



June 13, 2016

SANDRA RESER

YOