

DEZURIK MANUAL BUTTERFLY VALVE OPERATION & MAINTENANCE MANUAL

EAST AREA WQCF IMPROVEMENTS ATLANTA, GEORGIA

ENGINEER

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2839 Paces Ferry Road, Suite 900
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CONTRACTOR

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1259 Ellsworth Drive
Atlanta, GA 30318

VENDOR

Eco-Tech, Inc.
156 Hickory Springs Industrial Drive
Canton, Georgia 30115

September 28, 2022

East Area WQCF Improvements Atlanta, Georgia

Contractor: Lakeshore Engineering, LLC
1259 Ellsworth Drive
Atlanta, GA 30318
Ph: 404-355-3976

Description: Manual Valves

Supplier: Eco-Tech, Inc.
156 Hickory Springs Industrial Drive
Canton, GA 30115
Ph: (770) 345-2118
Contact: Heather Bame
Email: hbame@eco-tech.net

Manufacturers: DeZurik/APCO/Hilton
250 Riverside Avenue North
Sartell, MN 56377
Ph: 320-259-2000
Website: www.dezurik.com

Service Center: Eco-Tech, Inc.
156 Hickory Springs Industrial Drive
Canton, GA 30115
Ph: (770) 345-2118
Contact: Kelsie Gibson
Email: kgibson@eco-tech.net

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Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717878
1	1	1	PEF,6,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GB-6A-N	G-Series Buriable Nut; 2 In Square
Accessories	SB16	316 SST Bolting
Accessories	ENGS	Extended Actuating Nut; Carbon Steel

RELATED DOCUMENTS

A55489	DWG INST PEF MJ GB-6A-N ENGS 3
A55435	DWG VALVE ASSY PEF MJ 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
A55690	DWG ACC ENGS (EXT NUT) GEAR AC
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

EXTENSION ROD: 68.94
C/L OF VALVE TO TOP OF NUT: 84
LENGTH: 7 FEET
TAG: PV1

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV1		
WEIGHT (APPROX.)	177 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-1	
PART NUMBER:	9717878		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A55615. A55690.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>			
INCH	MM	B	C	K	L
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{8.00}{203}$	$\frac{10.69}{272}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{8.62}{219}$	$\frac{11.31}{287}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{9.75}{248}$	$\frac{12.44}{316}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{12.09}{307}$	$\frac{14.78}{375}$
10	250	$\frac{19.38}{492}$	$\frac{9.19}{233}$	$\frac{13.50}{343}$	$\frac{16.19}{411}$
12	300	$\frac{20.75}{527}$	$\frac{11.53}{293}$	$\frac{15.56}{395}$	$\frac{18.25}{464}$

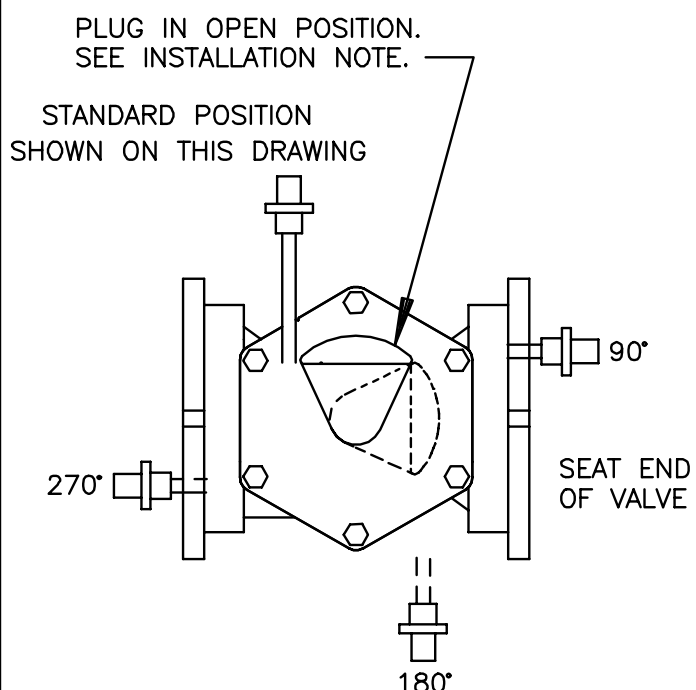
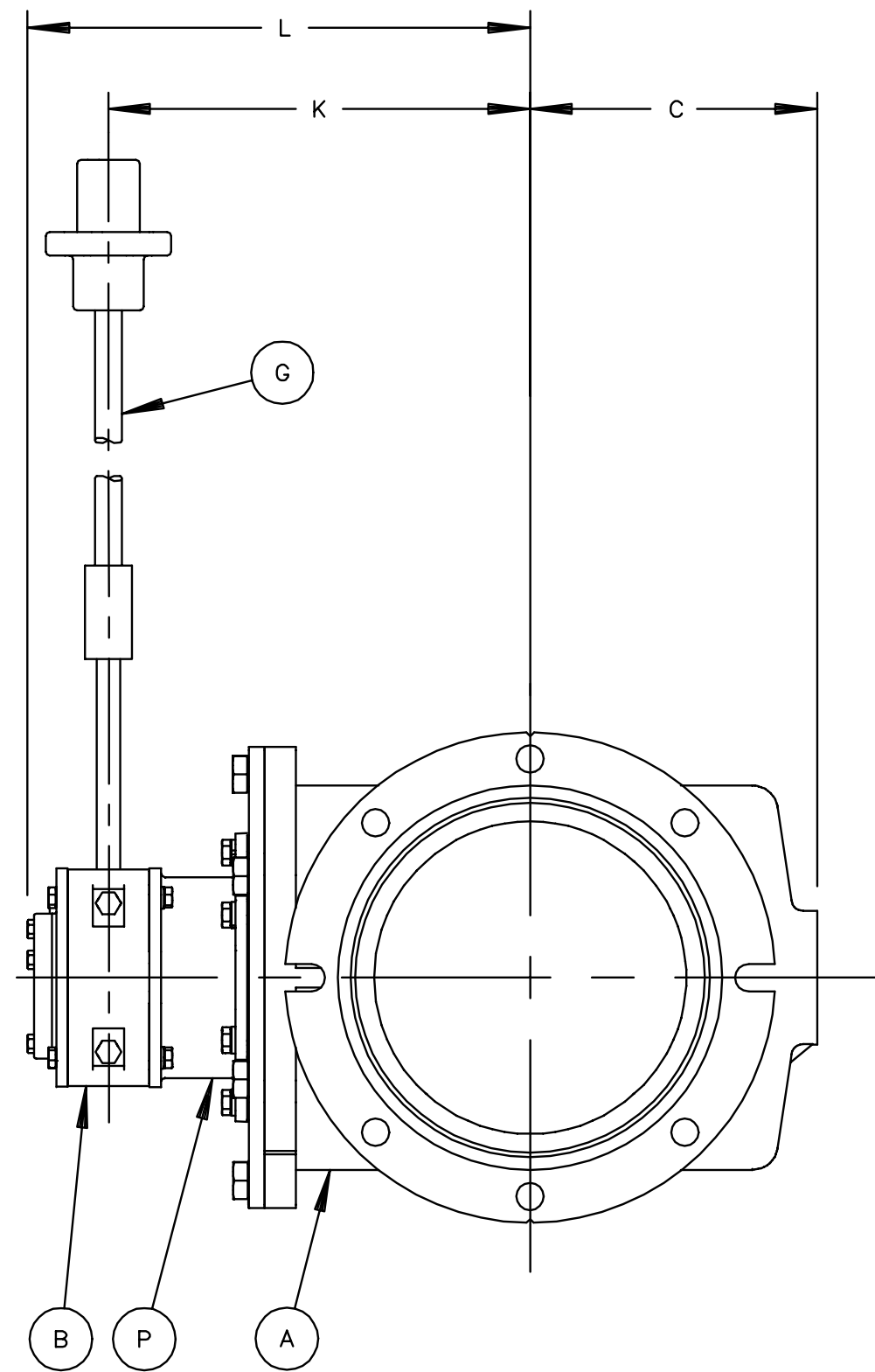
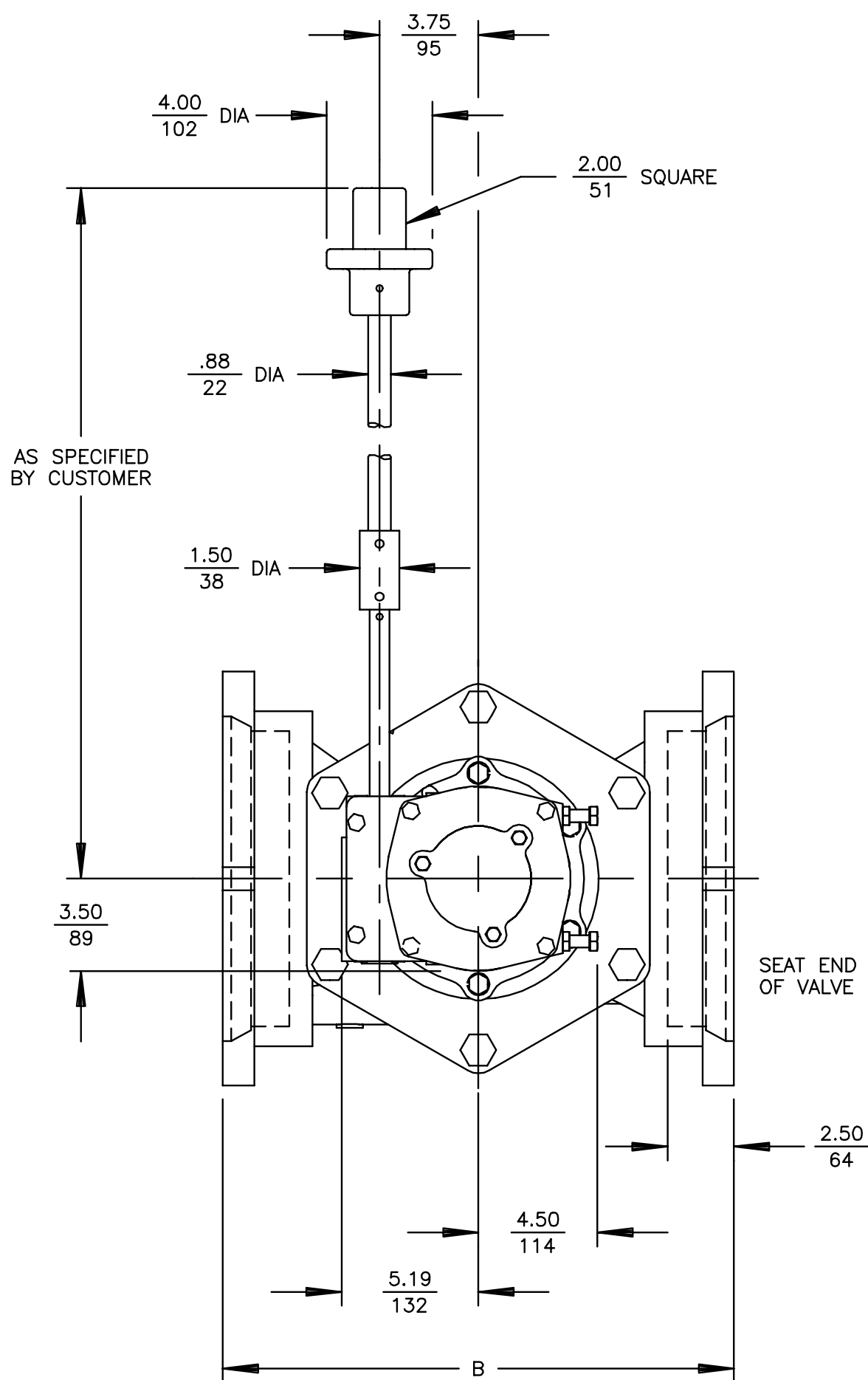
A	VALVE
B	ACTUATOR
G	EXTENDED NUT
P	CONNECTING PARTS

NOTE:

- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.
- 13 TURNS OF NUT ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:

- FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
- FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
03/14/07 61483						

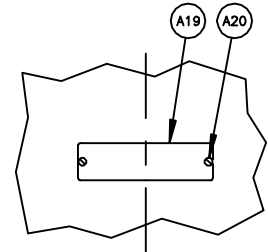
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 MECHANICAL JOINT GB-6A-N NUT ACTUATED (FOR SUBMERGED SERVICE) W/ENGS EXTENDED NUT					
DOCT. CODE	DRAWN	TC	APPROVED	SN	A55489
C1	CHECKED	SN	DATE	05/18/06	

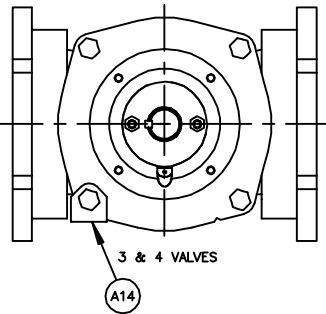
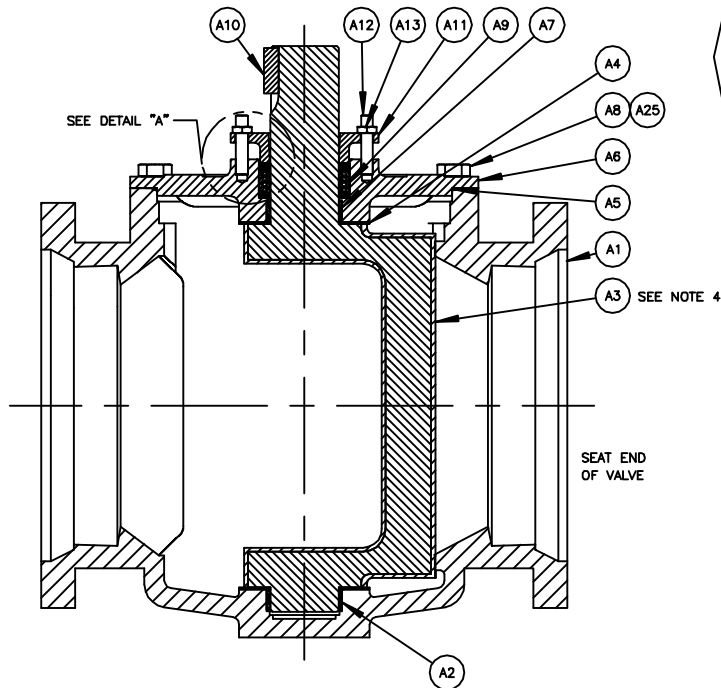
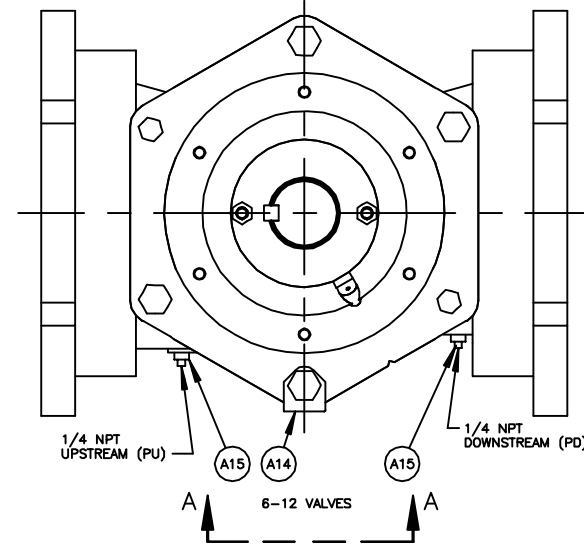
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

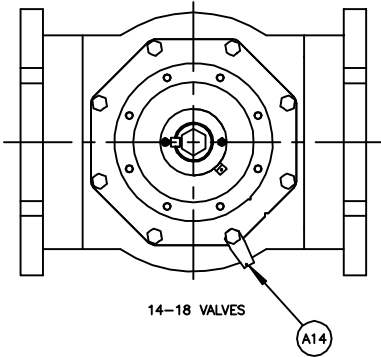


VIEW A - A



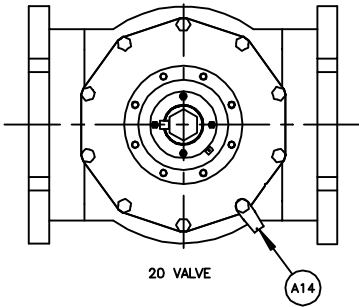
3 & 4 VALVES

A14



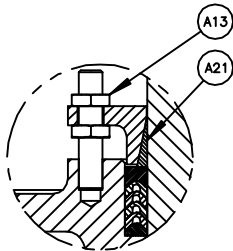
14-18 VALVES

A14



20 VALVE

A14



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR

REV	DATE	BY	CHKD
1	05/20/12	D	63490
2	07/24/17	C	61483
3	03/22/18	B	50312
4	05/02/18	A	61482

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

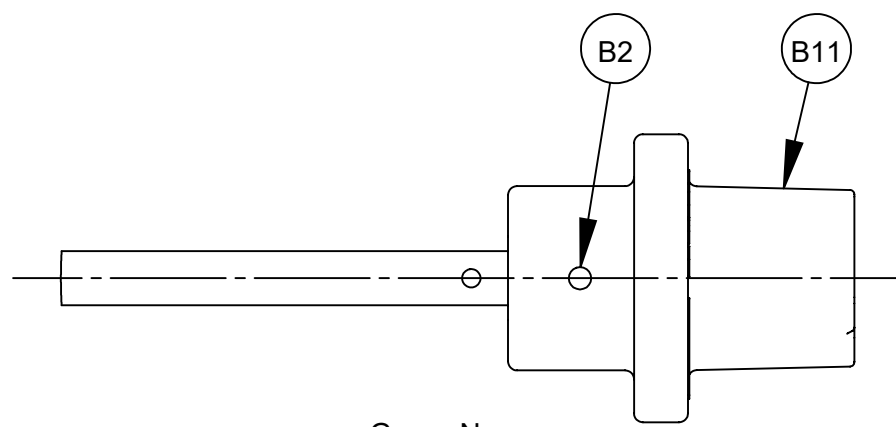
DRAWING(S): A55435

WORK ORDER: 143537

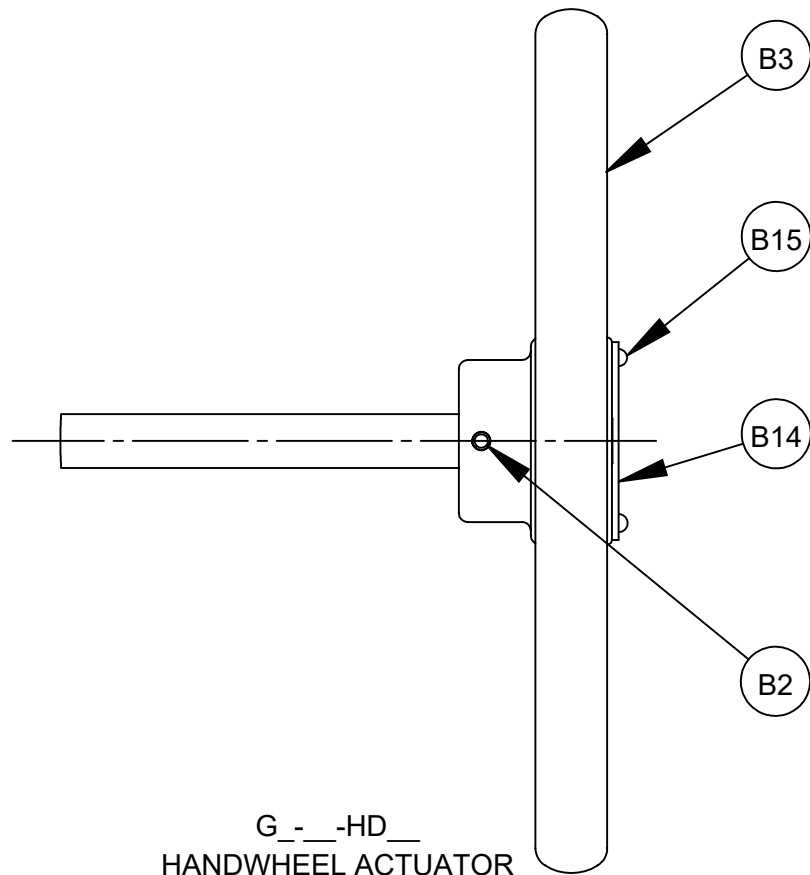
PART NO: 9717878

DESCRIPTION: PEF,6,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	CARBON STEEL, ZINC PLATED
A13	CARBON STEEL, ZINC PLATED
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

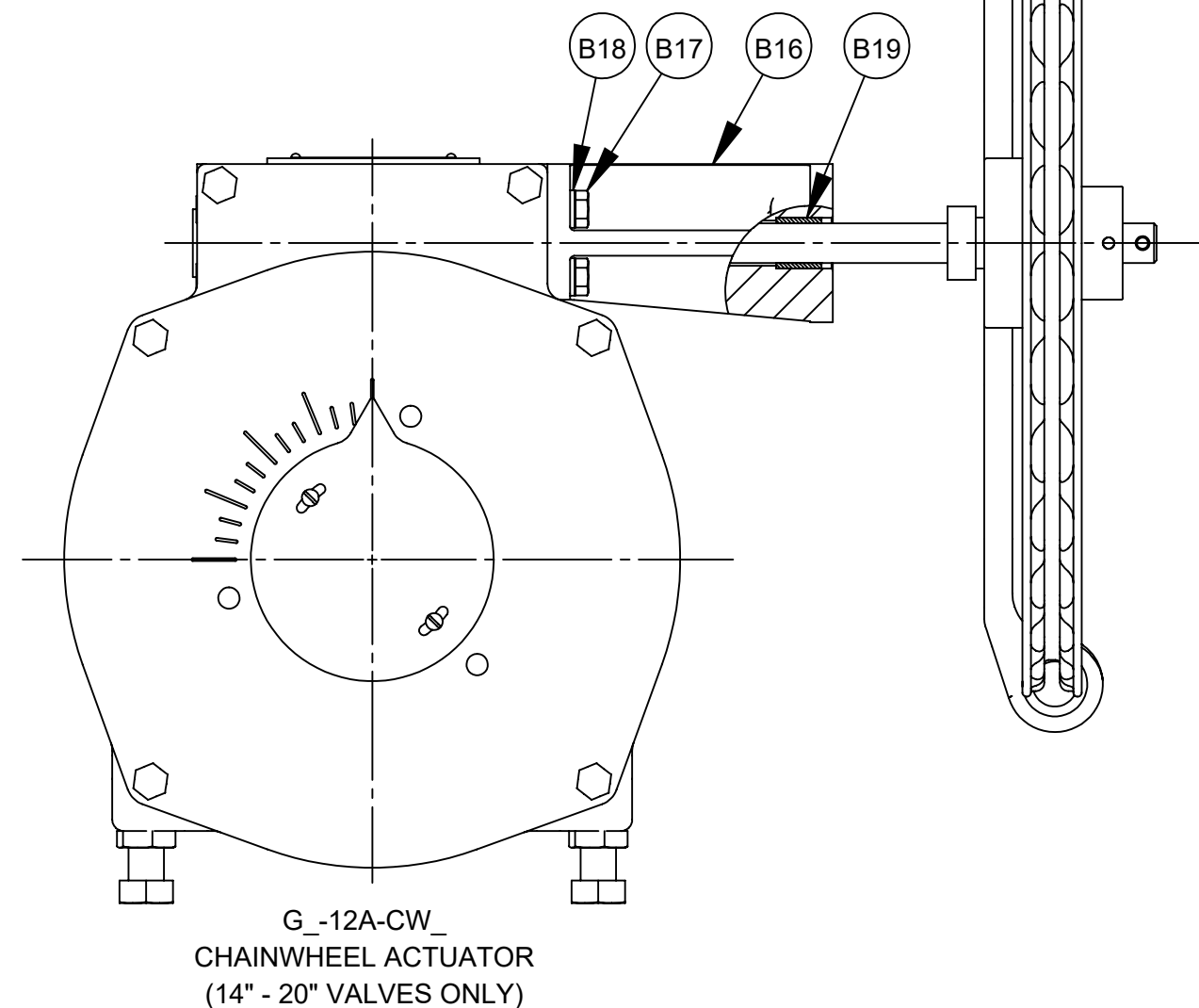
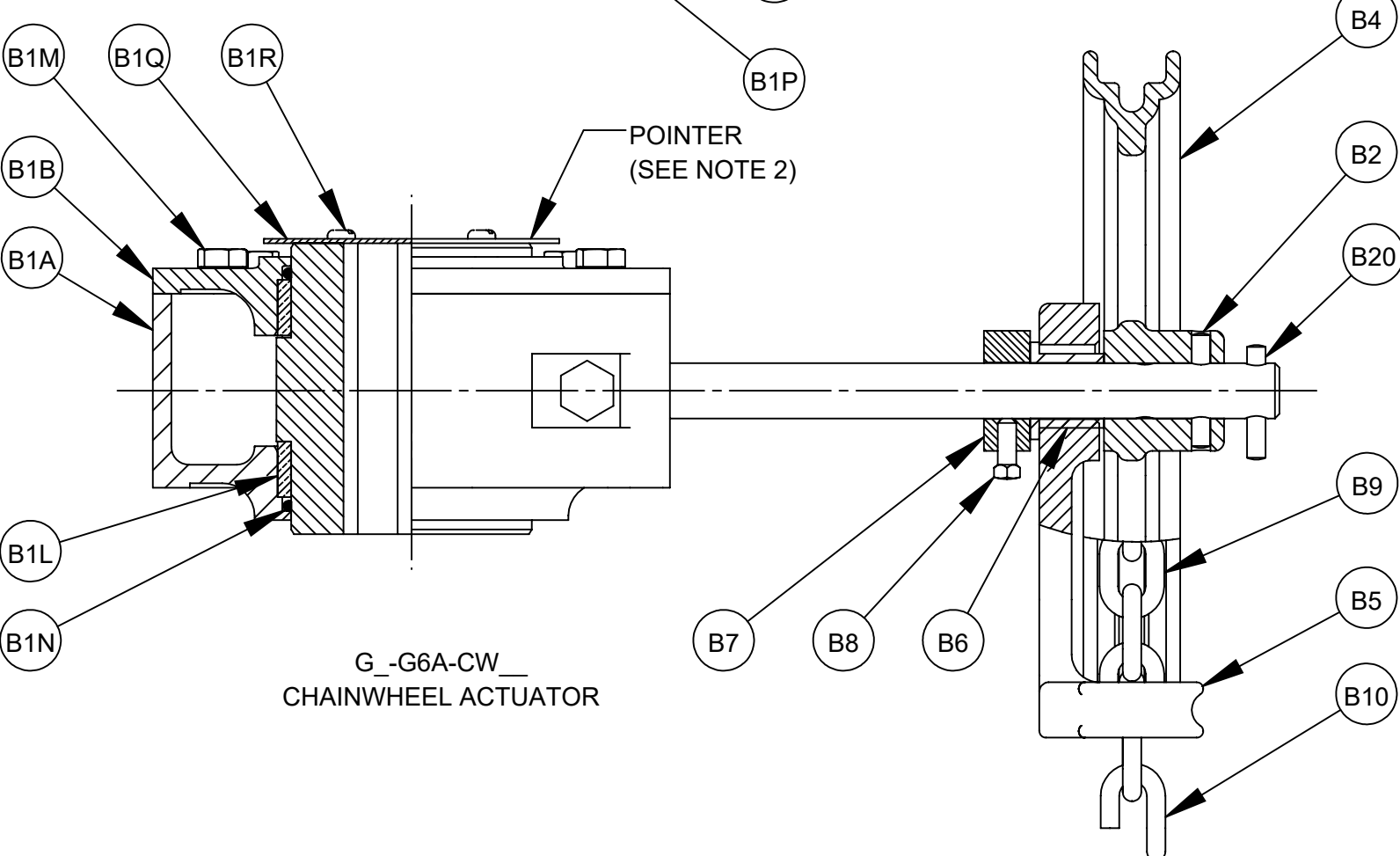
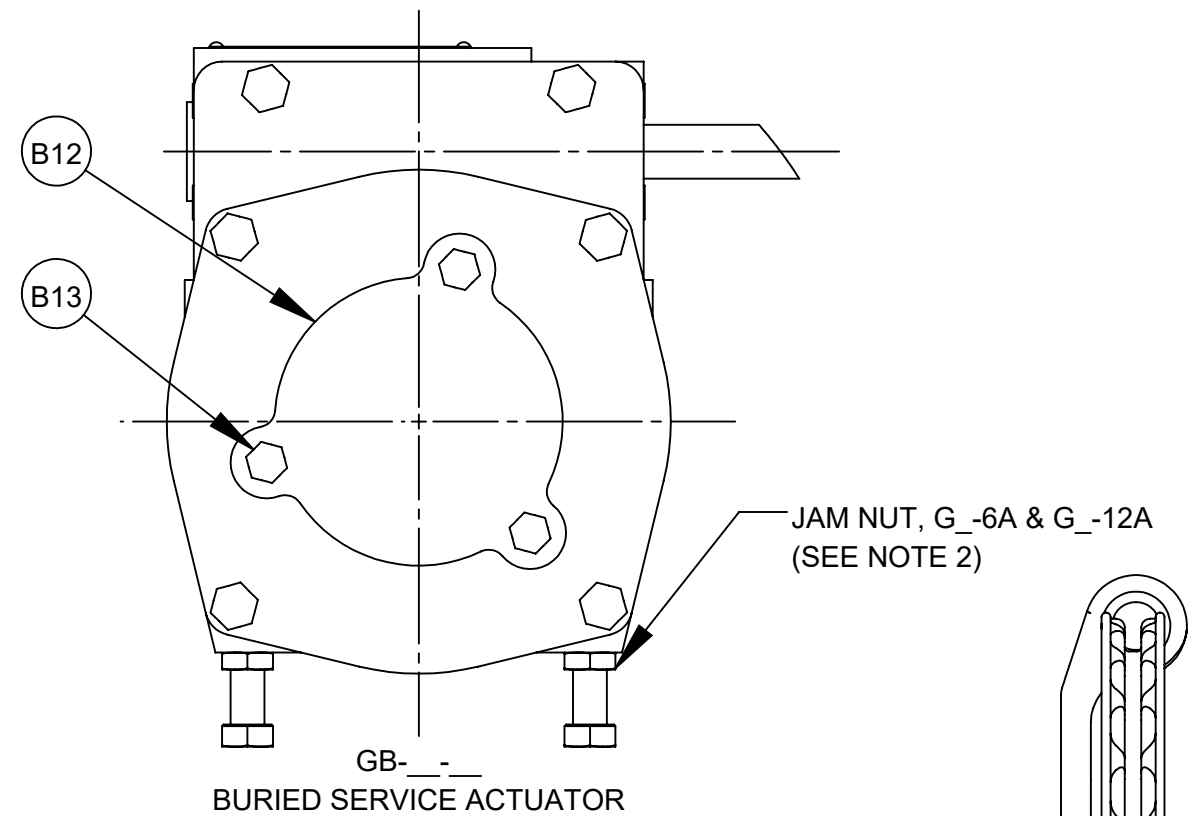
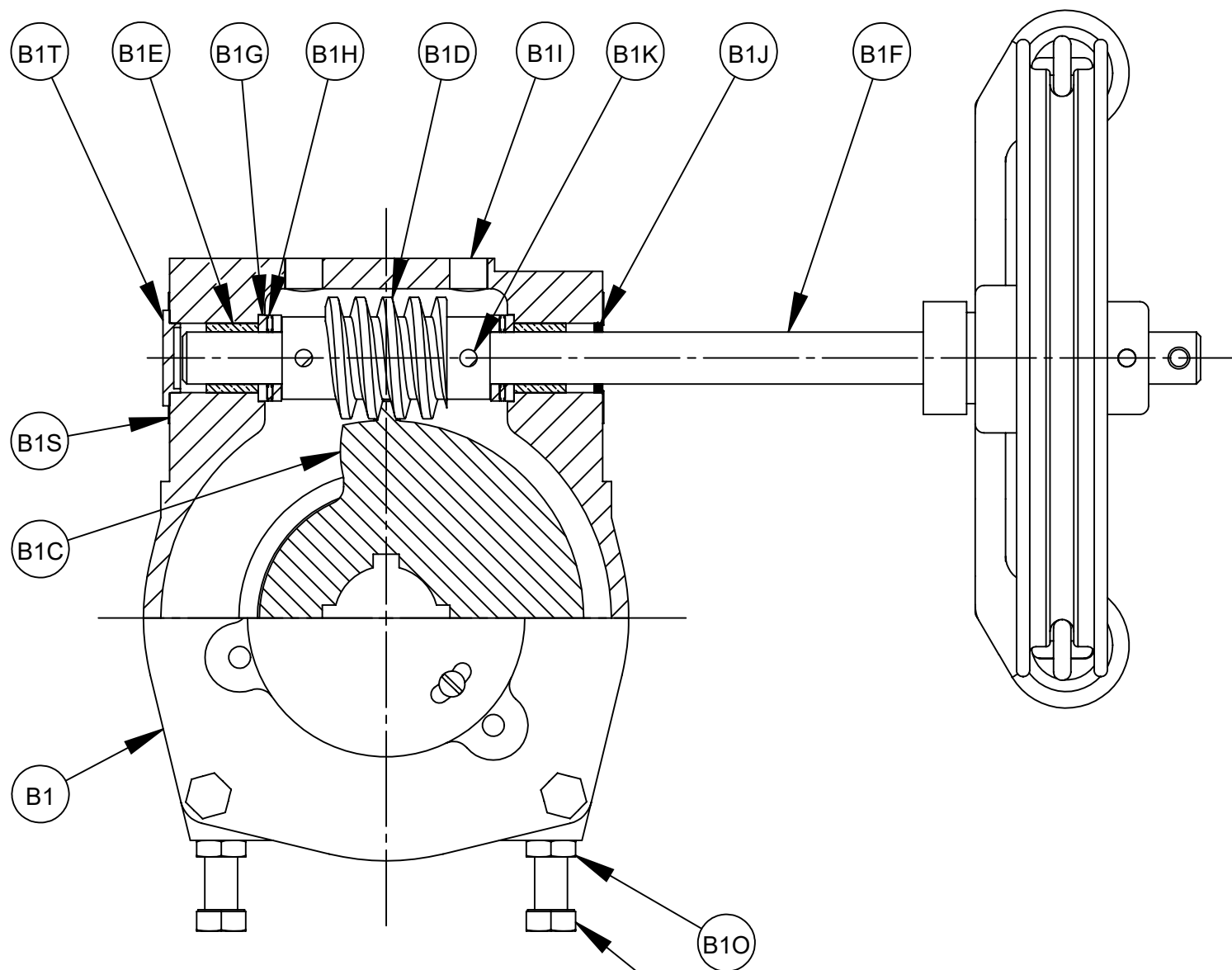
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



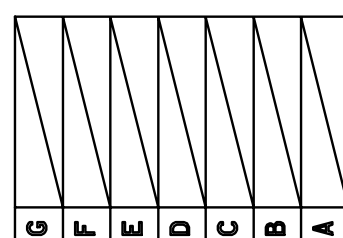
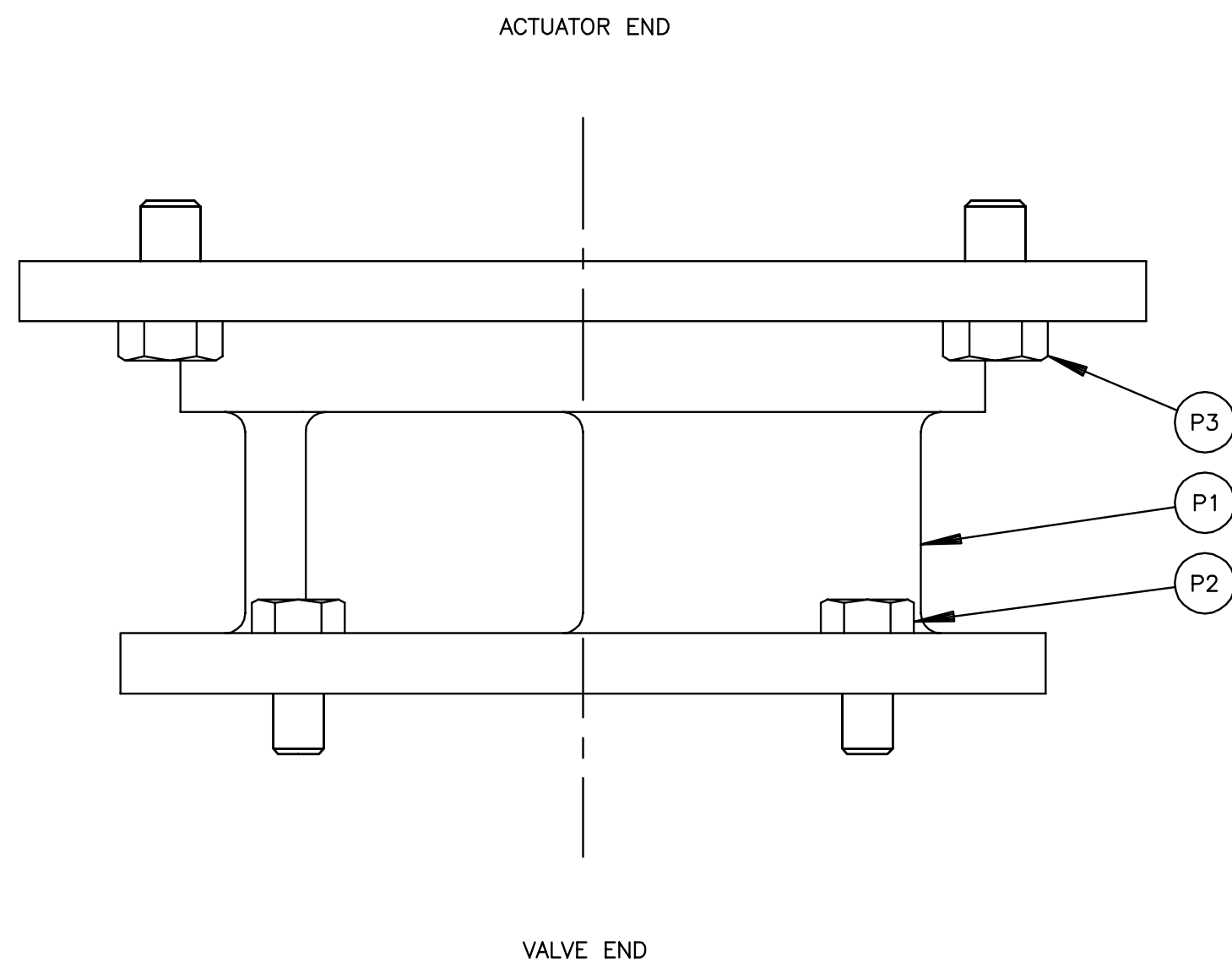
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



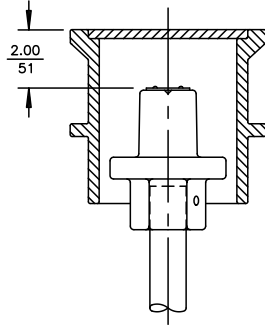
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

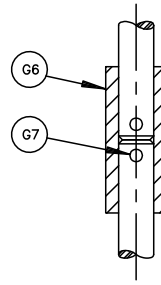
DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418

VALVE	SIZE	ACTUATOR NUMBER	DIMENSIONS <small>IN</small> <small>MM</small>			
			A	B	C	D
PEF	3-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	8-12"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	14-20"	G_-12A	17.41 526	23.60 599	17.66 449	23.60 599
BAW	8-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	14-20"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	3-20"	G_-6B	11.75 298	18.00 457	12.00 305	18.00 457



ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH FB FLOOR BOX

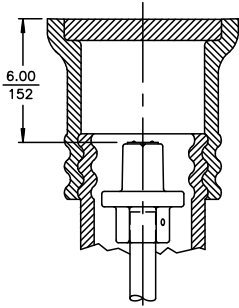


FOR ALL BAR EXTENSIONS
OVER 144.00
3658

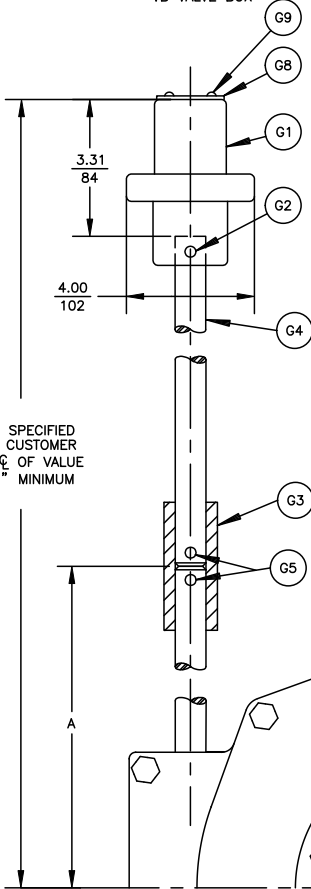
NO.	PART NAME	QTY.
G1	WRENCHING SQUARE	1
G2	PIN (BAR)	1
G2	PIN (PIPE)	2
G3	COUPLING	1
G4	BAR OR PIPE	1
G5	PIN (BAR)	2
G5	PIN (PIPE)	1
G6	COUPLING	1
G7	PIN	2
G8	DATA PLATE	1
G9	DRIVE SCREW	2
G10	COUPLING	1
G11	COUPLING	-
G12	PIN	-

NOTE:

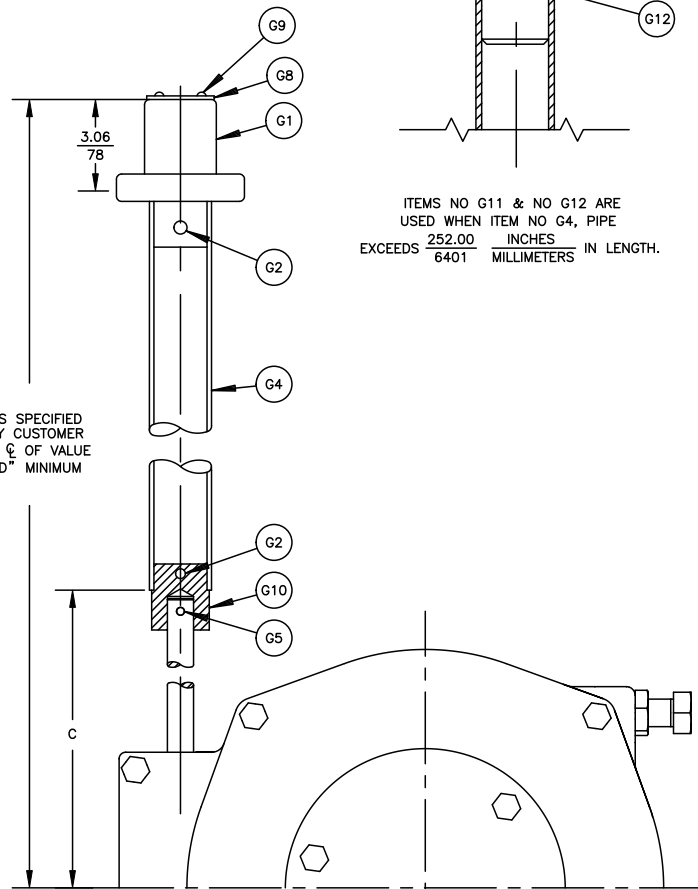
- WHEN ORDERING PARTS, SPECIFY VALVE SIZE AND MODEL NUMBER FROM DATA PLATE, ALSO GIVE DRAWING NUMBER WITH PART NAME, ITEM NUMBER AND QUANTITY.



ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH VB VALVE BOX



BAR EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGS, ENGS_, ENGSX1, ENGS_X1



PIPE EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGSX2, ENGS_X2, ENGSX3, ENGS_X3

ITEMS NO G11 & NO G12 ARE
USED WHEN ITEM NO G4, PIPE
EXCEEDS 252.00 INCHES
6401 MILLIMETERS IN LENGTH.

50315	08/12/18	05/08/17
50319		
A		



ENGS EXTENDED WRENCHING SQUARE FOR USE WITH G_-_A AND G_-_B SERIES GEAR ACTUATORS			
DOCT. CODE	DRAWN	SN	APPROVED
C1	CHECKED	SN	DATE
			05/30/06
			A55690



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717879
3	3	1	PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	8	8 Inch (200mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GB-6A-N	G-Series Buriable Nut; 2 In Square
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55488	DWG INST PEF MJ GB-6A-N 3-12"
A55435	DWG VALVE ASSY PEF MJ 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV3

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	8 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV3		
WEIGHT (APPROX.)	246 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-3	
PART NUMBER:	9717879		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390748	8" PLUG CR (RS16) PEF DI USA	1	A03
1361297	8-12" GRIT EXCLUDER PEF	2	A04
1361327	O-RING -272 9.48IDX9.76ODX0.14CS DIA NBR	1	A05
1055749	PACKING ADPT MALE 2-1/4 ID	1	A09
1055763	PACKING PRESS RING 2-1/4 ID	4	A09
1055778	PACKING ADPT FEMALE 2-1/4 ID	1	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>			
INCH	MM	B	C	K	L
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{8.00}{203}$	$\frac{10.69}{272}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{8.62}{219}$	$\frac{11.31}{287}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{9.75}{248}$	$\frac{12.44}{316}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{12.09}{307}$	$\frac{14.78}{375}$
10	250	$\frac{19.38}{492}$	$\frac{9.19}{233}$	$\frac{13.50}{343}$	$\frac{16.19}{411}$
12	300	$\frac{20.75}{527}$	$\frac{11.53}{293}$	$\frac{15.56}{395}$	$\frac{18.25}{464}$

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

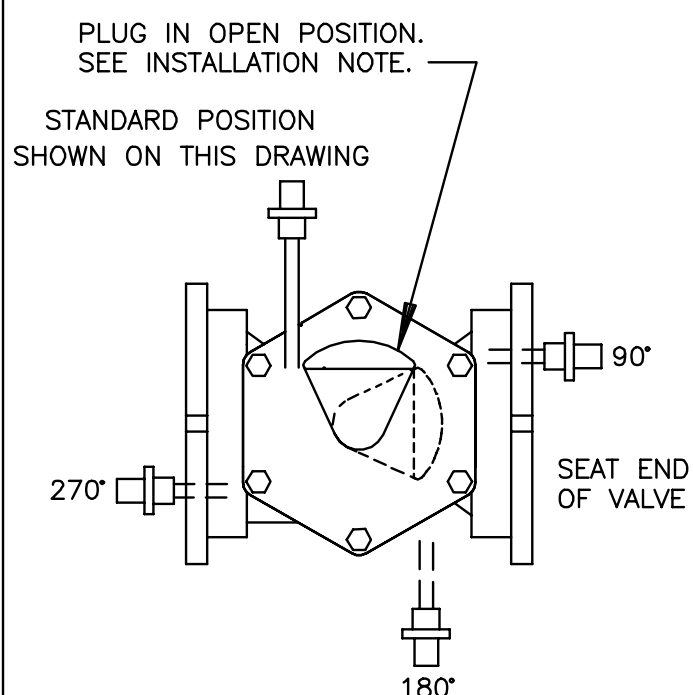
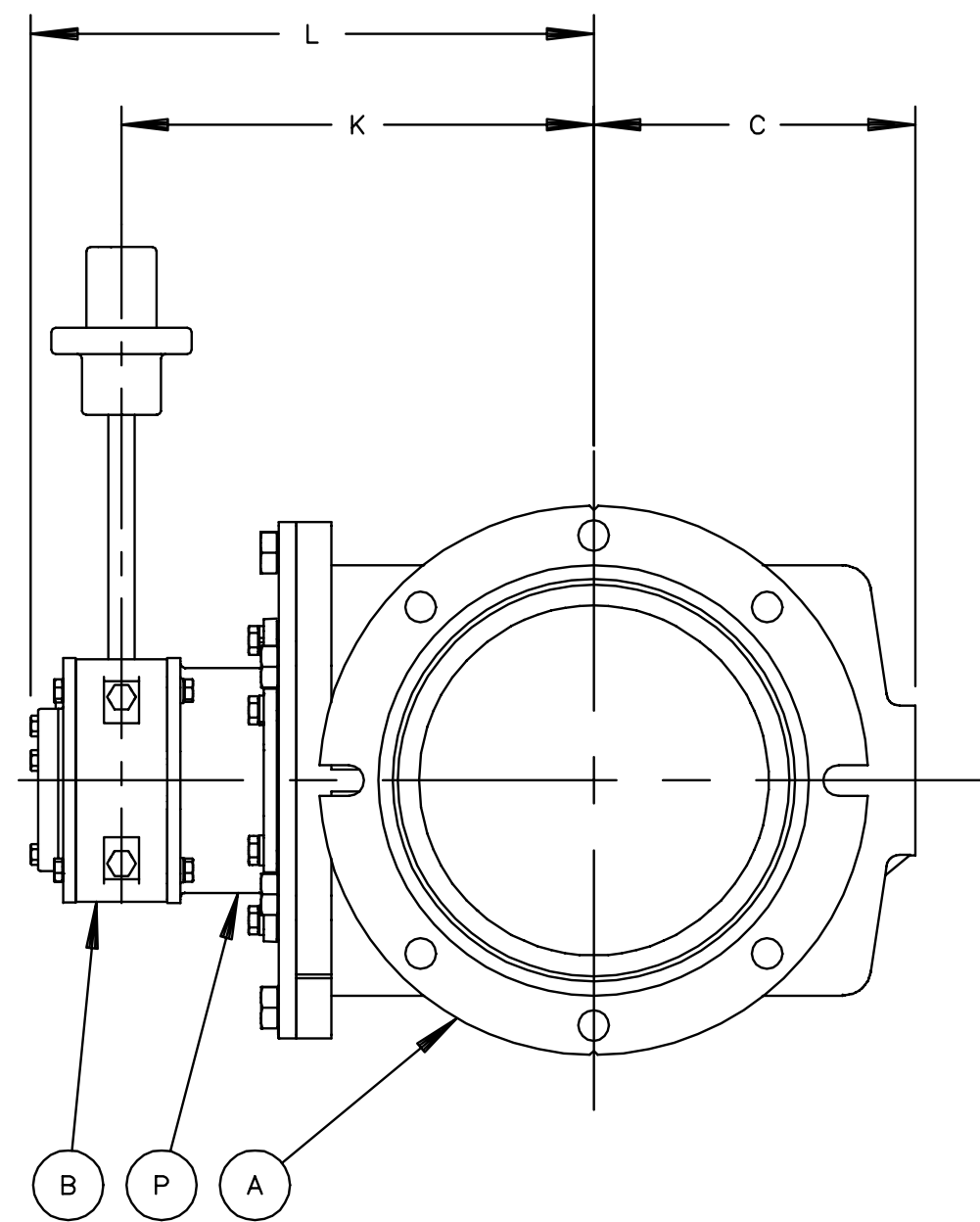
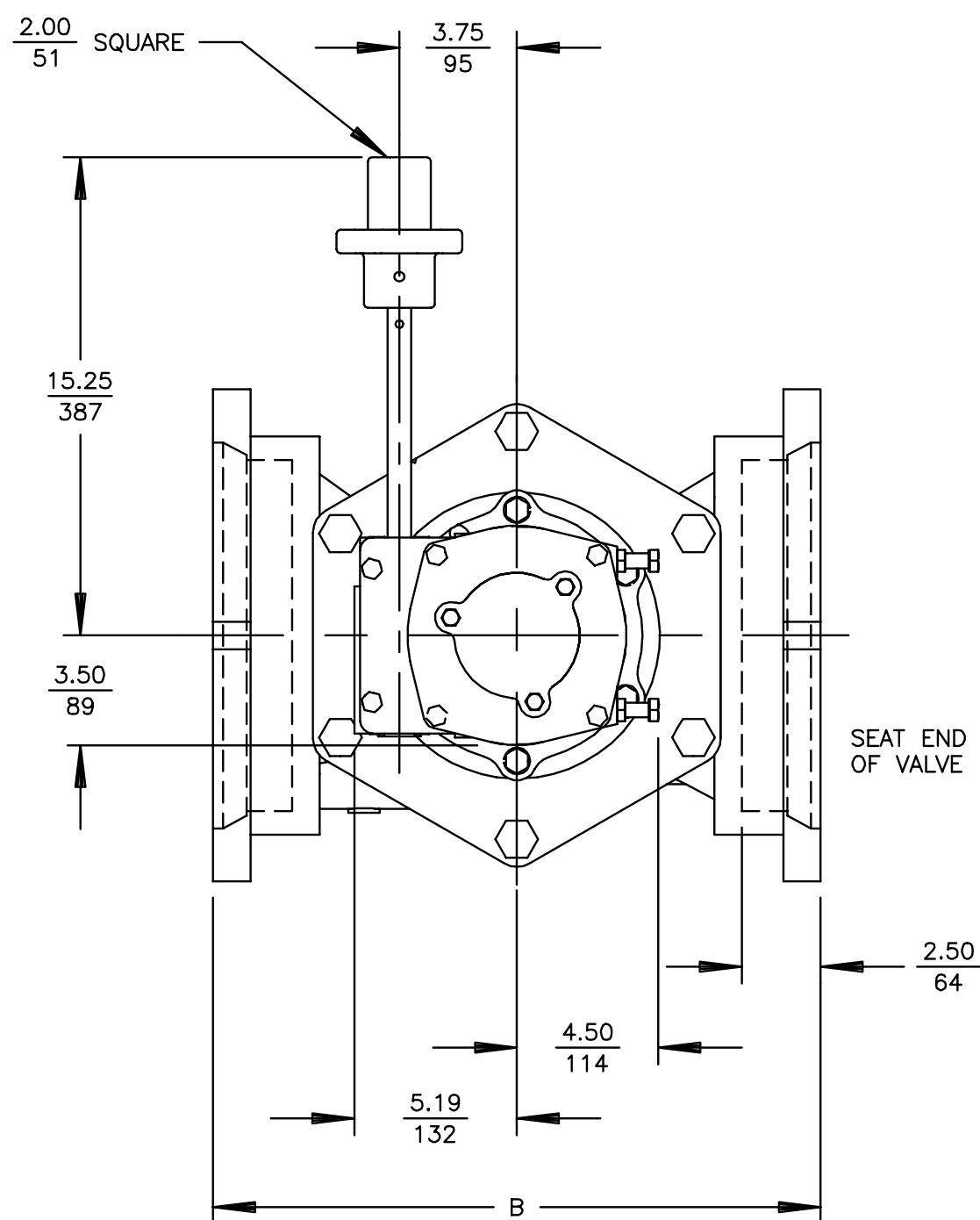
- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.
- 13 TURNS OF NUT ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:

- FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.

- FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE

THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
					61483	61483
					03/14/07	02/14/07

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 MECHANICAL JOINT GB-6A-N NUT ACTUATED (FOR SUBMERGED SERVICE)

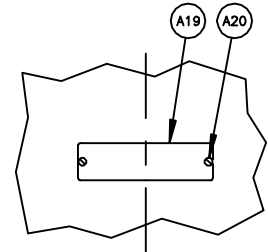
DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	10/18/05

A55488

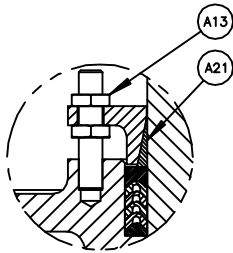
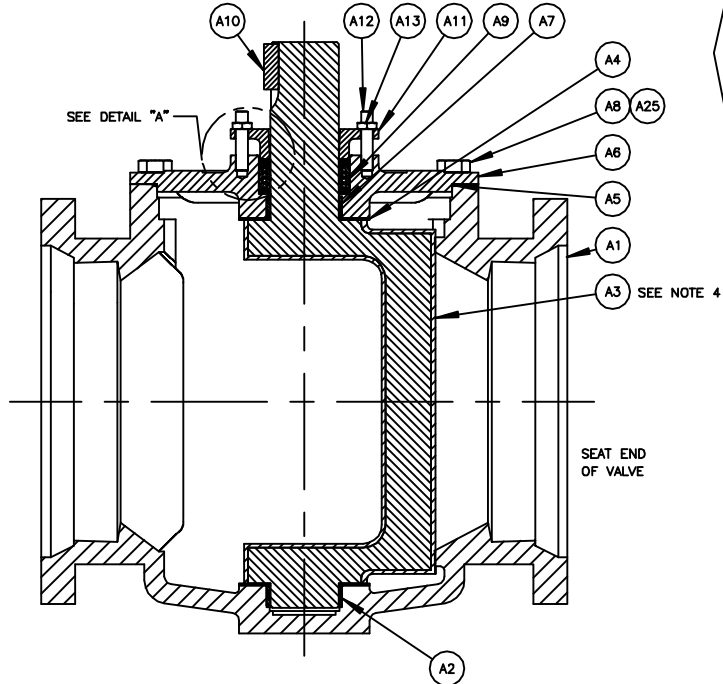
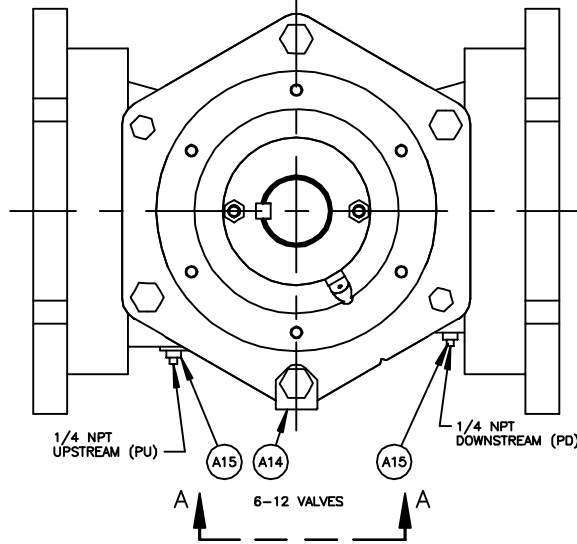
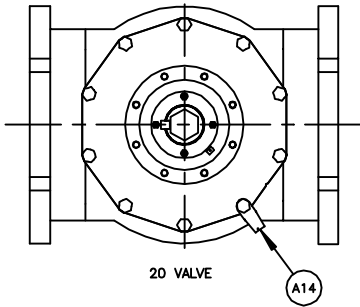
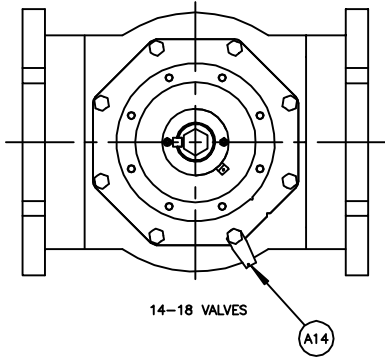
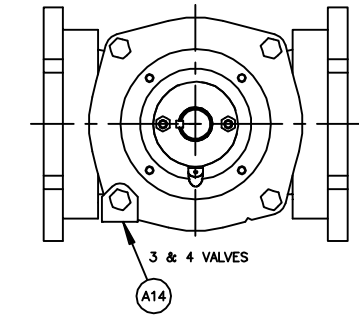
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.



VIEW A - A



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR

REV	DATE	BY	CHKD
1	09/20/17	D	63490
2	07/24/17	C	61483
3	03/22/16	B	50312
4	05/02/08	A	61482

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

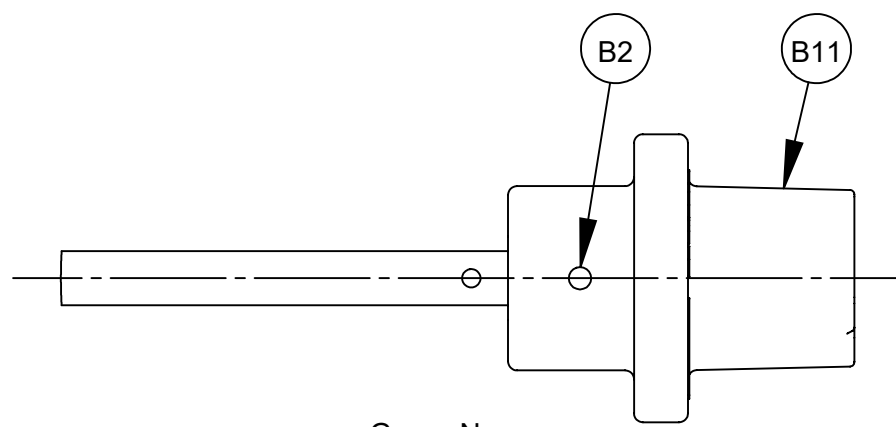
DRAWING(S): A55435

WORK ORDER: 143537

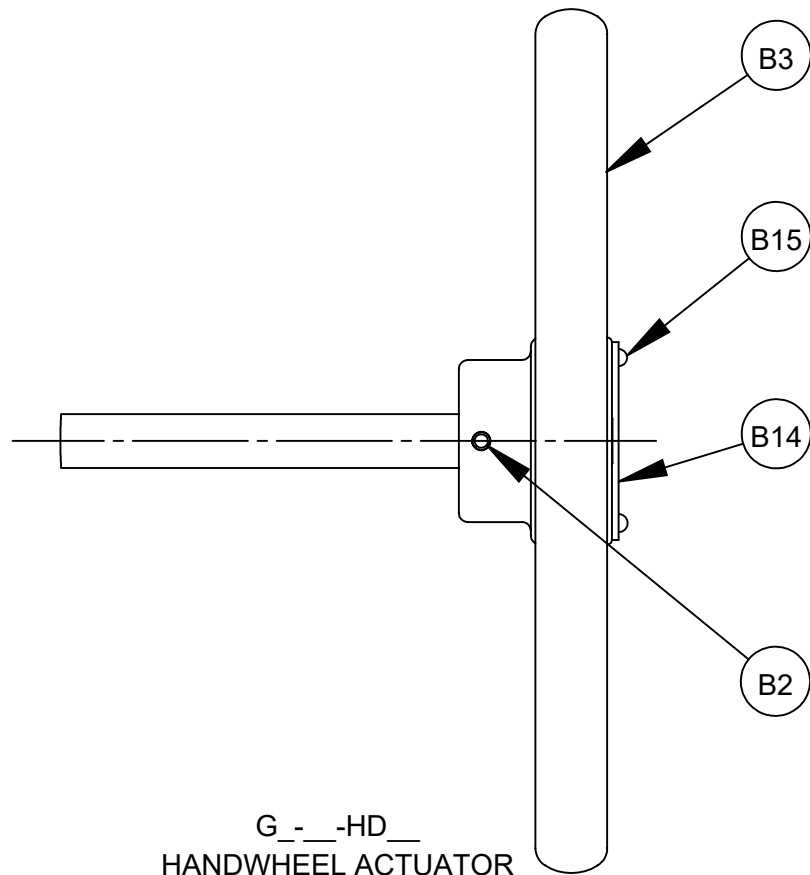
PART NO: 9717879

DESCRIPTION: PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	CARBON STEEL, ZINC PLATED
A13	CARBON STEEL, ZINC PLATED
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

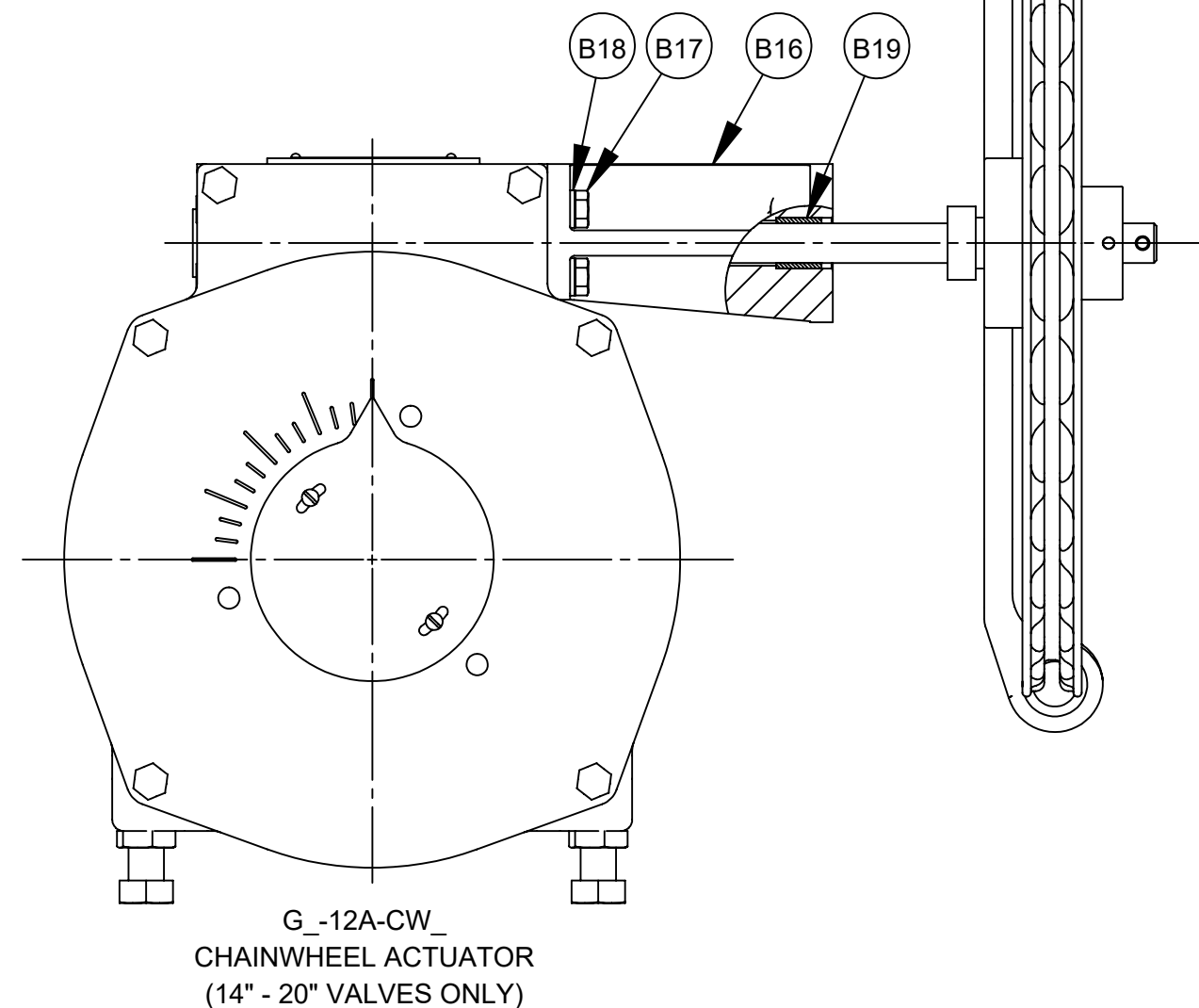
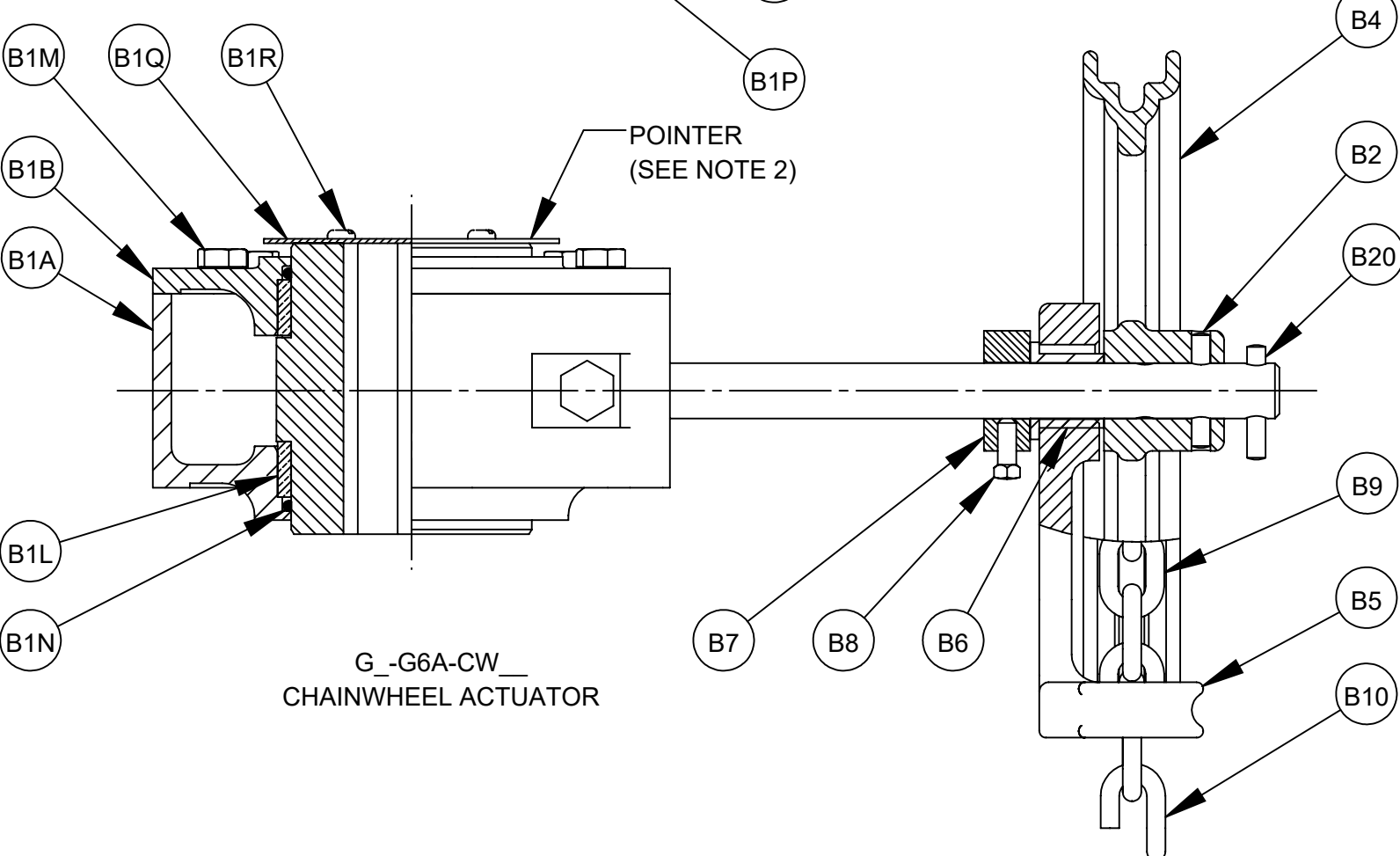
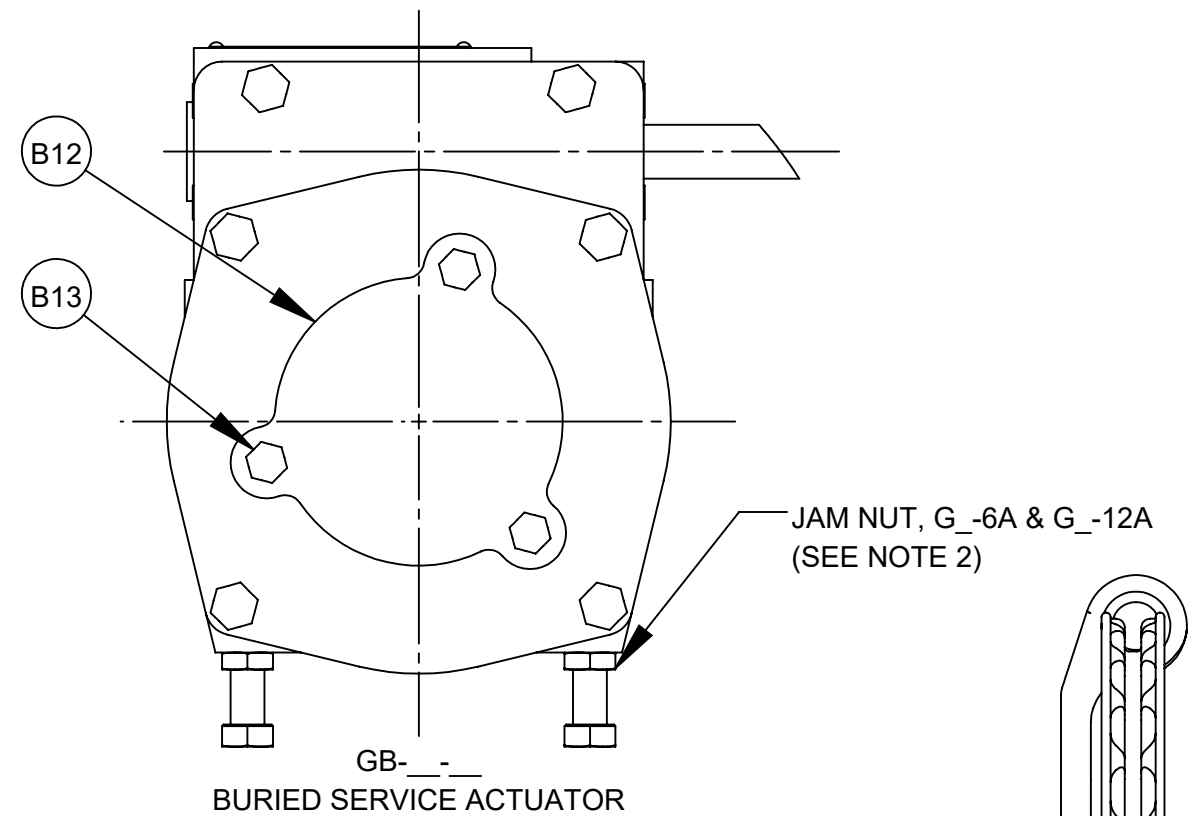
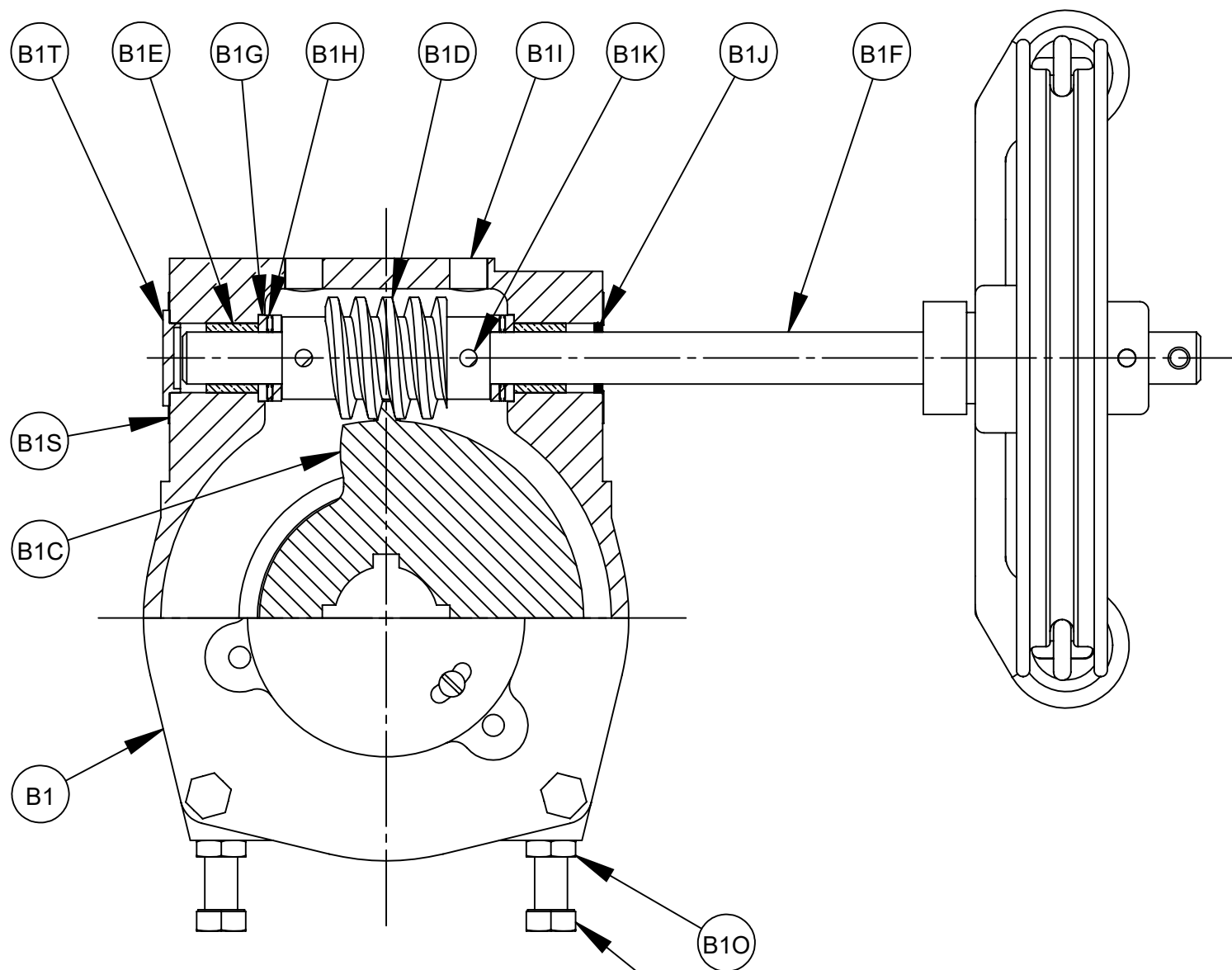
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						

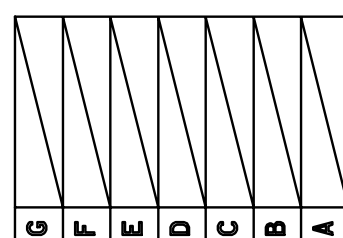
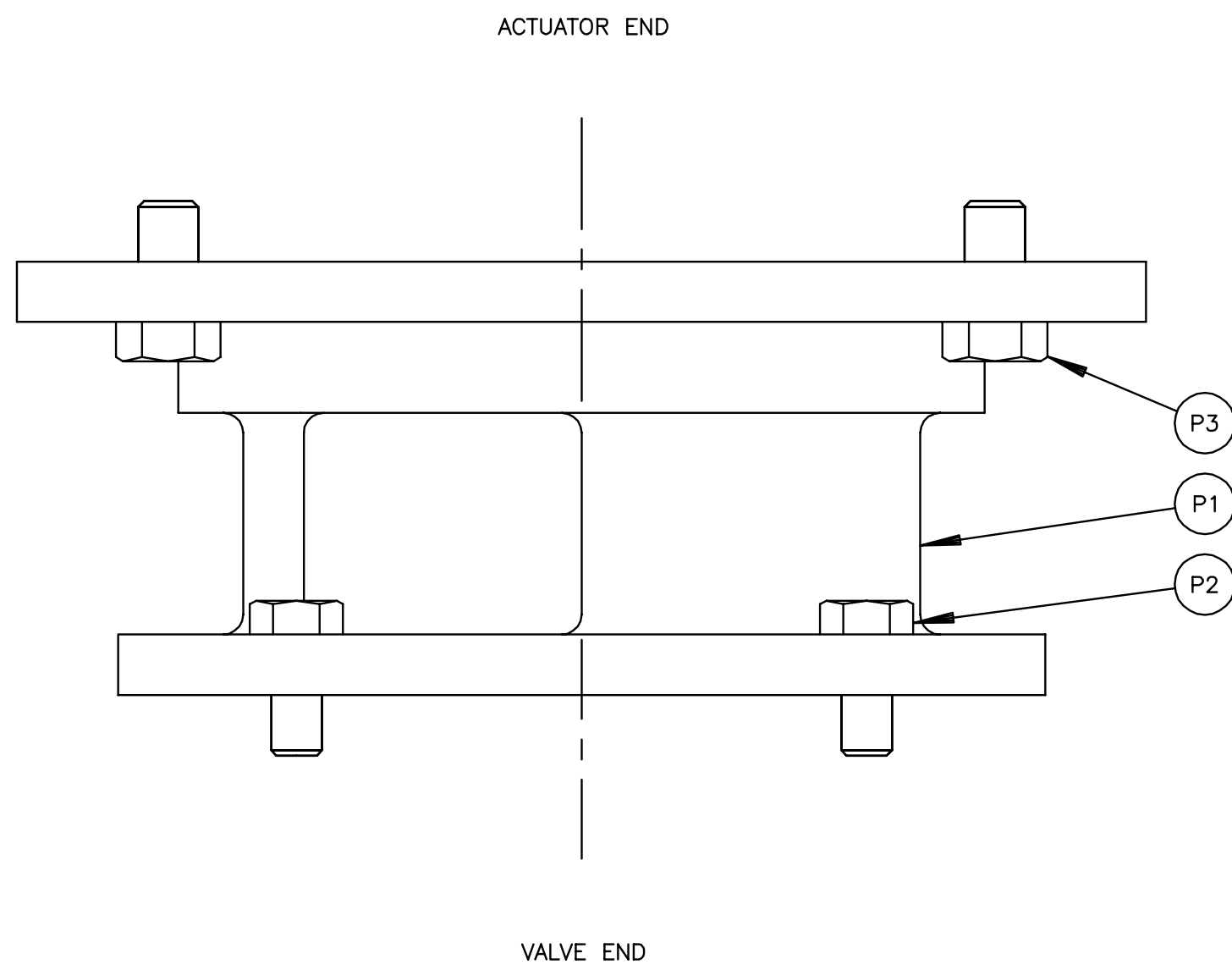


GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	SN
			DATE 12/16/05
			A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717880
4	4	4	PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-CW8	G-Series Chainwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV4

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV4		
WEIGHT (APPROX.)	115 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-4	
PART NUMBER:	9717880		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

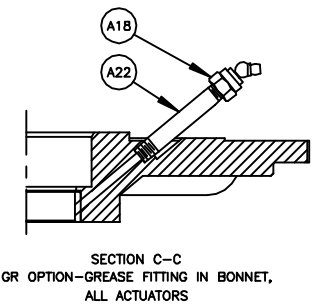
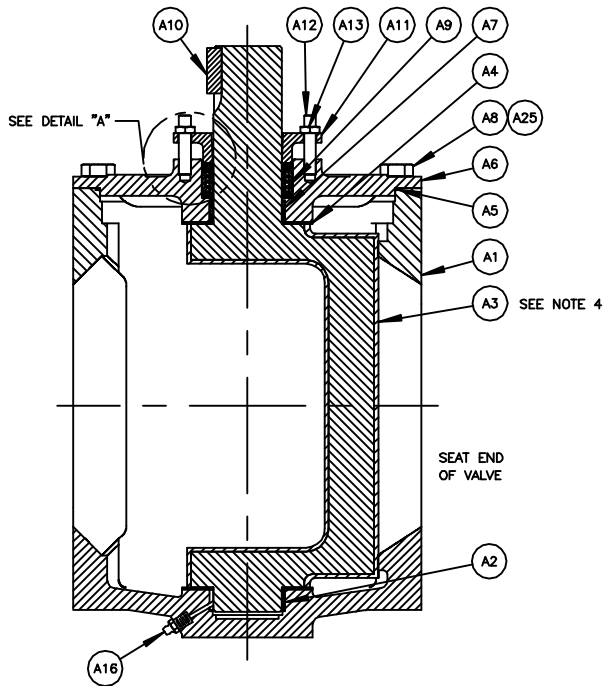
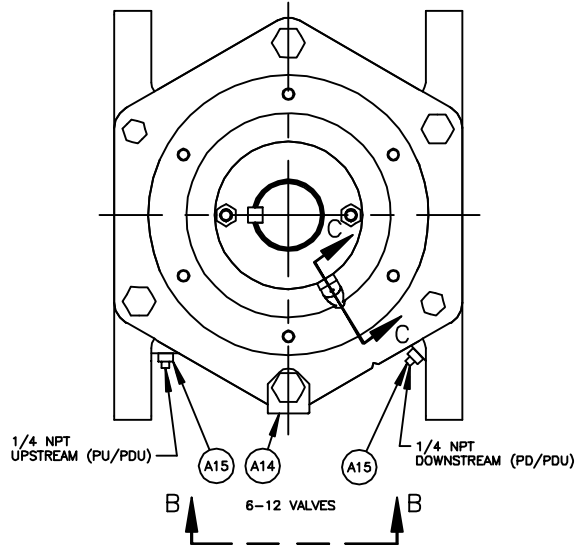
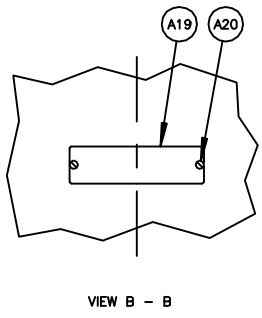
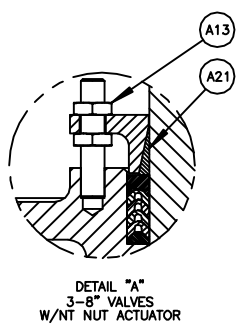
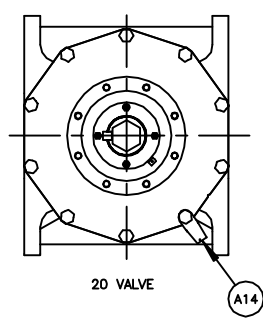
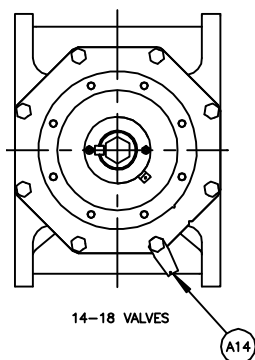
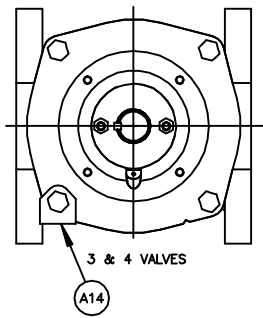
- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	12/05/05

A55403



MATERIALS OF CONSTRUCTION

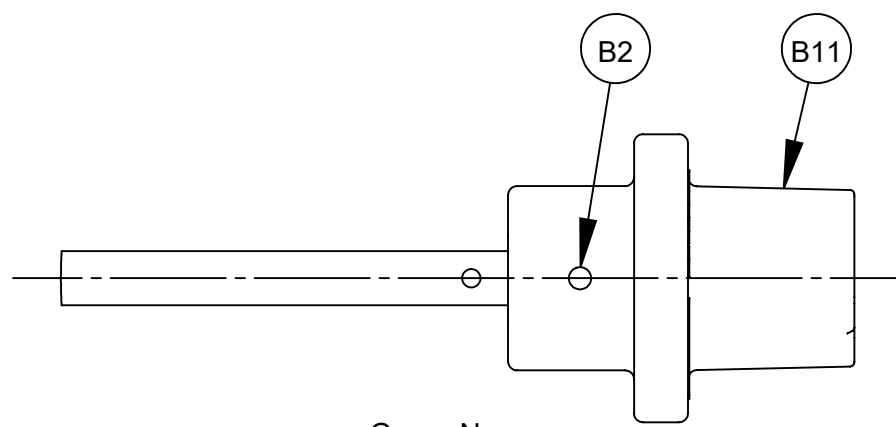
DRAWING(S): A55403

WORK ORDER: 143537

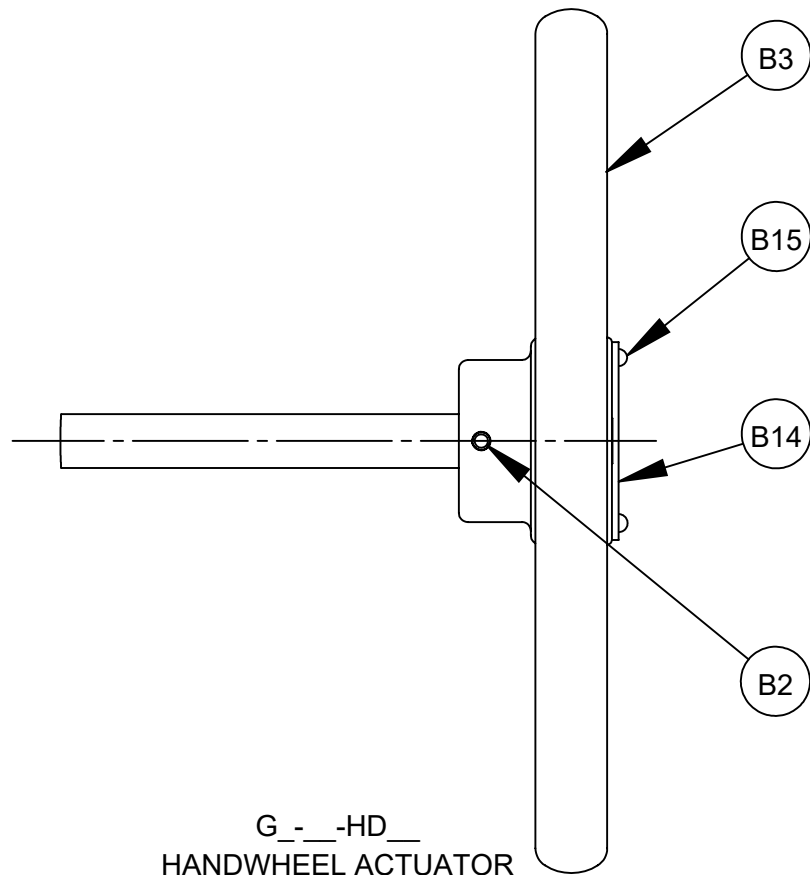
PART NO: 9717880

DESCRIPTION: PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

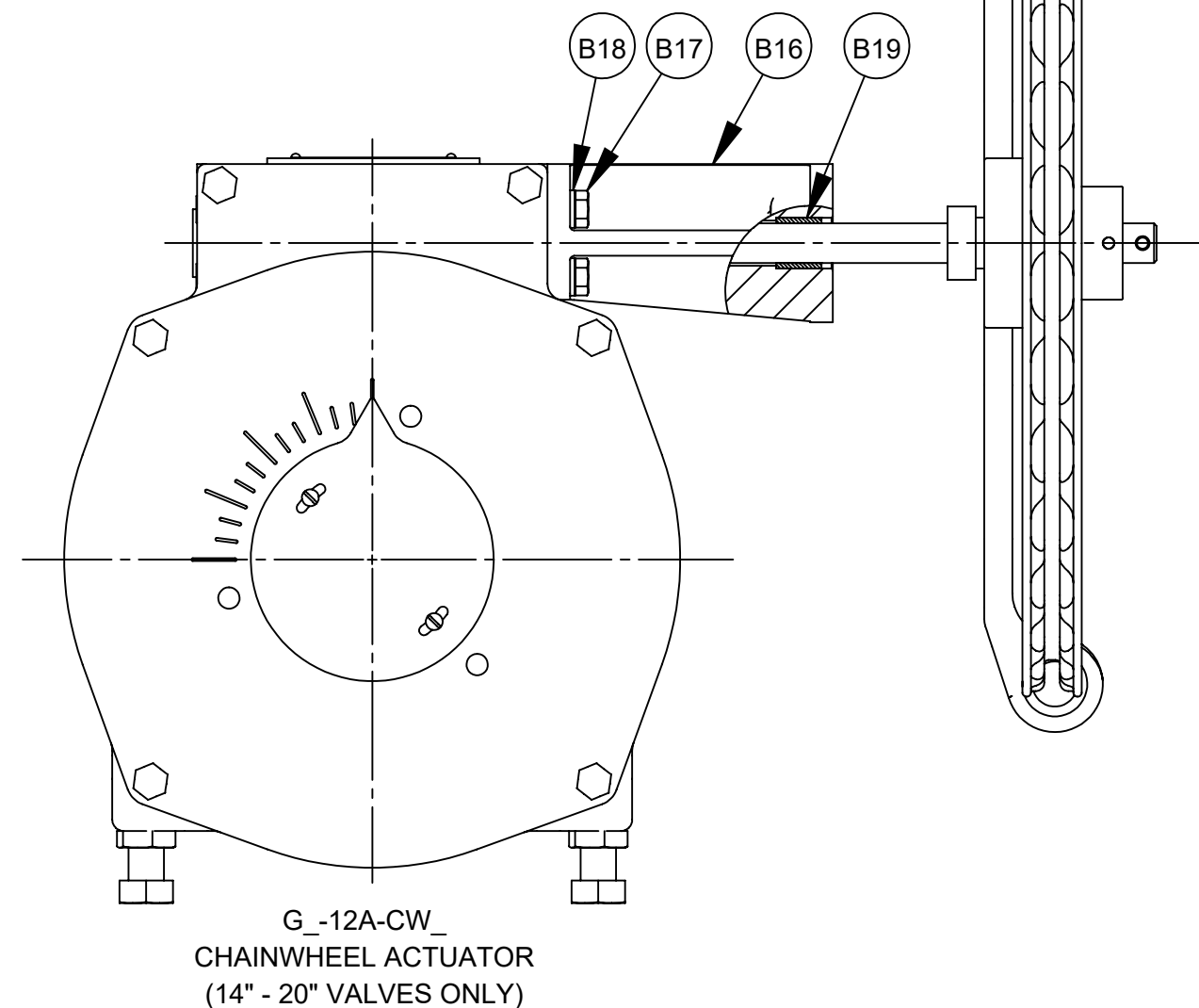
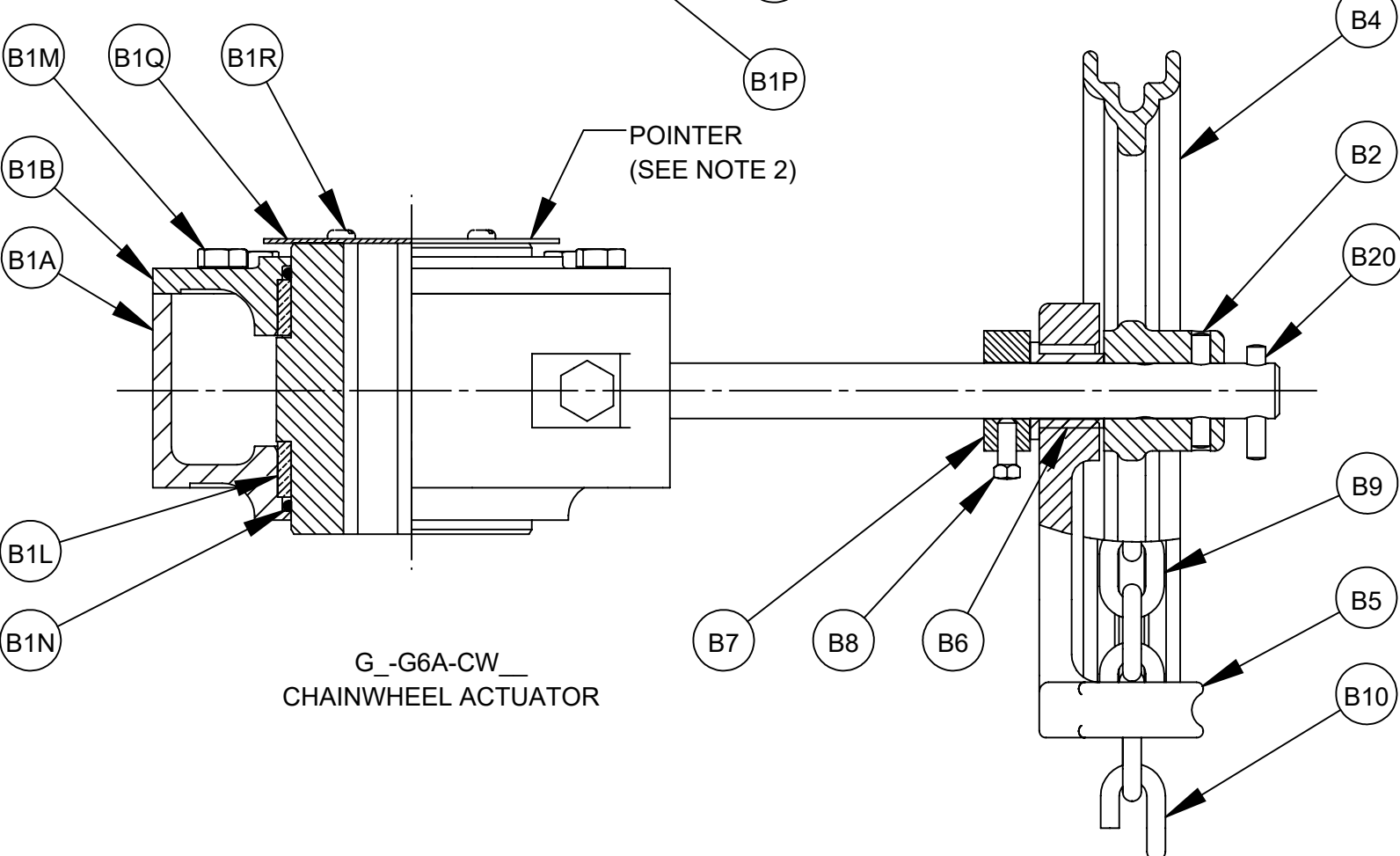
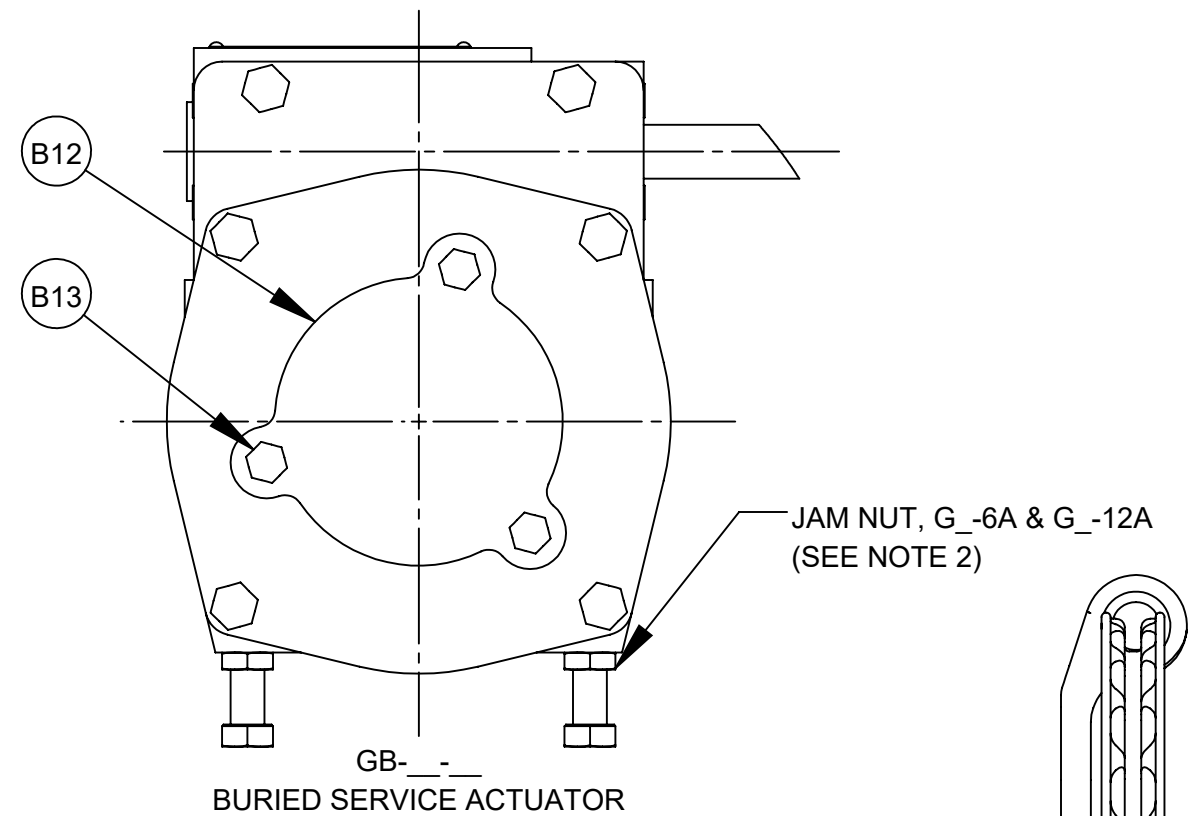
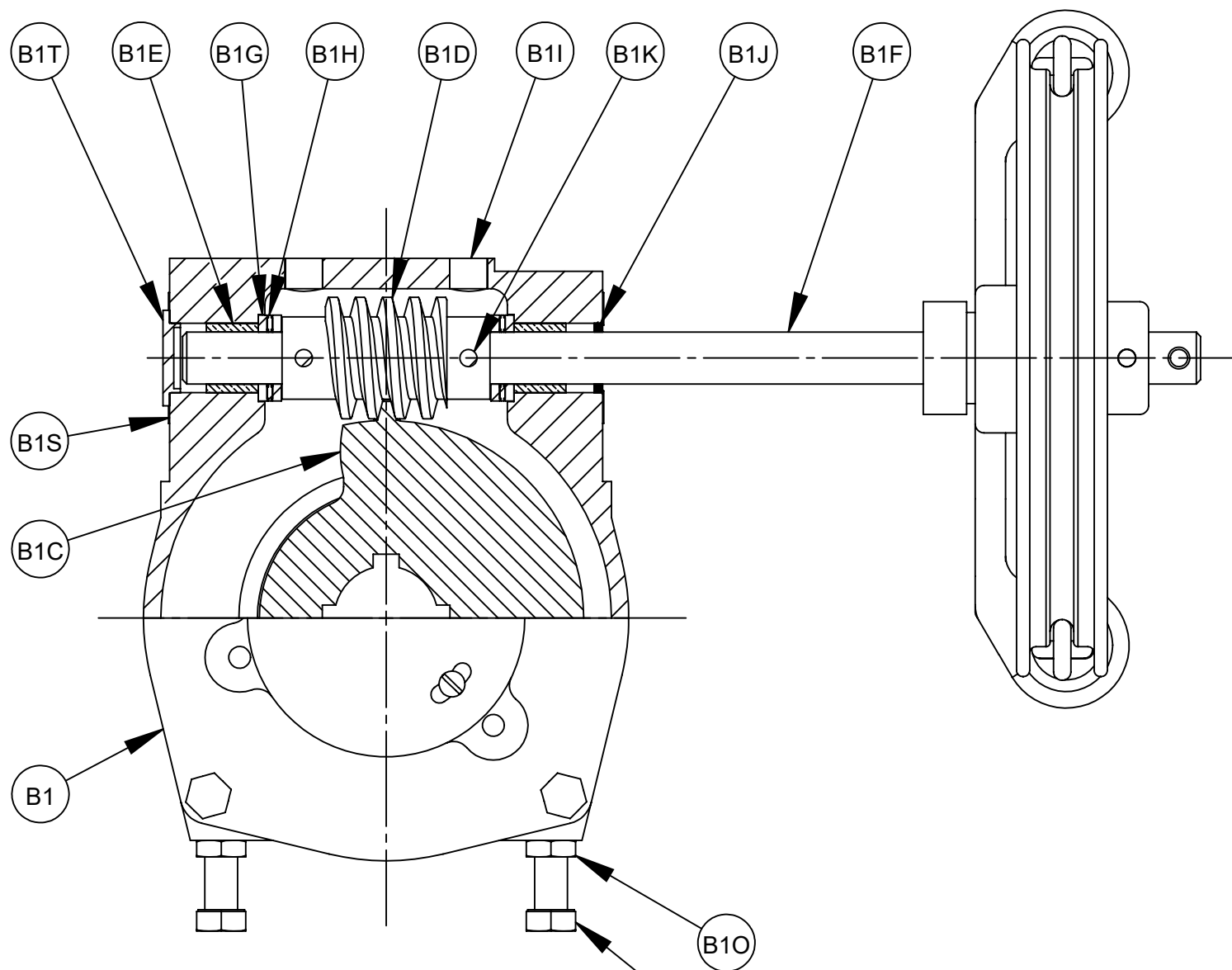
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



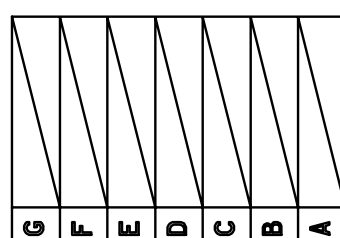
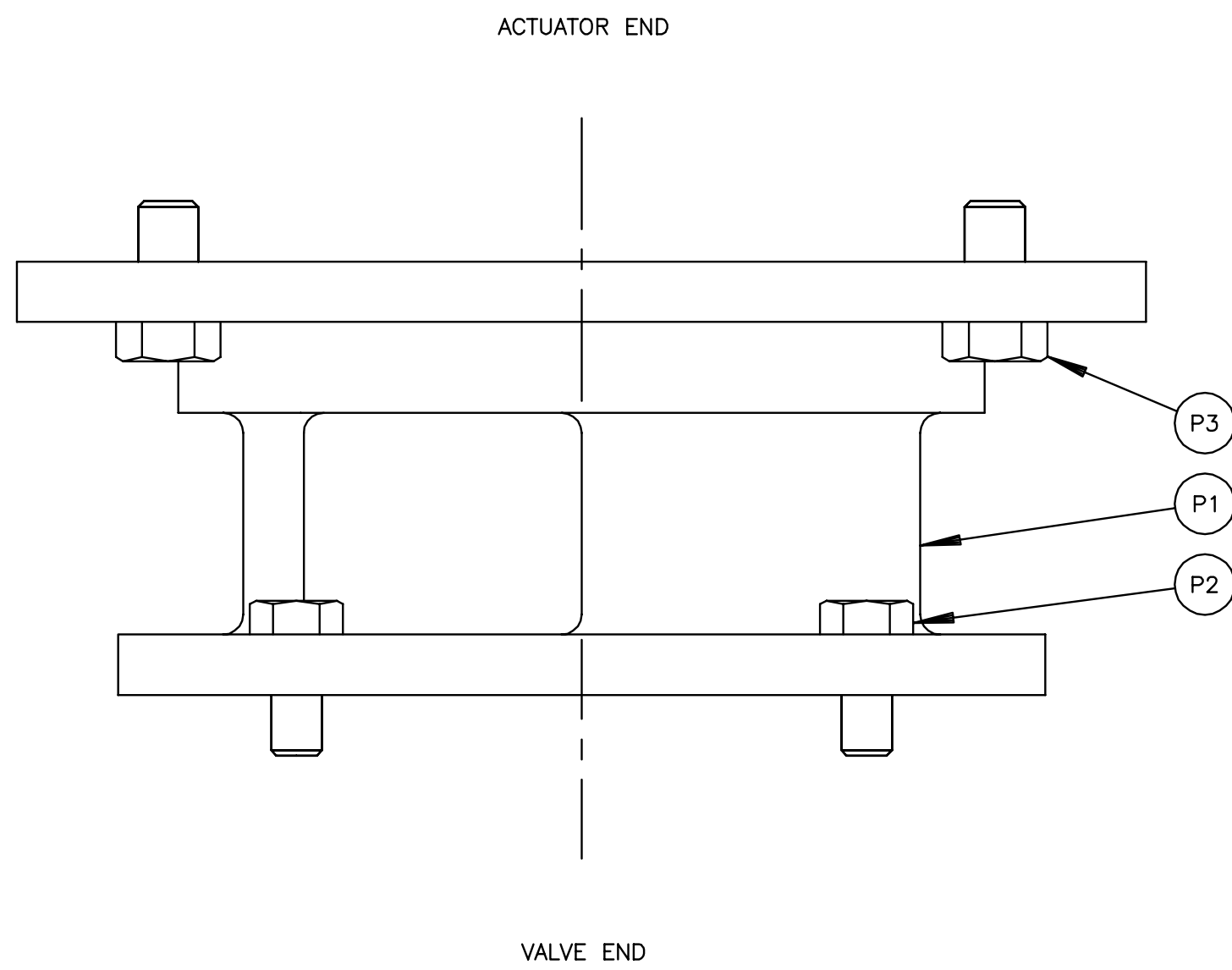
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717881
5	5	2	PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-CW8	G-Series Chainwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV5

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV5		
WEIGHT (APPROX.)	163 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-5	
PART NUMBER:	9717881		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

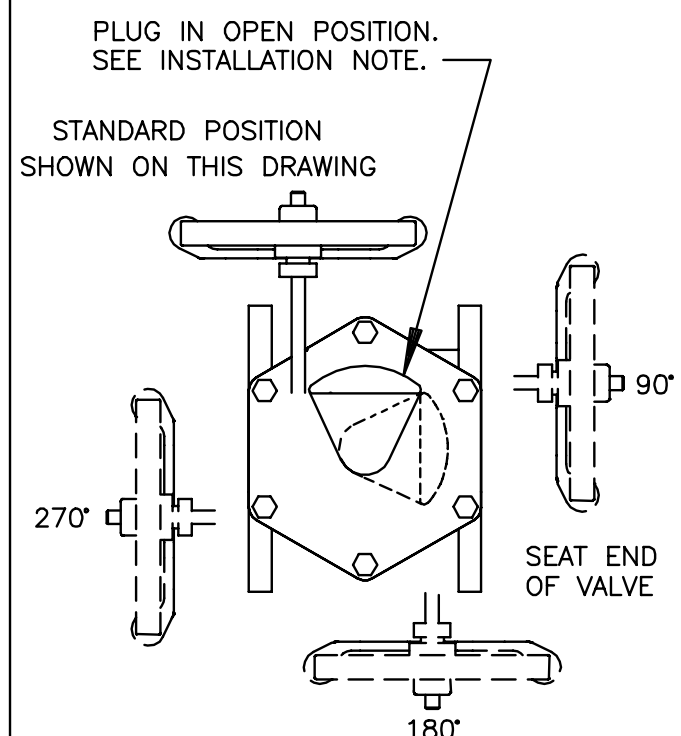
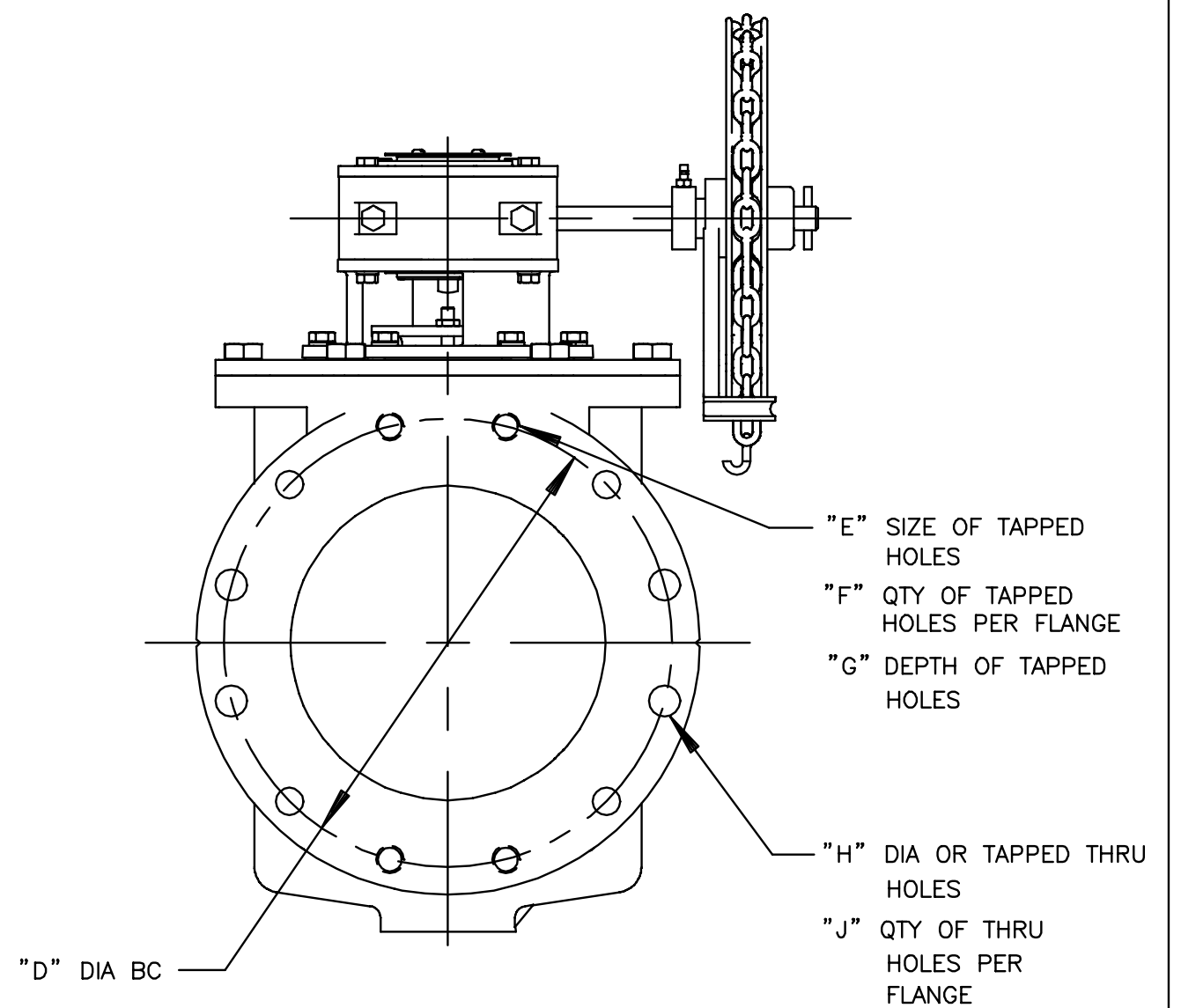
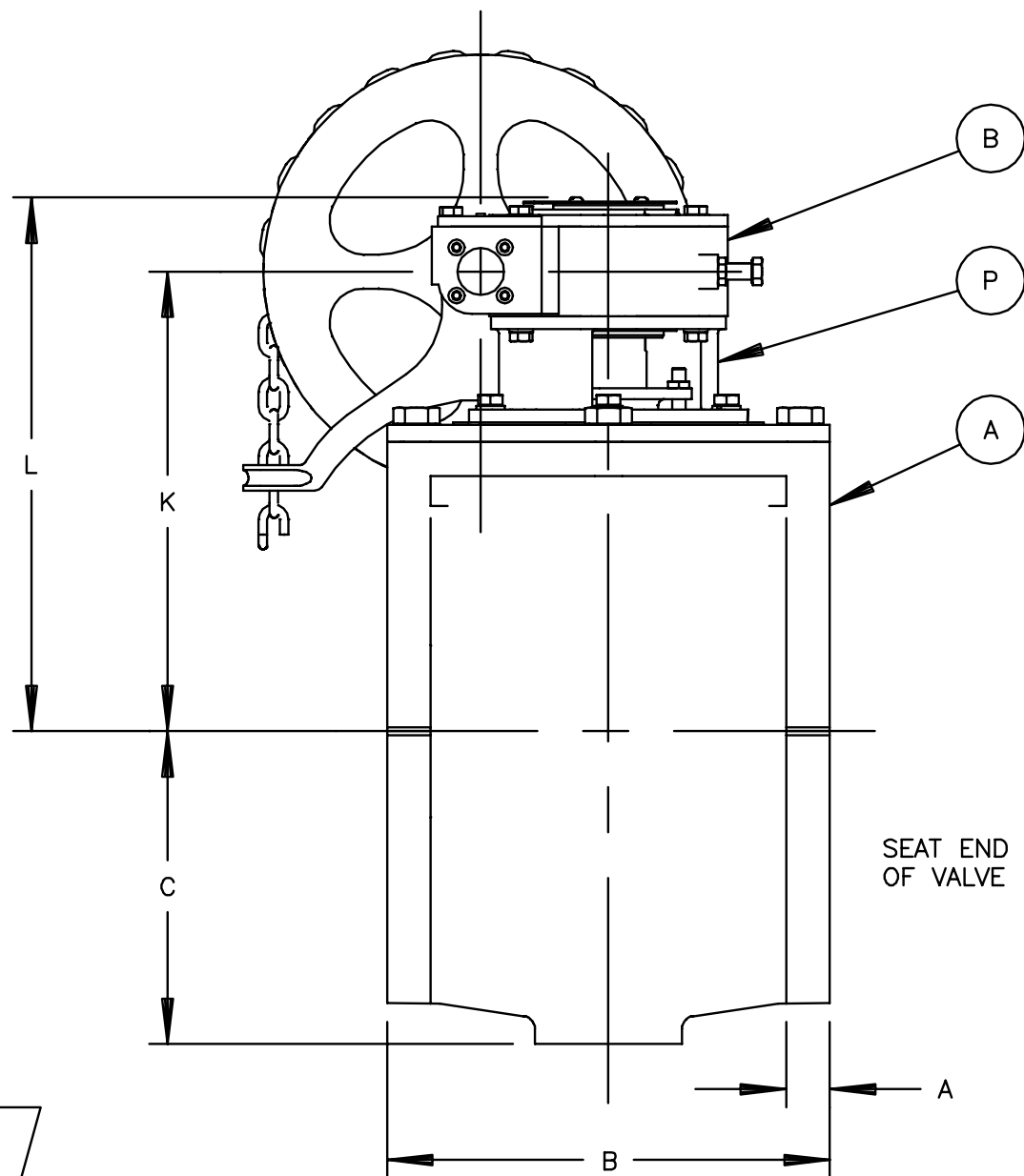
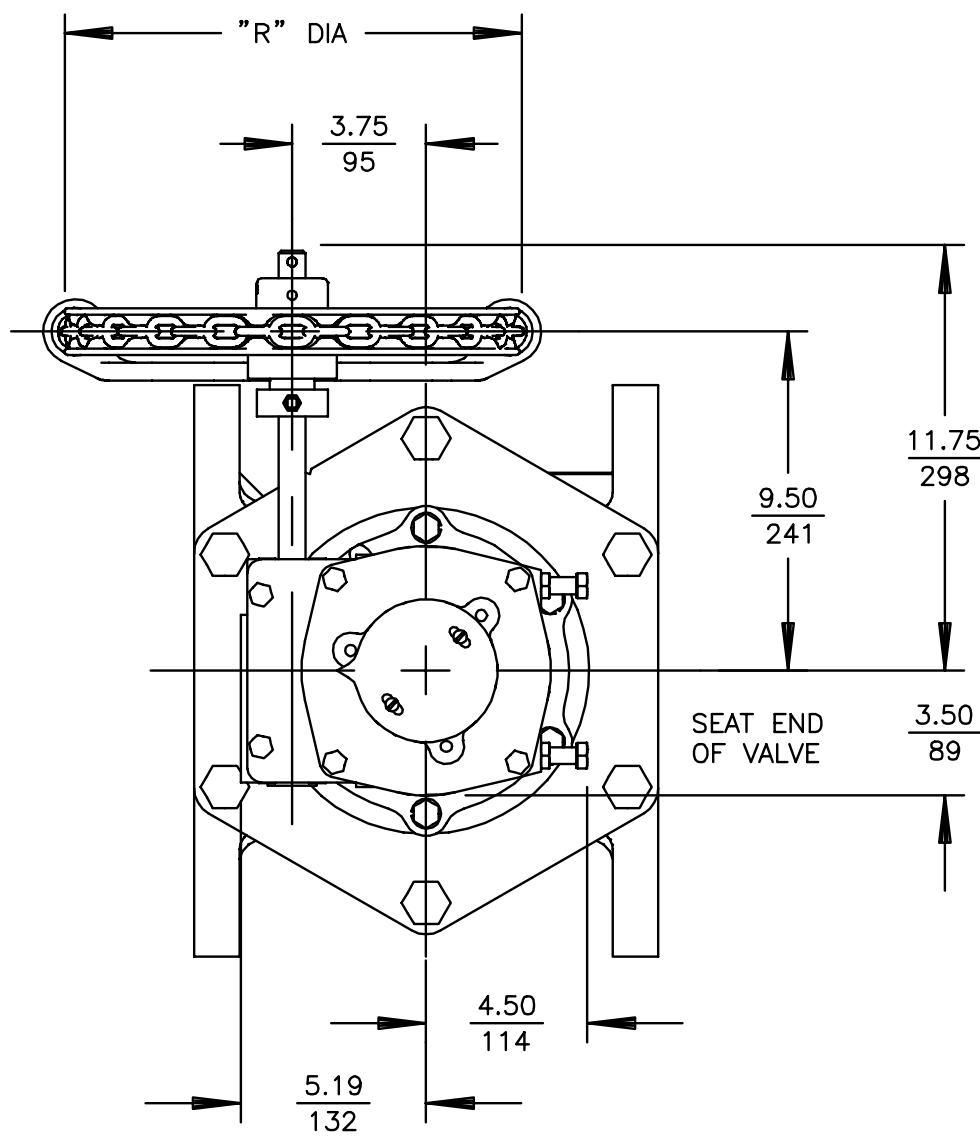
See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-CW8	$\frac{8.00}{203}$
GS-6A-CW12	$\frac{12.00}{305}$



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

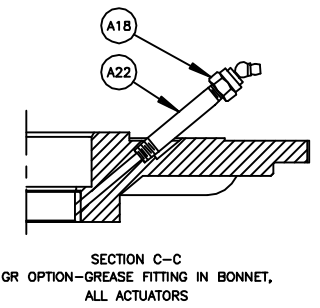
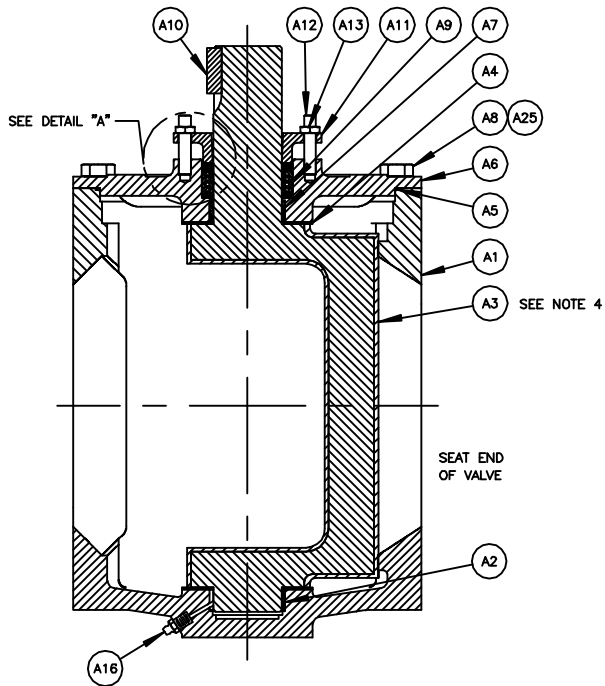
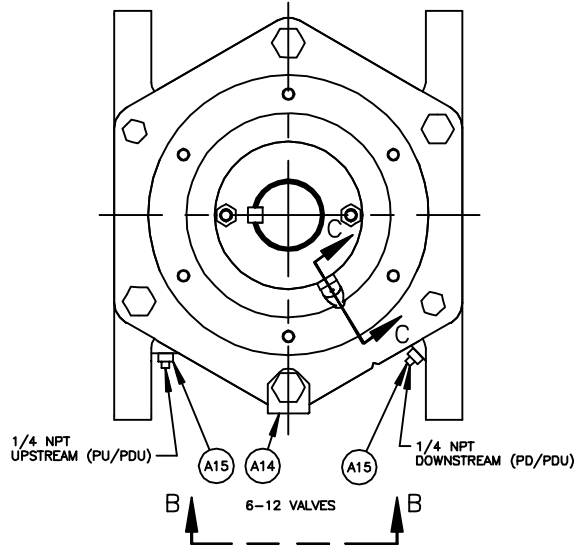
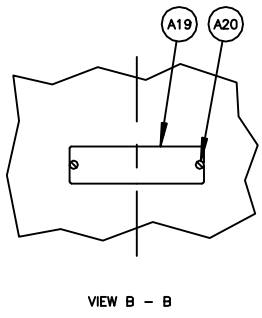
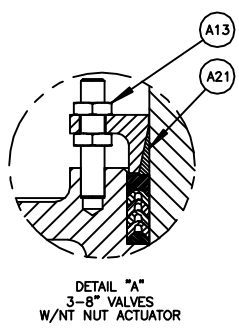
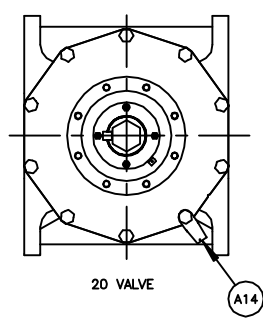
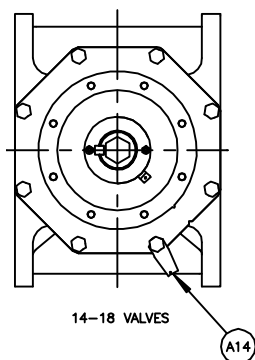
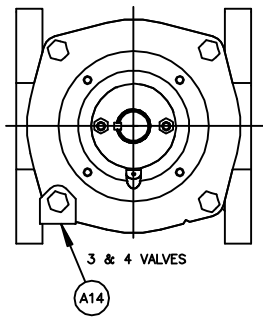
- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF CHAINWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.

6	5	4	3	2	1	03/14/07
G	F	E	D	C	B	A

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED GS-6A-CW_ CHAINWHEEL ACTUATED					
DOCT. CODE	DRAWN	TC	APPROVED	SN	A55463
C1	CHECKED	SN	DATE	10/17/05	



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	12/05/05

A55403



MATERIALS OF CONSTRUCTION

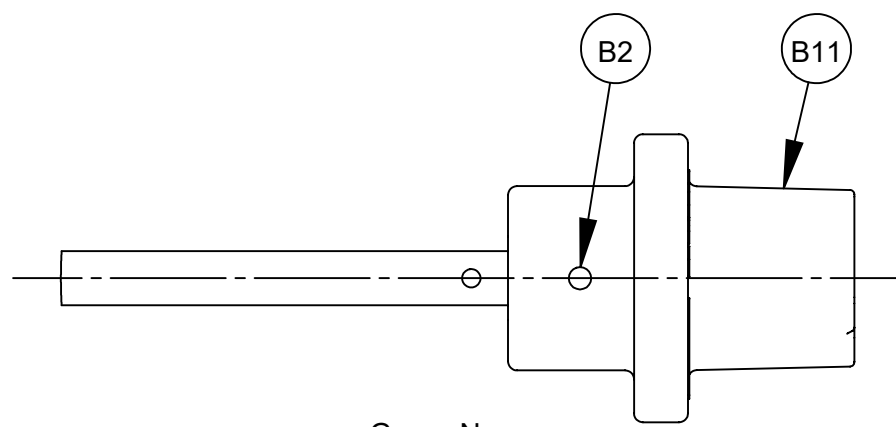
DRAWING(S): A55403

WORK ORDER: 143537

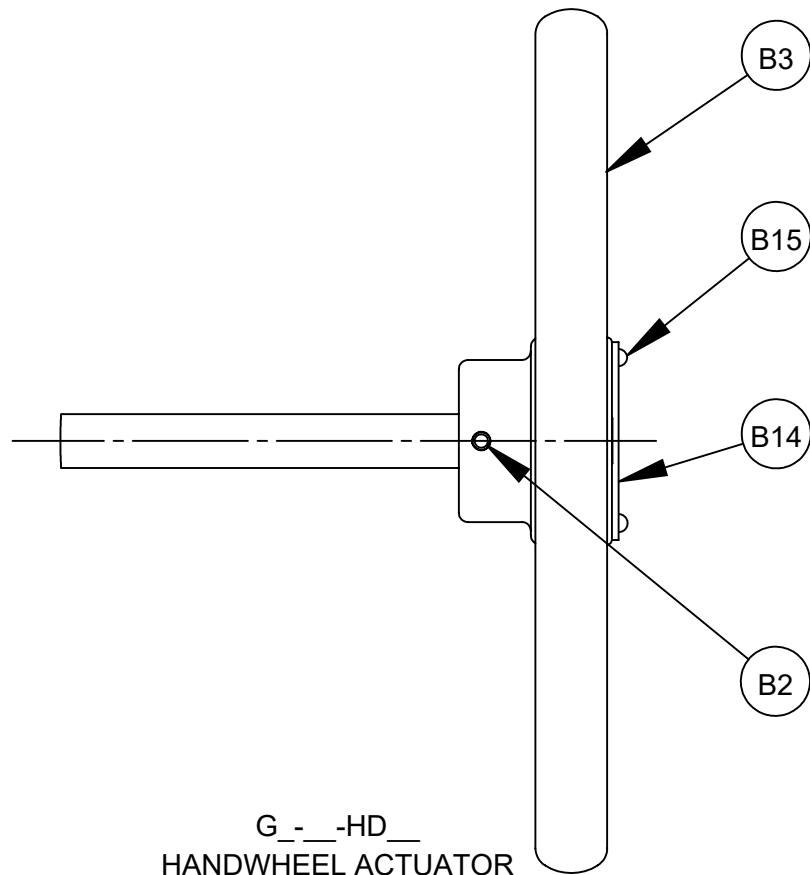
PART NO: 9717881

DESCRIPTION: PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

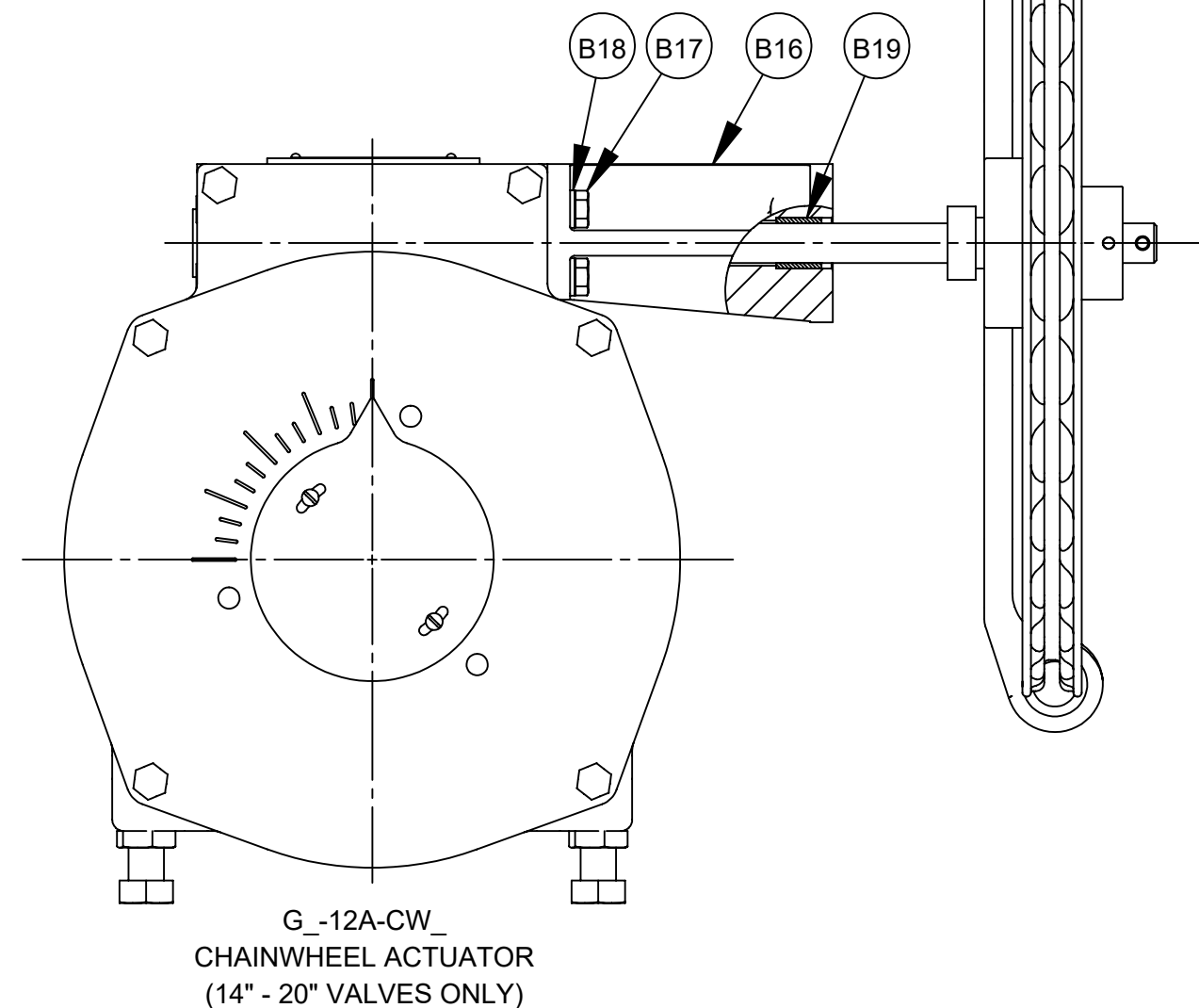
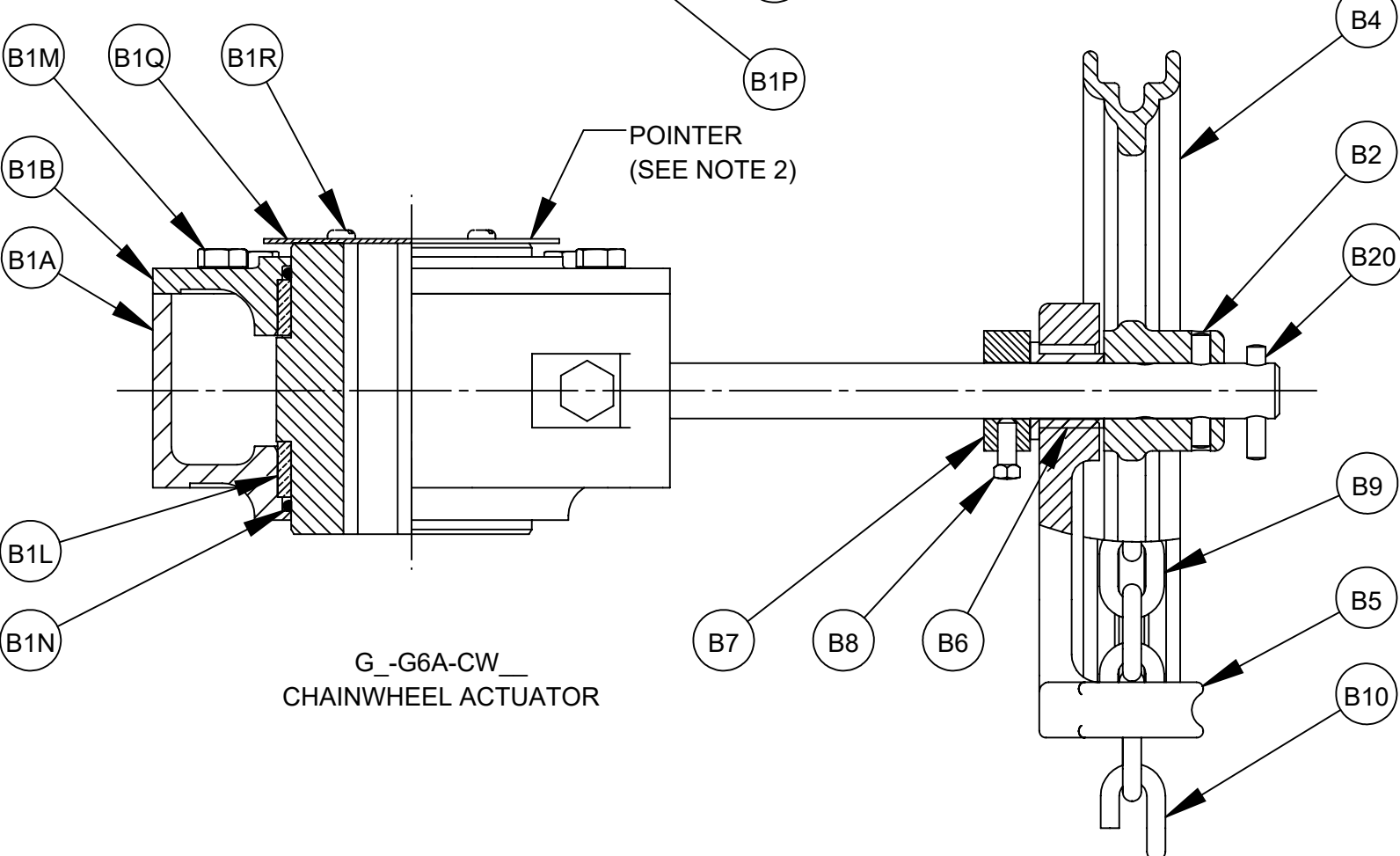
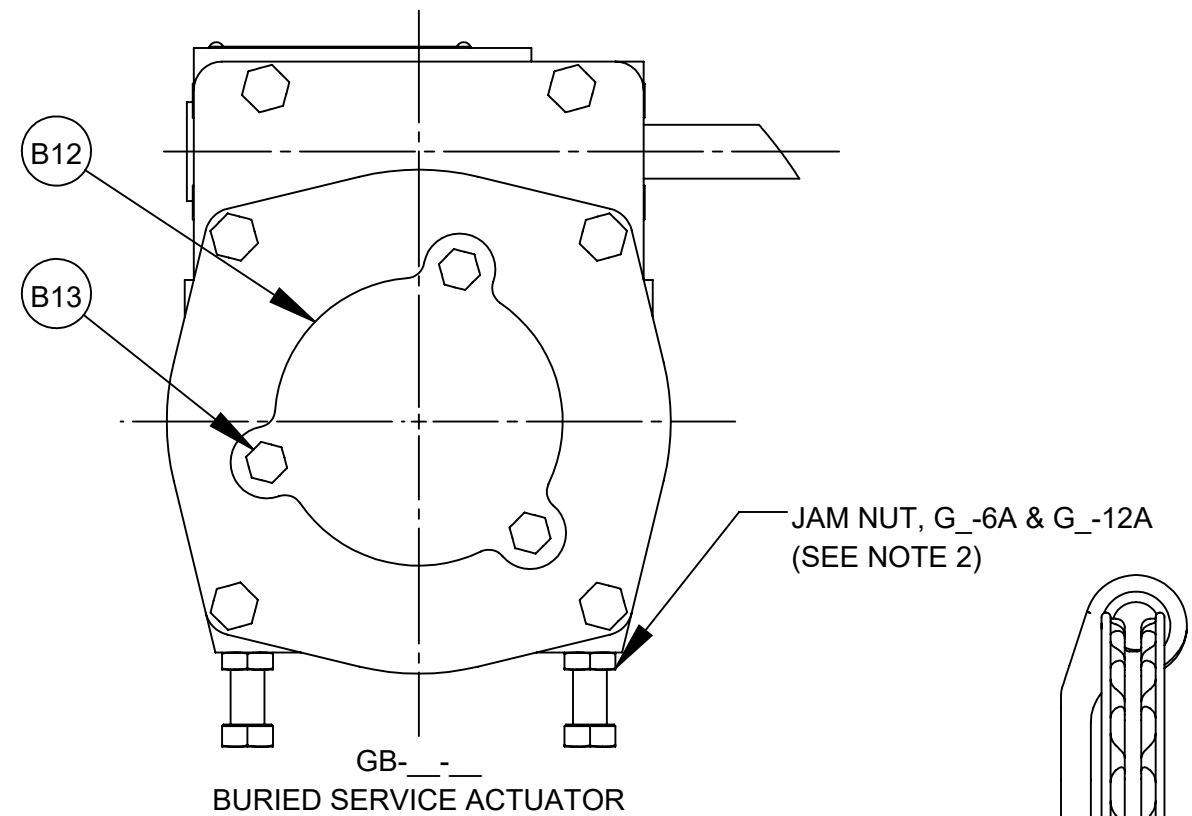
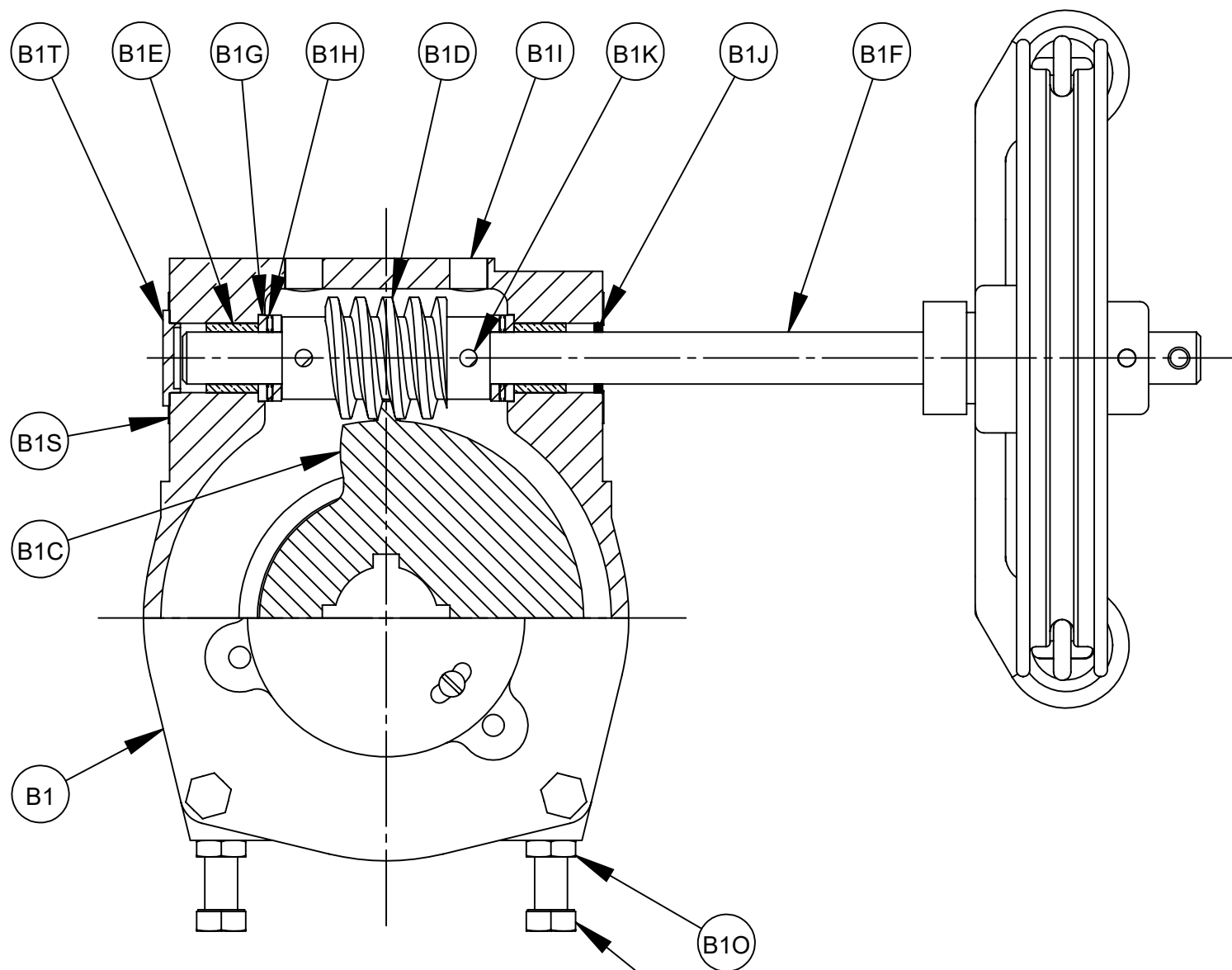
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
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C						
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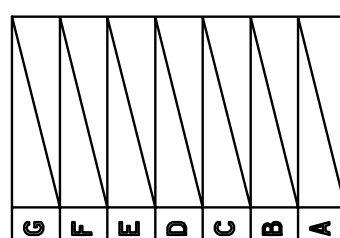
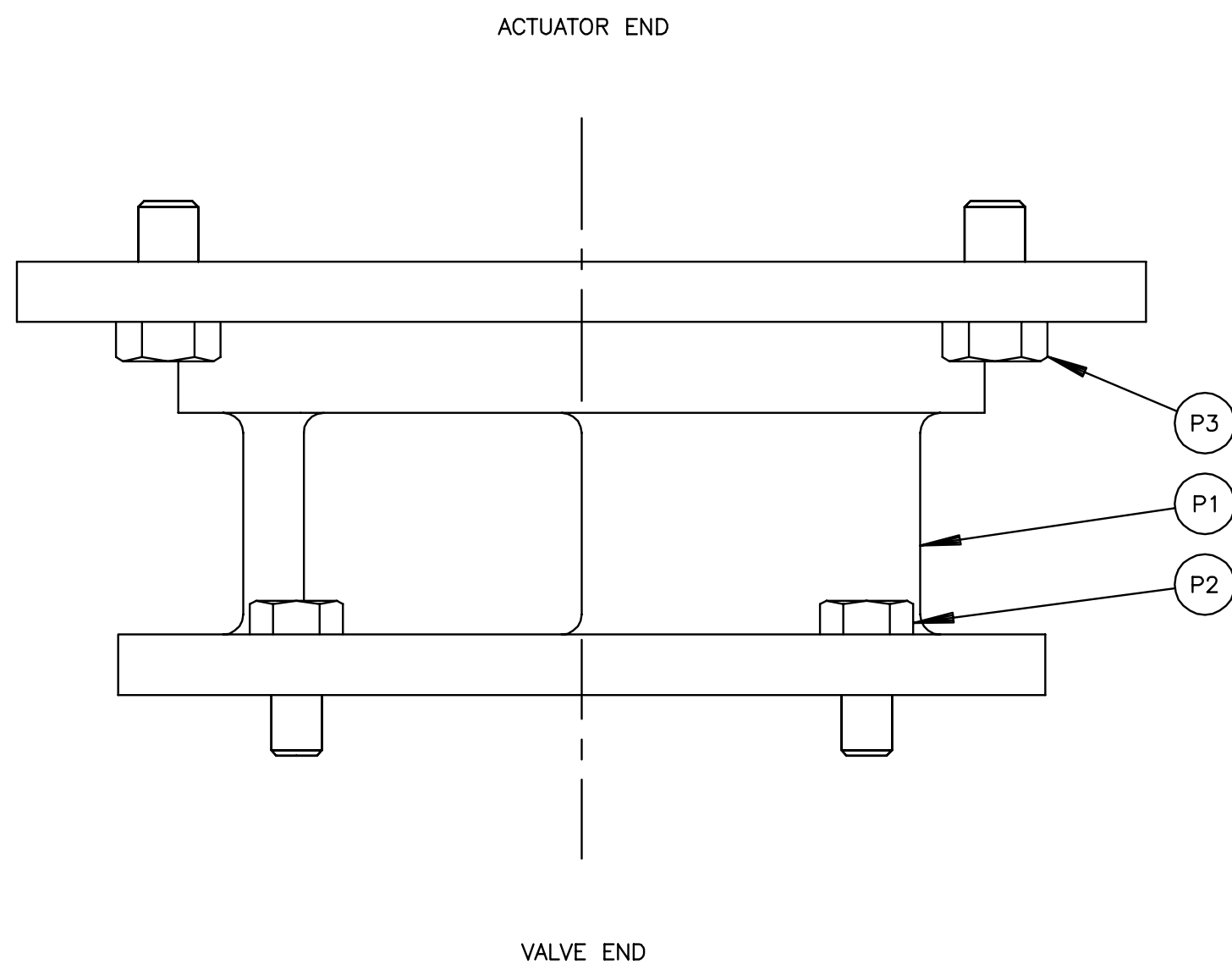
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717882
6	6	7	PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16	
Style		PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)	
Size		6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat	
End Connection		F1	Flanged Drilling; ASME Class 125/150	
Body Material		CI	Cast Iron	
Packing		NBR	Acrylonitrile-Butadiene; Temperature to 250° F.	
Plug & Facing		CR	Chloroprene; -20 to 180°F (-29 to 83°C)	
Option		AIS	USA Iron & Steel	
Coating		141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep	
Act Type		GS-6A-HD8	G-Series Handwheel; 8 In Dia	
Accessories		SB16	316 SST Bolting	

RELATED DOCUMENTS

A55432	DWG INST PEF F GS-6A-HD 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV6

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV6		
WEIGHT (APPROX.)	158 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-6	
PART NUMBER:	9717882		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:		770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

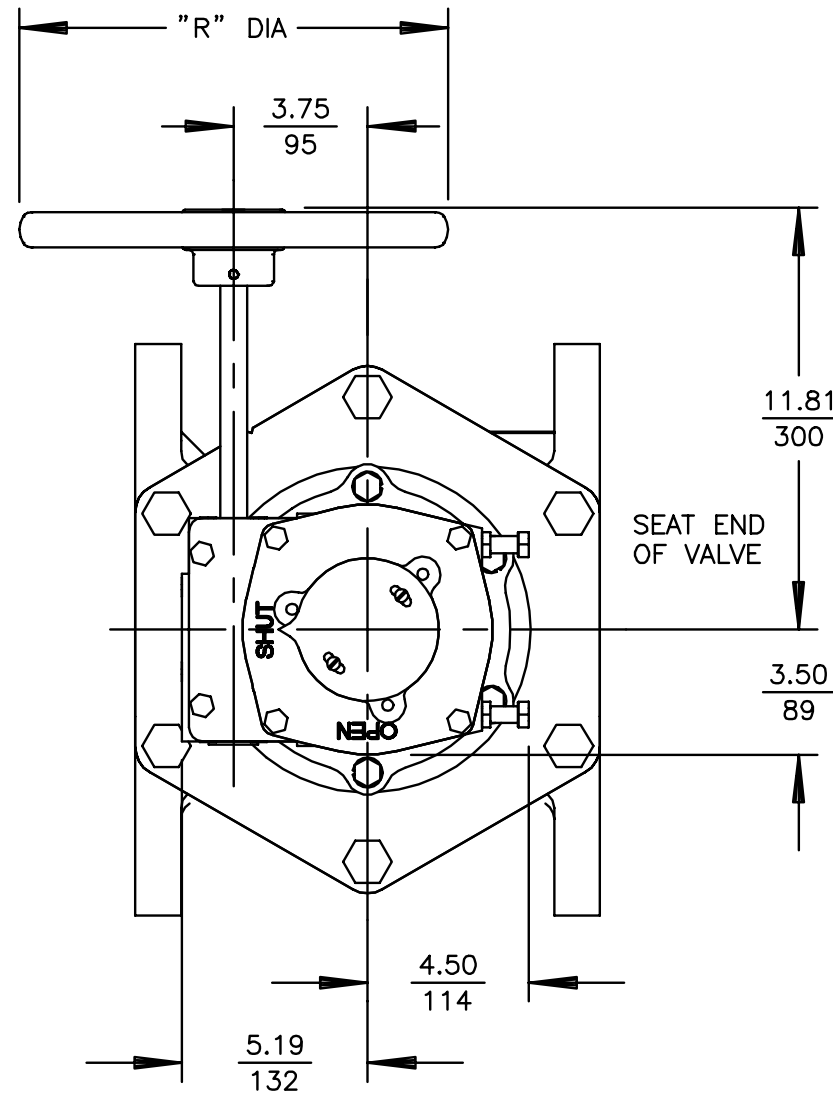
VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-HD8	$\frac{8.00}{203}$
GS-6A-HD12	$\frac{12.00}{305}$

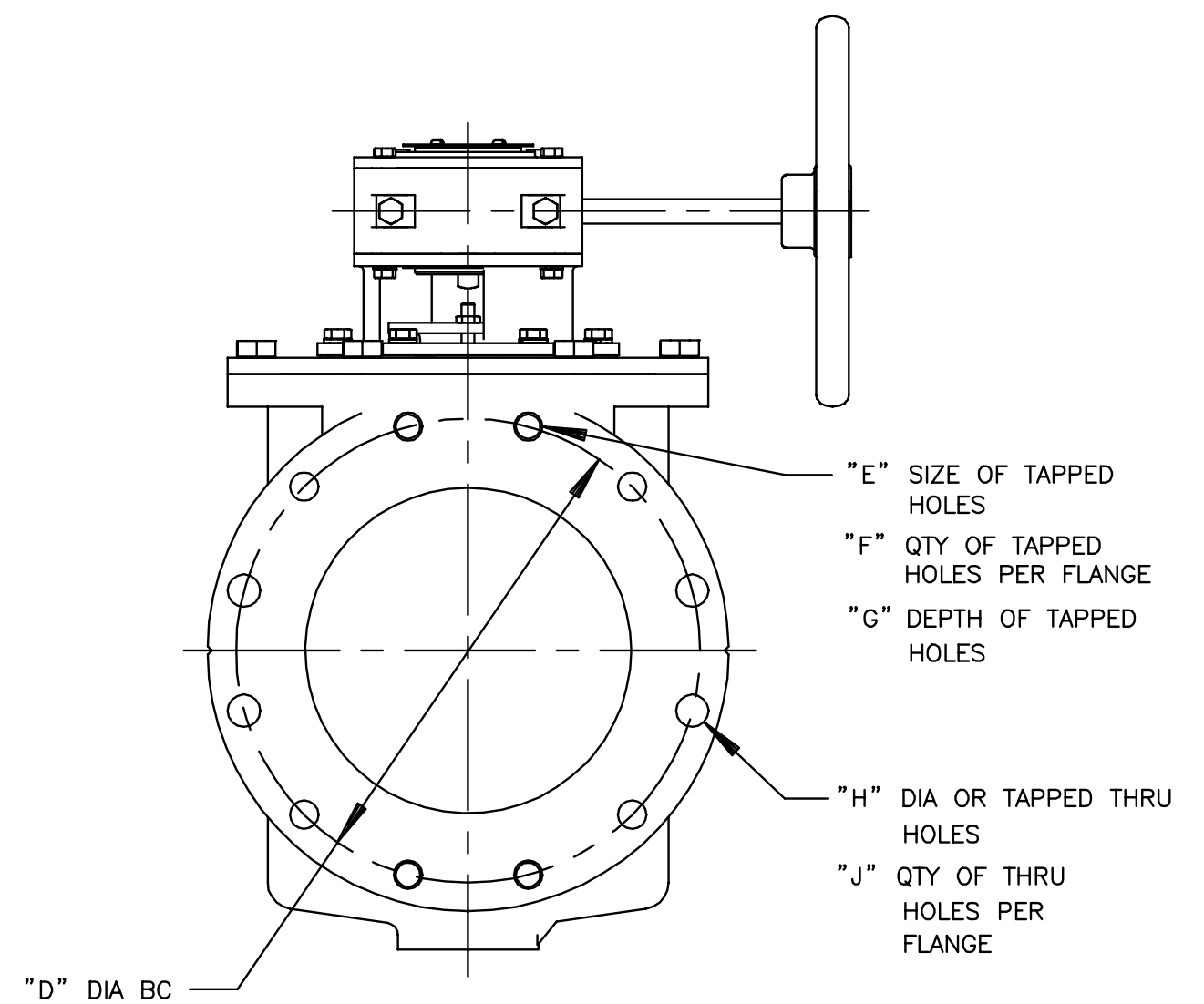
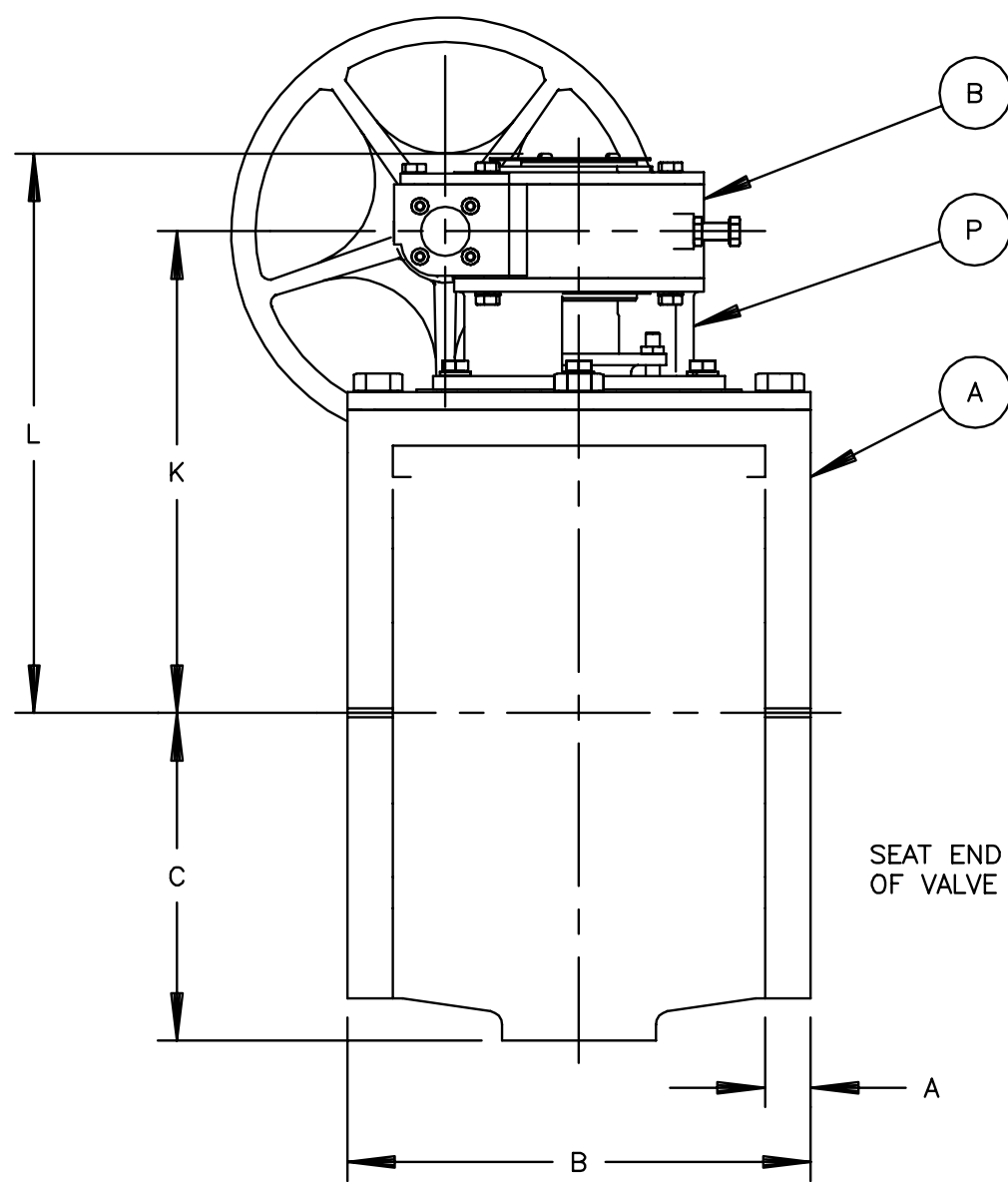
A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF HANDWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

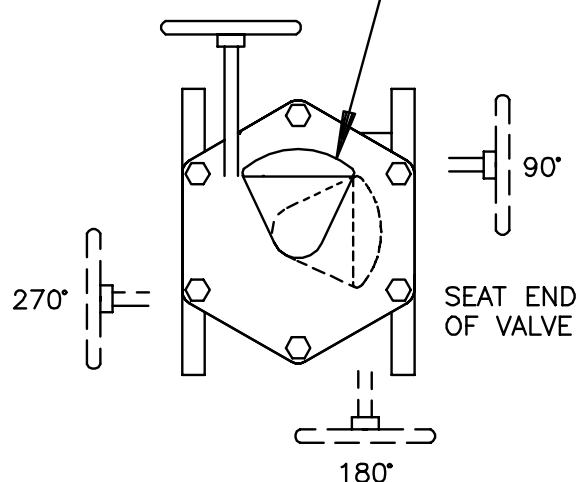


NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



PLUG IN OPEN POSITION.
SEE INSTALLATION NOTE.

STANDARD POSITION
SHOWN ON THIS DRAWING



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

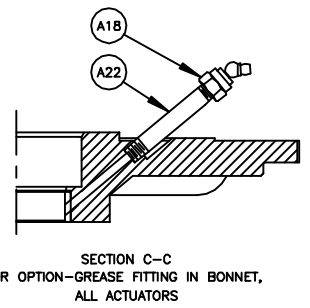
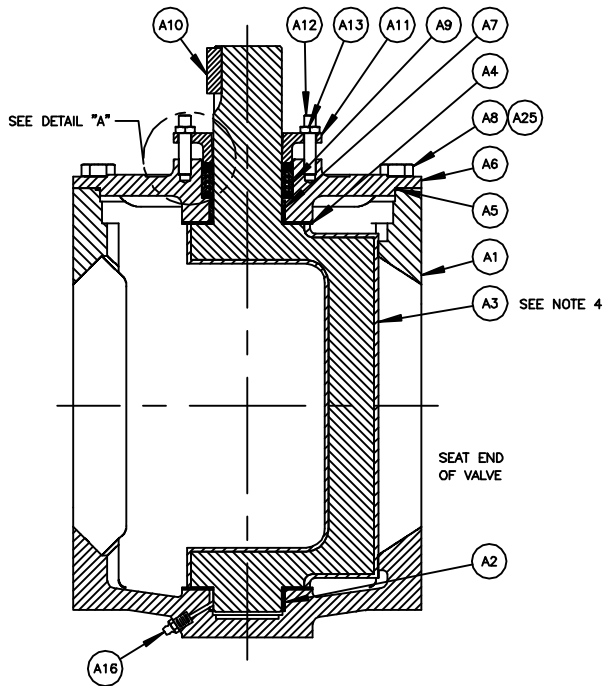
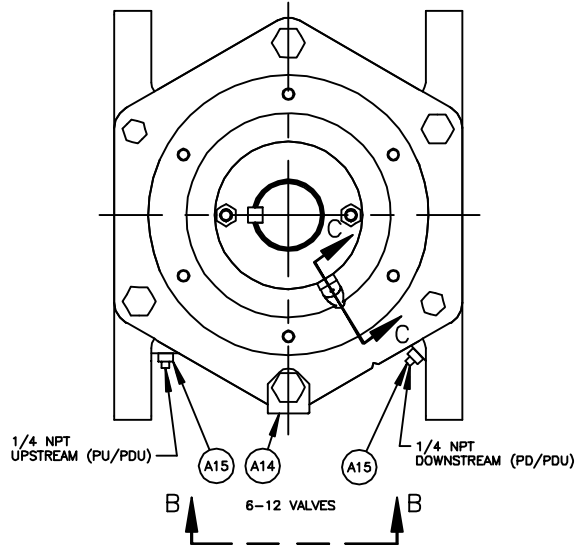
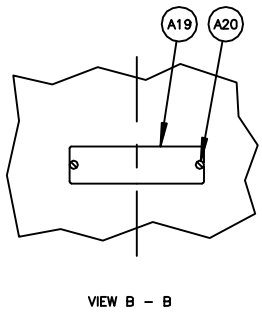
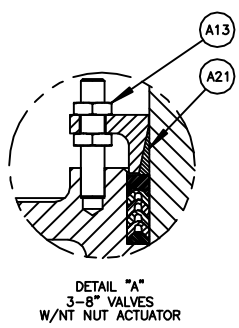
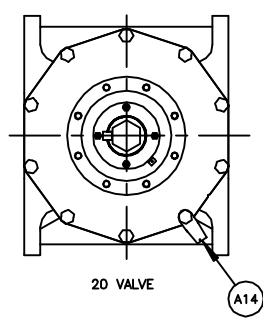
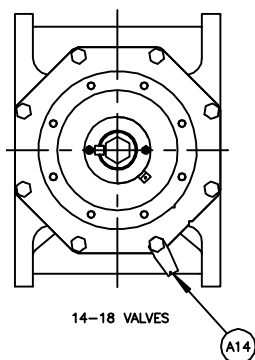
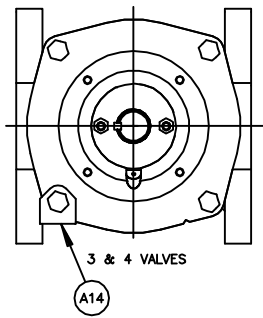
6	5	4	3	2	1	0
6	5	4	3	2	1	0

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED
GS-6A-HD_ HANDWHEEL ACTUATED

DOCT. CODE	DRAWN	APPROVED
C1	CHECKED	DATE
	SN	SN
	SN	10/17/05

A55432



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICTION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	12/05/05

A55403



MATERIALS OF CONSTRUCTION

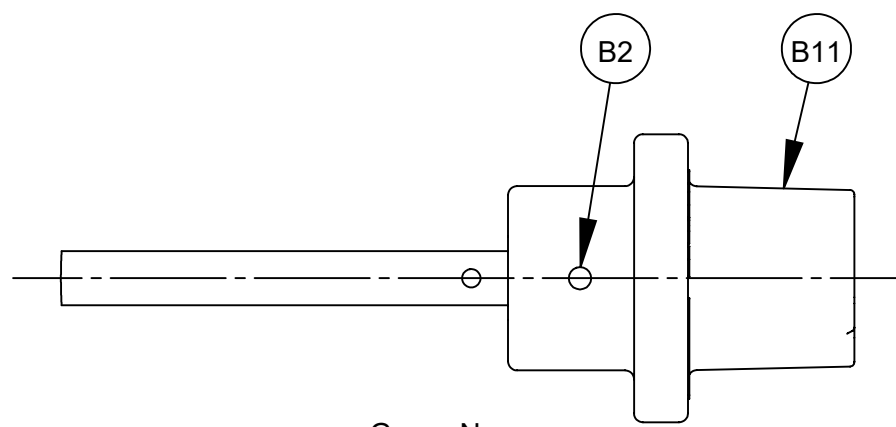
DRAWING(S): A55403

WORK ORDER: 143537

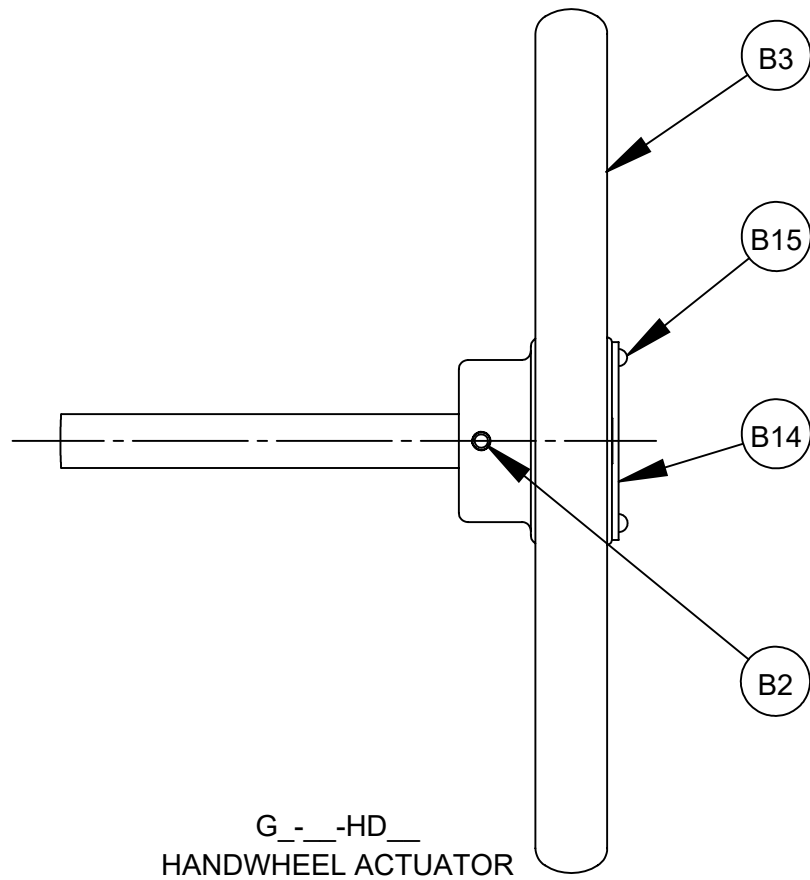
PART NO: 9717882

DESCRIPTION: PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

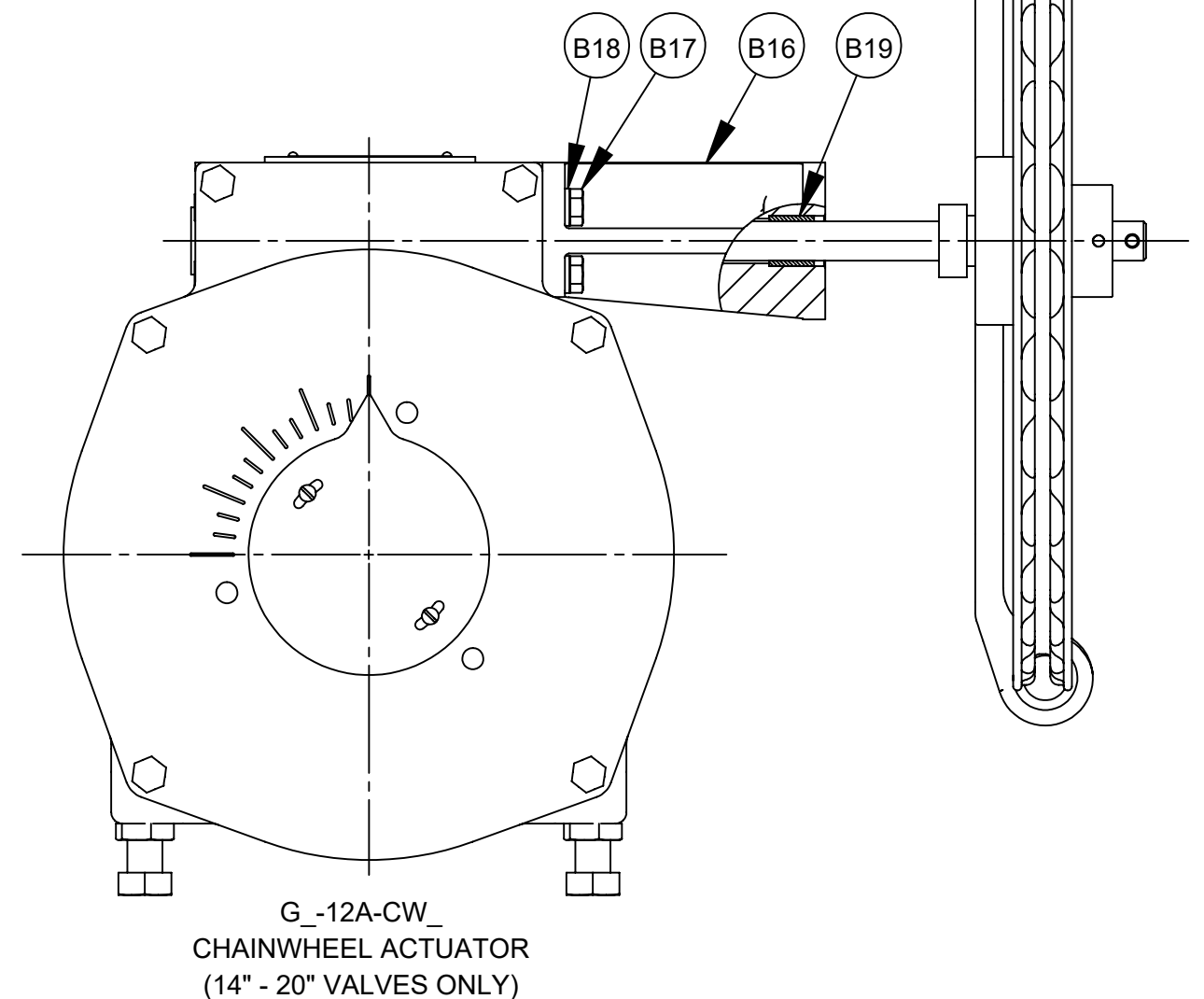
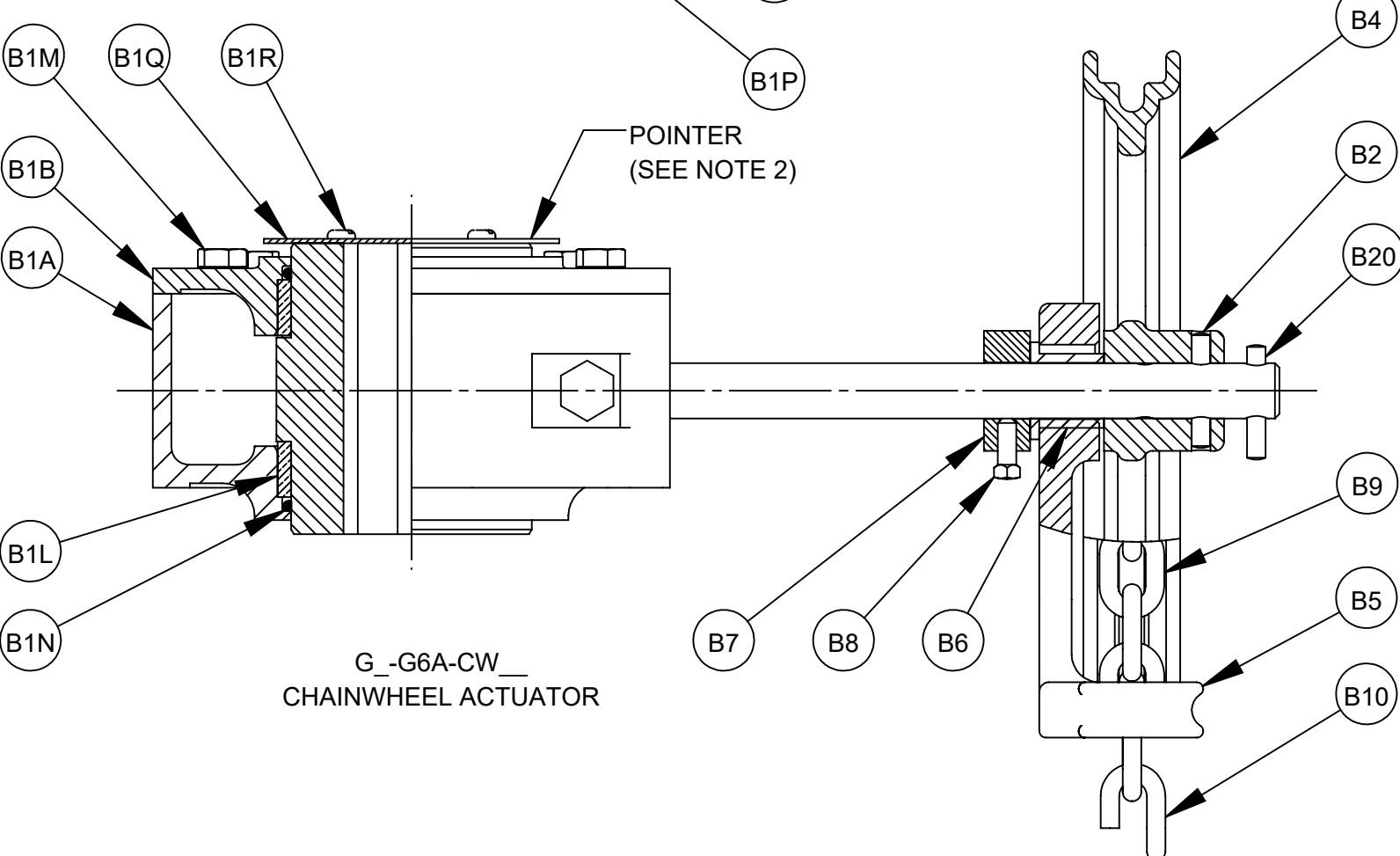
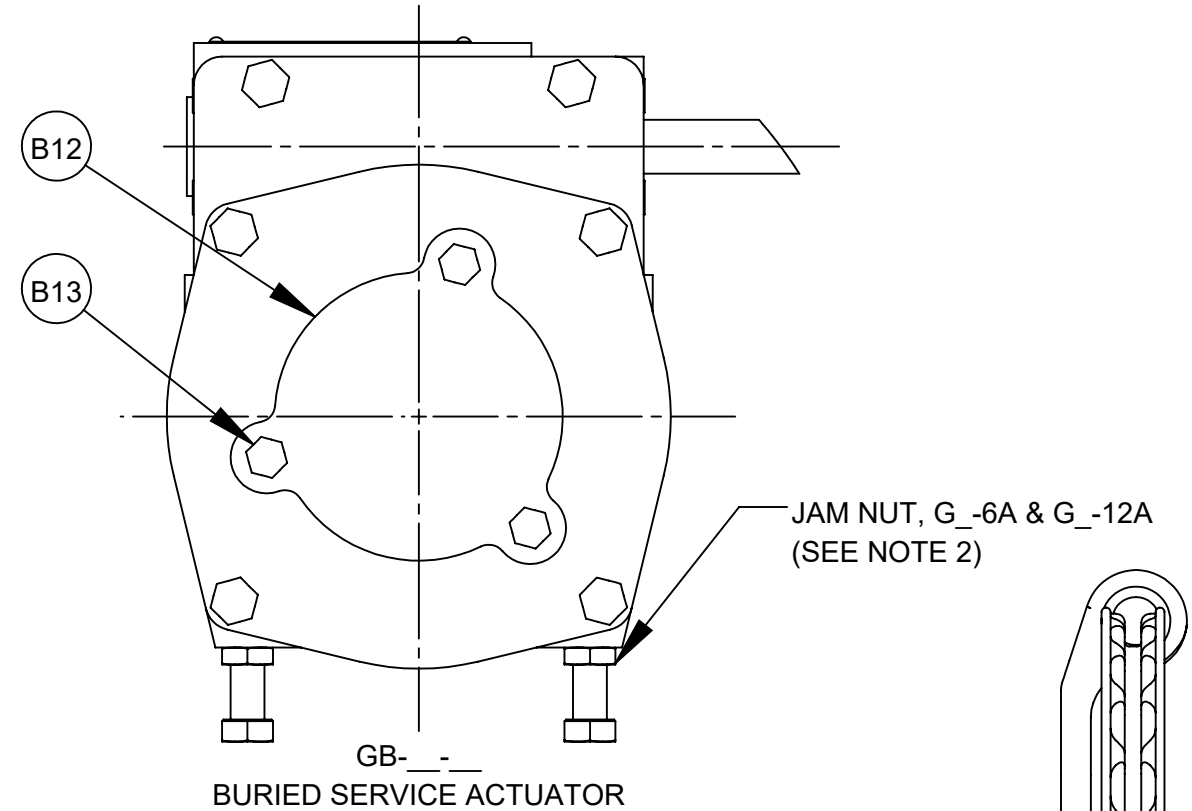
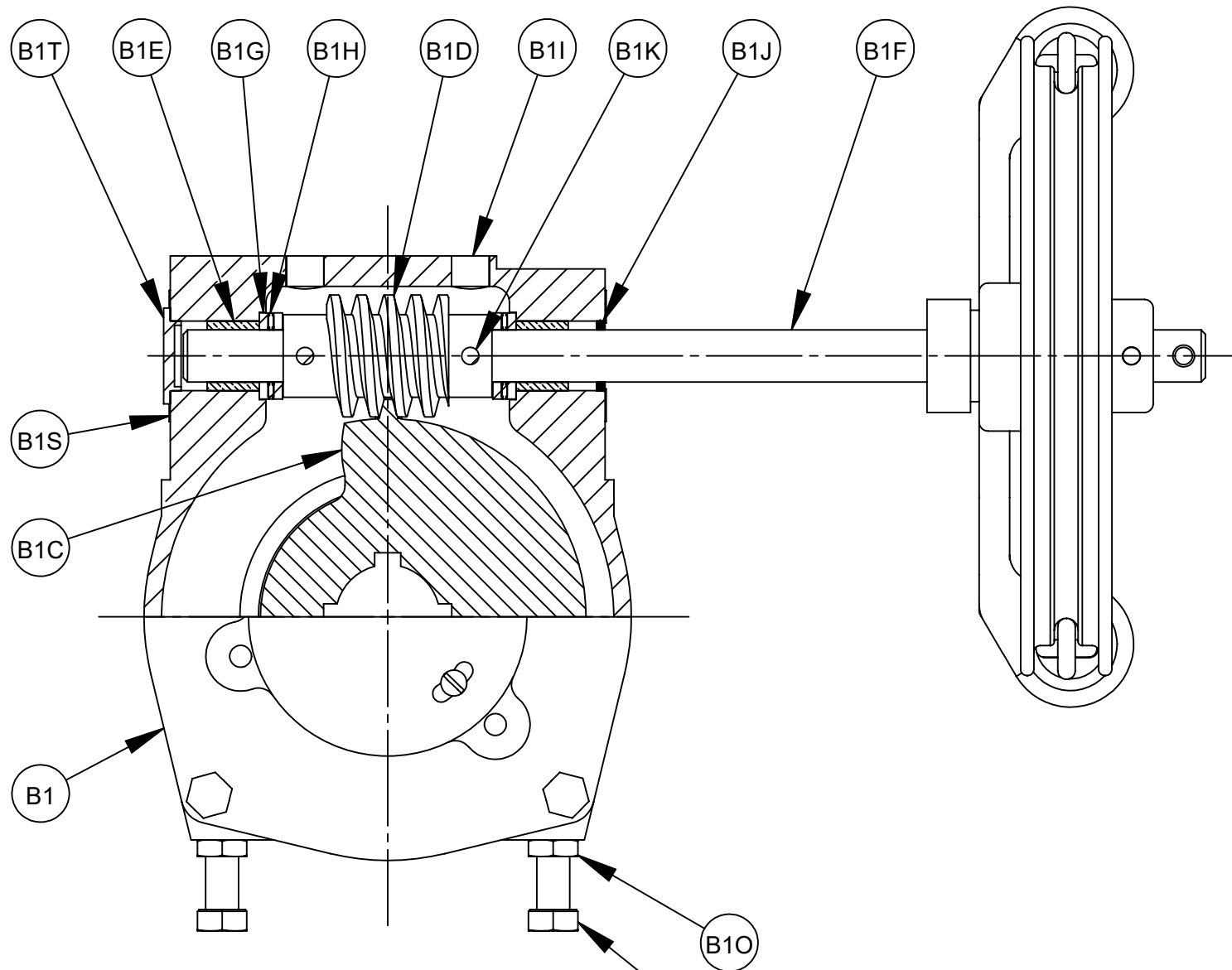
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
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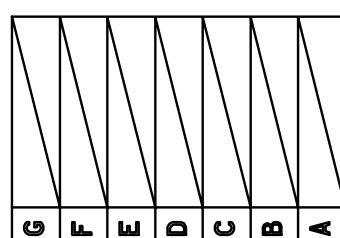
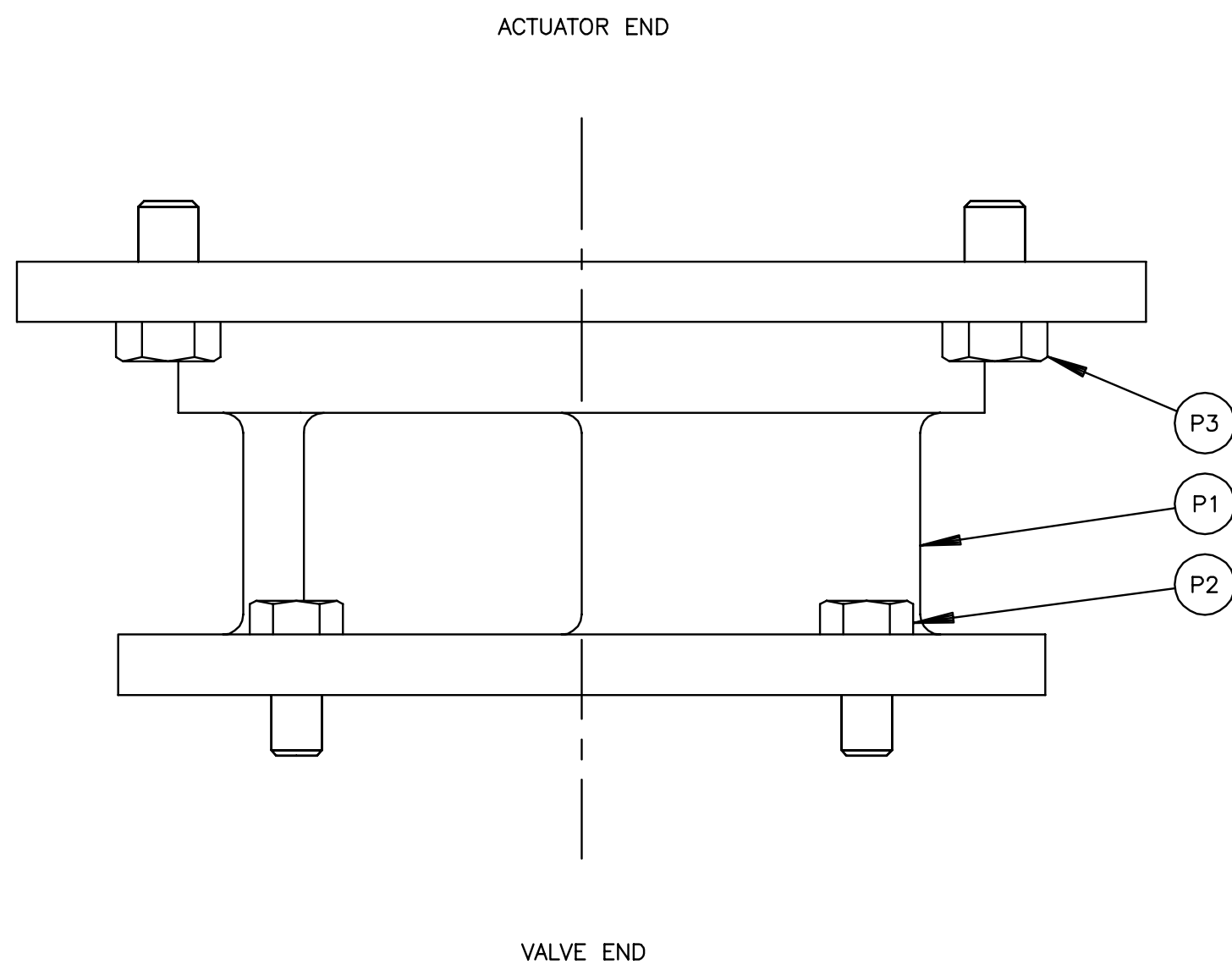
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717883
7	7	2	PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-HD8	G-Series Handwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55432	DWG INST PEF F GS-6A-HD 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV7

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV7		
WEIGHT (APPROX.)	110 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-7	
PART NUMBER:	9717883		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

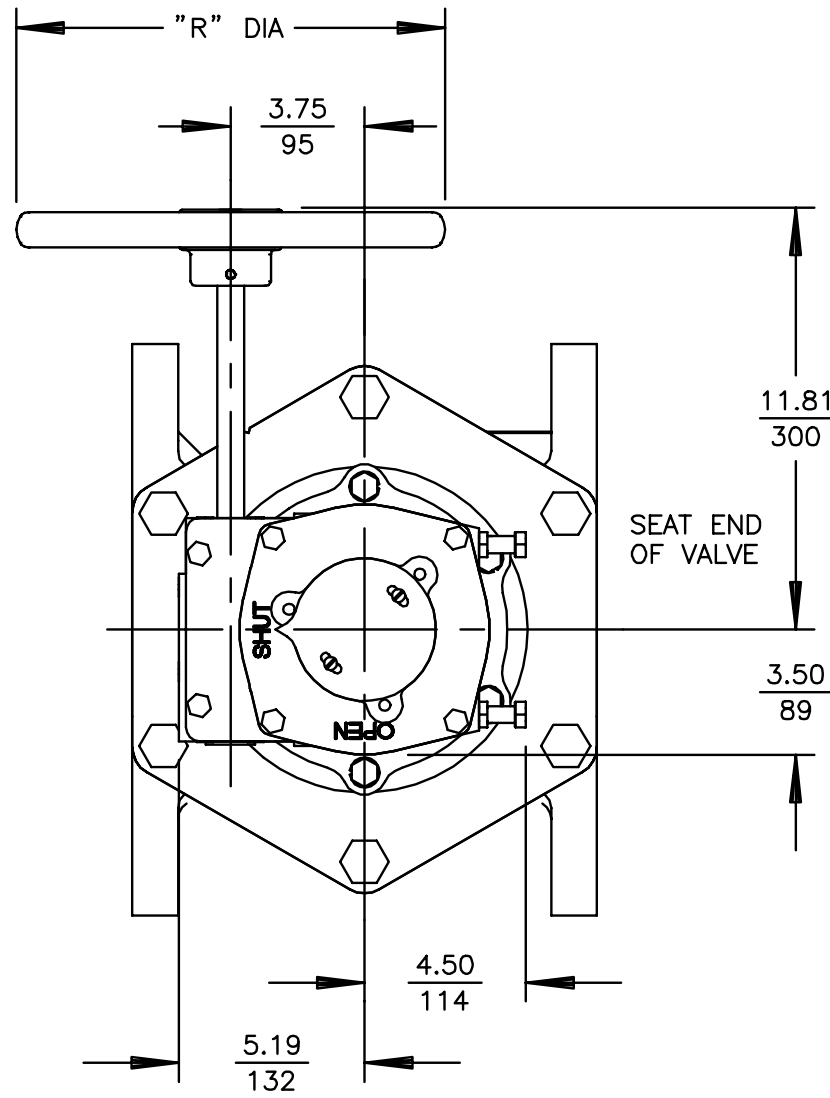
VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-HD8	$\frac{8.00}{203}$
GS-6A-HD12	$\frac{12.00}{305}$

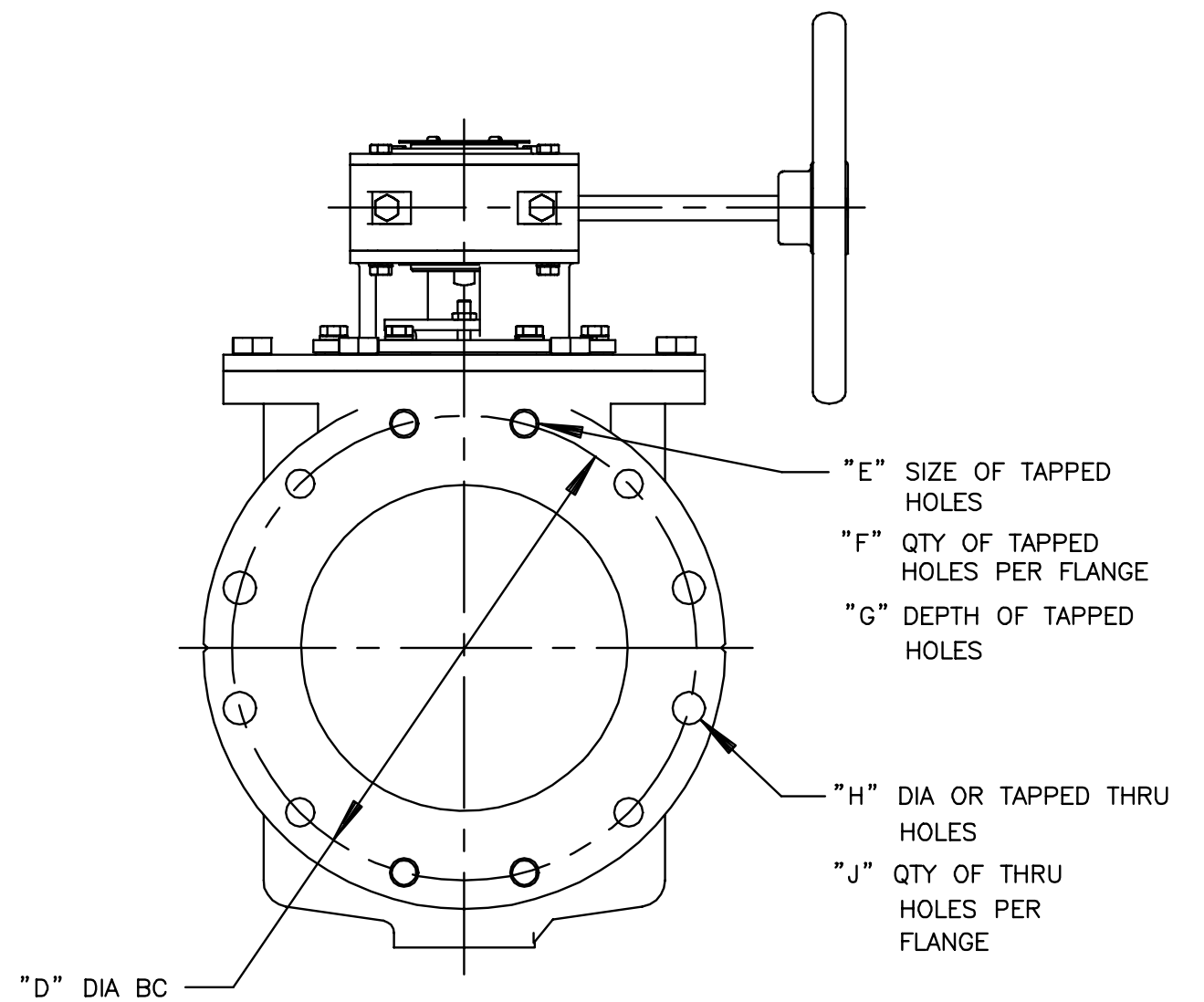
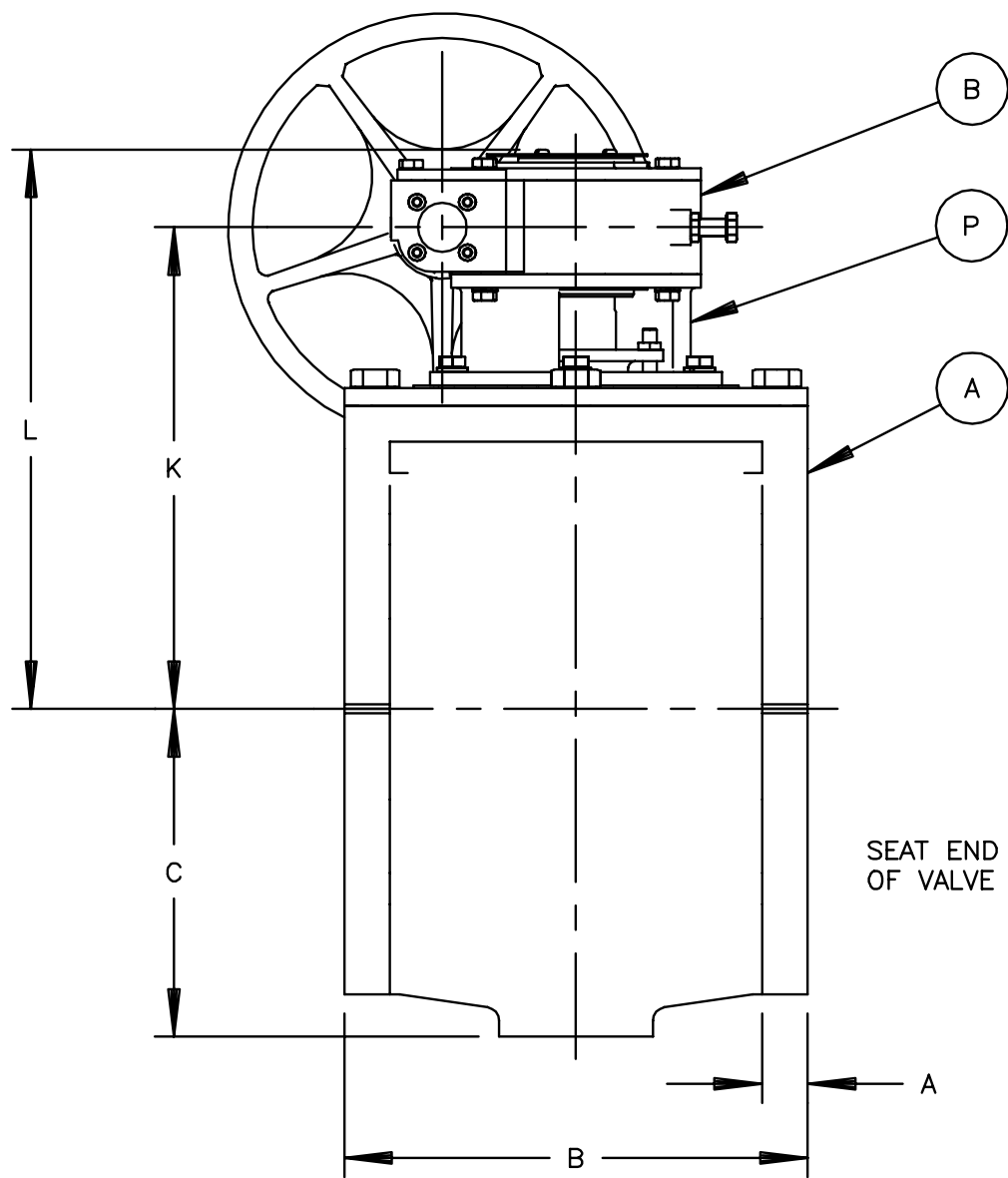
A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF HANDWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

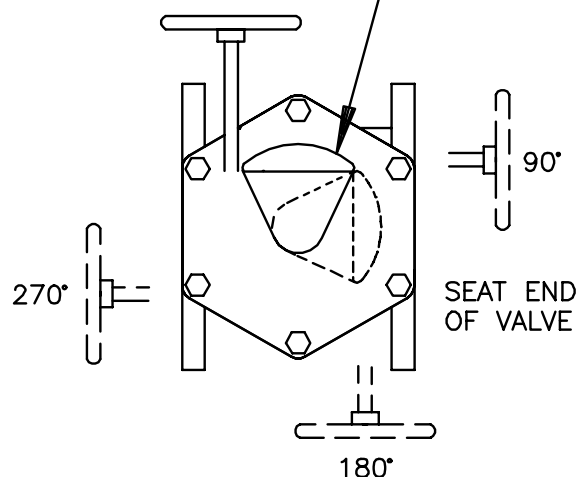


NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



PLUG IN OPEN POSITION. SEE INSTALLATION NOTE.

STANDARD POSITION SHOWN ON THIS DRAWING



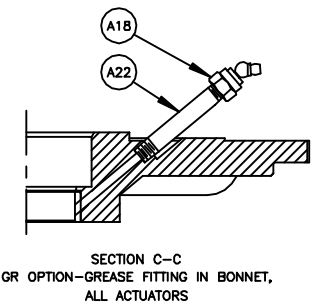
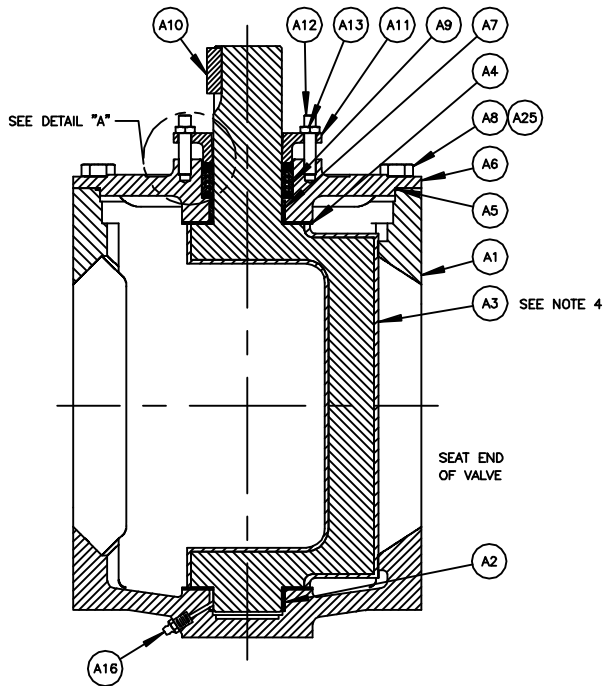
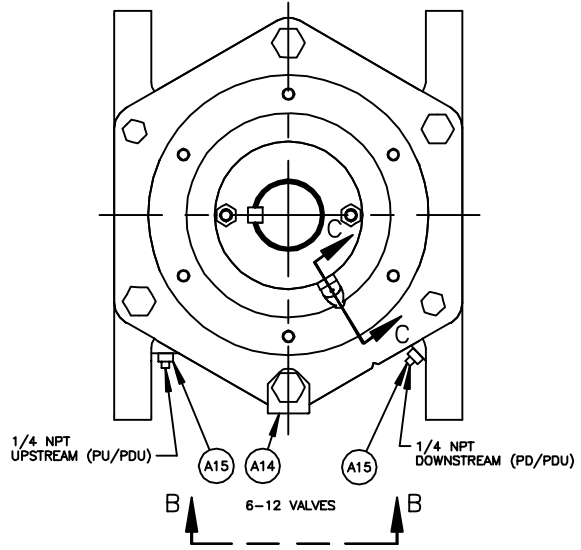
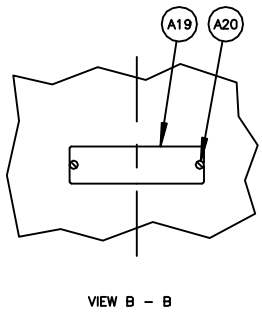
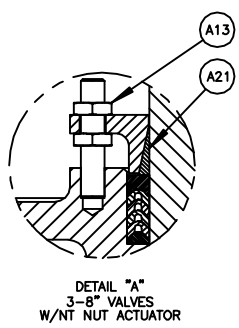
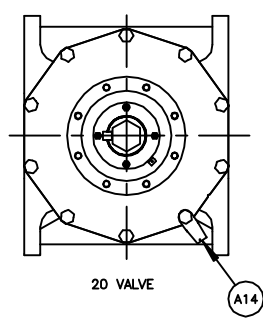
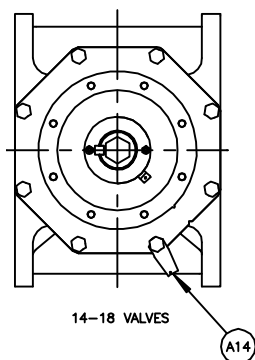
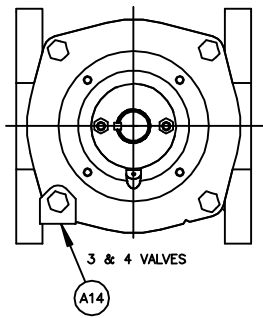
ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
61483	03/14/07					

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED GS-6A-HD_ HANDWHEEL ACTUATED			
DOCT. CODE	DRAWN	APPROVED	
C1	CHECKED	SN	SN
		DATE	10/17/05

A55432



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	APPROVED
C1	CHECKED	DATE
	SN	SN
	SN	12/05/05

A55403



MATERIALS OF CONSTRUCTION

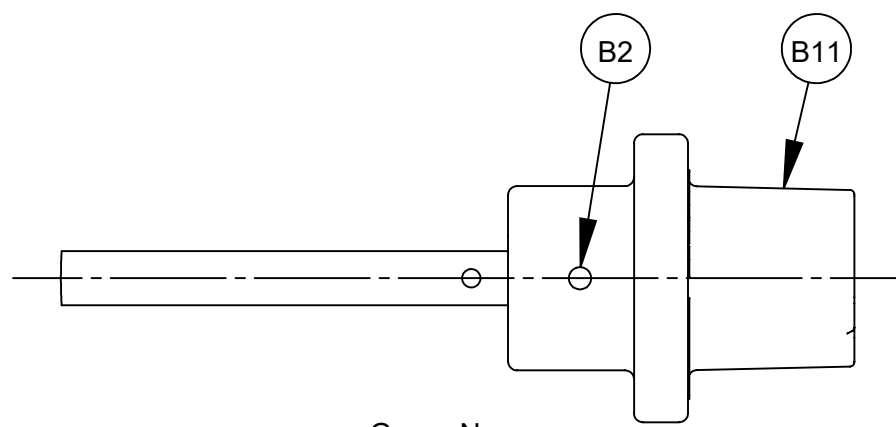
DRAWING(S): A55403

WORK ORDER: 143537

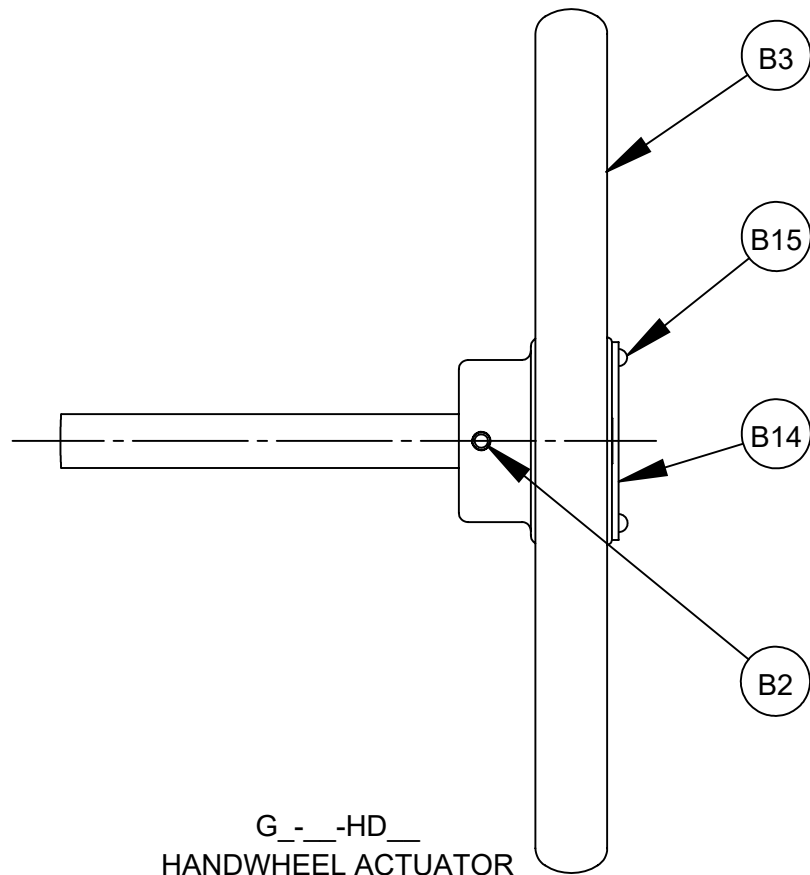
PART NO: 9717883

DESCRIPTION: PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

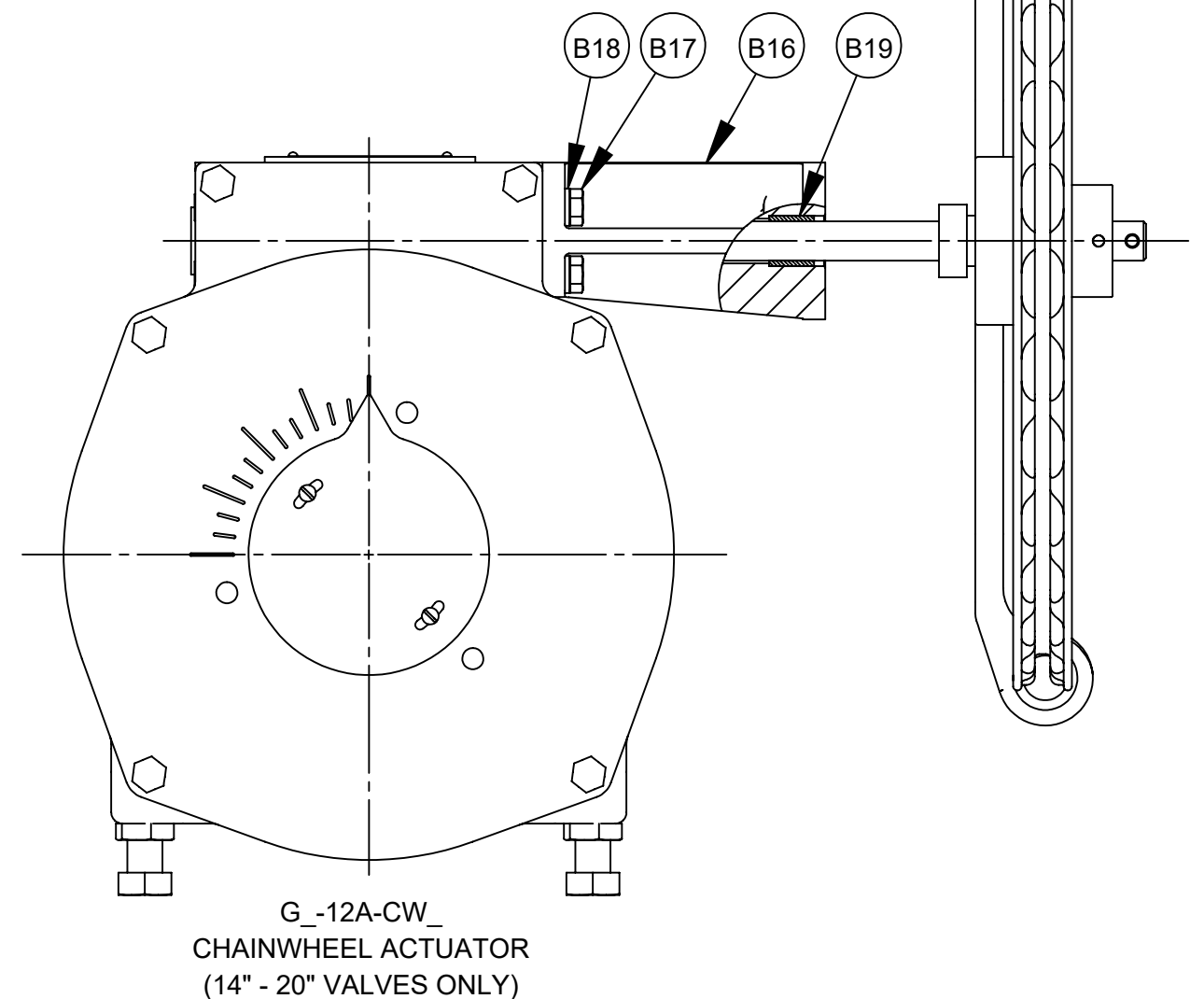
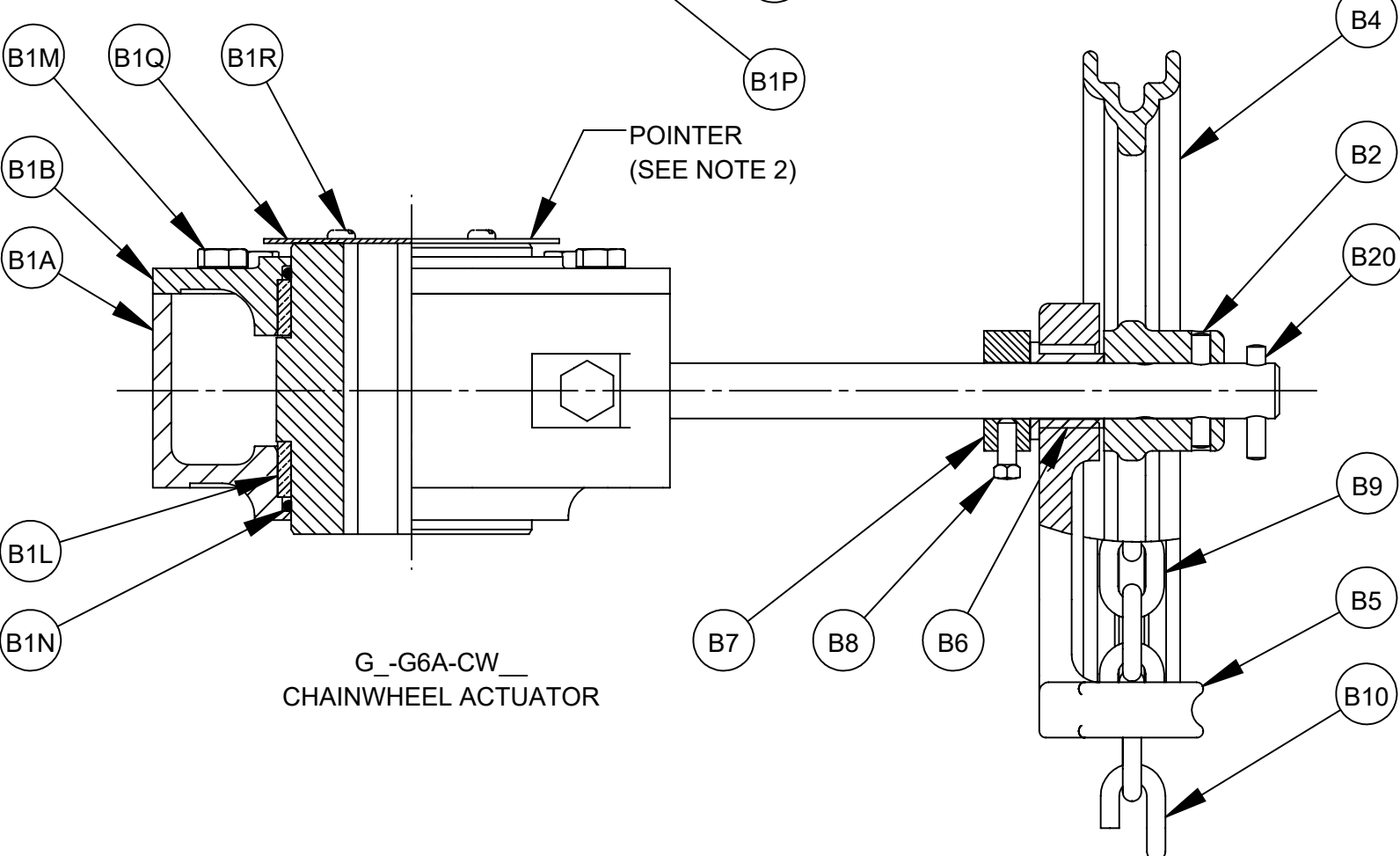
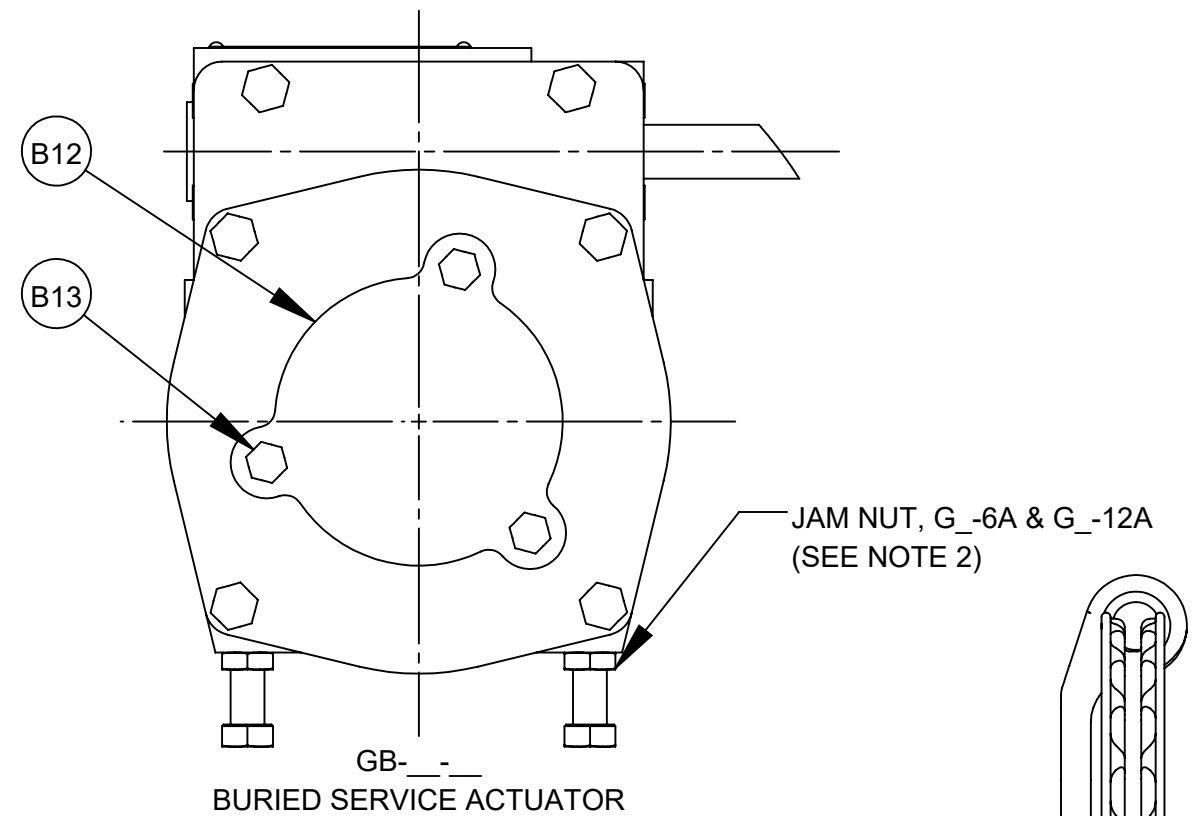
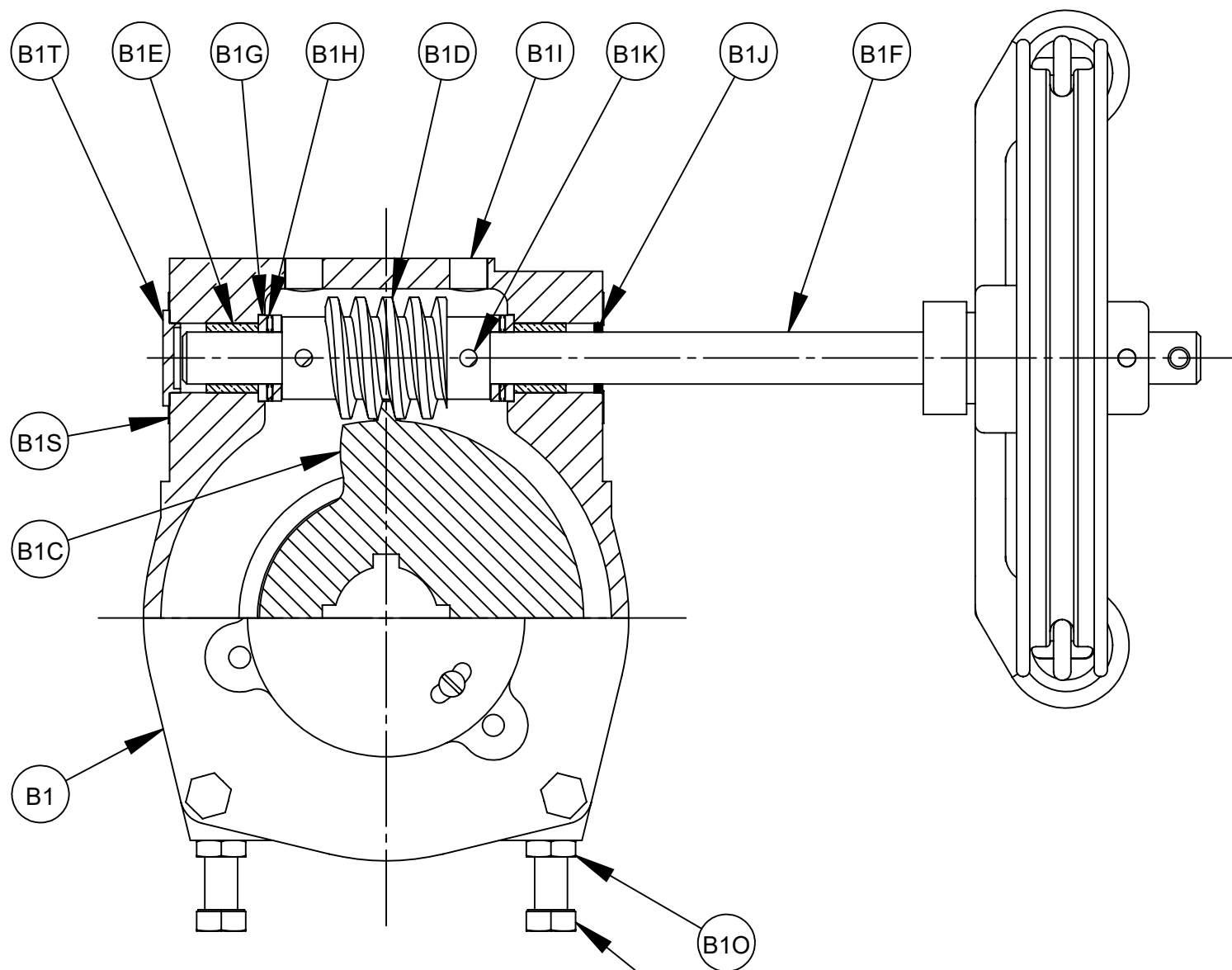
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



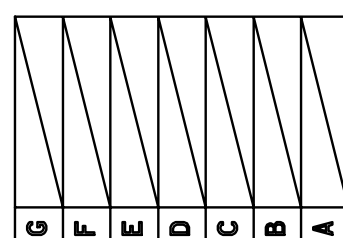
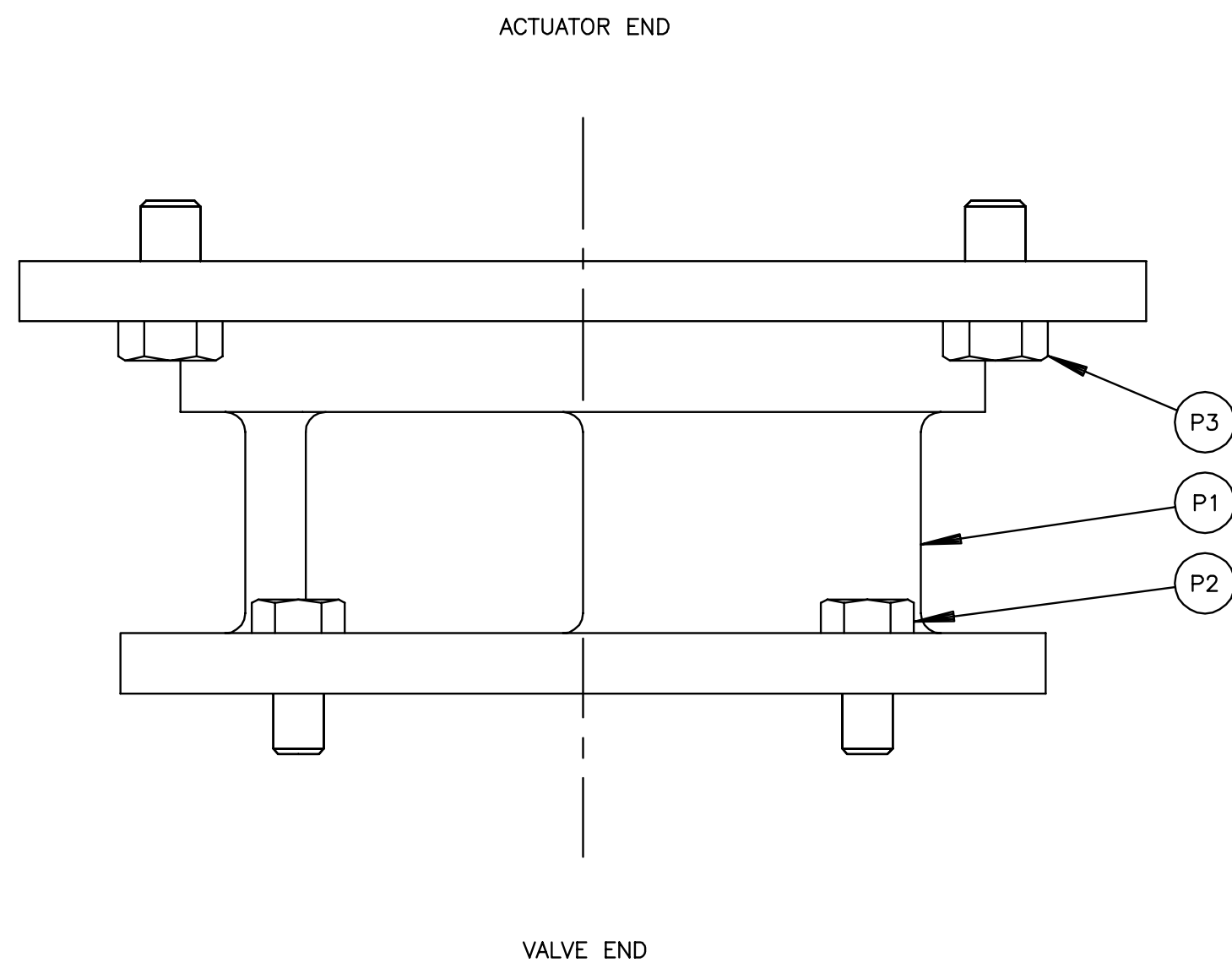
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717878
8	8	2	PEF,6,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GB-6A-N	G-Series Buriable Nut; 2 In Square
Accessories	SB16	316 SST Bolting
Accessories	ENGS	Extended Actuating Nut; Carbon Steel

RELATED DOCUMENTS

A55489	DWG INST PEF MJ GB-6A-N ENGS 3
A55435	DWG VALVE ASSY PEF MJ 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
A55690	DWG ACC ENGS (EXT NUT) GEAR AC
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

EXTENSION ROD: 44.94
C/L OF VALVE TO TOP OF NUT: 60
TAG: PV8

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV8		
WEIGHT (APPROX.)	177 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-8	
PART NUMBER:	9717878		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:		770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A55615. A55690.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>			
INCH	MM	B	C	K	L
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{8.00}{203}$	$\frac{10.69}{272}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{8.62}{219}$	$\frac{11.31}{287}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{9.75}{248}$	$\frac{12.44}{316}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{12.09}{307}$	$\frac{14.78}{375}$
10	250	$\frac{19.38}{492}$	$\frac{9.19}{233}$	$\frac{13.50}{343}$	$\frac{16.19}{411}$
12	300	$\frac{20.75}{527}$	$\frac{11.53}{293}$	$\frac{15.56}{395}$	$\frac{18.25}{464}$

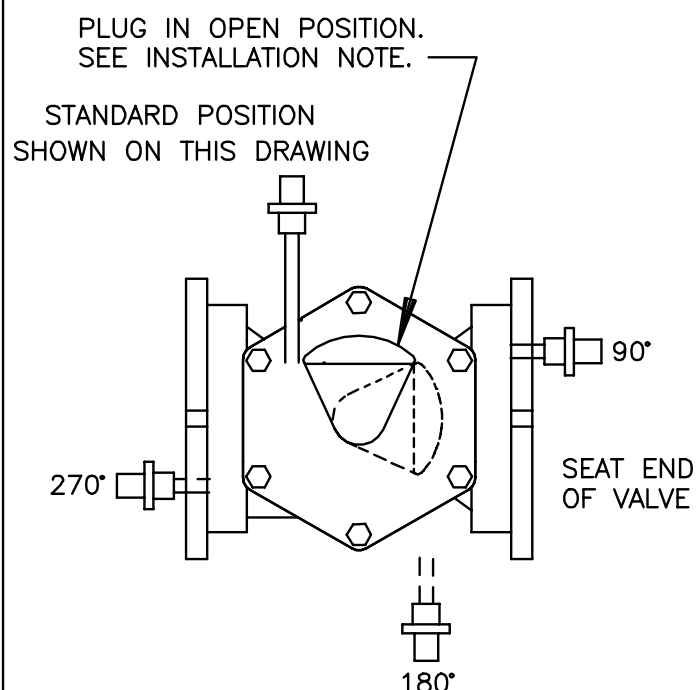
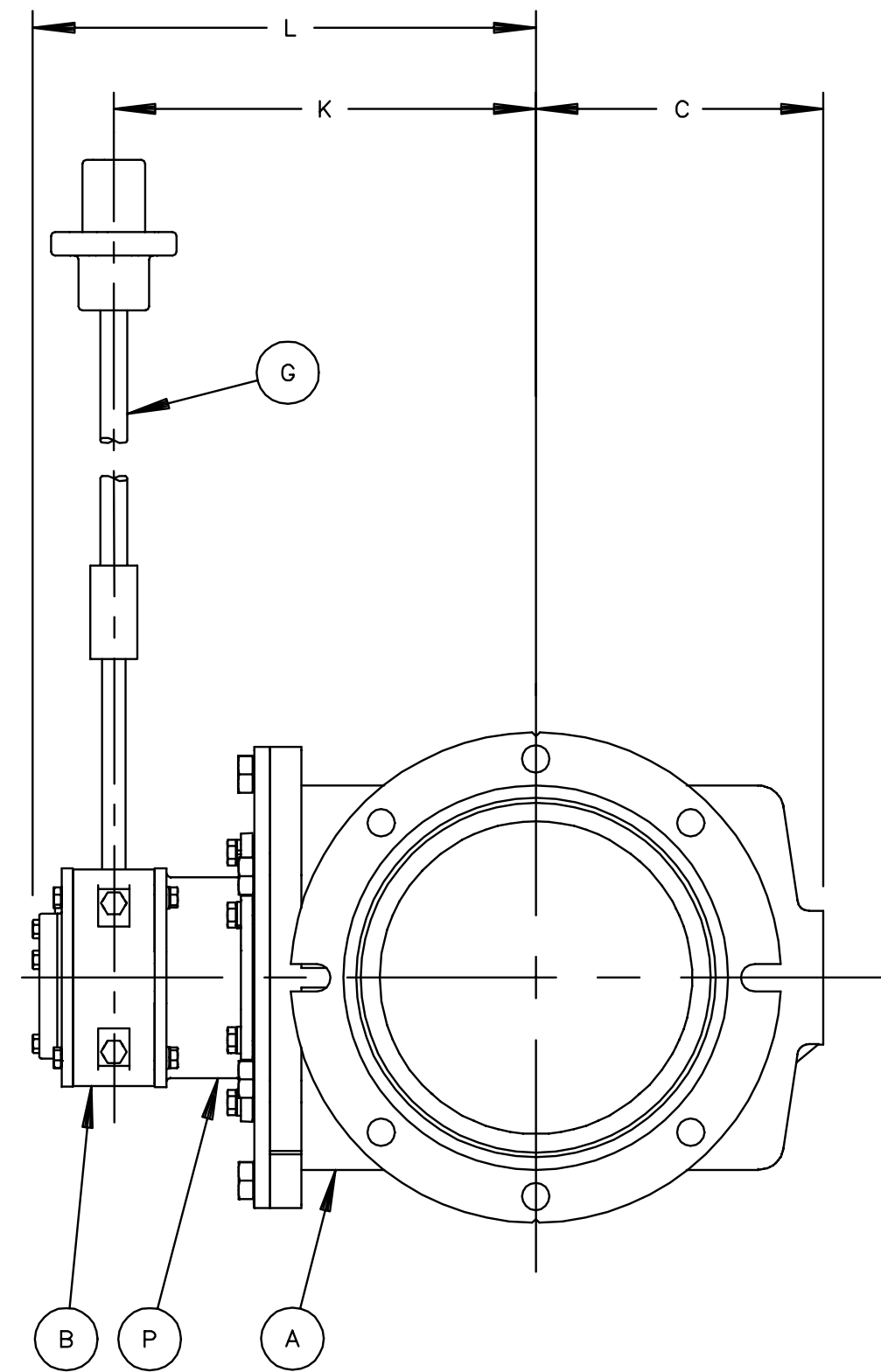
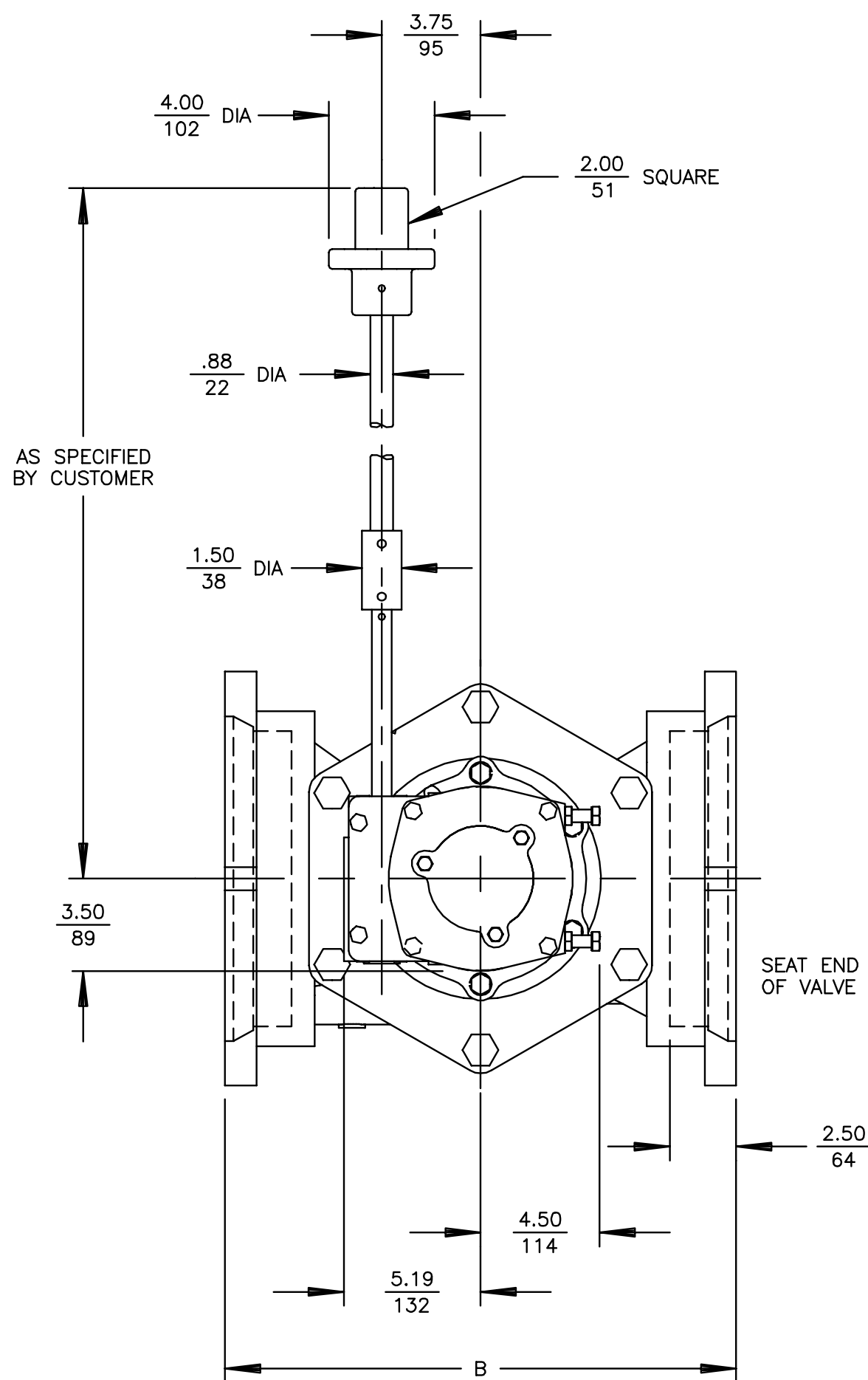
A	VALVE
B	ACTUATOR
G	EXTENDED NUT
P	CONNECTING PARTS

NOTE:

- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.
- 13 TURNS OF NUT ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:

- FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
- FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
03/14/07 61483						

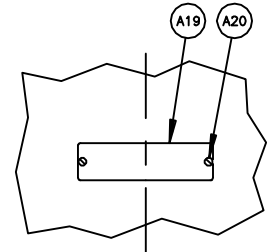
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 MECHANICAL JOINT GB-6A-N NUT ACTUATED (FOR SUBMERGED SERVICE) W/ENGS EXTENDED NUT					
DOCT. CODE	DRAWN	TC	APPROVED	SN	A55489
C1	CHECKED	SN	DATE	05/18/06	

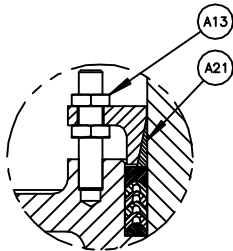
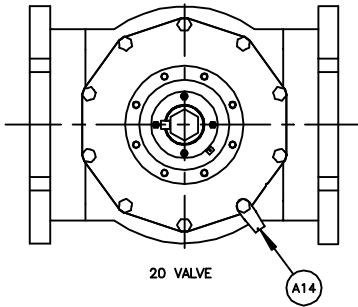
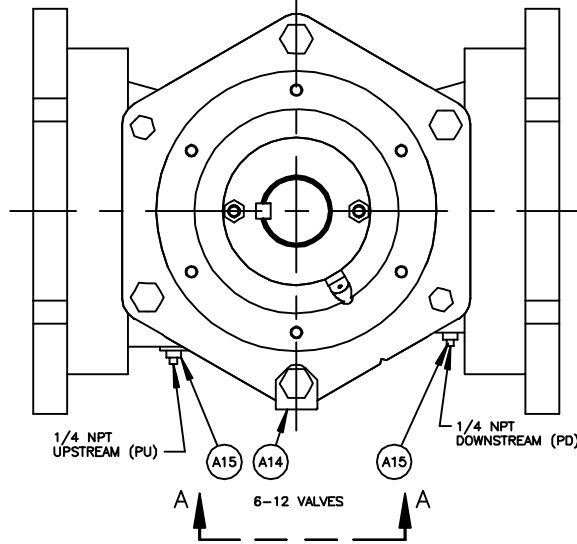
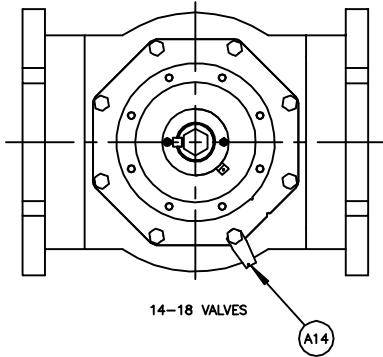
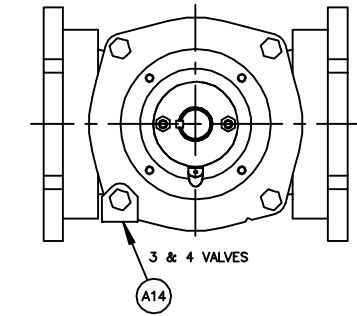
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

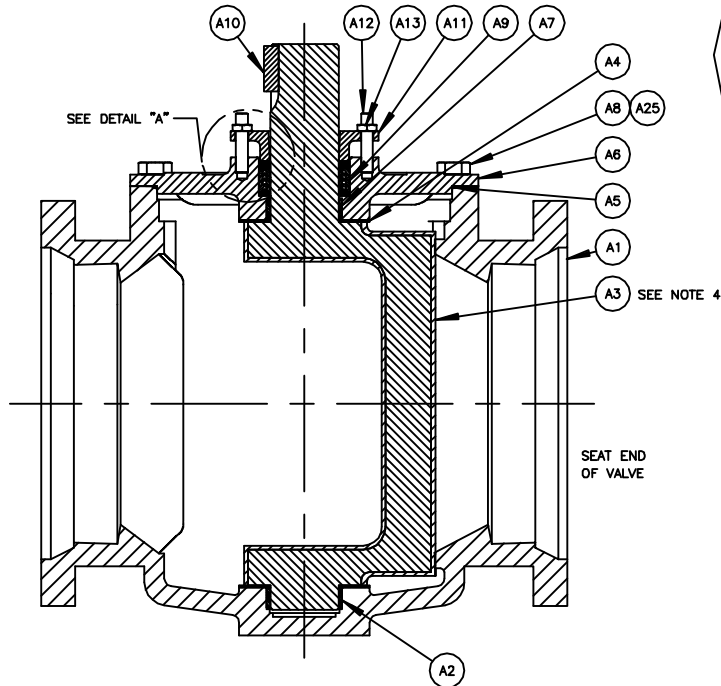
1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.



VIEW A - A



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR



REV	DATE	BY	CHKD
1	09/20/17	D	63490
2	07/24/17	C	61483
3	03/22/16	B	50312
4	05/02/08	A	61482

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

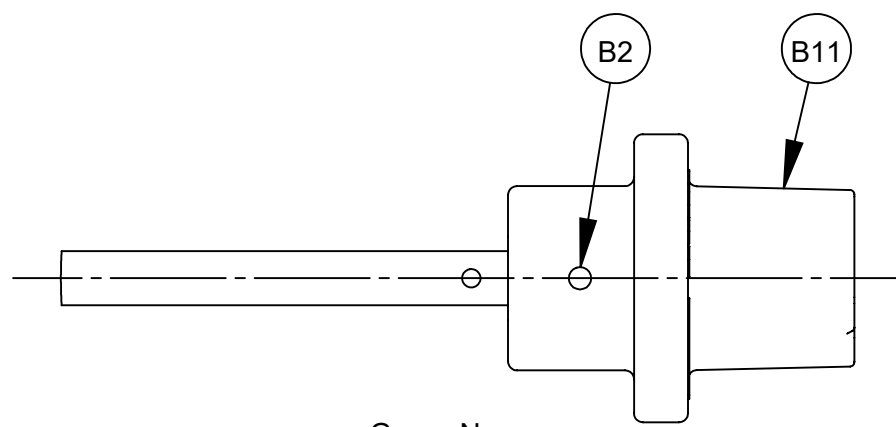
DRAWING(S): A55435

WORK ORDER: 143537

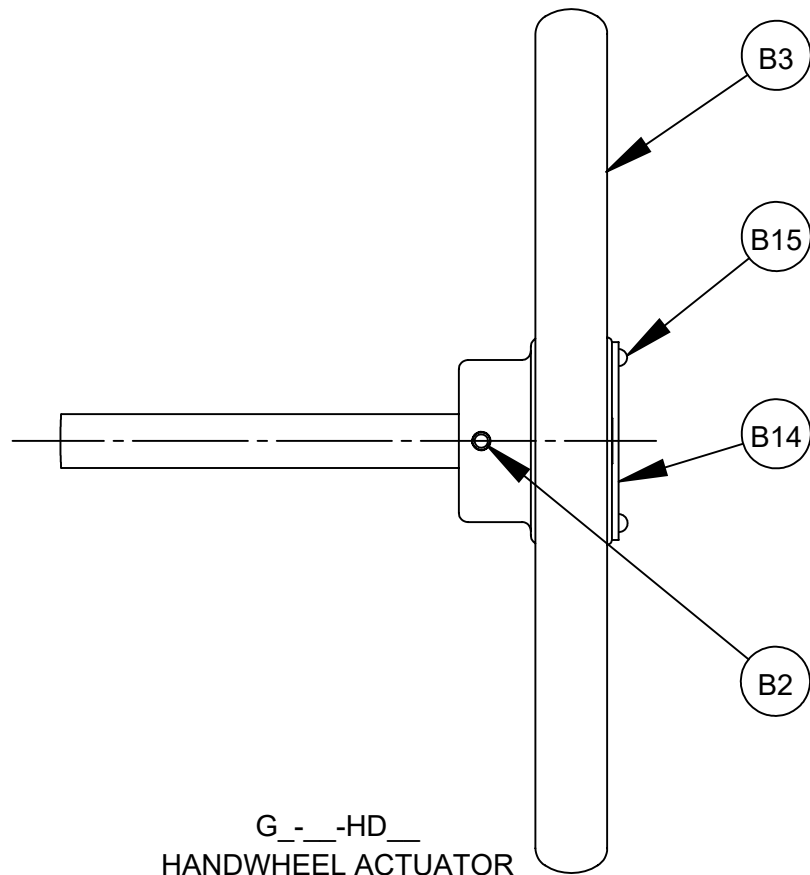
PART NO: 9717878

DESCRIPTION: PEF,6,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	CARBON STEEL, ZINC PLATED
A13	CARBON STEEL, ZINC PLATED
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

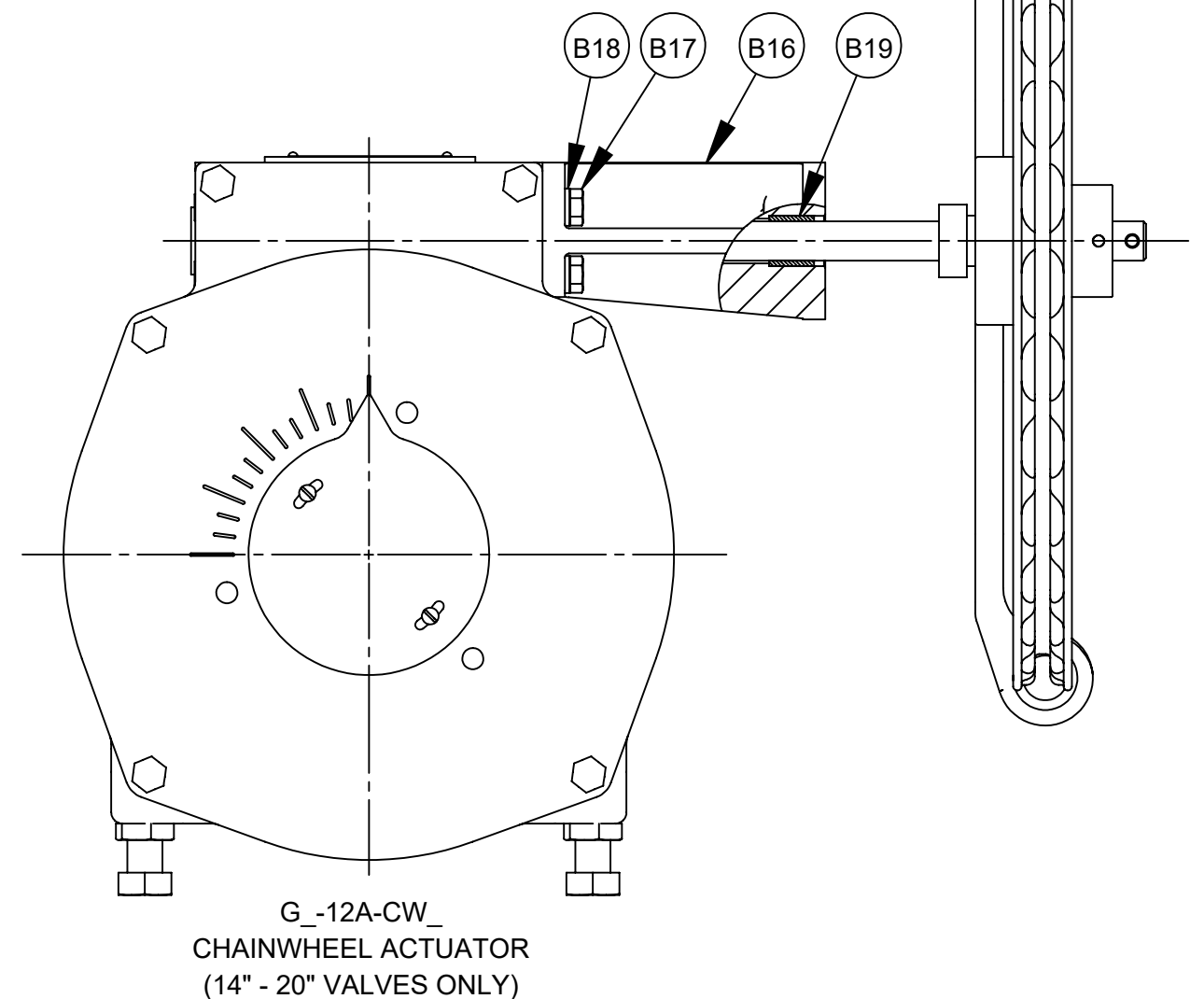
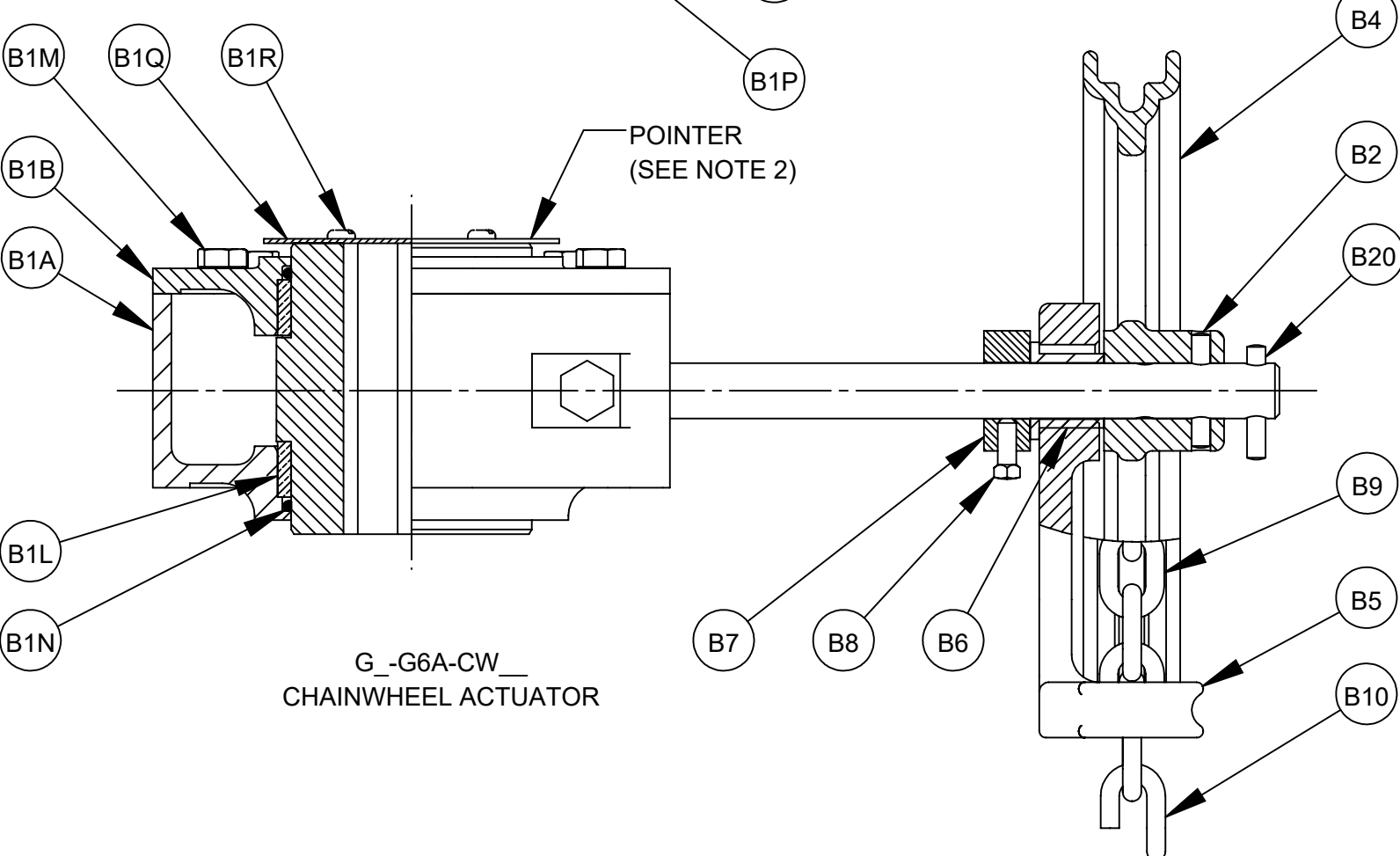
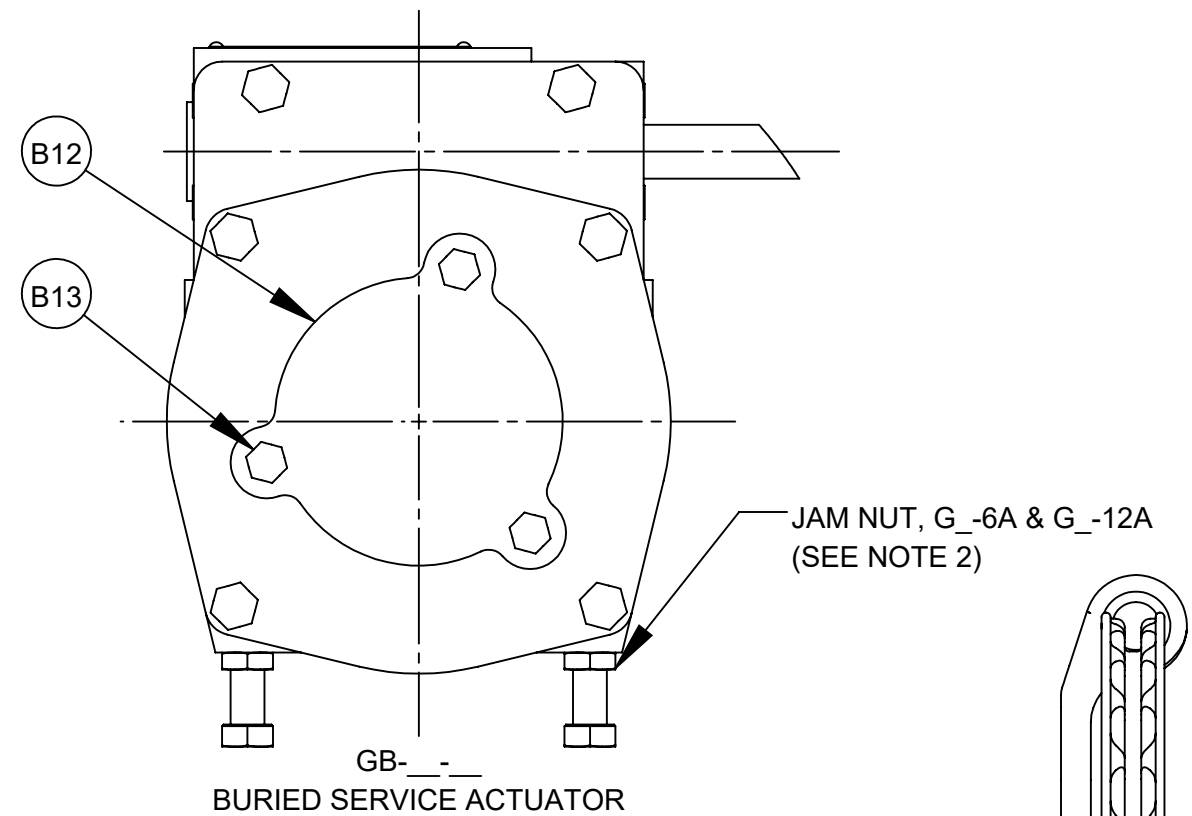
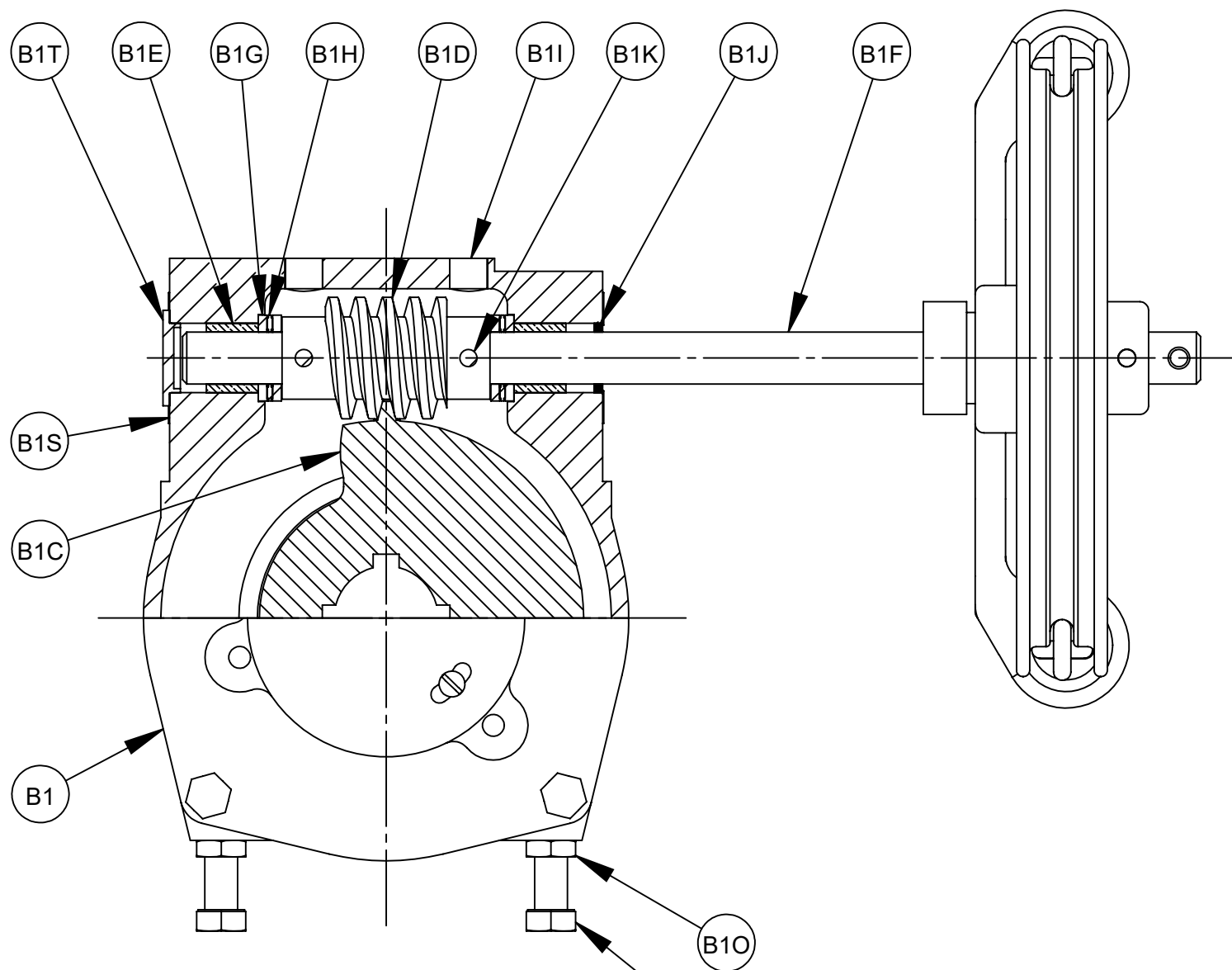
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



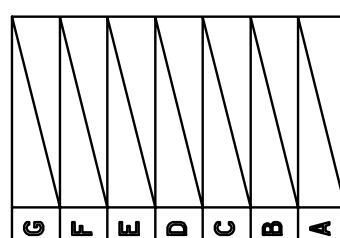
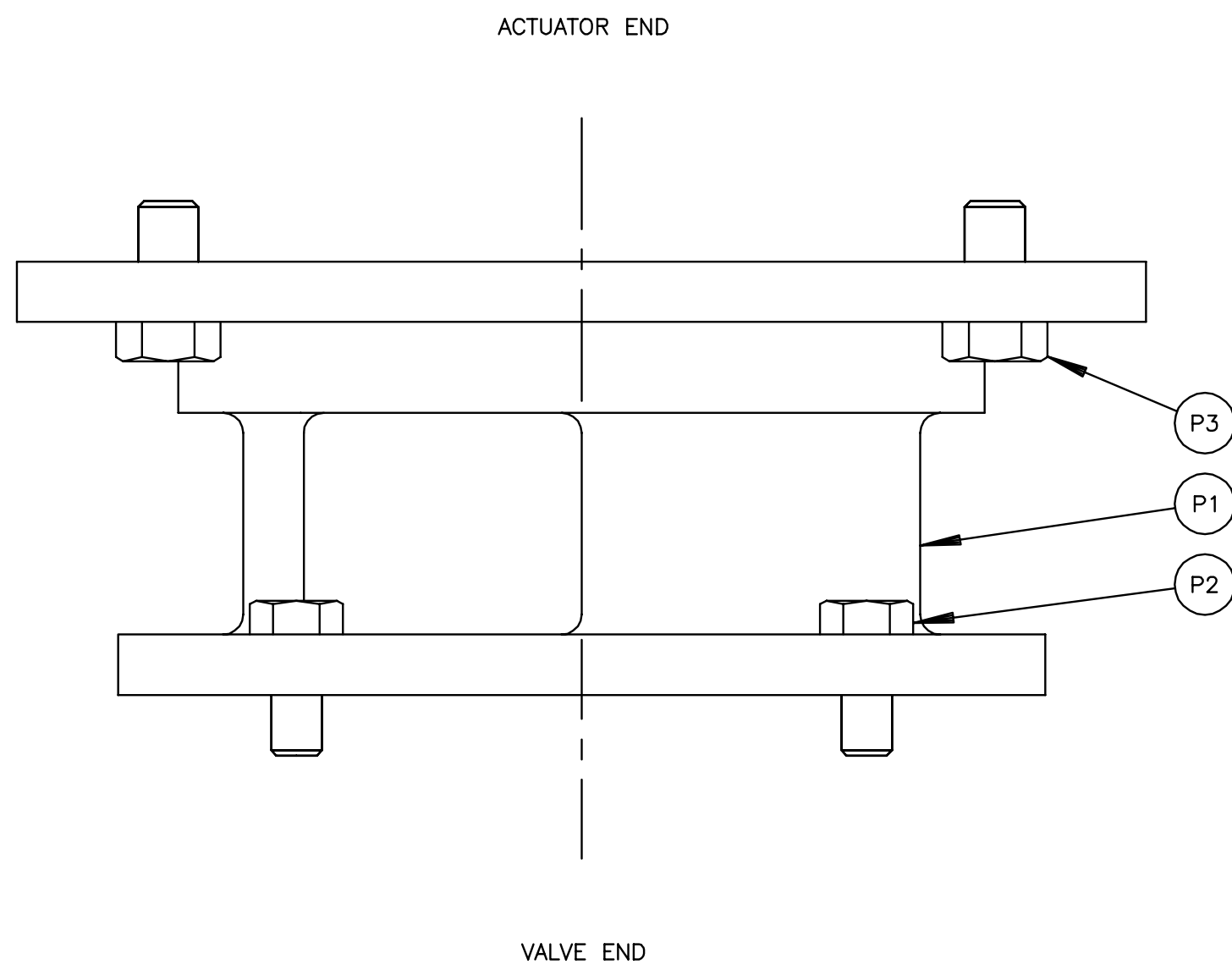
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



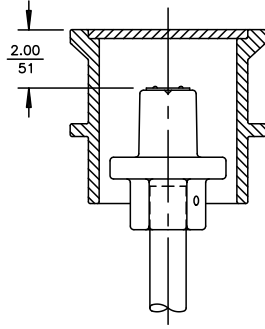
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

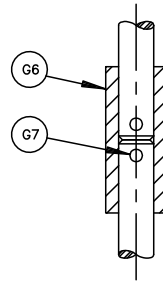
DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418

VALVE	SIZE	ACTUATOR NUMBER	DIMENSIONS <small>IN</small> <small>MM</small>			
			A	B	C	D
PEF	3-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	8-12"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	14-20"	G_-12A	17.41 526	23.60 599	17.66 449	23.60 599
BAW	8-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	14-20"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	3-20"	G_-6B	11.75 298	18.00 457	12.00 305	18.00 457



ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH FB FLOOR BOX

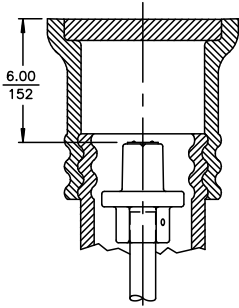


FOR ALL BAR EXTENSIONS
OVER 144.00
3658

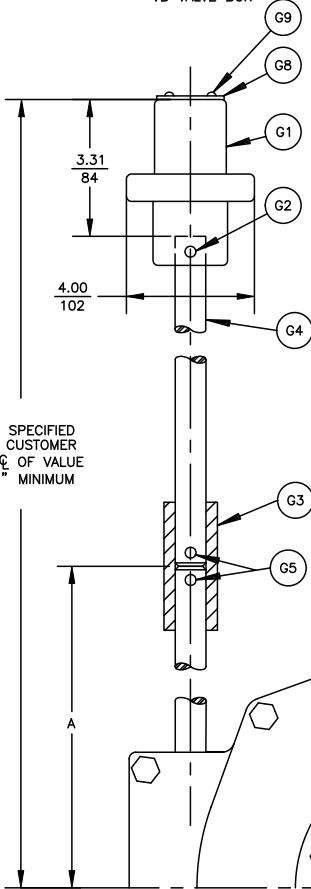
NO.	PART NAME	QTY.
G1	WRENCHING SQUARE	1
G2	PIN (BAR)	1
G2	PIN (PIPE)	2
G3	COUPLING	1
G4	BAR OR PIPE	1
G5	PIN (BAR)	2
G5	PIN (PIPE)	1
G6	COUPLING	1
G7	PIN	2
G8	DATA PLATE	1
G9	DRIVE SCREW	2
G10	COUPLING	1
G11	COUPLING	-
G12	PIN	-

NOTE:

- WHEN ORDERING PARTS, SPECIFY VALVE SIZE AND MODEL NUMBER FROM DATA PLATE, ALSO GIVE DRAWING NUMBER WITH PART NAME, ITEM NUMBER AND QUANTITY.

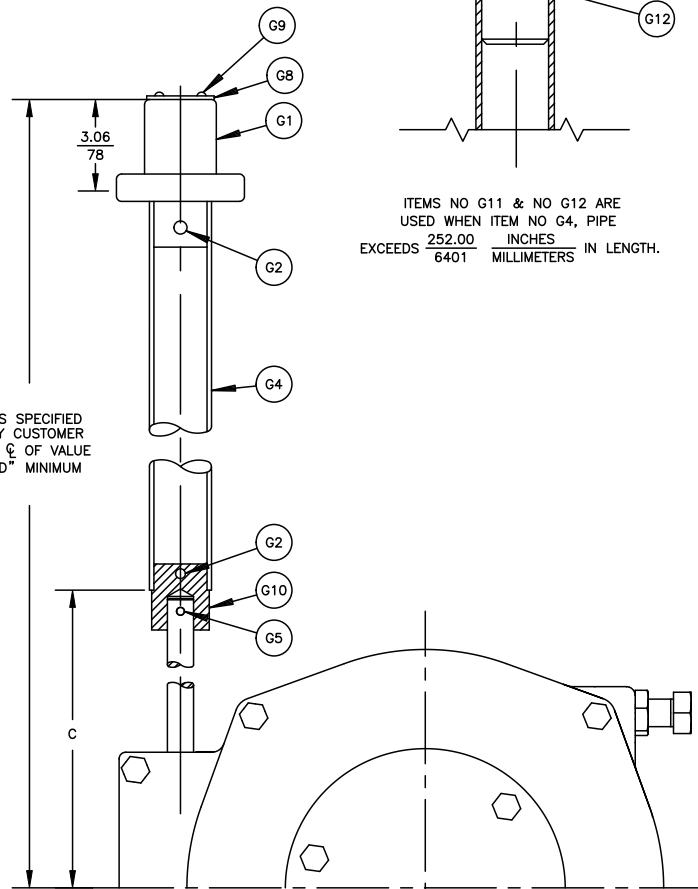


ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH VB VALVE BOX



AS SPECIFIED BY CUSTOMER TO ϕ OF VALUE "B" MINIMUM

BAR EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGS, ENGS_, ENGSX1, ENGS_X1



ITEMS NO G11 & NO G12 ARE USED WHEN ITEM NO G4, PIPE EXCEEDS 252.00 INCHES / 6401 MILLIMETERS IN LENGTH.

PIPE EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGSX2, ENGS_X2, ENGSX3, ENGS_X3

50315	08/12/18	05/08/17
50319		
A		
B		
C		
D		
E		
F		
G		



ENGS EXTENDED WRENCHING SQUARE FOR USE WITH G_-_A AND G_-_B SERIES GEAR ACTUATORS			
DOCT. CODE	DRAWN	SN	APPROVED
C1	CHECKED	SN	DATE
			05/30/06
			A55690



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717883
9	9	1	PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-HD8	G-Series Handwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55432	DWG INST PEF F GS-6A-HD 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV9

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV9		
WEIGHT (APPROX.)	110 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-9	
PART NUMBER:	9717883		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

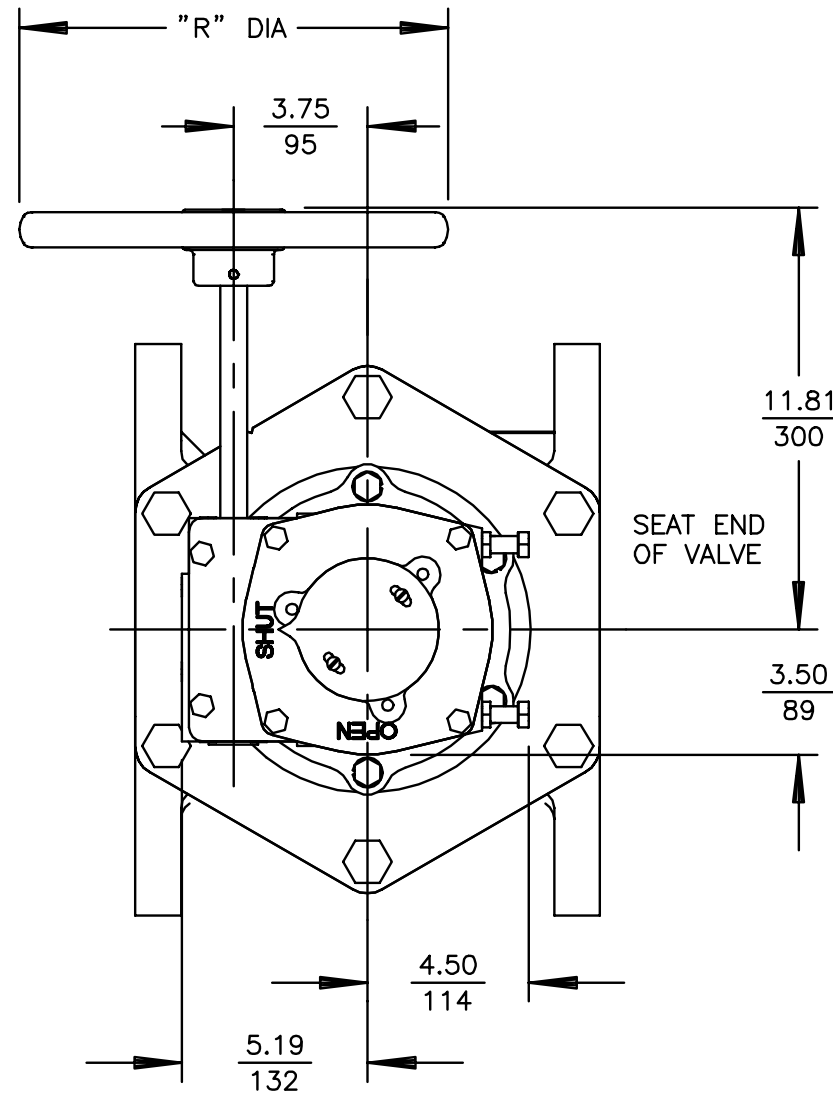
VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-HD8	$\frac{8.00}{203}$
GS-6A-HD12	$\frac{12.00}{305}$

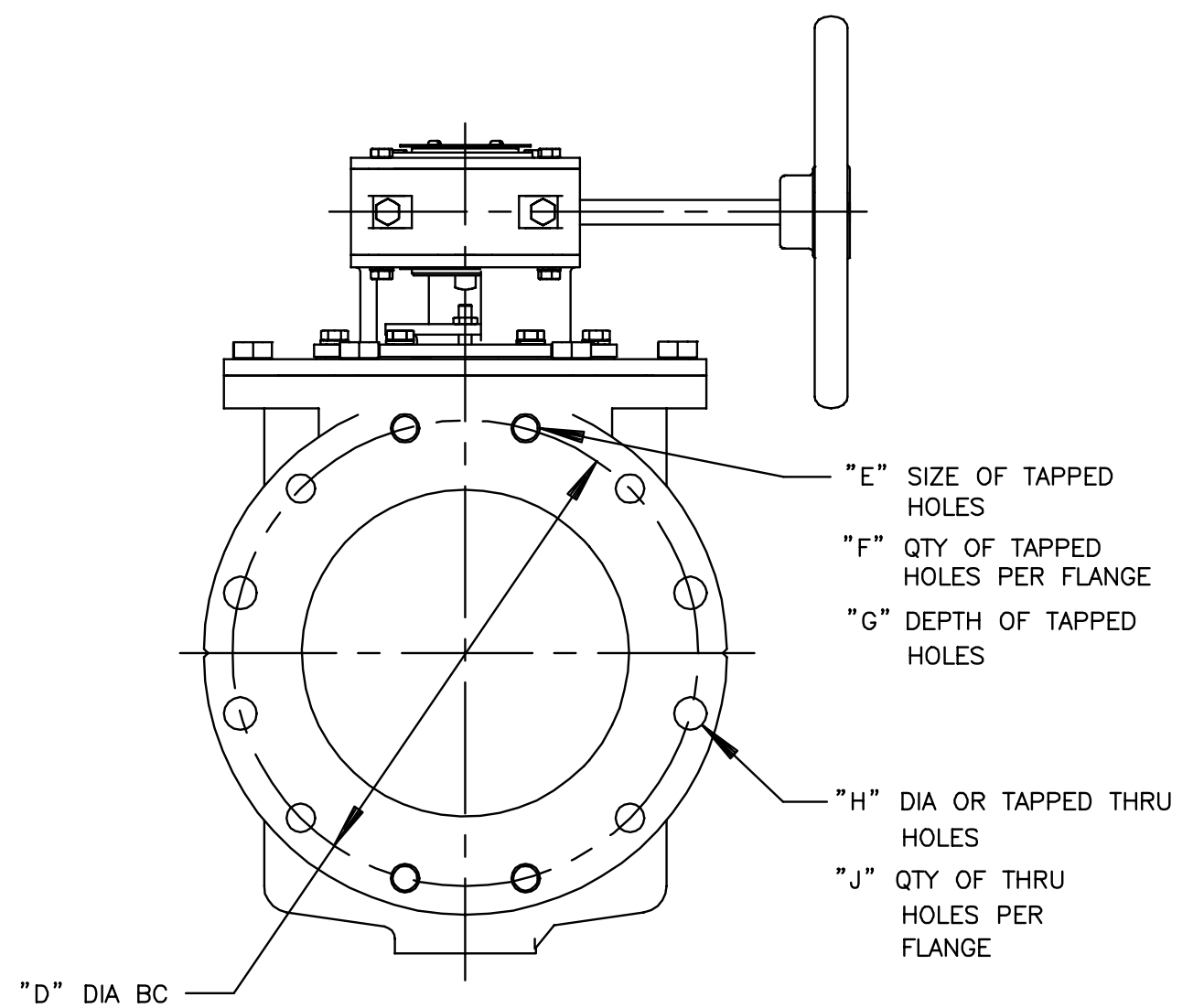
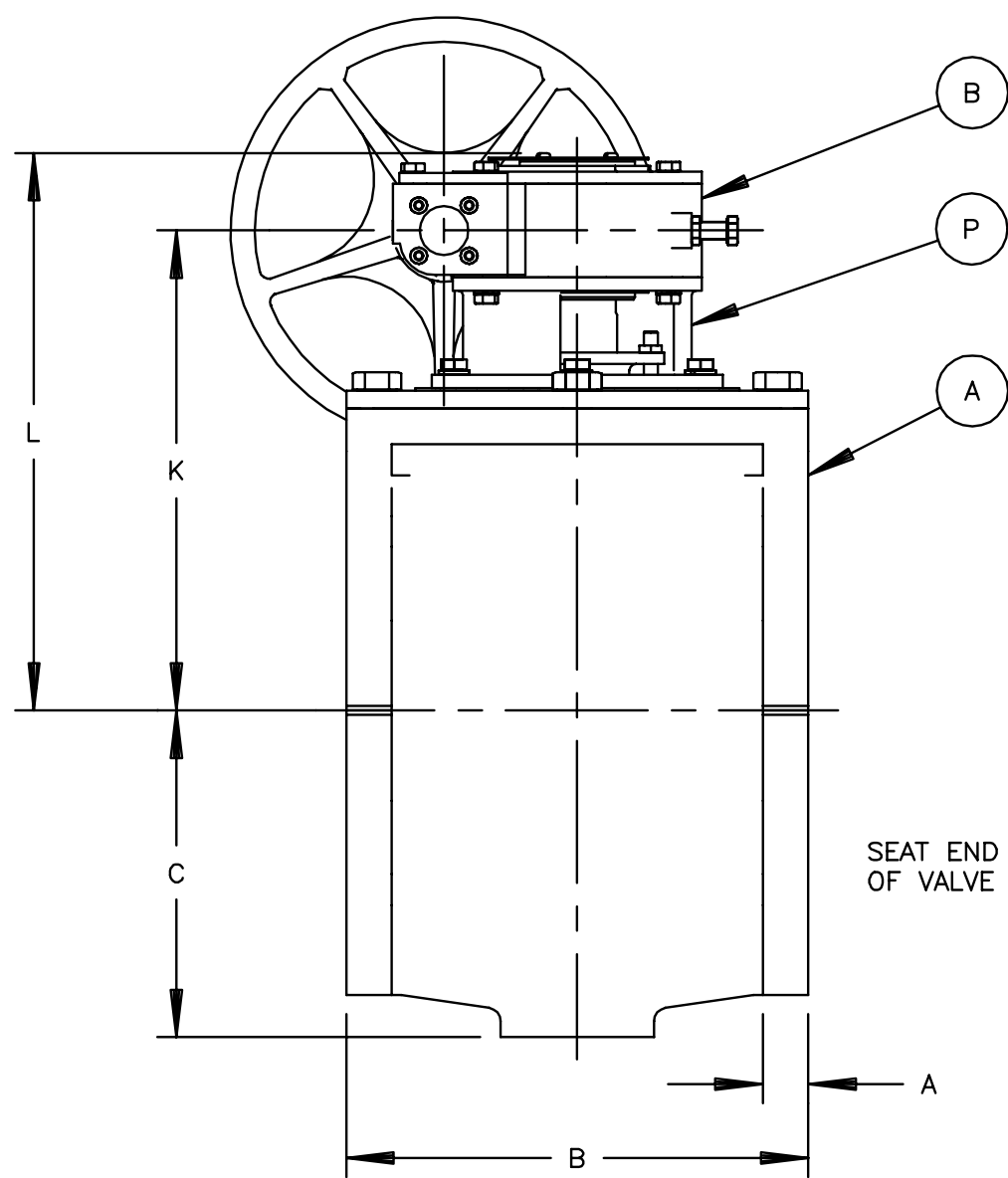
A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF HANDWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

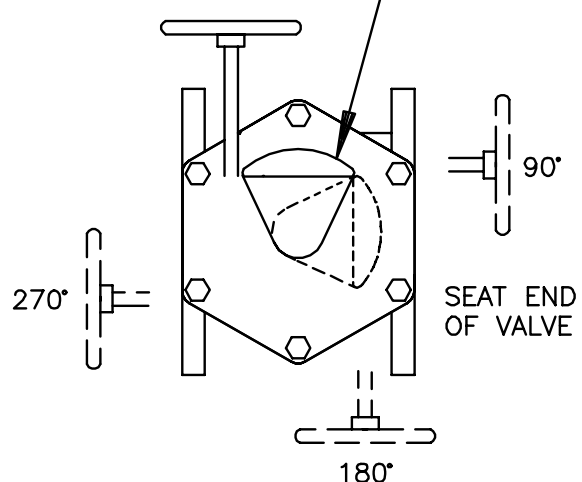


NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



PLUG IN OPEN POSITION. SEE INSTALLATION NOTE.

STANDARD POSITION SHOWN ON THIS DRAWING



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

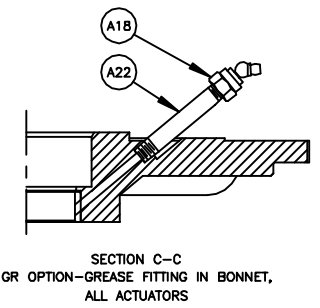
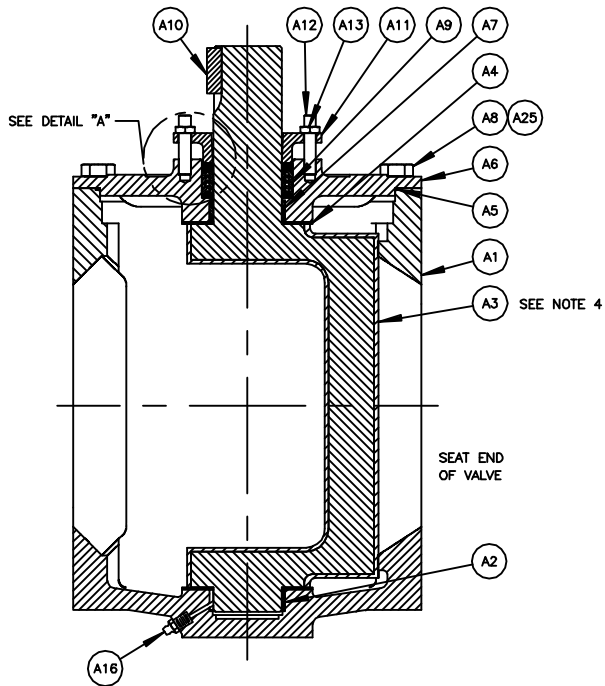
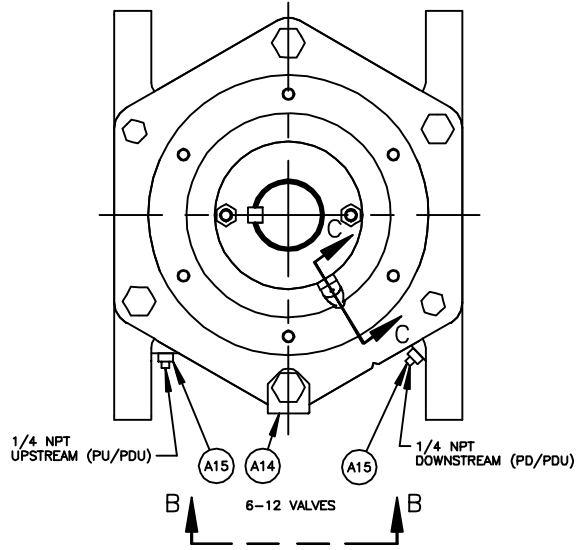
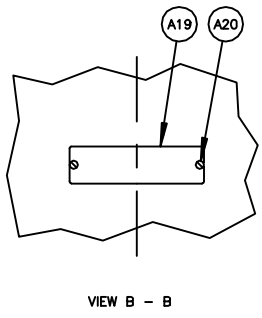
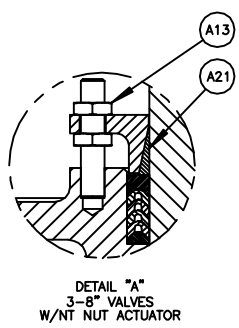
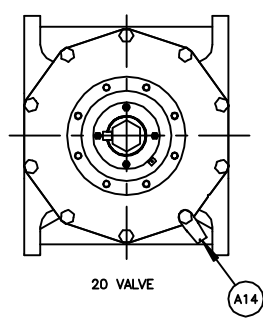
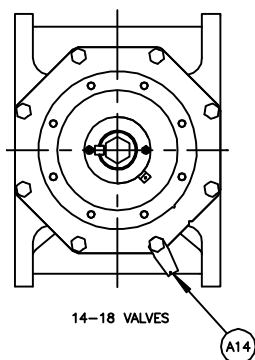
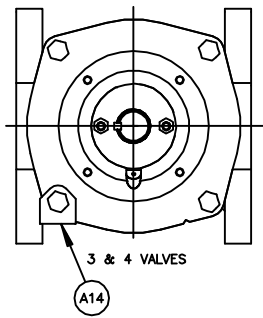
A	B	C	D	E	F	G
61483	03/14/07					

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED
GS-6A-HD_ HANDWHEEL ACTUATED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	10/17/05

A55432



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICTION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

63486	05/07/17
61483	07/24/17
62502	05/23/13
62289	04/29/15
60312	05/22/10
61812	08/17/08
61602	05/02/08

DeZURIK
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PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	APPROVED
C1	CN	SN
	CHECKED	DATE
	SN	12/05/05

A55403



MATERIALS OF CONSTRUCTION

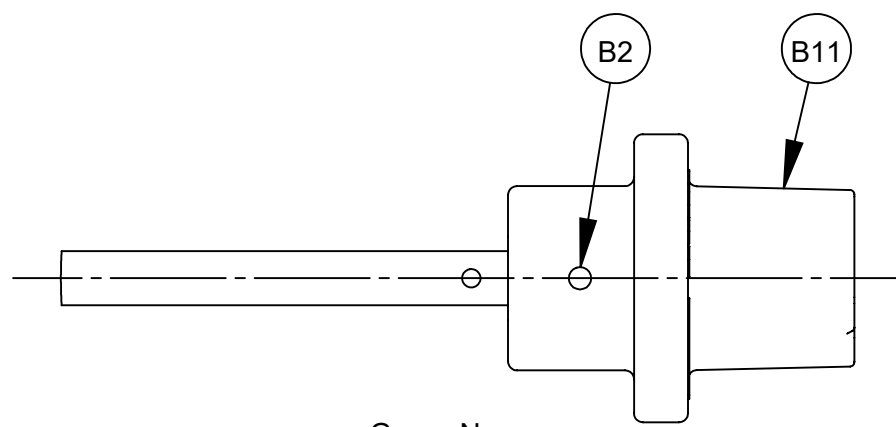
DRAWING(S): A55403

WORK ORDER: 143537

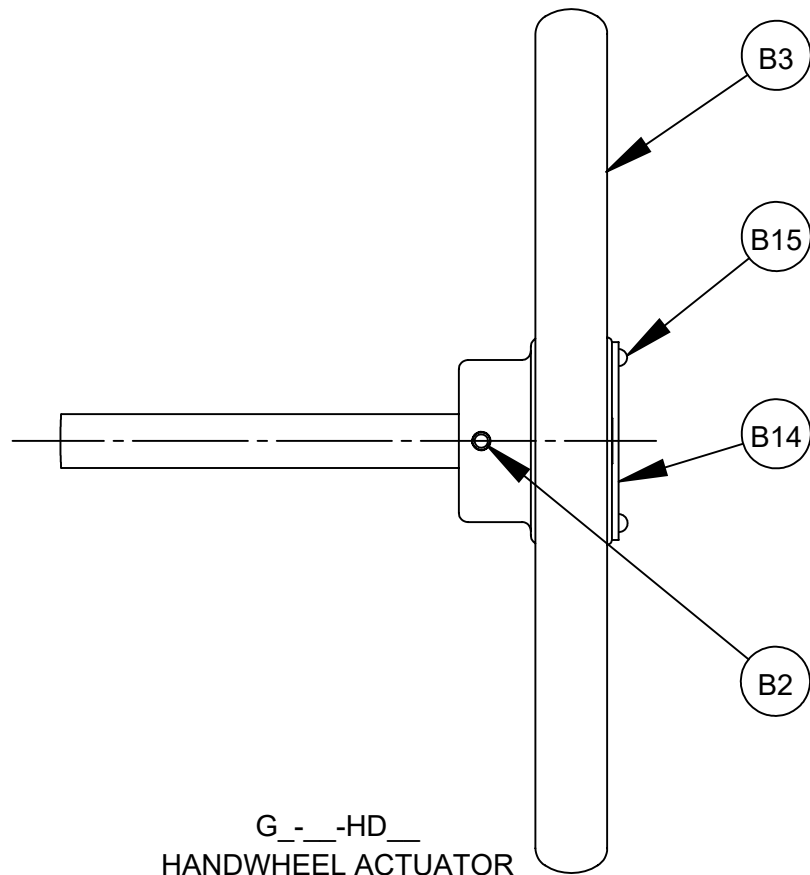
PART NO: 9717883

DESCRIPTION: PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

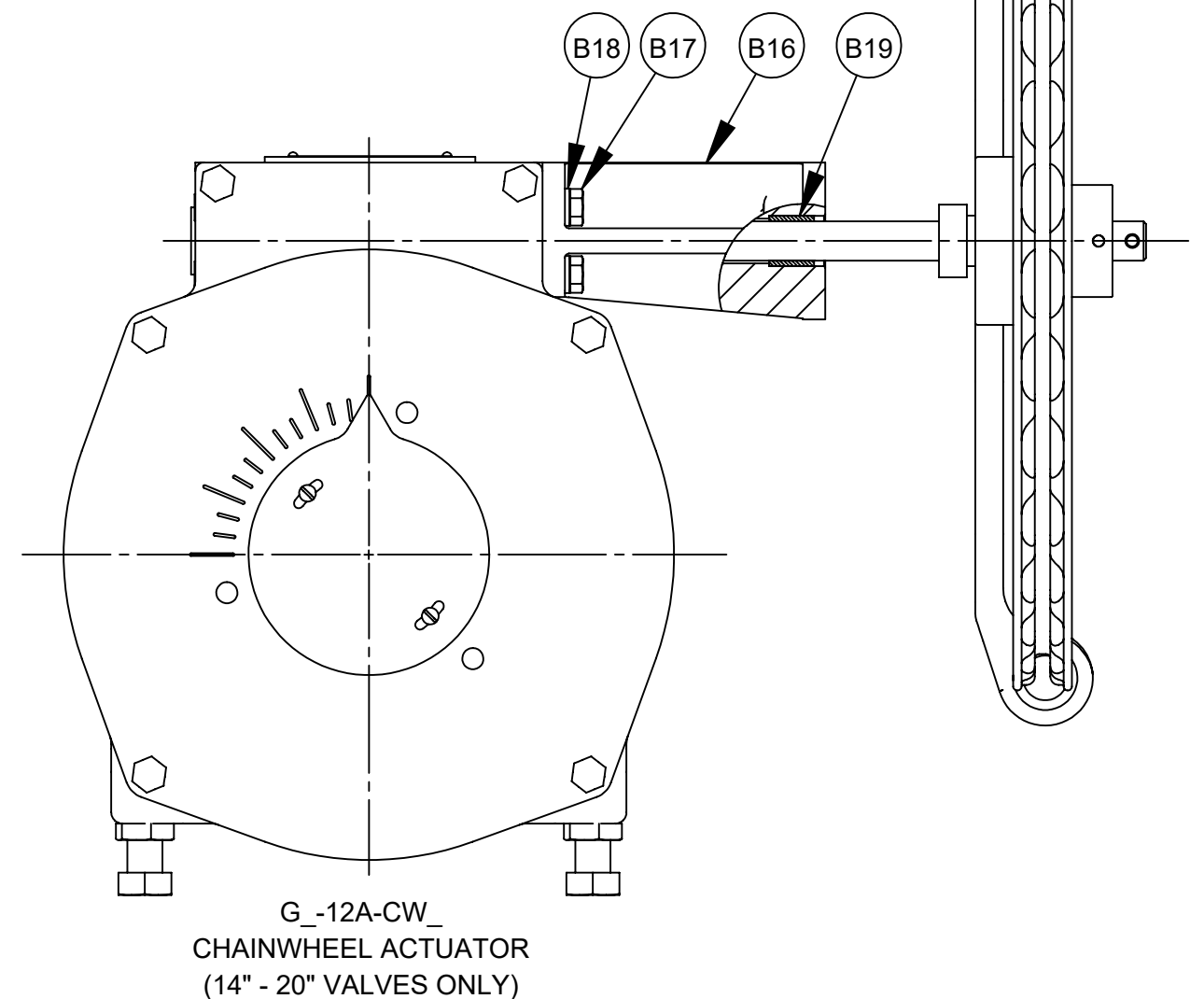
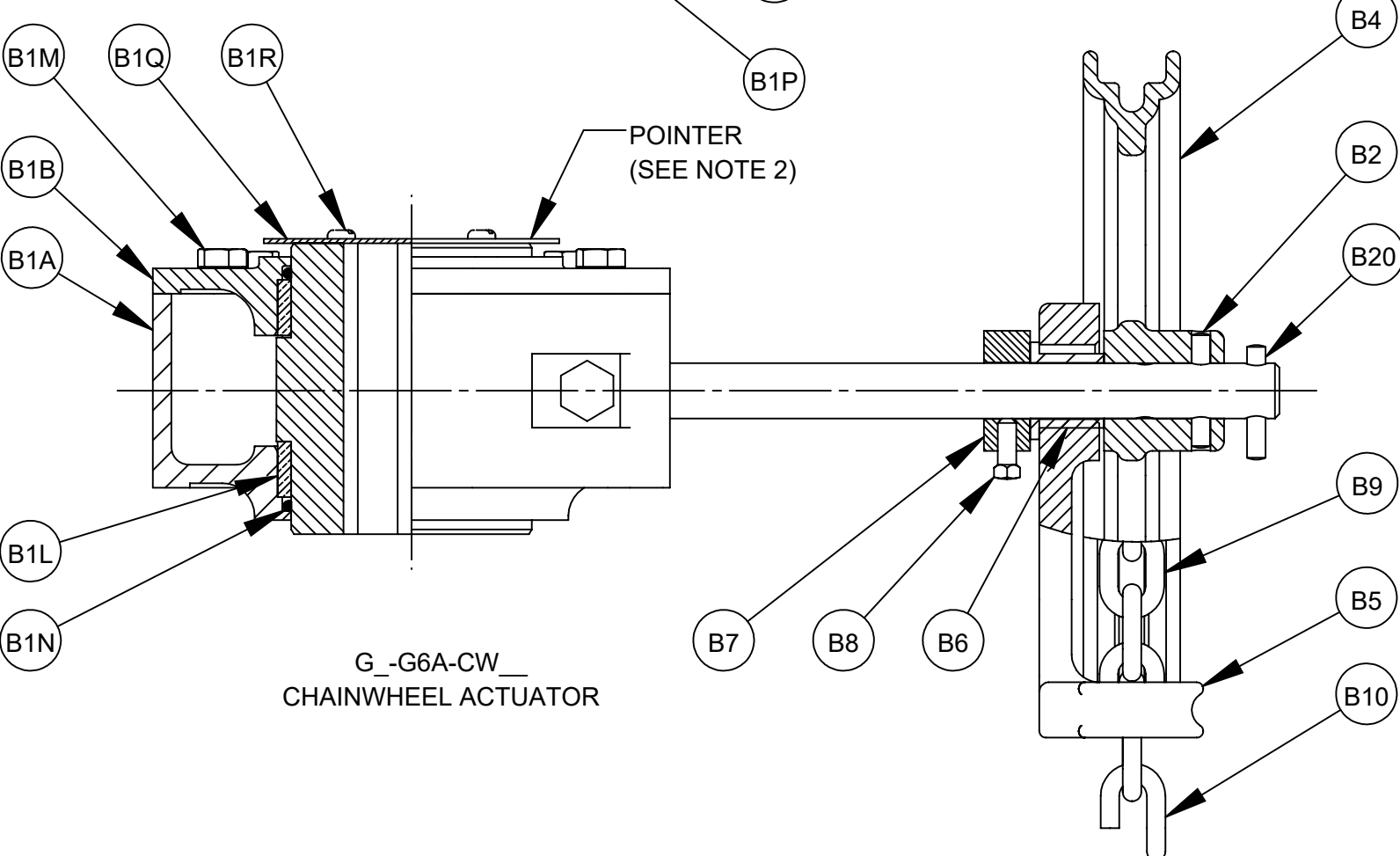
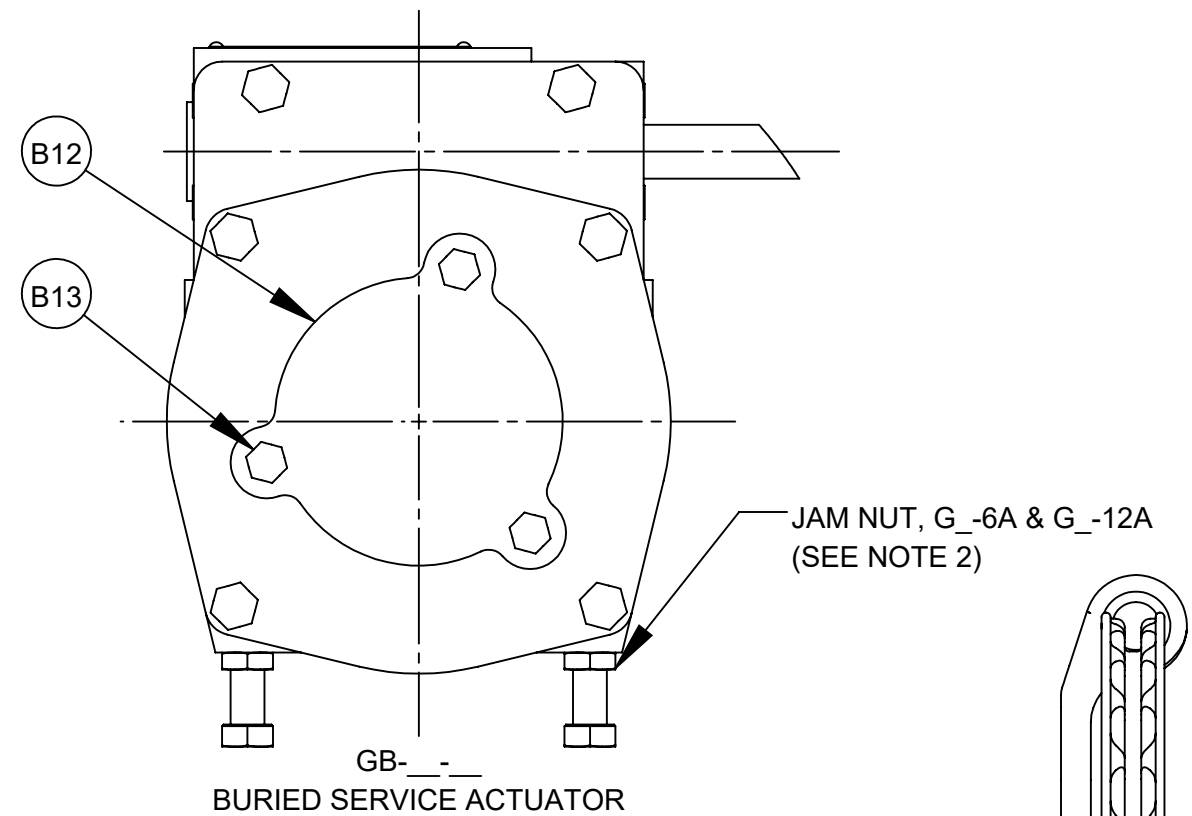
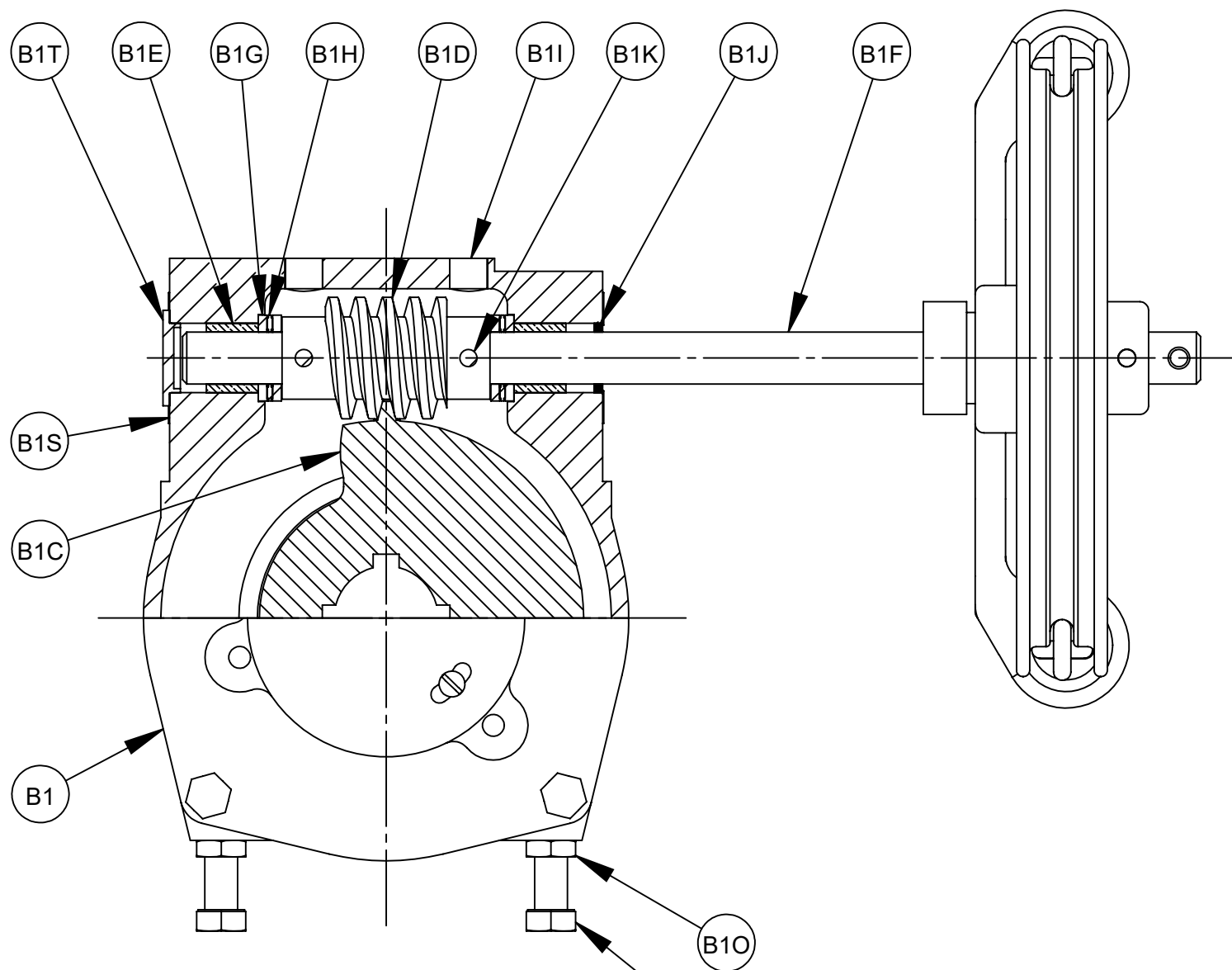
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



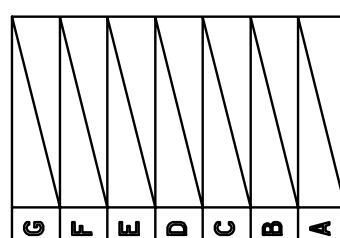
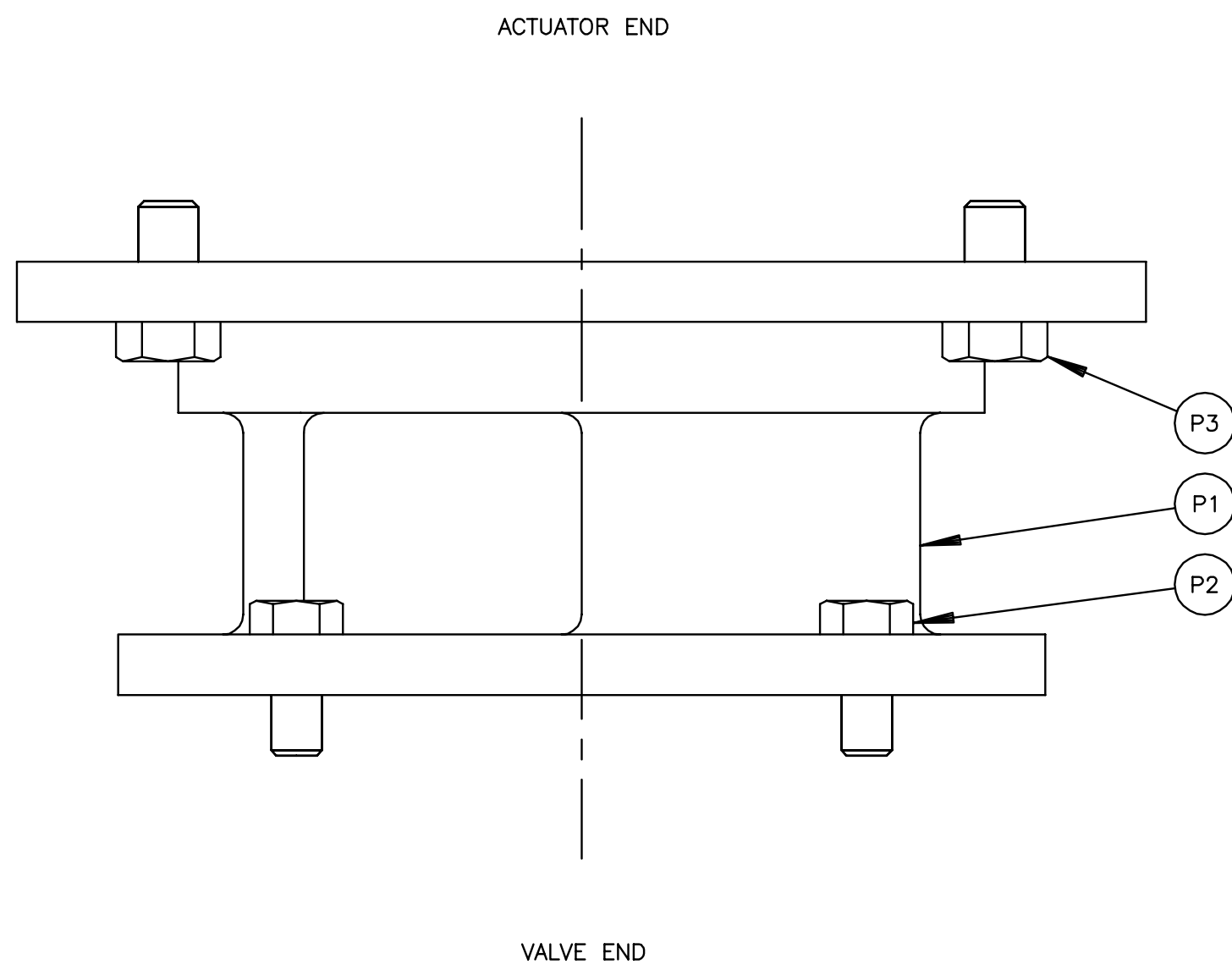
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717880
10	10	1	PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-CW8	G-Series Chainwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV10



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO.
11	11	280	ACC*CN102	1003703

Style	ACC	DeZURIK ACCESSORIES
Acc Cde	CN102	Chain Std Link; Chwhl Act's; Price per Foot

FEATURES

1 PIECE EQUAL LENGTH
SHIP WITH LINE 10

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV10		
WEIGHT (APPROX.)	115 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-10	
PART NUMBER:	9717880		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

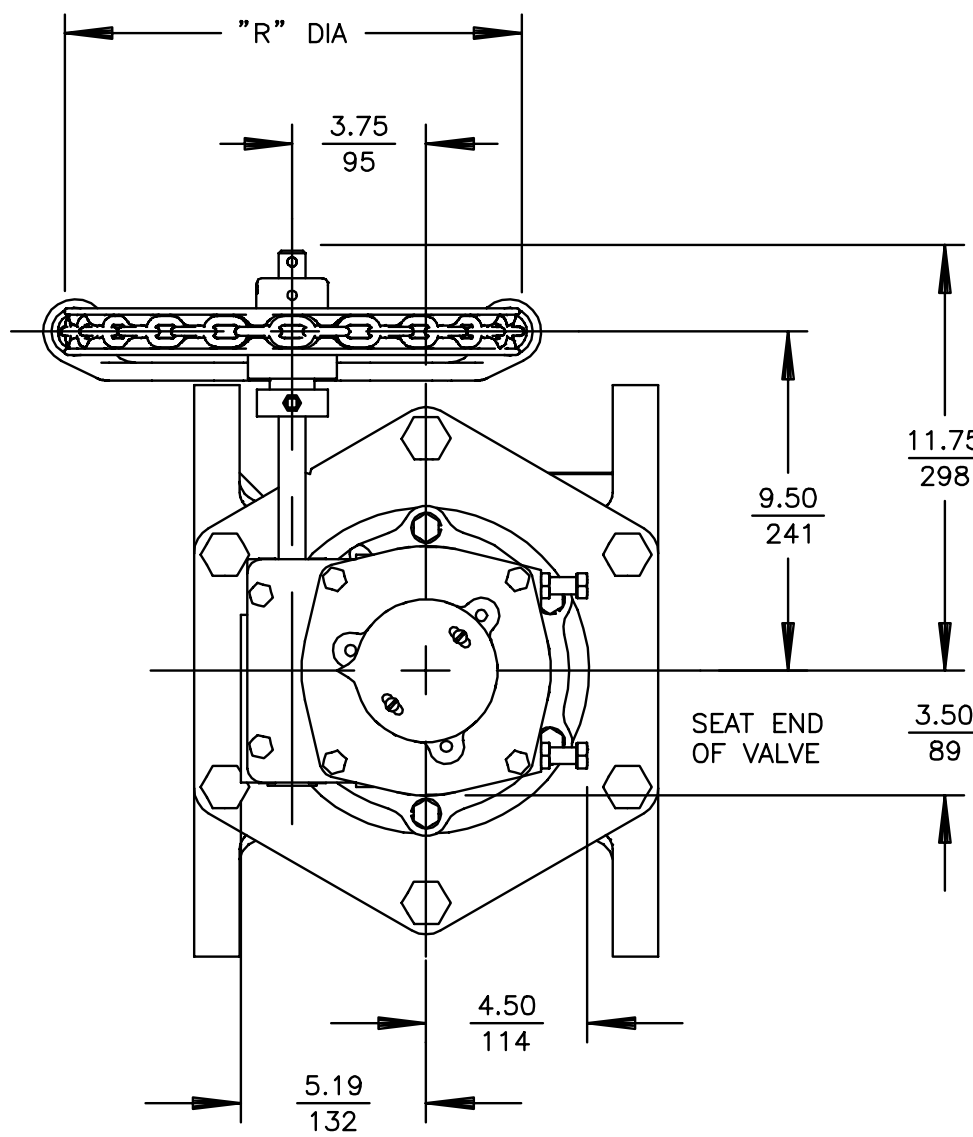
VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

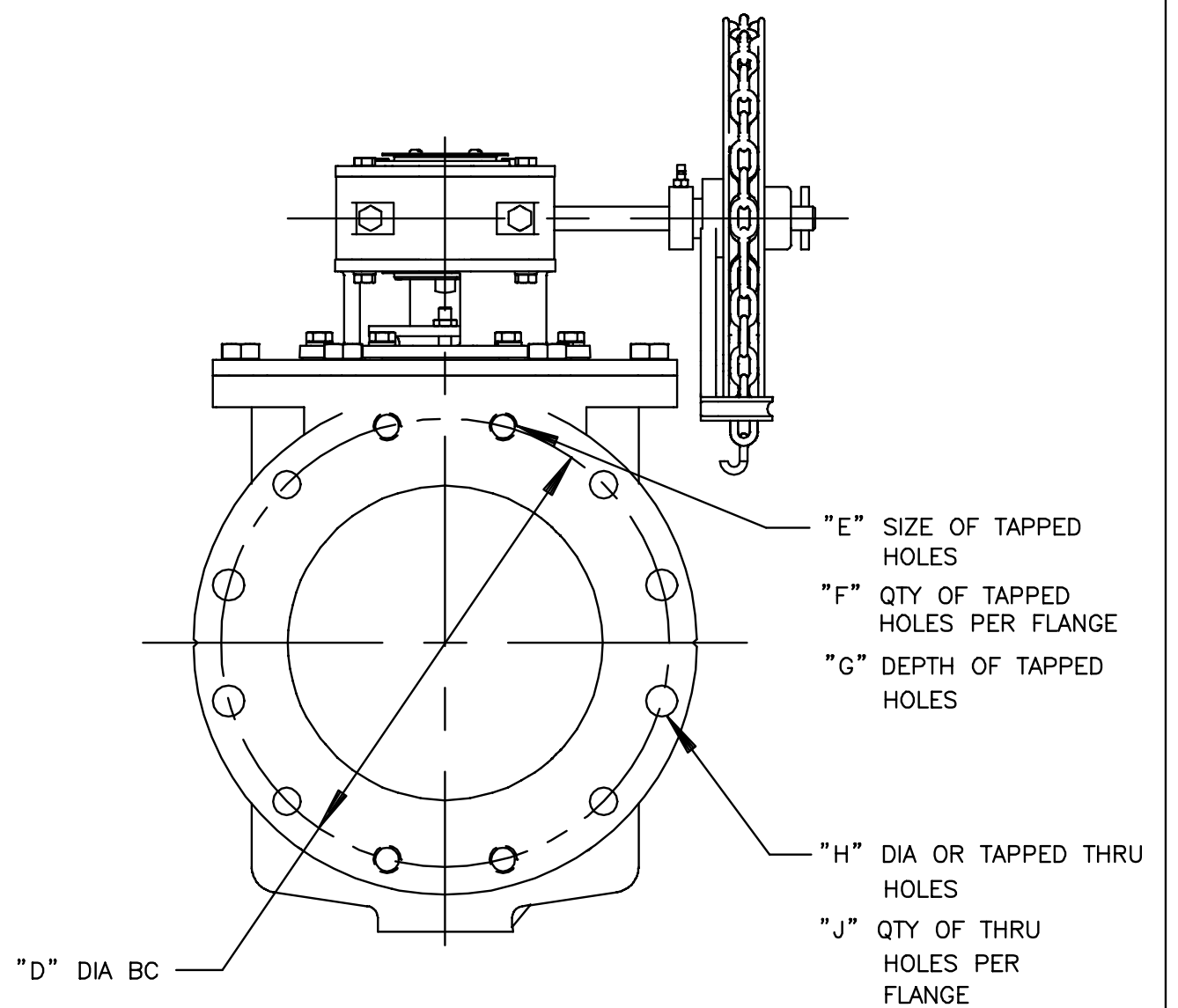
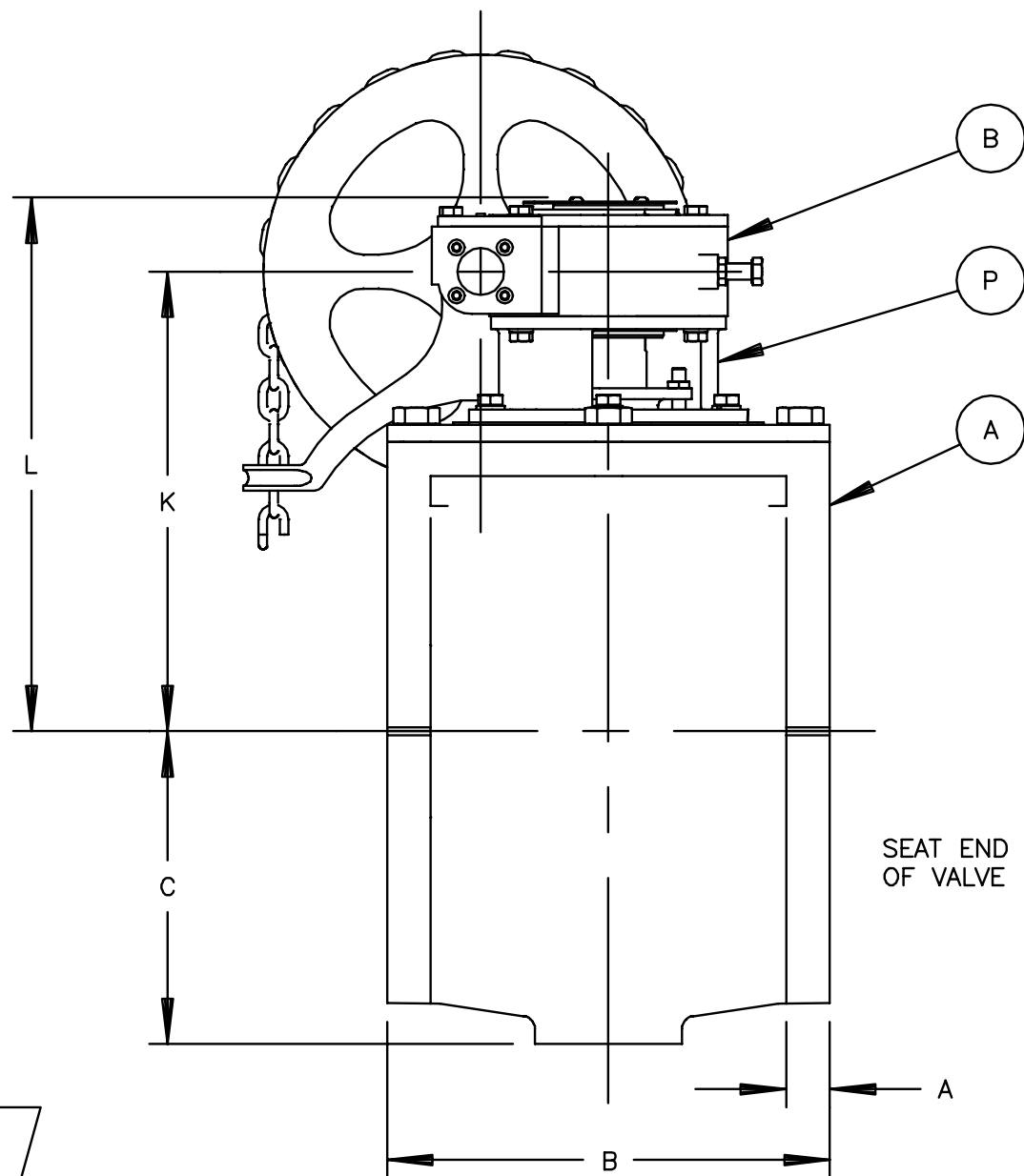
NOTE:

1. FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
2. 13 TURNS OF CHAINWHEEL ARE REQUIRED TO OPEN VALVE.
3. INSTALLATION NOTE:
 - FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

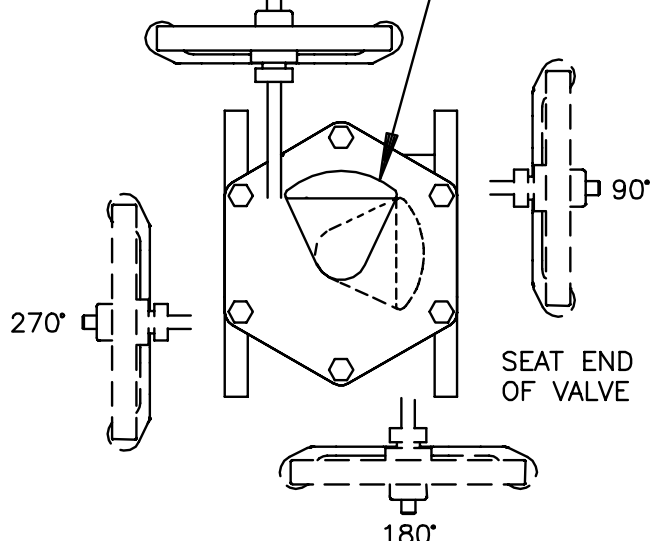
ACTUATOR NUMBER	DIM	IN	MM
	R		
GS-6A-CW8		$\frac{8.00}{203}$	
GS-6A-CW12		$\frac{12.00}{305}$	



NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



PLUG IN OPEN POSITION. SEE INSTALLATION NOTE.
STANDARD POSITION SHOWN ON THIS DRAWING



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

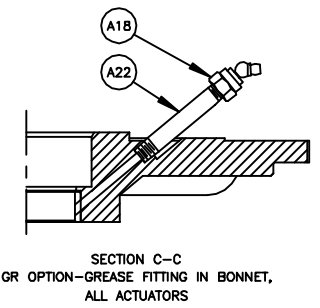
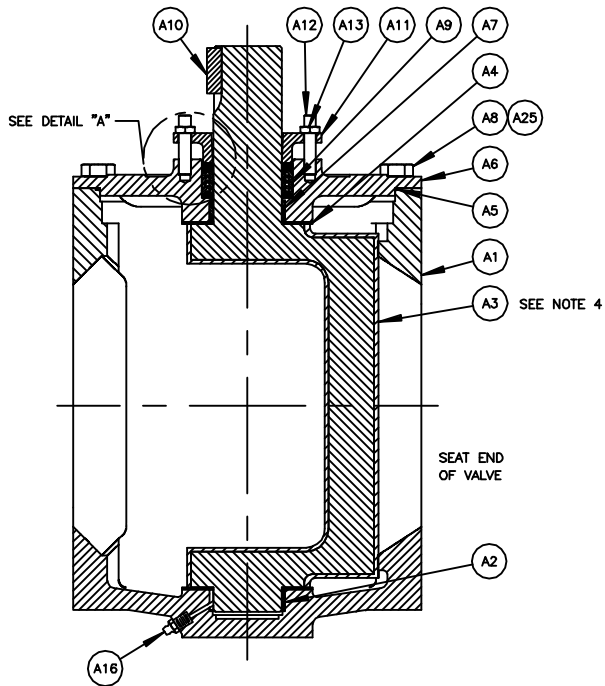
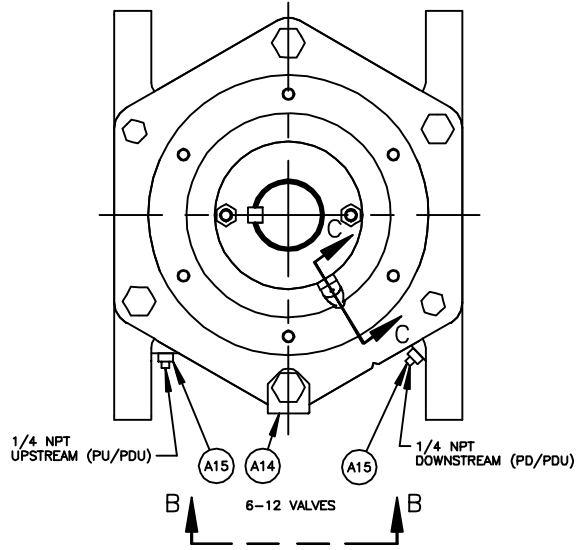
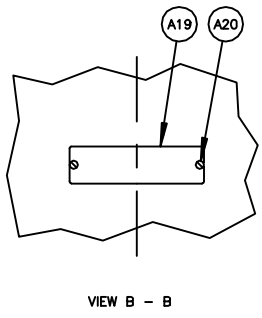
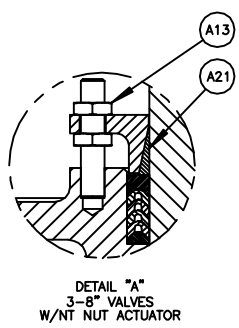
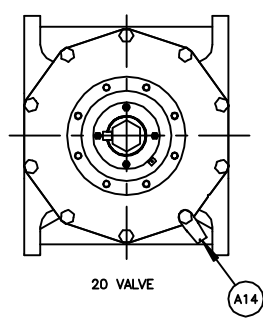
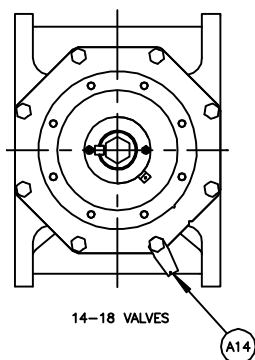
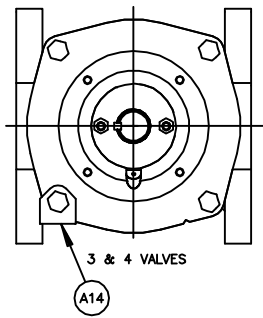
6	5	4	3	2	1	03/14/07
G	F	E	D	C	B	A

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED
GS-6A-CW_ CHAINWHEEL ACTUATED

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	10/17/05

A55463



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

63486	05/07/17
61483	07/24/17
62502	05/23/13
62209	04/29/15
60312	05/22/10
61812	08/17/08
61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	APPROVED
C1	CN	SN
	CHECKED	DATE
	SN	12/05/05

A55403



MATERIALS OF CONSTRUCTION

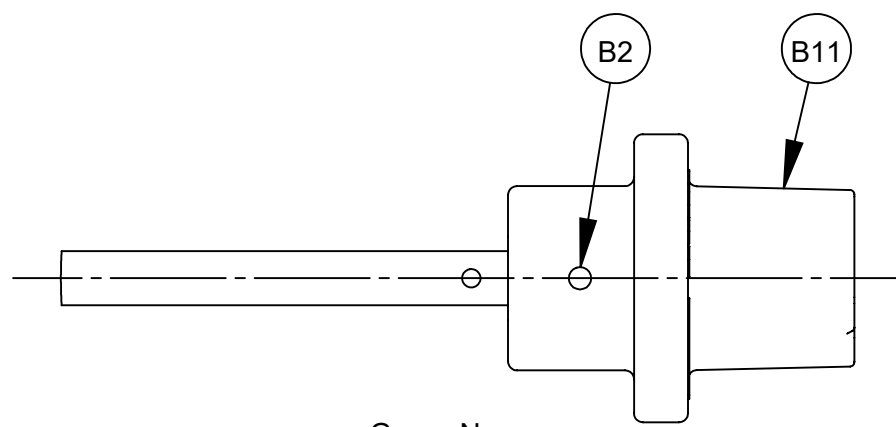
DRAWING(S): A55403

WORK ORDER: 143537

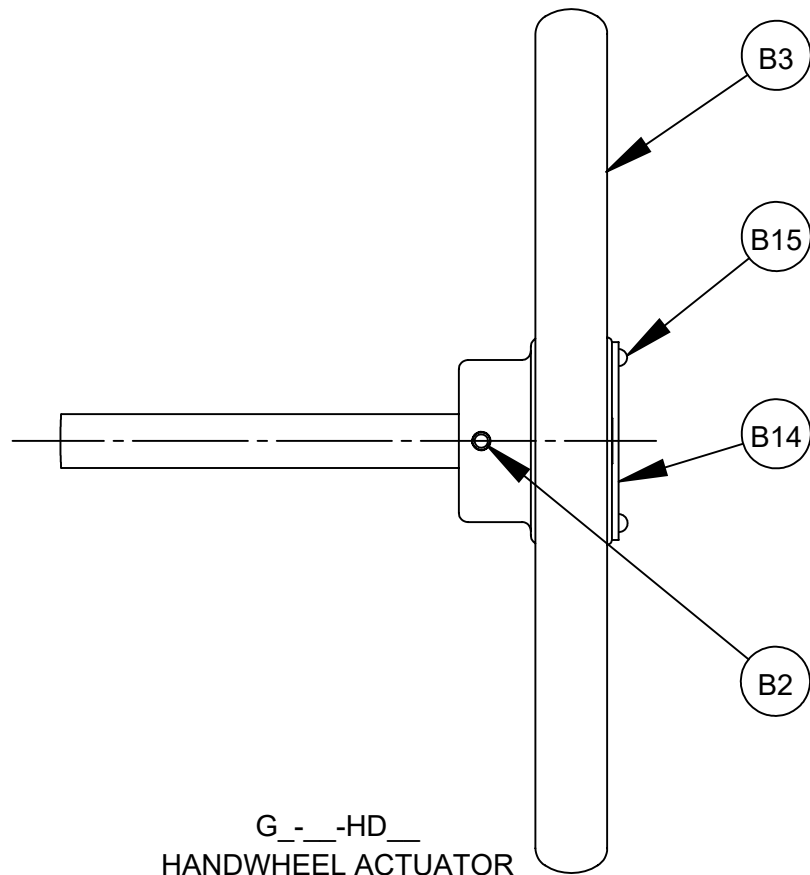
PART NO: 9717880

DESCRIPTION: PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

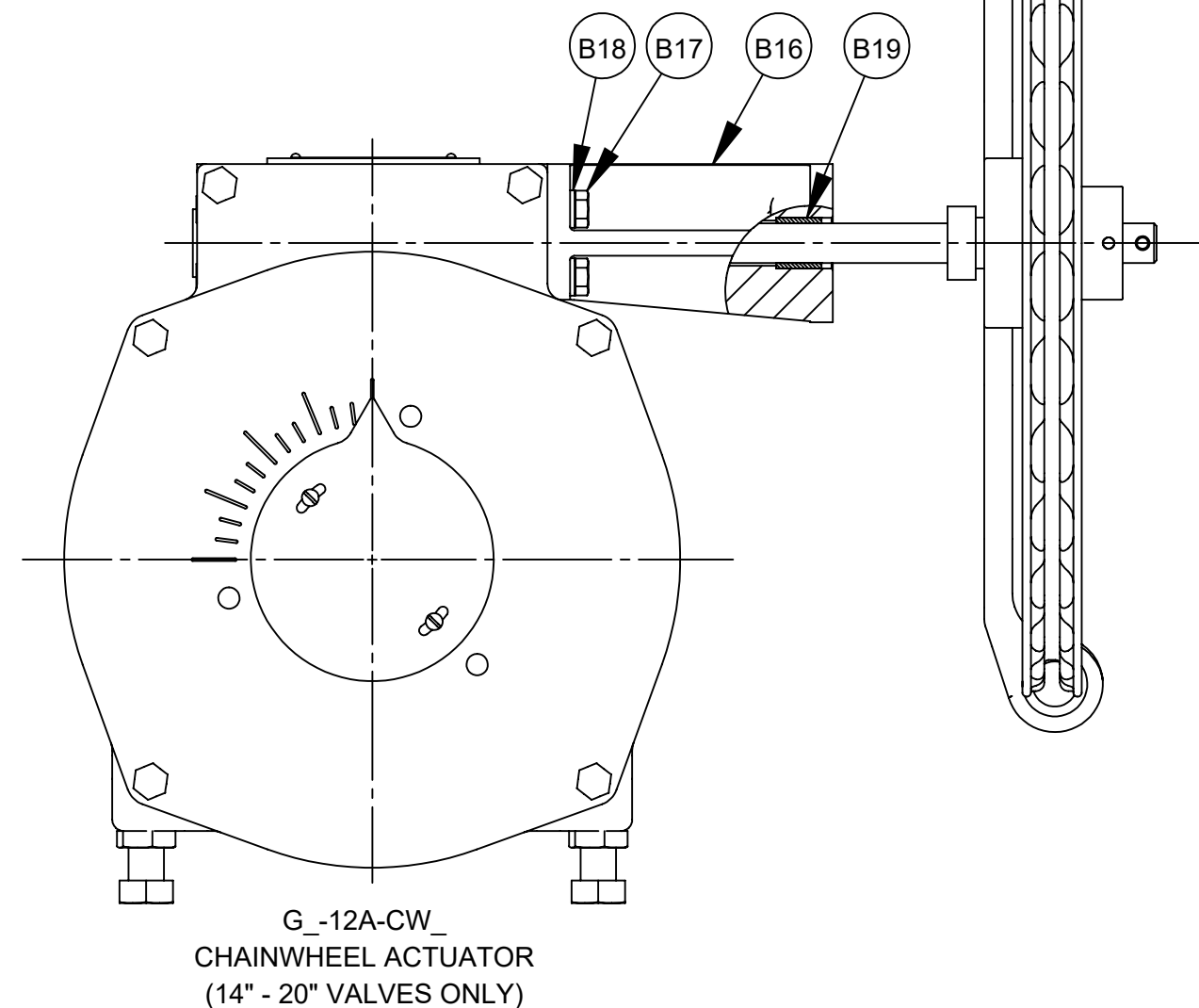
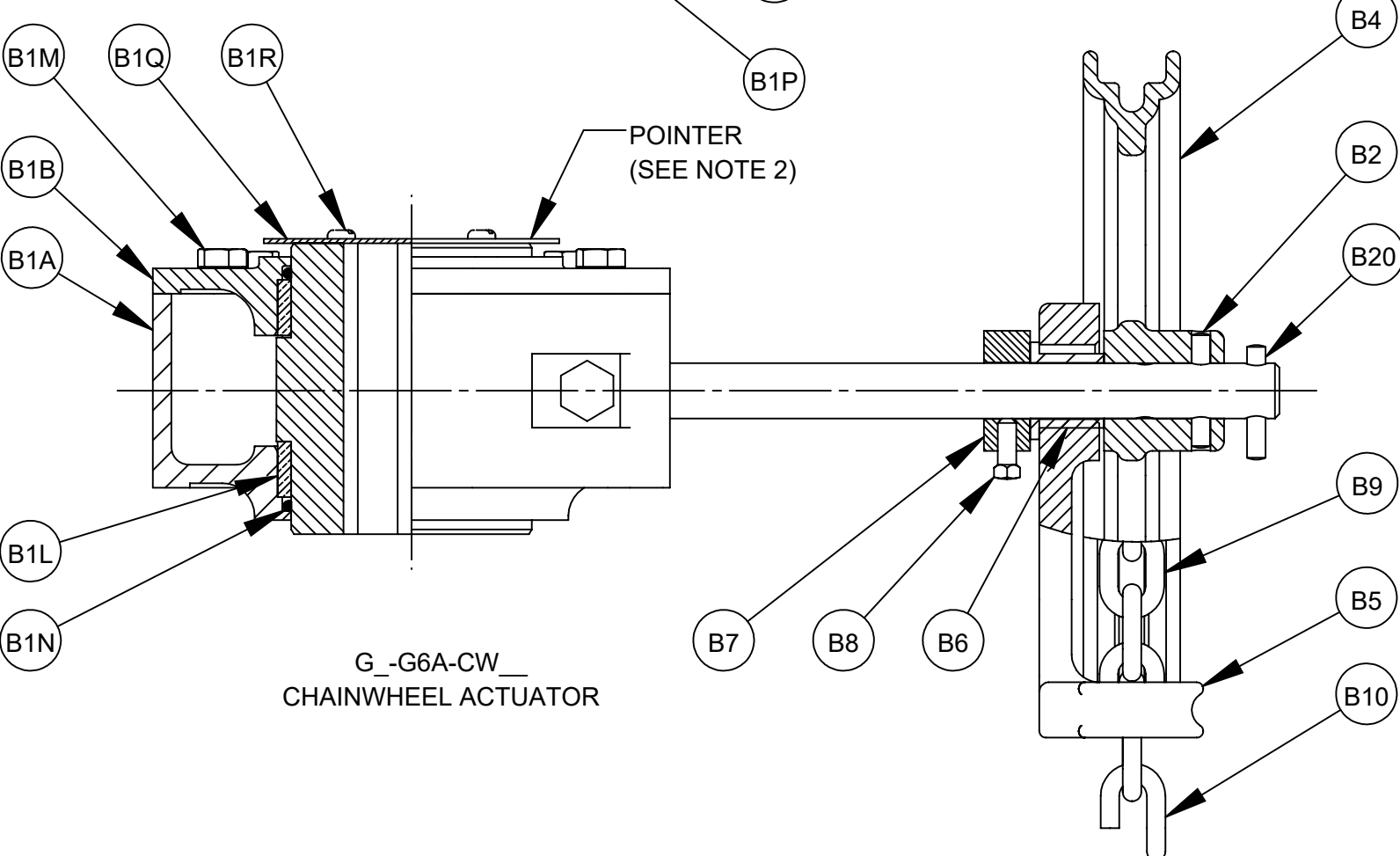
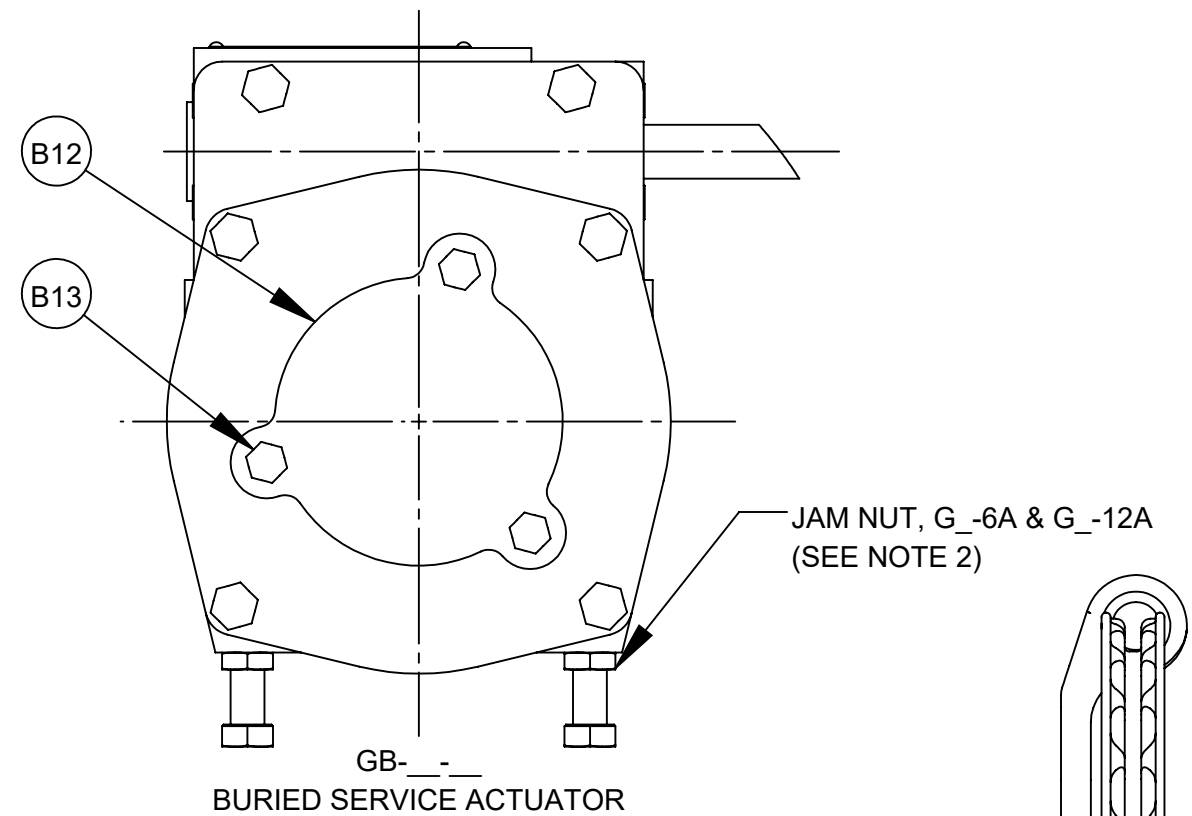
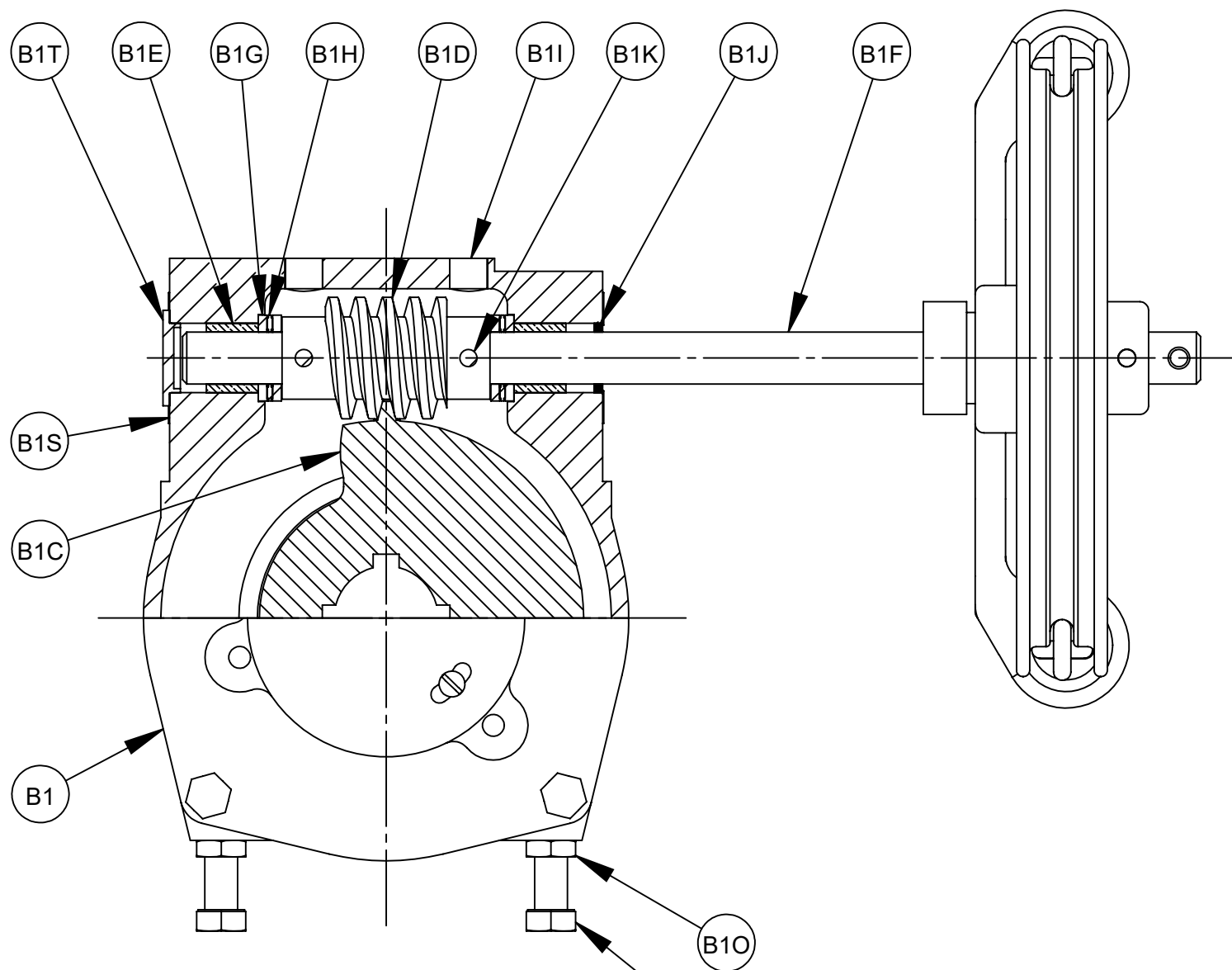
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



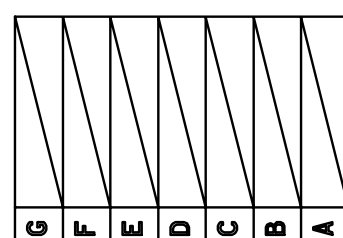
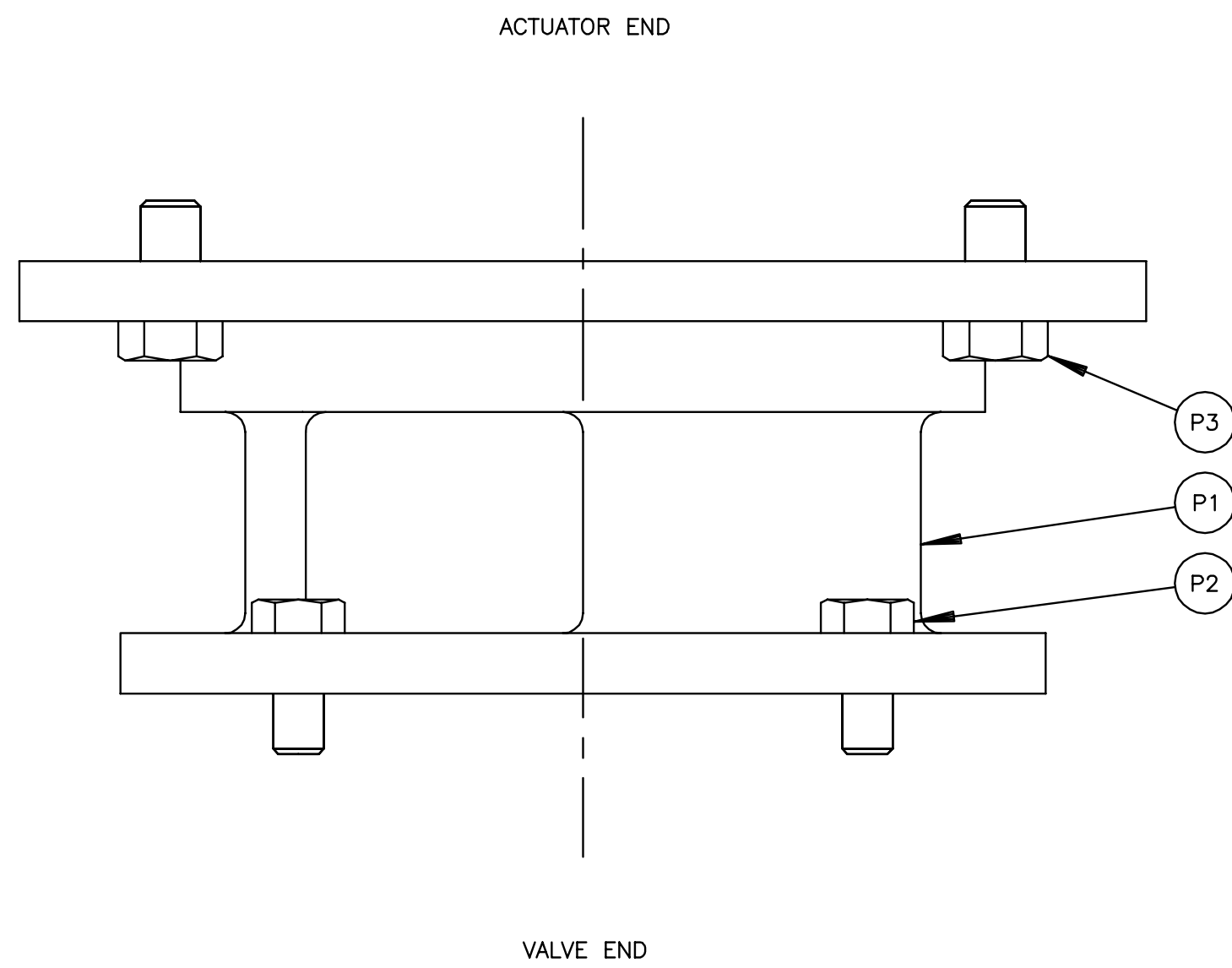
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0
PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717885
12	12	2	BAW,4,F1,CI,NBRA-NBR,150B,DI-S2,AIS*GS-6B-HD8,SB16	

Style	BAW	DEZURIK AWWA C504 3-72"; C516 78" and larger Rubber Seated Butterfly Valve
Size	4	4 Inch (100mm)
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBRA	Acrylonitrile Butadiene; Adjustable; -20 to 180° F. (-29 to 82° C.)
Seat Material	NBR	Acrylonitrile Butadiene; -20 to 180° F. (-29 to 82° C.)
Service Class	150B	AWWA Class 150B
Disc	DI	Ductile Iron with 316 Stainless Steel Edge
Shaft	S2	316 Stainless Steel
Option	AIS	USA Iron & Steel
Coating		8 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Interior and Exterior with Standard (SP10) surface prep
Act Type	GS-6B-HD8	G-Series Handwheel; 8 In Dia
Accessory	SB16	316 Stainless Steel Bolting

RELATED DOCUMENTS

A60843	DWG INST BAW F1 ADJ GB/GS-6B-H
A47532	DWG INST VALVE BAW F1 3-20"
A47525	DWG VALVE ASSY BAW F 3-12"
A61731	DWG ACT GS/GB-6B HD/CW/N
A60851	DWG CONN PARTS GS/GB-6B BAW 3-
D10386	IM VALVE BAW 3-20"
D10505	IM ACT G-SERIES 6B/12A MANUAL

FEATURES

TAG: BFV2

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK AWWA C504 Rubber-Seated Butterfly Valve		
EQUIPMENT / TAG NUMBERS:	TAG: BFV2		
WEIGHT (APPROX.)	89 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-12	
PART NUMBER:	9717885		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:		770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10386
- For actuator maintenance and lubrication refer to instruction manual(s): D10505.

RECOMMENDED SPARE PARTS

See Drawing(s) A47525. A61731.

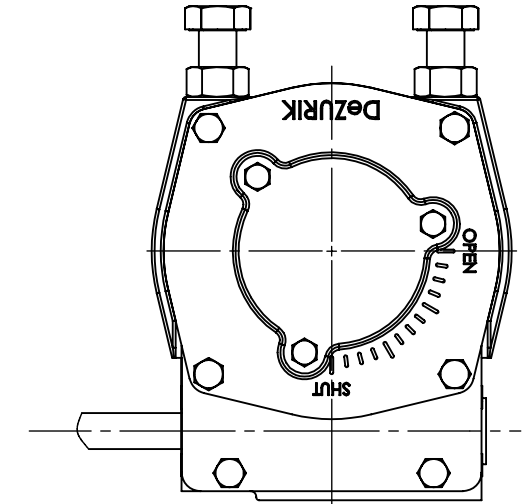
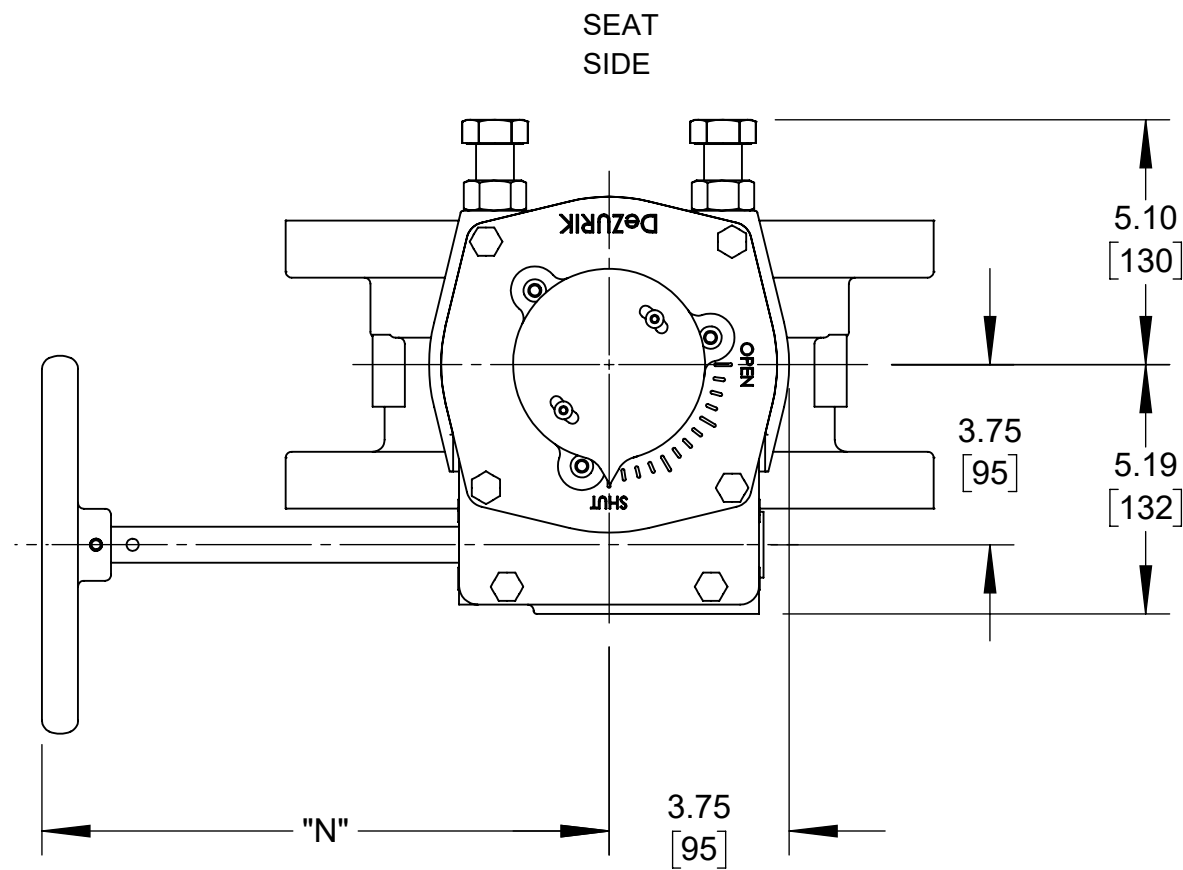
PART NO.	DESCRIPTION:	QUANTITY	LINE
1211529	4" BRG SLV UPPER NYLON MD	1	A07
1402003	4" PKG SET 5/8X1-1/8 NBR NT4B	1	A08
1211535	4" BRG SLV LOWER NYLON MD	1	A32
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

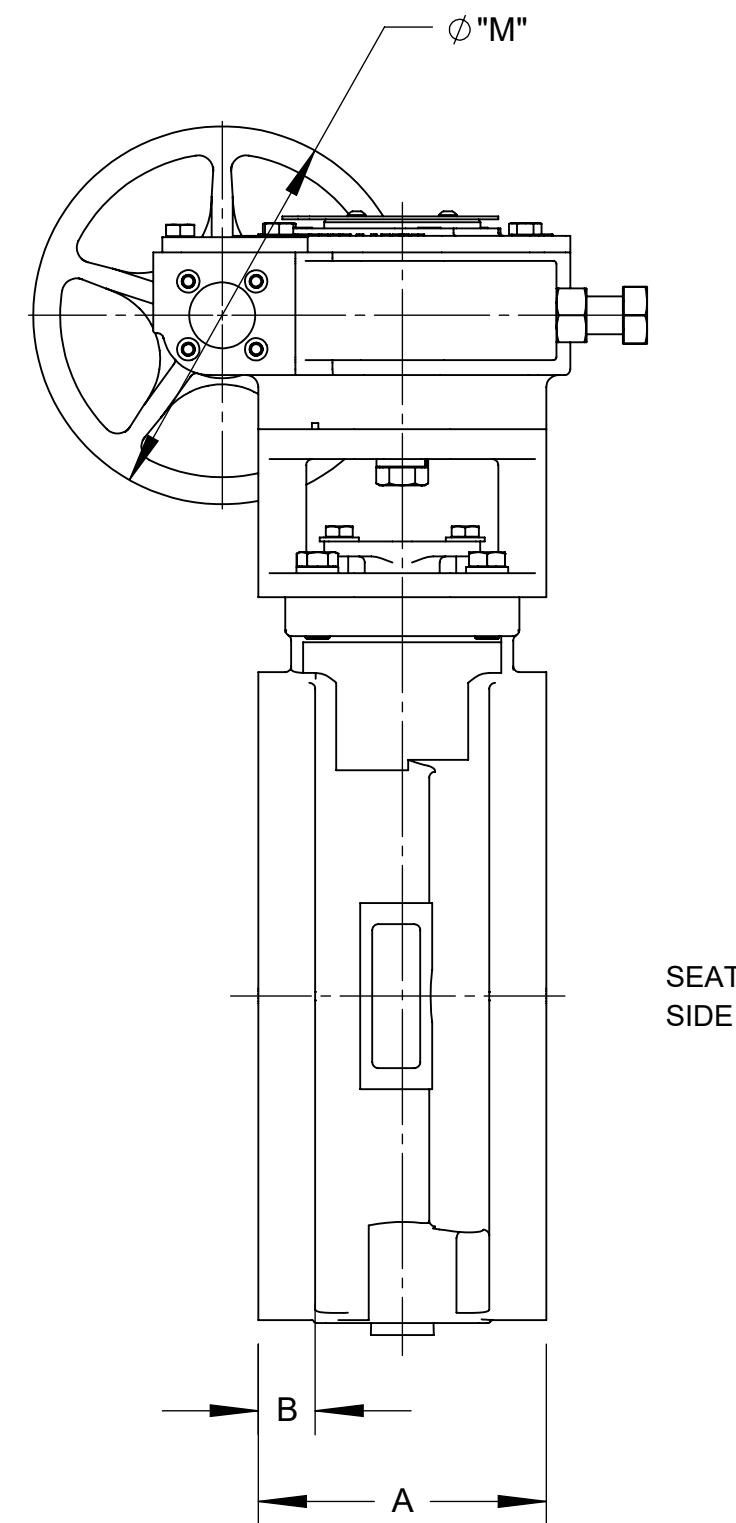
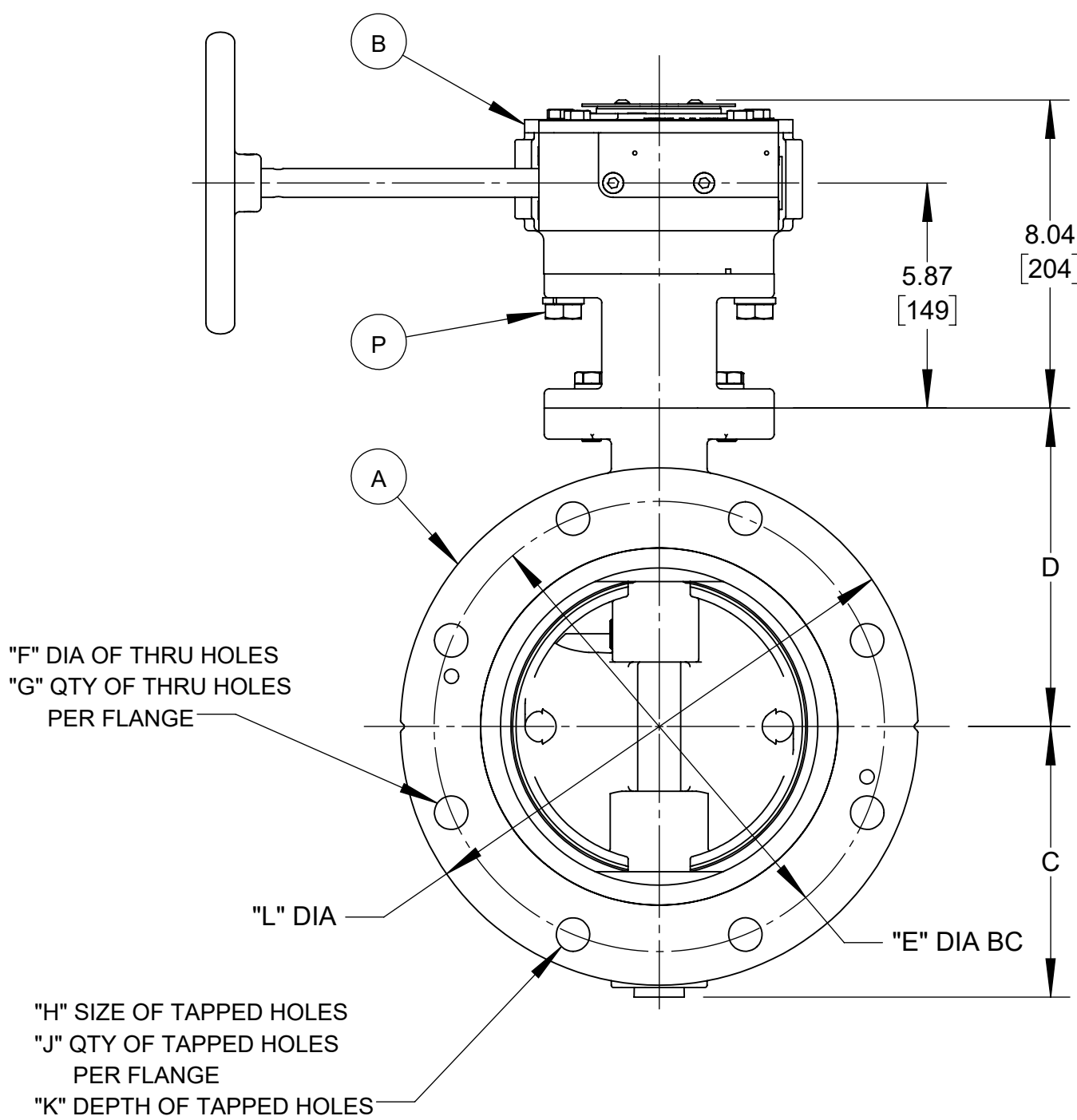
VALVE SIZE		DIMENSIONS IN [MM]										
IN	MM	A	B	C	D	E	F	G	H	J	K	L
3	75	5.00 [127]	.81 [21]	4.00 [102]	4.81 [122]	6.00 [152]	.75 [19]	4	N/A	N/A	N/A	7.50 [191]
4	100	5.00 [127]	1.00 [25]	4.75 [121]	5.56 [141]	7.50 [191]	.75 [19]	4	5/8-11 UNC	4	1.06 [27]	9.00 [229]
6	150	5.00 [127]	1.06 [27]	6.03 [153]	7.00 [178]	9.50 [241]	.88 [22]	4	3/4-10 UNC	4	1.28 [33]	11.00 [279]
8	200	6.00 [152]	1.19 [30]	7.16 [182]	8.31 [211]	11.75 [298]	.88 [22]	8	N/A	N/A	N/A	13.50 [343]
10	250	8.00 [203]	1.25 [32]	8.38 [213]	9.50 [241]	14.25 [362]	1.00 [25]	10	7/8-9 UNC	2	1.56 [40]	16.00 [406]
12	300	8.00 [203]	1.31 [33]	9.66 [245]	11.00 [279]	17.00 [432]	1.00 [25]	8	7/8-9 UNC	4	2.00 [51]	19.00 [483]

ACTUATOR NUMBER	DIMENSIONS IN [MM]	
	M	N
G_-6B-HD8	8.00 [203]	11.81 [300]
G_-6B-HD12	12.00 [305]	11.81 [300]
G_-6B-HD16	16.00 [406]	12.25 [311]

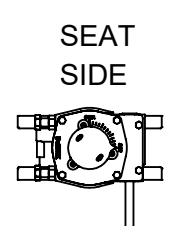
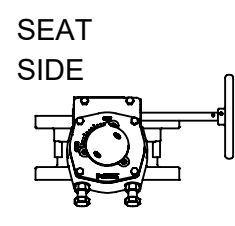
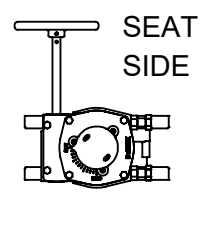
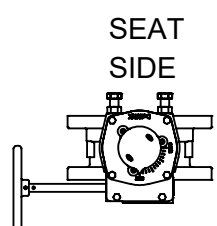
NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ALTERNATE
GB-6B-HD8 (BURIED) CONSTRUCTION



ACTUATOR MOUNTING POSITIONS



STANDARD POSITION
SHOWN ON THIS DRAWING

90° POSITION

180° POSITION

270° POSITION

50312	4/4/19	70424	3/21/19	RLP	3/27/17
C	L	U	D	C	B

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

BAW BUTTERFLY VALVES SIZE 3-12 FLANGED W/ADJUSTABLE PACKING
GS-6B-HD_ OR GB-6B-HD_ HANDWHEEL ACTUATOR

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	3/27/2017

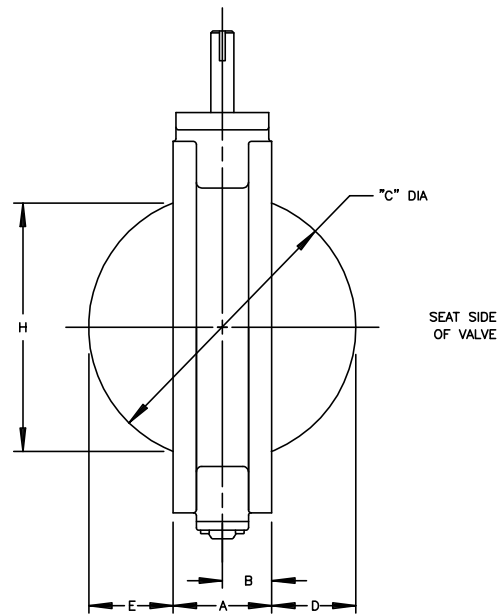
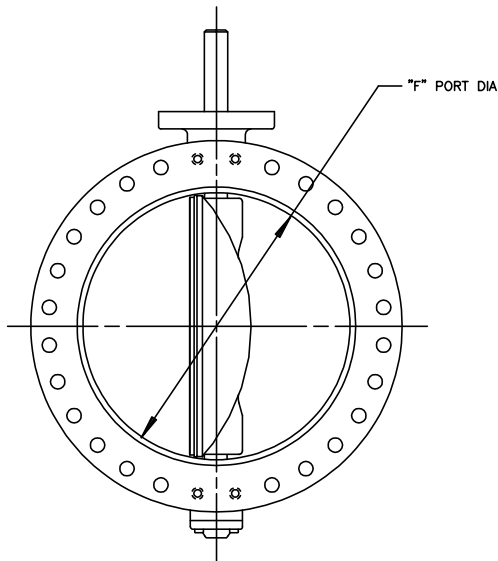
A60843

VALVE SIZE		VALVE CLASS	DIMENSIONS							
INCH	MM		A	B	C	D	E	F	H	
3	80	150B 250B	5.00 127	2.50 64	3.00 76	NONE	NONE	2.88 73	NONE	
4	100	150B 250B	5.00 127	2.50 64	4.00 102	NONE	NONE	3.88 99	NONE	
6	150	150B 250B	5.00 127	2.50 64	5.75 146	.375 9.5	.375 9.5	5.62 143	2.88 73	
8	200	150B 250B	6.00 152	3.00 76	7.60 193	.80 20	.80 20	7.47 190	4.72 120	
10	250	150B 250B	8.00 203	4.00 102	9.62 244	.81 21	.81 21	9.46 240	5.40 137	
12	300	150B 250B	8.00 203	4.00 102	11.60 295	1.80 46	1.80 46	11.45 291	8.46 215	
14	350	150B 250B	8.00 203	4.00 102	13.60 345	2.80 71	2.80 71	13.40 340	11.06 281	
16	400	150B 250B	8.00 203	4.00 102	15.50 394	3.74 95	3.74 95	15.25 387	13.32 338	
18	450	150B 250B	8.00 203	4.00 102	17.25 438	4.61 117	4.61 117	17.00 432	15.34 390	
20	500	150B	8.00 203	4.00 102	19.25 489	5.61 142	5.61 142	19.00 483	17.56 446	
20	500	250B	8.00 203	4.00 102	19.06 484	5.51 140	5.51 140	19.00 483	17.56 446	

SIZE	"G" (VALVE WEIGHT)									
	3	4	6	8	10	12	14	16	18	20
150B	33	45	65	100	156	250	325	470	505	675

NOTE:

1. "G" IS BARE SHAFTED VALVE WEIGHT (LBS).

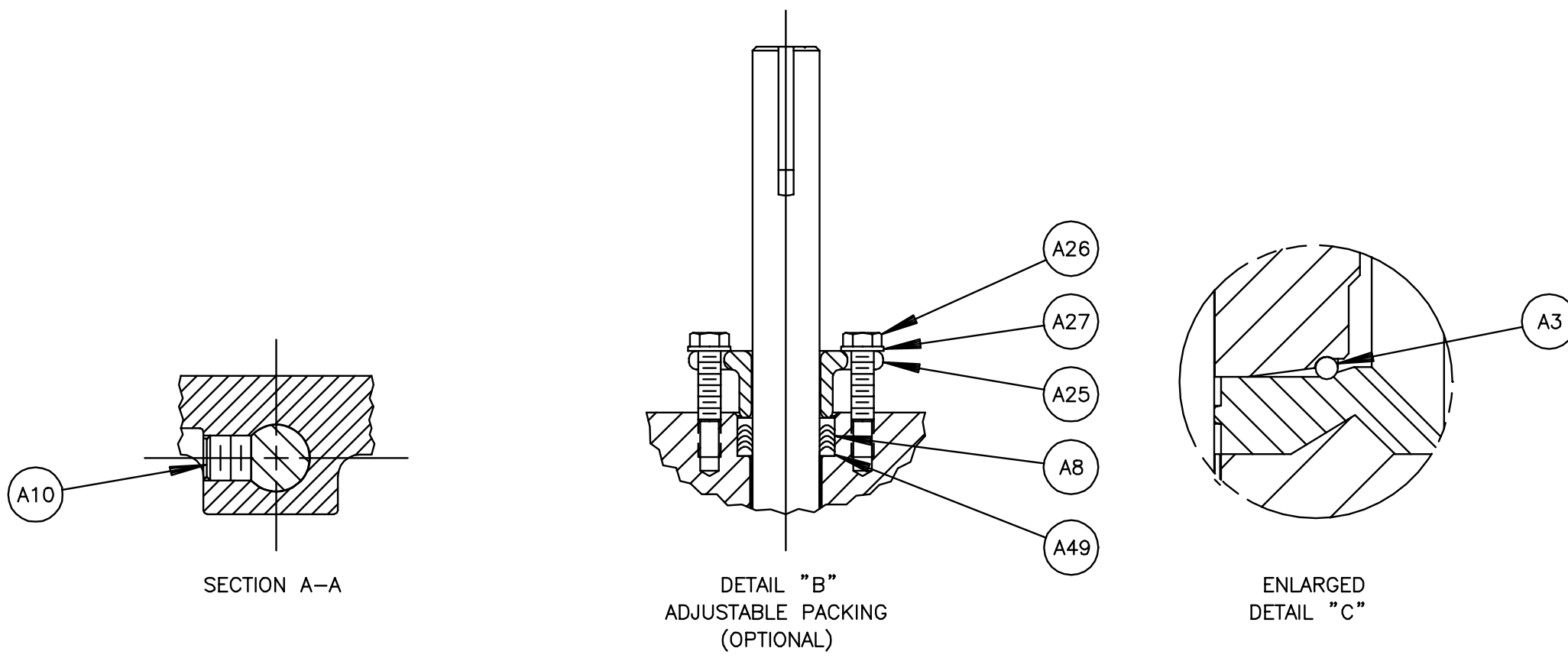


G	50312	11/22/18
F	50312	09/24/08
E	61158	02/13/04
D	50312	09/17/02
C	80712	02/20/02
B	50312	02/07/97
A		



3-20 FLANGED AWWA BUTTERFLY VALVES SHOWING DISC CLEARANCE IN FULL OPEN POSITION, VALVE WEIGHTS AND PORT DIAMETER			
DOCT. CODE	DRANN	APPROVED	
C1	CHECKED	KW	WCB
	SJU	DATE	09/17/96

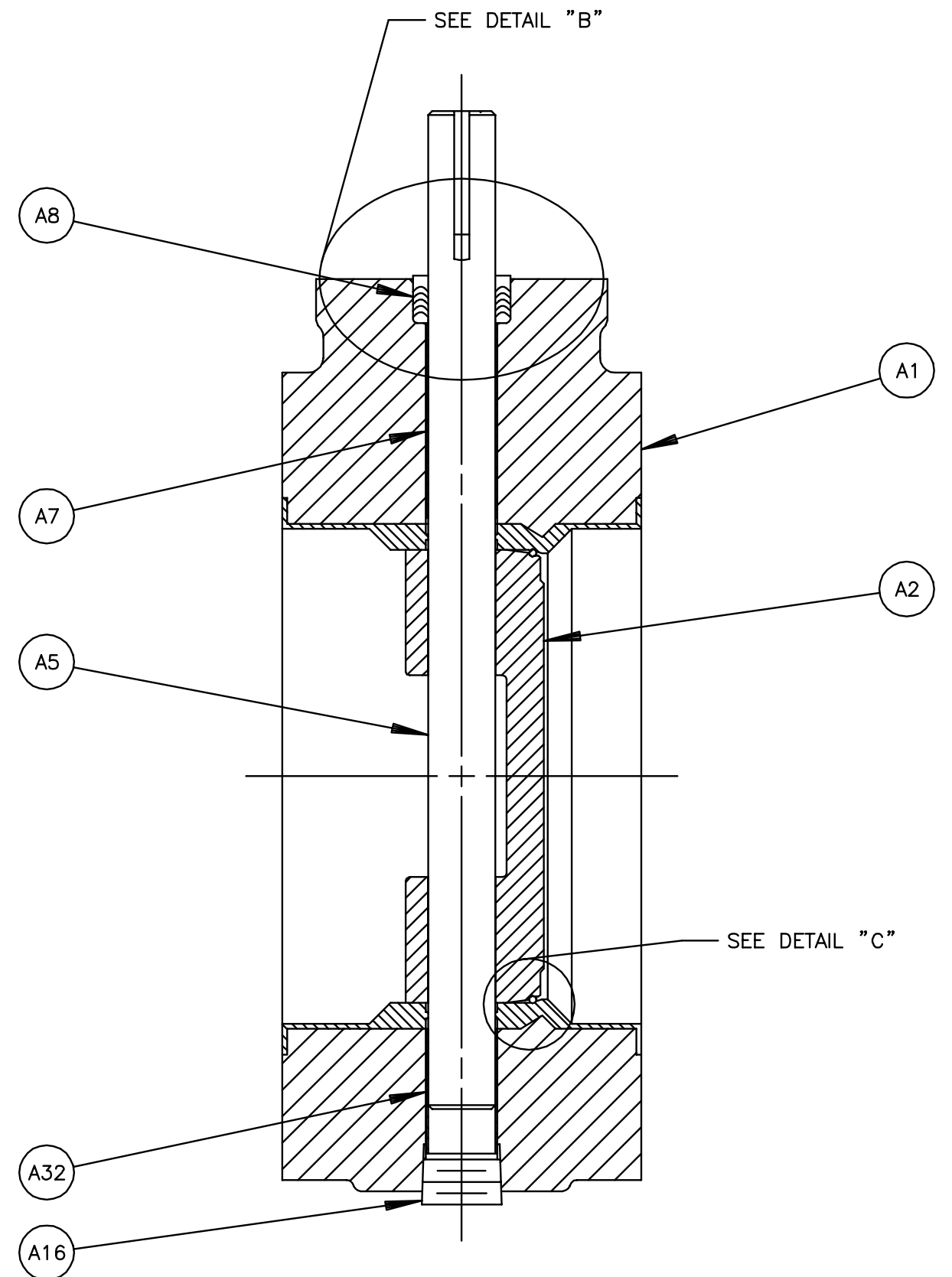
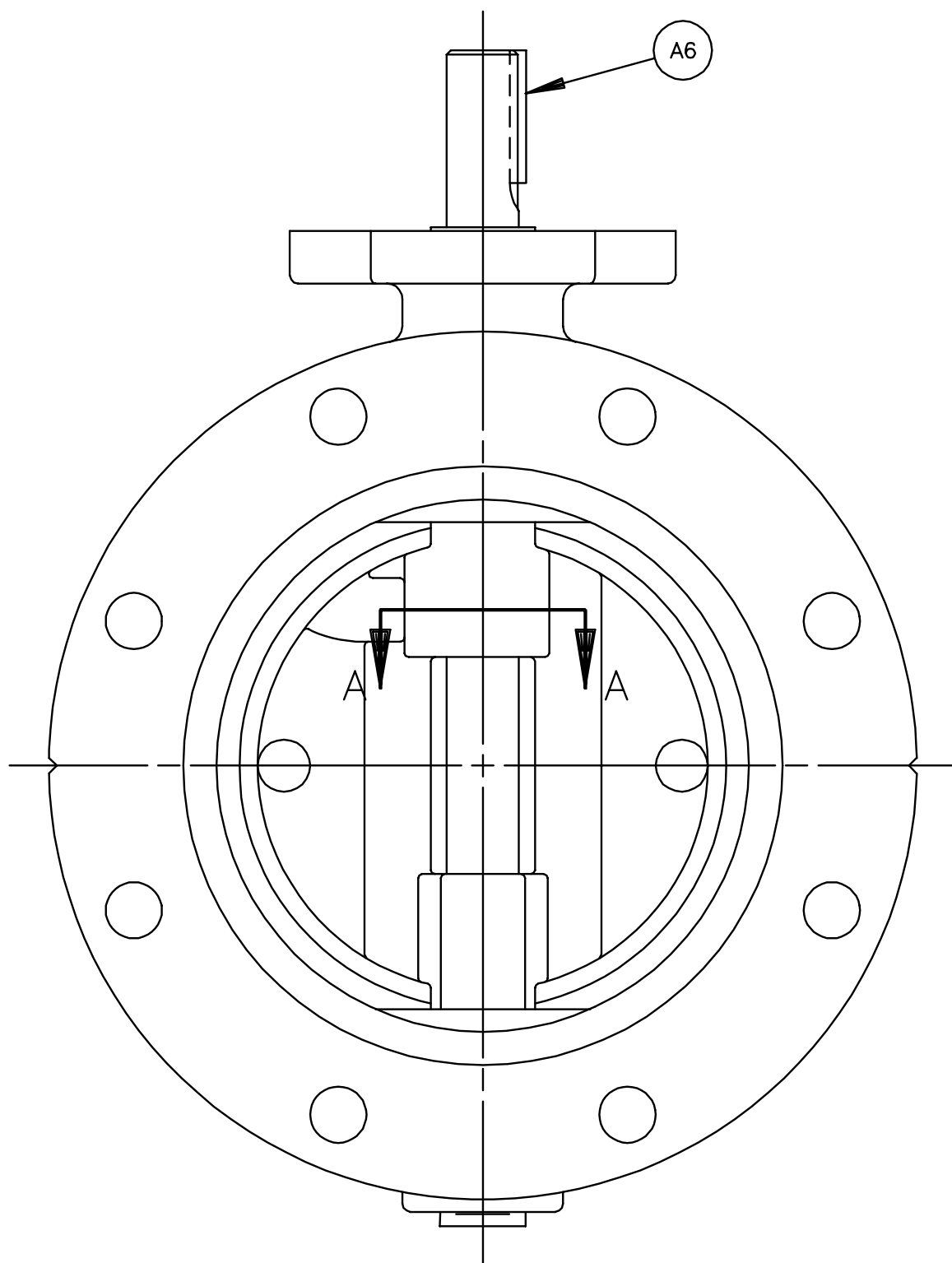
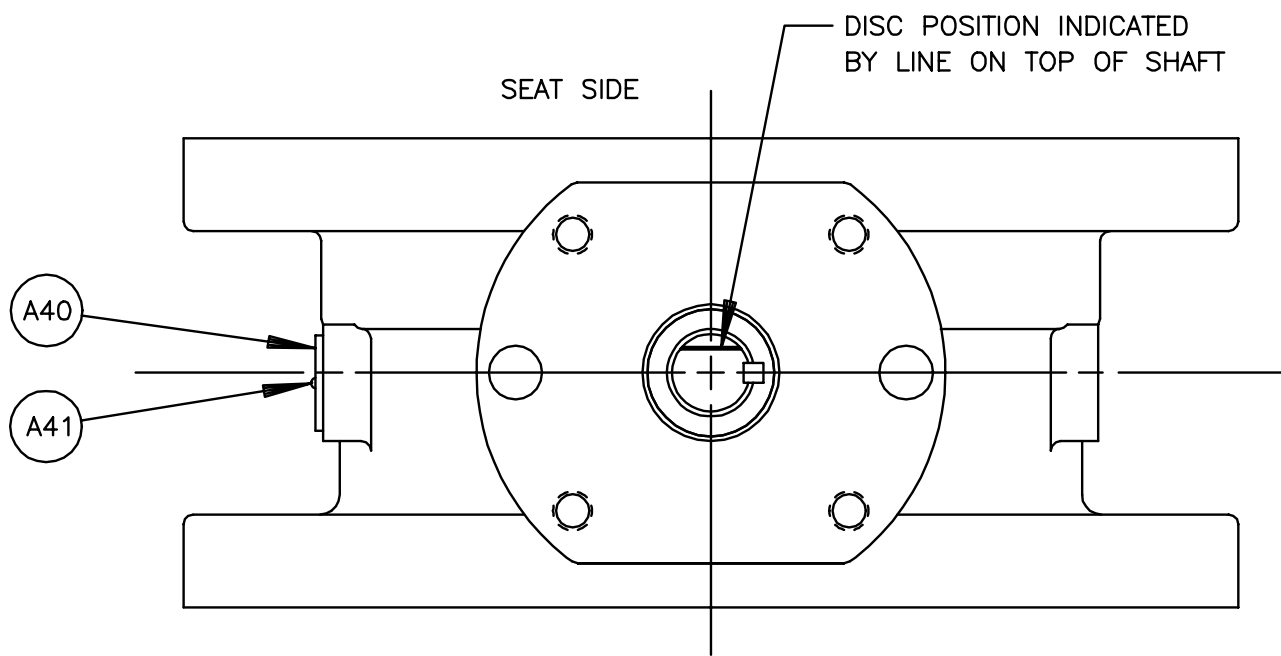
A47532



NO	PART NAME	QTY
A1	BODY	1
A2	DISC	1
A3	SEAT RING	1
A4		
A5	SHAFT	1
A6	KEY	1
A7	BEARING (UPPER JOURNAL)	1
A8	PACKING	-
A9		
A10	TORQUE PLUG	1
A11		
A12		
A13		
A14		
A15		
A16	PLUG	1
A25	GLAND	1
A26	SCREW	2
A27	WASHER	2
A32	BEARING (LOWER JOURNAL)	1
A40	VALVE CLASSIFICATION PLATE (WHEN REQ'D)	1
A41	DRIVE SCREW (USED WITH A40)	2
A49	SUPPORT RING (PTFE PACKING ONLY)	1

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
2. RECOMMENDED SPARE PARTS ARE ITEMS NO A7, A8 AND A32.



G	F	E	D	C	B	A
61892	62135	61384	61159	60712		
01/17/14	12/14/12	07/14/08	02/13/04	02/20/02		

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

BAW BUTTERFLY VALVES SIZE 3 - 12
FLANGED VALVE ASSEMBLY

DOCT. CODE	DRAWN	KW	APPROVED
C1	CHECKED	SJJ	W0BB
			DATE
			09/11/96

A47525



MATERIALS OF CONSTRUCTION

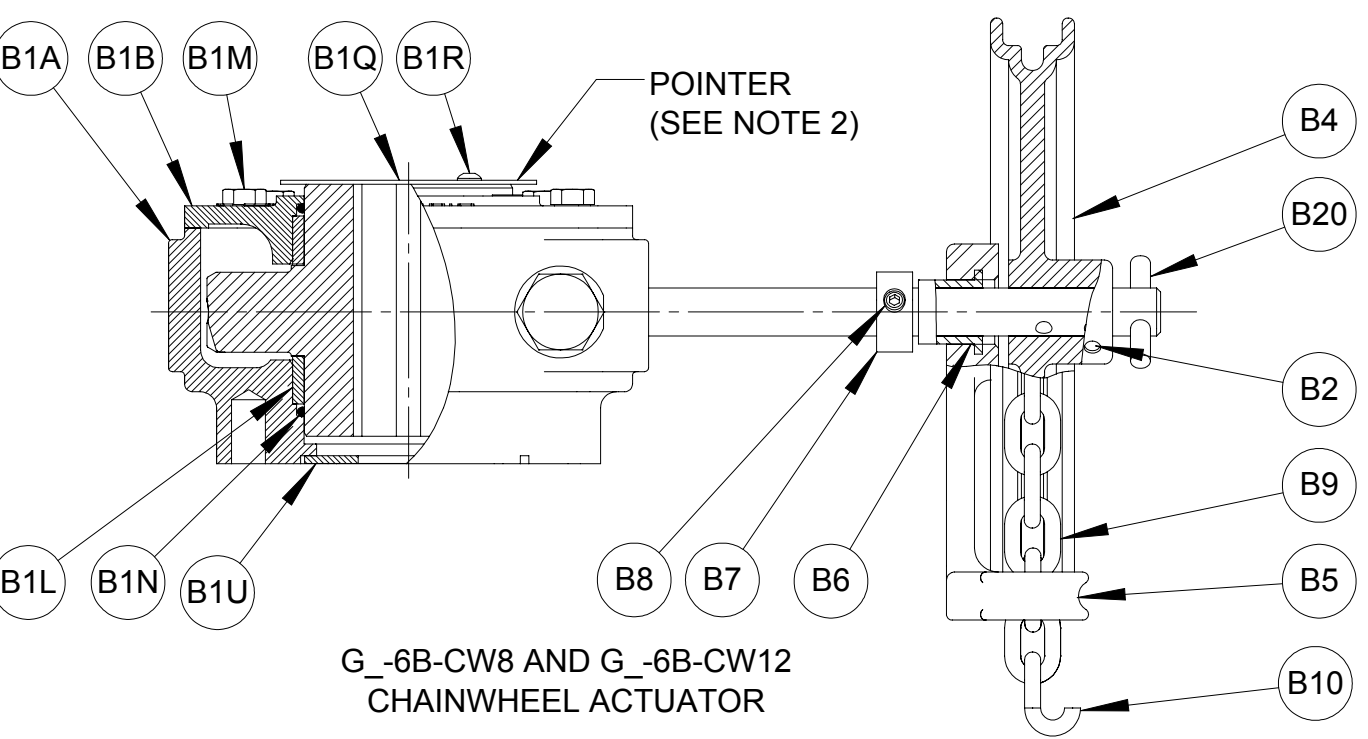
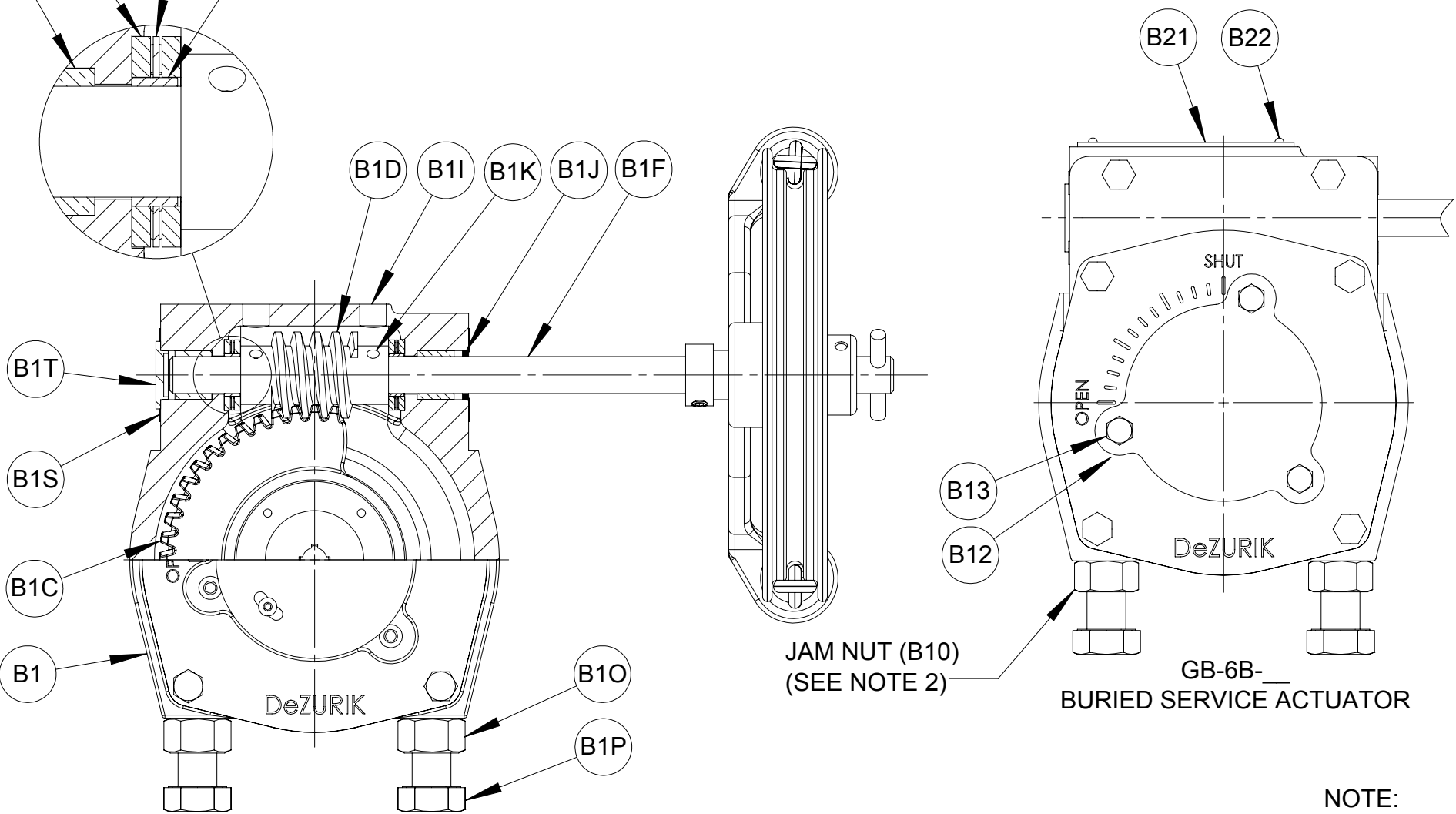
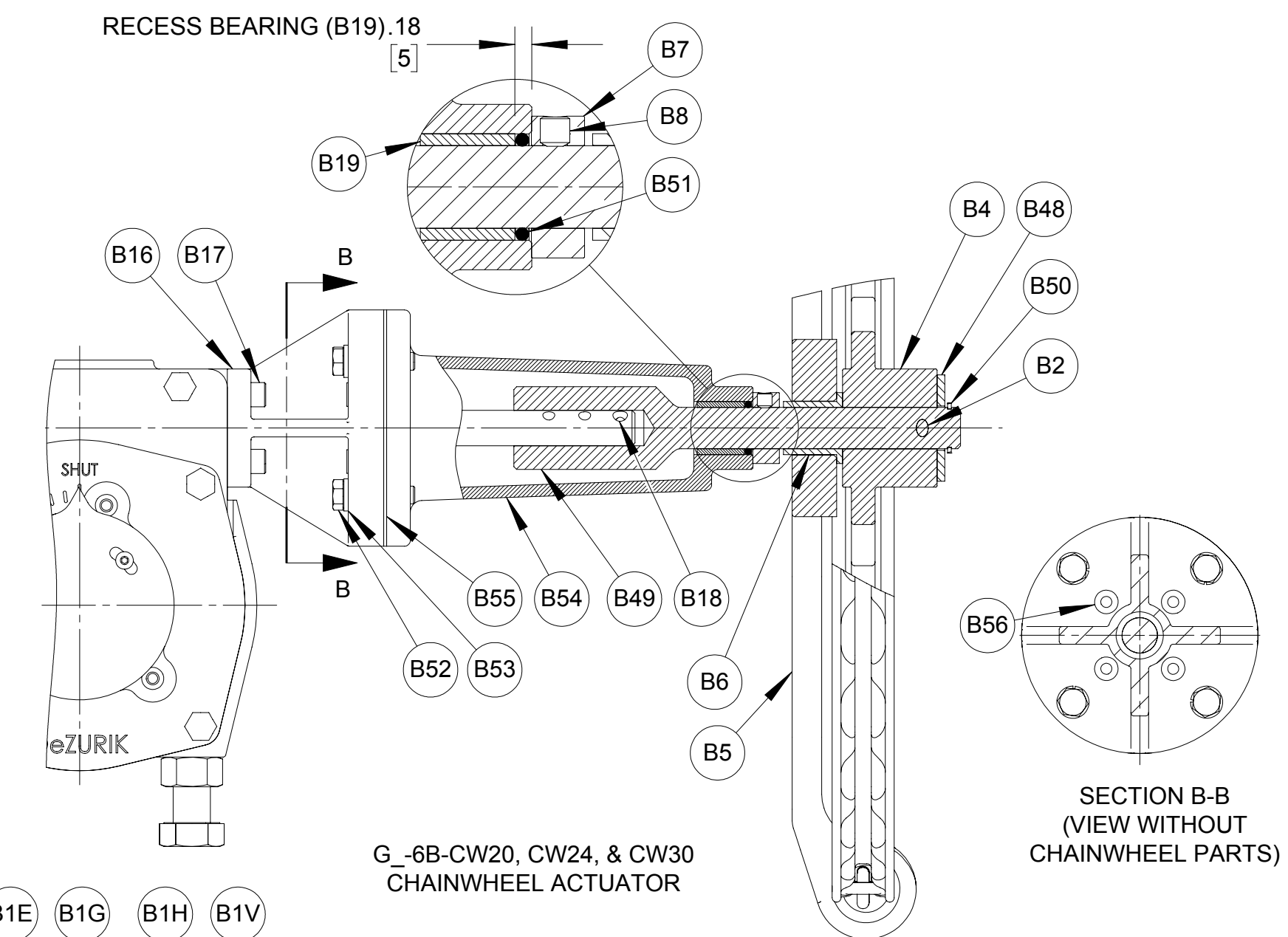
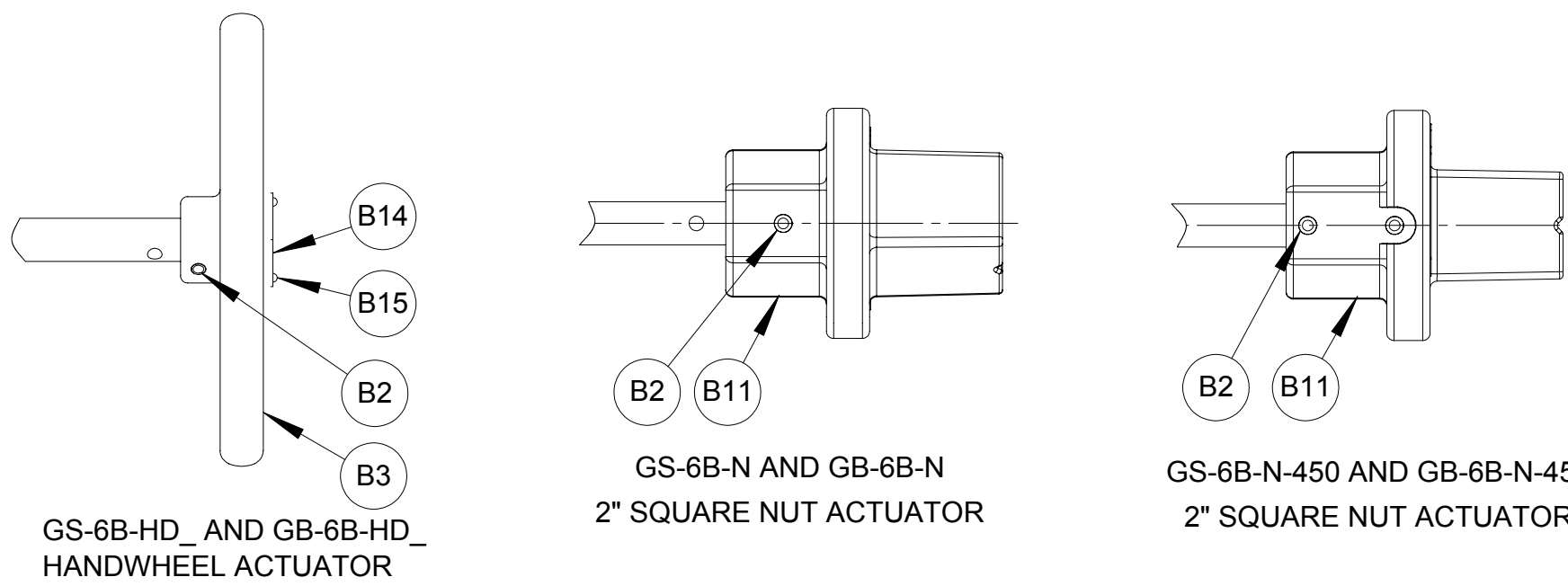
DRAWING(S): A47525

WORK ORDER: 143537

PART NO: 9717885

DESCRIPTION: BAW,4,F1,CI,NBRA-NBR,150B,DI-S2,AIS*GS-6B-HD8,SB16

ITEM	MATERIAL
A01	ACRYLONITRILE-BUTADIENE (NBR)
A01	IRON, ASTM A126, CLASS B, USA FOUNDRY
A02	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A03	STAINLESS STEEL, TYPE 316, ASTM A276, CONDITION A
A05	STAINLESS STEEL, TYPE 316, ASTM A240/A276, USA MILL
A06	STEEL, COLD DRAWN, AISI 1018
A07	NYLON MOLYBDENUM DISULFITE
A08	ACRYLONITRILE-BUTADIENE (NBR)
A10	STAINLESS STEEL, TYPE 316
A16	STEEL CARBON, SAE J403, GRADE 1008 OR 1010
A25	TIN BRONZE, ASTM B505/B427, C90700
A26	STAINLESS STEEL, TYPE 316
A27	STAINLESS STEEL, TYPE 316
A32	NYLON MOLYBDENUM DISULFITE



NO.	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B1U	PACKING WASHER	1
B1V	SPACER SLEEVE	2
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (WRENCHING SQUARE G_6B-N-450 OPTION ONLY)	2
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24" & 30" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24" & 30" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	PIN (20" - 30" CHAINWHEEL ONLY)	1
B19	BEARING (20" - 30" CHAINWHEEL ONLY)	1
B20	PIN (8" & 12" CHAINWHEEL ONLY)	
B21	DATA PLATE	1
B22	DRIVE SCREW	2
B48	WASHER (20" - 30" CHAINWHEEL ONLY)	1
B49	SHAFT EXTENSION (INNER)	1
B50	RETAINING RING (20" - 30" CHAINWHEEL ONLY)	1
B51	O-RING (20" - 30" CHAINWHEEL ONLY)	1
B52	SCREW (20" - 30" CHAINWHEEL ONLY)	4
B53	LOCKWASHER (20" - 30" CHAINWHEEL ONLY)	4
B54	SHAFT EXTENSION (20" - 30" CHAINWHEEL ONLY)	1
B55	GASKET (20" - 30" CHAINWHEEL ONLY)	1
B56	PLUG	4

NOTE:

- WHEN ORDERING PARTS INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NUMBER AND QUANTITY.
- TO CONVERT GS-6B (WEATHER PROOF) TO GB-6B (BURIED SERVICE) ACTUATOR.
 - REMOVE POINTER.
 - APPLY A BEAD OF SILICONE SEALANT DOW RTV-732(1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREW (B13).
 - BEFORE ADJUSTING ACTUATOR STOP SCREWS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP SCREW THREADS BETWEEN JAM NUTS AND ACTUATOR HOUSING (B1A).
- RECOMMENDED SPARE PARTS ARE ITEMS B1J, B1N, B6, B19, B51 AND B55.

70424	03/13/19
50312	08/22/18
RLP	08/16/17
C	L
E	D
B	A



GS-6B_ AND GB-6B_ MANUAL ACTUATOR WITH CHAINWHEEL, HANDWHEEL & WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	SN	APPROVED
C1	CHECKED	SN	DATE 8/16/2017
			A61731



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717886
13	13	1	PEF,4,MJ,CI,NBR,CR,AIS-141SB0*NT,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	NT	Nut
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A58184	DWG INST PEF MJ NT 3-8"
A55435	DWG VALVE ASSY PEF MJ 3-20"
A58182	DWG ACT NT 3-8" PEF
D10453	IM VALVE PEF 3-36"
D10061	IM ACT 2" NUT/LEVER (NT/LV/LVF)

FEATURES

TAG: TAG: 4" PEF MJ SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 4" PEF MJ SPARE		
WEIGHT (APPROX.)	89 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-13	
PART NUMBER:	9717886		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10061.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A58182.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09

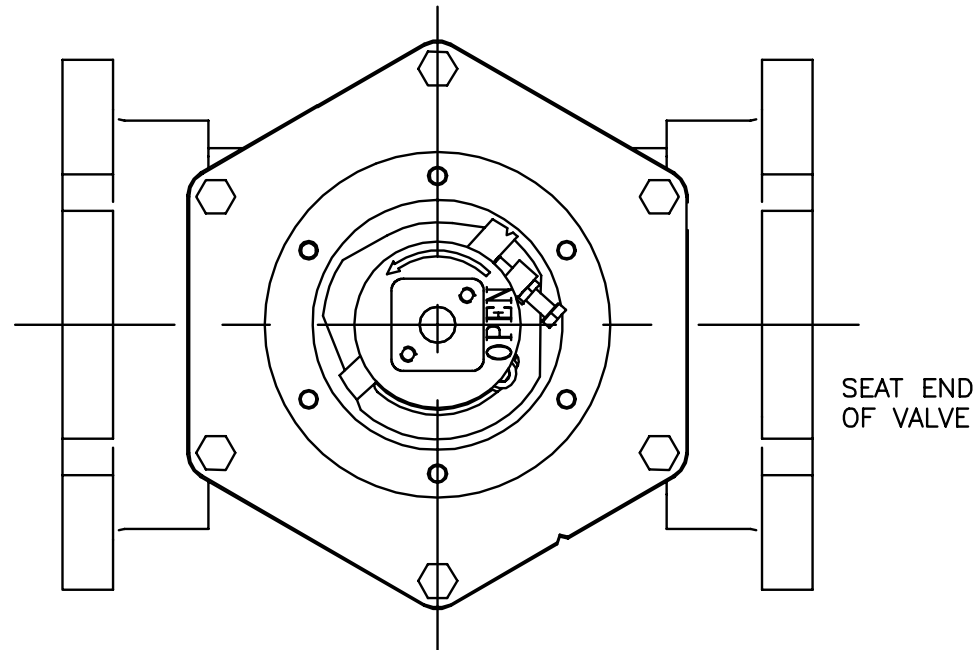
For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>		
INCH	MM	B	C	K
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{9.38}{238}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{9.88}{251}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{12.31}{313}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{15.56}{395}$

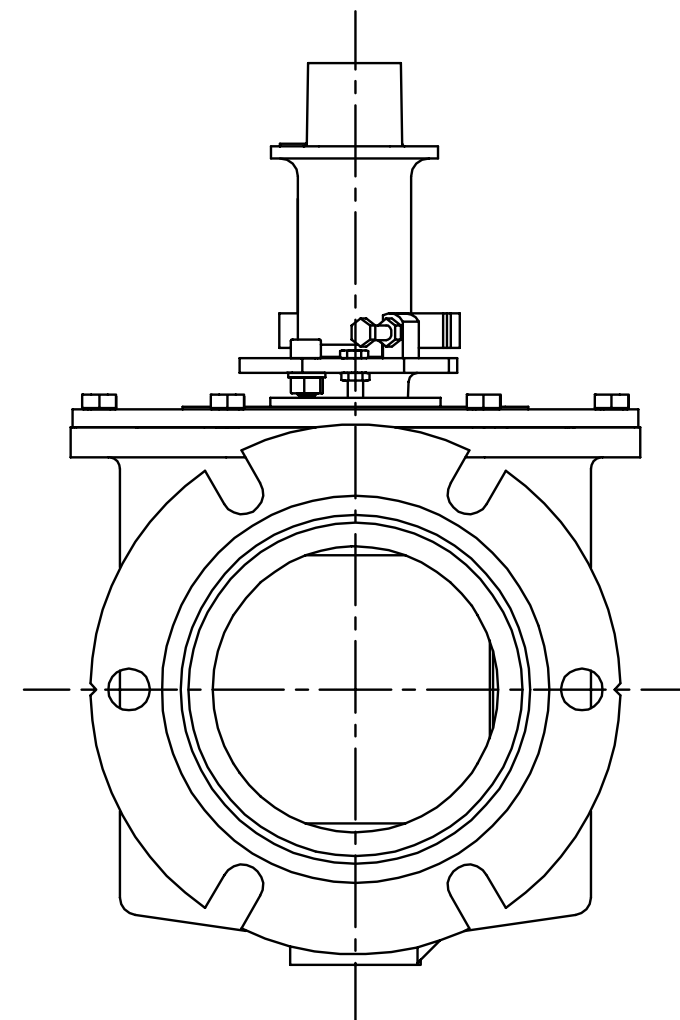
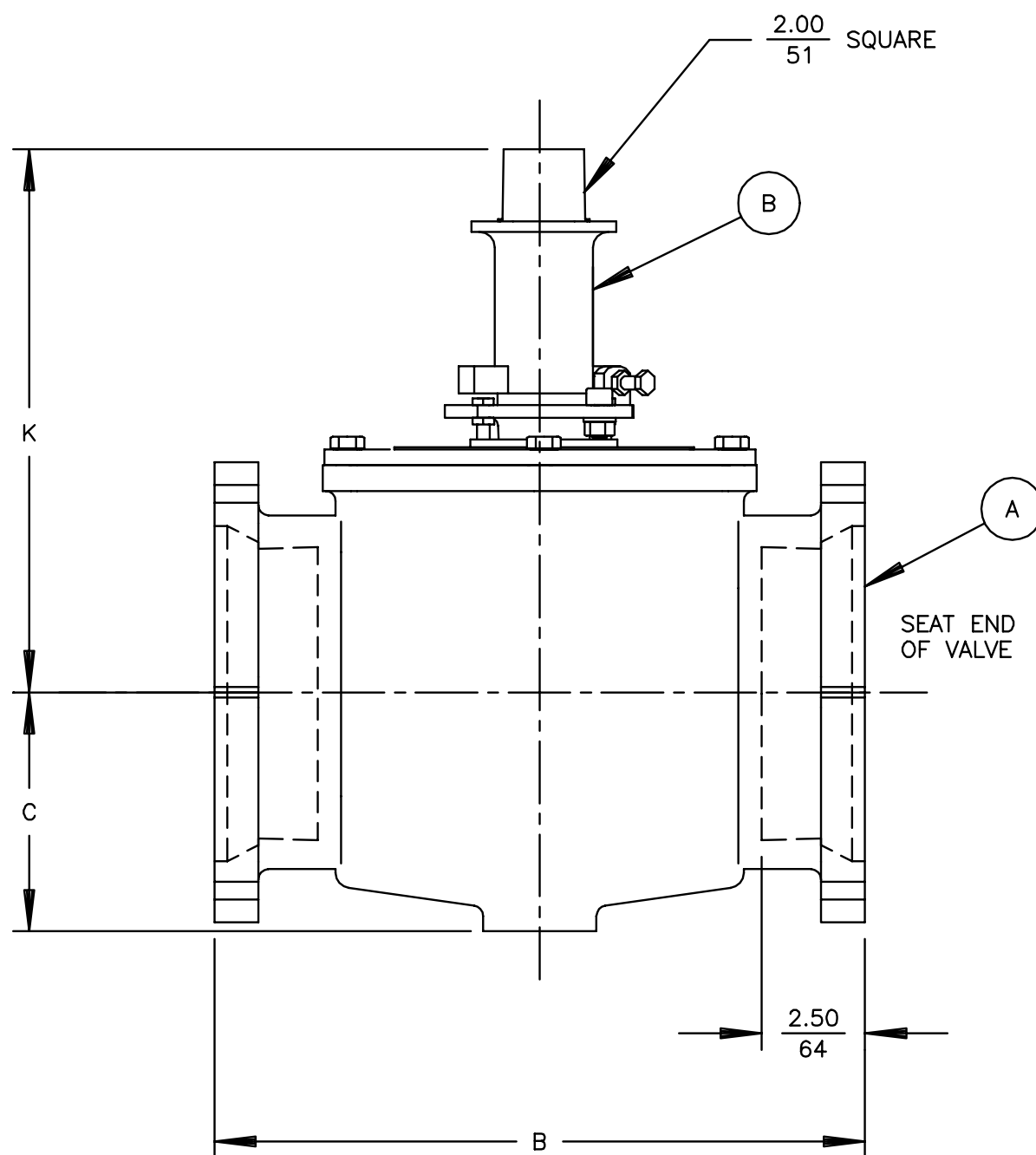
A	VALVE
B	ACTUATOR

NOTE:

- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.



NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



G	F	E	D	C	B	A
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DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 8 MECHANICAL JOINT NT NUT ACTUATED

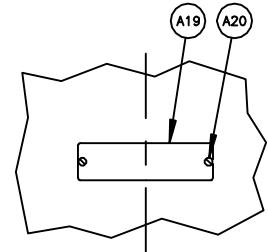
DOCT. CODE	DRAWN	DDP	APPROVED	TK
C1	CHECKED	TK	DATE	09/23/09

A58184

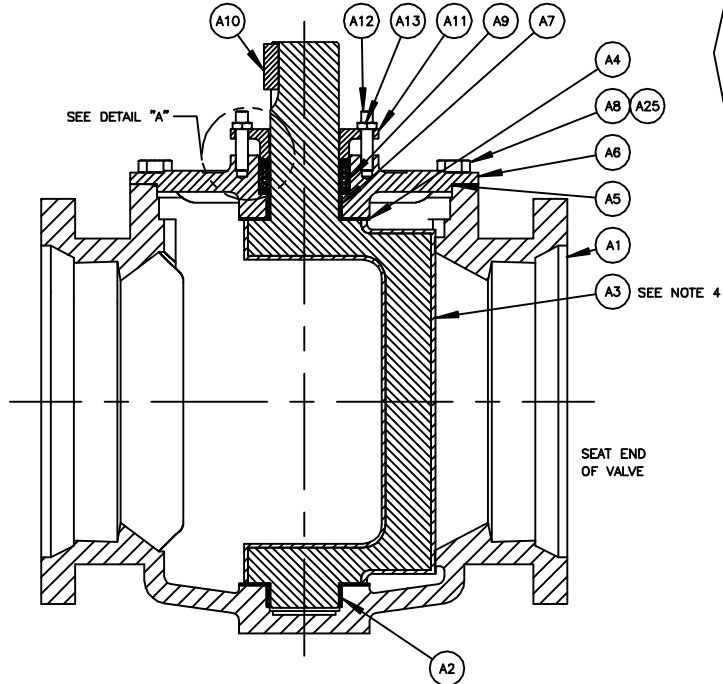
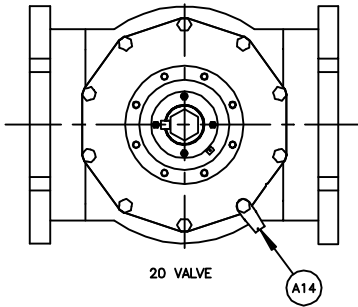
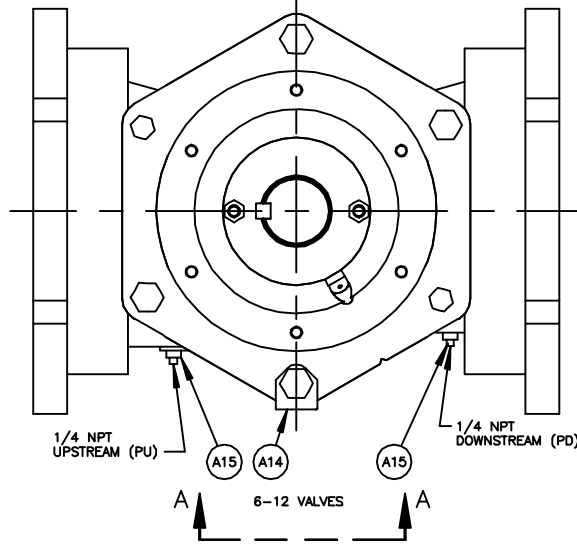
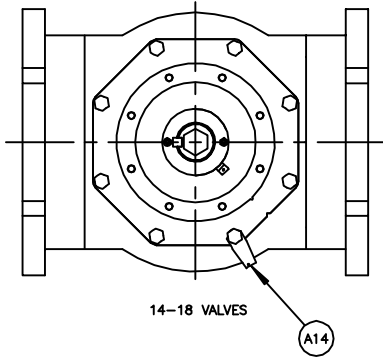
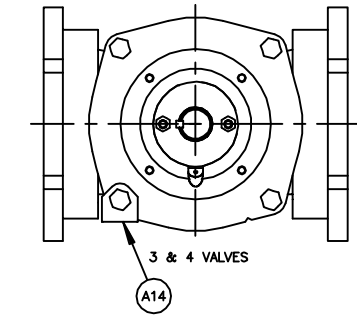
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

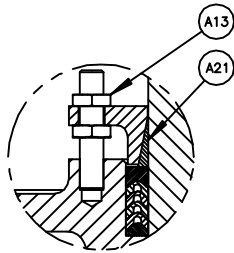


VIEW A - A



SEAT END OF VALVE

SEE NOTE 4



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR

REV	DATE	BY	CHKD
D	09/20/17	63490	
C	07/24/17	61483	
B	03/22/16	50312	
A	05/02/08	61482	

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

DRAWING(S): A55435

WORK ORDER: 143537

PART NO: 9717886

DESCRIPTION: PEF,4,MJ,CI,NBR,CR,AIS-141SB0*NT,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8
A21	RYTON, MINERAL FILLED, INJECTION MOLDING PELLETS



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717887
14	14	1	PEF,6,MJ,CI,NBR,CR,AIS-141SB0*NT,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	NT	Nut
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A58184	DWG INST PEF MJ NT 3-8"
A55435	DWG VALVE ASSY PEF MJ 3-20"
A58182	DWG ACT NT 3-8" PEF
D10453	IM VALVE PEF 3-36"
D10061	IM ACT 2" NUT/LEVER (NT/LV/LVF)

FEATURES

TAG: TAG: 6" PEF MJ SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 6" PEF MJ SPARE		
WEIGHT (APPROX.)	145 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-14	
PART NUMBER:	9717887		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10061.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A58182.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09

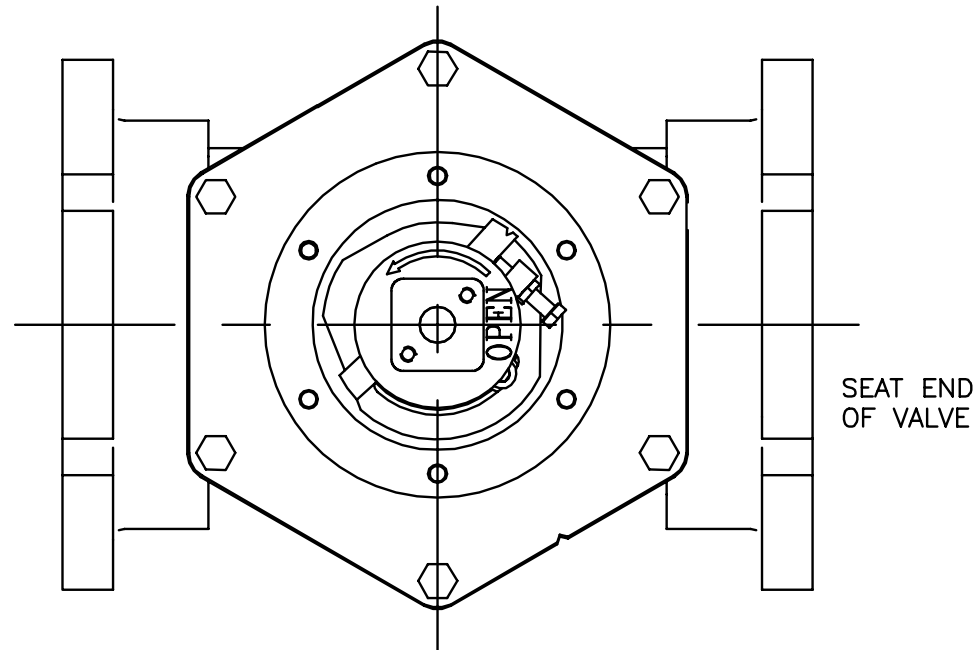
For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>		
INCH	MM	B	C	K
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{9.38}{238}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{9.88}{251}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{12.31}{313}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{15.56}{395}$

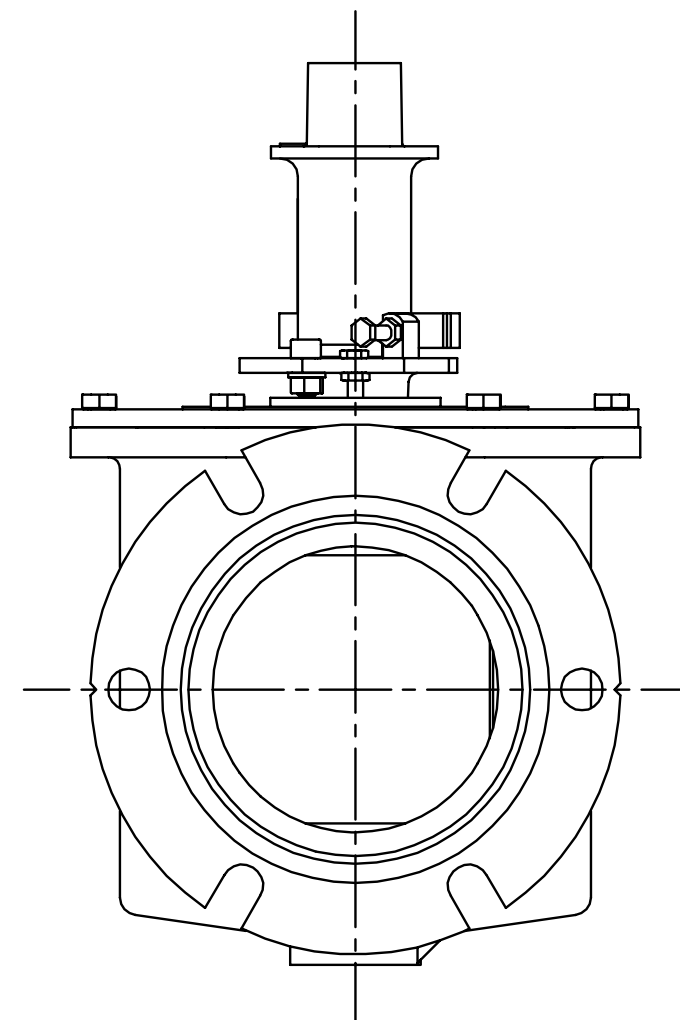
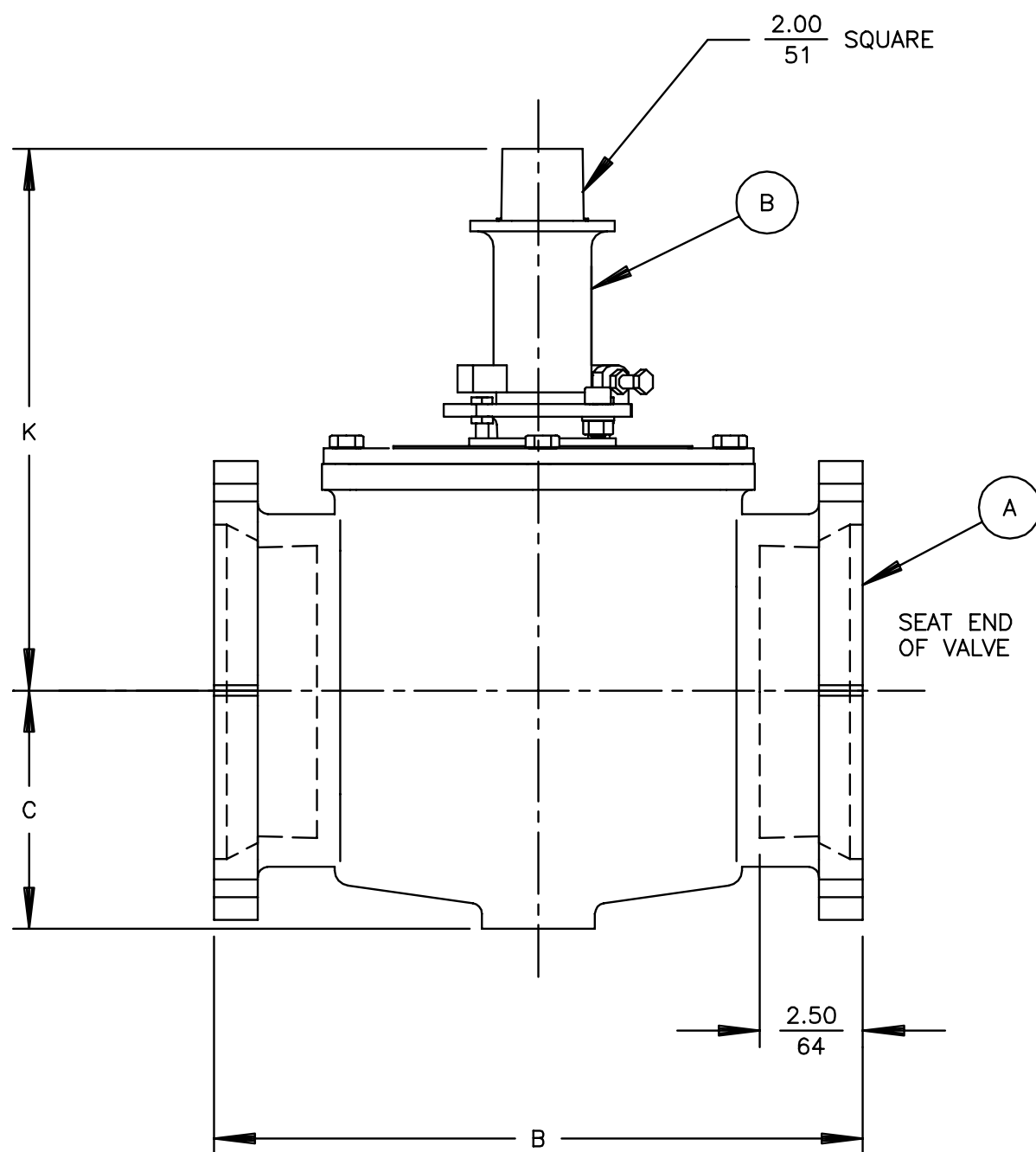
A	VALVE
B	ACTUATOR

NOTE:

- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.



NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



G	F	E	D	C	B	A
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DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 8 MECHANICAL JOINT NT NUT ACTUATED

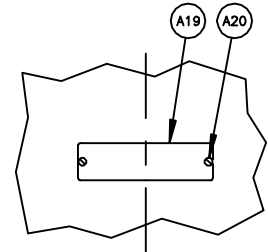
DOCT. CODE	DRAWN	DDP	APPROVED	TK
C1	CHECKED	TK	DATE	09/23/09

A58184

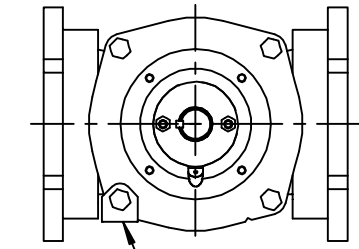
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

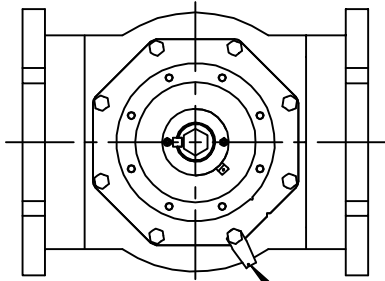


VIEW A - A



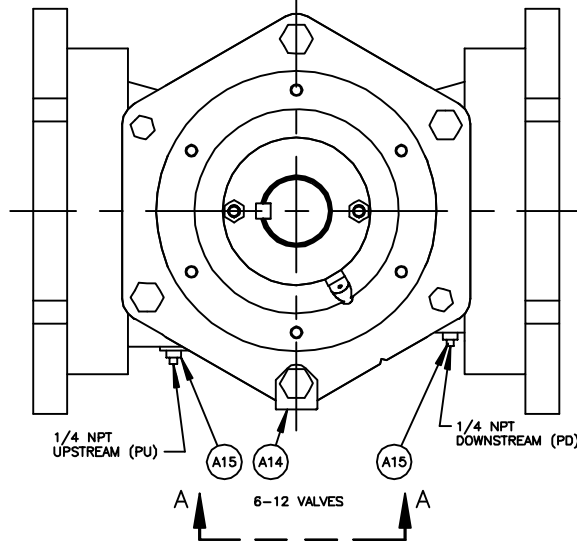
3 & 4 VALVES

A14



14-18 VALVES

A14



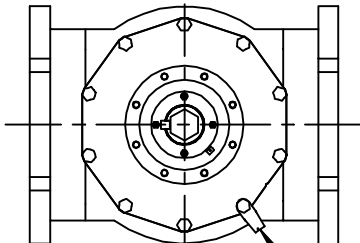
1/4 NPT UPSTREAM (PU)

1/4 NPT DOWNSTREAM (PD)

6-12 VALVES

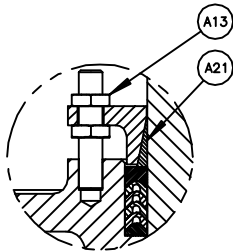
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A

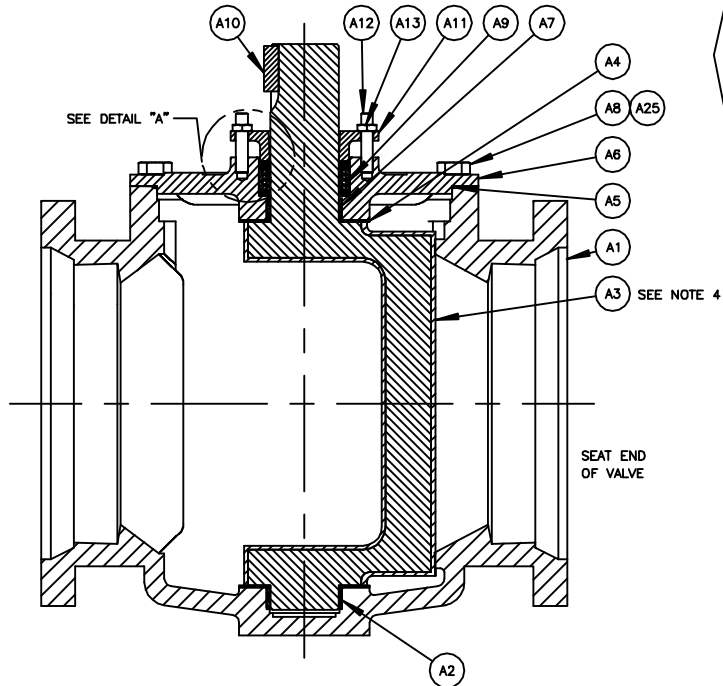


20 VALVE

A14



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR



SEAT END OF VALVE

SEE NOTE 4

REV	DATE	BY	CHKD	APP'D
1	09/20/17	D	63490	
2	07/24/17	C	61483	
3	03/22/16	B	50312	
4	05/02/08	A	61482	

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

DRAWING(S): A55435

WORK ORDER: 143537

PART NO: 9717887

DESCRIPTION: PEF,6,MJ,CI,NBR,CR,AIS-141SB0*NT,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8
A21	RYTON, MINERAL FILLED, INJECTION MOLDING PELLETS



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717879
15	15	1	PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	8	8 Inch (200mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GB-6A-N	G-Series Buriable Nut; 2 In Square
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55488	DWG INST PEF MJ GB-6A-N 3-12"
A55435	DWG VALVE ASSY PEF MJ 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: TAG: 8" PEF MJ SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	8 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 8" PEF MJ SPARE		
WEIGHT (APPROX.)	246 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-15	
PART NUMBER:	9717879		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390748	8" PLUG CR (RS16) PEF DI USA	1	A03
1361297	8-12" GRIT EXCLUDER PEF	2	A04
1361327	O-RING -272 9.48IDX9.76ODX0.14CS DIA NBR	1	A05
1055749	PACKING ADPT MALE 2-1/4 ID	1	A09
1055763	PACKING PRESS RING 2-1/4 ID	4	A09
1055778	PACKING ADPT FEMALE 2-1/4 ID	1	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>			
INCH	MM	B	C	K	L
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{8.00}{203}$	$\frac{10.69}{272}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{8.62}{219}$	$\frac{11.31}{287}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{9.75}{248}$	$\frac{12.44}{316}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{12.09}{307}$	$\frac{14.78}{375}$
10	250	$\frac{19.38}{492}$	$\frac{9.19}{233}$	$\frac{13.50}{343}$	$\frac{16.19}{411}$
12	300	$\frac{20.75}{527}$	$\frac{11.53}{293}$	$\frac{15.56}{395}$	$\frac{18.25}{464}$

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

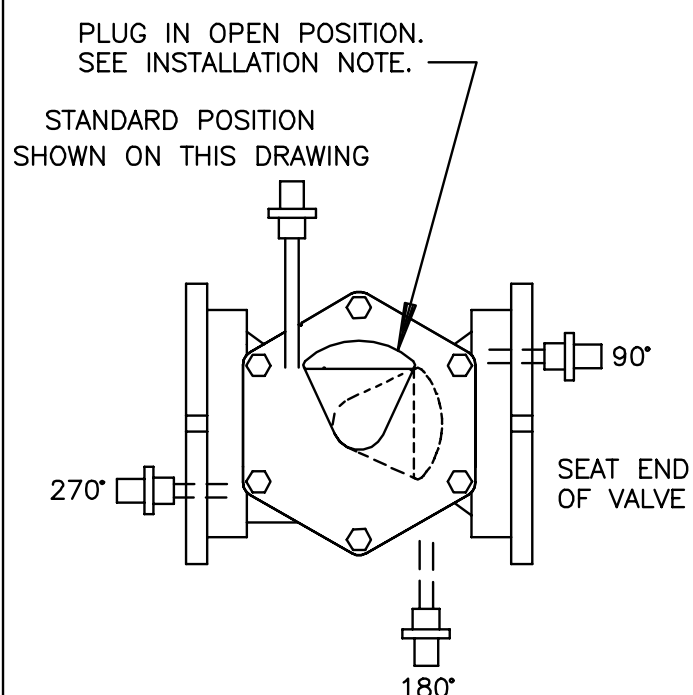
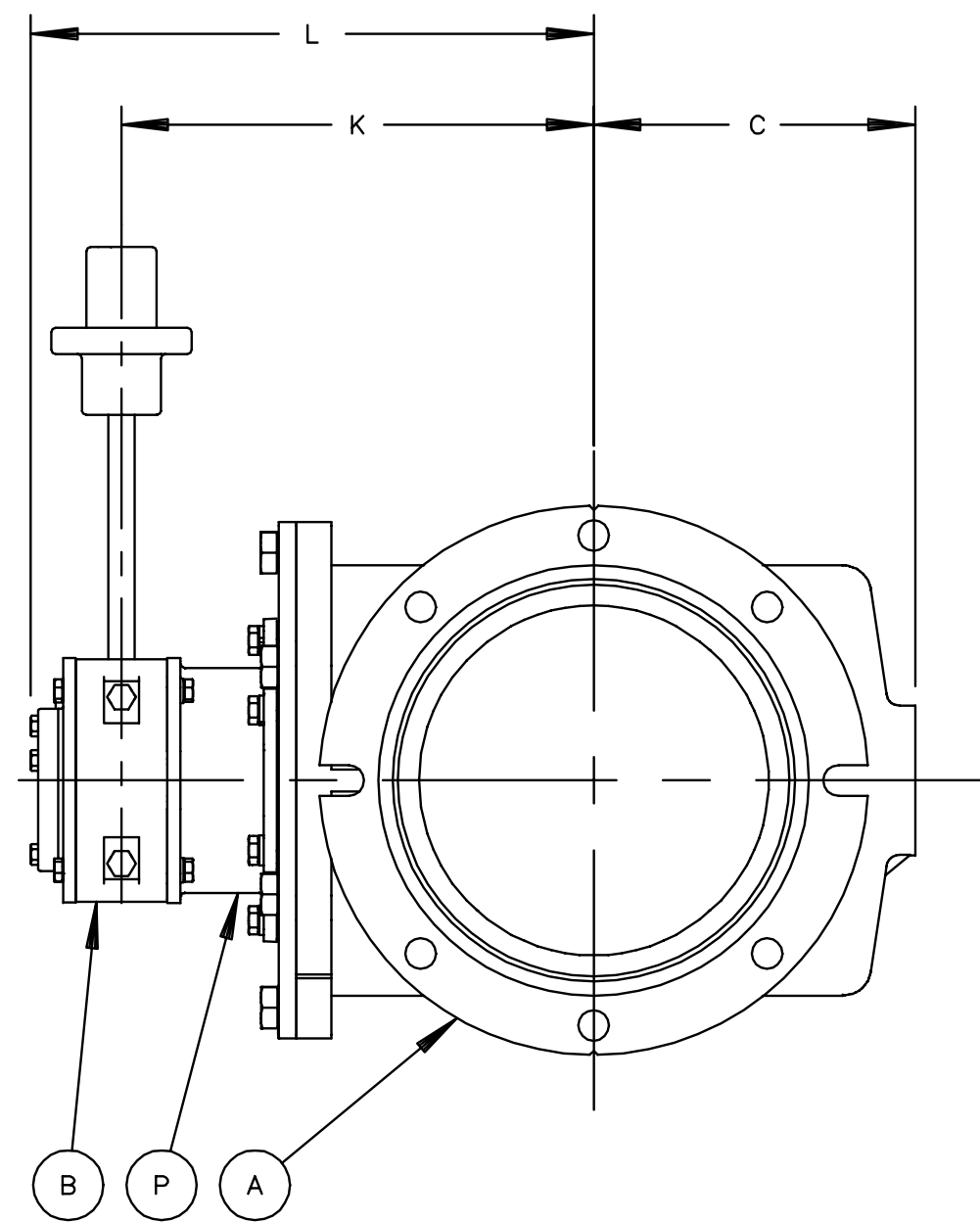
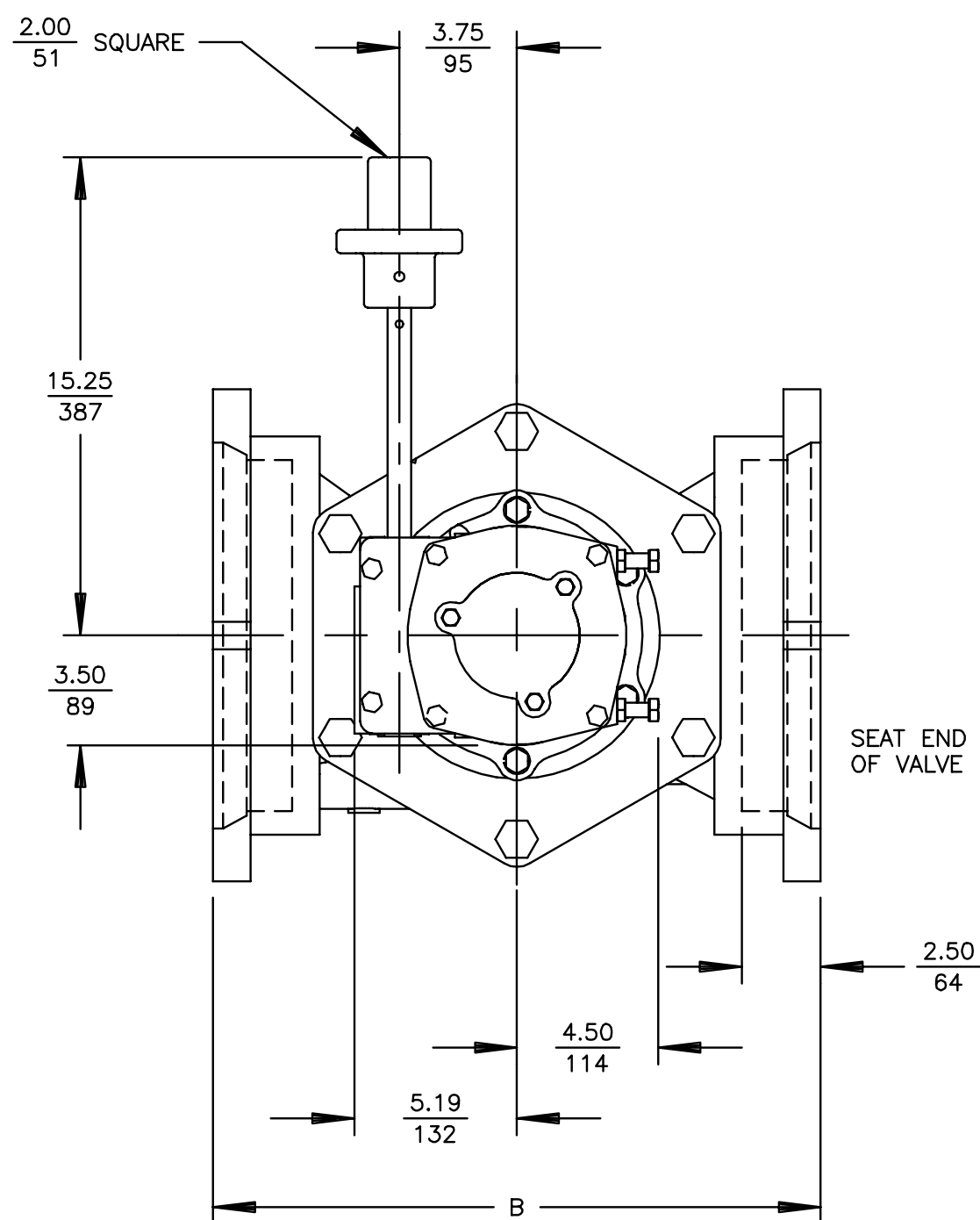
- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.
- 13 TURNS OF NUT ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:

- FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.

- FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE

THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
					61483	61483
					03/14/07	02/14/07

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 MECHANICAL JOINT GB-6A-N NUT ACTUATED (FOR SUBMERGED SERVICE)

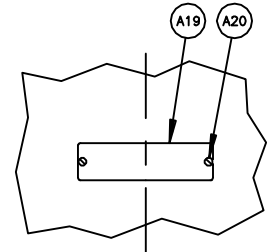
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C1	CHECKED	SN	DATE	10/18/05

A55488

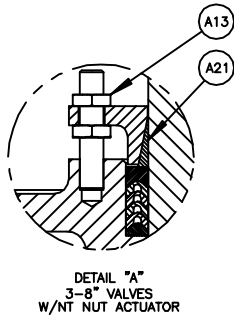
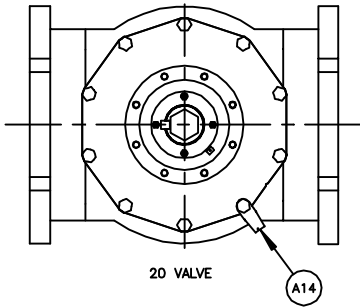
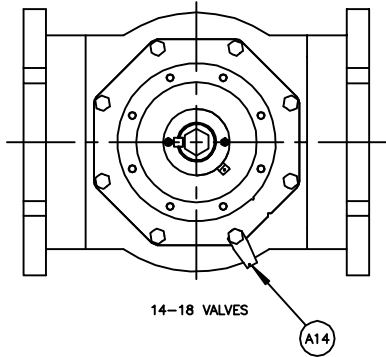
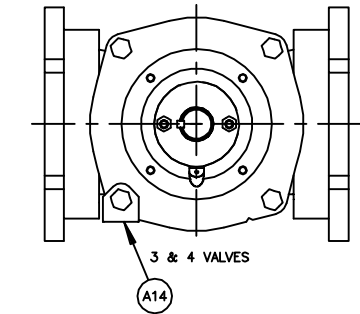
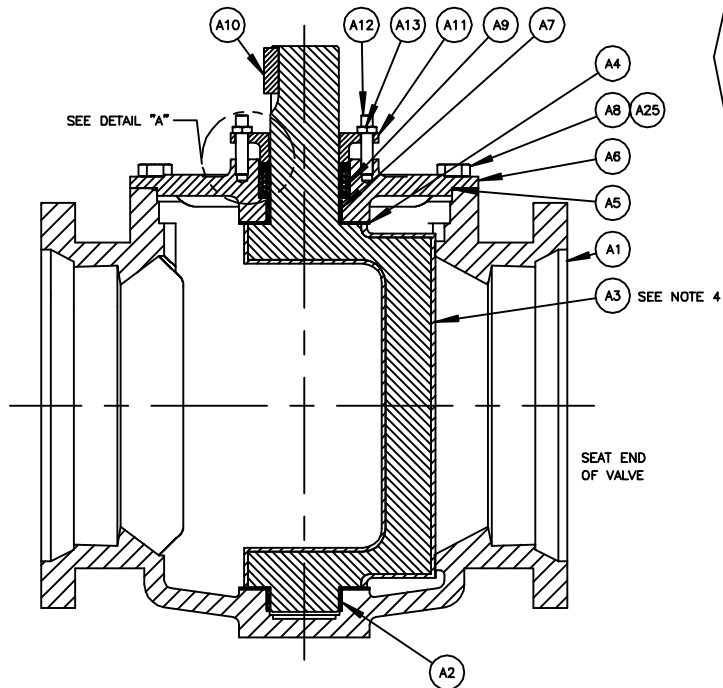
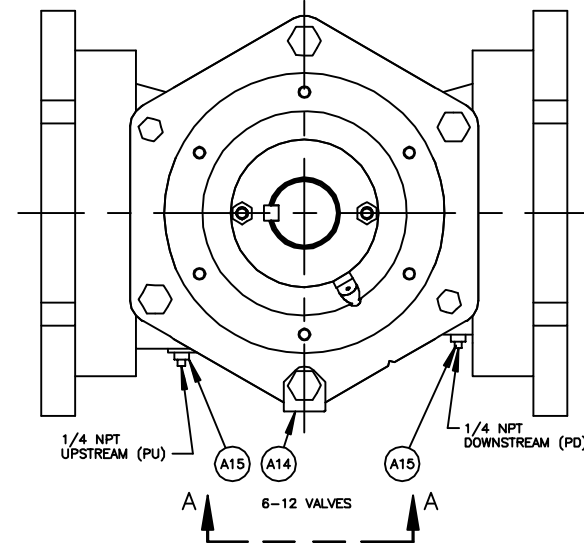
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.



VIEW A - A



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR

REV	DATE	BY	CHKD
1	09/20/12	D	63490
2	07/24/17	C	61483
3	03/22/18	B	50312
4	05/02/18	A	61482

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DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

A55435



MATERIALS OF CONSTRUCTION

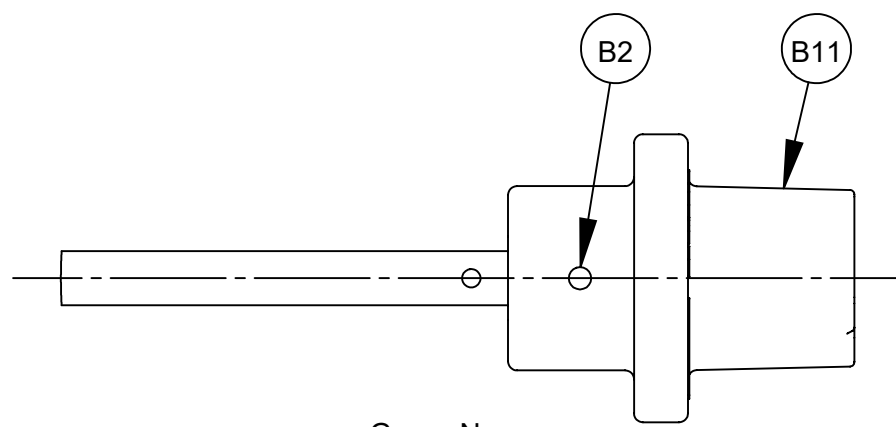
DRAWING(S): A55435

WORK ORDER: 143537

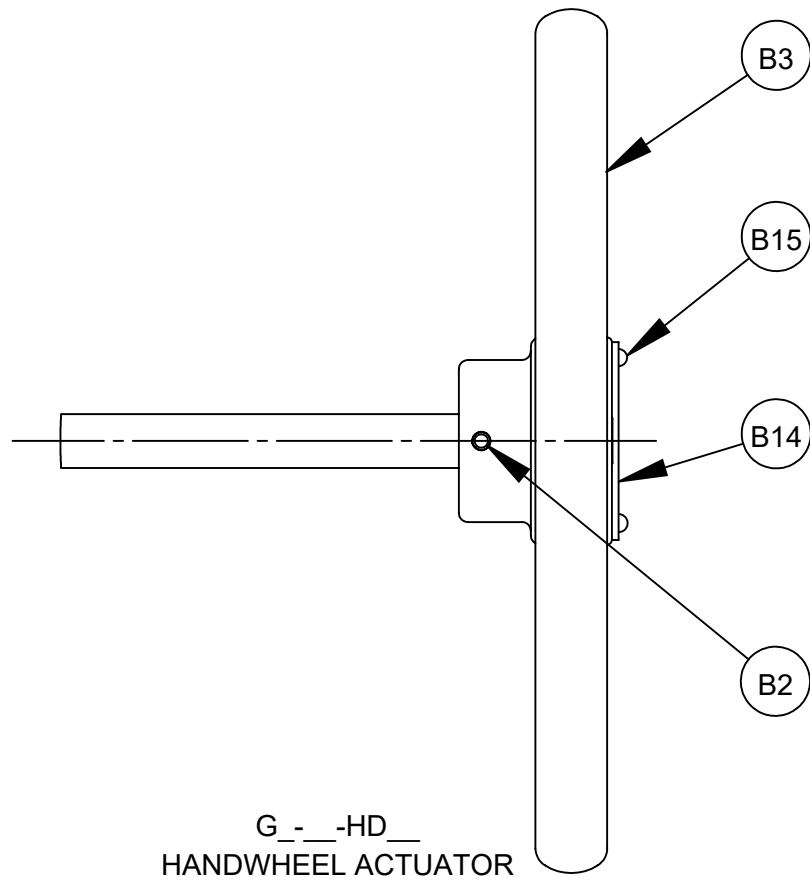
PART NO: 9717879

DESCRIPTION: PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	CARBON STEEL, ZINC PLATED
A13	CARBON STEEL, ZINC PLATED
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

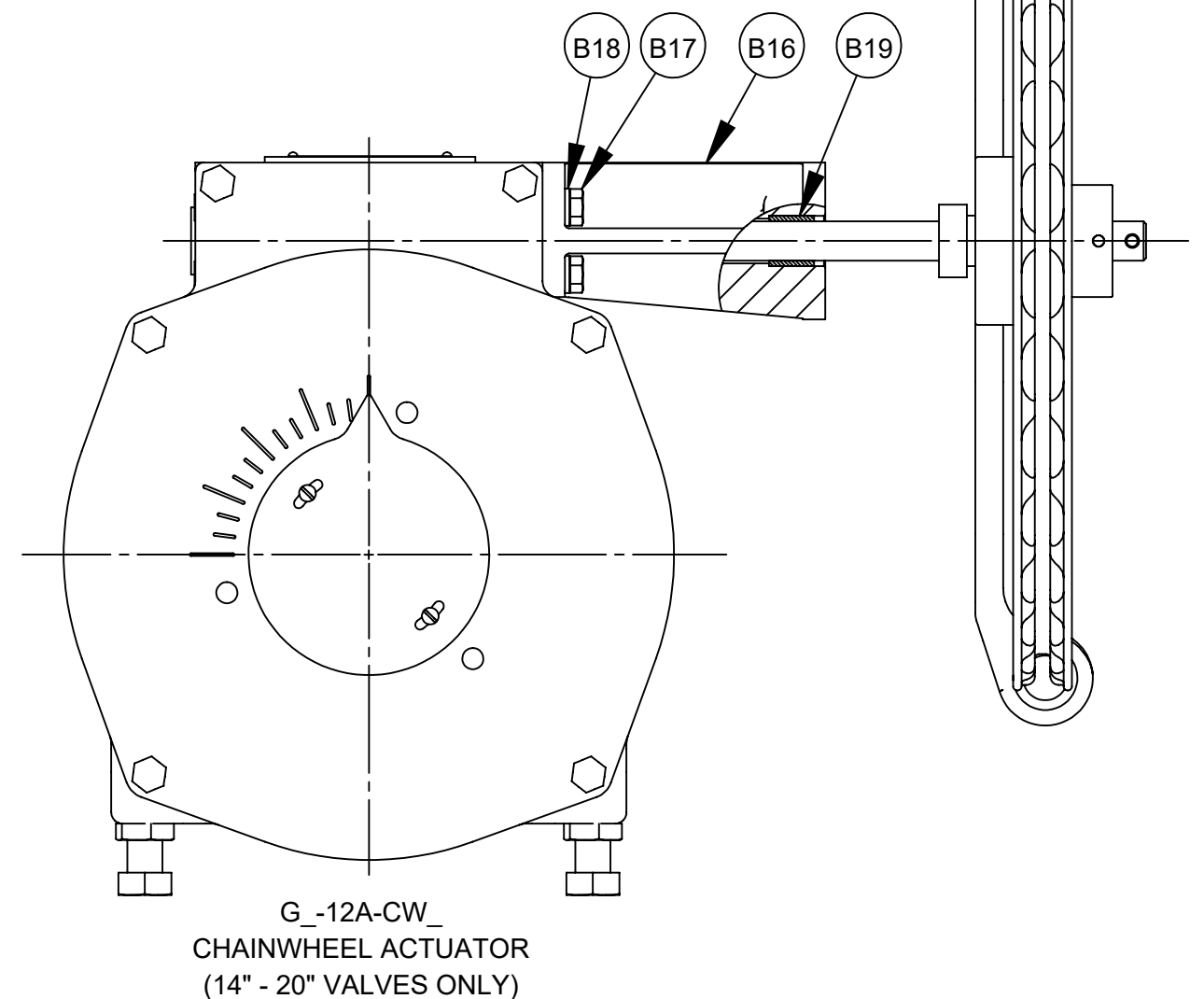
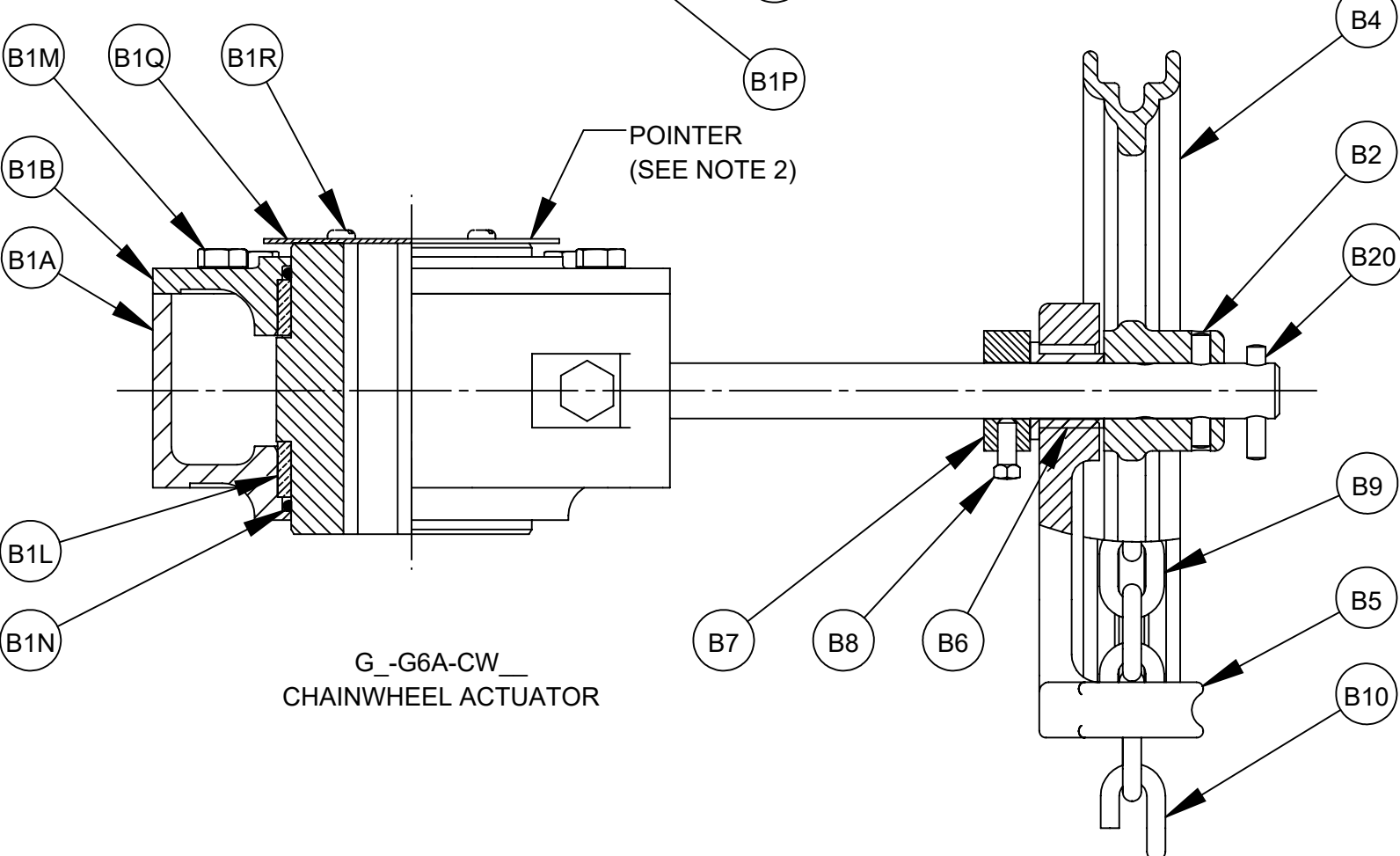
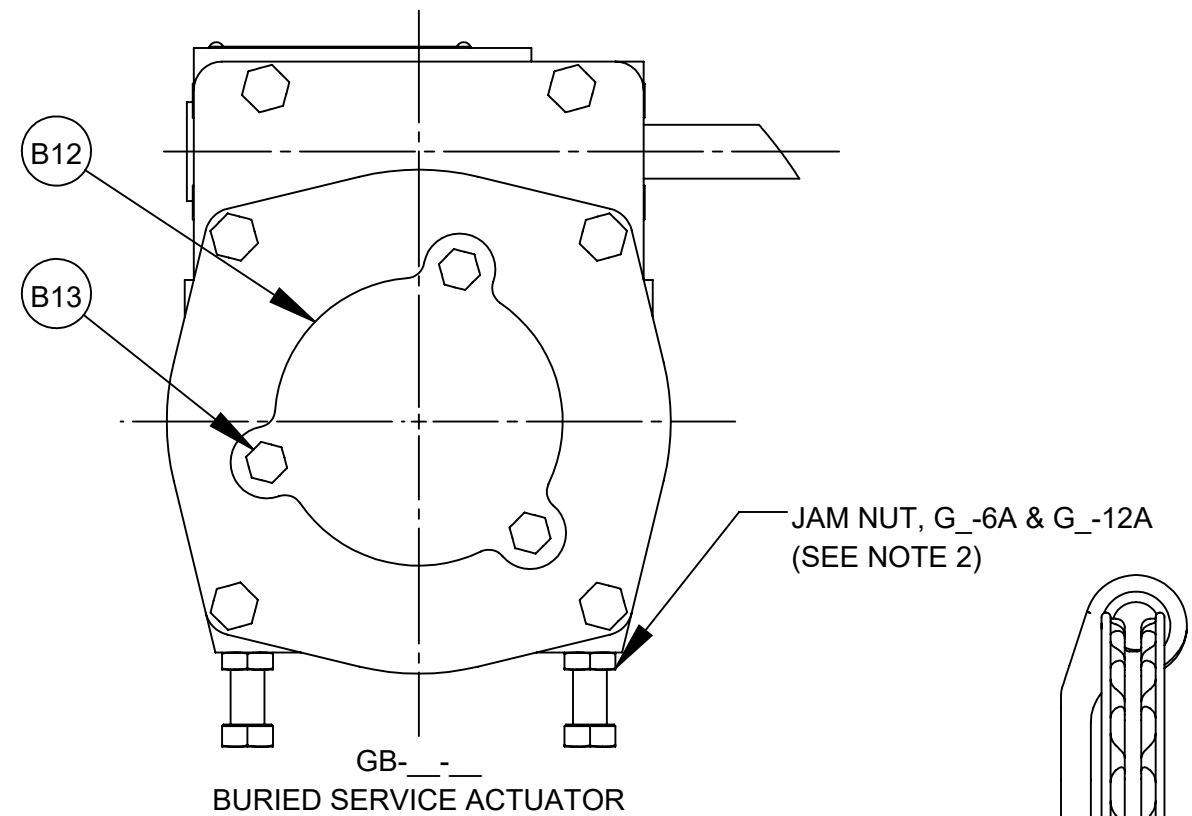
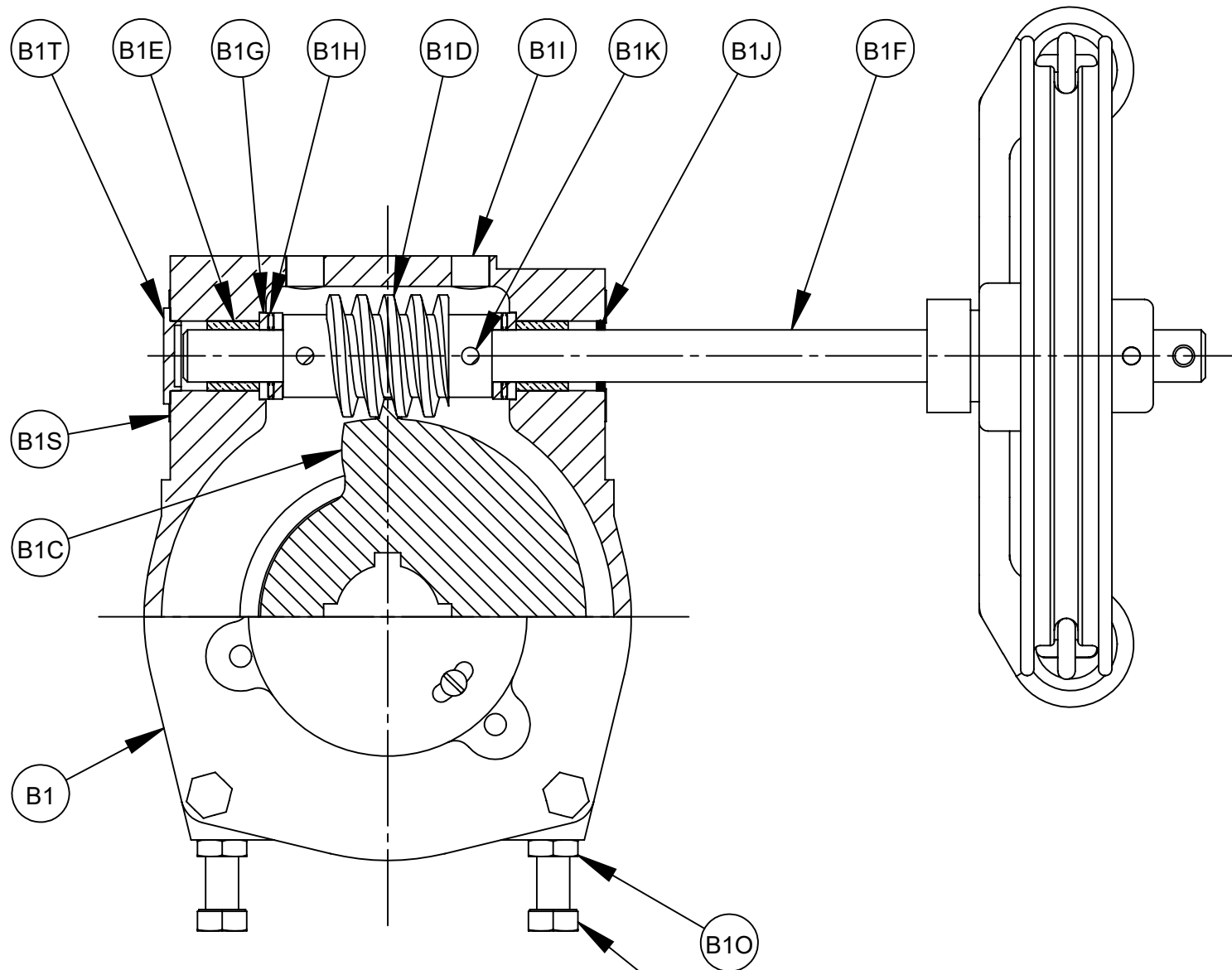
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



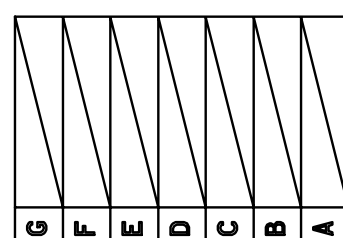
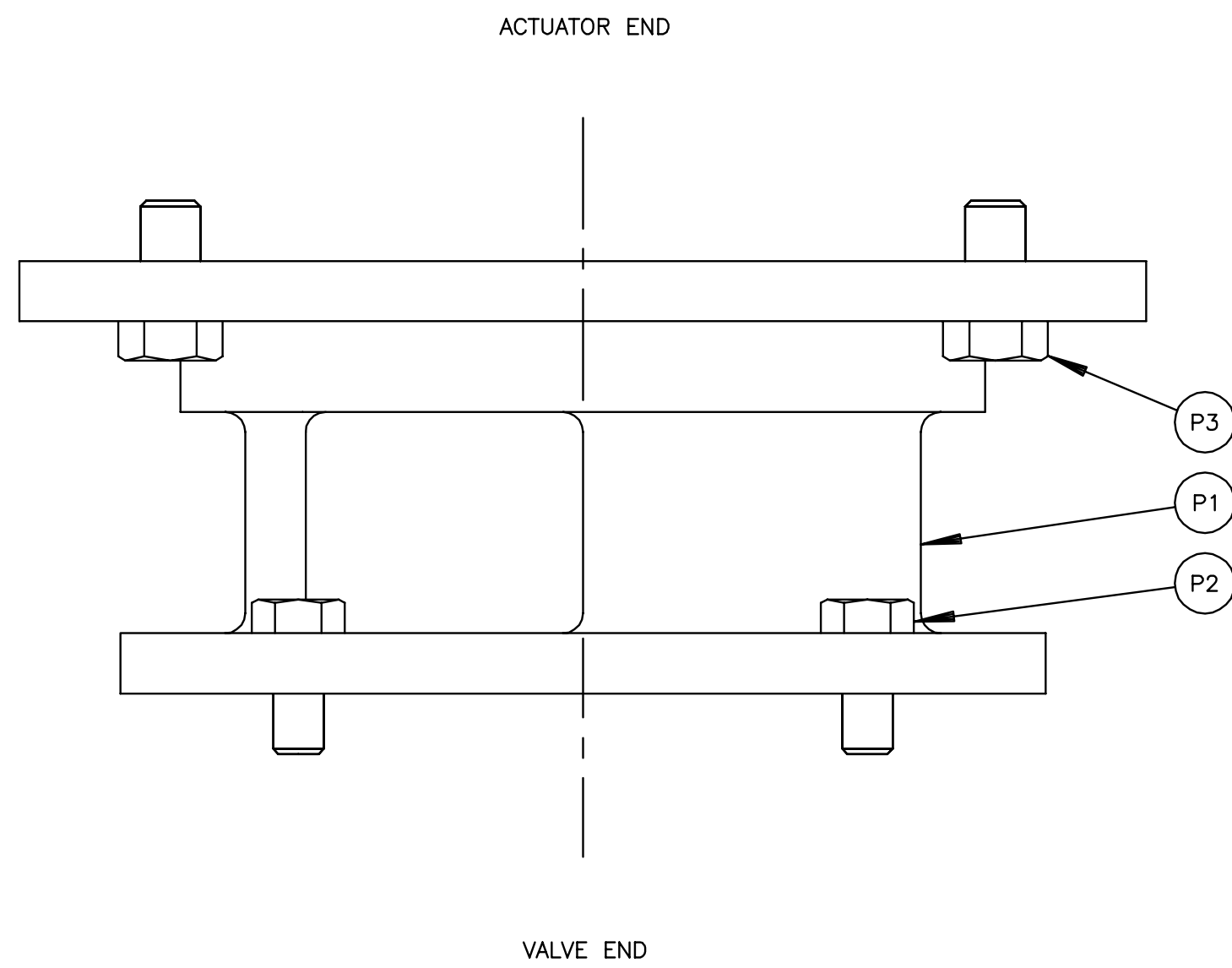
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717880
16	16	1	PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	4	4 Inch (100mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-CW8	G-Series Chainwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: TAG: 4" PEF F1 SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 4" PEF F1 SPARE		
WEIGHT (APPROX.)	115 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-16	
PART NUMBER:	9717880		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

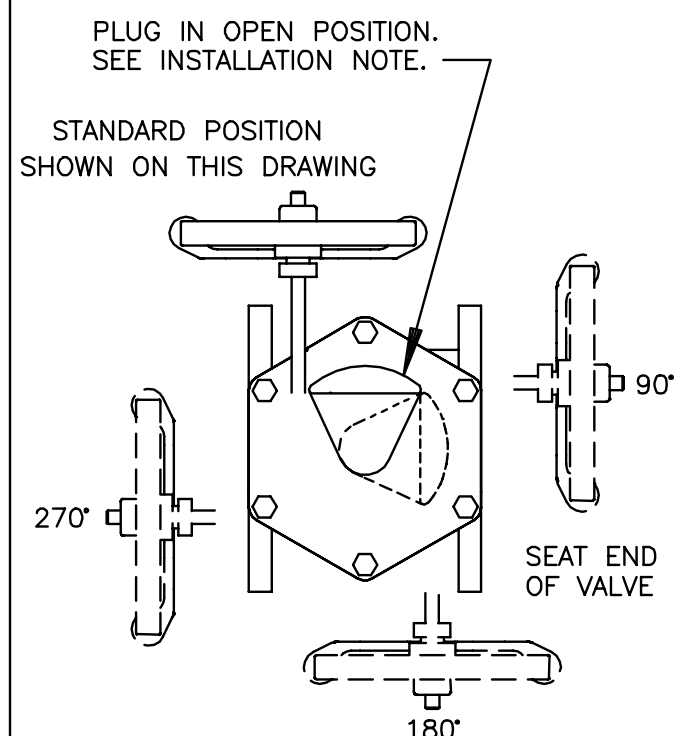
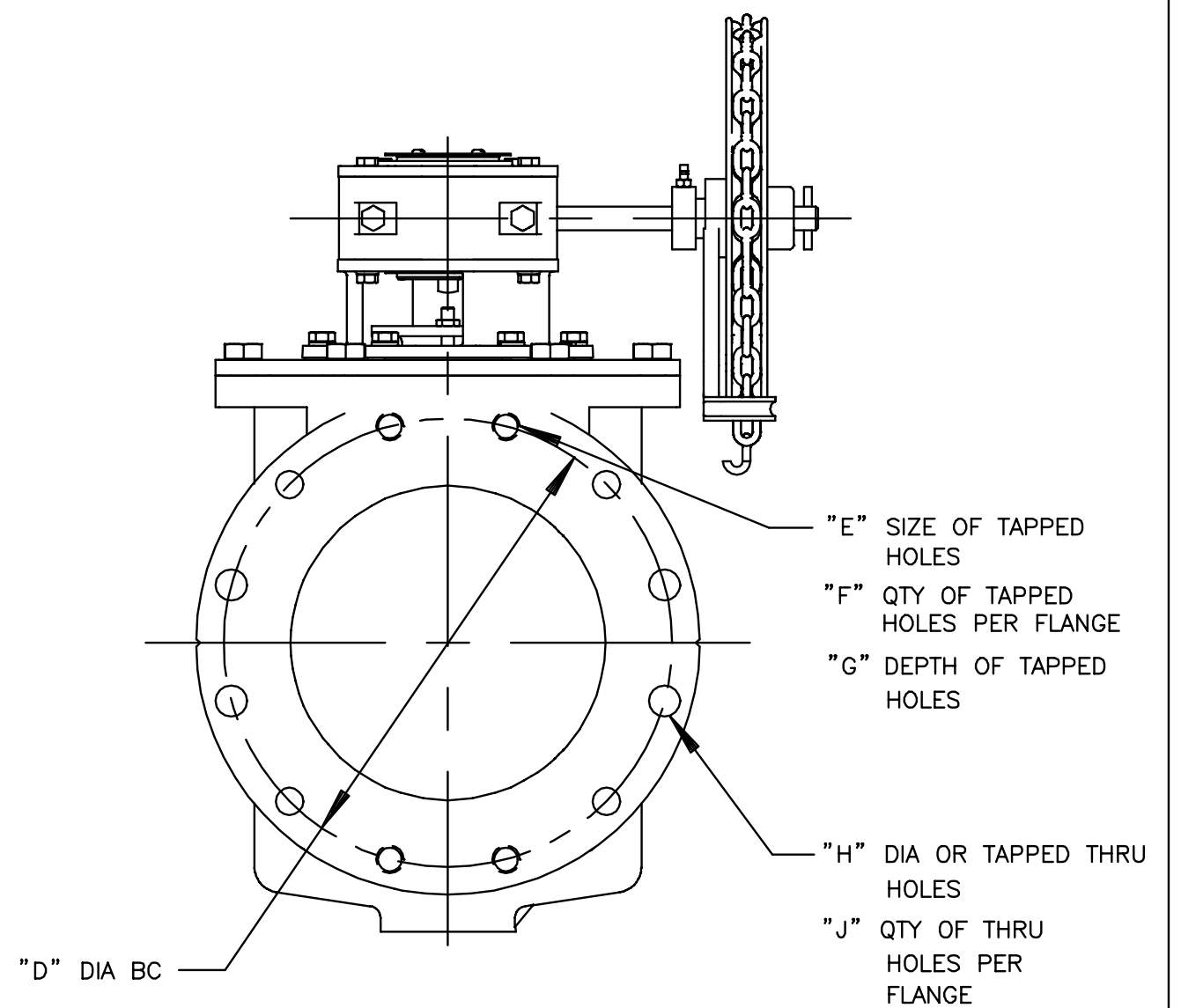
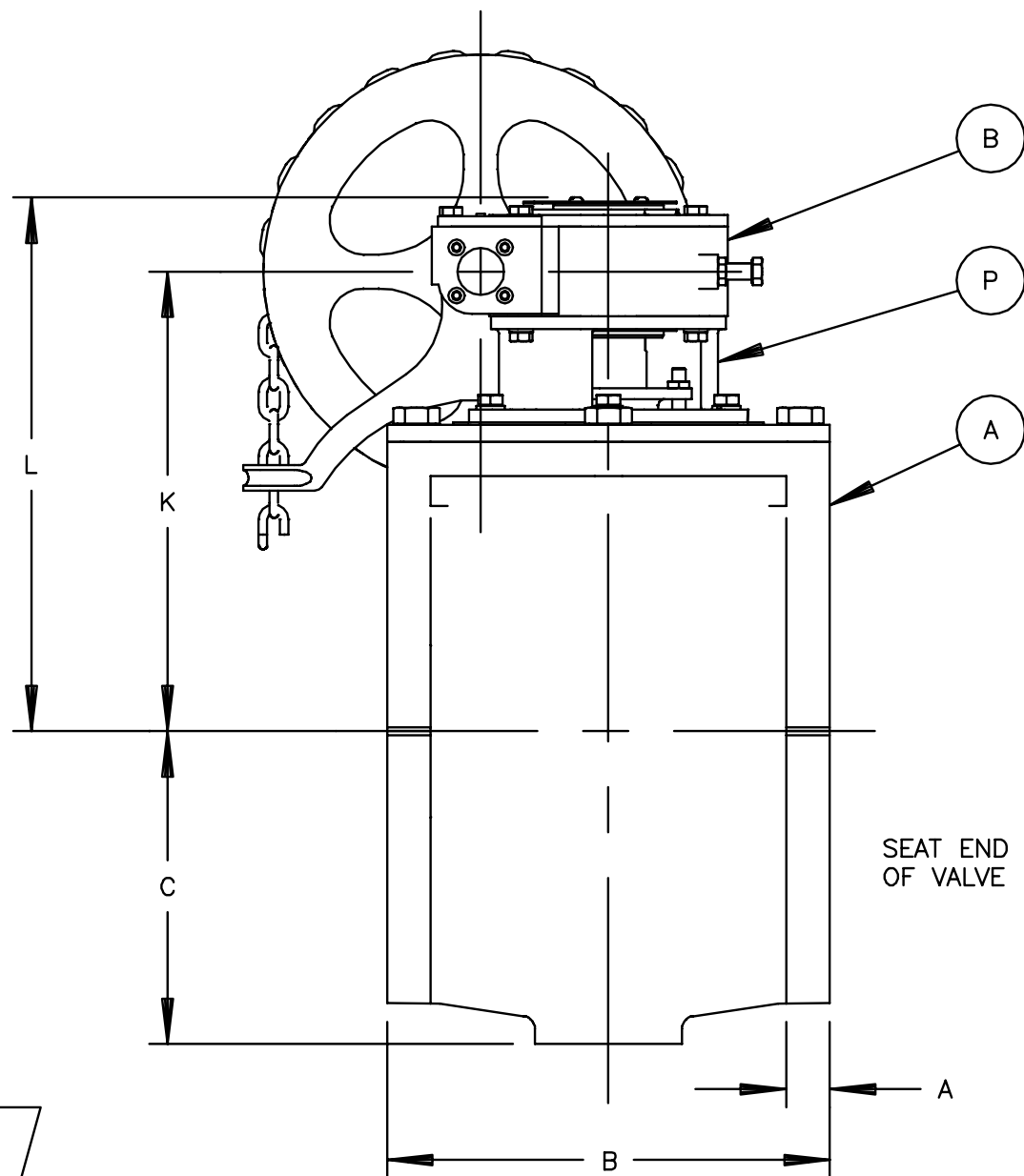
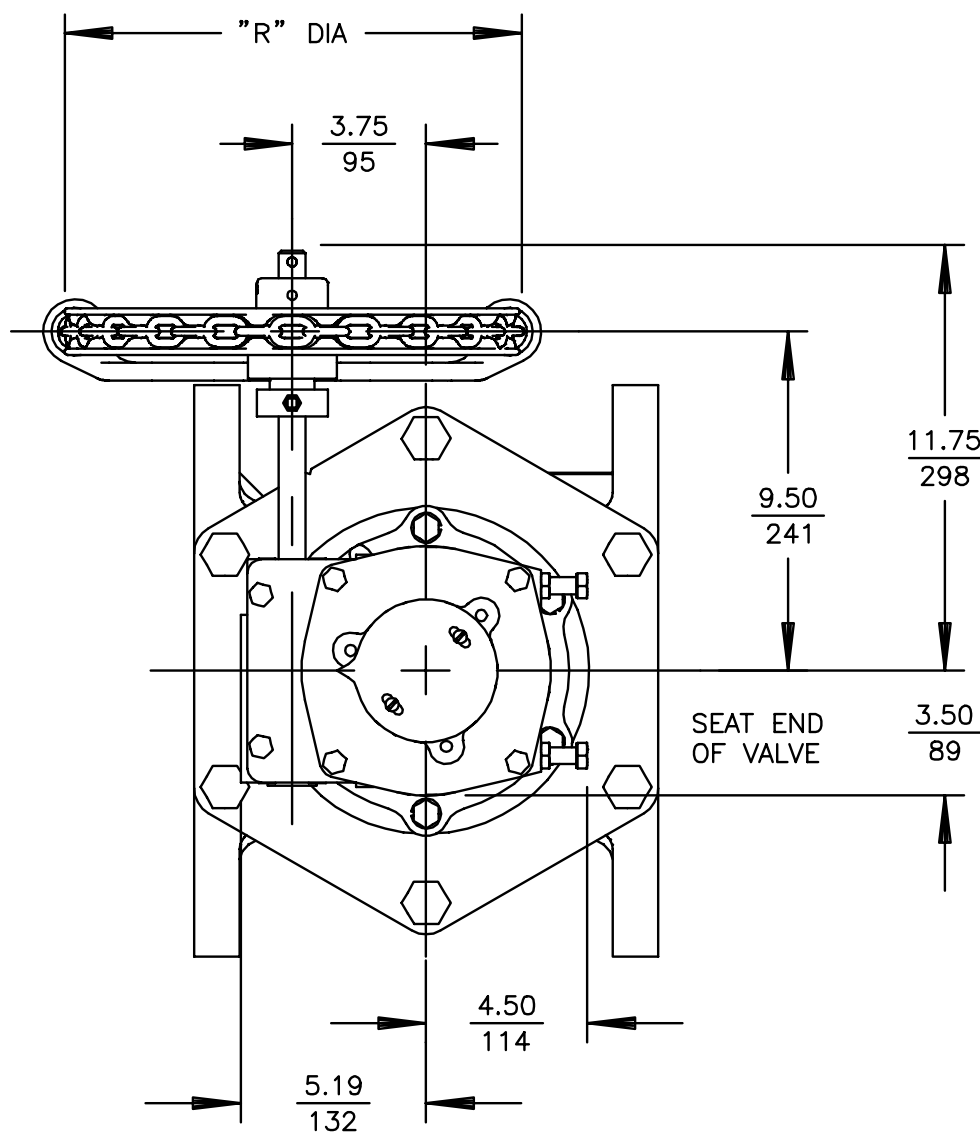
See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390741	4" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1361325	O-RING -260 6.48IDX6.76ODX0.14CS DIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-CW8	$\frac{8.00}{203}$
GS-6A-CW12	$\frac{12.00}{305}$



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF CHAINWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

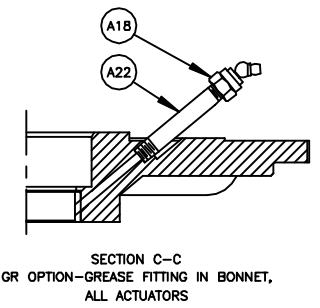
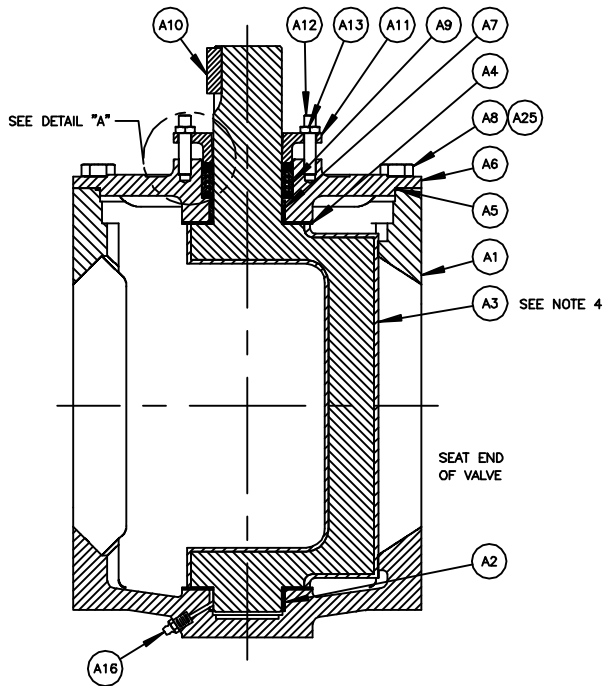
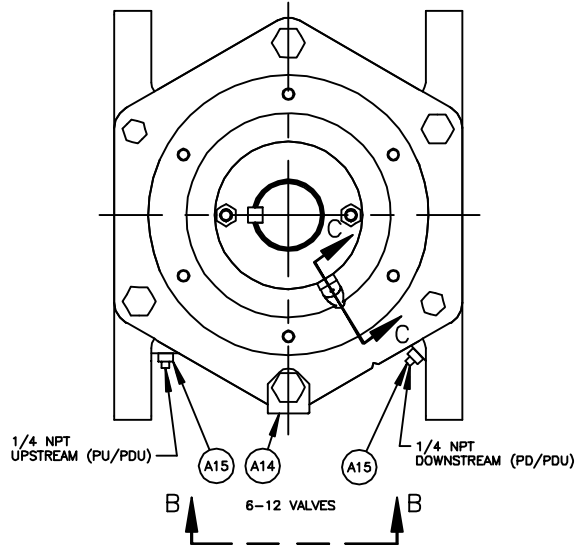
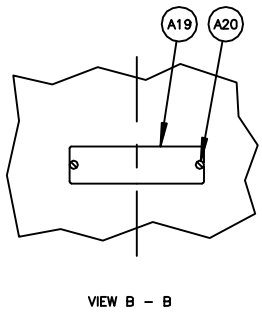
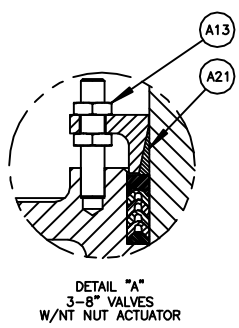
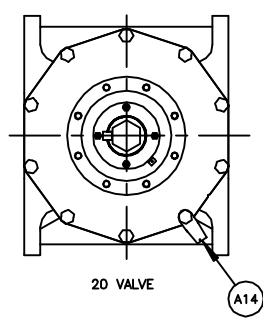
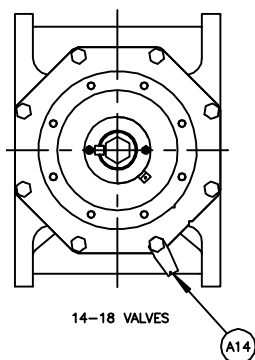
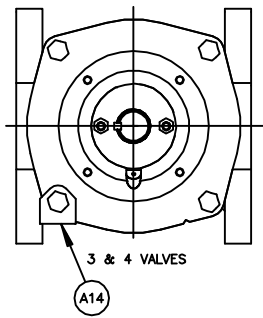
NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.

6	5	4	3	2	1	03/14/07
G	F	E	D	C	B	A

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED GS-6A-CW_ CHAINWHEEL ACTUATED			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			10/17/05

A55463



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICTION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	12/05/05

A55403



MATERIALS OF CONSTRUCTION

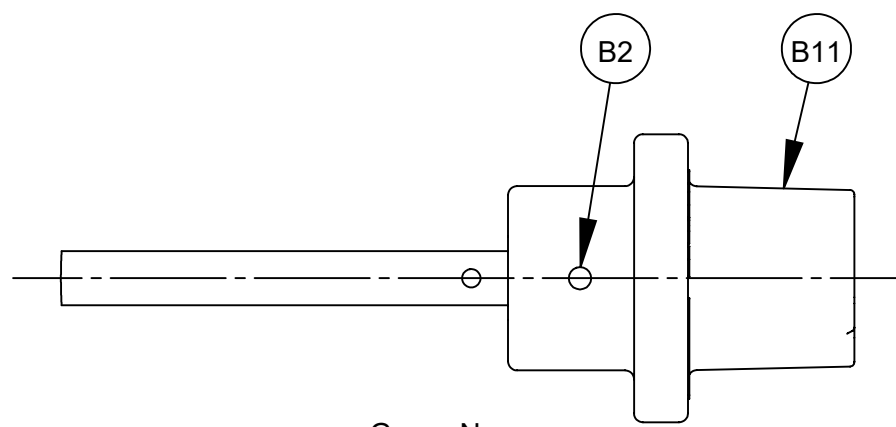
DRAWING(S): A55403

WORK ORDER: 143537

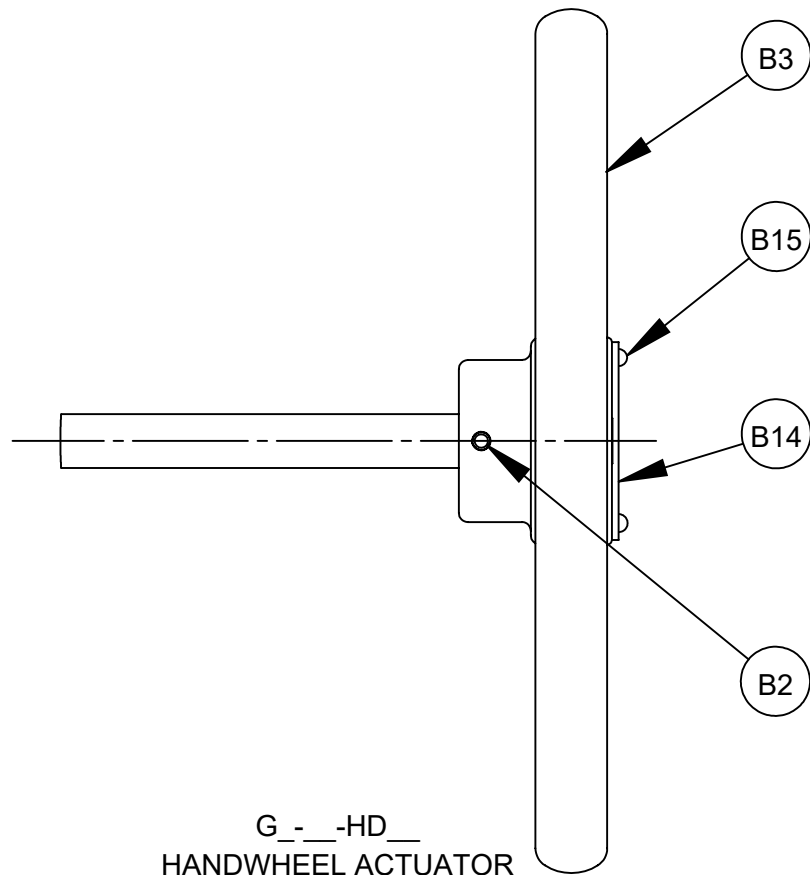
PART NO: 9717880

DESCRIPTION: PEF,4,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

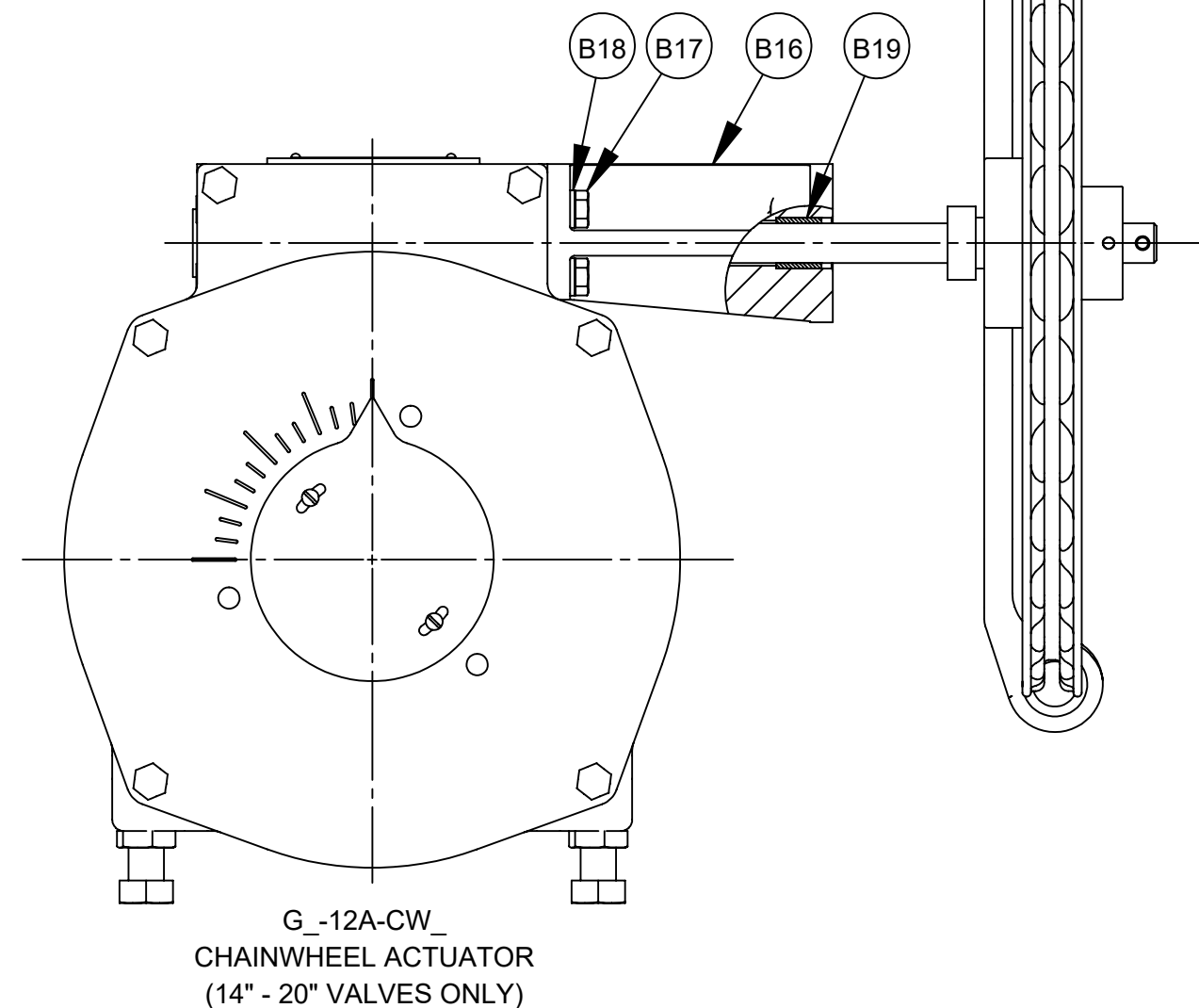
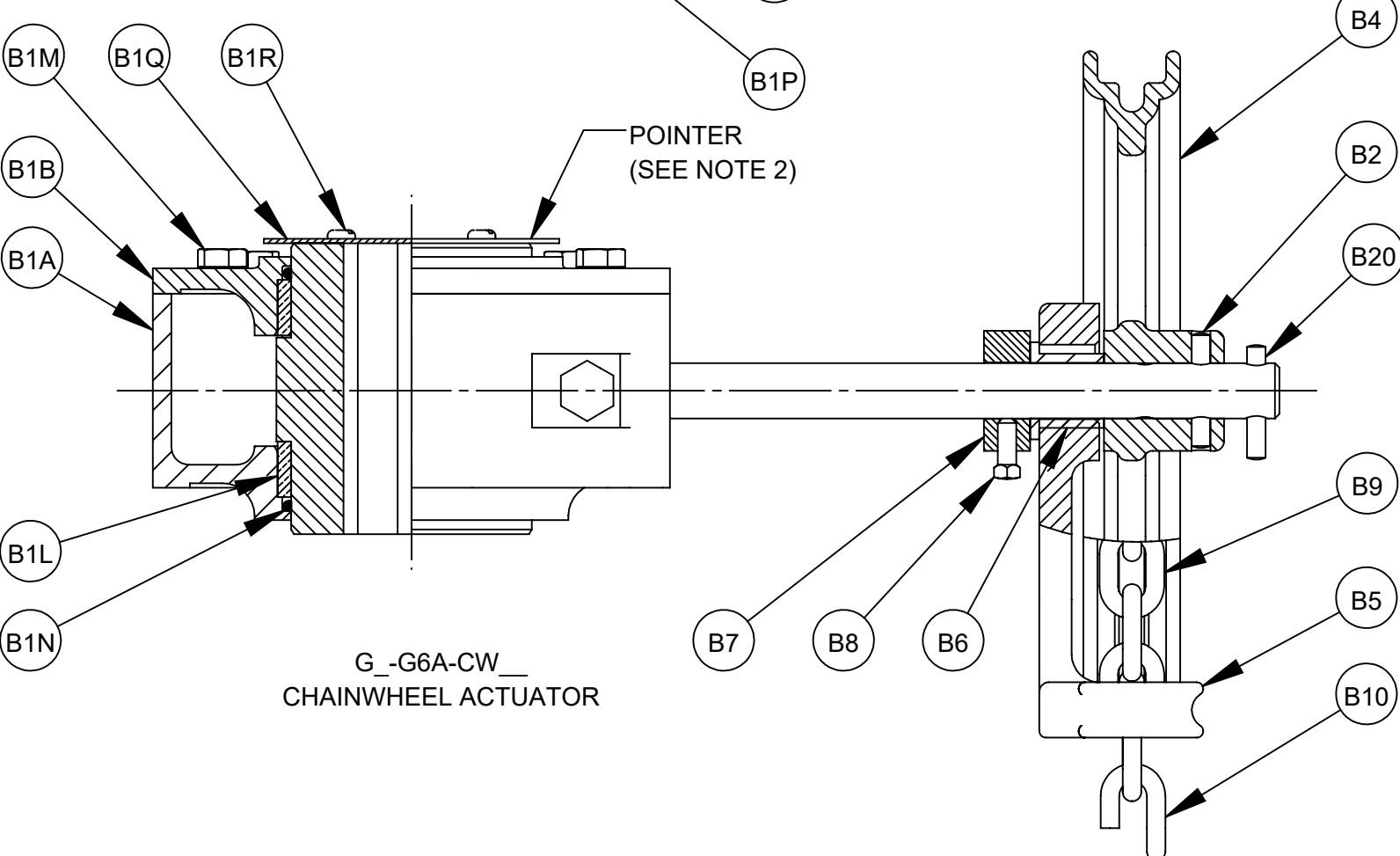
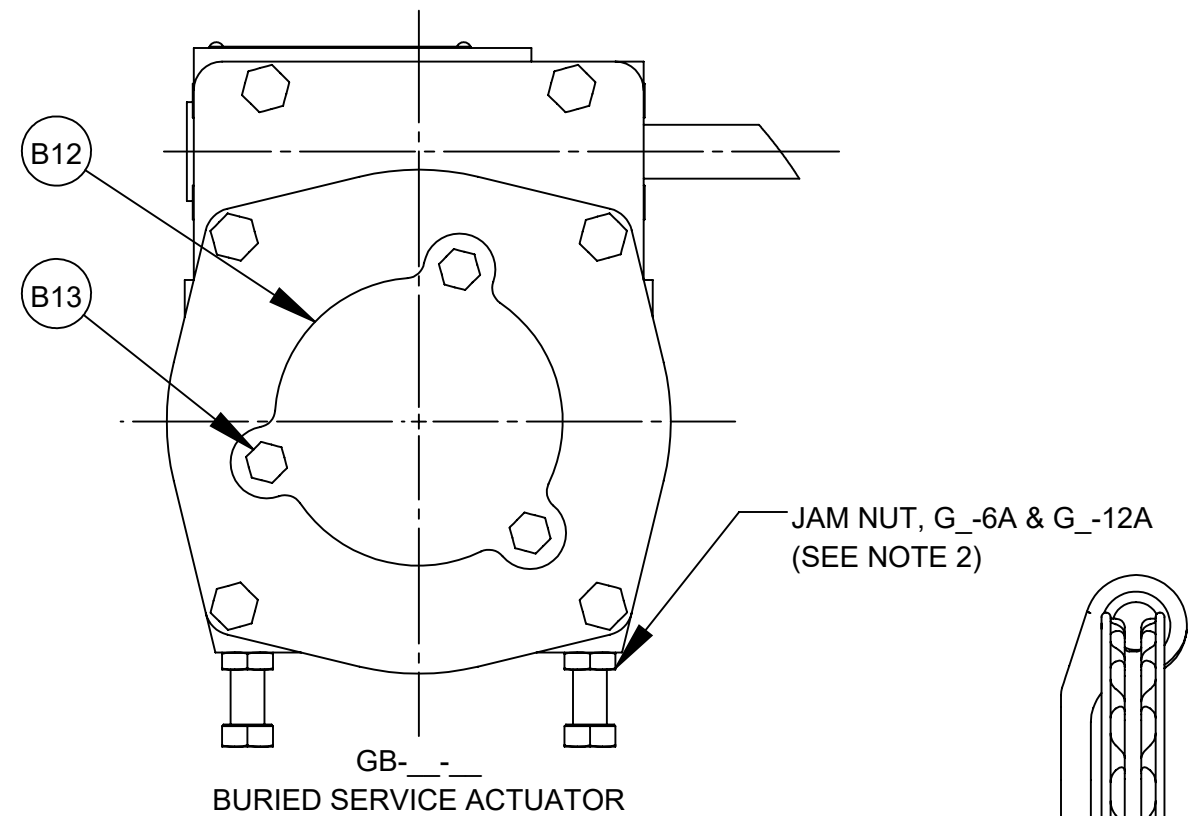
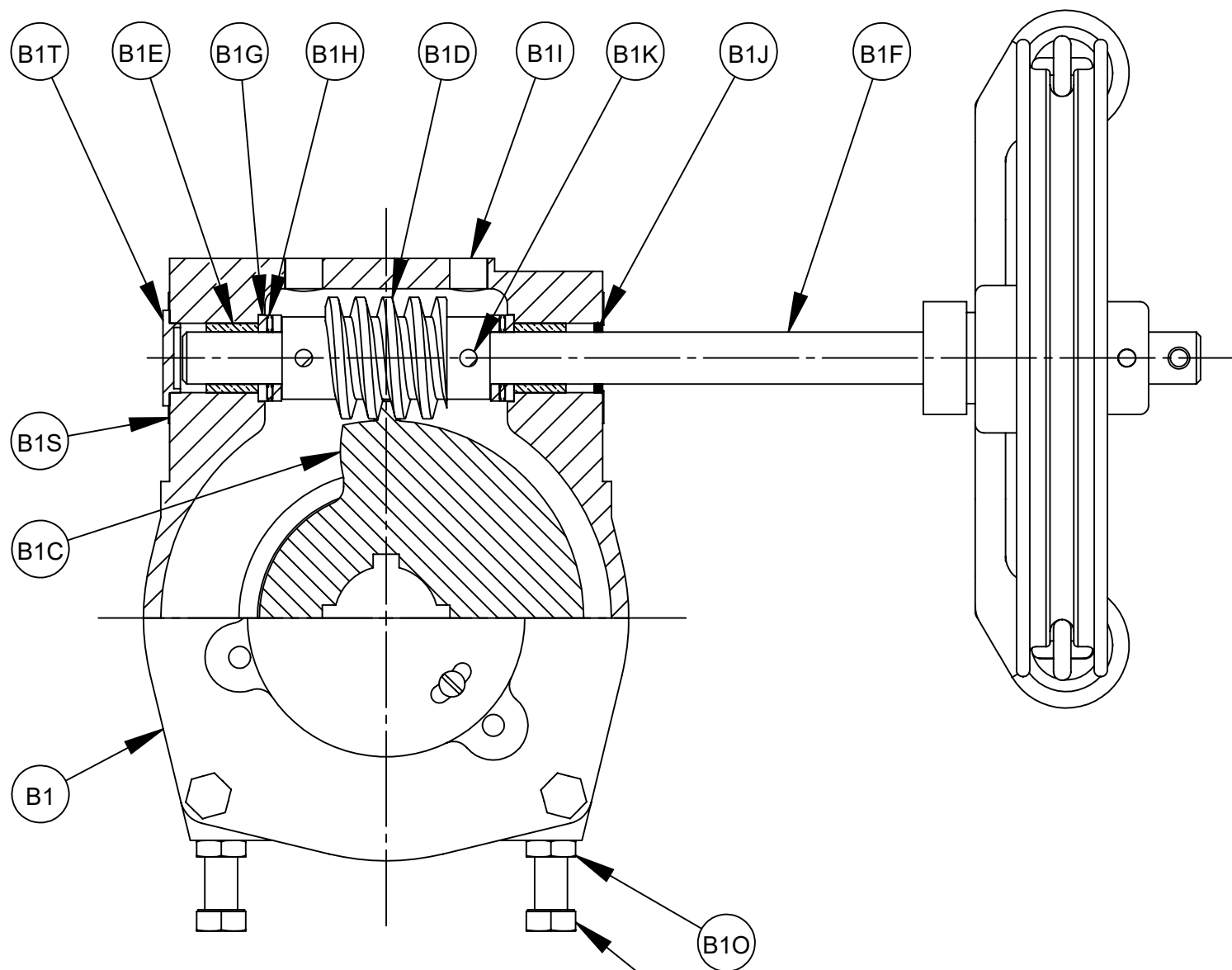
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



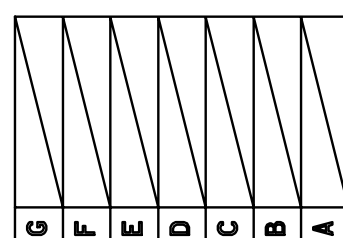
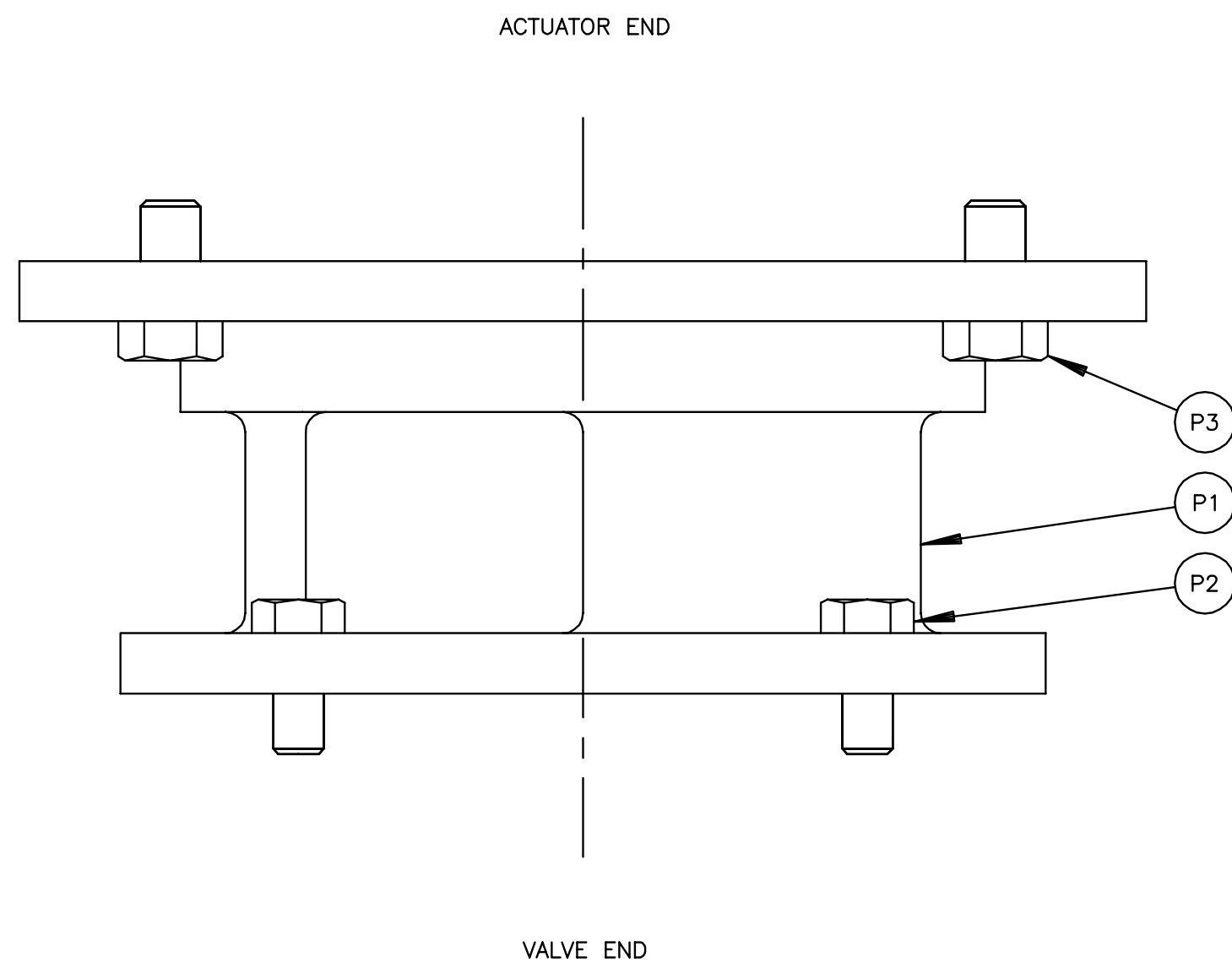
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0
PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717882
17	17	1	PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	6	6 Inch (150mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-HD8	G-Series Handwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55432	DWG INST PEF F GS-6A-HD 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: TAG: 6" PEF F1 SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	6 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 6" PEF F1 SPARE		
WEIGHT (APPROX.)	158 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-17	
PART NUMBER:	9717882		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC	Telephone:	770-345-2118	
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390745	5&6" PLUG CR (RS16) PEF DI USA	1	A03
1361296	5&6" GRIT EXCLUDER PEF	2	A04
1361326	O-RING -270 9.00IDX9.26ODX0.14CS DIA NBR	1	A05
1055746	PACKING ADPT MALE 1-3/4 ID	1	A09
1055775	PACKING ADPT FEMALE 1-3/4 ID	1	A09
1055788	PACKING PRESS RING 1-3/4 ID	4	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

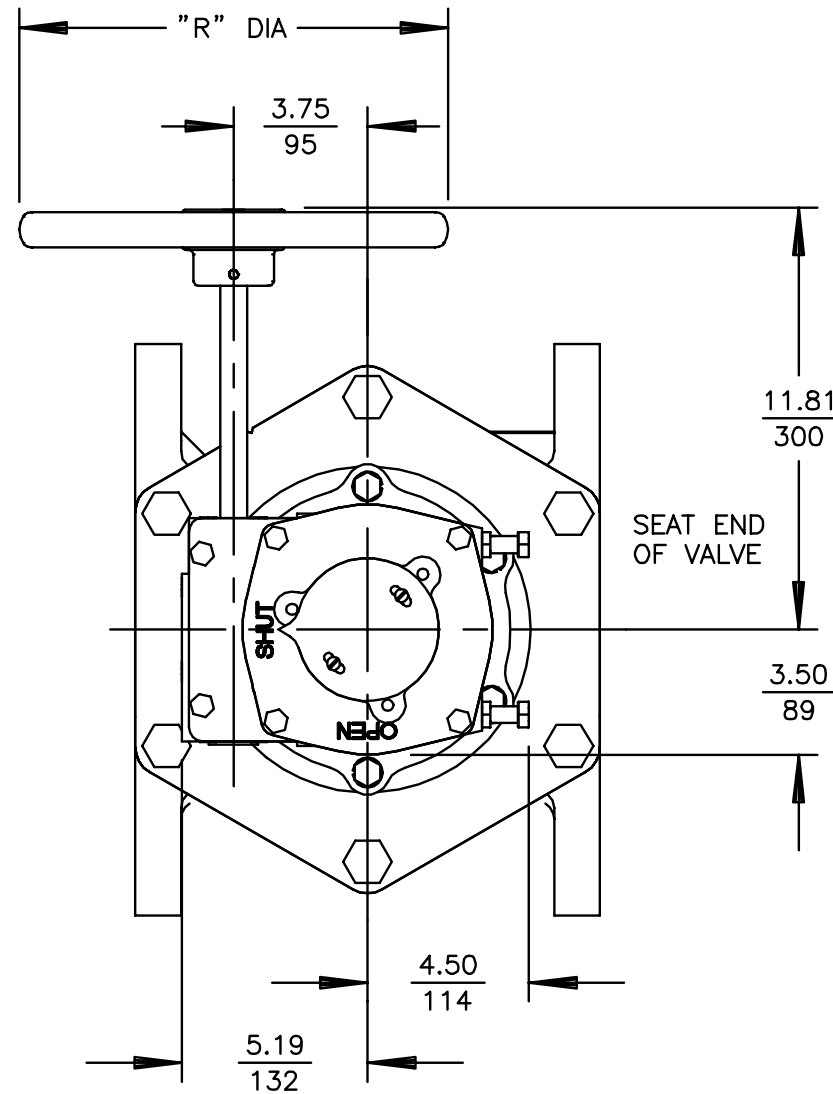
VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-HD8	$\frac{8.00}{203}$
GS-6A-HD12	$\frac{12.00}{305}$

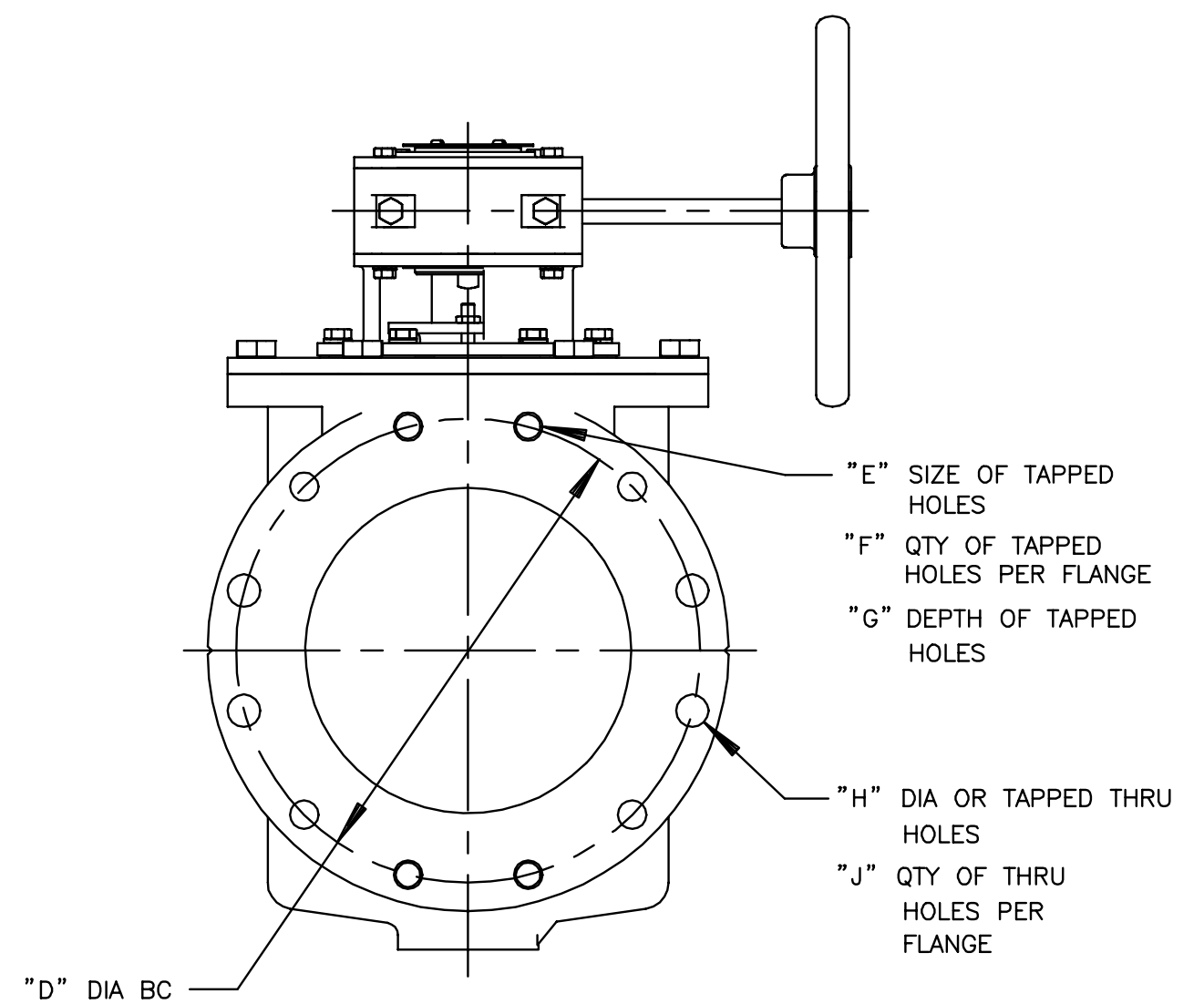
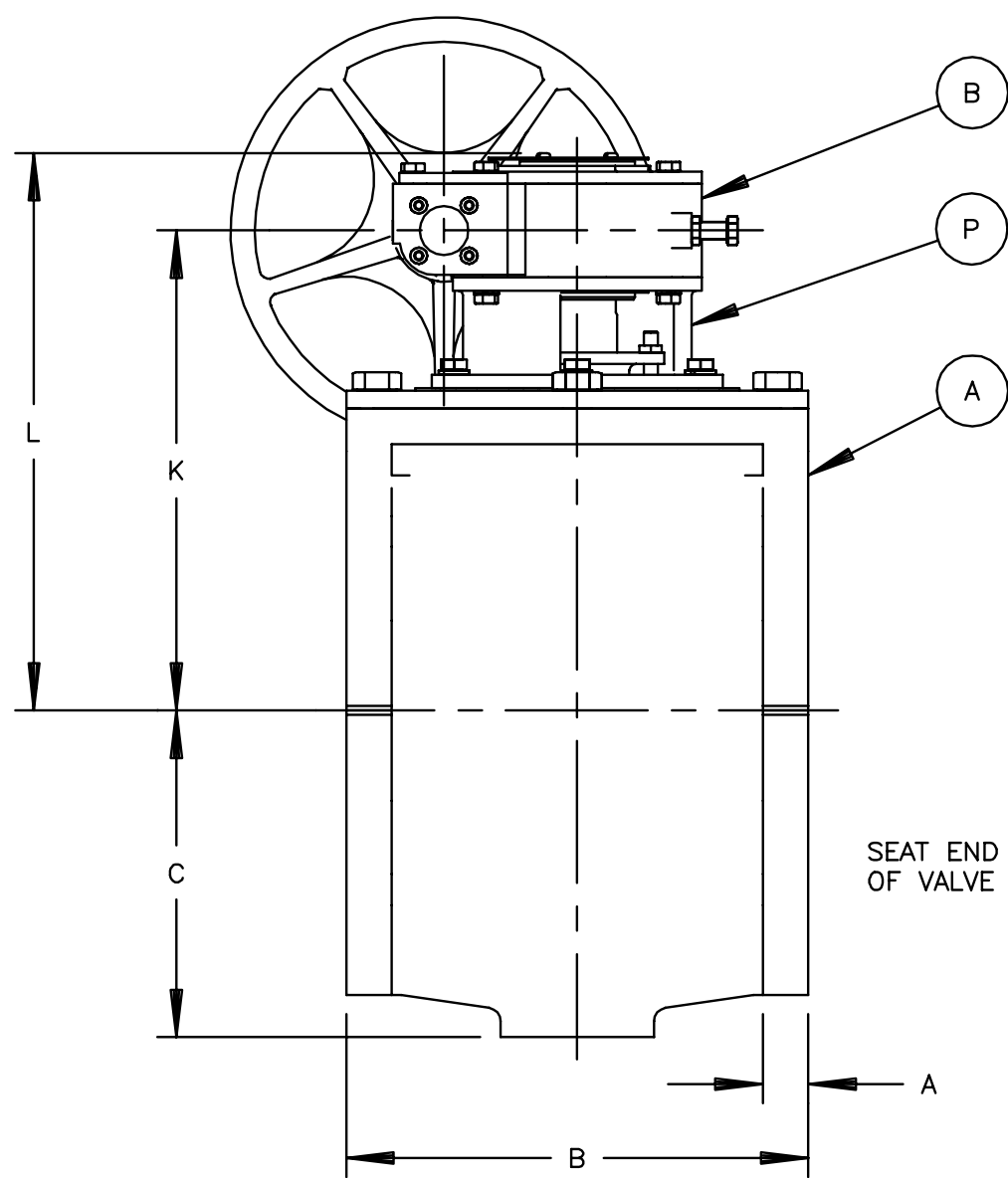
A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF HANDWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

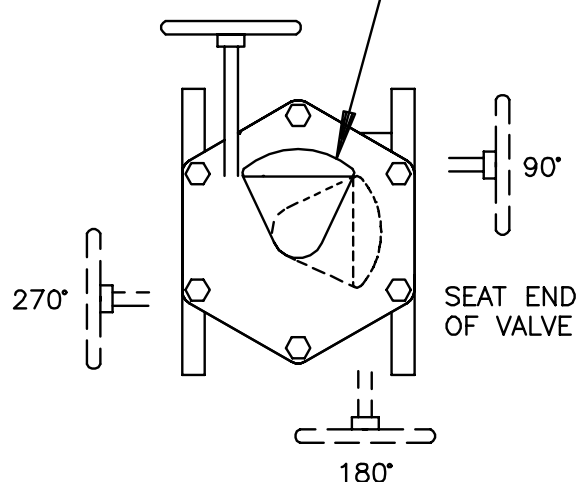


NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



PLUG IN OPEN POSITION. SEE INSTALLATION NOTE.

STANDARD POSITION SHOWN ON THIS DRAWING



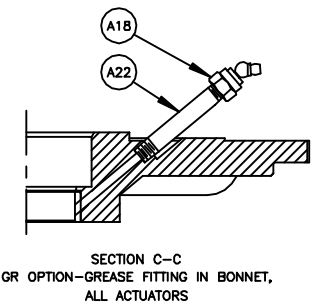
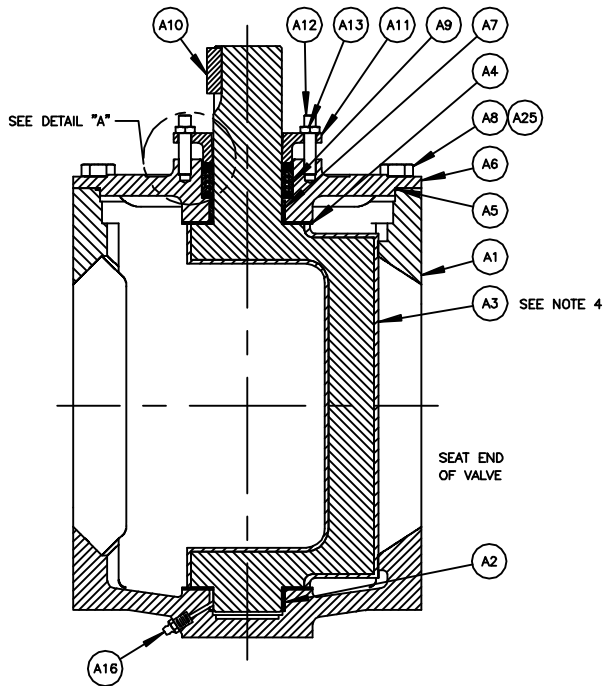
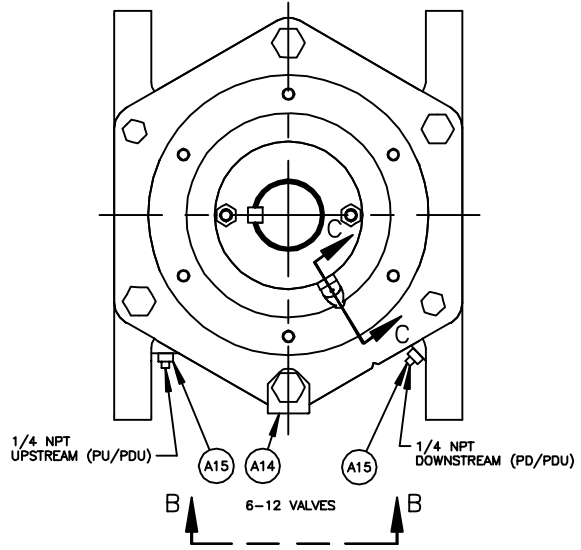
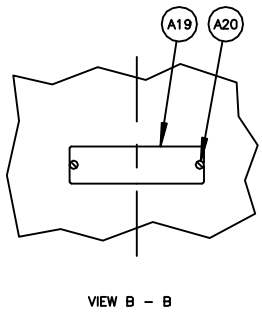
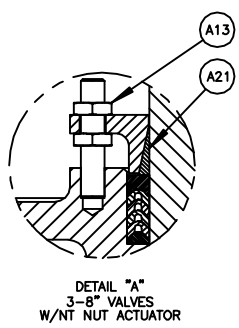
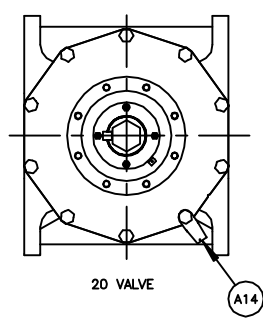
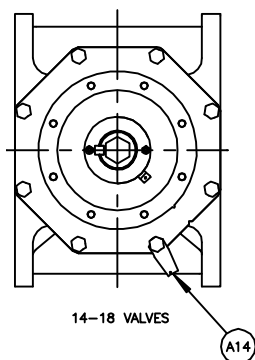
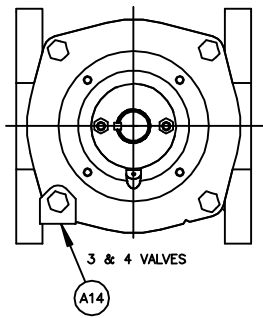
ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
03/14/07 61483						

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED GS-6A-HD_ HANDWHEEL ACTUATED			
DOCT. CODE	DRAWN	APPROVED	
C1	CHECKED	SN	SN
		DATE	10/17/05

A55432



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61612	08/17/08
A	61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	SN	APPROVED	SN
C1	CHECKED	SN	DATE	12/05/05

A55403



MATERIALS OF CONSTRUCTION

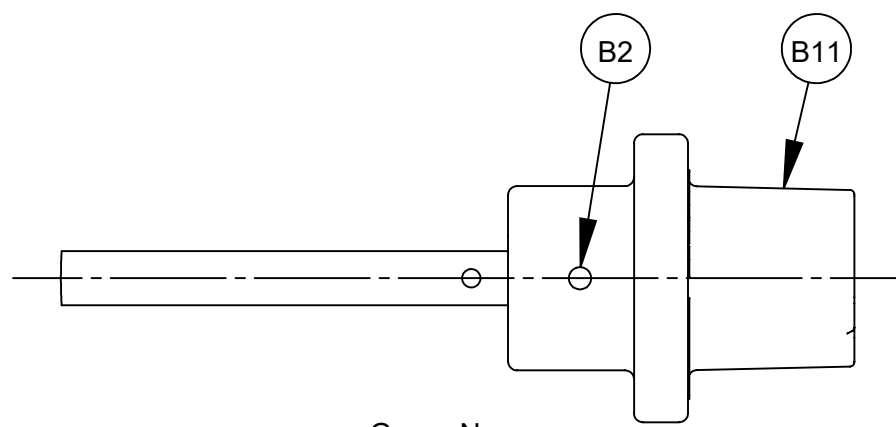
DRAWING(S): A55403

WORK ORDER: 143537

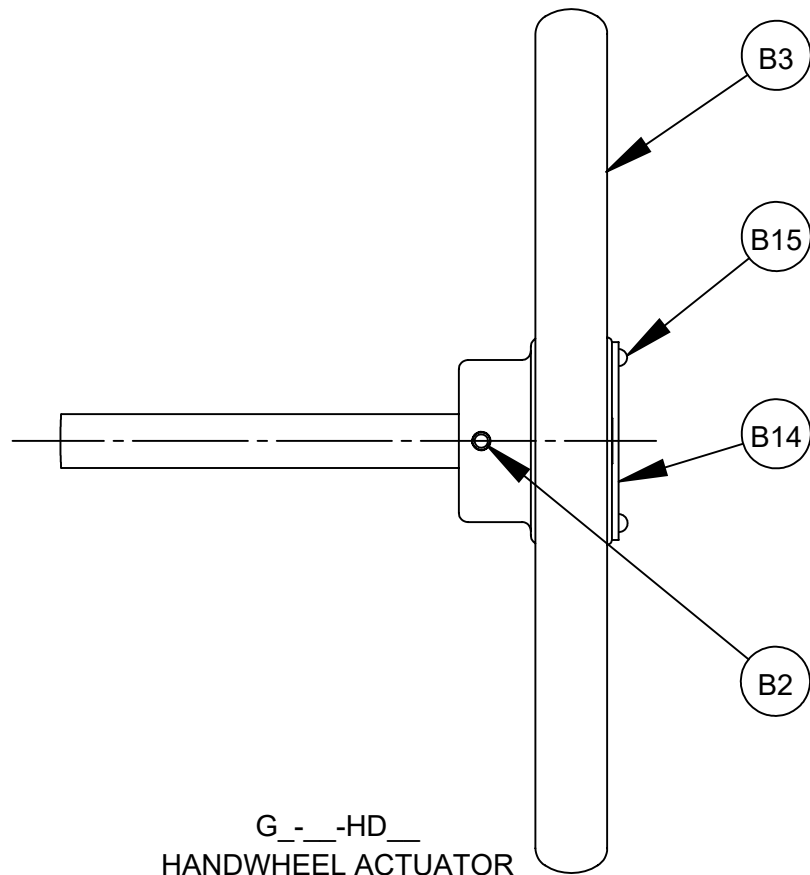
PART NO: 9717882

DESCRIPTION: PEF,6,F1,CI,NBR,CR,AIS-141SB0*GS-6A-HD8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

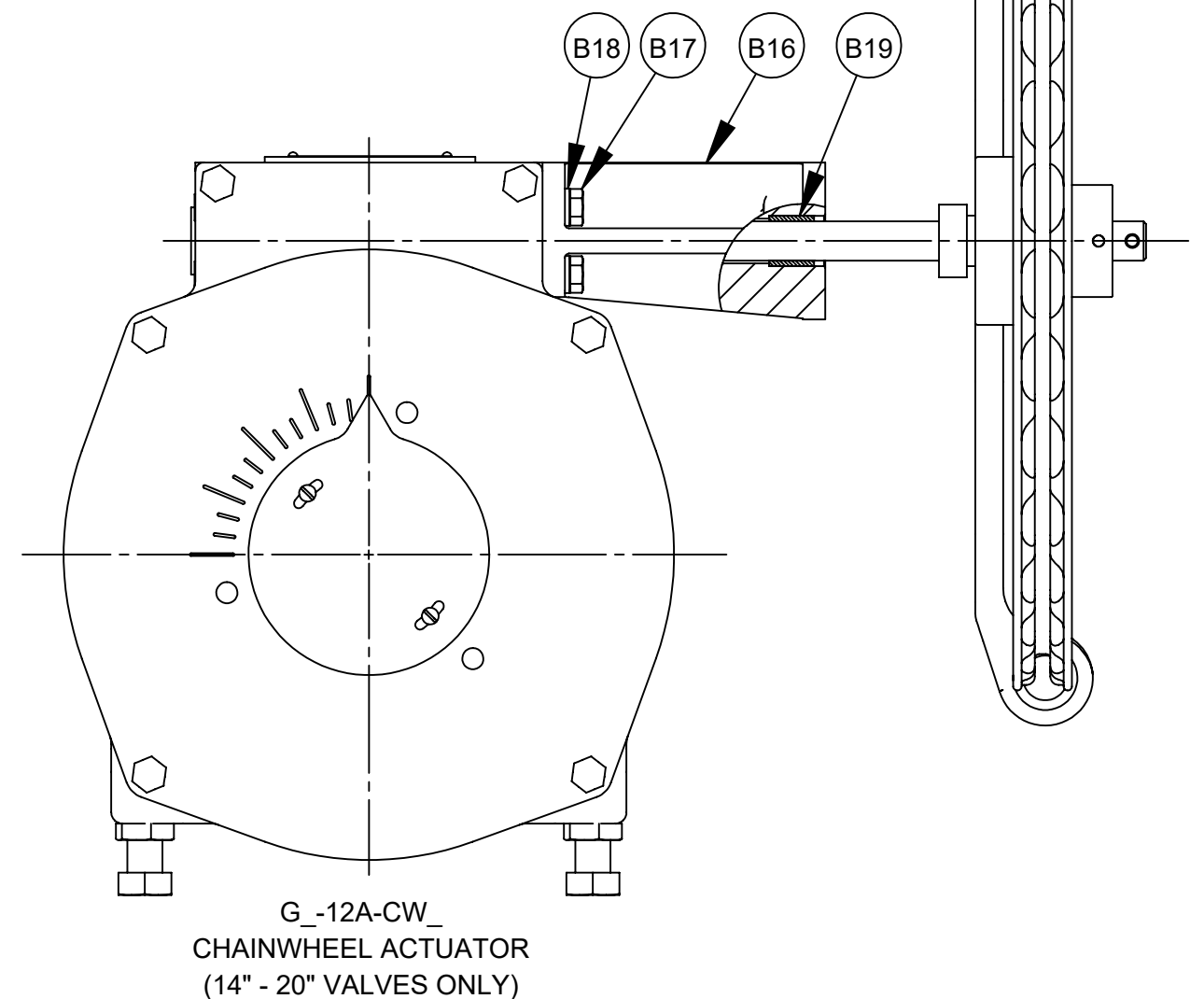
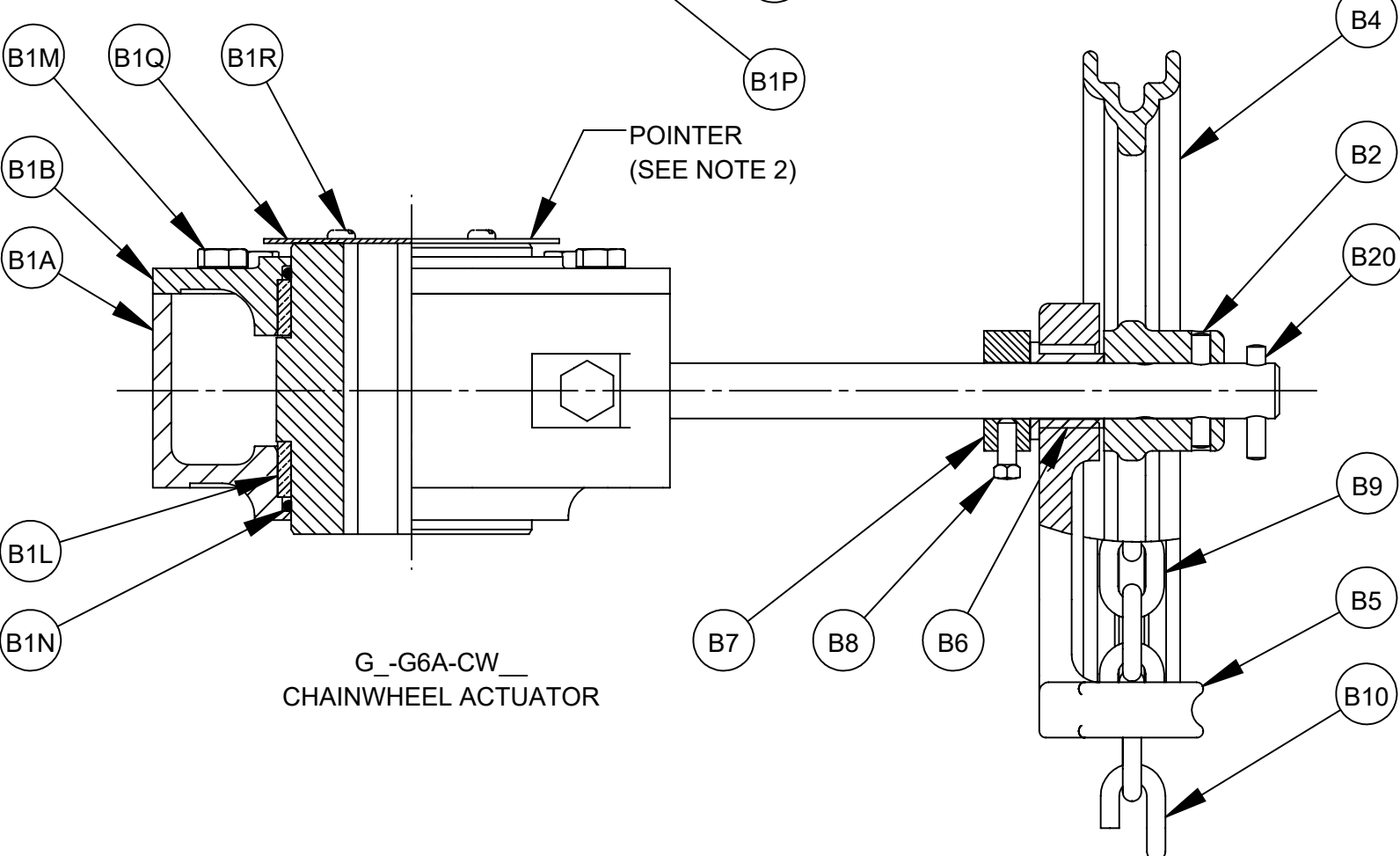
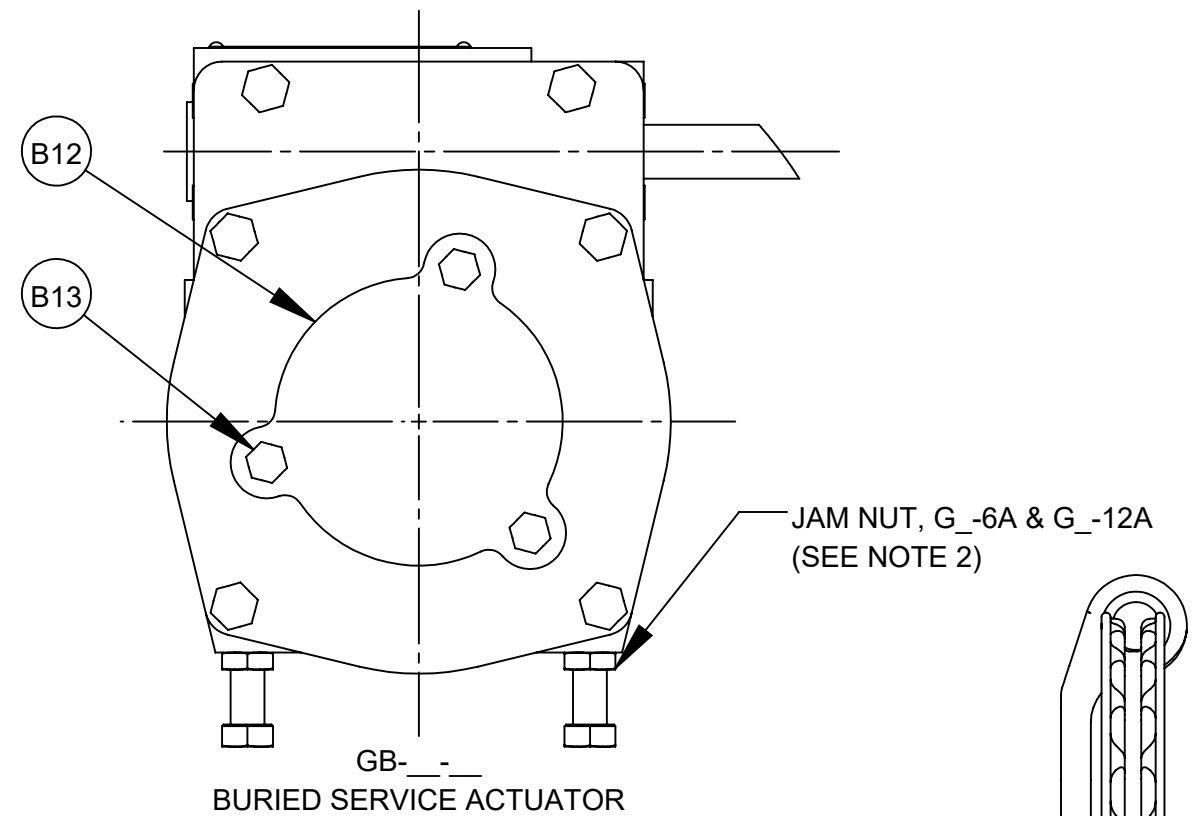
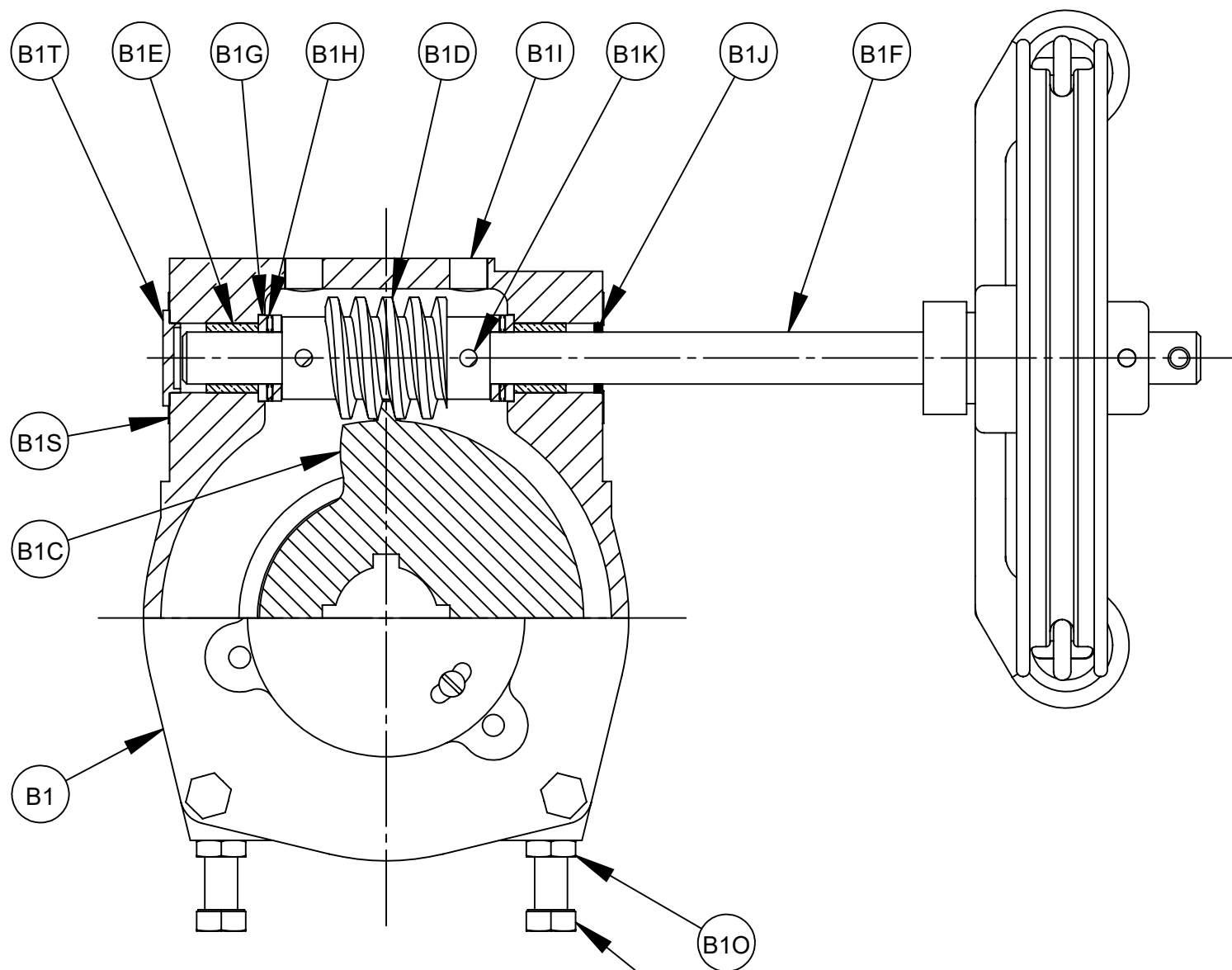
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



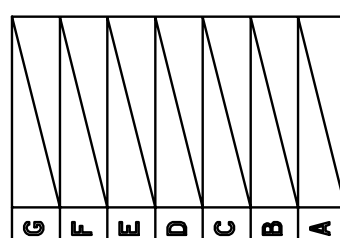
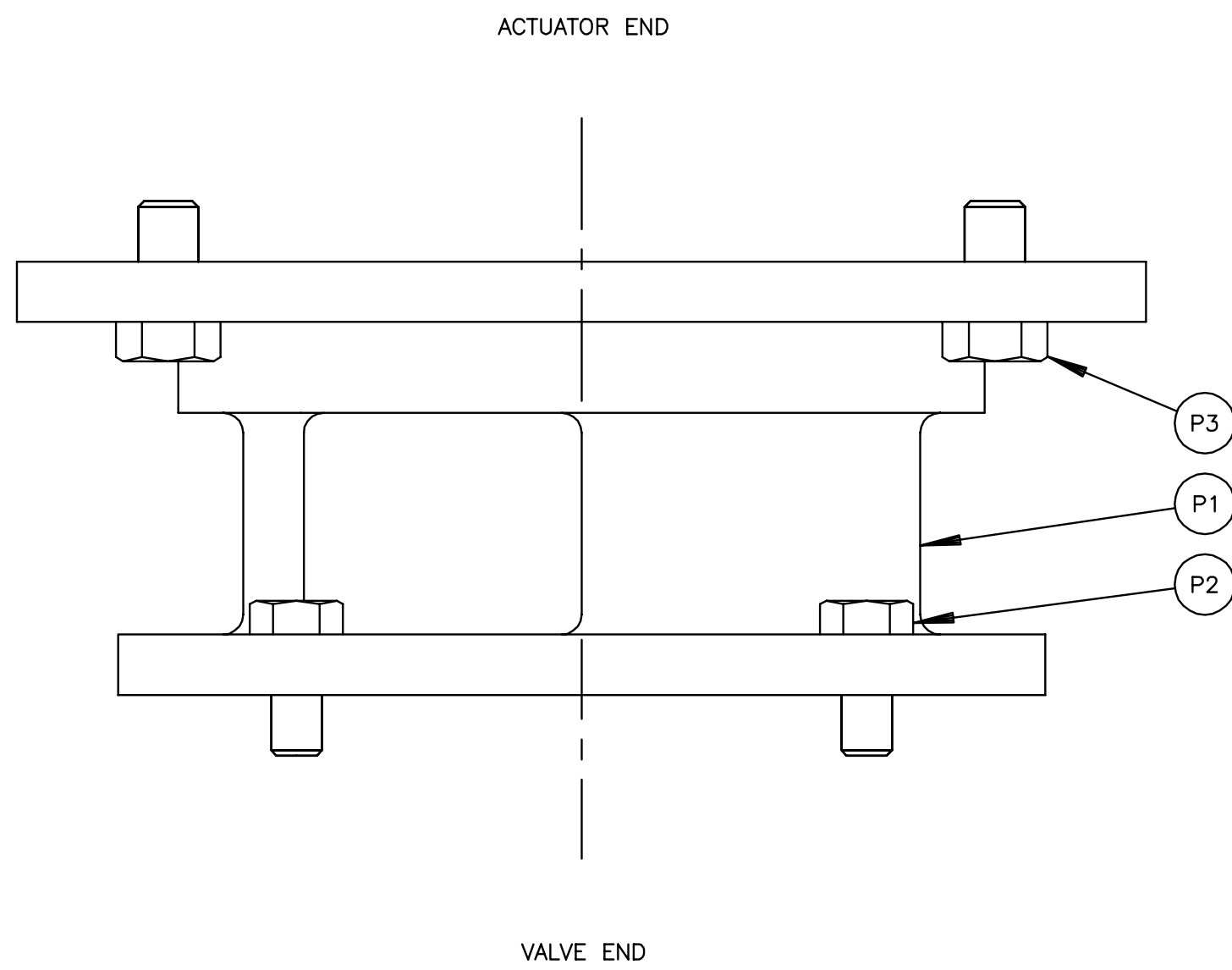
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9717888
18	18	1	BAW,4,F1,CI,NBRA-NBR,150B,DI-S2,AIS*LT,SB16	

Style	BAW	DEZURIK AWWA C504 3-72"; C516 78" and larger Rubber Seated Butterfly Valve
Size	4	4 Inch (100mm)
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBRA	Acrylonitrile Butadiene; Adjustable; -20 to 180° F. (-29 to 82° C.)
Seat Material	NBR	Acrylonitrile Butadiene; -20 to 180° F. (-29 to 82° C.)
Service Class	150B	AWWA Class 150B
Disc	DI	Ductile Iron with 316 Stainless Steel Edge
Shaft	S2	316 Stainless Steel
Option	AIS	USA Iron & Steel
Coating		8 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Interior and Exterior with Standard (SP10) surface prep
Act Type	LT	Lever; Ten Position
Accessory	SB16	316 Stainless Steel Bolting

RELATED DOCUMENTS

J50864	DWG INST BAW F1 ADJ LT 3-8"
A47532	DWG INST VALVE BAW F1 3-20"
A47525	DWG VALVE ASSY BAW F 3-12"
A42310	DWG ACT LT
J70776	DWG CONN PARTS ADJ BAW
D10386	IM VALVE BAW 3-20"
D10316	IM ACT LEVER TEN POSITION

FEATURES

TAG: TAG: 4" BAW F1 SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	4 Inch DeZURIK AWWA C504 Rubber-Seated Butterfly Valve		
EQUIPMENT / TAG NUMBERS:	TAG: TAG: 4" BAW F1 SPARE		
WEIGHT (APPROX.)	50 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-18	
PART NUMBER:	9717888		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10386
- For actuator maintenance and lubrication refer to instruction manual(s): D10316.

RECOMMENDED SPARE PARTS

See Drawing(s) A47525. A42310.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1211529	4" BRG SLV UPPER NYLON MD	1	A07
1402003	4" PKG SET 5/8X1-1/8 NBR NT4B	1	A08
1211535	4" BRG SLV LOWER NYLON MD	1	A32
1138382	BRG SLV .627X.753X1/2	1	B11

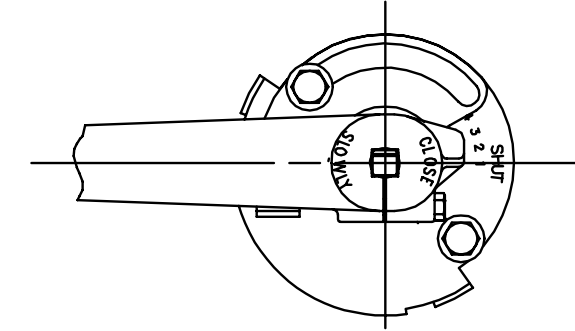
For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE	DIMENSIONS <small>INCHES MILLIMETERS</small>														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
3	$\frac{5.00}{127}$	$\frac{.81}{21}$	$\frac{4.00}{102}$	$\frac{4.81}{122}$	$\frac{6.00}{152}$	$\frac{.75}{19}$	4	N/A	N/A	N/A	$\frac{7.50}{191}$	$\frac{6.06}{154}$	$\frac{3.56}{90}$	$\frac{3.00}{76}$	$\frac{14.00}{356}$
4	$\frac{5.00}{127}$	$\frac{1.00}{25}$	$\frac{4.75}{121}$	$\frac{5.56}{141}$	$\frac{7.50}{191}$	$\frac{.75}{19}$	4	5/8-11 UNC	4	$\frac{1.06}{27}$	$\frac{9.00}{229}$	$\frac{6.06}{154}$	$\frac{3.56}{90}$	$\frac{3.00}{76}$	$\frac{14.00}{356}$
6	$\frac{5.00}{127}$	$\frac{1.06}{27}$	$\frac{6.03}{153}$	$\frac{7.00}{178}$	$\frac{9.50}{241}$	$\frac{.88}{22}$	4	3/4-10 UNC	4	$\frac{1.28}{33}$	$\frac{11.00}{279}$	$\frac{6.38}{162}$	$\frac{3.56}{90}$	$\frac{3.00}{76}$	$\frac{14.00}{356}$
8	$\frac{6.00}{152}$	$\frac{1.19}{30}$	$\frac{7.16}{182}$	$\frac{8.31}{211}$	$\frac{11.75}{298}$	$\frac{.88}{22}$	8	N/A	N/A	N/A	$\frac{13.50}{343}$	$\frac{6.38}{162}$	$\frac{3.56}{90}$	$\frac{3.00}{76}$	$\frac{14.00}{356}$

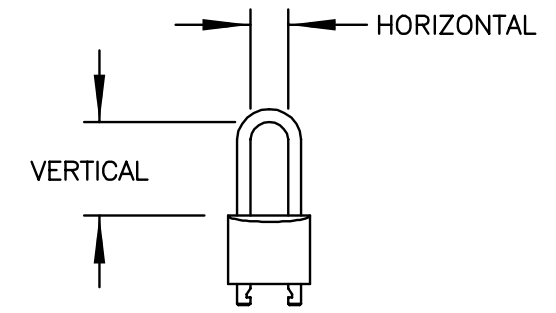
A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

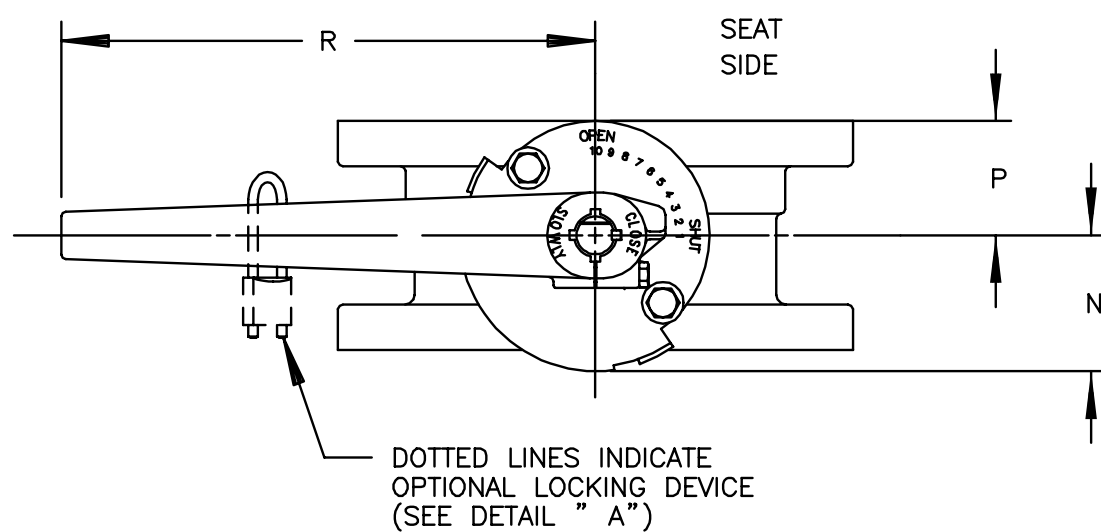
1. FLANGES ARE FLAT FACED WITH DIMENSIONS AND DRILLING TO ANSI B16.1 CLASS 125 EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A-26506 FOR NON-ANSI FLANGE DATA.
2. FLOW MAY BE IN EITHER DIRECTION. THE PREFERRED INSTALLATION IS WITH THE SEAT SIDE UPSTREAM.
3. LEVER WILL USE A $\frac{.38}{10}$ DIA X $\frac{2.50}{64}$ VERTICAL X $\frac{.94}{24}$ HORIZONTAL ADJUSTABLE SHACKLE PADLOCK. DIMENSIONS ARE IN THE LOCKED POSITION.



ADJUSTABLE OPEN POSITION INDICATOR (OPTIONAL)
FURNISHED WHEN ST IS ORDERED



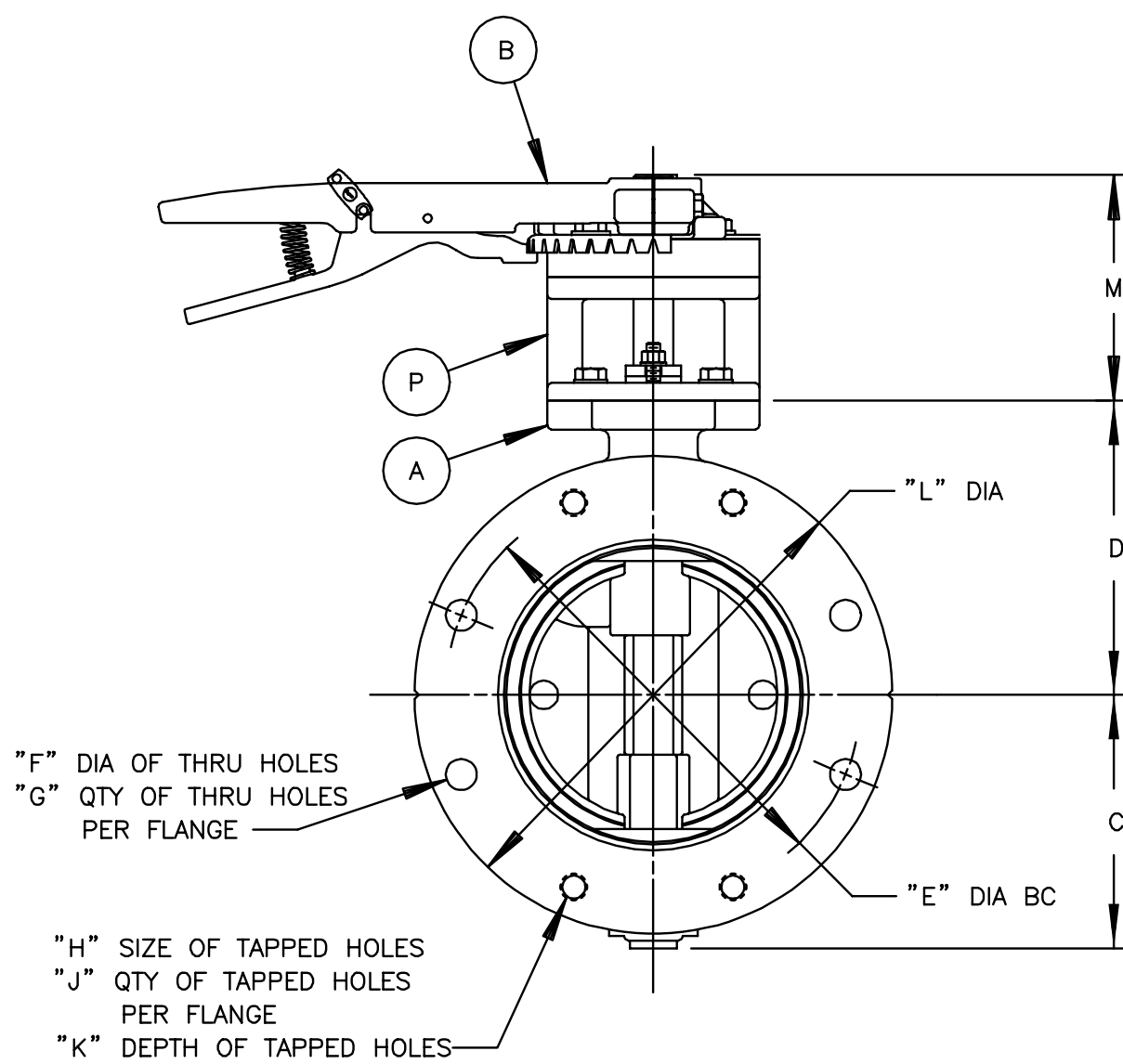
DETAIL "A"
LOCKING DEVICE
(PROVIDED BY CUSTOMER)
SEE NOTE 3



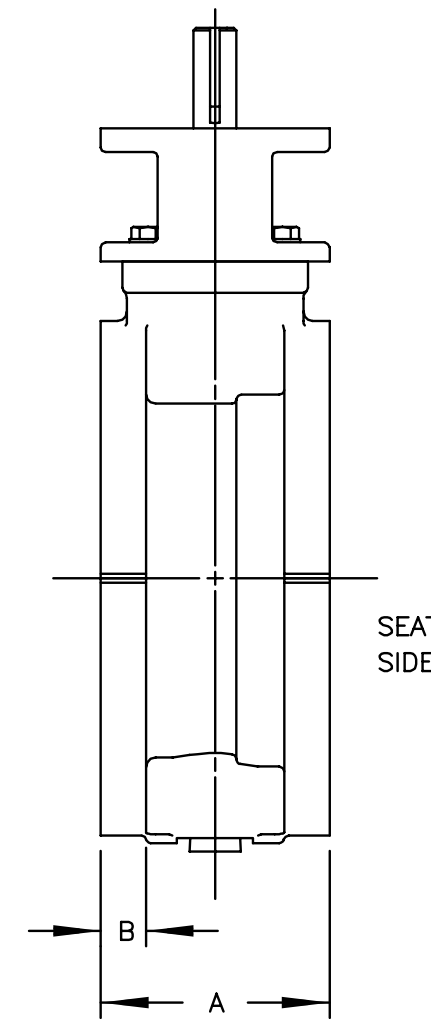
DOTTED LINES INDICATE
OPTIONAL LOCKING DEVICE
(SEE DETAIL "A")

NOTICE

THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.

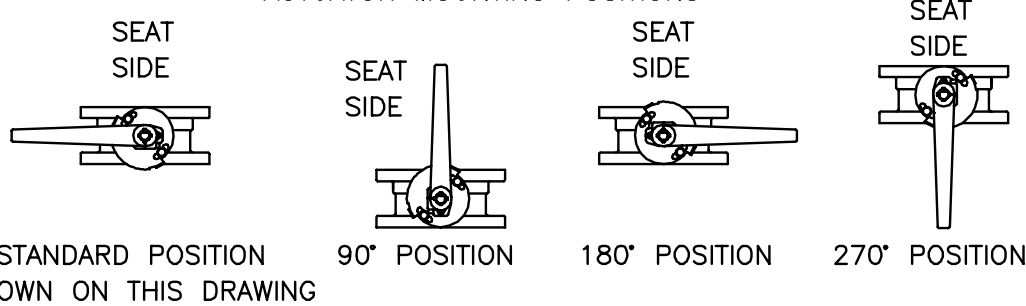


"F" DIA OF THRU HOLES
"G" QTY OF THRU HOLES PER FLANGE
"H" SIZE OF TAPPED HOLES
"J" QTY OF TAPPED HOLES PER FLANGE
"K" DEPTH OF TAPPED HOLES



SEAT SIDE

ACTUATOR MOUNTING POSITIONS



G	L	E	D	C	B	A
61510	61336	60712	50312	02/25/09	09/12/07	09/25/03
10/04/96						

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

BAW BUTTERFLY VALVES 3 - 8 FLANGED W/ADJUSTABLE PACKING
LT 10 POSITION LEVER ACTUATOR

DOCT. CODE	DRAWN	APPROVED
C1	MPB	GK
CHECKED	DATE	
GK	02/16/96	

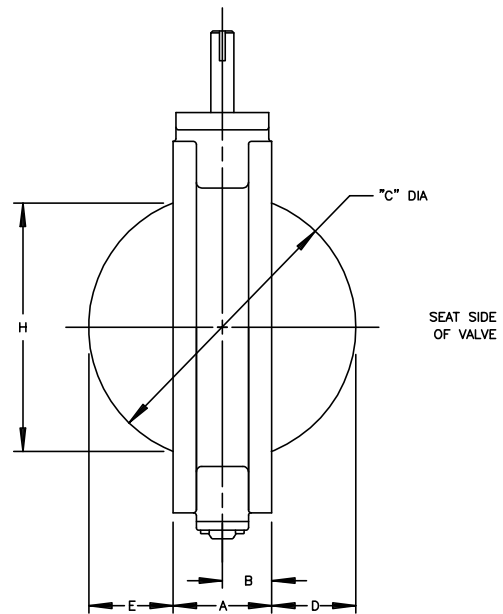
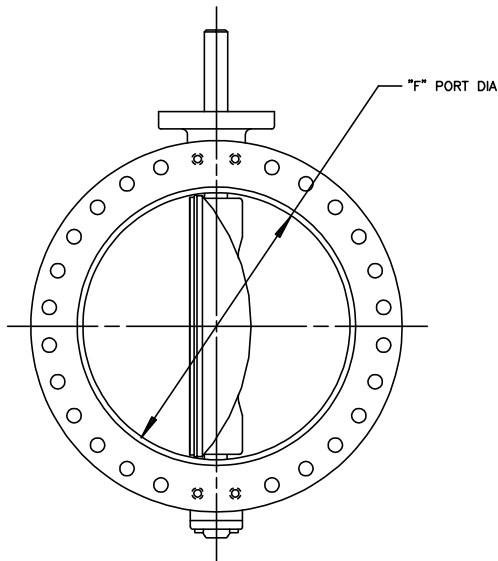
J50864

VALVE SIZE		VALVE CLASS	DIMENSIONS							
INCH	MM		A	B	C	D	E	F	H	
3	80	150B 250B	5.00 127	2.50 64	3.00 76	NONE	NONE	2.88 73	NONE	
4	100	150B 250B	5.00 127	2.50 64	4.00 102	NONE	NONE	3.88 99	NONE	
6	150	150B 250B	5.00 127	2.50 64	5.75 146	.375 9.5	.375 9.5	5.62 143	2.88 73	
8	200	150B 250B	6.00 152	3.00 76	7.60 193	.80 20	.80 20	7.47 190	4.72 120	
10	250	150B 250B	8.00 203	4.00 102	9.62 244	.81 21	.81 21	9.46 240	5.40 137	
12	300	150B 250B	8.00 203	4.00 102	11.60 295	1.80 46	1.80 46	11.45 291	8.46 215	
14	350	150B 250B	8.00 203	4.00 102	13.60 345	2.80 71	2.80 71	13.40 340	11.06 281	
16	400	150B 250B	8.00 203	4.00 102	15.50 394	3.74 95	3.74 95	15.25 387	13.32 338	
18	450	150B 250B	8.00 203	4.00 102	17.25 438	4.61 117	4.61 117	17.00 432	15.34 390	
20	500	150B	8.00 203	4.00 102	19.25 489	5.61 142	5.61 142	19.00 483	17.56 446	
20	500	250B	8.00 203	4.00 102	19.06 484	5.51 140	5.51 140	19.00 483	17.56 446	

SIZE	"G" (VALVE WEIGHT)									
	3	4	6	8	10	12	14	16	18	20
150B	33	45	65	100	156	250	325	470	505	675

NOTE:

- "G" IS BARE SHAFTED VALVE WEIGHT (LBS).



G	50312	11/22/16
F	50312	09/24/08
E	61158	02/13/04
D	50312	09/17/02
C	80712	02/20/02
B	50312	02/07/97



3-20 FLANGED AWWA BUTTERFLY VALVES SHOWING DISC CLEARANCE IN FULL OPEN POSITION, VALVE WEIGHTS AND PORT DIAMETER			
DOCT. CODE	DRANN	APPROVED	WCB
C1	CHECKED SJJ	KW DATE 09/17/96	

A47532



MATERIALS OF CONSTRUCTION

DRAWING(S): A47525

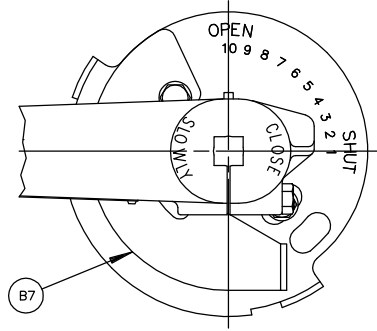
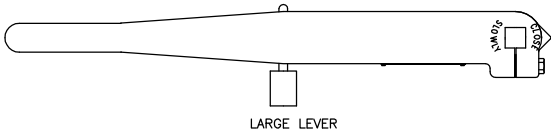
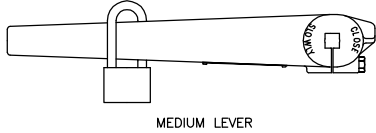
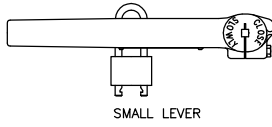
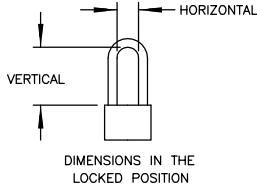
WORK ORDER: 143537

PART NO: 9717888

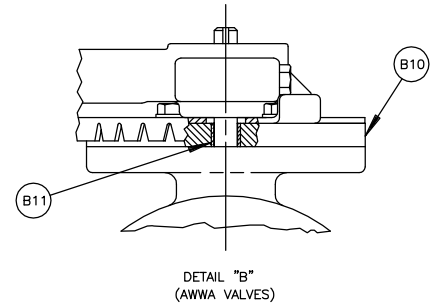
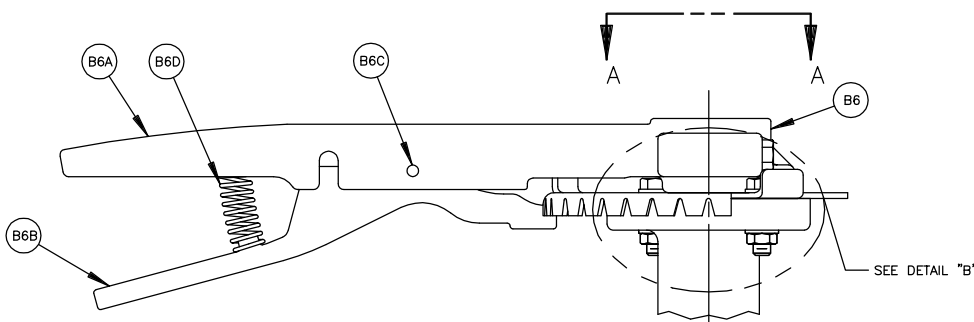
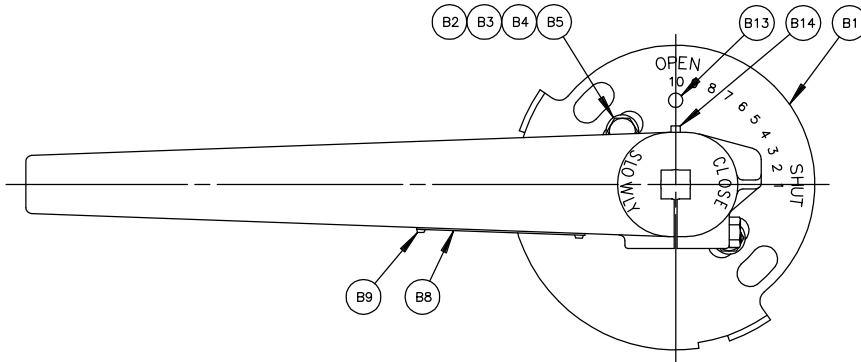
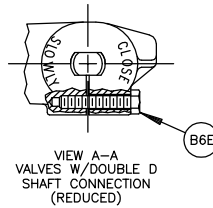
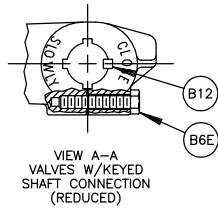
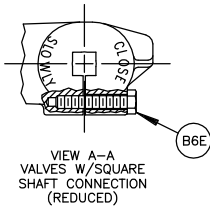
DESCRIPTION: BAW,4,F1,CI,NBRA-NBR,150B,DI-S2,AIS*LT,SB16

ITEM	MATERIAL
A01	ACRYLONITRILE-BUTADIENE (NBR)
A01	IRON, ASTM A126, CLASS B, USA FOUNDRY
A02	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A03	STAINLESS STEEL, TYPE 316, ASTM A276, CONDITION A
A05	STAINLESS STEEL, TYPE 316, ASTM A240/A276, USA MILL
A06	STEEL, COLD DRAWN, AISI 1018
A07	NYLON MOLYBDENUM DISULFITE
A08	ACRYLONITRILE-BUTADIENE (NBR)
A10	STAINLESS STEEL, TYPE 316
A16	STEEL CARBON, SAE J403, GRADE 1008 OR 1010
A25	TIN BRONZE, ASTM B505/B427, C90700
A26	STAINLESS STEEL, TYPE 316
A27	STAINLESS STEEL, TYPE 316
A32	NYLON MOLYBDENUM DISULFITE

LOCKING FEATURE
(PADLOCK NOT INCLUDED)
SEE NOTE 2
(REDUCED SCALE)



ADJUSTABLE OPEN POSITION STOP
(OPTIONAL)



NO	PART NAME	QTY
B1	DIAL	1
B2	SCREW	2
B3	LOCKWASHER	2
B4	NUT (EXCEPT AWWA BFLY VALVES)	2
B5	WASHER	2
B6	LEVER SUB-ASSEMBLY	1
B6A	HANDLE	1
B6B	LEVER	1
B6C	PIN	1
B6D	SPRING	1
B6E	SCREW	1
B7	MEMORY STOP (OPTIONAL)	1
B8	DATA PLATE (EXCEPT BHP API-609 OPTION)	1
B9	DRIVE SCREW (EXCEPT BHP API-609 OPTION)	2
B10	GLAND PLATE (AWWA BFLY VALVES)	1
B11	BEARING (AWWA BFLY VALVES)	1
B12	KEY (AWWA BFLY VALVE ONLY, SEE NOTE 3)	1
B13	RIVET (BHP BFLY VALVES)	1
B14	PIN (BHP BFLY VALVES - API)	1

NOTE:

- WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
- SMALL LEVER WILL USE A $\frac{.28}{7}$ DIA X $\frac{2.00}{51}$ VERTICAL X $\frac{.81}{21}$ HORIZONTAL ADJUSTABLE SHACKLE PADLOCK. MEDIUM AND LARGE LEVERS WILL USE A $\frac{.38}{10}$ DIA X $\frac{2.50}{64}$ VERTICAL X $\frac{.94}{24}$ HORIZONTAL ADJUSTABLE OR NON-ADJUSTABLE SHACKLE PADLOCK.
- KEY IS SUPPLIED AS PART OF VALVE ASSEMBLY AND WILL BE SHIPPED WITH VALVE.

G	50012	02/13/15
F	50012	03/10/10
E	61159	02/13/04
D	50012	04/08/02
C	60712	02/20/02
B	50012	09/09/96
A	51690	02/29/95

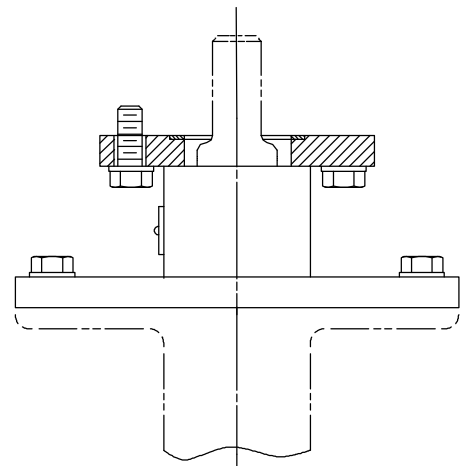
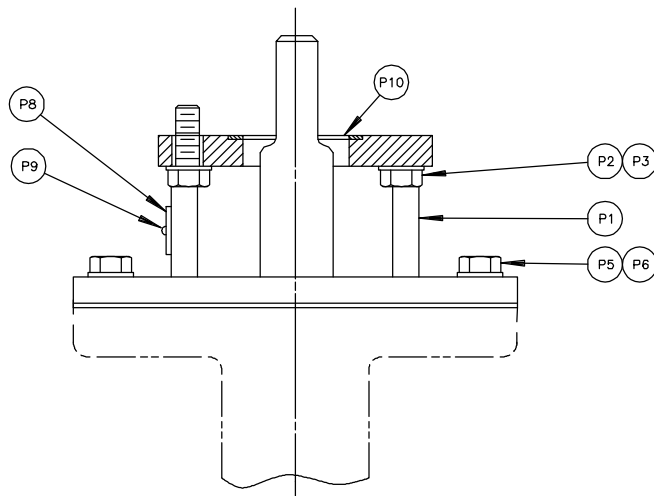
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

LT 10 POSITION LEVER ACTUATOR			
DOCT. CODE	DRAWN	WP	APPROVED
C1	CHECKED	SJ	SJ
		DATE	7-12-93
			A42310

NO	PART NAME	QTY
P1	ADAPTOR FAB	1
P2	SCREW	4
P3	LOCKWASHER	4
P4		
P5	SCREW	4
P6	LOCKWASHER	4
P7		
P8	DATA PLATE	1
P9	DRIVE SCREW	2
P10	WASHER (IF REQUIRED)	1

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE, ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



ALTERNATE VIEW SHOWING BURIED CONSTRUCTION

5	4	3	2	1	0
B	50312	09/20/14			
A	60712	06/25/03			



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

DOCT. CODE	DRAWN	APPROVED
C1	RJK	RJK
	CHECKED	DATE
	RJK	10-28-92

CONNECTING PARTS AS USED WITH
BAW BUTTERFLY VALVES WITH ADJUSTABLE PACKING

J70776



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9725296
19		1	PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	8	8 Inch (200mm); SST Bearings; Welded-in Nickel Seat
End Connection	MJ	Mechanical Joint, Conforms to ASME/AWWA C111/A21.11
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GB-6A-N	G-Series Buriable Nut; 2 In Square
Accessories	SB16	316 SST Bolting
Accessories	ENGS	Extended Actuating Nut; Carbon Steel

RELATED DOCUMENTS

A55489	DWG INST PEF MJ GB-6A-N ENGS 3
A55435	DWG VALVE ASSY PEF MJ 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
A55690	DWG ACC ENGS (EXT NUT) GEAR AC
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

EXTENSION ROD: 32.94
C/L OF VALVE TO TOP OF NUT: 48
TAG: PV3A

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	8 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV3A		
WEIGHT (APPROX.)	246 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-19	
PART NUMBER:	9725296		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55435. A55615. A55690.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390748	8" PLUG CR (RS16) PEF DI USA	1	A03
1361297	8-12" GRIT EXCLUDER PEF	2	A04
1361327	O-RING -272 9.48IDX9.76ODX0.14CS DIA NBR	1	A05
1055749	PACKING ADPT MALE 2-1/4 ID	1	A09
1055763	PACKING PRESS RING 2-1/4 ID	4	A09
1055778	PACKING ADPT FEMALE 2-1/4 ID	1	A09
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>			
INCH	MM	B	C	K	L
3	80	$\frac{11.50}{292}$	$\frac{3.50}{89}$	$\frac{8.00}{203}$	$\frac{10.69}{272}$
4	100	$\frac{14.25}{362}$	$\frac{4.43}{113}$	$\frac{8.62}{219}$	$\frac{11.31}{287}$
6	150	$\frac{15.75}{400}$	$\frac{5.79}{147}$	$\frac{9.75}{248}$	$\frac{12.44}{316}$
8	200	$\frac{17.38}{441}$	$\frac{7.65}{194}$	$\frac{12.09}{307}$	$\frac{14.78}{375}$
10	250	$\frac{19.38}{492}$	$\frac{9.19}{233}$	$\frac{13.50}{343}$	$\frac{16.19}{411}$
12	300	$\frac{20.75}{527}$	$\frac{11.53}{293}$	$\frac{15.56}{395}$	$\frac{18.25}{464}$

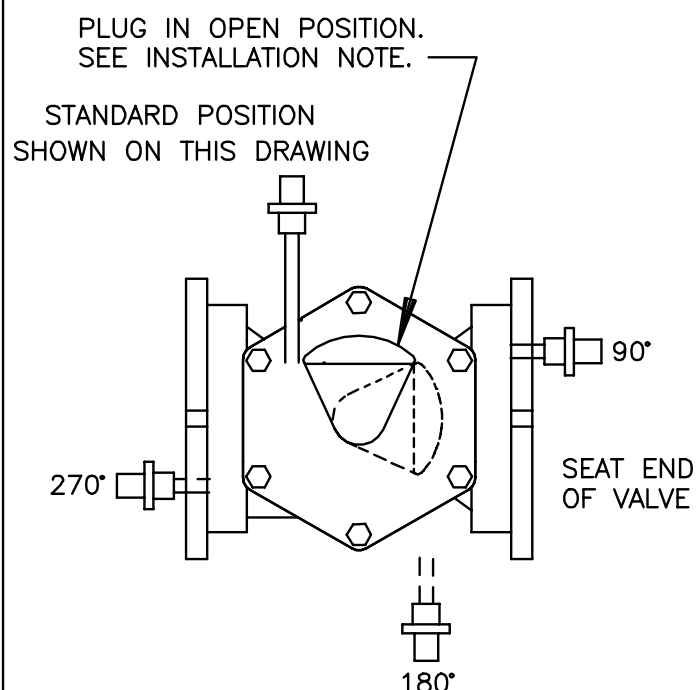
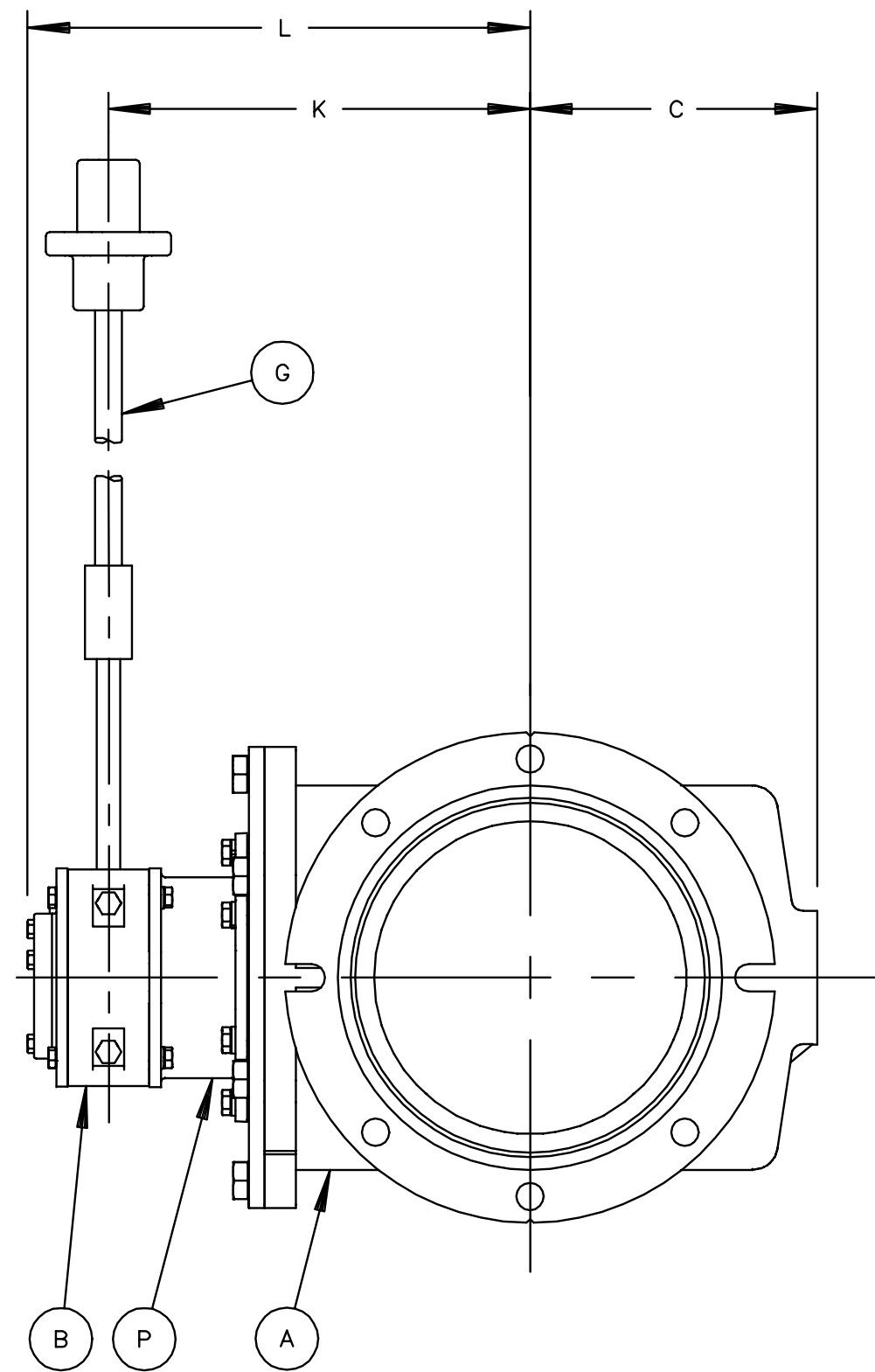
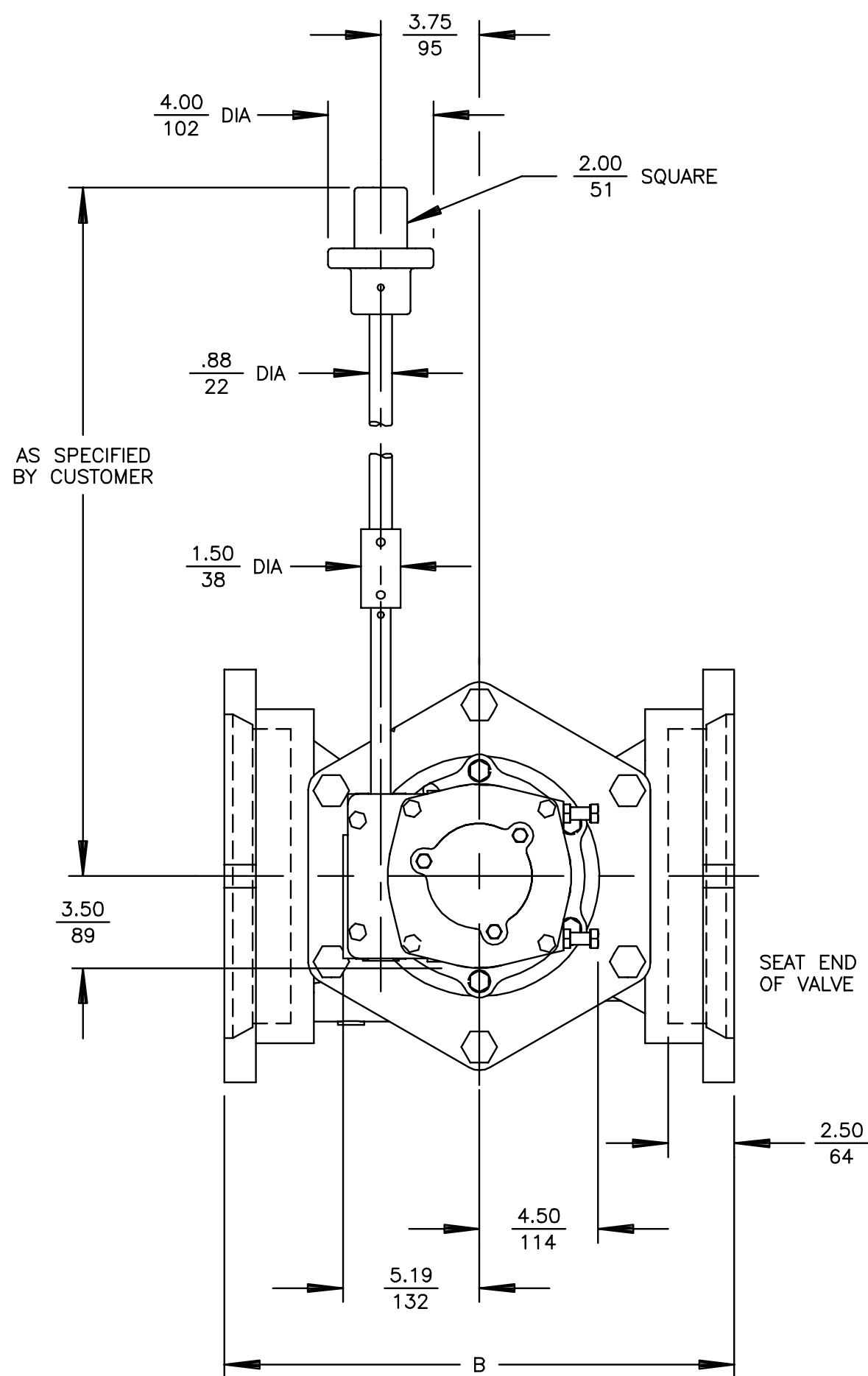
A	VALVE
B	ACTUATOR
G	EXTENDED NUT
P	CONNECTING PARTS

NOTE:

- MECHANICAL JOINT ENDS MEET AWWA STANDARD C111.
- 13 TURNS OF NUT ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:

- FOR LIQUIDS & GASES:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
- FOR SUSPENDED SOLIDS, SLURRIES, ETC:
INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

G	F	E	D	C	B	A
03/14/07 61483						

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 MECHANICAL JOINT GB-6A-N NUT ACTUATED (FOR SUBMERGED SERVICE) W/ENGS EXTENDED NUT

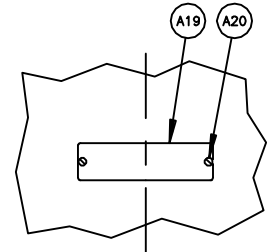
DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	05/18/06

A55489

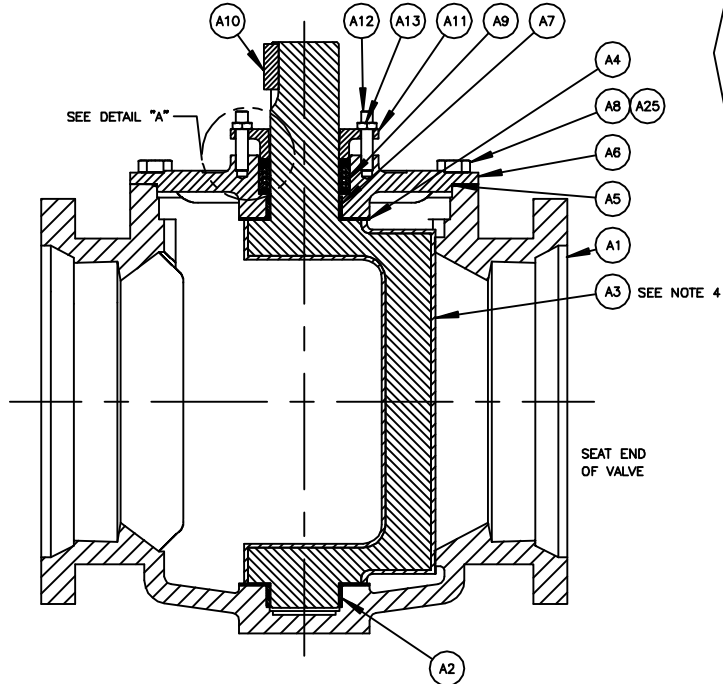
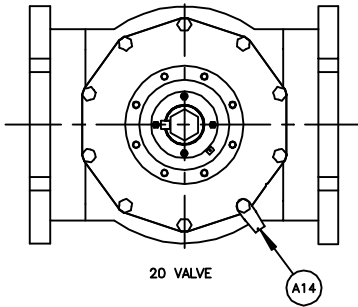
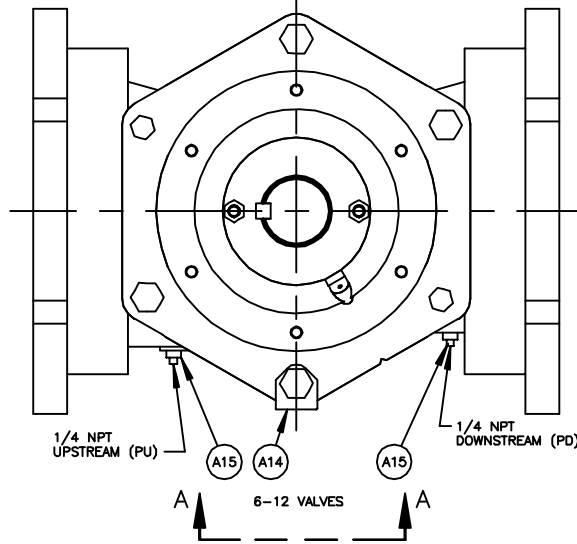
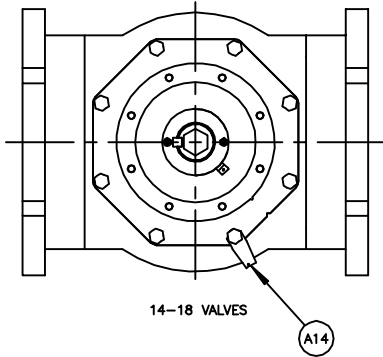
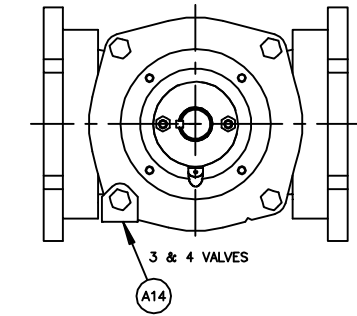
NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT OPTION)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU OR PD ONLY)	-
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

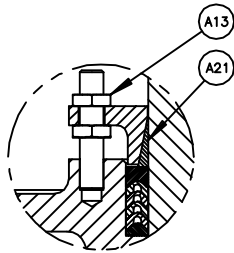


VIEW A - A



SEAT END OF VALVE

SEE NOTE 4



DETAIL "A"
3-8" VALVES
W/NT NUT ACTUATOR

REV	DATE	BY	CHKD
1	05/20/12	D	63490
2	07/24/17	C	61483
3	03/22/18	B	50312
4	05/02/18	A	61482

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, MECHANICAL JOINT

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	12/06/05

A55435



MATERIALS OF CONSTRUCTION

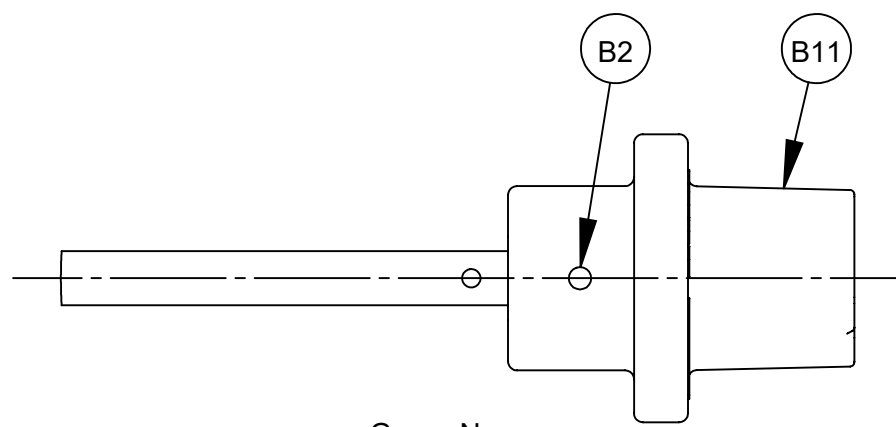
DRAWING(S): A55435

WORK ORDER: 143537

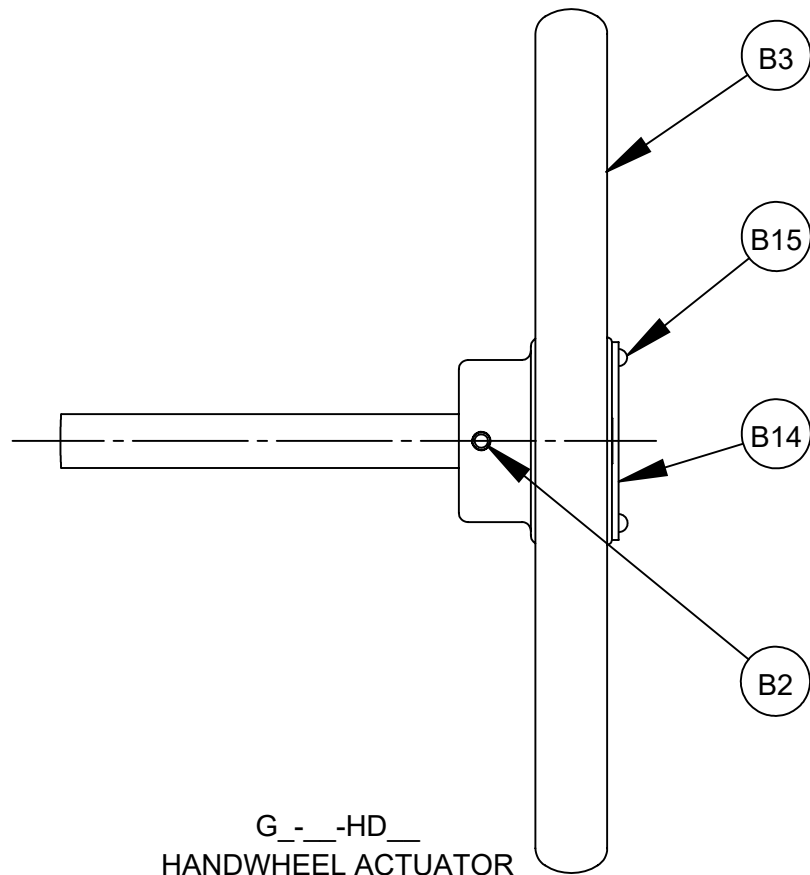
PART NO: 9725296

DESCRIPTION: PEF,8,MJ,CI,NBR,CR,AIS-141SB0*GB-6A-N,SB16-ENGS

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	CARBON STEEL, ZINC PLATED
A13	CARBON STEEL, ZINC PLATED
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

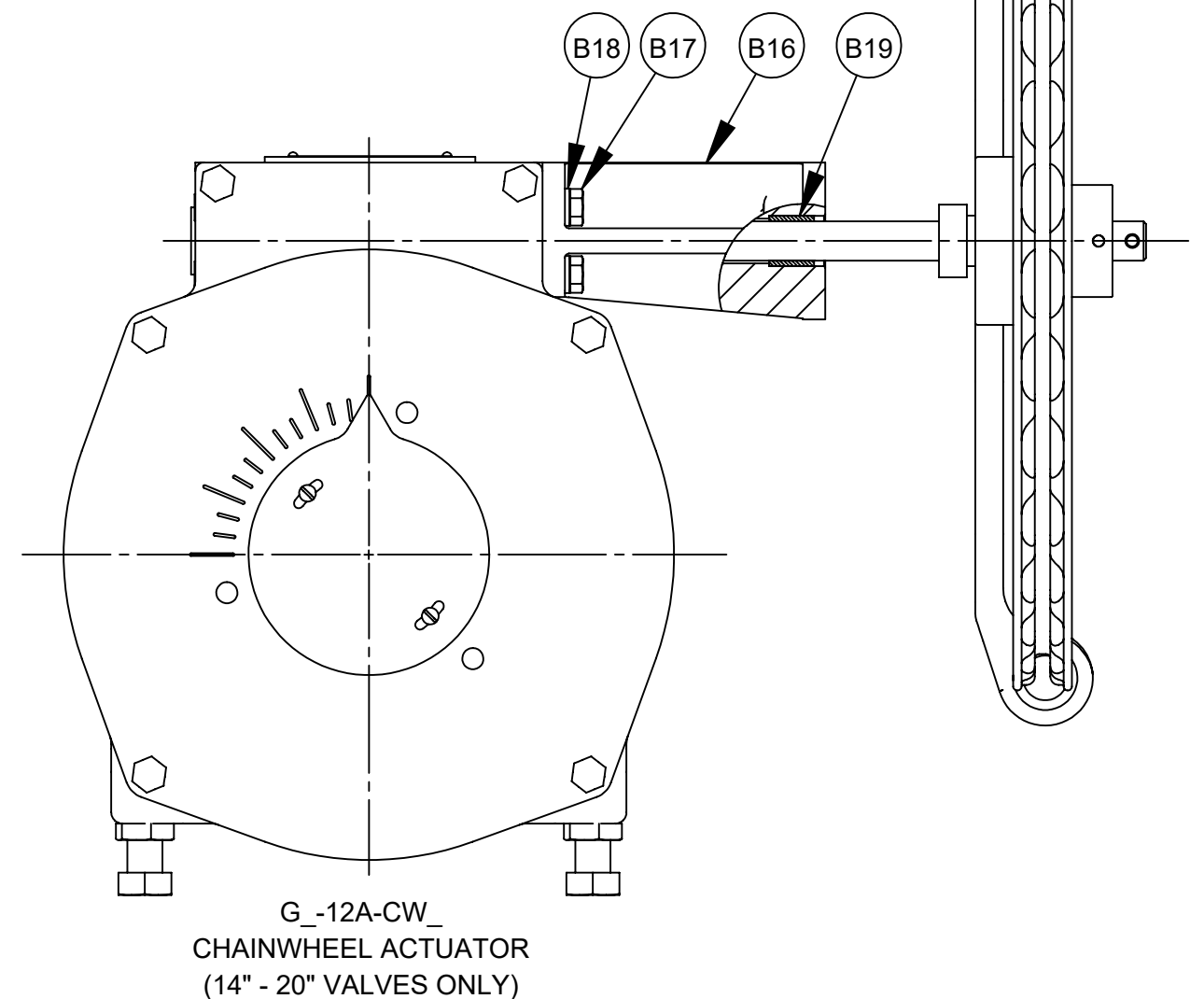
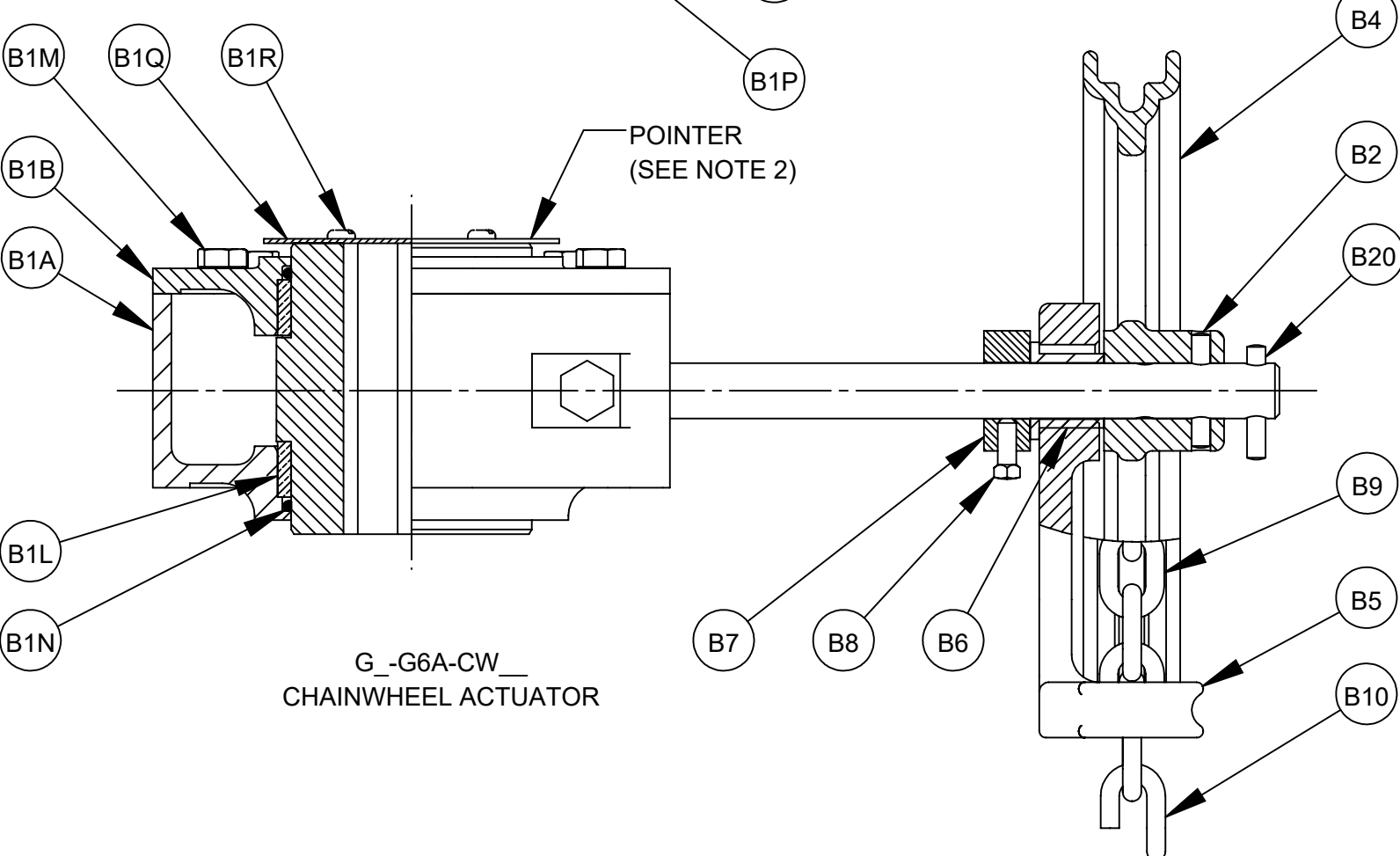
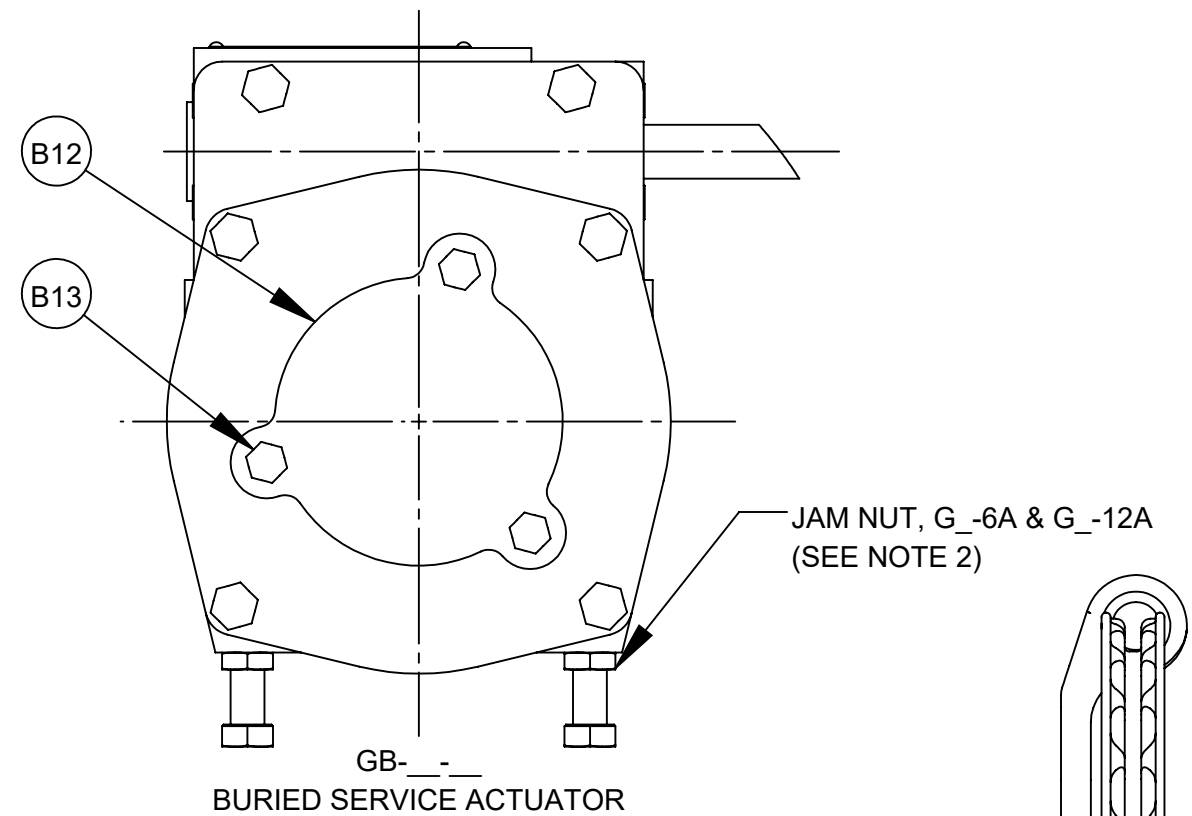
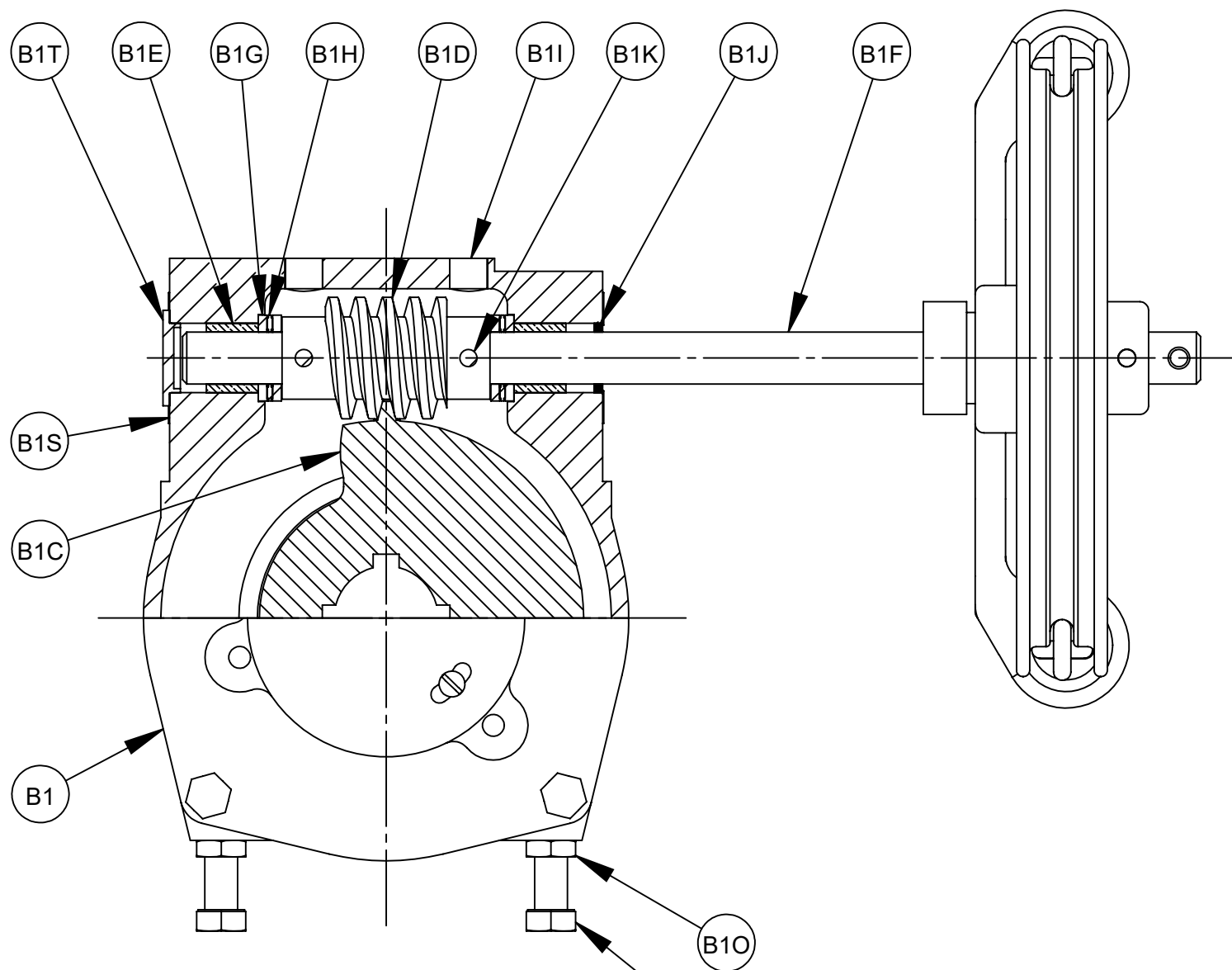
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



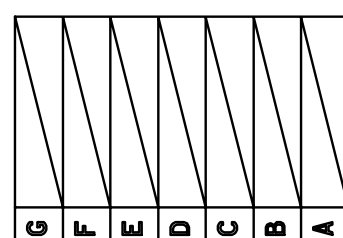
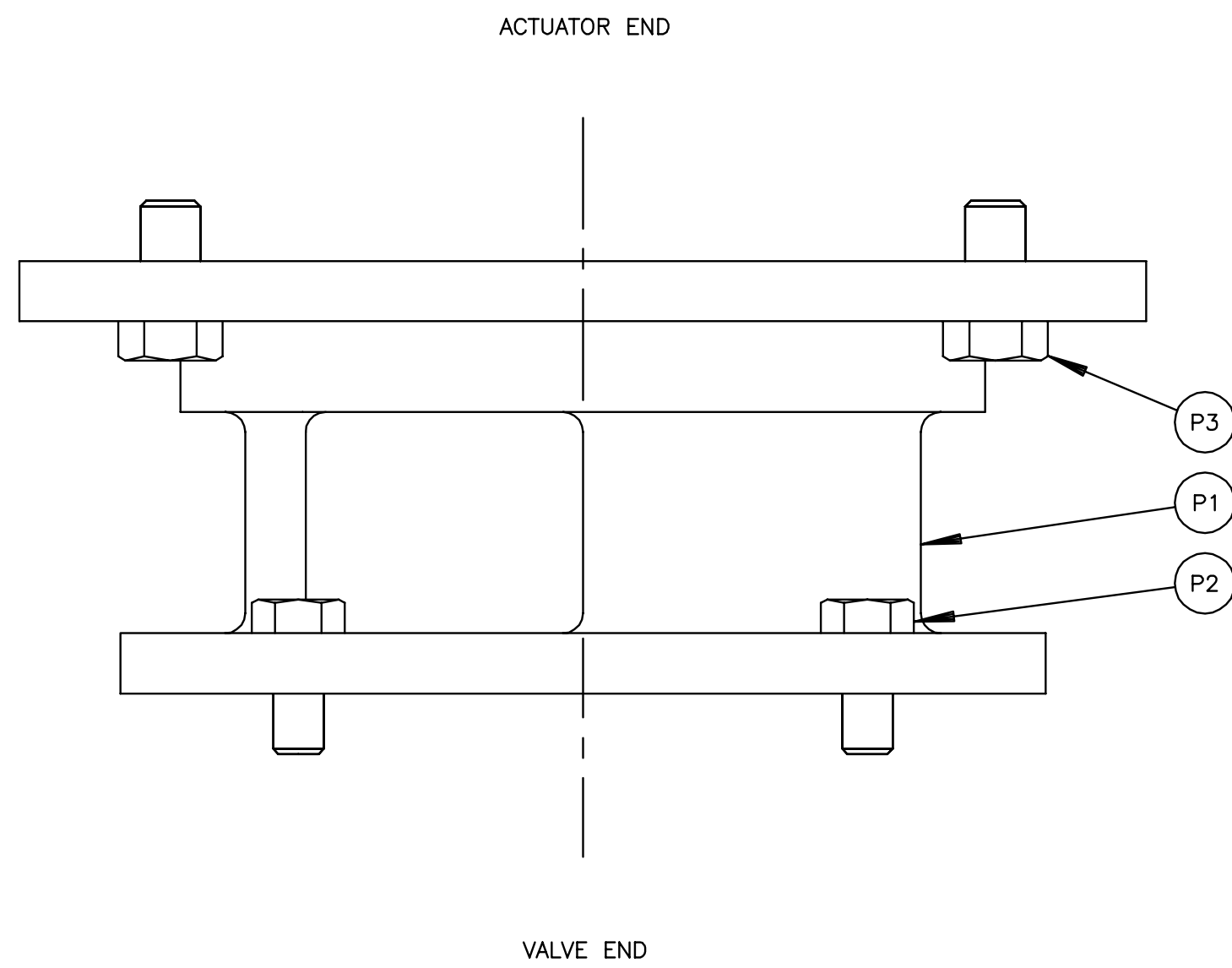
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



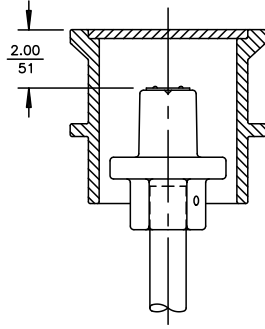
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

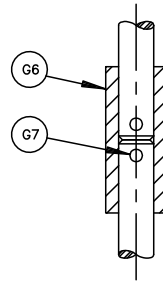
DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418

VALVE	SIZE	ACTUATOR NUMBER	DIMENSIONS <small>IN</small> <small>MM</small>			
			A	B	C	D
PEF	3-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	8-12"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	14-20"	G_-12A	17.41 526	23.60 599	17.66 449	23.60 599
BAW	8-12"	G_-6A	11.75 298	18.00 457	12.00 305	18.00 457
	14-20"	G_-12A	14.41 366	20.60 523	14.66 372	20.60 523
	3-20"	G_-6B	11.75 298	18.00 457	12.00 305	18.00 457



ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH FB FLOOR BOX

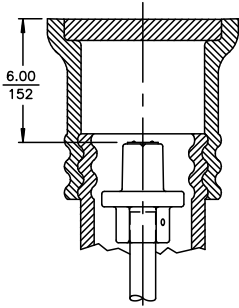


FOR ALL BAR EXTENSIONS
OVER 144.00
3658

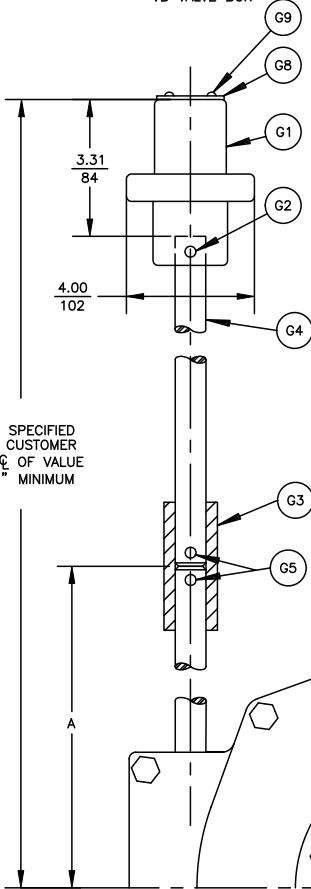
NO.	PART NAME	QTY.
G1	WRENCHING SQUARE	1
G2	PIN (BAR)	1
G2	PIN (PIPE)	2
G3	COUPLING	1
G4	BAR OR PIPE	1
G5	PIN (BAR)	2
G5	PIN (PIPE)	1
G6	COUPLING	1
G7	PIN	2
G8	DATA PLATE	1
G9	DRIVE SCREW	2
G10	COUPLING	1
G11	COUPLING	-
G12	PIN	-

NOTE:

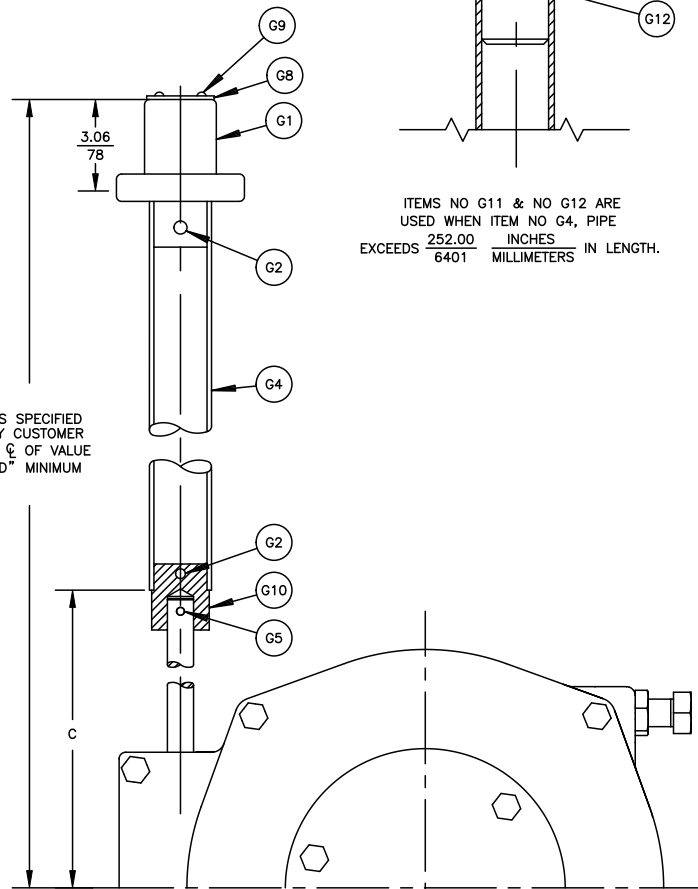
- WHEN ORDERING PARTS, SPECIFY VALVE SIZE AND MODEL NUMBER FROM DATA PLATE, ALSO GIVE DRAWING NUMBER WITH PART NAME, ITEM NUMBER AND QUANTITY.



ENGS EXTENDED WRENCHING SQUARE WHEN USED WITH VB VALVE BOX



BAR EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGS, ENGS_, ENGSX1, ENGS_X1



PIPE EXTENSION CONSTRUCTION
USED ON EXTENSION CODES:
ENGSX2, ENGS_X2, ENGSX3, ENGS_X3

50315	08/12/18	05/08/17
50318		
A		
B		
C		
D		
E		
F		
G		



ENGS EXTENDED WRENCHING SQUARE FOR USE WITH G_-_A AND G_-_B SERIES GEAR ACTUATORS			
DOCT. CODE	DRAWN	SN	APPROVED
C1	CHECKED	SN	DATE
			05/30/06
			A55690



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9725297
20		8	PEF,3,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	
Style		PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)	
Size		3	3 Inch (80mm); SST Bearings; Welded-in Nickel Seat	
End Connection		F1	Flanged Drilling; ASME Class 125/150	
Body Material		CI	Cast Iron	
Packing		NBR	Acrylonitrile-Butadiene; Temperature to 250° F.	
Plug & Facing		CR	Chloroprene; -20 to 180°F (-29 to 83°C)	
Option		AIS	USA Iron & Steel	
Coating		141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep	
Act Type		GS-6A-CW8	G-Series Chainwheel; 8 In Dia	
Accessories		SB16	316 SST Bolting	

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV4A

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	3 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV4A		
WEIGHT (APPROX.)	100 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-20	
PART NUMBER:	9725297		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

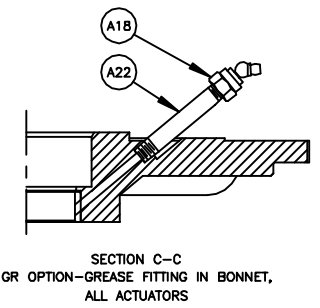
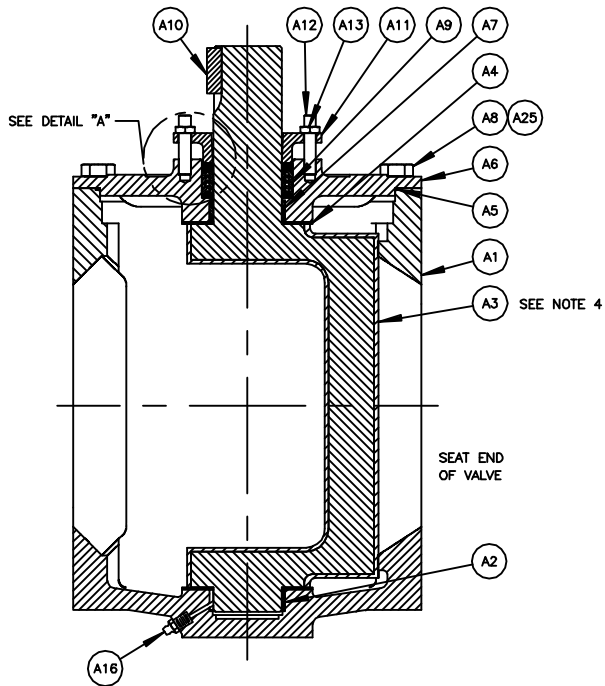
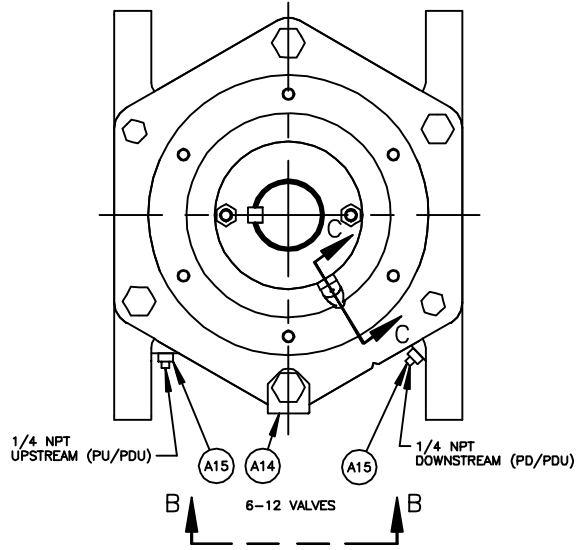
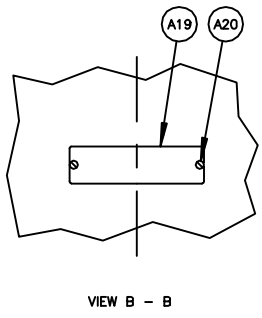
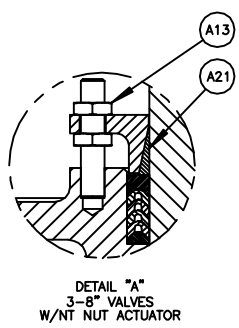
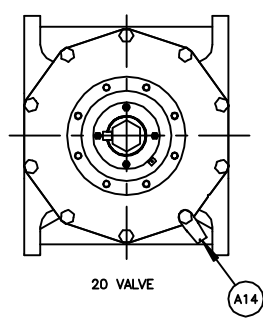
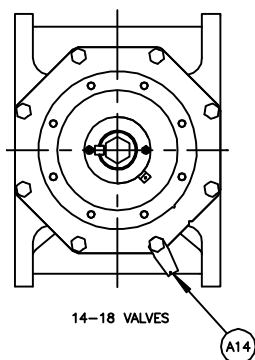
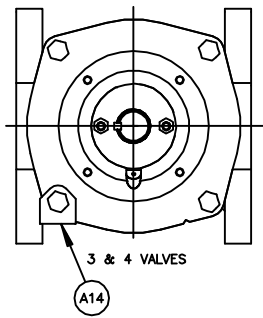
- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390738	3" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1002123	O-RING-256 5.73IDX6.01ODX.14CSDIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICTION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

63486	05/07/17
61483	07/24/17
62502	05/23/13
62209	04/29/15
60312	05/22/10
61812	08/17/08
61602	05/02/08

DeZURIK
AFCO | HILTON
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

DOCT. CODE	DRAWN	APPROVED
C1	CHECKED	DATE
	SN	SN
	SN	12/05/05

A55403



MATERIALS OF CONSTRUCTION

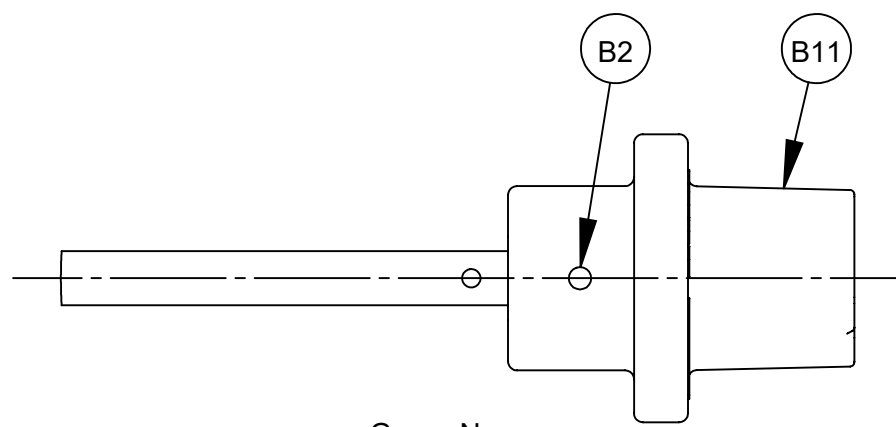
DRAWING(S): A55403

WORK ORDER: 143537

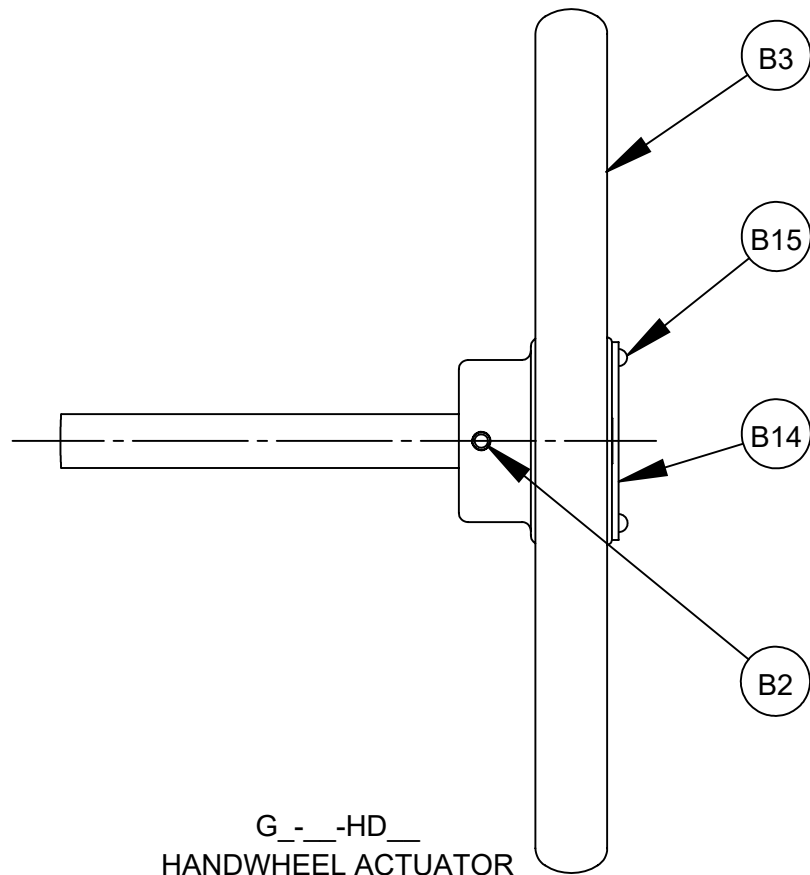
PART NO: 9725297

DESCRIPTION: PEF,3,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_--N
WRENCHING SQUARE ACTUATOR



G_--HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

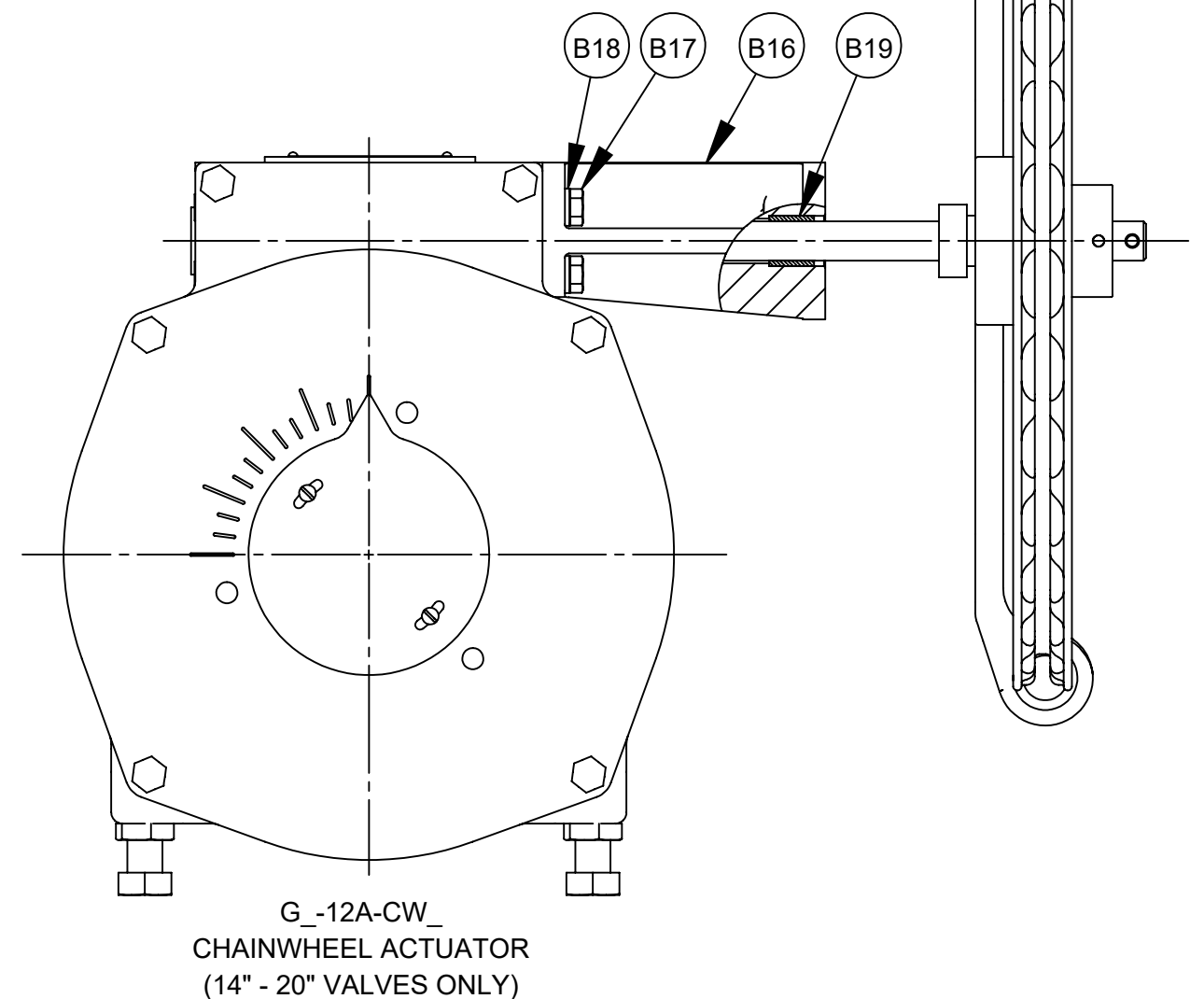
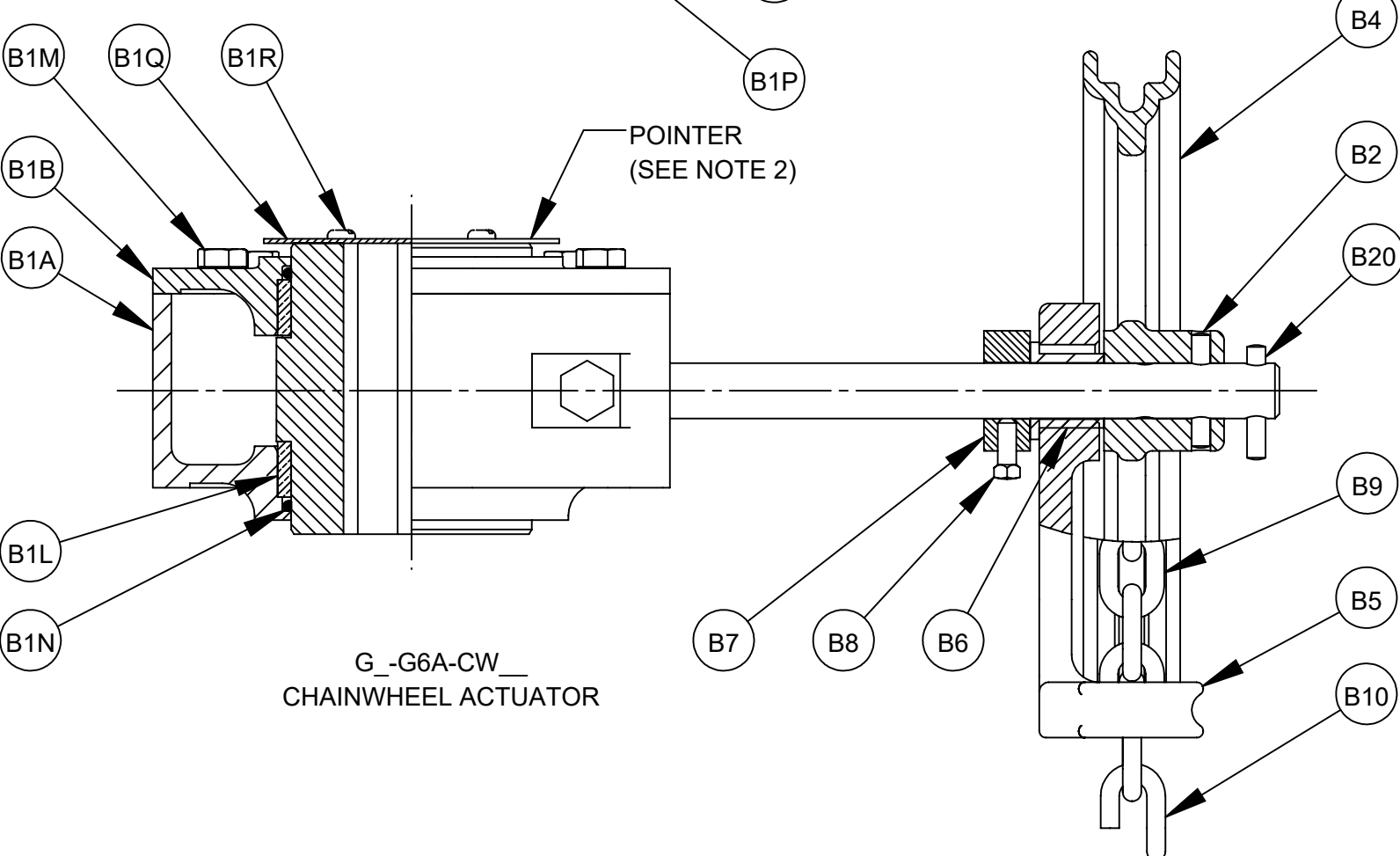
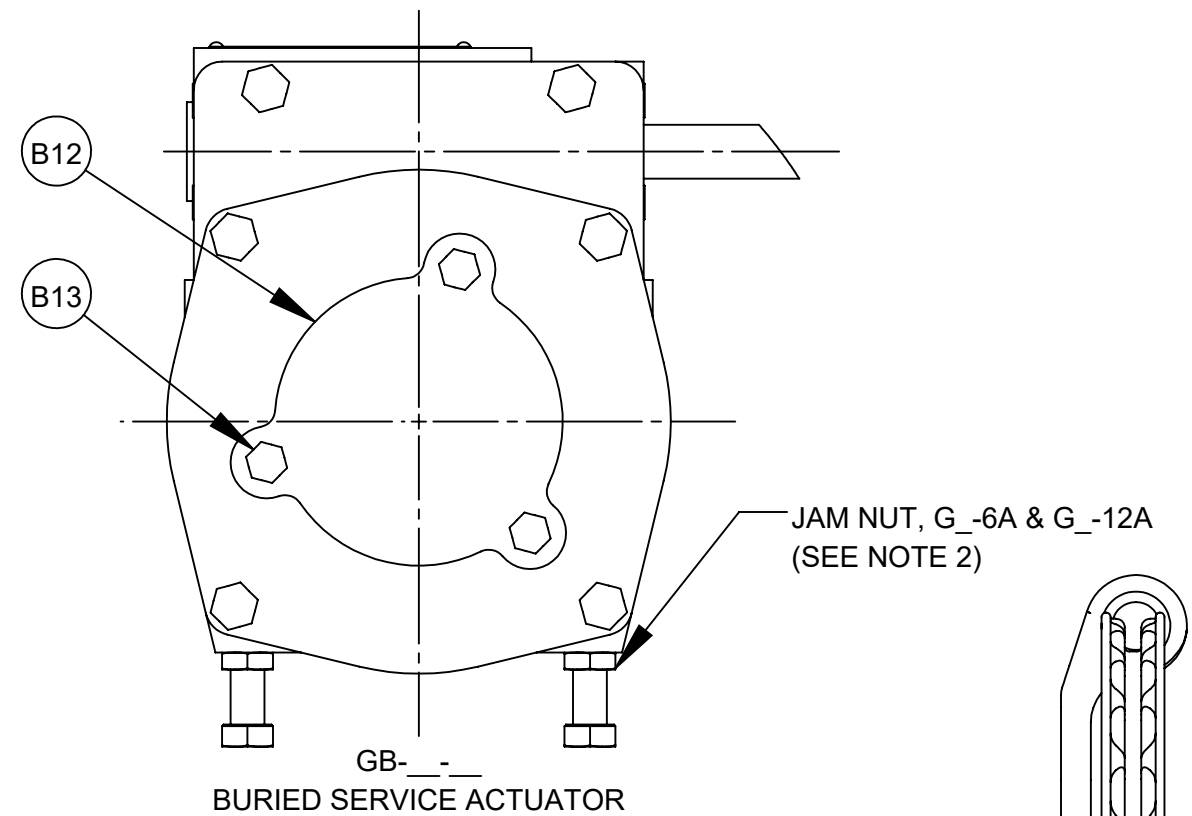
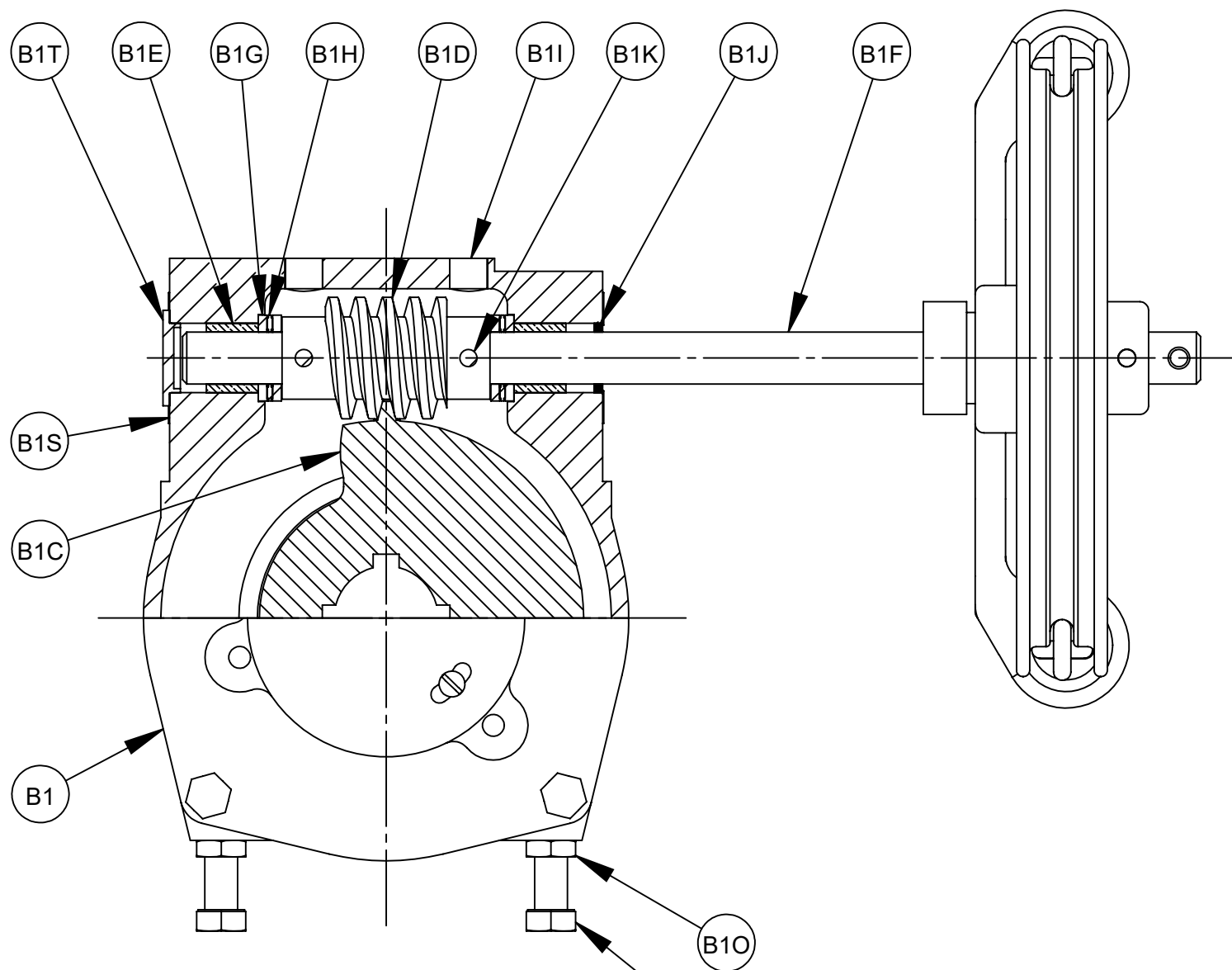
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



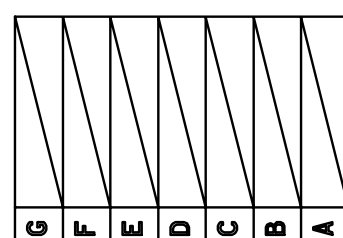
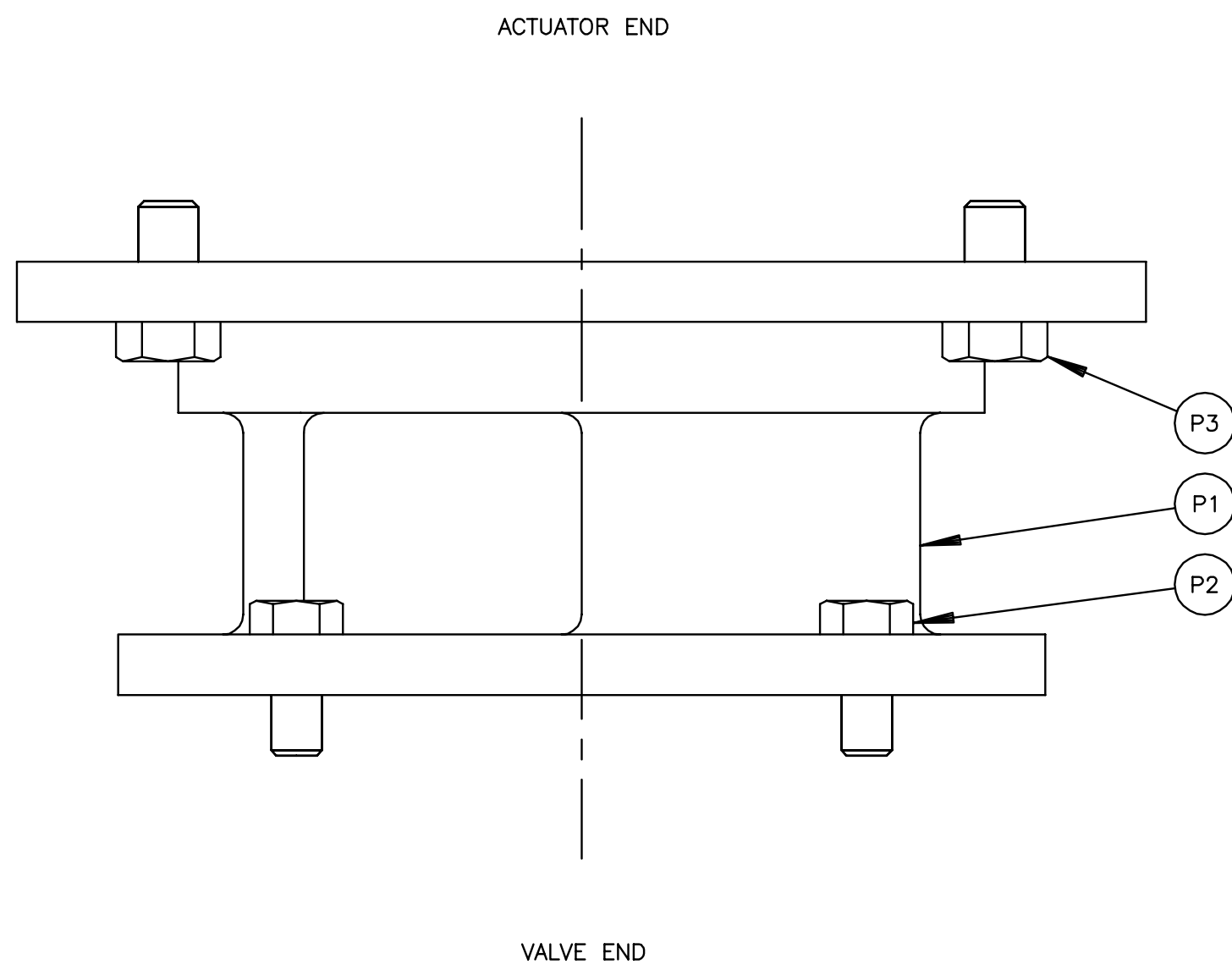
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_-A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418



Submittal Data Sheet

Date: 08/24/22

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA
30142

P.O. 21043-16
FACTORY ORDER NO 143537
FACTORY SALES ORDER NO 626555
REV 0

PROJ. NAME East Area WQCF

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9725297
21		1	PEF,3,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16	

Style	PEF	DEZURIK Eccentric 100% Port Plug Valve (AWWA C517)
Size	3	3 Inch (80mm); SST Bearings; Welded-in Nickel Seat
End Connection	F1	Flanged Drilling; ASME Class 125/150
Body Material	CI	Cast Iron
Packing	NBR	Acrylonitrile-Butadiene; Temperature to 250° F.
Plug & Facing	CR	Chloroprene; -20 to 180°F (-29 to 83°C)
Option	AIS	USA Iron & Steel
Coating	141SB0	12 mils minimum (non-stainless steel parts) of Blue Epoxy Tnemec 141 (NSF Std. 61) on Interior with SP5 surface prep and 4 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	GS-6A-CW8	G-Series Chainwheel; 8 In Dia
Accessories	SB16	316 SST Bolting

RELATED DOCUMENTS

A55463	DWG INST PEF F GS-6A-CW 3-12"
A55403	DWG VALVE ASSY PEF F1 3-20"
A55615	DWG ACT GS/GB-6A/12A-HD/CW/N
A55418	DWG CONN PARTS GS/GB-6A/12A PE
D10453	IM VALVE PEF 3-36"
D10456	IM ACT G-SERIES MANUAL FULL PO

FEATURES

TAG: PV4A - SPARE

EQUIPMENT DATA FORM (MAINTENANCE SUMMARY FORM)

PROJECT:	East Area WQCF		
PURCHASE ORDER:	21043-16		
EQUIPMENT ITEM:	3 Inch DeZURIK 100% Area Rectangular Port Eccentric Plug Valve		
EQUIPMENT / TAG NUMBERS:	TAG: PV4A - SPARE		
WEIGHT (APPROX.)	100 Lbs.		
MANUFACTURER: DeZURIK	WORK ORDER:	143537-21	
PART NUMBER:	9725297		
MANUFACTURER'S LOCAL REPRESENTATIVE:			
ECO TECH INC		Telephone:	770-345-2118
156 HICKORY SPRINGS IND DR, PO BOX 956, HOLLY SPRINGS, GA, 30142			
MOTOR DATA PLATE (HP, Voltage, Speed, etc.)			

MAINTENANCE REQUIREMENTS

- DeZURIK recommends exercising your valve every 30 days.
- Valve lubrication required upon disassembly only.
- For valve maintenance and lubrication refer to instruction manual(s): D10453
- For actuator maintenance and lubrication refer to instruction manual(s): D10456.

RECOMMENDED SPARE PARTS

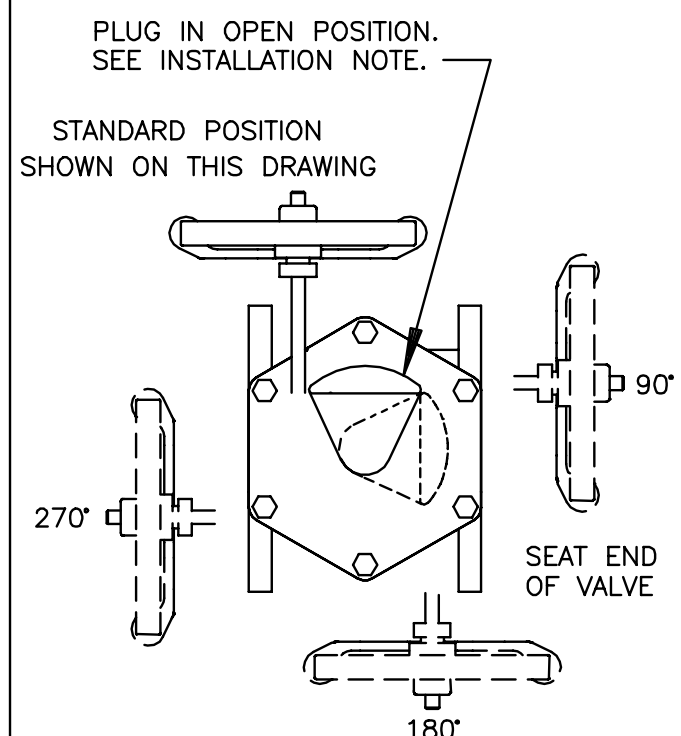
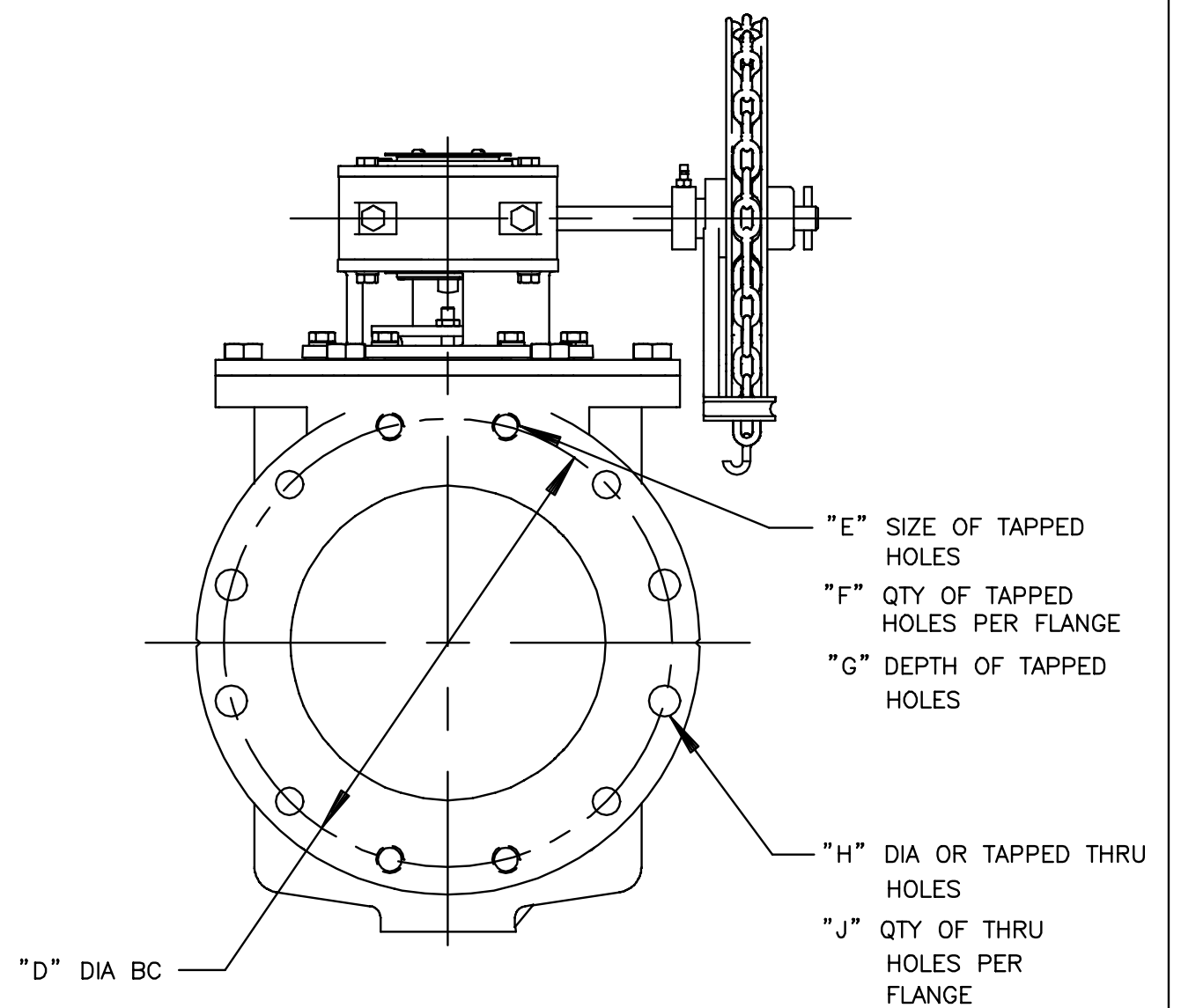
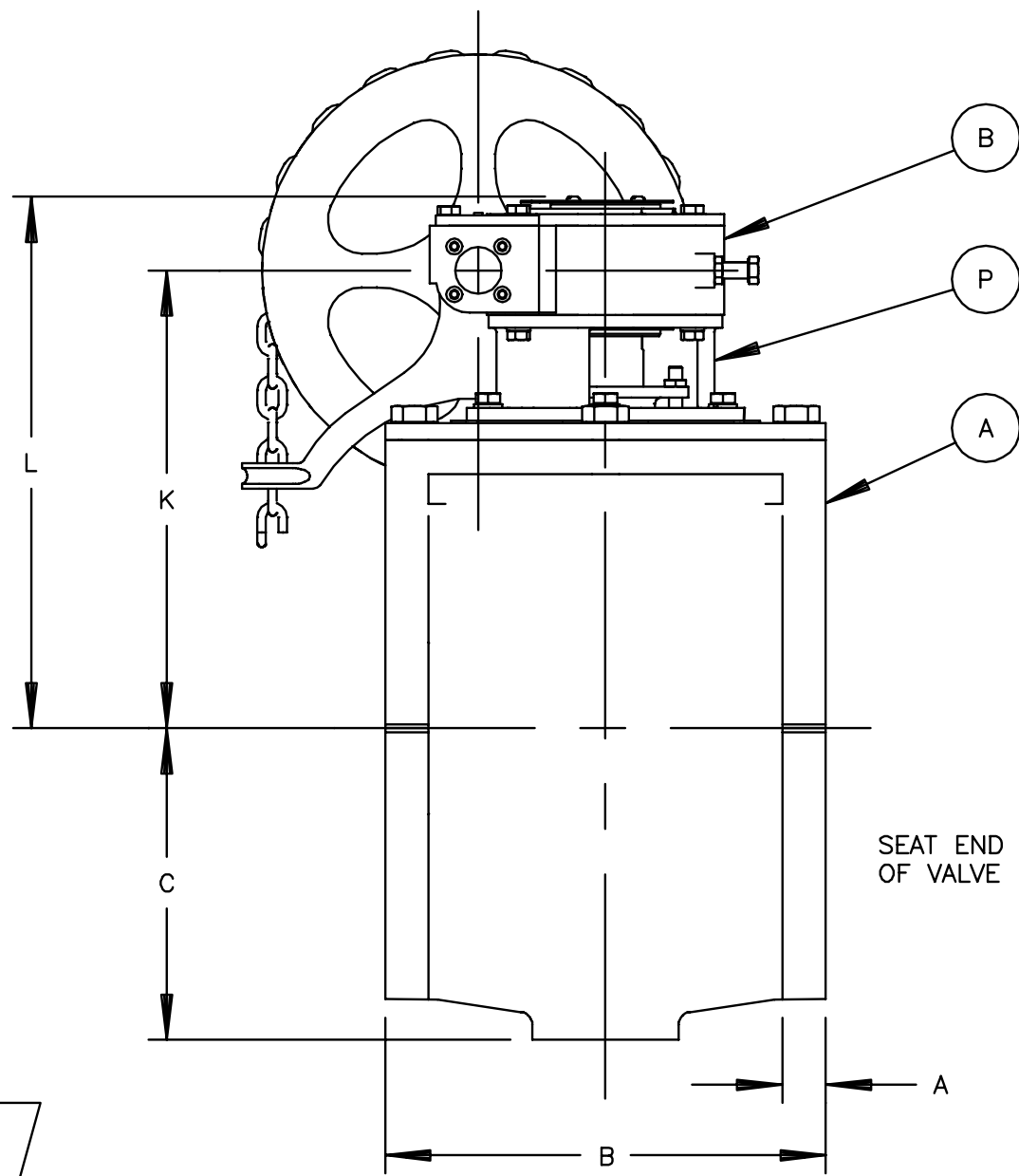
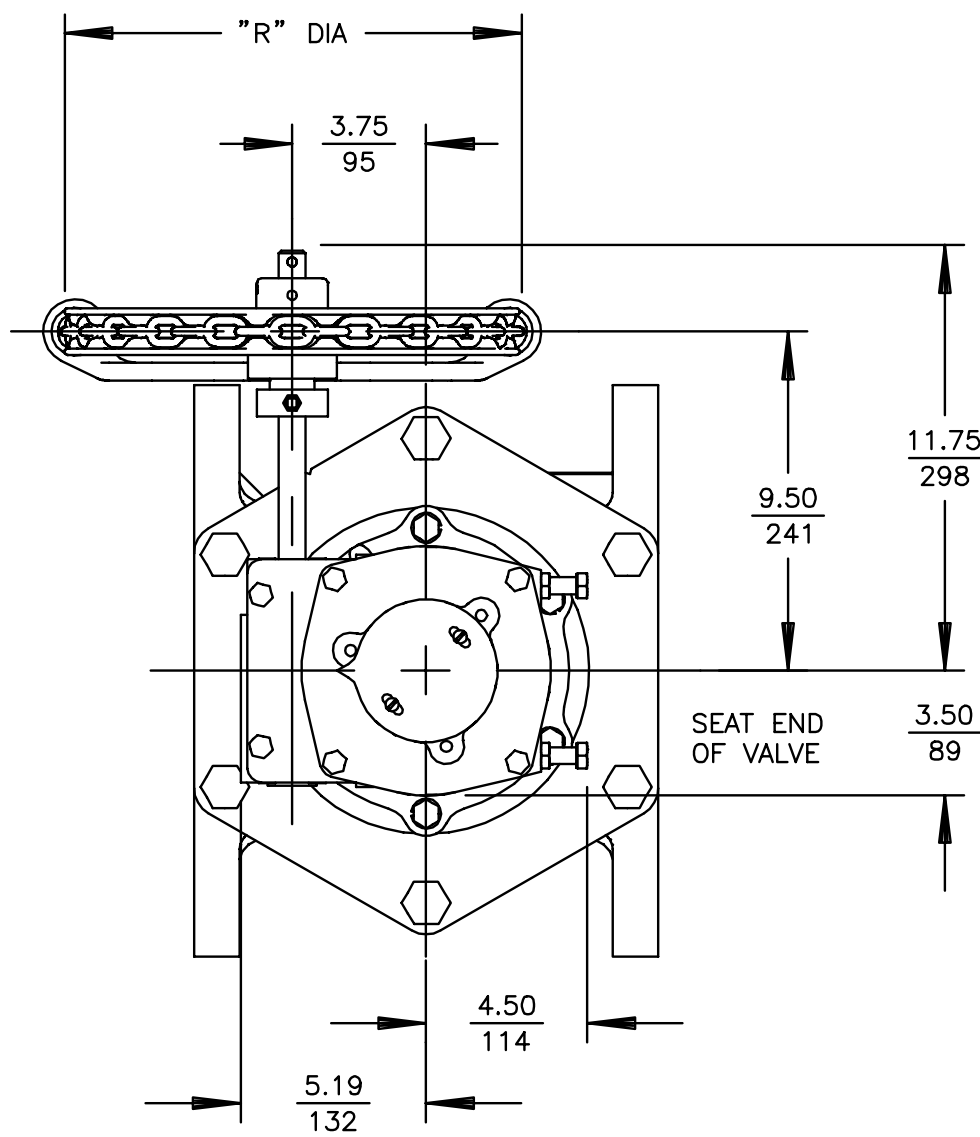
See Drawing(s) A55403. A55615.

PART NO.	DESCRIPTION:	QUANTITY	LINE
1390738	3" PLUG CR (RS16) PEF DI USA	1	A03
1361295	3&4" GRIT EXCLUDER PEF	2	A04
1002123	O-RING-256 5.73IDX6.01ODX.14CSDIA NBR	1	A05
1055745	PACKING ADPT MALE 1-1/4 ID	1	A09
1055760	PACKING PRESS RING 1-1/4 ID	4	A09
1055774	PACKING ADPT FEMALE 1-1/4 ID	1	A09
1014170	BRG FLG .752X1.002X1	1	B06
1013989	SEAL ROD TRANSCOM 07091VM .750ODX1.000IDX.	1	B1J
1248039	O-RING-236 3.23IDX3.51ODX.14CSDIA NBR	2	B1N

For current spare parts pricing, contact local manufacturer's representative listed above.

VALVE SIZE		DIMENSIONS <small>INCHES MILLIMETERS</small>										
INCH	MM	A	B	C	D	E	F	G	H	J	K	L
3	80	$\frac{.83}{21}$	$\frac{8.00}{203}$	$\frac{3.56}{90}$	$\frac{6.00}{152}$	5/8-11 UNC	4	$\frac{.81}{21}$	N/A	N/A	$\frac{8.00}{203}$	$\frac{10.19}{259}$
4	100	$\frac{1.02}{26}$	$\frac{9.00}{229}$	$\frac{4.43}{113}$	$\frac{7.50}{191}$	5/8-11 UNC	4	$\frac{.62}{16}$	$\frac{.75}{19}$	4	$\frac{8.62}{219}$	$\frac{10.81}{275}$
5	125	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{8.50}{216}$	3/4-10 UNC	4	$\frac{.69}{18}$	3/4-10 UNC	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
6	150	$\frac{1.04}{26}$	$\frac{10.50}{267}$	$\frac{5.79}{147}$	$\frac{9.50}{241}$	3/4-10 UNC	4	$\frac{.69}{18}$	$\frac{.88}{22}$	4	$\frac{9.75}{248}$	$\frac{11.94}{303}$
8	200	$\frac{1.23}{31}$	$\frac{11.50}{292}$	$\frac{7.65}{194}$	$\frac{11.75}{298}$	3/4-10UNC	4	$\frac{.75}{19}$	$\frac{.88}{22}$	4	$\frac{12.09}{307}$	$\frac{14.28}{363}$
10	250	$\frac{1.30}{33}$	$\frac{13.00}{330}$	$\frac{9.19}{233}$	$\frac{14.25}{362}$	7/8 - 9 UNC	8	$\frac{.66}{17}$	$\frac{1.00}{25}$	4	$\frac{13.50}{343}$	$\frac{15.69}{399}$
12	300	$\frac{1.36}{35}$	$\frac{14.00}{356}$	$\frac{11.53}{293}$	$\frac{17.00}{432}$	7/8 - 9 UNC	8	$\frac{.75}{19}$	$\frac{1.00}{25}$	4	$\frac{15.56}{395}$	$\frac{17.75}{451}$

ACTUATOR NUMBER	DIM <small>IN MM</small>
	R
GS-6A-CW8	$\frac{8.00}{203}$
GS-6A-CW12	$\frac{12.00}{305}$



ACTUATOR MOUNTING POSITIONS AS VIEWED FROM TOP OF VALVE. DOTTED LINES SHOW OPTIONAL MOUNTING POSITIONS.

A	VALVE
B	ACTUATOR
P	CONNECTING PARTS

NOTE:

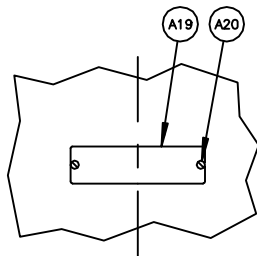
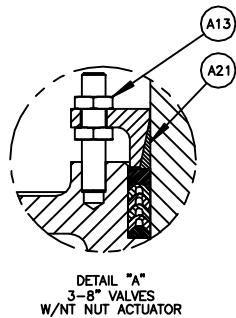
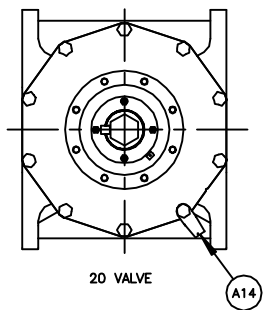
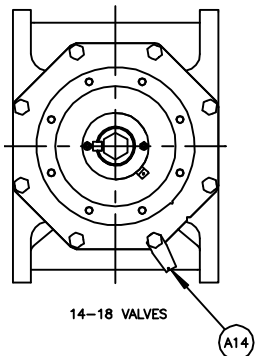
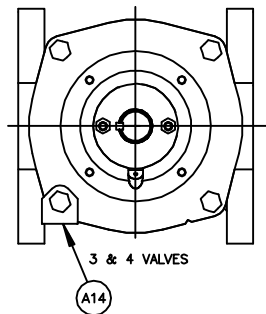
- FLANGES ARE FLAT FACED WITH THICKNESS, DIAMETER AND DRILLING TO CLASS 125 ANSI STANDARD B16.1, EXCEPT FOR TAPPED HOLES AS INDICATED. SEE A55467 FOR NON-ANSI FLANGE DATA.
- 13 TURNS OF CHAINWHEEL ARE REQUIRED TO OPEN VALVE.
- INSTALLATION NOTE:
 - FOR LIQUIDS & GASES: INSTALL VALVE WITH HIGHER PRESSURE AGAINST END OPPOSITE SEAT.
 - FOR SUSPENDED SOLIDS, SLURRIES, ETC: INSTALL VALVE WITH HIGHER PRESSURE AGAINST SEAT END. IN HORIZONTAL PIPELINES, VALVE SHOULD BE INSTALLED ON IT'S SIDE SO PLUG ROTATES TO THE TOP OF THE PIPELINE WHEN OPEN. (SEE DIAGRAM BELOW).

NOTICE
THIS DRAWING DOES NOT SHOW ACTUATOR ACCESSORIES. IF ACCESSORIES ARE REQUIRED, REFER TO THE APPROPRIATE ACCESSORY INSTALLATION DRAWING FOR DIMENSIONS AND OTHER RELATED INFORMATION.

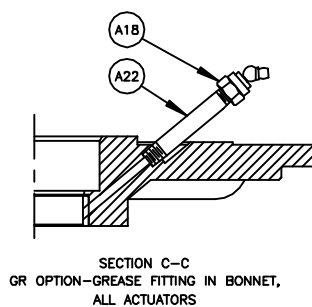
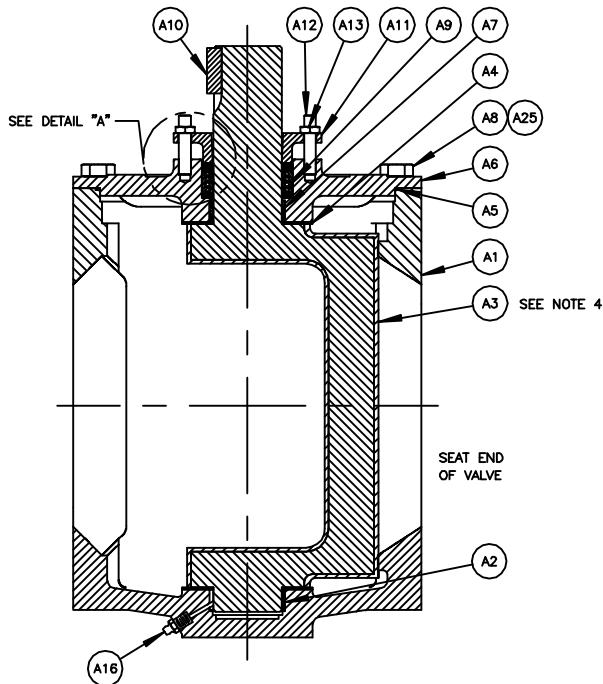
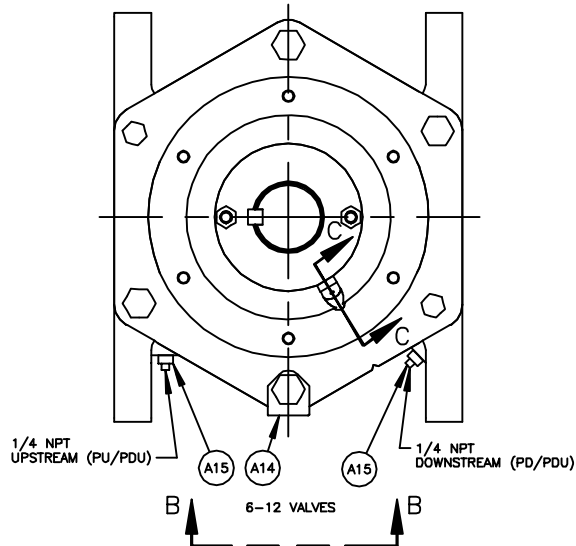
6	5	4	3	2	1	03/14/07
G	F	E	D	C	B	A

DeZURIK
Sartell, MN USA 56377
www.dezurik.com

PEF 100% PORT ECCENTRIC VALVES SIZE 3 - 12 FLANGED GS-6A-CW_ CHAINWHEEL ACTUATED					
DOCT. CODE	DRAWN	TC	APPROVED	SN	A55463
C1	CHECKED	SN	DATE	10/17/05	



VIEW B - B



NO	PART NAME	QTY
A1	BODY	1
A2	BEARING (BODY)	1
A3	PLUG	1
A4	GRIT EXCLUDER	2
A5	O-RING	1
A6	BONNET	1
A7	BEARING (BONNET)	1
A8	SCREW (3 & 4 VALVES)	4
A8	SCREW (5 - 12 VALVES)	6
A8	SCREW (14 & 18 VALVES)	8
A8	SCREW (20 VALVE)	10
A9	PACKING	-
A10	KEY (EXCEPT NT)	1
A11	GLAND	1
A12	STUD	2
A13	NUT (EXCEPT NT)	2
A13	NUT (NT)	4
A14	WARNING TAG	1
A15	PIPE PLUG (PU, PD OR PDU)	-
A16	GREASE FITTING (GR)	1
A17		
A18	GREASE FITTING (GR - WHEN REQUIRED)	1
A19	DATA PLATE	1
A20	DRIVE SCREW	2
A21	FRICITION CONE (NT)	1
A22	NIPPLE (GR - WHEN REQUIRED)	1
A25	WASHER (FUSION COATING) (3 & 4 VALVES)	4
A25	WASHER (FUSION COATING) (5-12 VALVES)	6
A25	WASHER (FUSION COATING) (14-18 VALVES)	8
A25	WASHER (FUSION COATING) (20 VALVES)	10

NOTE:

1. RECOMMENDED SPARE PARTS ARE ITEMS NUMBER A3, PLUG (IF RUBBER FACED), A4, A5 AND A9.
2. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.
3. CLOCKWISE ROTATION OF PLUG STEM CLOSES VALVE.
4. 3" - 8" PLUGS ARE THE ONLY SIZES FULLY RUBBER LINED.

Q	63486	05/07/17
F	61483	07/24/17
E	62502	05/23/13
D	62289	04/29/15
C	50312	05/22/10
B	61812	08/17/08
A	61802	05/02/08

DeZURIK
AFCO | HILTON
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DOCT. CODE	DRAWN	APPROVED
C1	CHECKED	DATE
	SN	SN
	SN	12/05/05

PEF 100% PORT ECCENTRIC VALVE ASSEMBLY
3-20, FLANGED

A55403



MATERIALS OF CONSTRUCTION

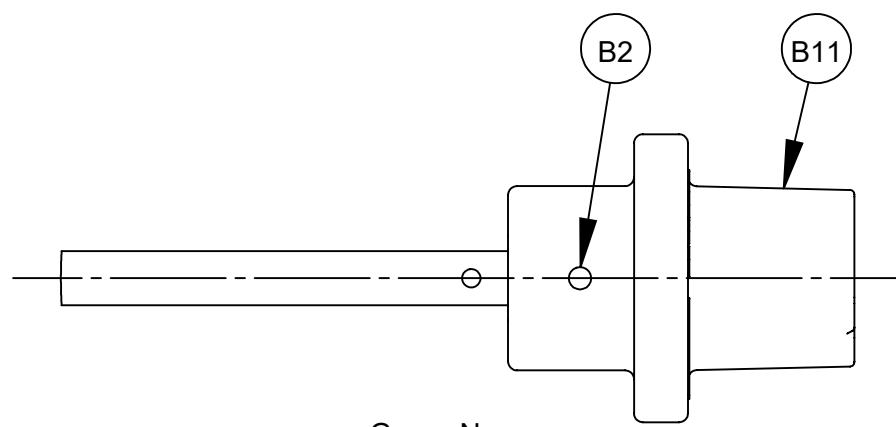
DRAWING(S): A55403

WORK ORDER: 143537

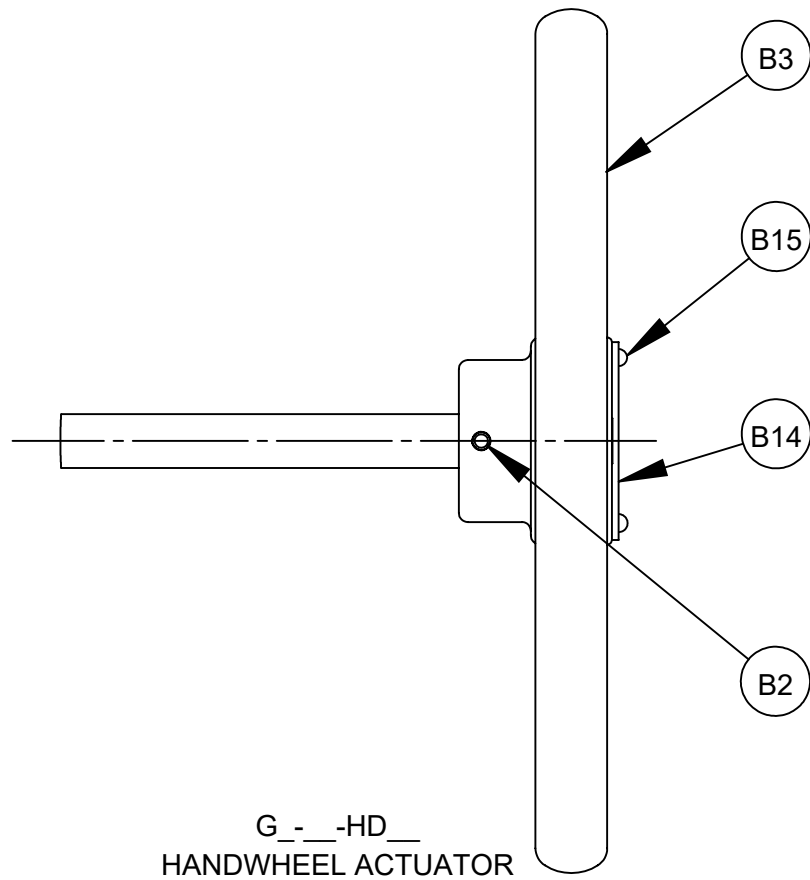
PART NO: 9725297

DESCRIPTION: PEF,3,F1,CI,NBR,CR,AIS-141SB0*GS-6A-CW8,SB16

ITEM	MATERIAL
A01	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A02	STAINLESS STEEL, TYPE 316L, SINTERED
A03	CHLOROPRENE (CR)
A03	DUCTILE IRON, ASTM A536, GRADE 65-45-12, USA FOUNDRY
A04	VIRGIN PTFE
A05	ACRYLONITRILE-BUTADIENE (NBR)
A06	IRON, ASTM A126, CLASS B, HARDNESS TEST, USA FOUNDRY
A07	STAINLESS STEEL, TYPE 316L, SINTERED
A08	STAINLESS STEEL, TYPE 316
A09	ACRYLONITRILE-BUTADIENE (NBR)
A10	STEEL, COLD DRAWN, AISI 1018
A11	IRON, ASTM A126, CLASS B
A12	STAINLESS STEEL, TYPE 316
A13	STAINLESS STEEL, TYPE 316
A14	STAINLESS STEEL, SERIES 300
A19	STAINLESS STEEL, TYPE 316
A20	STAINLESS STEEL, TYPE 18-8



G_-_-N
WRENCHING SQUARE ACTUATOR



G_-_-HD
HANDWHEEL ACTUATOR

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.

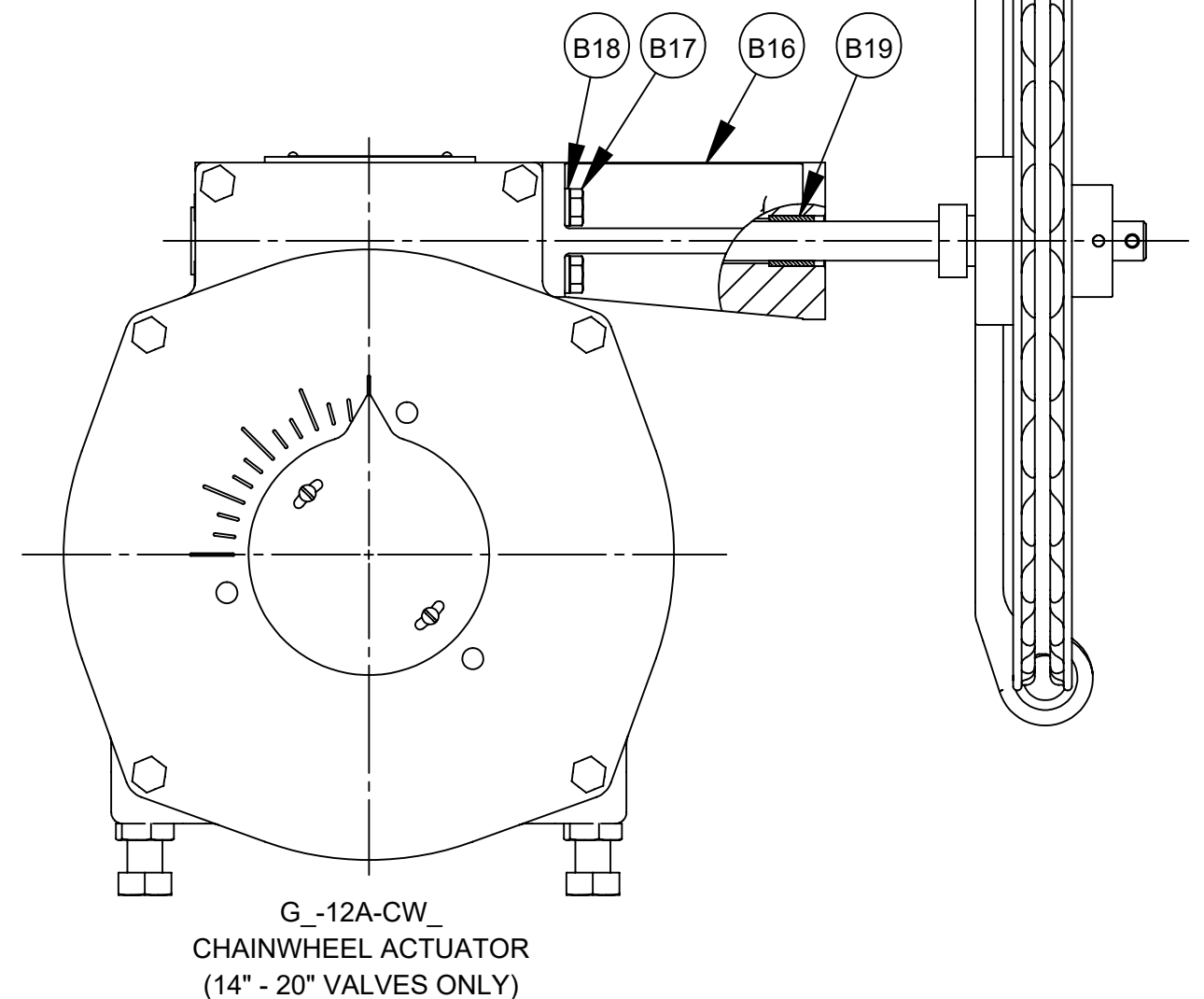
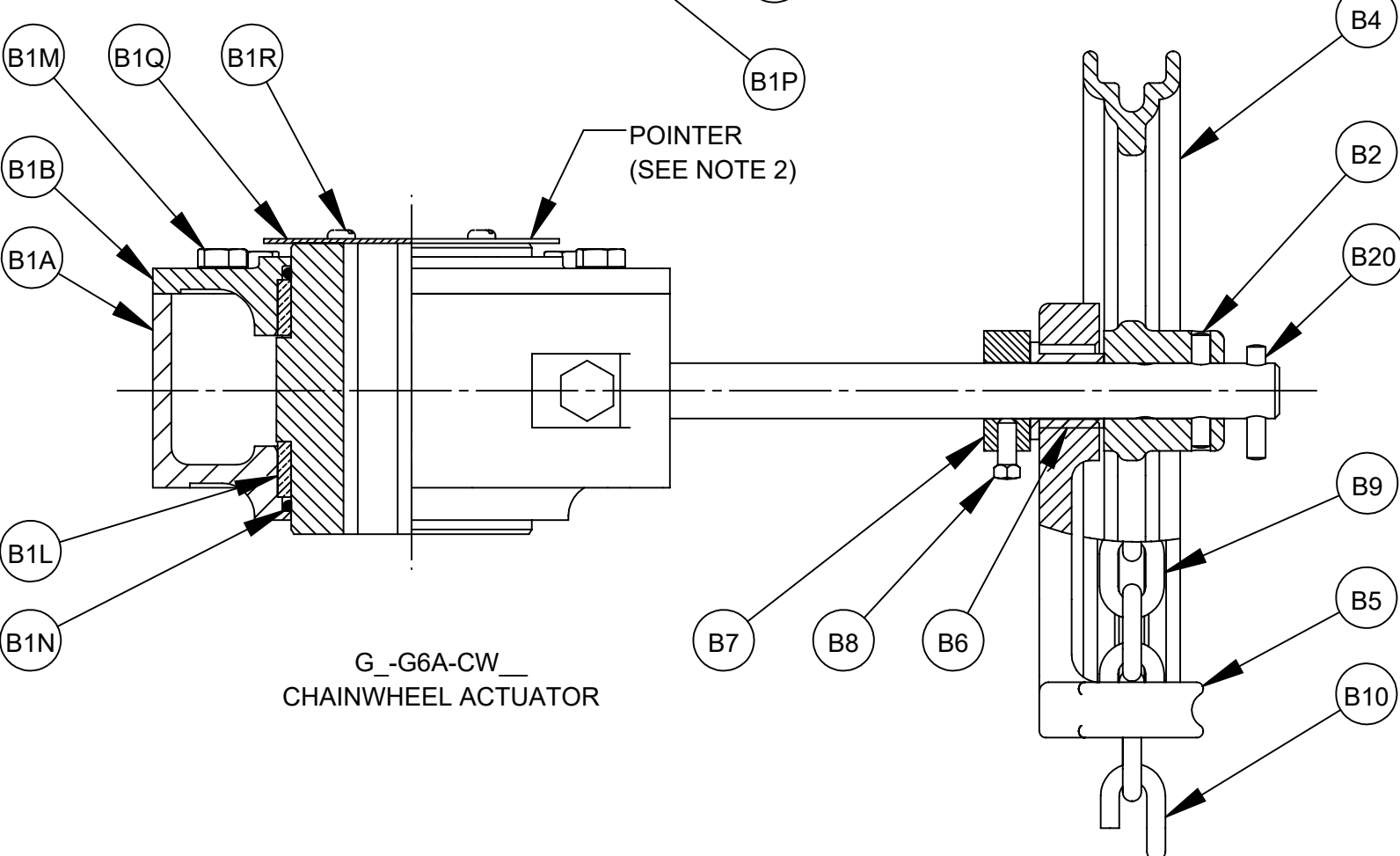
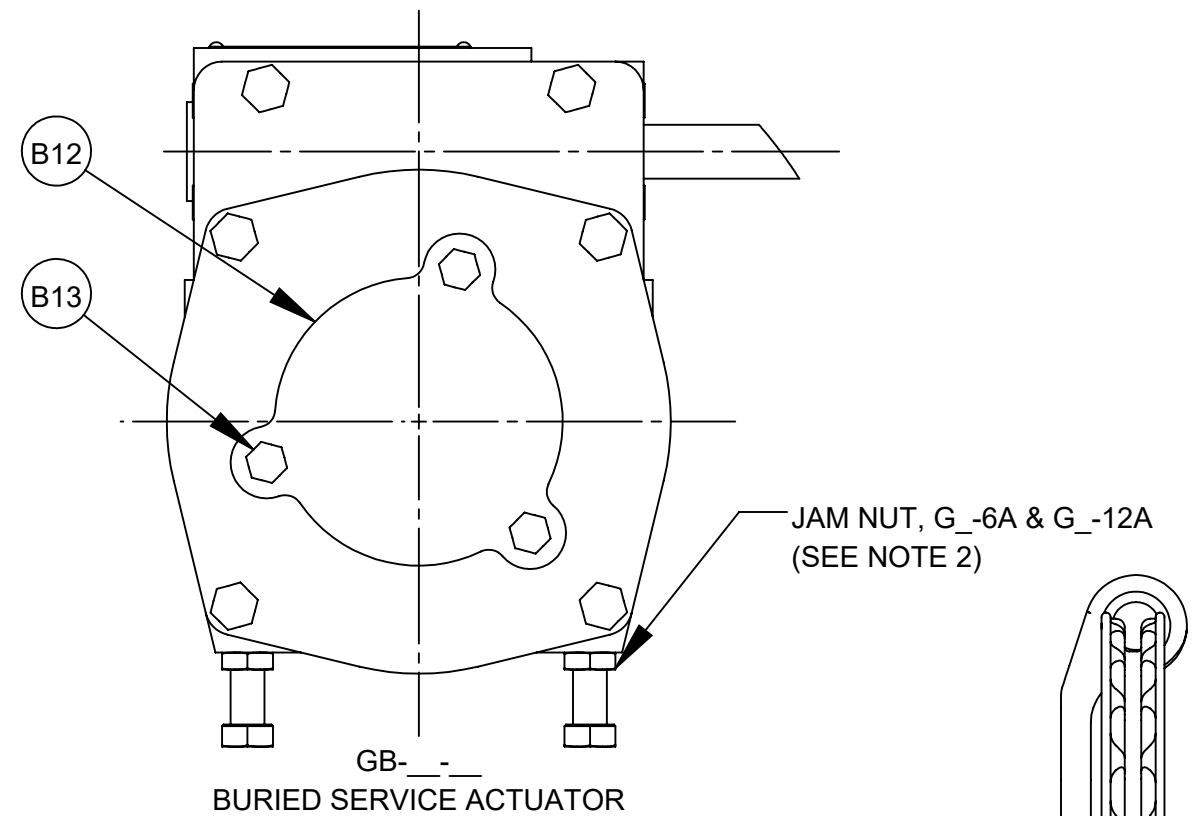
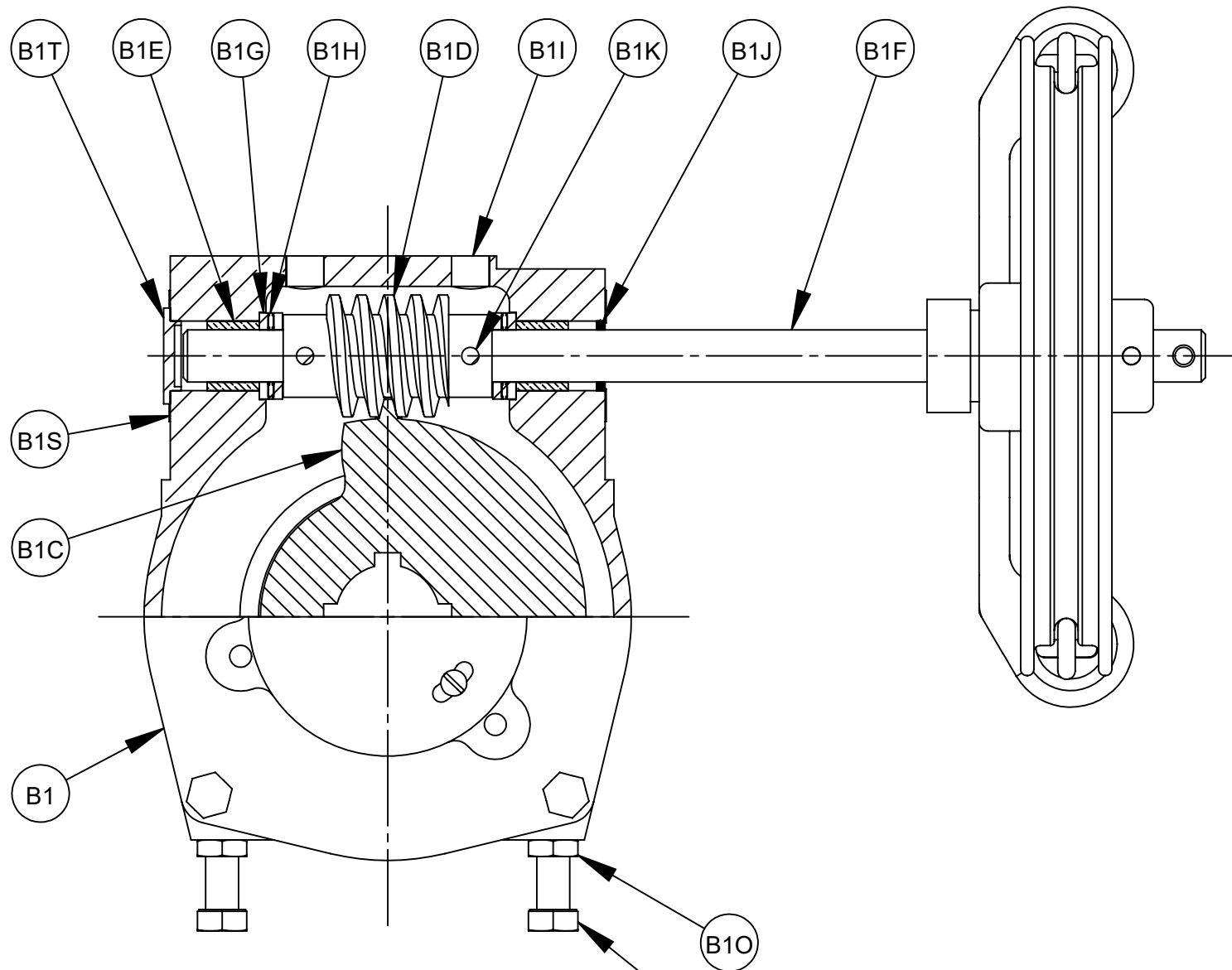
2. TO CONVERT GS-(WEATHER PROOF) ACTUATOR TO GB-(BURIED SERVICE) ACTUATOR:

A. REMOVE POINTER.

B. APPLY A BEAD OF SILICONE SEALANT DOW RTV-732 (1055515) TO ACTUATOR MATING SURFACE OF COVER (B12), ASSEMBLE TO ACTUATOR AND ATTACH WITH SCREWS (B13).

C. BEFORE ADJUSTING ACTUATOR STOPS (B1P), LOOSEN JAM NUTS (B10) AND APPLY 2 WRAPS OF STRING PACKING (1013701) TO THE ACTUATOR STOP THREADS BETWEEN JAM NUTS AND ACTUATOR (B1).

NO	DESCRIPTION	QTY
B1	ACTUATOR ASSEMBLY	1
B1A	HOUSING	1
B1B	COVER	1
B1C	GEAR	1
B1D	WORM GEAR	1
B1E	BEARING	2
B1F	DRIVE SHAFT	1
B1G	BEARING RACE	4
B1H	THRUST BEARING	2
B1I	PIPE PLUG	2
B1J	SEAL	1
B1K	PIN	2
B1L	BEARING	2
B1M	SCREW	6
B1N	O-RING	2
B1O	NUT	2
B1P	SCREW	2
B1Q	POINTER	1
B1R	SCREW	2
B1S	PLUG	11
B1T	PLUG	1
B2	PIN (HANDWHEEL & WRENCHING SQUARE)	1
B2	PIN (CHAINWHEEL)	1
B3	HANDWHEEL	1
B4	CHAINWHEEL	1
B5	CHAIN GUIDE	1
B6	BEARING	1
B7	COLLAR	1
B8	SET SCREW	1
B9	CHAIN	-
B10	CLOSING LINK	1
B11	WRENCHING SQUARE	1
B12	COVER (BURIED SERVICE ONLY)	1
B13	SCREW (BURIED SERVICE ONLY)	3
B14	OPEN TAG (24", 30" & 36" HANDWHEEL ONLY)	1
B15	DRIVE SCREW (24", 30" & 36" HANDWHEEL ONLY)	2
B16	ADAPTOR	1
B17	SCREW	4
B18	LOCKWASHER	4
B19	BEARING	1
B20	PIN (CHAINWHEEL)	1



	6/28/19	03/08/16	06/28/13	07/15/09	01/05/09	05/20/08
G	50312	63180	50312	61790	50312	61613
F						
E						
D						
C						
B						
A						



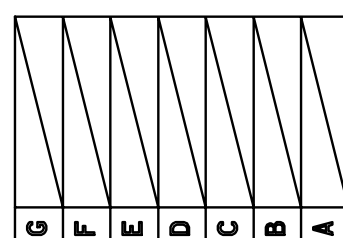
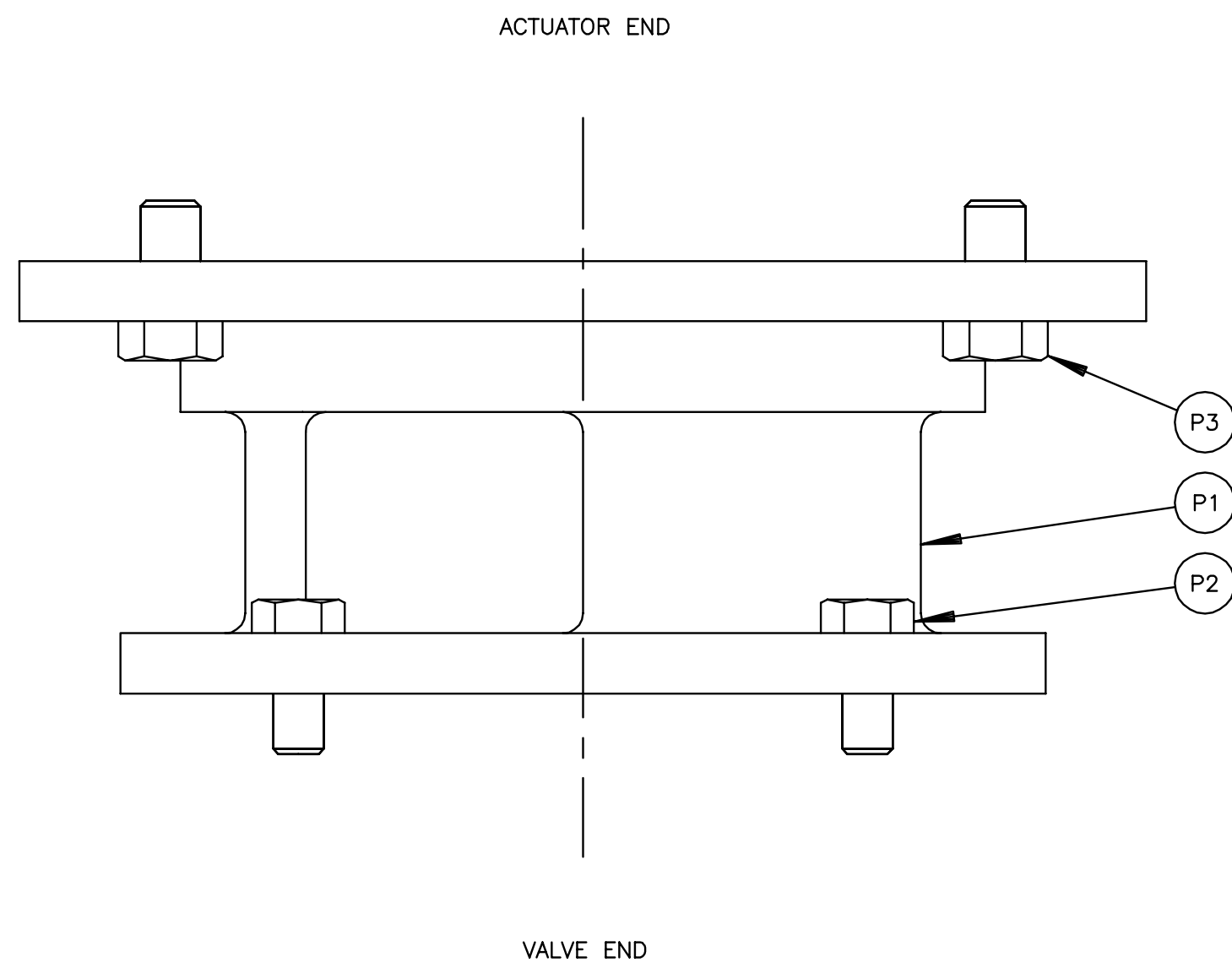
GS-6A, GB-6A, GS-12A & GB-12A MANUAL ACTUATORS WITH CHAINWHEEL, HANDWHEEL AND WRENCHING SQUARE (NUT)			
DOCT. CODE	DRAWN	TC	APPROVED
C1	CHECKED	SN	DATE
			12/16/05

A55615

NO	PART NAME	QTY
P1	ADAPTOR	1
P2	SCREW (3 & 4 VALVES)	4
P2	SCREW (5 - 12 VALVES)	6
P2	SCREW (14 - 20 VALVES)	8
P3	SCREW	4

NOTE:

1. WHEN ORDERING PARTS, INCLUDE VALVE SIZE AND PART NUMBER FROM DATA PLATE. ALSO INCLUDE THIS DRAWING NUMBER WITH PART NAME, NUMBER AND QUANTITY.



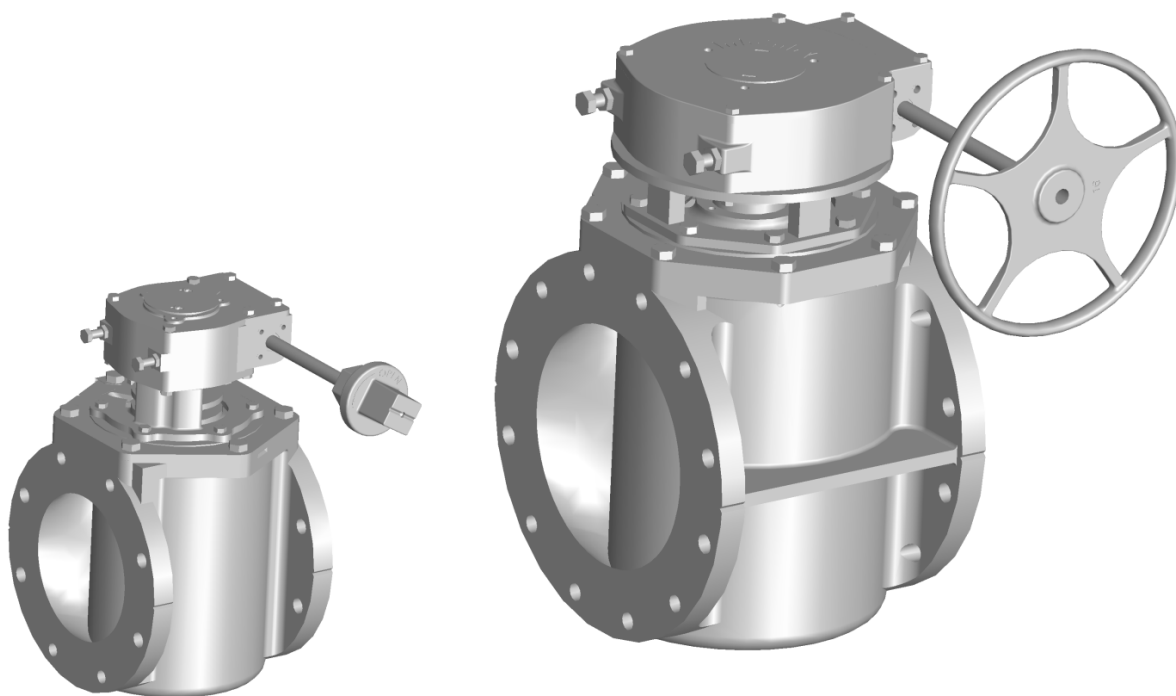
DeZURIK
Sartell, MN USA 56377
www.dezurik.com

CONNECTING PARTS FOR G_--A MANUAL ACTUATORS
FOR USE WITH PEF ECCENTRIC PLUG VALVES

DOCT. CODE	DRAWN	TC	APPROVED	SN
C1	CHECKED	SN	DATE	11/02/05

A55418

DEZURIK 3-36" PEF 100% PORT ECCENTRIC PLUG VALVES



Instruction D10453
February 2019

DeZURIK

3-36" PEF 100% Port Eccentric Plug Valves*

Instructions

These instructions provide information about PEF 100% Port Eccentric Plug Valves. They are for use by personnel who are responsible for installation, operation and maintenance of PEF 100% Port Eccentric Plug Valves.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your PEF 100% Port Eccentric Plug Valve has been packaged to provide protection during shipment, however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your local DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

* Patent Applied For

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Description

The 3- 36" PEF 100% Port Eccentric Plug Valves have welded nickel seats that provide excellent resistance to corrosion and damage, and prolong the life of the resilient plug facing. The valve rotates 90 degrees from full open to full closed. Clockwise rotation of the valve stem closes the valve.

If an actuator other than a DeZURIK is to be mounted, the actuator must be capable of seating and unseating the plug and maintaining the valve plug position with flow in the pipeline.



WARNING!

This valve is a pressure vessel. Failure to release pipeline pressure may result in personal injury and/or flow system damage. Completely release pipeline pressure before removing the actuator from the valve or removing the valve from the pipeline.

Handling

Lifting the valve improperly may damage it. Do not fasten lifting devices to the actuator, plug or through the seat opening in the body. Lift the valve with slings, chains or cables fastened around the valve body, or fastened to bolts or rods through bolt holes in the flanges.

Required Tools

This valve is assembled using only metric fasteners. To service this valve, you should have a full set of combination wrenches, Allen wrenches, a large flat tipped screwdriver, a flat pry bar, a pin punch and a dead blow hammer.

Note: You may want to machine a shaft to aid you in removing the lower bearing from the body. See "Disassembly" section.

Fusion/Powder Coated Valves



CAUTION!

Valves with fusion/powder coated exterior paint require flat washers to be installed under the flange nuts when installing the valve to the pipeline flange to prevent the paint from cracking or chipping.

Installation

The type of materials carried in the pipeline and the location of the valve determine the correct installation procedure.

Rust Veto may be removed with the use of Houghton Kleensol #4 or petroleum solvent.

Liquids without Suspended Solids and Clean Gases

1. Before installation, remove foreign material such as weld spatter, oil, grease, and dirt from the pipeline.
2. Prepare pipe ends and install valves in accordance with the pipe manufacture's instructions for the joint used.

Note: See Figure 1 for proper valve orientation.



CAUTION!

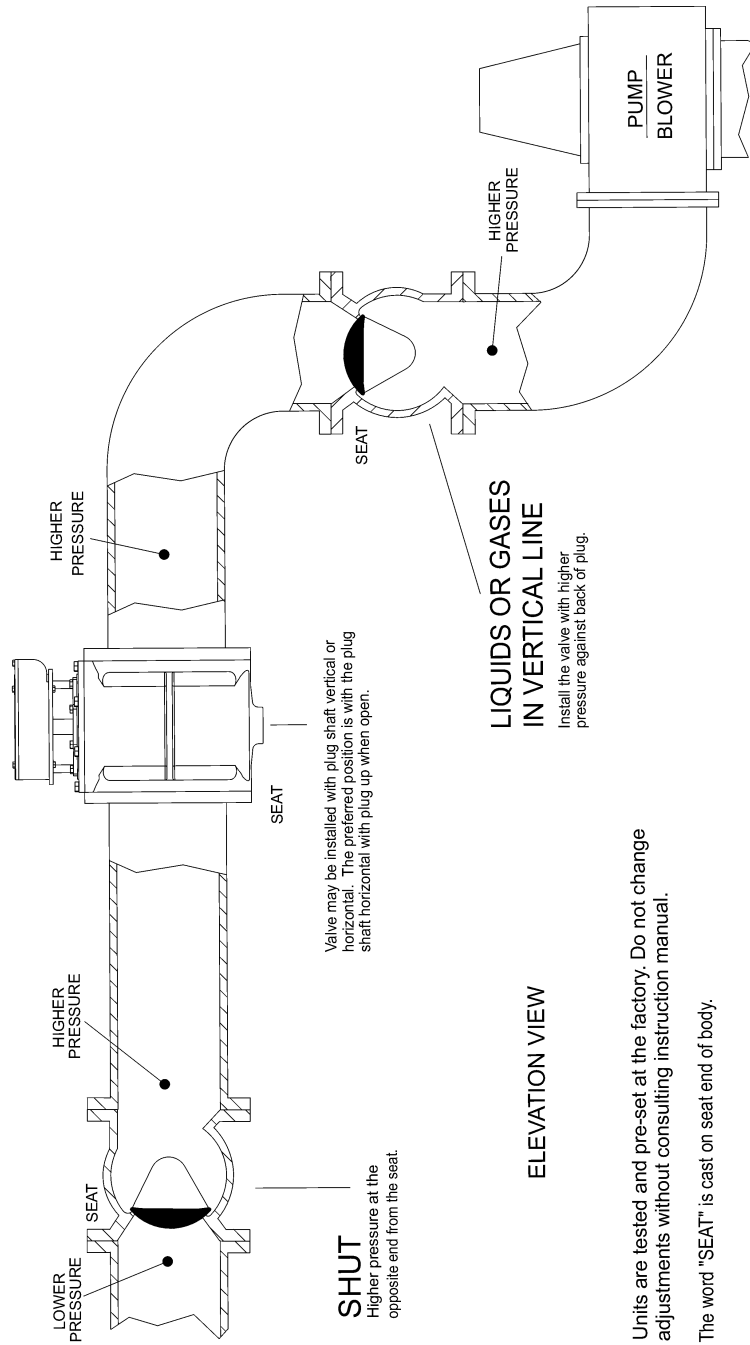
Do not deflect the pipe-valve joint. Minimize bending stresses in the valve end connection with pipe loading.

3. Ensure the valve and flanges are concentric to ensure proper flange sealing.
4. Tighten the flange bolts or studs in a crisscross pattern.

Installation (Continued)

INSTALLATION - Liquids without Suspended Solids and Clean Gases

The proper installation of a DeZURIK PEF 100% Eccentric Plug Valve in clean liquids & gases applications is with the higher pressure against the end opposite the seat



- NOTE - 1. Units are tested and pre-set at the factory. Do not change adjustments without consulting instruction manual.
2. The word "SEAT" is cast on seat end of body.

Figure 1—Liquids without Suspended Solids and Clean Gases

Installation *(Continued)****Liquids with Suspended Solids and Dirty Gases***

If the pipeline carries suspended solids such as paper stock of 2 percent or higher consistency, mining slurry, or raw sewage:

1. Before installation, remove foreign material such as weld spatter, oil, grease, and dirt from the pipeline.
2. Prepare pipe ends and install valves in accordance with the pipe manufacture's instructions for the joint used.

Note: See Figure 2 for proper valve orientation.

- a. In HORIZONTAL pipelines, install the valve so that the plug is horizontal and rotates upward as the valve opens.
- b. For VERTICAL pipelines, install the valve with the end marked "SEAT" at top of valve.

**CAUTION!**

Do not deflect the pipe-valve joint. Minimize bending stresses in the valve end connection with pipe loading.

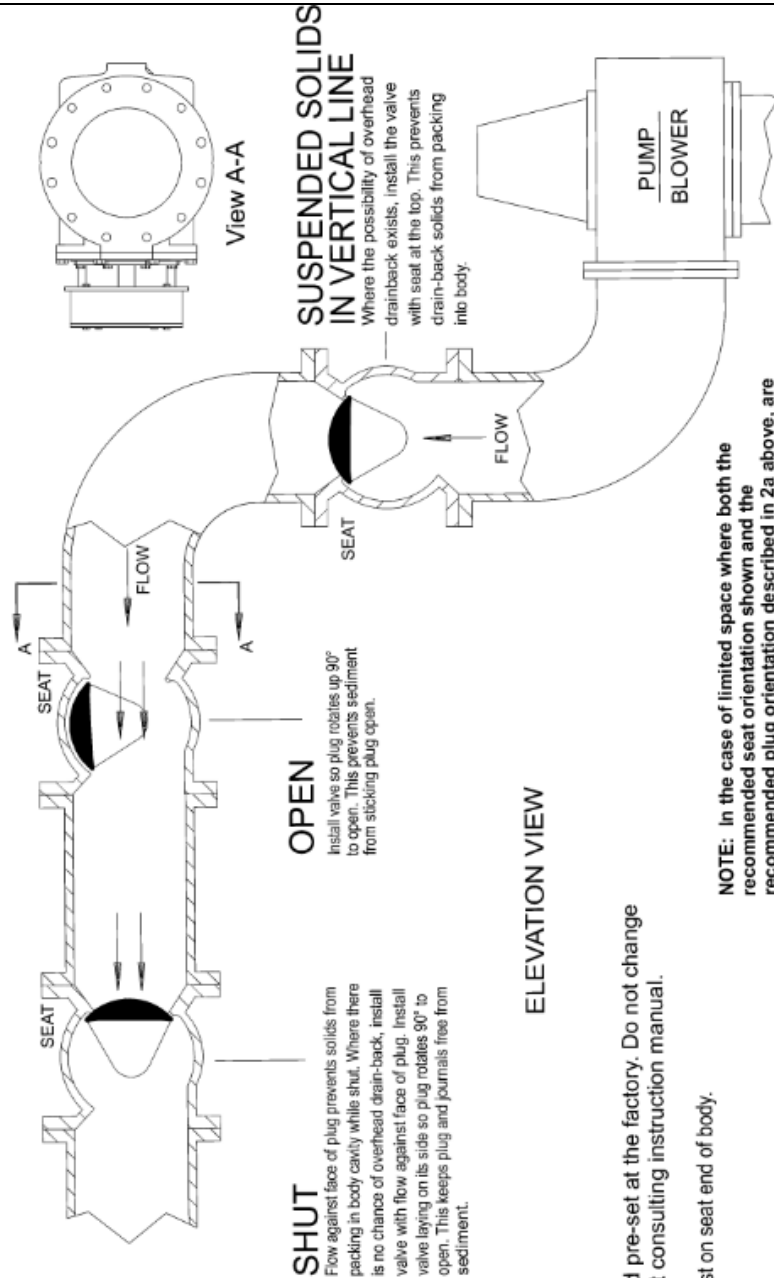
3. Ensure the valve and flanges are concentric to ensure proper flange sealing.
4. Tighten the flange bolts or studs in a crisscross pattern.

Installation (Continued)

INSTALLATION - Liquids with Suspended Solids and Dirty Gases

The proper installation of a DeZURIK PEF 100% Eccentric Plug Valve in suspended solids applications such as mining slurries, raw sewage or paper stock of 2% or more consistency is critical to prevent solids from packing into the valve body, restricting the plug movement. This can be accomplished by

installing the valve with the flow against the face of the plug in the closed position and the valve on its side with the plug rotating to the top of the pipeline in the open position. For pump isolation service, install the valve with the seat side opposite the pump and with the plug rotating to the top of the pipeline in the open position. On the suction side, install the valve with the seat toward the pump.



NOTE - 1. Units are tested and pre-set at the factory. Do not change adjustments without consulting instruction manual.

2. The word "SEAT" is cast on seat end of body.

NOTE: In the case of limited space where both the recommended seat orientation shown and the recommended plug orientation described in 2a above, are not possible, the recommended plug position shall always take precedence.

Figure 2—Liquids with Suspended Solids and Dirty Gases

Actuator Stop Adjustments

Closed Position

Because of the eccentric action of this valve, the closed position of the valve is dependent upon the pressure drop expected when the valve is closed. To adjust the valve closed position, follow these steps:



WARNING!

This valve is a pressure vessel. The bonnet will blow off the valve if the bonnet bolts are removed with pressure in the valve and pipeline media can be hazardous. Completely release pressure before disassembling the valve.

1. Relieve pipeline pressure.



WARNING!

Moving parts from accidental operation of power actuator can cause personal injury or equipment damage.

Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.
3. Back off the actuator closed position stop as described in the Actuator Instructions.
4. Close the valve with the torque specified in the Actuator Instructions.
Note: This torque is the amount required to seat the plug for a given pressure drop across the valve. To avoid excessive plug and seat wear caused by over torquing, use the actual pressure drop across the valve when determining correct closing torque.
5. After the valve has been closed using the correct amount of torque, set the actuator closed position stop to limit actuator travel at this position.

Lubrication

This valve does not require routine maintenance lubrication, except for special application. If the valve is disassembled, lubricate the packing and the plug journals as follows:

Packing

Packing lubrication requirements are dependent upon the packing material.

- PTFE PACKING: Requires no lubrication.
- ALL PACKING OTHER THAN PTFE:
Apply a light coat to the inside and outside diameters of the packing rings using one of these lubricants.
 - Lubriplate Clearplex-2 (**recommended**)
 - Amoco FG (alternate)
 - Mobilgrease FM 101 (alternate)
 - Petro-Canada Purity FG 2 (alternate)
 - Phillips Philube PF (alternate)

Note: Ensure lubricant is compatible with flow media.

Lubrication *(Continued)***Plug Journals**

Plug journal lubrication is dependent upon the materials used in construction of the valve.

- CAST IRON VALVES: Lubricate the journals on the plug using one of these lubricants.
 - Lubriplate Clearplex-2 (**recommended**)
 - Amoco FG (alternate)
 - Mobilgrease FM 101 (alternate)
 - Petro-Canada Purity FG 2 (alternate)
 - Phillips Philube PF (alternate)

Note: Ensure lubricant is compatible with flow media.

Thrust Washers and O-rings

Apply a light coat to all surfaces of thrust washers and O-rings using one of these lubricants.

- Lubriplate Clearplex-2 (**recommended**)
- Phillips Philube PF (alternate)
- Mobilgrease FM 101 (alternate)
- Amoco FG (alternate)

Note: Ensure lubricant is compatible with flow media.

Packing Adjustment

The stem seal tightening procedure is dependent upon the type of actuator on the valve. If a packing leak should occur, tighten the packing as follows:

3" – 8" Lever and Nut Operated Valves

Table A: Actuating Torque

Valve Size		Actuating Torque	
		Standard Packing	
in	mm	ft lbs	Nm
3 & 4	100	28	37
5 & 6	125-150	60	81
8	200	104	141

All Other Actuators

Tighten the gland nuts evenly only until the leak stops.

Note: Do not continue tightening after leak stops. If packing leak cannot be stopped by tightening the gland nuts, the packing must be replaced.

3-36" PEF 100% Port Eccentric Plug Valves

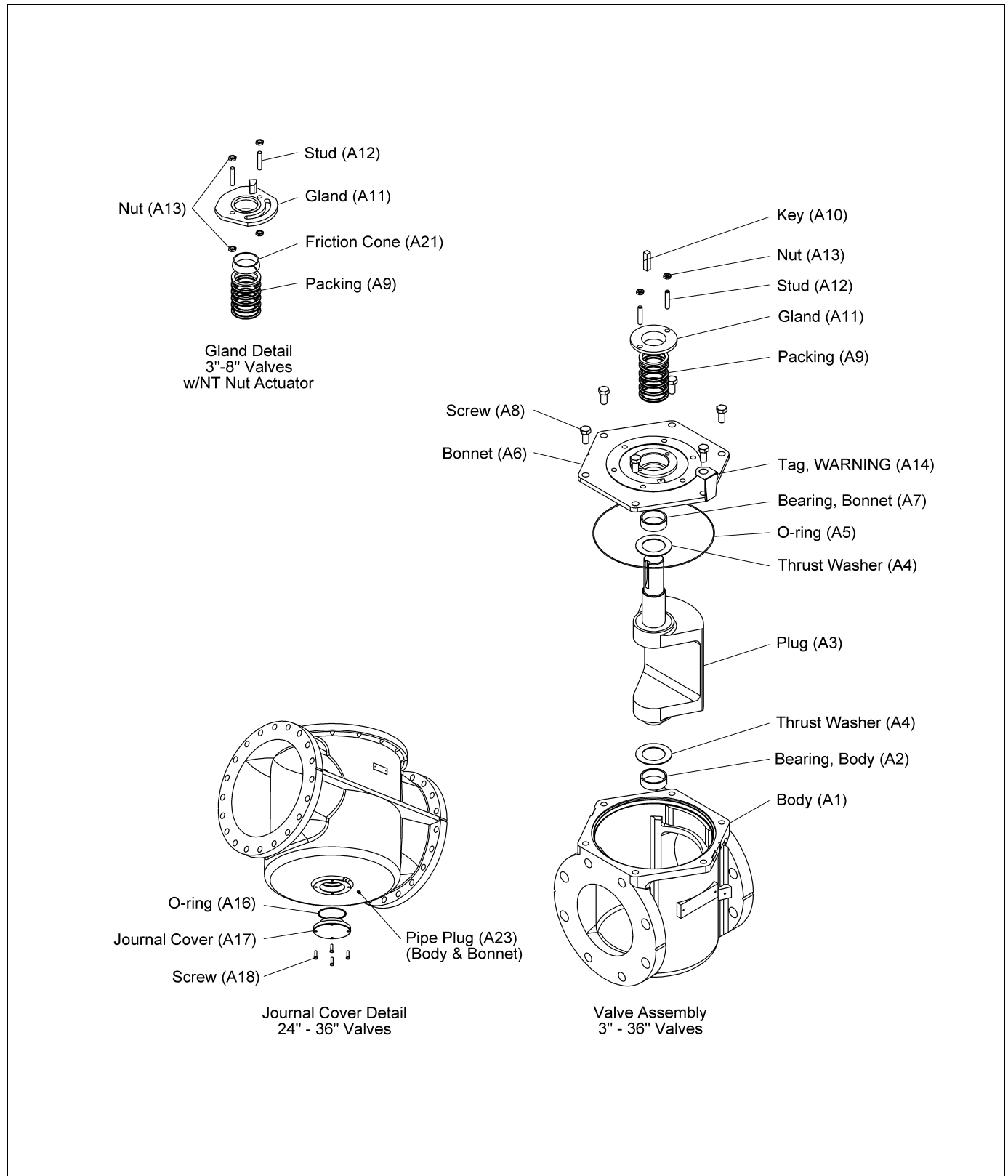


Figure 3—Parts Identification

Packing Replacement

Replacing Packing with Actuator Removed

To replace the packing without removing actuator, see the “Replacing Packing Without Removing Actuator” section.

See Figure 3 for parts identification.

1. Discontinue pipeline flow and relieve pipeline pressure.
2. Scribe the actuator and valve bonnet for alignment when reassembling.



WARNING!

Moving parts from accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

3. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.



WARNING!

When an eccentric valve is mounted in a vertical pipeline—or mounted in a horizontal pipeline with the plug stem horizontal—gravity can cause the plug to swing to a lower position in the valve body when the actuator is removed. Place the plug in the lowest position before removing the actuator.

4. Remove the actuator from the valve. See Actuator Instructions.
5. Remove the actuator adaptor from the valve.
6. Remove the gland nuts (A13), then slide the gland (A11) off the plug shaft (A3).
7. Pull the packing (A9) out of the bonnet (A6).
8. For valves with gear actuators, lubricate the new packing (A9), then install it one ring at a time in the sequence shown in Figure 4.

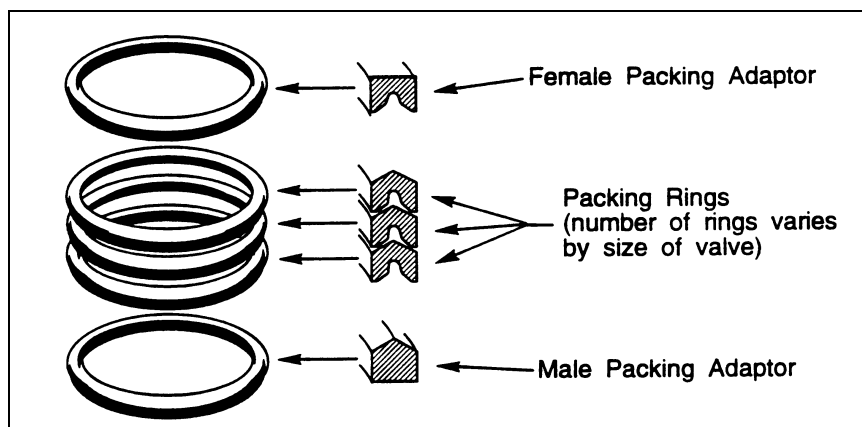


Figure 4 - Correct Packing Installation Sequence

Packing Replacement *(Continued)*

Note: 3 - 8" lever and nut operated valves have a friction cone (A21) and standard packing (A9). Before installing the gland (A11), set the friction cone on top of the packing. Do not lubricate the outside of the friction cone or the inside of the gland. See Figure 5.

9. Slide the gland (A11) down the plug shaft (A3) and over the studs (A12). If the valve has a friction cone (A21), bring the gland nuts (A13) under the gland up finger tight.

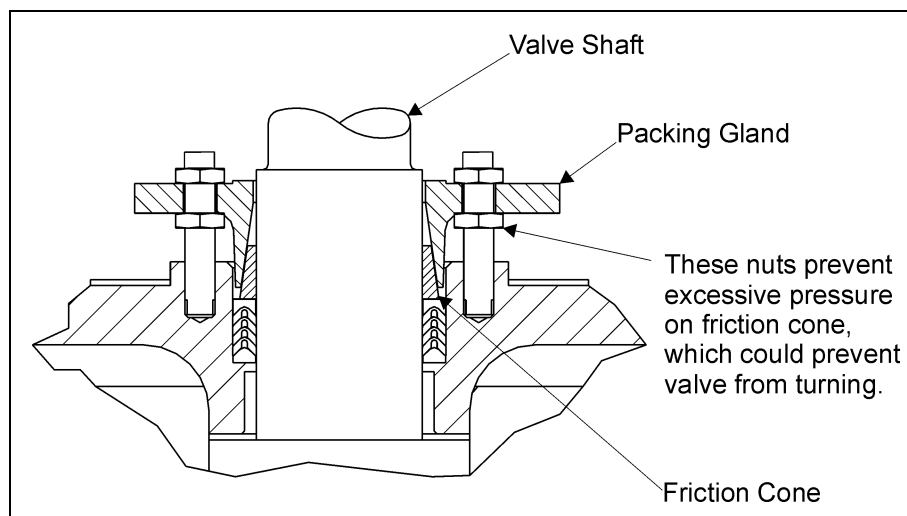


Figure 5—Friction Cone Adjustment

10. Adjust gland nuts (A13).

3 - 8" LEVER AND NUT OPERATED VALVES ONLY:

Turn gland nuts (A13) onto the studs (A12) until they touch the gland (A11).

Note: This is a preliminary adjustment, it will be necessary to adjust the gland nuts (A13) after the valve is pressurized. See "Packing Adjustment" section.

11. Fasten the adaptor (when used) to the valve, lining up the scribe marks made during disassembly.
12. Install the actuator as described in the Actuator Instructions.
13. If the actuator is a powered actuator, reconnect power to the actuator.

Packing Replacement *(Continued)*

Replacing Packing Without Removing Actuator

Note: Lever and nut operated valves require that the actuator be removed before packing can be replaced. See “*Replacing Packing with Actuator Removed*” section to replace the packing in these valves.

1. This process can be done with or without pressure in the pipeline.



WARNING!

Caustic, toxic, or hot material in the pipeline can cause personal injury or death if leakage occurs. Confirm that the material is not harmful.

2. Ensure that the material in the pipeline will not cause injury if leakage occurs.
3. Remove the gland nuts (A13) from the studs (A12), and slide the gland (A11) up the stem of the plug (A3).
4. Remove the studs (A12) from the bonnet (A6).
5. Cut and completely remove all of the old packing (A9) from the packing chamber in the bonnet (A6).
6. Cut each new packing ring (A9) radially in one place with a razor-sharp knife.
7. Place each new packing ring (A9)—one at a time with the joints staggered—around the plug stem (A3) and into position in the packing chamber.
8. Replace the studs (A12) in the bonnet (A6).
9. Push the packing rings (A9) down into position with the gland (A11), and replace the gland nuts (A13) on the studs (A12).
10. Turn the gland nuts (A13) onto the studs (A12) until they touch the gland (A11), then one more turn.
11. Restore the pipeline pressure if it was relieved, and check for packing leakage. If leakage occurs, tighten each packing nut just enough to stop the leakage. Excessive tightening will cause reduced packing life and higher valve operating torque.

Disassembly

See Figure 3 for parts identification.



WARNING!

This valve is a pressure vessel. The bonnet will blow off the valve if the bonnet bolts are removed with pressure in the valve and pipeline media can be hazardous. Completely release pressure before disassembling the valve.

Follow these steps to disassemble valve:

1. Relieve pipeline pressure and close the valve.



WARNING!

Moving parts from accidental operation of power actuator can cause personal injury or equipment damage.

Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.
3. Close the valve.
4. Remove the valve from the pipeline (if desired).

Note: The valve can be disassembled while still in the pipeline. To remove valve from pipeline, see “Removing Valve from Pipeline” section.



WARNING!

When an eccentric valve is mounted in a vertical pipeline—or mounted in a horizontal pipeline with the plug stem horizontal—gravity can cause the plug to swing to a lower position in the valve body when the actuator is removed.

Place the plug in the lowest position before removing the actuator.

5. Remove actuator from valve—see Actuator Instructions.
6. Scribe a line on the body (A1), bonnet (A6) and plug stem (A3) to help align these parts during reassembly.
7. Remove the screws (A8) that hold the bonnet (A6) in place, then pry the bonnet loose from the body (A1).

Note: Note the location of **WARNING TAG** (A14) on bonnet (A6) and do not misplace tag. This tag must be attached to the valve at reassembly.

8. Remove the plug (A3) from the body (A1).
9. Remove the gland nuts (A13) and gland (A11) from the bonnet (A6).
10. Remove the packing (A9) from the bonnet (A6).

Disassembly *(Continued)*

11. Reaching through the packing chamber in the bonnet (A6), drive the bearing (A7) out of the bonnet using a hammer and pin punch.
12. Remove the bearing (A2) from the body (A1).

For **3" - 20" valves**, the bearing (A2) can be chiseled out; or, it can be hydraulically forced out. See Figure 6.

For **24" - 36" valves**, the bearing (A2) can be driven out of the body (A1) using a hammer and pin punch. First remove the screws (A18) and journal cover (A17) from the body. Remove the old o-ring (16) from the journal cover.

To hydraulically force the bearing (A2) out of 3" - 20" valve body:

1. Fill the interior diameter of the bearing (A2) with water.
2. Pound a shaft with the same outside diameter as the lower journal of the valve plug into the bearing (A2).

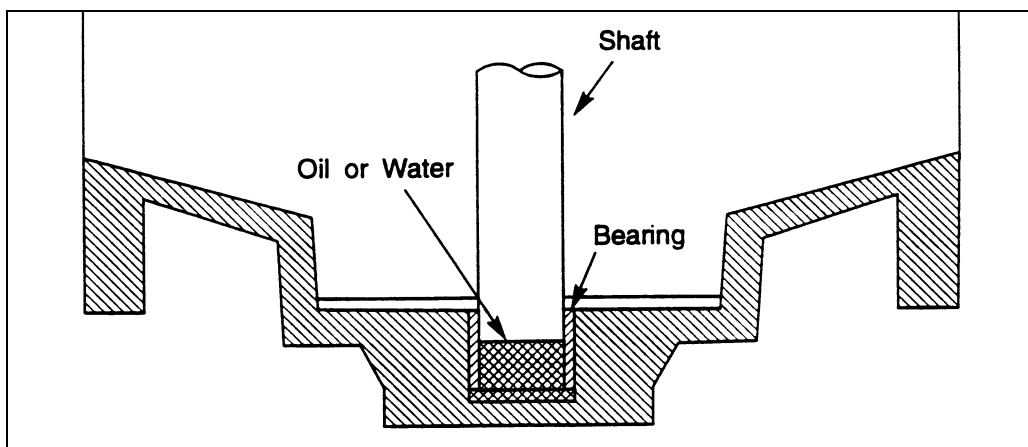


Figure 6—Hydraulically Removing the Lower Bearing in the Valve Body

Reassembly

See Figure 3 for parts identification.

1. Push a new bearing (A2) into the body (A1), then lubricate the bearing as described in the "Lubrication" section.
2. For **24" - 36" valves**, place a new o-ring (A16) in the groove of the journal cover (A17). Fasten the journal cover to the body (A1) with screws (A18).
3. Place a Teflon thrust washer (A4) on the top and bottom shoulder of the plug shaft (A3).
4. Place the plug (A3) into the body (A1) so the lower journal slides into the bearing (A2). Turn the plug so it is almost closed.
5. If necessary, push a new bearing (A7) into the bonnet (A6), then lubricate the bearing. See "Lubrication" section.
6. For **3" - 20" valves**, place an o-ring (A5) in the bonnet (A6).

For **24" - 36" valves**, place an o-ring (A5) into the o-ring groove of the body (A1).

7. Place bonnet (A6) on body (A1), align witness marks, then fasten bonnet in place with screws (A8).



WARNING!

This valve is a pressure vessel and has been supplied with a WARNING TAG from the factory.

Secure WARNING TAG (A14) to bonnet (A6) with one of the bonnet screws (A8) at the location noted during disassembly.

8. Turn the plug (A3) to the closed position. See "Actuator Stop Adjustments" section.
9. For valves with low friction packing, lubricate the new packing (A9), then install it one ring at a time. See Figure 4.

Note: 3 - 8" valves use a friction cone (A21) with a wrenching nut or hand lever actuator, and standard packing. Before installing the gland (A11), set the friction cone on top of the packing (A9). Do not lubricate the outside of the friction cone or the inside of the gland. (See Figure 5.)

10. Slide the gland (A11) down the plug shaft (A3) and over the studs (A12). If the valve has a friction cone (A21), bring the gland nuts (A13) under the gland up finger tight.
11. Adjust gland nuts (A13).

3 - 8" LEVER AND NUT OPERATED VALVES ONLY:

Turn packing gland nuts (A13) onto the studs (A12) until they contact the gland (A11). It will be necessary to adjust the gland nuts after the valve is pressurized; see the "Packing Adjustment" section.

Note: This is a preliminary adjustment, it will be necessary to adjust the gland nuts (A13) after the valve is pressurized. See "Packing Adjustment" section.

Reassembly *(Continued)*

12. Install the actuator—see Actuator Instructions.
13. After actuator is mounted, and shaft key is assembled in keyseat, secure shaft key by staking with a center-punch on the end of the shaft. Stake on both sides of the shaft as shown in Figure 7.

Note: Do not deform the outside diameter of the shaft.

14. After pipeline flow is restored, check the packing for leakage.

Note: If packing leaks, tighten the gland nuts (A13) only enough to stop the leak. Over tightening the packing will cause premature packing failure and higher valve operating torque.

15. If the actuator is a powered actuator, reconnect power to the actuator.

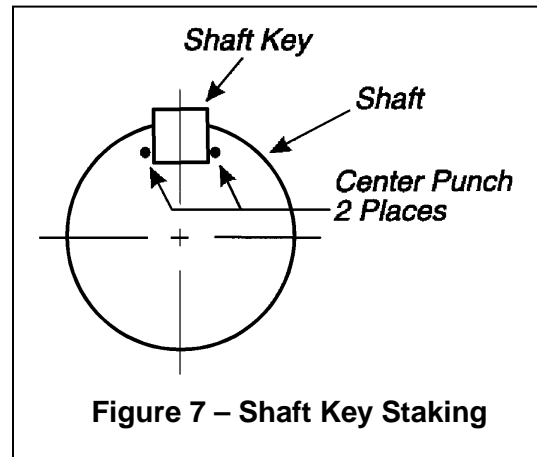


Figure 7 – Shaft Key Staking

Removing Valve from Pipeline

To remove the entire valve assembly from the pipeline, follow these steps.

**WARNING!**

This valve is a pressure vessel. The bonnet will blow off the valve if the bonnet bolts are removed with pressure in the valve and pipeline media can be hazardous.

Completely release pressure before disassembling the valve.

1. Relieve pipeline pressure and drain portion of system where valve is located.
2. Close the valve.

**WARNING!**

Moving parts from accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

3. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.
4. Support the valve assembly, then remove the flange bolts.
5. Remove the valve from the pipeline.

Field Test

Stroke the valve between the fully open and fully closed positions to verify that the valve and actuator are functioning properly. Prior to any field pressure test above the valve design pressure, contact DeZURIK.



WARNING!

Test pressures above valve design pressure can cause leakage, permanent or structural failure to the valve and personal injury.

Valve Exercising

Each valve should be operated through a full cycle and returned to its normal operating position on a time schedule that is designed to prevent a buildup of media deposits that could render the valve inoperable or prevent a tight shutoff.

The interval of time between exercising valves in critical applications or valves subjected to severe operating conditions, should be shorter than valves in less critical installations. The time period for valve exercising should be based on local experience.

Emergency Operation

Operate the valve as under normal conditions, taking care to bring the plug to the position required by the particular emergency condition.

Predicted Wear of Parts

Length of service for parts subject to wear is dependent on service conditions.

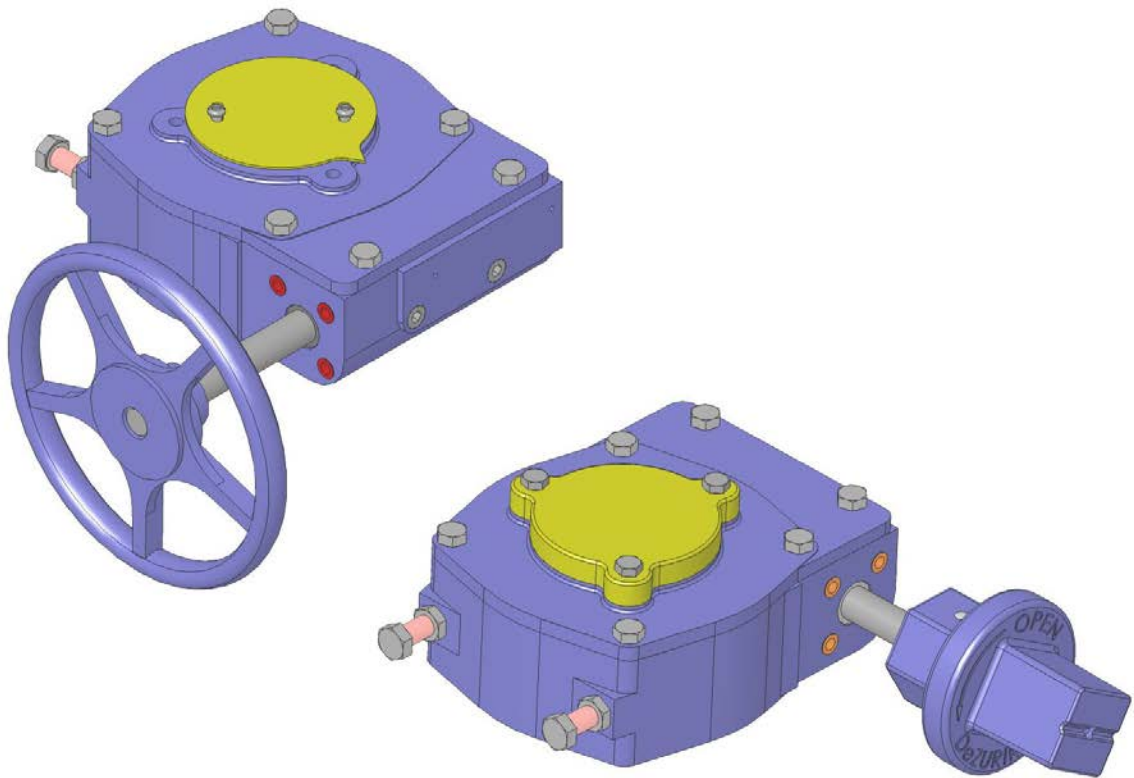
Troubleshooting

Symptom	Possible Cause	Corrective Action
Packing Leaks.	Packing is loose.	Adjust Packing. (See " <i>Packing Adjustment</i> " section.)
	Packing is worn.	Replace Packing. (See " <i>Packing Replacement</i> " section.)
Valve does not close.	Object is wedged between plug and seat.	Open the valve completely to flush object. If this doesn't work, remove valve from the pipeline or drop one section of adjacent pipe. (See " <i>Removing Valve from Pipeline</i> " section.)
	Actuator closed position is out of adjustment.	Adjust the closed position stop as described in the Actuator instructions.
Valve leaks when closed	Plug is worn or damaged.	Replace plug. (See " <i>Disassembly</i> " section.)
	Rubber on plug is torn.	

DEZURIK MANUAL

G-SERIES ACTUATOR

USED ON PEC 100% PORT PLUG VALVES



Instruction **D10456**
August 2012

DeZURIK

Manual G-Series Actuator used on PEF 100% Port Plug Valves

Instructions

These instructions provide information about Manual G-Series Actuators on PEF 100% Port Eccentric Plug Valves. They are for use by personnel who are responsible for installation, operation and maintenance of Manual G-Series Actuators.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your Manual G-Series Actuator has been packaged to provide protection during shipment; however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your local DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

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DeZURIK

Manual G-Series Actuators used on PEF 100% Port Plug Valves

Description

The manual operated G-Series actuator is designed to operate a PEF 100% Port Eccentric plug valve. External adjustable stops limit actuator stroke for both the open and closed valve positions. This actuator is available in two sizes: Size 6 and Size 12. See Figure 1 to identify which unit you have.

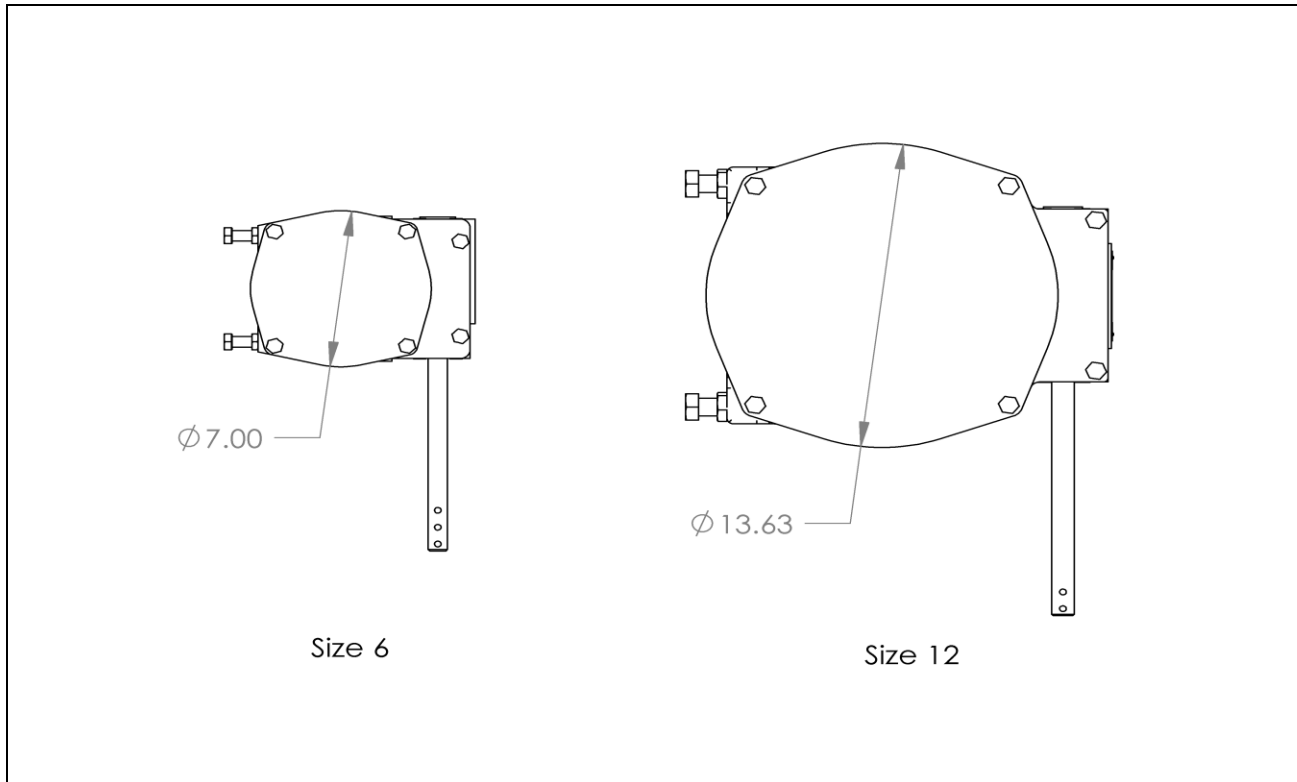


Figure 1— G-Series Actuator Identification

Operation

Rotating the operator (handwheel, chainwheel or 2" nut) clockwise closes the valve. Counterclockwise rotation of the operator opens the valve. To actuate the valve from full open to full closed (or vice-versa), the Size 6 requires 13 revolutions and the Size 12 requires 19 revolutions of the operator.

Tools Required

This actuator is assembled using metric fasteners. To service this unit, you should have a full set of combination or ratchet wrenches, Allen wrenches, flat tipped screwdrivers, a 1/4" pin punch and a dead blow hammer.

Lubrication

The G-Series actuator has been lubricated at the factory and requires no routine maintenance lubrication. If the actuator requires disassembly, see the ACTUATOR DISASSEMBLY AND ASSEMBLY section in this instruction for disassembly, lubrication and assembly procedures.

Parts Identification

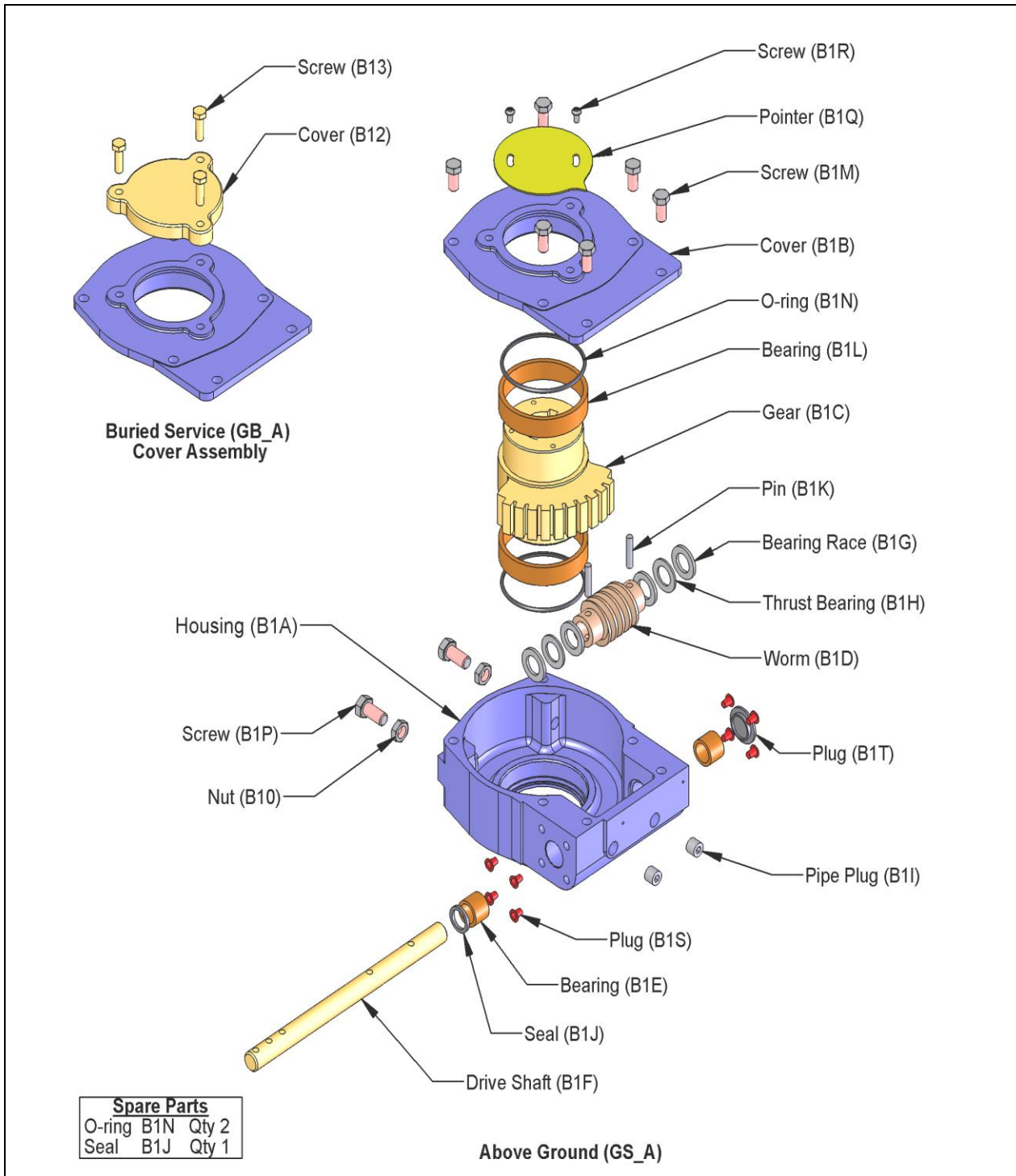


Figure 2— Actuator Parts Identification

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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Stop Adjustments

The open and closed position stops prevent the valve plug from rotating beyond the optimum open and shutoff positions.

If the actuator is factory-mounted on the valve, the stops are preset, and do not require further adjustment. If the actuator is not factory mounted on the valve, or if the actuator has been removed, the stops will require adjustment as described below; also refer to the Valve Instructions for specific closed position requirements for the valve.

Valves can be mounted with Direct or Reverse pressure.

Direct Pressure - When the higher pressure is at the end opposite the seat. See Figure 3.

Reverse Pressure - When the higher pressure is at the seat end of the valve. See Figure 3.

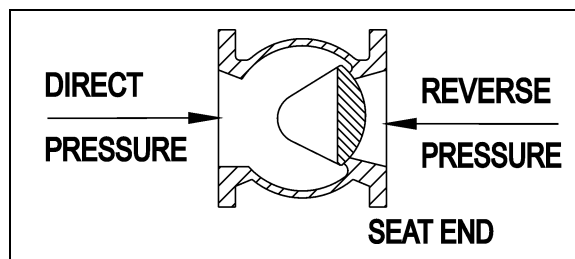


Figure 3— Pressure Direction

To Adjust the Closed Position Stop

See Figure 5 for stop Identification.



WARNING!

To adjust the closed position stop: (see Figure 5 for stop identification) Adjusting stops with flow in the pipeline can allow the valve to close causing personal injury and damaging the flow system.

Shut down the flow and relieve pipeline pressure before making stop adjustments

1. Discontinue flow and relieve pipeline pressure.
2. Close the valve.
3. Loosen the nut on the closed position screw, and back out the screw about two turns.
4. Turn the handwheel, chainwheel or 2" wrenching square operator until the specified Actuator Input Torque from Table A is reached.
5. While maintaining the Actuator Input Torque from Table A, turn the closed position screw clockwise until resistance is felt from the screw contacting the gear (B1C).
6. Prevent the screw from turning and tighten the nut against housing (B1A).
7. Pipeline flow may now be restored.

Stop Adjustments *(Continued)*

To Adjust the Open Position Stop

See Figure 5 for stop identification.



WARNING!

Adjusting stops with flow in the pipeline can allow the valve to close causing personal injury and damaging the flow system.

Shut down the flow and relieve pipeline pressure before making stop adjustments.

1. Discontinue flow and relieve pipeline pressure.
2. To visually determine when the valve is in the open position:
Above Ground Service (GS_A) actuator - Remove the screws (B1R) and pointer (B1Q).
Buried Service (GB_A) actuator - Remove the screws (B13) and cover (B12).
3. Loosen the nut on the open position screw, and back out the screw about two turns.
4. Turn the handwheel, chainwheel or 2" wrenching square operator so the drive key/plug alignment is parallel to the valve flanges. See Figure 4 for valve open position.

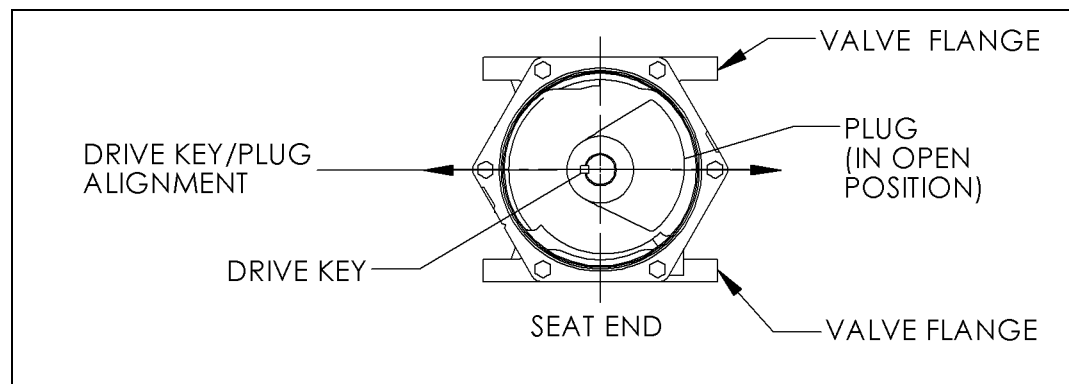


Figure 4— Valve Open Position

5. Turn the open position screw clockwise until resistance is felt from the screw contacting the gear (B1C).
6. Prevent the screw from turning, and tighten the nut against housing (B1A).
7. **Above Ground Service (GS_A) actuator** - Replace the pointer (B1Q) so it is pointing at the OPEN mark on the cover (B1B) and tighten screws (B1R).
Buried Service (GB_A) actuator - Remove old sealant from cover (B12) and cover (B1B) mating mounting surfaces. Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the cover (B12) and cover (B1B) mating surfaces. Fasten the cover (B12) to cover (B1B) with screws (B13).
8. Pipeline flow may now be restored.

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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Stop Adjustments *(Continued)*

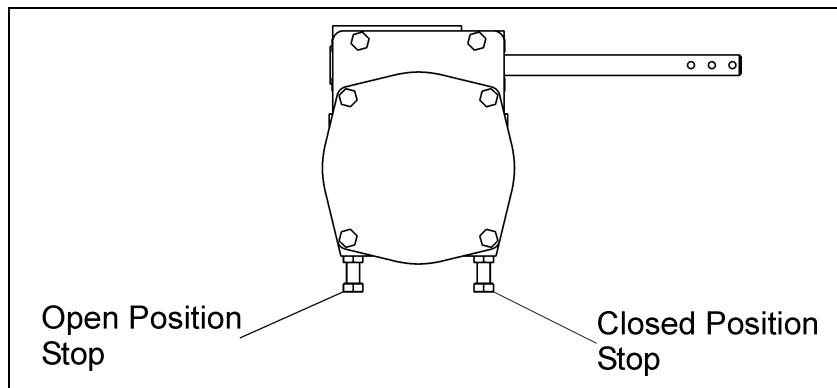


Figure 5— Open and Closed Position Stop Identification

Valve Size	Actuator Size	Actuator Input Torque (ft-lbs)							
		Direct Pressure Drop (psi)	Reverse Pressure Drop (psi)						
			25	50	75	100	125	150	175
3 & 4	G6	4	4	4	5	5	5	5	5
5	G6	8	8	9	10	11	11	11	11
6	G6	8	8	9	10	11	11	11	11
8	G6	15	15	17	19	20	21	21	21
10	G6	22	22	25	29	33	36	N/A	N/A
10	G12	11	11	18	18	18	18	18	18
12	G6	29	29	29	29	N/A	N/A	N/A	N/A
12	G12	15	15	15	15	15	15	15	15
14	G12	18	18	24	29	34	34	34	N/A
16	G12	22	22	29	37	45	45	45	N/A
18	G12	26	26	35	45	55	55	N/A	N/A
20	G12	29	29	44	55	55	N/A	N/A	N/A

Note: The “N/A” designation in Table A indicates that the Valve/Actuator combination cannot be used for that particular reverse pressure.

Removing Actuator from Valve

Refer to Figure 6 for connecting parts identification.

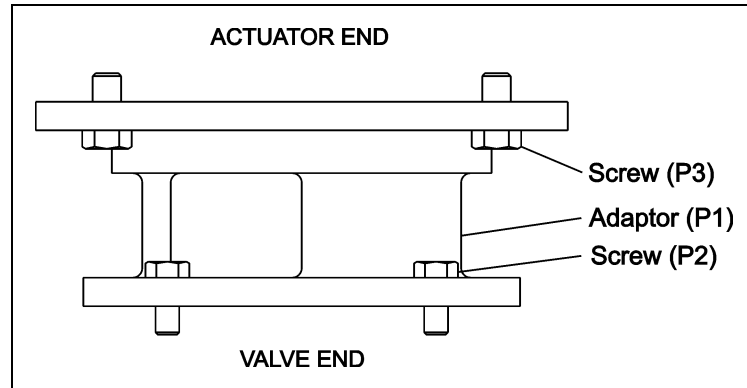


Figure 6— Connecting Parts Identification



WARNING!

Flow in the pipeline with the actuator removed can slam the valve closed causing personal injury and damaging the flow system. Shut down the flow in the pipeline before removing the actuator from the valve.

1. Discontinue flow and relieve pipeline pressure.



WARNING!

When Eccentric Plug valves are mounted in a vertical pipeline, or mounted in a horizontal pipeline with the plug stem horizontal, there is a chance that gravity will cause the plug to swing to a lower position in the valve body when the actuator is removed.

To avoid this hazard, rotate the plug to the lowest position before removing the actuator.

2. Close the valve or rotate the plug to the lowest position in the valve body.
3. Remove the four adaptor mounting screws (P3).
4. Remove the actuator from the adaptor (P1).
5. Do not loose the drive key used in the valve plug and actuator gear.

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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Replacing Actuator on Valve

Refer to Figure 2 and Figure 6 for parts identification.

1. Place the valve in the position it was in when the actuator was removed. Normally this will be so the plug is in the lowest position in the valve body.
2. **For Buried Service (GB_A) actuators only** - Before reassembly, remove old sealant from all mating mounting surfaces. Apply a thin bead of silicone sealant DOW RTV-732 (1055515) or similar to the adaptor (P1) and the actuator housing (B1A) mounting surfaces.
3. **Above Ground Service (GS_A) actuator only** - Remove the screws (B1R) and pointer (B1Q).
Buried Service (GB_A) actuator only - Remove the screws (B13) and cover (B12).
4. Mount the actuator to the adaptor with the four mounting screws (P3). Tighten screws.
5. Insert the drive key into the valve plug/gear (B1C) keyway.
6. **Above Ground Service (GS_A) actuator only** - Fasten the pointer (B1Q) to the gear (B1C) with the two screws (B1R).
Buried Service (GB_A) actuator only - Remove old sealant from cover (B12) and cover (B1B) mating mounting surfaces. Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the cover (B12) and cover (B1B) mating surfaces. Fasten the cover (B12) to cover (B1B) with screws (B13).
7. Check the closed position stop setting and readjust if necessary as described in the “STOP ADJUSTMENT” Section of this Instruction.
8. Pipeline flow may now be restored.

Changing Actuator Mounting Position

The actuator can be mounted in 90° increments around the valve shaft.

To move the actuator mounting position in 90° increments from its present position, follow these steps.

1. Remove the actuator from the valve as described in the REMOVING ACTUATOR FROM VALVE Section of this Instruction.
2. Rotate the actuator to the desired position.
3. Install the actuator on the valve as described in the REPLACING ACTUATOR ON VALVE Section of this Instruction.

Actuator Disassembly and Assembly

Under normal operating conditions the G-Series actuator does not require routine maintenance. If the actuator has excessive wear or has been damaged, it is recommended that the actuator be replaced, not repaired.

Use the following procedure for replacing leaking seals and o-rings. Refer to Figure 2 for component identification.

Actuator Disassembly



WARNING!

Flow in the pipeline with the actuator removed can slam the valve closed causing personal injury and damaging the flow system. Shut down the flow in the pipeline before removing the actuator from the valve.

1. Discontinue flow and relieve pipeline pressure.
-



WARNING!

When Eccentric Plug valves are mounted in a vertical pipeline, or mounted in a horizontal pipeline with the plug stem horizontal, there is a chance that gravity will cause the plug to swing to a lower position in the valve body when the actuator is removed.

To avoid this hazard, rotate the plug to the lowest position before removing the actuator.

2. Close the valve or rotate the plug to the lowest position in the valve body.
3. Remove the actuator from the valve as described in the REMOVING ACTUATOR FROM VALVE Section of this Instruction.
4. **Above Ground Service (GS_A) actuator only** - Note the position of the pointer (B1Q), then remove the screws (B1R) and pointer.
Buried Service (GB_A) actuator only - Remove screws (B13) and cover (B12).
5. Remove the screws (B1M) and cover (B1B).
6. Remove the o-ring (B1N) thru the top of the cover (B1B).
7. Note the position of the gear (B1C) in the housing (B1A), then slide the gear (B1C) out of the housing.
8. Remove the two pipe plugs (B1I) from the housing (B1A).
9. Rotate the drive shaft (B1F) until the pins (B1K) line up with the pipe plug holes in the housing (B1A).

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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Actuator Disassembly and Assembly *(Continued)*

10. Drive both pins (B1K) thru the worm (B1D) and drive shaft (B1F).
11. Slide the drive shaft (B1F) out of the housing (B1A).
12. Remove the seal (B1J) from the housing (B1A).
13. Remove the o-ring (B1N) thru the bottom of the housing (B1A).
14. Remove old gasket sealant from the top of the housing (B1A) and bottom of the cover (B1B).

Buried Service (GB_A) actuator only - Remove old gasket sealant from the bottom of the housing (B1A), valve adaptor (P1), top of cover (B1B) and bottom of cover (B12) mating surfaces.

Actuator Assembly

1. Install a new seal (B1J) into the housing (B1A).
2. Slide the drive shaft (B1F) into the housing (B1A) and thru bearing race (B1G), thrust bearing (B1H), bearing race (B1G), worm (B1D), bearing race (B1G), thrust bearing (B1H) and bearing race (B1G).
3. Rotate the drive shaft (B1F) until the pin holes in the drive shaft and the worm (B1D) line up.
4. Drive the two pins (B1K) thru the worm (B1D) and drive shaft (B1F).
5. Apply removable thread sealant to the threads of pipe plugs (B1I) and install the pipe plugs flush or below the surface of the housing (B1A).
6. Apply a light film of grease to a new o-ring (B1N) and insert it into the groove in the bottom of the housing (B1A).
7. Grease the bearing (B1L) in the housing (B1A) and slide the gear (B1C) into the bearing in the position noted in Step 7 of the ACTUATOR DISASSEMBLY section.
8. **Above Ground Service (GS_A) actuator only** - Apply a liberal amount of Lithium based grease such as Shell Alvania EP2 or Mobilux EP2 to the gear (B1C), bearings (B1L) and worm (B1D).
Buried Service (GB_A) actuator only - Pack the housing (B1) full of Lithium based grease such as Shell Alvania EP2 or Mobilux EP2.
9. Apply a light film of grease to a new o-ring (B1N) and insert into groove in the cover (B1B).
10. Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the housing (B1A) or cover (B1B) mating surface. Grease the bearing (B1L) in the cover, slide the cover onto the gear (B1C) and fasten with screws (B1M) to the housing.
11. Insert the drive key into the valve plug/gear (B1C) keyway.
12. **Above Ground Service (GS_A) actuator only** - Fasten the pointer (B1Q) to the gear (B1C) with the two screws (B1R) in the position noted in Step 4. of the ACTUATOR DISASSEMBLY section.
Buried Service (GB_A) actuator only - Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the cover (B12) or cover (B1B) mating surface. Fasten the cover (B12) to cover (B1B) with screws (B13).
13. Install the actuator on the valve as described in the "REPLACING ACTUATOR ON VALVE" section of this Instruction.

Operator Component Identification

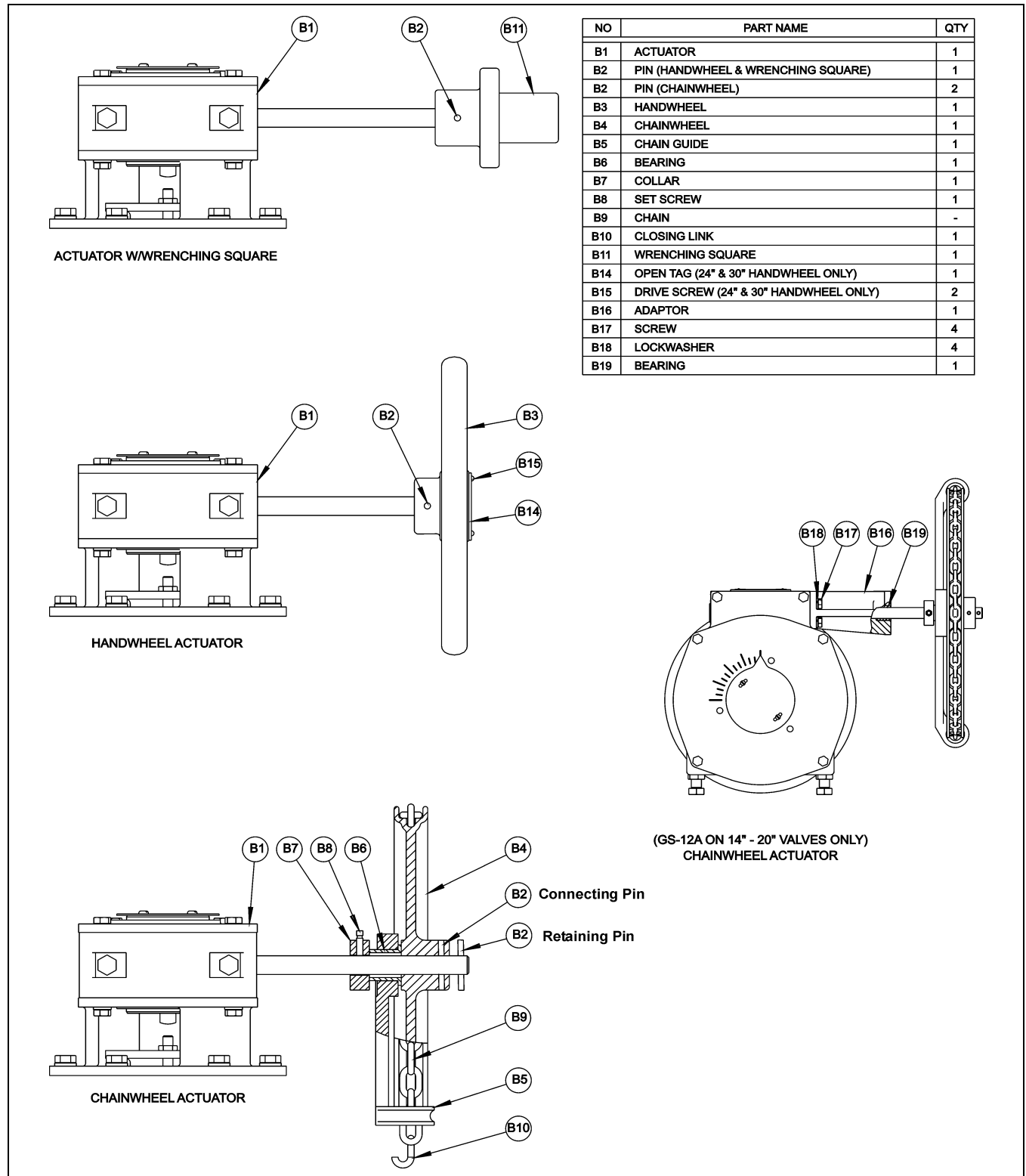


Figure 7— Operator Component Identification

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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Replacing Handwheel or Wrenching Square with Chainwheel

Refer to Figure 7 for component identification.

G₋6A and G₋12A (3" - 12" valves)

1. Support the actuator shaft with a solid surface, drive out the pin (B2), and remove the handwheel (B3) or wrenching square (B11) from the actuator shaft.
2. Slide the collar (B7) onto the actuator shaft
3. Assemble the bearing (B6), chain guide (B5) and the chainwheel (B4) onto the actuator shaft.
4. Align the second pin hole in the actuator shaft and the pin hole in the chainwheel hub. Support the hub of the chainwheel with a solid surface and drive the connecting pin (B2) into position. See Figure 7 for location of connecting pin.



WARNING!

The connecting pin securing the chainwheel hub to the actuator shaft could potentially shear allowing the chainwheel to disengage from the actuator shaft and cause personal injury or equipment damage.

A retaining pin at the end of the actuator shaft must be in-place to insure the chainwheel can not disengage from the actuator shaft.

5. Support the hub of the chainwheel with a solid surface and drive the retaining pin (B2) into the remaining pin hole at the end of the actuator shaft. See Figure 7 for location of retaining pin.
6. Slide the collar (B7) up to the bearing (B6) and tighten with set screw (B8).
7. Feed the chain (B9) over the chainwheel (B4) and through both openings in the chain guide (B5).
8. Connect the ends of the chain (B9) with closing link (B10).

G₋12A (14" - 20" valves)

1. Support the actuator shaft with a solid surface, drive out the pin (B2), and remove the handwheel (B3) or wrenching square (B11) from the actuator shaft.
2. Remove the plastic plugs from the mounting holes on the shaft side of the actuator housing.
3. Slide the adaptor (B16) onto the actuator shaft. Tighten with screws (B17) and lockwashers (B18).
4. Slide the collar (B7) onto the actuator shaft
5. Assemble the bearing (B6), chain guide (B5) and the chainwheel (B4) onto the actuator shaft.

Replacing Handwheel or Wrenching Square with Chainwheel *(Continued)*

6. Align the second pin hole in the actuator shaft and the pin hole in the chainwheel hub. Support the hub of the chainwheel with a solid surface and drive the connecting pin (B2) into position. See Figure 7 for location of connecting pin.



WARNING!

The connecting pin securing the chainwheel hub to the actuator shaft could potentially shear allowing the chainwheel to disengage from the actuator shaft and cause personal injury or equipment damage.

A retaining pin at the end of the actuator shaft must be in-place to insure the chainwheel can not disengage from the actuator shaft.

7. Support the hub of the chainwheel with a solid surface and drive the retaining pin (B2) into the remaining pin hole at the end of the actuator shaft.
8. Slide the collar (B7) up to the bearing (B6) and tighten with set screw (B8).
9. Feed the chain (B9) over the chainwheel (B4) and through both openings in the chain guide (B5).
10. Connect the ends of the chain (B9) with closing link (B10).

Replacing Chainwheel with Handwheel or Wrenching Square

Refer to Figure 7 for component identification.

1. Support the chainwheel hub with a solid surface and drive out the two pins (B2).
2. .Remove the chainwheel (B4) and chain guide (B5) assembly from the actuator shaft.
3. .Loosen the set screw (B8) and slide the collar (B7) off the actuator shaft.
4. **GS-12A on 14" - 20" valves only** - Remove screws (B17), lockwashers (B18) and slide adaptor (B16) off the actuator shaft.
5. Slide the handwheel (B3) or wrenching square (B11) onto the actuator shaft. Align the pin hole in the handwheel or wrenching square with the second pin hole in the actuator shaft. Support the actuator shaft with a solid surface and drive the pin (B2) into position.

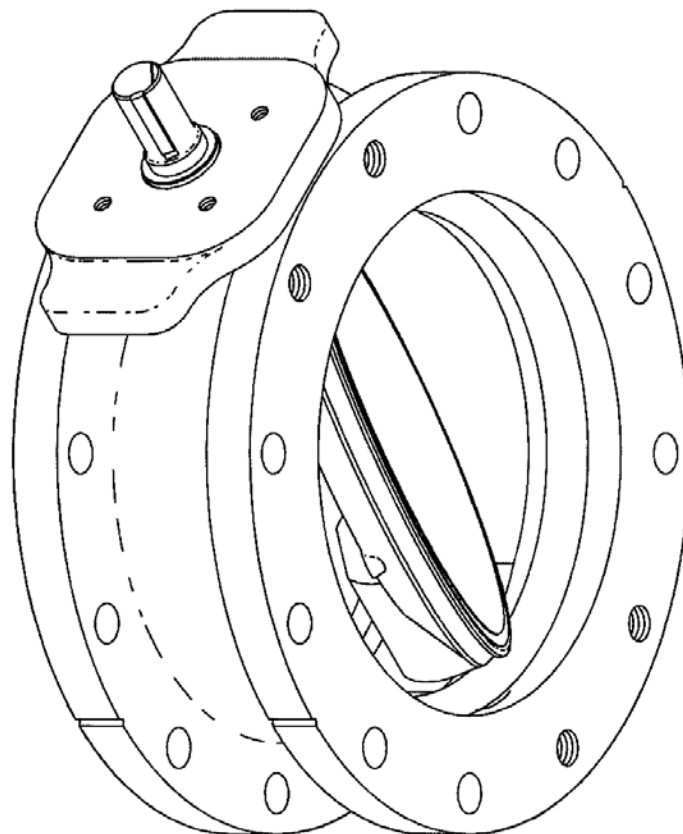
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Manual G-Series Actuators used on PEF 100% Port Plug Valves

Troubleshooting

Condition	Possible Cause	Corrective Action
Actuator closes to wrong position.	Closed position stop is set incorrectly.	Adjust closed position stop. See STOP ADJUSTMENTS section.
	Pointer is installed incorrectly.	Rotate pointer to correct position.
Actuator opens to wrong position.	Open position stop is set incorrectly.	Adjust closed position stop. See STOP ADJUSTMENTS section.
	Pointer is installed incorrectly.	Rotate pointer to correct position.
Actuator will not fully operate valve.	Pipeline obstruction in valve is preventing closure.	Remove obstruction.
High operating torque.	Misalignment of adaptor.	Check valve-adaptor actuator alignment and adjust.
	Misalignment of ENK extension.	Check valve-extension-actuator alignment and adjust.
	Bent actuator input shaft.	Replace actuator.

DeZURIK 3-20" BAW AWWA BUTTERFLY VALVES WITH TRANSFER MOLDED SEAT



Instruction D10386
March 2021

DeZURIK

3-20" BAW AWWA Butterfly Valves

Instructions

These instructions provide installation, operation and maintenance information for BAW Butterfly Valves. They are for use by personnel who are responsible for installation, operation and maintenance of BAW Butterfly Valves.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death. Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your BAW Butterfly Valve has been packaged to provide protection during shipment, however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your local DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

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3-20" BAW AWWA Butterfly Valves

Description

The 3-20" BAW AWWA Butterfly Valve is a resilient seated bi-directional valve that meets all class 150 requirements of ANSI/AWWA standard C504. Flanged and mechanical joints are offered. Pressure and temperature ratings are shown on the valve data plate

Handling

Lifting the valve improperly may damage it. Do not fasten lifting devices to the actuator, disc or through the seat opening in the body. Lift the valve with slings, chains or cables fastened around the valve body, or fastened to bolts or rods through bolt holes in the flanges.

Maintenance

This valve is assembled using standard SAE fasteners. To service this valve, you should have a full set of combination wrenches, flat tipped screwdrivers, Allen wrenches, a torque wrench, sockets, chisels, a hooked tool for removing the packing and a dead blow hammer.

Lubrication

The valve is lubricated at the factory, and does not require routine lubrication. When installing valve or if maintenance is required, refer to the appropriate sections for lubrication requirements and use an NSF 61 approved lubricant (such as Dow Corning 111 or Phoenix 505).

Refer to the actuator instructions for actuator lubrication requirements.

Fusion/Powder Coated Valves

NOTICE

Valves with fusion/powder coated exterior paint require flat washers to be installed under the flange nuts when installing the valve to the pipeline flange to prevent the paint from cracking or chipping.

Installation

Mount the actuator on the valve before installation. For a DeZURIK actuator, see actuator instructions.

For other actuators:

- On valves with non-adjustable packing, the actuator interface must include a retaining plate for the packing.
- On valves with adjustable packing, the actuator interface must provide clearance for the packing gland and access for packing adjustment. Dimensional requirements are shown on the installation drawing for the valve.

Lifting the valve improperly may damage it. Do not fasten lifting devices to the actuator, disc or through the seat opening in the body. Lift the valve with slings, chains or cables fastened around the valve body, or fastened to bolts or rods through bolt holes in the flanges.

Refer to the installation drawing for dimensions and to identify components.

Requirements

NOTICE

PVC pipe that does not meet AWWA standards may damage the valve. If PVC pipe is used with mechanical joint valves, the pipe O.D. must comply with AWWA C900, C905, C909 (current revision) "PVC PIPE WITH CAST IRON PIPE EQUIVALENT O.D.'S."

- Flanged connections require mating flanges that comply with ASME/ ANSI B16.1 Class 125 or Class 150. Flange gaskets are also required.
- Mechanical joints must comply with ANSI/AWWA C111/A21.11.
- To reduce the effects of downstream disturbances, install the valve at least the distance of eight pipe diameters downstream from the closest elbow or pump.
- If possible, install the valve with the shaft horizontal to provide self-cleaning action.

DeZURIK

3-20" BAW AWWA Butterfly Valves

Installation (Continued)

Installing Valves using PVC Pipe with Cast Iron Outside Diameter (CIOD)

When installing valves with mechanical joint ends on Class 200 (DR 14 or higher) PVC pipe, call DeZURIK customer service if you have any problems or questions with this procedure

1. Chamfer the ID of the pipe as shown in Table A to provide clearance for the valve disc.

Table A: Chamfer Requirements

Valve Size	Pipe Pressure Class	Pipe Dimension Ratio	Chamfer Seat Side	Chamfer Opposite Seat	Min. Chamfer Dia. (in)	Chamfer Angle
4	200	14	No	No	N/A	N/A
6	200	14				
8	200	14				
10	200	14	Yes	No	9.62"	30°
12	200	14	Yes	No	11.75"	30°
14	200	21	Yes	No	13.75"	30°
	235	18	Yes	No	13.88"	30°
	250	17	No	Yes	14.00"	30°
	305	14	Yes	Yes	14.00"	30°
16	165	25	No	No	N/A	N/A
	200	21				
	235	18	Yes	No	15.68"	30°
	250	17	No	Yes	15.78"	30°
	305	14	Yes	Yes	15.88"	30°
18	165	25	No	No	N/A	N/A
	200	21				
	235	18	Yes	No	17.38"	30°
	250	17	No	Yes	17.50"	30°
	305	14	Yes	Yes	17.50"	30°
20	165	25	Yes	Yes	41.50"	20°
	200	21	Yes	No	19.56"	30°
	250	17	No	Yes	19.63"	30°
	305	18	Yes	No	19.56"	30°

*Call DeZURIK customer service if you have any questions on this procedure.

2. Cycle the valve for three full open–close cycles to ensure disc fully clears the pipe.

Installation *(Continued)*

Installing All Valves

1. Thoroughly clean the pipeline, valve and flanges of all debris, which could damage the seat, disc or bearings. Rust Veto may be removed from flanges with Houghton Kleensol #4 or equivalent petroleum solvent.
2. Open the valve, clean the seat and sealing edge of the disc, then apply a paint-like coating of an NSF 61 approved lubricant (such as Dow Corning 111 or Phoenix 505) to the seat.
3. Close the valve and tighten the bolts evenly in a crisscross pattern.

Note: Ensure the pipeline, valve and flanges are properly aligned. Do not use the valve to force the pipeline into position.

Due to varying conditions during shipment, storage, handling and installation, it is recommended that each valve be tested while the valve is accessible in the pipeline.

Operation

Turning the valve shaft clockwise closes the valve. The valve is fully closed when the disc is centered on the seat; valve is fully open when the disc is 90° counterclockwise from the closed position.

Disc Position Indicator

The indicator notch on top of the valve shaft corresponds with the seat side of the disc. The location of the indicator notch is shown in Figure 1.

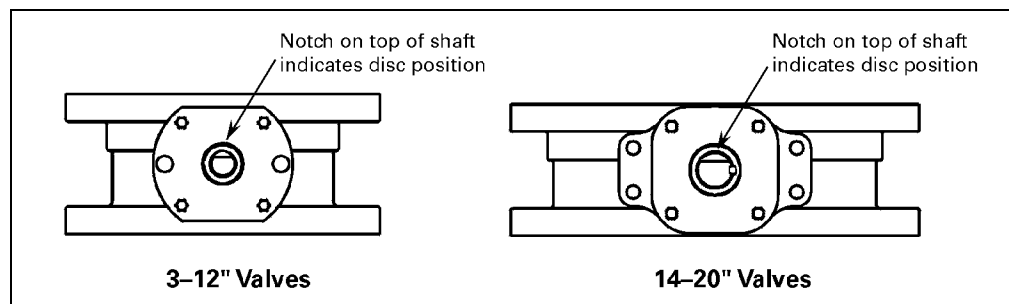


Figure 1—Disc Indicator Location

Position Stops

The valve actuator is connected to the valve shaft and positions the disc at the open, closed or intermediate positions. Installed DeZURIK actuators come with the position stops pre-adjusted. For other actuators, refer to actuator instructions to adjust the position stops.

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3-20" BAW AWWA Butterfly Valves

Drawings

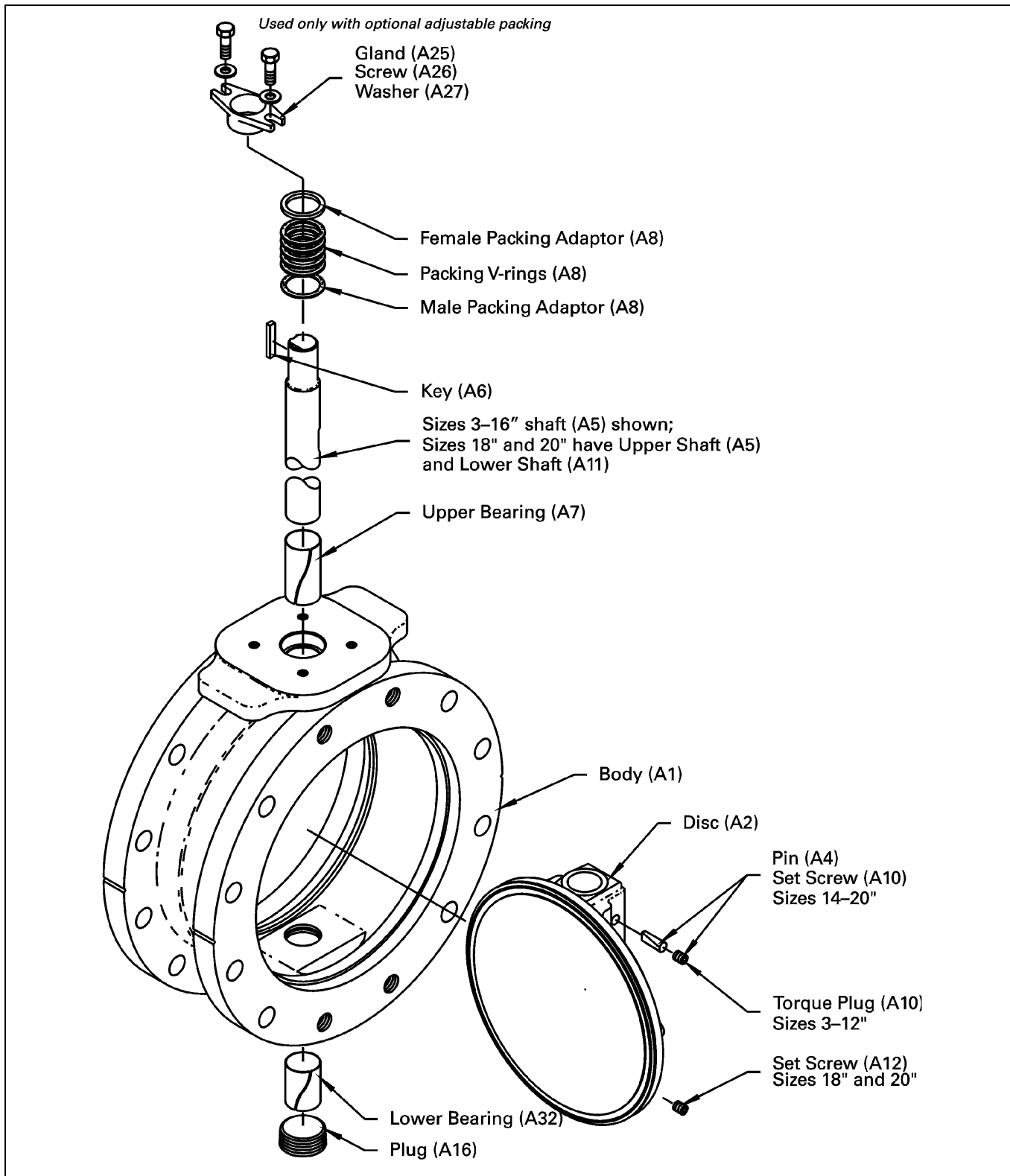


Figure 2—Disassembled 3-20" BAW AWWA Butterfly Valve

Drawings (Continued)

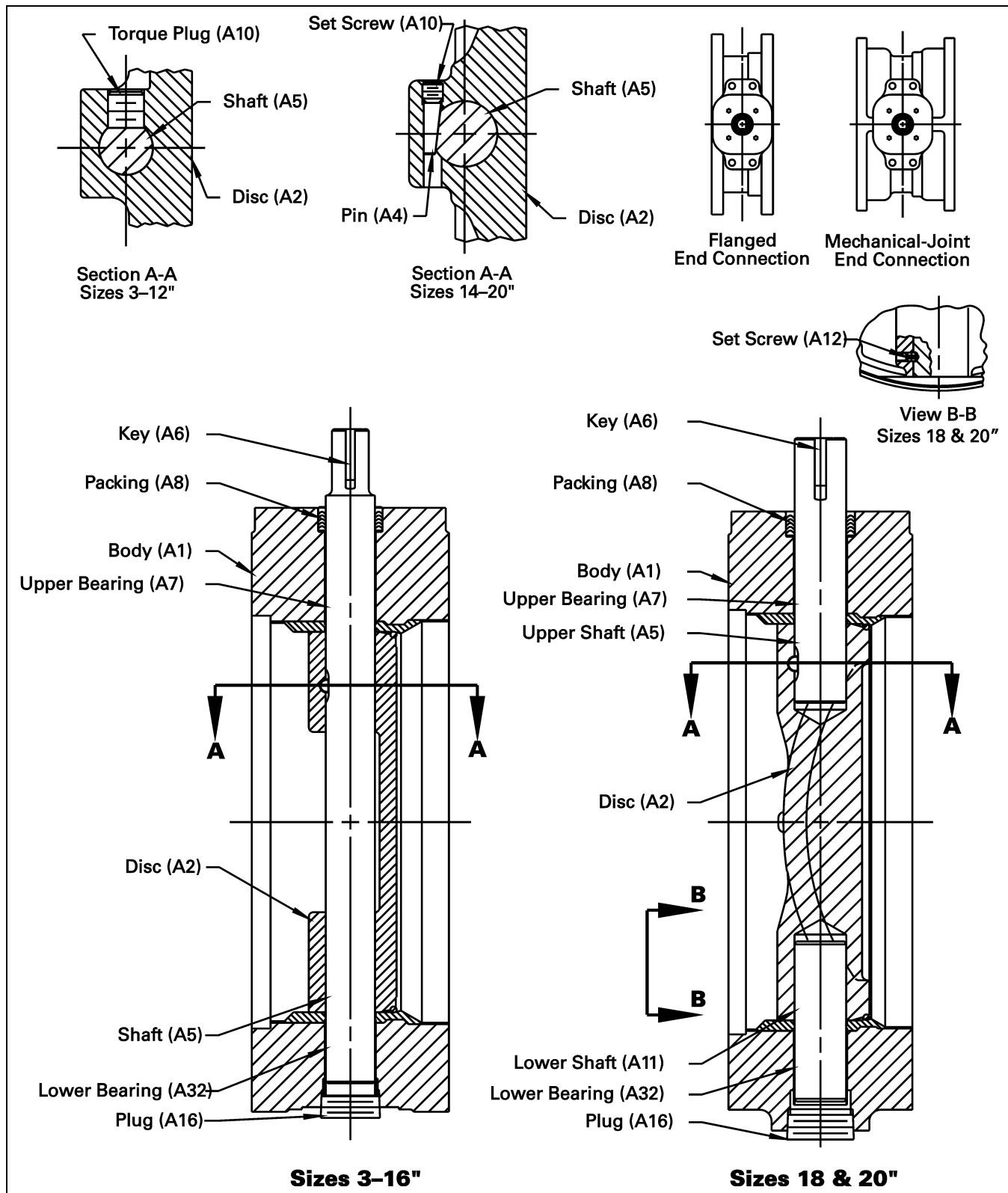


Figure 3—Assembled 3-20" BAW AWWA Butterfly Valve

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3-20" BAW AWWA Butterfly Valves

Adjusting Packing

See Figure 2 to identify parts.

Valves without Packing Gland



WARNING!

Removing the valve while the pipeline is under pressure can cause personal injury or equipment damage. Relieve pipeline pressure before removing the valve.

1. Relieve the pressure in the pipeline and close the valve.
-



WARNING!

Accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic or electrical power to prevent accidental operation of the actuator.
 3. Remove the actuator (and adapter, if included) from the valve.
 4. Slide spacers down the valve shaft so that they protrude 1/32–1/16" above the body.
Note: Spacers can be Garlock style 7857/260 rock hard rubber; Grade A, D or E Bronze; or 316 stainless steel.
 5. Replace the actuator on the valve.
 6. If packing continues to leak, replace the packing.
-

Valves with Packing Gland

If the packing leaks on valves with a packing gland, tighten the packing gland nuts just enough to stop the leak; over-tightening will cause excessive operating torques and premature packing wear. If the leak cannot be stopped by tightening the packing nuts, replace the packing.

Replacing Packing

Valves without Packing Gland

**WARNING!**

Removing the valve while the pipeline is under pressure can cause personal injury or equipment damage. Relieve pipeline pressure before removing the valve.

1. Relieve the pressure in the pipeline and close the valve.
-

**WARNING!**

Accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.
3. Remove the actuator (and adaptor if included) from the valve
4. Remove all of the packing rings (A8) from the packing chamber with a hooked tool.
5. Apply a paint-like coat of an NSF 61 approved lubricant (such as Dow Corning 111 or Phoenix 505) to the inside and outside diameters of the new packing, then install the new packing one ring at a time.
Note: Start each chevron ring into the packing chamber at a slight angle and push each ring carefully into position so that the sealing lips do not bend over. Push the packing firmly into place. Do not use a sharp or pointed tool.
6. Replace the actuator adaptor (if included) and the actuator on the valve.

Valves with Packing Gland

**WARNING!**

Removing the valve while the pipeline is under pressure can cause personal injury or equipment damage. Relieve pipeline pressure before removing the valve.

1. Relieve the pressure in the pipeline and close the valve.
-

**WARNING!**

Accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic, or electrical power to prevent accidental operation of the actuator.

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3-20" BAW AWWA Butterfly Valves

Replacing Packing *(Continued)*

3. Remove the actuator (and adaptor if included) from the valve.
4. Remove the two screws (A26) and the gland (A25).
5. Pull all of the packing rings (A8) from the packing chamber with a hooked tool.
6. Apply a paint-like coat of an NSF 61 approved lubricant (such as Dow Corning 111 or Phoenix 505) to the inside and outside diameters of the new packing, then install the new packing one ring at a time.

Note: Start each chevron ring into the packing chamber at a slight angle and push each ring carefully into position so that the sealing lips do not bend over. Push the packing firmly into place. Do not use a sharp or pointed tool.

7. Replace the gland (A25), the two screws (A26) and washers (A27).
8. Tighten the screws in a criss-cross pattern until finger-tight, plus ½ turn.
9. Replace the actuator adaptor (if included) and the actuator on the valve.
10. Pressurize the valve and check for leaks.
11. If packing leaks, tighten the two adjustment screws (A26) on the packing gland. Tighten the screws evenly and gently, just enough to stop the leakage. Over-tightening will cause excessive operating torque and will decrease the life of the packing.
12. If the actuator is a powered actuator, reconnect power to the actuator.

Removing Valve

Lifting the valve improperly may damage it. Do not fasten lifting devices to the actuator, disc or through the seat opening in the body. Lift the valve with slings, chains or cables fastened around the valve body or fastened to bolts or rods through bolt holes in the flanges.



WARNING!

Removing the valve while the pipeline is under pressure can cause personal injury or equipment damage. Relieve pipeline pressure before removing the valve.

1. Relieve pipeline pressure and drain the section near the valve and close the valve.
-



WARNING!

Accidental operation of power actuator can cause personal injury or equipment damage. Disconnect and lock out power to actuator before servicing.

2. If the actuator is powered, disconnect and lock out the pneumatic, hydraulic or electrical power to the actuator.
3. Support the valve assembly, remove the flange bolts or mechanical joint connections then remove the valve from the pipeline.

Disassembling Valve

Before disassembly, remove the valve from the pipe line, open the valve and remove actuator (and adapter, if included) from the valve. See the "REMOVING VALVE" section. See Figures 1 and 2 for component identification.

Removing the Disc/Shaft from Body

1. If the valve has packing gland, remove the two screws (A26), and the gland (A25).
2. Remove the plug (A16) from the bottom of the valve.
3. Remove the disc-to-shaft assembly:
 - On sizes 3–12", remove the torque plug (A10).
 - On sizes 14–20", remove the set screw (A10) and drive out the pin (A4) from the side opposite the set screw with a hammer and punch. Do not damage the shaft with the punch.
 - On sizes 18 and 20", also remove the lower set screw (A12).
4. Remove the shaft from the valve body:
 - On sizes 3–16", push the bottom end of the shaft (A5) and carefully remove the shaft from the top of the body.
 - On sizes 18 and 20", turn a threaded fastener into the threaded hole on the lower shaft (A11). Using the threaded fastener, carefully remove the shaft from the body.
5. Remove the disc (A2) from the side of the body opposite seating side.

Reassembling Valve

1. Block the body (A1) in a horizontal position with the seat facing down.
Note: Provide clearance for the disc above and below the seat opening.
2. Apply a paint-like coating of an NSF 61 approved lubricant (such as Dow Corning 111 or Phoenix 505) to the two flat pads near the holes for the shaft.
3. Holding the disc (A2) in a vertical "OPEN" position, with the shaft connection toward the top of the body, insert the disc into the seat opening in the body and align the shaft holes in the disc with the shaft holes in the body.
4. Insert the shaft into the body and disc:
 - On sizes 3–16", insert the shaft (A5) into the top of the body, through the disc and into the bottom of the body. Insert the shaft carefully so that the body bearings (A7 and A32) are not damaged or moved out of position.
 - On sizes 18 and 20", insert the upper shaft (A5) through the top of the body and into the top of the disc. Insert the shaft carefully so that the upper body bearing (A7) is not damaged or moved out of position. Align and center the flat on the shaft with the tapped hole in the disc. Insert the lower shaft (A11) through the bottom of the body and into the bottom of the disc. Insert the shaft carefully so that the lower body bearing (A32) is not damaged or moved out of position. Align and center the hole in the lower shaft with the tapped hole in the disc.

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3-20" BAW AWWA Butterfly Valves

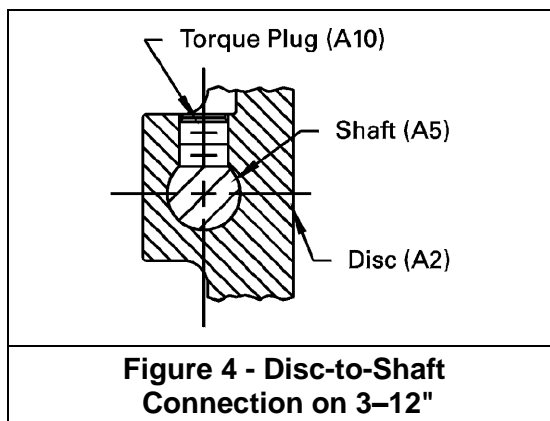
Reassembling Valve (Continued)

5. Connect the disc to the shaft:

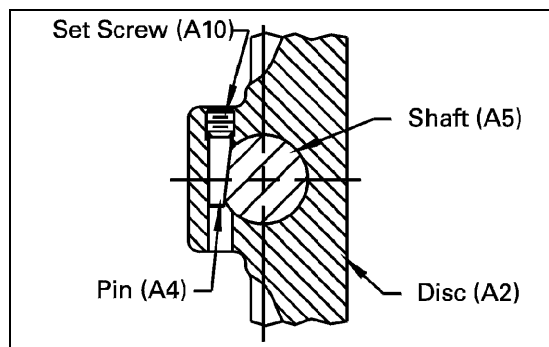
- On sizes 3–12", align and center the flat on the shaft with the tapped hole in the disc. See Figure 4. On sizes 3–6", apply one bead of Loctite 243 along half the depth of the threads tapped hole; on sizes 8–12", apply two beads, on opposite sides. Apply one bead to the threads of the torque plug (A10) and screw the torque plug into the disc and tighten to the torque shown in Table B.

Table B Plug Torque

Valve Size	Torque, Ft. Lbs.
3	13+/-2
4	20 +/-2
6	60+/-5
8	100+/-5
10	200+/-5
12	270+/-5



- On sizes 14–16", align and center the flat on the shaft with the tapped hole in the disc. Insert the pin (A4) into the mating hole in the disc (A2) so that the flat on the pin is centered on the flat on the shaft. Tap the pin firmly into position with a hammer and punch until the hammer bounces back when the pin is struck. Apply one bead of Loctite 243 to the threads of set screw (A10) and one bead along half the depth of the threads in the tapped hole above the pin. Tighten the set screw to 75±5 ft. lbs. See Figure 5.



Reassembling Valve (Continued)

- On sizes 18 and 20", align and center the flat on the shaft with the tapped hole in the disc. Insert the pin (A4) into the mating hole in the disc (A2) so that the flat on the pin is centered on the flat on the shaft. Tap the pin firmly into position with a hammer and punch until the hammer bounces back when the pin is struck. Apply one bead of Loctite 243 to the threads of the set screw (A10) and one bead along half the depth of the threads in the tapped hole above the pin. Tighten the set screw to 125 ± 5 ft. lbs. See Figure 5. Apply one bead of Loctite 243 to the threads of set screw (A12) and one bead along half the depth of the threads in the threaded hole near the bottom of the disc (A2). Thread the set screw into the disc and into the blind hole in the lower shaft (A11) and tighten to 13 ± 2 ft. lbs. See Figure 6.

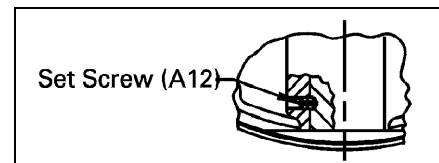


Figure 6—Lower Set Screw Detail 18" & 20"

- Apply PTFE pipe sealant to the threads of plug (A16) and tighten the plug securely in the threaded hole in the bottom of the body.
- If the valve has a packing gland, mount the gland (A25) with the two screws (A26) and washers (A27). Tighten the screws evenly and finger-tight, plus 1/2 turn.
- Mount the actuator (and adapter, if included) to the valve.

Replacing Bearings

- To replace bearing, disassemble the valve as instructed in the "disassembling valve" section.
- Remove the bearings from the upper and lower journals in the valve body.

Note: If PTFE or Darcon bearings are used, fabricate a sleeve the same size as the bearing OD; insert the sleeve into the bearing, and push the bearing out of the journal.
- Thoroughly clean the journals before inserting new bearings.
- Form new bearings into cylindrical shape and insert bearings into the journals until they stop against the rubber seat ring or are 1/8" away from the body opening.

Note: For 3-8" valves, warm the bearing to 350°F (177°C) before forming into the cylindrical shape to avoid crimping the bearing material.
- For PTFE or Darcon bearings, apply a layer of Loctite to the outside surface of bearing, then use sleeve to push it into the journal until it stops against the body step.
- Reassemble the valve as described in the "reassembling valve" section.

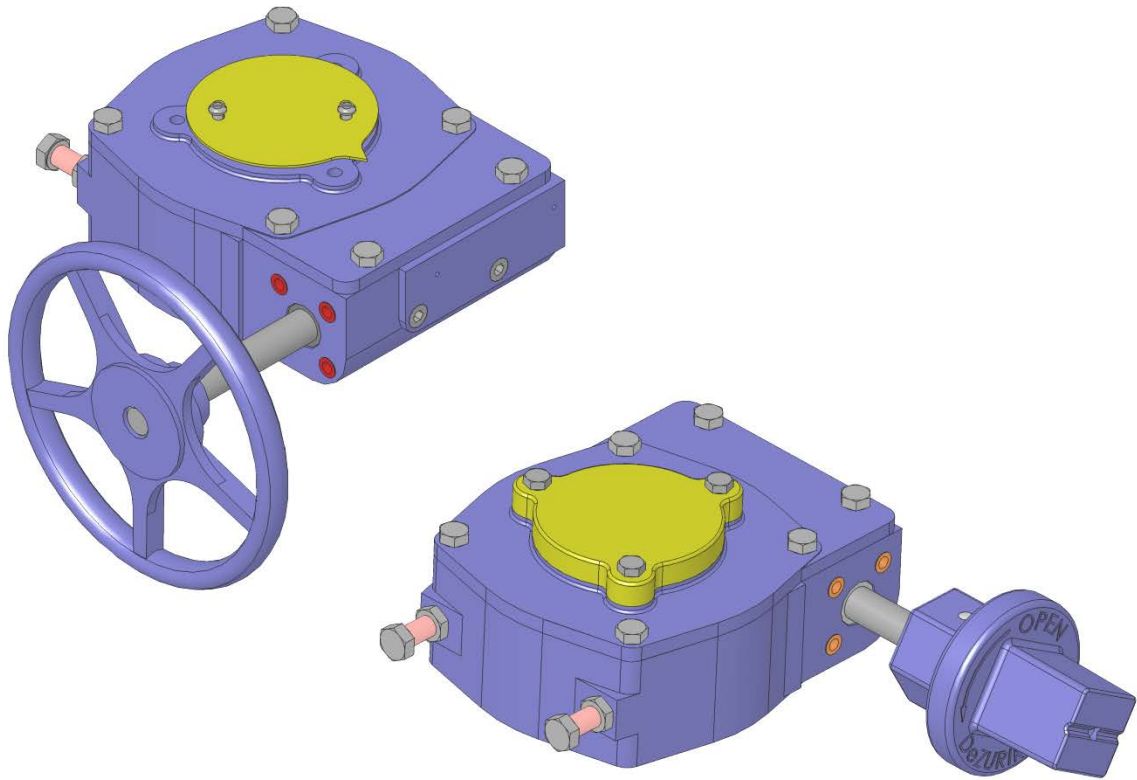
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3-20" BAW AWWA Butterfly Valves

Troubleshooting

Condition	Possible Cause	Corrective Action
Packing leaks.	Packing is loose.	Adjust packing See "Packing Adjustment."
	Packing is worn.	Replace Packing. See "Packing Replacement."
Valve leaks when closed.	Closed position stop is set incorrectly.	Adjust closed position stop
	Seat is worn or Damaged.	Replace valve.
	Sealing edge of disc is worn or damaged.	Replace disc.
Valve does not fully close.	Object is wedged between seat and disc.	Fully open valve to remove object.
	Closed position stop is not set correctly.	Adjust closed position stop.
Valve does not fully open.	Open position stop is not adjusted correctly.	Adjust open position stop.
Opening and/or closing torque is excessive.	Bearings, shaft, disc and/or seat are dirty or worn.	Clean or replace dirty or worn component(s).
	Shaft is bent.	Replace shaft.
	Packing gland screws are over-tightened.	Loosen screws and replace packing if needed.

DEZURIK G-SERIES (6B/12A) MANUAL ACTUATOR USED ON BAW BUTTERFLY VALVES



Instruction D10505
August 2019

DeZURIK

G-Series (6B/12A) Manual Actuator used on BAW Butterfly Valves

Instructions

These instructions provide information about G-Series Manual Actuators. They are for use by personnel who are responsible for installation, operation and maintenance of G-Series Manual Actuators.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your G-Series Manual Actuator has been packaged to provide protection during shipment; however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) and serial number located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

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**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Description

The G-Series Manual Actuator is designed to operate a BAW Butterfly valve. External adjustable stops limit actuator stroke for both the open and closed valve positions. This actuator is available in two sizes: Size 6B and Size 12A. See Figure 1 to identify which unit you have.

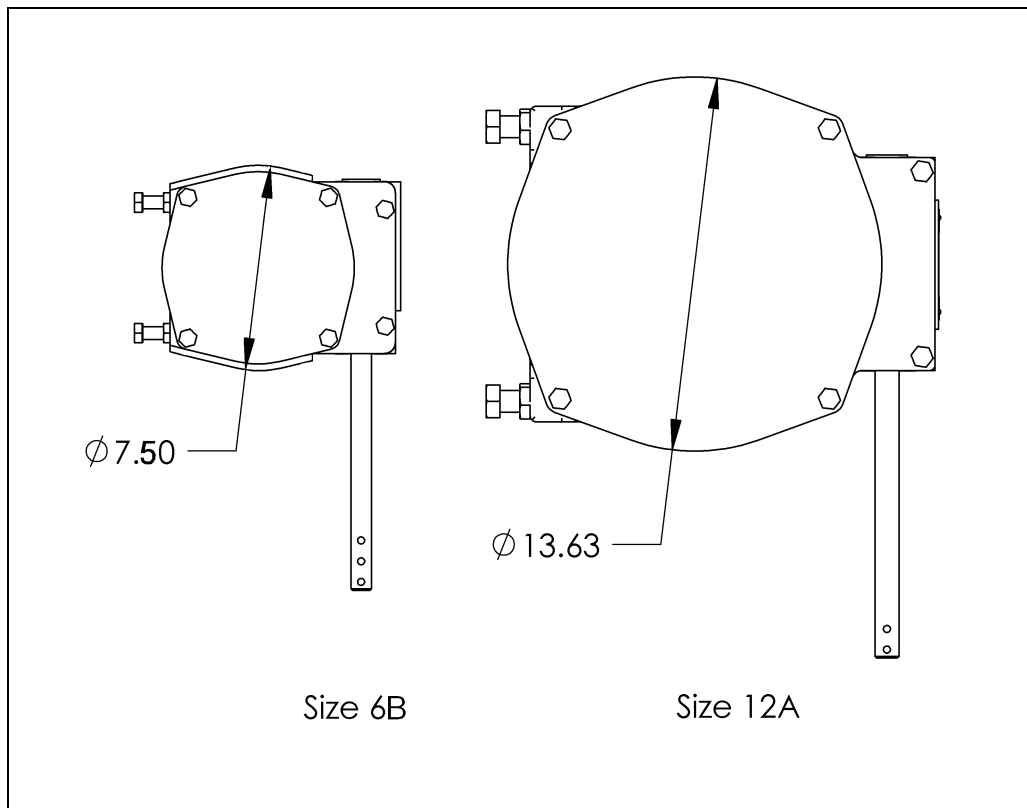


Figure 1 - Actuator Identification

Operation

Rotating the operator (handwheel, chainwheel or 2" wrenching square) clockwise closes the valve. Counterclockwise rotation of the operator opens the valve. To actuate the valve from full open to full closed (or vice-versa), the Size 6B requires 13 revolutions and the Size 12A requires 19 revolutions of the operator.

Tools Required

This actuator is assembled using metric fasteners. To service this unit, you should have a full set of combination or ratchet wrenches, Allen wrenches, flat tipped screwdrivers, a 1/4" pin punch and a dead blow hammer.

Lubrication

The G-Series manual Actuator has been lubricated at the factory and requires no routine maintenance lubrication. If the actuator requires disassembly, see the ACTUATOR DISASSEMBLY AND ASSEMBLY section in this instruction for disassembly, lubrication and assembly procedures.

**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Parts Identification

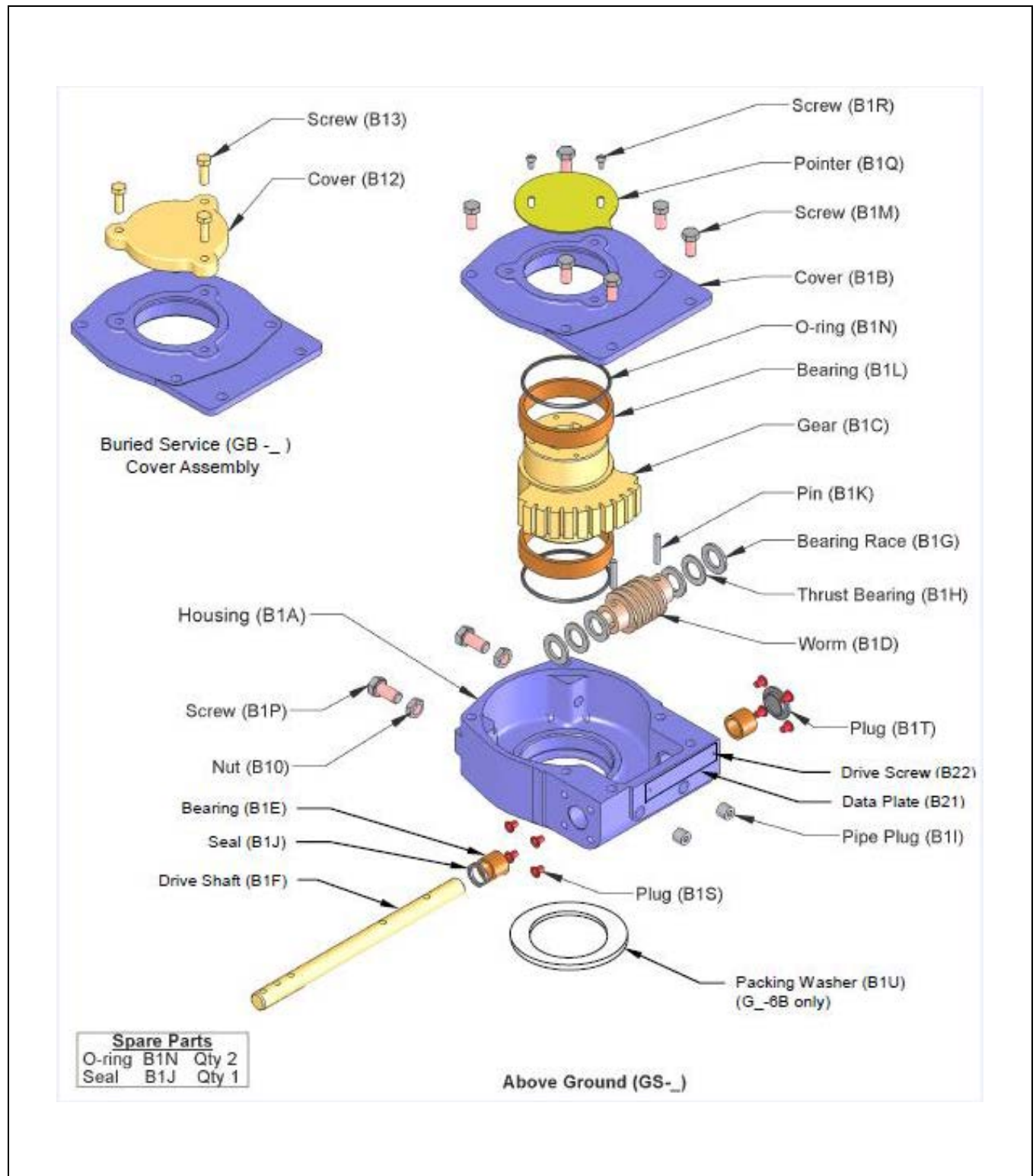


Figure 2— Actuator Parts Identification

**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Adjusting Position Stops

The open and closed position stops prevent the valve disc from rotating beyond the optimum open and shutoff positions.

If the actuator is factory-mounted on the valve, the stops are preset, and do not require further adjustment. If the actuator is not factory mounted on the valve, or if the actuator has been removed, the stops will require adjustment as described below; also refer to the Valve Instructions for specific closed-position requirements for the valve.

To adjust the closed position stop

(See Figure 4 for stop identification)



WARNING!

Adjusting stops with flow in the pipeline can allow the valve to close causing personal injury and damaging the flow system.

Shut down the flow and relieve pipeline pressure before making stop adjustments.

1. Discontinue flow and relieve pipeline pressure.
2. Loosen the nut on the closed position screw, and back out the screw about two turns.
3. Close the valve.
4. Turn the closed position screw clockwise until resistance is felt from the screw contacting the gear sector (B1C).
5. Prevent the screw from turning and tighten the nut against housing (B1A).
6. Pipeline flow may now be restored.

To adjust the open position stop

(See Figure 4 for stop identification)



WARNING!

Adjusting stops with flow in the pipeline can allow the valve to close causing personal injury and damaging the flow system.

Shut down the flow and relieve pipeline pressure before making stop adjustments.

1. Discontinue flow and relieve pipeline pressure.
2. To visually determine when the valve is in the open position:
Above Ground Service (GS_) actuator - Remove the screws (B1R) and pointer (B1Q).
Buried Service (GB_) actuator - Remove the screws (B13) and cover (B12).
3. Loosen the nut on the open position screw, and back out the screw about two turns.

G-Series (6B/12A) Manual Actuator used on BAW Butterfly Valves

Adjusting Position Stops (Continued)

- Turn the handwheel, chainwheel or 2" wrenching square operator so the drive key/plug alignment is parallel to the valve flanges. See Figure 3 for valve open position.

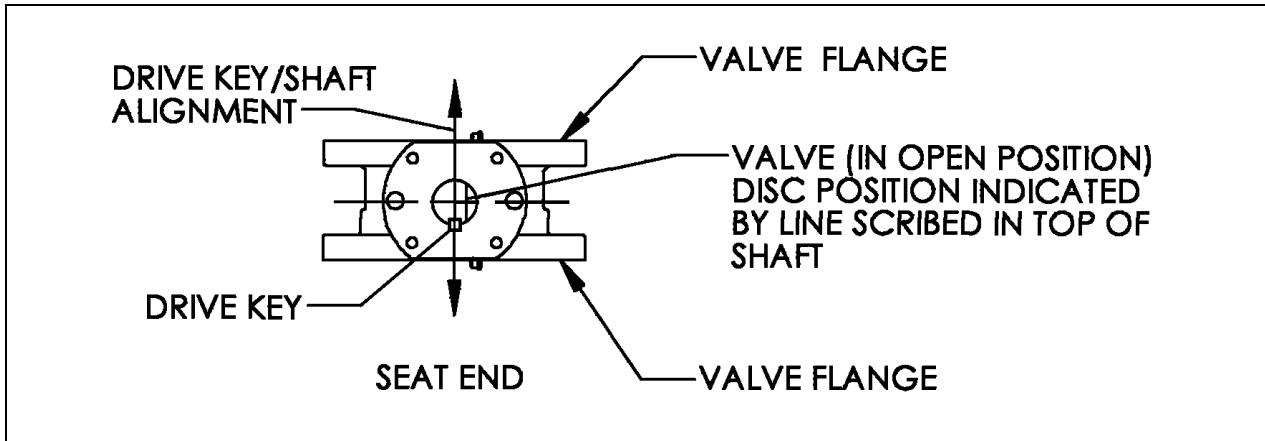


Figure 3 – Valve Open Position

- Turn the open position screw clockwise until resistance is felt from the screw contacting the gear sector (B1C).
- Buried Service (GB_) actuator:** Apply 2 wraps of string packing (1013701) to the actuator stop screw threads between jam nut and actuator.
- Prevent the screw from turning, and tighten the nut (B10) against housing (B1A).
- Above Ground Service (GS_) actuator:** Replace the pointer (B1Q) so it is pointing at the OPEN mark on the cover (B1B) and tighten screws (B1R).

Buried Service (GB_) actuator: Remove old sealant from cover (B12) and cover (B1B) mating mounting surfaces. Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the cover (B12) and cover (B1B) mating surfaces. Fasten the cover (B12) to cover (B1B) with screws (B13).

- Pipeline flow may now be restored.

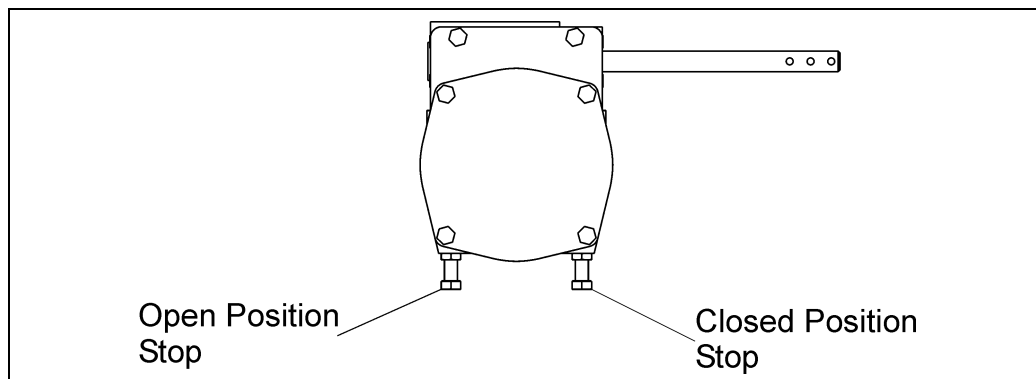
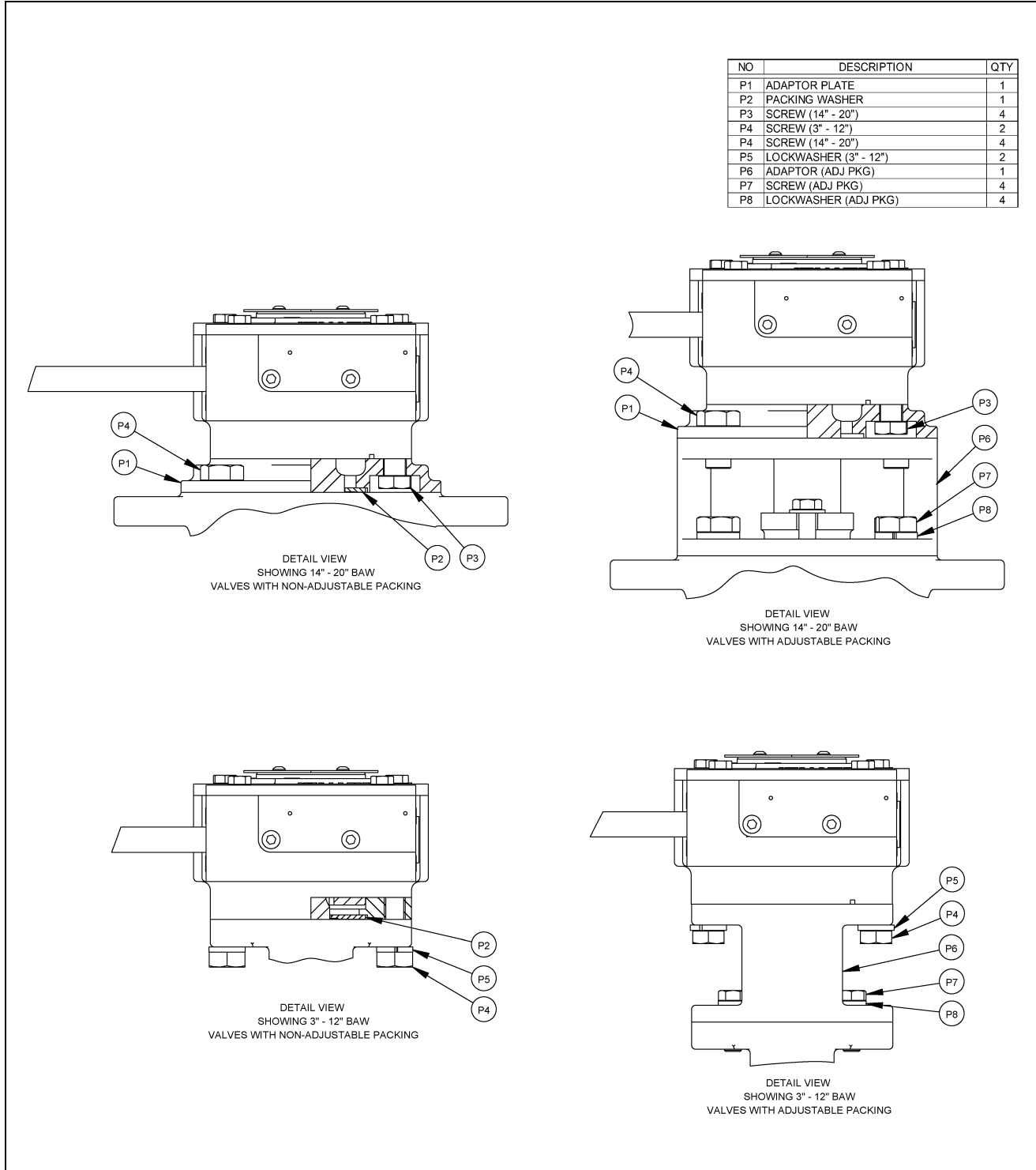


Figure 4 – Open and Closed Position Stop Identification

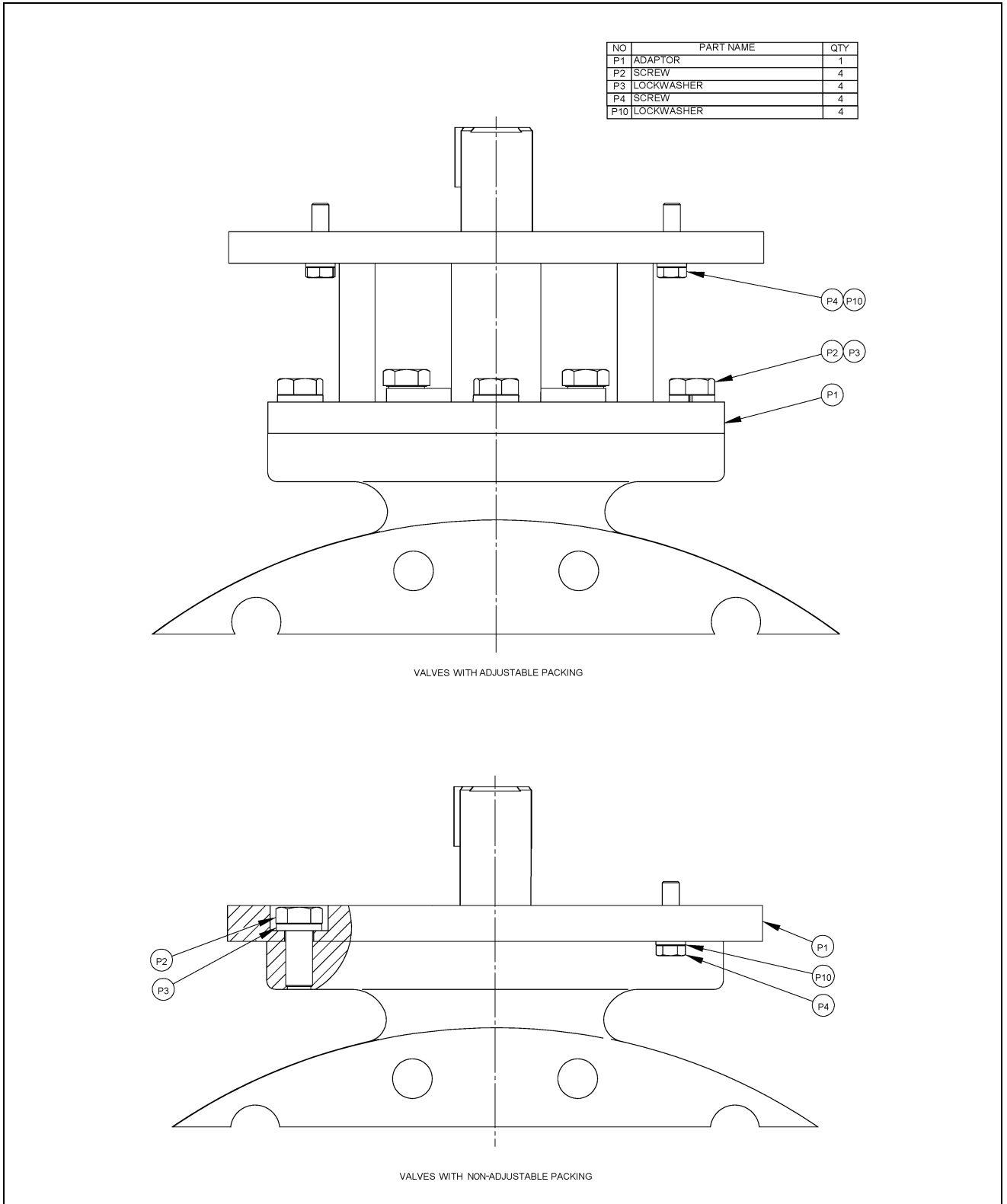
**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Removing Actuator from Valve

Refer to Figure 5 (G_-6B) and Figure 6 (G_-12A) for connecting parts identification.



**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**



**Figure 6 – G_-12A Connecting Parts Identification
20” – 30” Valves**

Removing Actuator from Valve *(Continued)*



WARNING!

Flow in the pipeline with the actuator removed can slam the valve closed causing personal injury and damaging the flow system. Shut down the flow in the pipeline before removing the actuator from the valve.

G_-6B Actuator on 3 – 12 Inch Valves (Figure 5)

1. Discontinue flow and relieve pipeline pressure.
2. Close the valve.
3. Remove the indicator (B1Q) or buried service cover (B12).
4. Remove the two actuator mounting screws (P4) and lock-washers (P5).
5. Remove the actuator from the mounting flange.
6. Do not lose the drive key used in the valve shaft and actuator gear sector.
7. Clean the keyways, removing the silicon residue. Wipe away any remaining cleaning residue.

G_-6B Actuator on 14 – 20 Inch Valves (Figure 5)

1. Discontinue flow and relieve pipeline pressure.
2. Close the valve.
3. Remove the indicator (B1Q) or buried service cover (B12).
4. Remove the four adaptor mounting screws (P4).
5. Remove the actuator with adaptor plate (P1) from the mounting flange.
6. Do not lose the drive key used in the valve shaft and actuator gear sector.
7. Clean the keyways, removing the silicon residue. Wipe away any remaining cleaning residue.

G_-12A Actuator on 20 – 30 Inch Valves (Figure 6)

1. Discontinue flow and relieve pipeline pressure.
2. Close the valve.
3. Remove the indicator (B1Q) or buried service cover (B12).
4. Remove the four actuator mounting screws (P4) and lock-washers (P10).
5. Remove the actuator from the adaptor (P1).
6. Do not lose the drive key used in the valve shaft and actuator gear sector.
7. Clean the keyways, removing the silicon residue. Wipe away any remaining cleaning residue.

G-Series (6B/12A) Manual Actuator used on BAW Butterfly Valves

Installing Actuator on Valve

Refer to Figure 2 and Figure 5 for parts identification.

G_-6B Actuator on 3 – 12 Inch Valves

1. Place the valve in the position it was in when the actuator was removed. Normally this will be in the closed position.
2. **For Buried Service (GB_) actuators only:** Before reassembly, remove old sealant from all mating mounting surfaces. Apply a thin bead of silicone sealant DOW RTV-732 (1055515) or similar to the valve top mounting flange and the actuator housing (B1A) mounting surfaces.
3. **For Above Ground Service (GS_) actuators mounted on valves with non-adjustable packing only:** Verify the packing washer (P2) is located on the valve shaft.
4. Install the actuator onto the valve shaft and verify the valve shaft keyway is properly aligned with the keyway in the actuator gear sector. Mount the actuator to the mounting flange with the two mounting screws (P4) and lock-washers (P5). Tighten screws.
5. Insert the key into the gear sector and shaft keyway. Apply enough Dow Corning 732 silicone sealant in the gear sector keyway to cover the exposed end of the key and secure the key to the gear sector.
6. Check the closed position stop setting and readjust if necessary as described in the **ADJUSTING POSITION STOPS** Section of this Instruction.
7. Replace the indicator (B1Q) or buried service cover (B12).
8. Pipeline flow may now be restored.

G_-6B Actuator on 14 – 20 Inch Valves

1. Place the valve in the position it was in when the actuator was removed. Normally this will be in the closed position.
2. **For Buried Service (GB_) actuators only:** Before reassembly, remove old sealant from all mating mounting surfaces. Apply a thin bead of silicone sealant DOW RTV-732 (1055515) or similar to the adaptor plate (P1) and the actuator housing (B1A) mounting surfaces.
3. **For Above Ground Service (GS_) actuators mounted on valves with non-adjustable packing only:** Verify the packing washer (P2) is located on the valve shaft.
4. Install the actuator onto the valve shaft and verify the valve shaft keyway is properly aligned with the keyway in the actuator gear sector. Mount the actuator with adaptor to the mounting flange with the four mounting screws (P4). Tighten screws.
5. Insert the key into the gear sector and shaft keyway. Apply enough Dow Corning 732 silicone sealant in the gear sector keyway to cover the exposed end of the key and secure the key to the gear sector.
6. Check the closed position stop setting and readjust if necessary as described in the **ADJUSTING POSITION STOPS** Section of this Instruction.
7. Replace the indicator (B1Q) or buried service cover (B12).
8. Pipeline flow may now be restored.

Installing Actuator on Valve *(Continued)*

G_-12A Actuator on 20 – 30 Inch Valves

1. Place the valve in the position it was in when the actuator was removed. Normally this will be in the closed position.
2. **For Buried Service (GB_) actuators only:** Before reassembly, remove old sealant from all mating mounting surfaces. Apply a thin bead of silicone sealant DOW RTV-732 (1055515) or similar to the adaptor plate (P1) and the actuator housing (B1A) mounting surfaces.
3. Install the actuator onto the valve shaft and verify the valve shaft keyway is properly aligned with the keyway in the actuator gear sector. Mount the actuator to the adaptor plate (P1) with the four mounting screws (P4) and lock-washers (P10). Tighten screws.
4. Insert the key into the gear sector and shaft keyway. Apply enough Dow Corning 732 silicone sealant in the gear sector keyway to cover the exposed end of the key and secure the key to the gear sector.
5. Check the closed position stop setting and readjust if necessary as described in the **ADJUSTING POSITION STOPS** Section of this Instruction.
6. Replace the indicator (B1Q) or buried service cover (B12).
7. Pipeline flow may now be restored.

**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Convert from CCW to CW to Open (Open Right)

1. Remove the actuator from the valve as described in the REMOVING ACTUATOR FROM VALVE section of this instruction.
2. Rotate the operator of the actuator CCW until the gear sector moves 90 degrees from the closed position.
3. Re-install actuator onto valve per INSTALLING ACUTATOR ON VALVE section of this instruction.

Actuator Disassembly and Assembly

Under normal operating conditions the G-Series actuator does not require routine maintenance. If the actuator has excessive wear or has been damaged, it is recommended that the actuator be replaced, not repaired.

Use the following procedure for replacing leaking seals and O-rings. Refer to Figure 2 for component identification.

Actuator Disassembly:



WARNING!

Flow in the pipeline with the actuator removed can slam the valve closed causing personal injury and damaging the flow system. Shut down the flow in the pipeline before removing the actuator from the valve.

4. Discontinue flow and relieve pipeline pressure.
5. Close the valve.
6. Remove the actuator from the valve as described in the REMOVING ACTUATOR FROM VALVE section of this Instruction.
7. **Above Ground Service (GS_) actuator only:** Note the position of the pointer (B1Q), then remove the screws (B1R) and pointer.

Buried Service (GB_) actuator only: Remove screws (B13) and cover (B12).
8. Remove the screws (B1M) and cover (B1B).
9. Remove the O-ring (B1N) thru the top of the cover (B1B).
10. Note the position of the gear sector (B1C) in the housing (B1A).
11. Remove the two pipe plugs (B1I) from the housing (B1A).
12. Rotate the drive shaft (B1F) until the pins (B1K) line up with the pipe plug holes in the housing (B1A).
13. Drive both pins (B1K) thru the worm (B1D) and drive shaft (B1F).
14. Slide the drive shaft (B1F) out of the housing (B1A).
15. Remove the worm gear (B1D), four bearing race (B1G), two thrust bearings (B1H), two spacer sleeves (B1V), gear sector (B1C) and seal (B1J) from the housing (B1A).
16. Remove the O-ring (B1N) thru the bottom of the housing (B1A).
17. Remove old gasket sealant from the top of the housing (B1A) and bottom of the cover (B1B).

Buried Service (GB_) actuator only: Remove old gasket sealant from the bottom of the housing (B1A), top of adaptor plate (P1), top of cover (B1B) and bottom of cover (B12) mating surfaces.

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**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

Actuator Assembly:

1. Install a new seal (B1J) into the housing (B1A).
2. Apply a light film of grease to a new O-ring (B1N) and insert it into the groove in the bottom of the housing (B1A).
3. Grease the bearing (B1L) in the housing (B1A) and slide the gear sector (B1C) into the bearing in the position noted in Step 7. of the ACTUATOR DISASSEMBLY section.
4. Slide the drive shaft (B1F) into the housing (B1A) and thru bearing race (B1G), thrust bearing (B1H), bearing race (B1G), spacer sleeve (B1V), worm (B1D), bearing race (B1G), thrust bearing (B1H) and bearing race (B1G), spacer sleeve (B1V).
5. Rotate the drive shaft (B1F) until the pin holes in the drive shaft and the worm (B1D) line up.
6. Drive the two pins (B1K) thru the worm (B1D) and drive shaft (B1F).
7. Apply removable thread sealant to the threads of pipe plugs (B1I) and install the pipe plugs flush or below the surface of the housing (B1A).
8. **Above Ground Service (GS_) actuator only:** Apply a liberal amount of Lithium based grease such as Shell Alvania EP2 or Mobilux EP2 to the gear sector (B1C), bearings (B1L) and worm (B1D).

Buried Service (GB_) actuator only: Pack the housing (B1) full of Lithium based grease such as Shell Alvania EP2 or Mobilux EP2.

9. Apply a light film of grease to a new O-ring (B1N) and insert into groove in the cover (B1B).
10. Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the housing (B1A) or cover (B1B) mating surface. Grease the bearing (B1L) in the cover, slide the cover onto the gear sector (B1C) and fasten with screws (B1M) to the housing.
11. Insert the drive key into the valve shaft/gear sector (B1C) keyway.
12. **Above Ground Service (GS_) actuator only:** Fasten the pointer (B1Q) to the gear sector (B1C) with the two screws (B1R) in the position noted in Step 4. of the ACTUATOR DISASSEMBLY section.

Buried Service (GB_) actuator only: Apply a bead of silicone sealant DOW RTV-732 (1055515) or similar to the cover (B12) or cover (B1B) mating surface. Fasten the cover (B12) to cover (B1B) with screws (B13).

13. Install the actuator on the valve as described in the REPLACING ACTUATOR ON VALVE Section of this Instruction.

**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

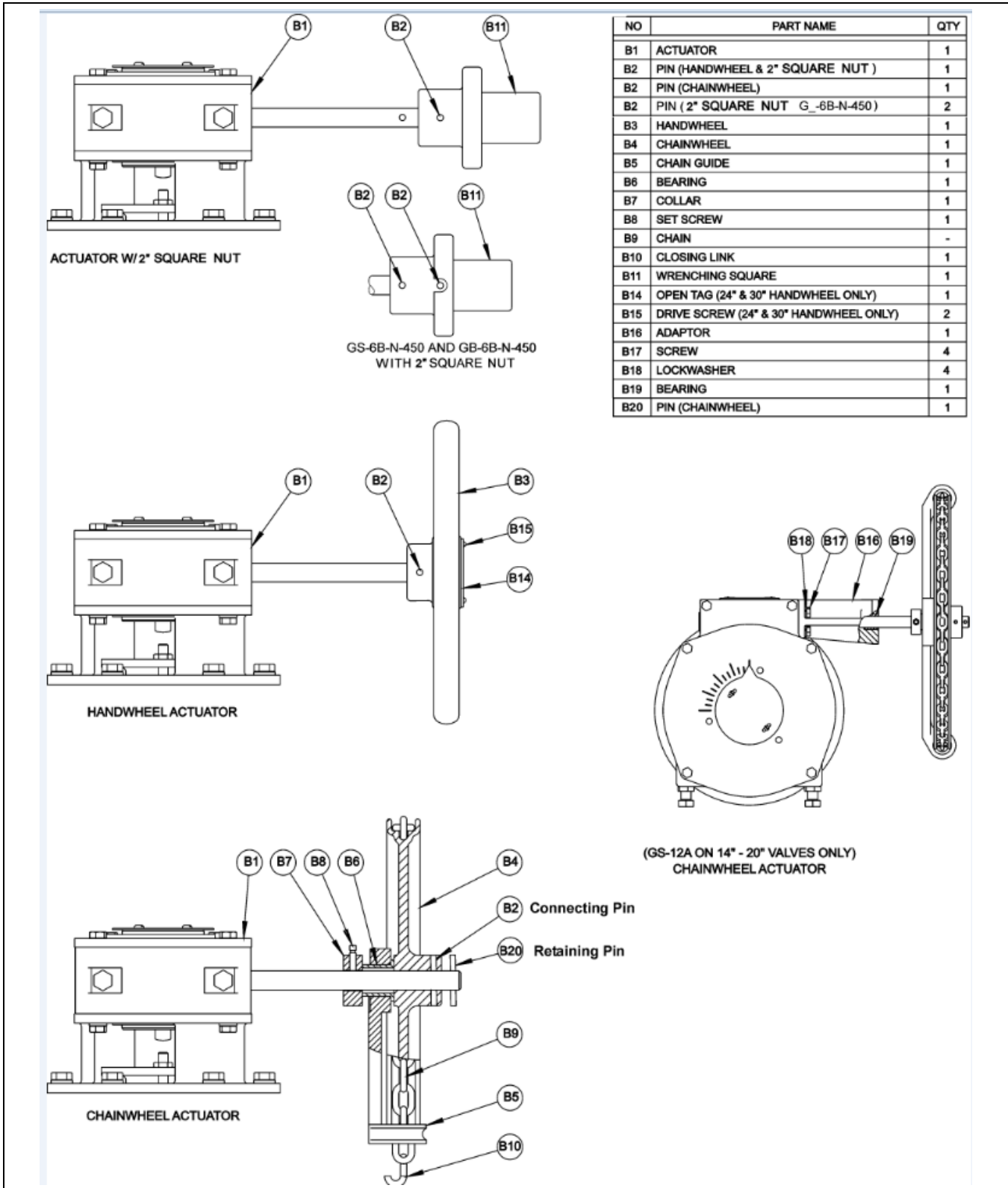


Figure 7 – G_-6B and G_-12A Operator Component Identification

**G-Series (6B/12A) Manual Actuator
used on BAW Butterfly Valves**

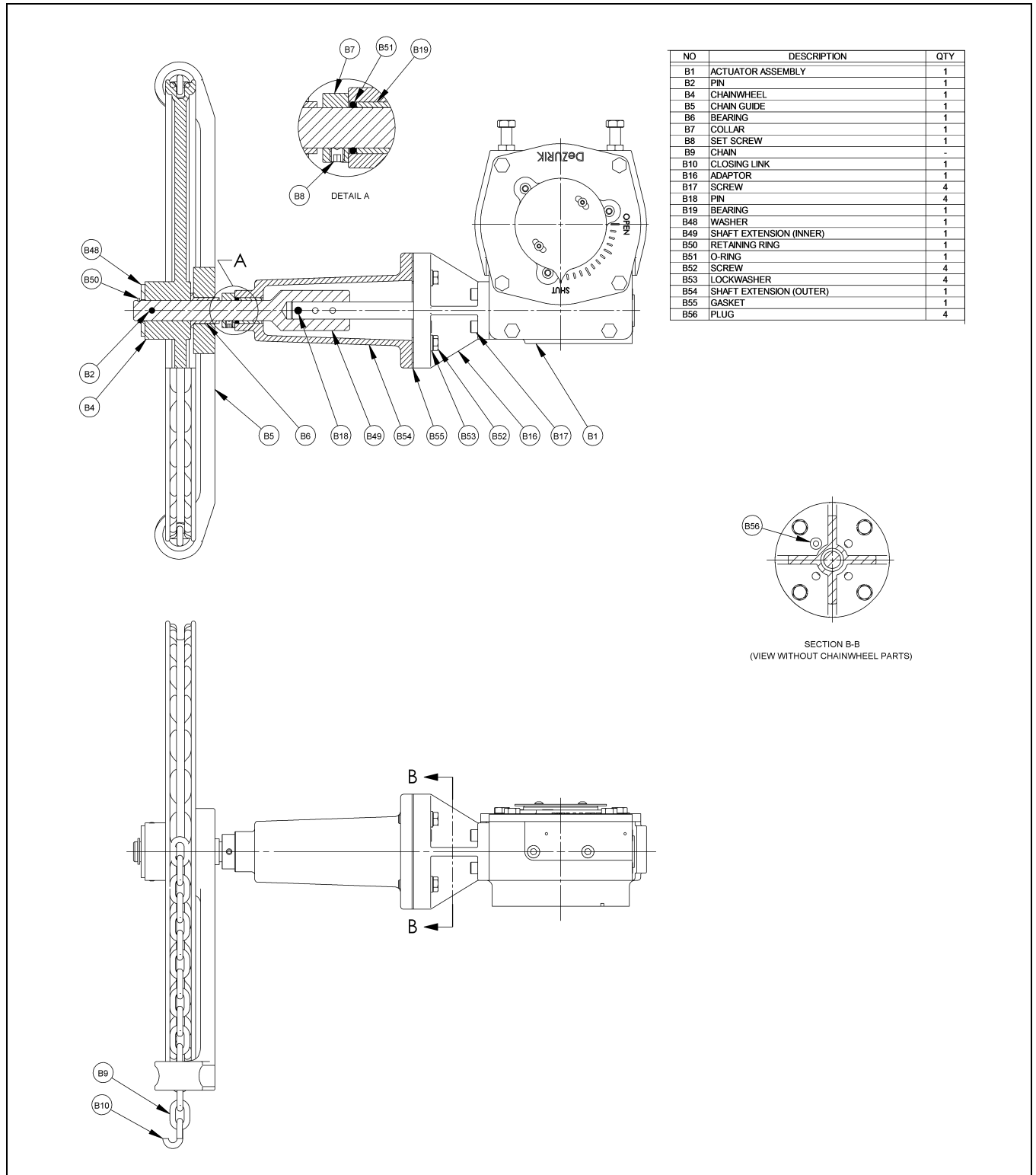


Figure 8 – G_-6B with 20” and 24” Chainwheels Operator Component Identification

Replace Handwheel or Nut with Chainwheel Operator

Carefully follow these steps to convert the actuator from a handwheel or nut operator to a chainwheel operator.



WARNING!

Flow in the pipeline with the actuator removed can slam the valve closed causing personal injury and damaging the flow system. Shut down the flow in the pipeline before removing the actuator from the valve.

1. Discontinue flow and relieve pipeline pressure.
2. Close the valve.
3. Remove actuator from valve. Refer to “Removing Actuator from Valve” section in this instruction.
4. Support actuator shaft (B1F) with a solid surface. Drive out pin (B2) and remove handwheel (B3) or nut (B11) from actuator shaft.

GS-6B-CW_ (8 and 12 Inch Chainwheels)

Refer to Figure 6 for parts identification.

1. Slide collar (B7) with set screw (B8) onto actuator shaft (B1F).
2. Insert bearing (B6) into chain guide (B5) and slide chain guide onto actuator shaft (B1F) with the bearing flange facing actuator and openings in chain guide facing away from actuator.
3. Slide chainwheel (B4) onto actuator shaft (B1F) with the pin hole in hub facing away from actuator and line up pin hole in chainwheel hub with second hole in actuator shaft. Support the hub of chainwheel with a solid surface and drive connecting pin (B2) into position. See Figure 6 for location of connecting pin.



WARNING!

The “connecting” pin securing the chainwheel hub to the actuator shaft could potentially shear allowing the chainwheel to disengage from the actuator shaft and cause personal injury or equipment damage.

A “retaining” pin at the end of the actuator shaft must be in-place to insure the chainwheel cannot disengage from the actuator shaft.

4. Support the hub of chainwheel (B4) with a solid surface and drive retaining pin (B20) into the remaining hole at the end of actuator shaft. See Figure 6 for location of retaining pin.
5. Slide collar (B7) and chain guide (B5) against chainwheel (B4) and tighten set screw (B8).
6. Install actuator on valve. Refer to “Installing Actuator on Valve” section in this instruction.
7. Feed chain (B9) over chainwheel (B4) and through both openings in chain guide (B5).
8. Connect ends of chain (B9) with closing link (B10).

Replace Handwheel or Nut with Chainwheel Operator *(Continued)*

GS-6B-CW_ (20 and 24 Inch Chainwheels)

Refer to Figure 8 for parts identification.

1. Remove plastic plugs from mounting holes on shaft side of actuator housing (B1A).
2. Slide adaptor (B16) onto actuator shaft (B1F). Tighten with screws (B17).
3. Slide inner shaft extension (B49) onto actuator shaft (B1F) and align pin holes.
4. Support the hub of inner shaft extension (B49) with a solid surface and drive pin (B18) into the aligned pin holes.
5. Insert bearing (B19) in hole of outer shaft extension (B54).
Note: Bearing must be recessed .18" from end of outer shaft extension.
6. Place gasket (B55) on adaptor (B16).
7. Slide outer shaft extension (B54) onto inner shaft extension (B49).
8. Align gasket (B55) and outer shaft extension (B54) with adaptor (B16). Secure outer shaft extension to adaptor with screws (B52) and lock-washers (B53).
9. Apply a light film of grease to a new O-ring (B51) and slide over inner shaft extension (B49) and insert into outer shaft extension (B54) O-ring groove.
10. Slide collar (B7) with set screw (B8) onto inner shaft extension (B49) and secure up against outer shaft extension (B54).
11. Insert the four plugs (B56) into thru holes in adaptor (B16).
12. Insert bearing (B6) into chain guide (B5) and slide chain guide onto inner shaft extension (B49) with the bearing flange and openings in chain guide facing away from actuator.
13. Slide chainwheel (B4) onto inner shaft extension (B49) with pin hole in hub facing away from actuator. Line up pin hole in chainwheel hub with hole in inner shaft extension. Support hub of chainwheel with a solid surface and drive pin (B2) into position.



WARNING!

The “connecting” pin securing the chainwheel hub to the inner shaft extension could potentially shear allowing the chainwheel to disengage from the actuator shaft and cause personal injury or equipment damage.

A washer and retaining ring must be in-place to insure the chainwheel cannot disengage from the inner shaft extension.

14. Slide washer (B48) onto inner shaft extension (B49) and attach retaining ring (B50) to inner shaft extension.
15. Install actuator on valve. Refer to “Installing Actuator on Valve” section in this instruction.
16. Feed chain (B9) over chainwheel (B4) and through both openings in chain guide (B5).
17. Connect the ends of chain (B9) with closing link (B10).

Replace Handwheel or Nut with Chainwheel Operator *(Continued)*

GS-12A-CW_

Refer to Figure 6 for parts identification.

1. Remove plastic plugs from mounting holes on shaft side of actuator housing (B1A).
2. Slide adaptor (B16) onto actuator shaft (B1F). Tighten with screws (B17) and lock-washers (B18).
3. Slide collar (B7) with set screw (B8) onto actuator shaft (B1F).
4. Insert bearing (B6) into chain guide (B5) and slide chain guide onto actuator shaft (B1F) with the bearing flange facing actuator and chain holes in guide facing away from actuator.
5. Slide chainwheel (B4) onto actuator shaft (B1F) with pin hole in hub facing away from actuator and line up pin hole in chainwheel hub with second hole in actuator shaft. Support the hub of chainwheel with a solid surface and drive connecting pin (B2) into position. See Figure 7 for location of connecting pin.



WARNING!

The connecting pin securing the chainwheel hub to the actuator shaft could potentially shear allowing the chainwheel to disengage from the actuator shaft and cause personal injury or equipment damage.

A retaining pin at the end of the actuator shaft must be in-place to insure the chainwheel cannot disengage from the actuator shaft.

6. Support hub of chainwheel (B4) with a solid surface and drive retaining pin (B20) into remaining hole at end of actuator shaft. See Figure 6 for location of retaining pin.
7. Slide collar (B7) and chain guide (B5) against chain wheel (B4) and tighten set screw (B8).
8. Install actuator on valve. Refer to "Installing Actuator on Valve" section in this instruction.
9. Feed chain (B9) over chainwheel (B4) and through both openings in chain guide (B5).
10. Connect ends of chain (B9) with closing link (B10).

G-Series (6B/12A) Manual Actuator used on BAW Butterfly Valves

Changing Mounting Positions

The actuator can be mounted in 90° increments around the valve shaft.

To move the actuator mounting position in 90° increments from its present position, follow these steps.

1. Remove the actuator from the valve as described in the REMOVING ACTUATOR FROM VALVE Section of this Instruction.
2. Rotate the actuator to the desired position.

Install the actuator on the valve as described in the INSTALLING ACTUATOR ON VALVE Section of this Instruction.

Troubleshooting

Condition	Possible Cause	Corrective Action
Actuator closes to wrong position	Closed position stop is set incorrectly	Adjust closed position stop. See <i>Adjusting Position Stops</i> section
	Pointer is installed incorrectly.	Rotate pointer to correct position.
Actuator opens to wrong position	Open position stop is set incorrectly	Adjust open position stop. See <i>Adjusting Position Stops</i> section
	Pointer is installed incorrectly.	Rotate pointer to correct position.
High operating torque.	Misalignment of adaptor.	Check valve-adaptor-actuator alignment and adjust.
	Misalignment of ENK extension.	Check valve-extension-actuator alignment and adjust.
	Bent actuator input shaft.	Replace actuator.



DEZURIK NT NUT AND LEVER ACTUATOR USED ON 4" - 8" PEC & 3" - 8" PEF ECCENTRIC VALVES

Instruction D10061
June 2014

Instructions

These instructions provide information about NT Nut and Lever Actuators. They are for use by personnel who are responsible for installation, operation and maintenance of NT Nut and Lever Actuators.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with the assumption of pipeline material within the valve.

Inspection

Your NT Nut and Lever Actuator has been packaged to provide protection during shipment, however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

DeZURIK Service

DeZURIK service personnel are available to install, maintain and repair all DeZURIK products. DeZURIK also offers customized training programs and consultation services.

For more information, contact your local DeZURIK sales representative or visit our website at www.dezurik.com.

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Description

The 4" - 6" PEC & 3" - 6" PEF Eccentric valves can be actuated with the LV or LVF lever operators or with other levers that fit the 2" NT wrenching nut. Recommended lengths for levers are dependent upon valve size and maximum pressure drop expected across the valve as shown in Table A.

Table A: Lever Length

Valve Size	Lever Length			
	Pressure Drop			
	25 psi 170 kPa	50 & 75 psi 345 & 515 kPa	100 psi 690 kPa	125 psi 860 kPa
3 & 4 in 80 & 100 mm	15 in 381mm	15 in 381mm	15 in 381mm	15 in 381mm
5 & 6 in 125 & 150 mm	23 in 584 mm	30 in 762 mm	-	-
8 in 200 mm	30 in 762 mm	33 in 838 mm	43 in 1092 mm	-

Pressure Ratings

Direct shutoff pressure differentials for nut or lever actuated valves must not exceed the limits shown in Table B.

Note: Reverse shutoff differentials must not exceed 25 psi (170 kPa).

If valves must seal higher pressures, use handwheel actuators.

Table B: Maximum Shutoff Pressure Differentials

Valve Size	Nitrile-Butadiene (Buna V) NBR Packing (with Friction Cone)	Low Friction Nitrile-Butadiene (Buna V) NBRL Packing (without Friction Cone)
3 & 4 in 80 & 100 mm	125 psi 860 kPa	40 psi 275 kPa
5 - 8 in 125 - 200 mm	100 psi 690 kPa	25 psi 170 kPa

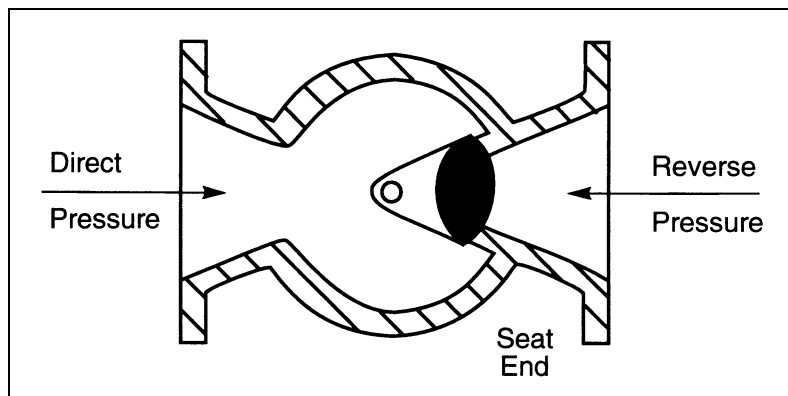


Figure 1 - Direct and Reverse Pressure Detail

Operation

Slowly rotate the lever clockwise around the valve stem to close the valve.



CAUTION!

Close the valve slowly. Rapid closure of the valve can cause pipeline pressure surges that will damage pipeline equipment.

Stop Adjustments

This actuator features open and closed position stops. These stops can be adjusted to stop valve stroke at the fully open and fully closed valve positions, or at any other valve position as desired to allow full control of your flow system.

Open Position Stop

The open position stop is a socket head cap screw and nut located in the slot in the gland. To change the stop setting, loosen the nut, slide the screw to the desired stop location, then tighten the nut. Check the stop setting by operating the valve until the lug contacts the stop; readjust the stop if necessary.

Closed Position Stop

The closed position setting for PEC Eccentric valves is determined by torquing the valve plug into the seat. To set the closed position stop, turn the closed position stop screw counterclockwise several turns, torque the plug into the seat to the torque specified in Table C, then turn the closed position stop screw clockwise until it contacts the adaptor.

Table C: Valve Seating Torque

Valve Size	Valve Seating Torque
3 & 4 in 80 & 100 mm	150 ft lbs 200 N-M
5 & 6 in 125 mm & 150 mm	180 ft lbs 245 N-M
8 in 200 mm	300 ft lbs 400 N-M

Removing Actuator

1. Stop pipeline flow.



WARNING!

Flow in the pipeline with the actuator removed can allow the valve to slam closed and cause personal injury and/or damage to the flow system. Shut down the flow in the pipeline before removing the actuator.

2. Scribe a line on the wrenching nut, packing gland and the valve bonnet for alignment during assembly.
3. Remove the nut recessed in the top of the wrenching nut.
4. Lift the wrenching nut off the plug stem.

Note: Do not lose the washers that are in the recessed hole.

Installing Actuator

1. Line up the scribe marks on the wrenching nut and packing gland, then set the wrenching nut on the plug stem.
2. Slide the flat washer (PEC Valves only) down the plug stem stud, then install the spring washers as shown in Figure 2.
3. Screw the lock nut down the plug stud until it is tight and the spring washers are completely compressed, then back the nut off one full turn.

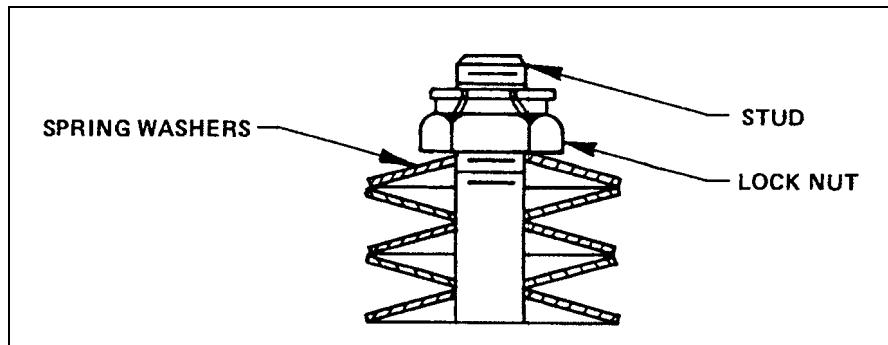


Figure 2 – Spring Washer Stackup



DEZURIK TEN-POSITION LEVER MANUAL ACTUATOR

Instruction D10316
August 2012

Instructions

These instructions provide information about Lever Actuators. They are for use by personnel who are responsible for installation, operation and maintenance of Lever Actuators.

Safety Messages

All safety messages in the instructions are flagged with an exclamation symbol and the word Caution, Warning or Danger. These messages indicate procedures that must be followed exactly to avoid equipment damage, personal injury or death.

Safety label(s) on the product indicate hazards that can cause equipment damage, personal injury or death. If a safety label becomes difficult to see or read, or if a label has been removed, please contact DeZURIK for replacement label(s).



WARNING!

Personnel involved in the installation or maintenance of valves should be constantly alert to potential emission of pipeline material and take appropriate safety precautions. Always wear suitable protection when dealing with hazardous pipeline materials. Handle valves, which have been removed from service with suitable protection for any potential pipeline material in the valve.

Inspection

Your Lever Actuator has been packaged to provide protection during shipment, however, it can be damaged in transport. Carefully inspect the unit for damage upon arrival and file a claim with the carrier if damage is apparent.

Parts

Recommended spare parts are listed on the assembly drawing. These parts should be stocked to minimize downtime.

Order parts from your DeZURIK sales representative, or directly from DeZURIK. When ordering parts, please include the 7-digit part number and 4-digit revision number (example: **9999999R000**) located on the data plate attached to the valve assembly. Also include the part name, the assembly drawing number, the balloon number and the quantity stated on the assembly drawing.

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Description

The Ten-Position Lever is a manual actuator for 90° rotation of Butterfly Valves. The actuator holds the valve in the open or closed position, or in any of eight other equally-spaced intermediate positions. A lockout feature allows the actuator to be padlocked in any of the ten positions. There are three sizes of levers as shown in Figure 1.

An Adjustable Open Position Stop is available as an option. This device prevents the actuator from opening beyond a preset partially-open position.

Operation

To operate the actuator, firmly grasp and squeeze the end of the handle and the lever to disengage the lever; then slowly rotate the handle to the desired valve position. Clockwise rotation closes the valve, and counterclockwise rotation opens the valve. Ensure that the lever is engaged in one of the 10 notches before releasing the handle.



CAUTION!

- 1. Close the valve slowly. Rapid closure of the valve can cause pipeline pressure surges that will damage pipeline equipment.**
 - 2. Ensure that the lever is engaged in one of the 10 notches before releasing the handle. If the lever is not engaged, the valve can slam closed and cause pipeline pressure surges that will damage pipeline equipment.**
-

Closed Position Adjustment

If the valve is not closed when the actuator is in the closed position, the closed position of the actuator may be adjusted as described below. Maintain a firm grip on the actuator during adjustment to prevent pipeline damage as described in the OPERATION section above. Refer to Figure 1 for component identification.

1. Loosen the two dial screws and place the valve—not the actuator—in the closed position.
2. Rotate the dial so that the handle points to “shut” and the lever engages with the last (most clockwise) notch in the dial.
3. Tighten the two dial screws to the torque shown in Table A.
4. Operate the actuator to the open and closed positions to confirm that the valve is closed when the actuator is in the closed position. Repeat steps 1 through 4 if necessary.

Locking the Actuator

A lockout feature allows the actuator to be padlocked in any of the 10 actuator positions. To lock the actuator, insert the padlock (not included) between the lever and the handle as shown in Figure 1. See recommendations below.

Padlock for the small size lever:

Master No. 510 or equivalent, with a 9/32" (7.1 mm) diameter removable shackle, 2" (50 mm) vertical clearance, and 13/16" (21 mm) horizontal clearance, as shown in Figure 1.

Locking the Actuator *(Continued)***Padlock for the medium and large size levers:**

Master No. 5 or equivalent, with a 3/8" (9.5 mm) diameter shackle, 2½" (64 mm) vertical clearance, and 15/16" (24 mm) horizontal clearance, as shown in Figure 1.

Open Position Stop (Optional)

The optional Adjustable Open Position Stop prevents the actuator from opening beyond a preset partially-open position. To adjust the stop:

1. Loosen the screw that mounts the stop to the dial.
2. Place the actuator in the desired partially-open position, with the lever engaged in one of the ten dial notches.
3. Rotate the stop so that the stop is against the handle.
4. Tighten the stop mounting screw to the torque shown in Table A.

Table A: Fastener Torques

Fastener Size	Carbon Steel		Stainless Steel	
	(ft lbs)	(Nm)	(ft lbs)	(Nm)
1/4-20	7 ± 1	9 ± 1	45 ± 6 (in lbs)	5.1 ± 0.7
5/16-18	14 ± 2	19 ± 3	8 ± 1	11 ± 1
3/8-16	26 ± 3	35 ± 4	15 ± 2	20 ± 3
1/2-13	63 ± 8	85 ± 11	38 ± 5	52 ± 7
M8 X 1.25	23 ± 3	31 ± 4	16 ± 2	22 ± 3
M10 X 1.5	47 ± 6	64 ± 8	33 ± 4	45 ± 5
M12 X 1.75	83 ± 10	113 ± 14	58 ± 8	79 ± 1

Removing Actuator**WARNING!**

Flow in the pipeline with the actuator removed can allow the valve to slam closed and cause personal injury and/or damage to the flow system. Shut down the flow in the pipeline before removing the actuator.

Refer to Figure 1 for actuator component identification.

1. Shut down the flow in the pipeline.
2. Close the valve.
3. Loosen the screw that secures the handle to the valve shaft.
4. While squeezing the lever, lift and remove the handle from the valve shaft.
5. Remove the two dial screws and the dial.

Ten-Position Lever Manual Actuator

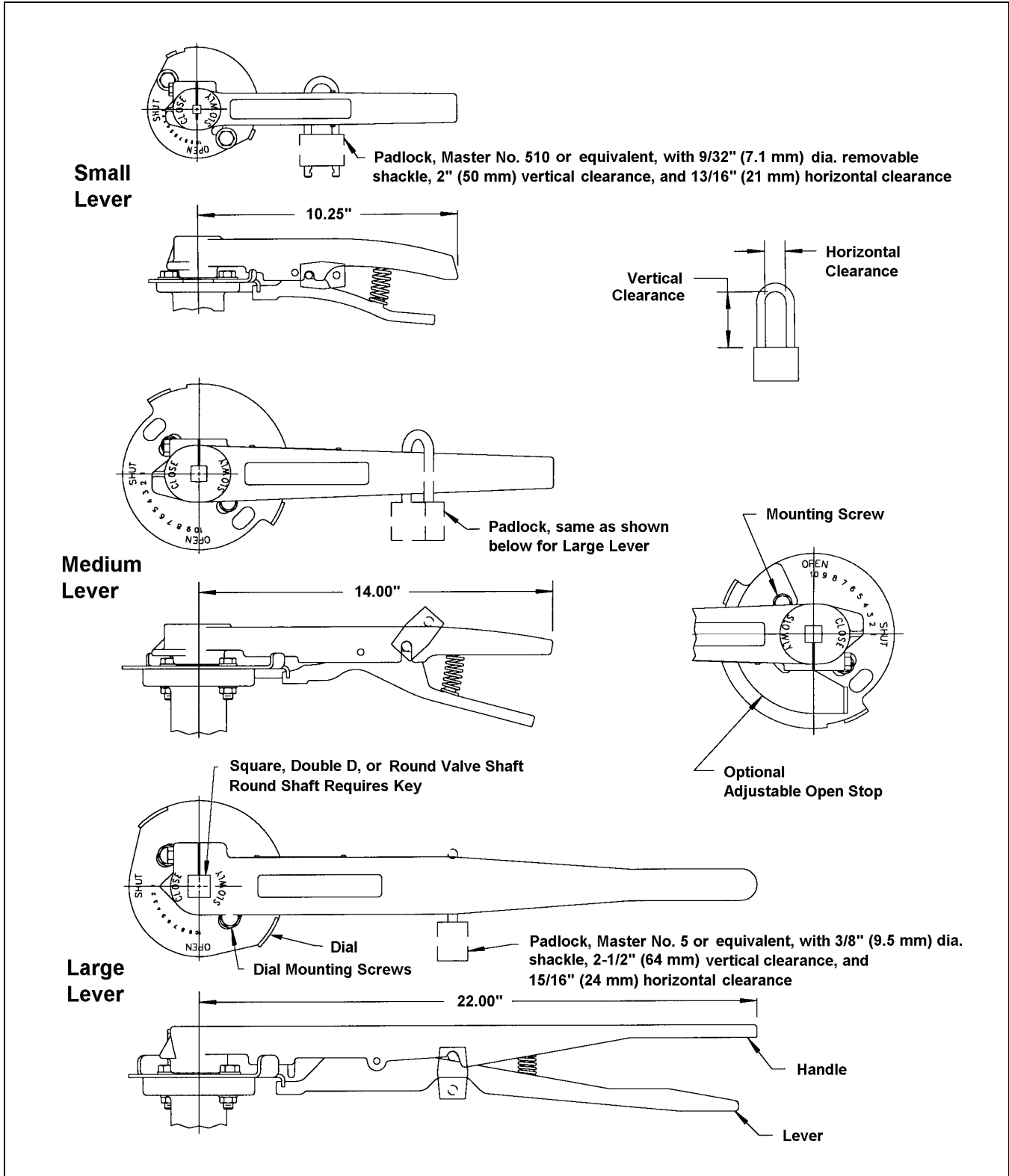


Figure 1 – Actuator Components

Installing Actuator

Refer to Figure 1 for actuator component identification.

1. Select the desired actuator mounting position. The actuator may be mounted in any of two or four positions, as shown on the Installation Drawing for the Valve; however, the standard position shown is recommended—with the handle perpendicular to the pipeline when the valve and actuator are in the closed position.
2. Mount the dial to the top of the valve with the two screws. Tighten the screws finger tight.
3. If the valve has a round keyed shaft, lubricate the key with light grease, and place the key in the valve shaft.
4. Place the handle in position on the valve shaft, and against the dial.
5. Tighten the screw in the handle to the torque in Table A.
6. Adjust the closed position as described in the Closed Position Adjustment section.

Changing Mounting Position

The actuator may be mounted on the valve in any of two or four mounting positions, as shown on the Installation Drawing for the valve. To change to a different mounting position:

1. Remove the actuator as described in the *Removing Actuator* section.
2. Determine the new mounting position for the actuator, and replace the actuator on the valve as described in the *Installing Actuator* section.

August 24, 2022

ECO TECH INC
PO BOX 956
HOLLY SPRINGS, GA 30142

Subject: American Iron and Steel Step Certification for Project “**East Area WQCF**”

Work Order # “143537”

I, Rachael Nieland, certify that the (melting, bending, galvanizing, cutting, etc.) processes for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with AIS requirement as mandated by Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A – Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference.

Item, Products and/or materials:

Model BAW, AWWA Butterfly Valves

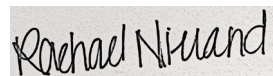
Model PEF, Eccentric 100% Port Plug Valves

Manufacturing processes of the above products take place at the following location:

DeZURIK - Sartell Plant
250 Riverside Ave North
Sartell, Minnesota 56377
320-259-2000

This certification is to be submitted upon request to interested parties (e.g. municipalities, consulting engineers, general contractors, etc.)

If any of the above compliance statements change while providing materials to this project, please immediately notify the person(s) who is requesting to use your product(s).



Rachael Nieland

*Project Management &
Order Administration Manager*
320-259- 2137Office
Rachael.nieland@dezurik.com

RECOMMENDED LONG & SHORT TERM STORAGE PROCEDURES

LONG TERM STORAGE (6 MONTHS +)

1. All valves shall be stored in the position in which they were shipped.
2. Valves shall be stored fully enclosed in a crate or on a skid. It is acceptable to store the valves uncrated but protected from any dirt, debris or UV exposure as long as the environmental conditions as described in item 3 are met. Any desiccant packages received with the original shipment should be replaced before putting valves into long term storage. Please follow your desiccant manufacturer's recommended usage of any desiccant based on the volume of the enclosed area.
3. Valves shall be stored in a well ventilated, clean, dry indoor facility on skids or raised racks with temperatures ranging from 35°F to 95°F (2°C to 35°C) with humidity levels not exceeding 50%.
4. If the above conditions cannot be met, valves shall be separately packaged inside sealed heavy duty plastic sheeting and a weather resistant enclosure, or a standard crate lined with moisture proof paper, to protect the valves from dirt, debris and UV exposure. Desiccant packages shall be used to control moisture both inside the enclosure and the sealed heavy duty plastic covering. Please follow your desiccant manufacturer's recommended usage of any desiccant based on the volume of the enclosed area.
5. Do not store valves next to operating electric motors or equipment which may emit ozone, which can cause deterioration of valve elastomers. Store in an environment with less than 0.1 ppm concentration, at least 25 feet from ozone emitting devices, with ventilation.
6. Valves with cylinder actuators and control valves which are stored for extended periods may be subject to cylinder blow-by caused by permanent distortion of any of the seals. Valves should be operated prior to installation and damaged seals replaced. If possible, it is recommended that cylinders be cycled every 4-6 months to maintain seals.
7. Valves with electric motor operators shall be stored in accordance with the individual motor manufacturer's recommended long term storage procedures.
8. All electrical components shall be visually inspected prior to valve installation.

SHORT TERM STORAGE (LESS THAN 6 MONTHS)

1. All valves shall be stored in the position in which they were shipped.
2. Valves shall be protected from dirt, debris, excessive moisture and UV exposure. Store at temperatures ranging from 35°F to 95°F (2°C to 35°C) with humidity levels not exceeding 50%.

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(Y67834 references this form)

Manufacturer's Warranty

Products, auxiliaries and parts thereof, of DeZurik's manufacture, are guaranteed for a period of twenty four (24) months from date of shipment against defective workmanship and material only, when properly installed, operated and serviced in accordance with DeZurik's recommendations. Replacement for items of DeZurik's manufacture will be made free of charge if provided to be defective within such time. No claim for transportation, labor or special or consequential damages shall be allowed. Purchaser shall be solely responsible for determining suitability for use and in no event shall DeZurik be liable in this respect. Equipment or parts manufactured by others but furnished by DeZurik will be repaired or replaced, but only to the extent provided in the original manufacturer's warranty to DeZurik. DeZurik does not guarantee resistance to corrosion, erosion, abrasion or other sources of failure, nor does DeZurik guarantee a minimum length of service. Failure of purchaser to give prompt written notice of any alleged defect under this guarantee forthwith upon its discovery, or use possession thereof after an attempt has been made and completed by someone other than DeZurik or an authorized representative to remedy the defects therein, or failure to return product or parts for replacement as herein provided, or failure to install and operate said products and parts according to instructions furnished by DeZurik, or failure to pay entire contract price when due, shall be a waiver by purchaser of all rights under these representations. The foregoing guarantee shall be null and void if, after shipment from our factory, the item is modified in any way or a component of another manufacturer, such as, but not limited to, an actuator, is attached to the item by anyone other than DeZurik Factory Service personnel. All orders accepted shall be deemed accepted subject to this guarantee, which shall be exclusive of any other or previous guarantee, and this shall be the only effective guarantee or warranty binding on DeZurik, anything to the contrary contained in the purchase order or represented by any agent or employee of DeZurik, in writing or otherwise, notwithstanding, including but not limited to implied warranties.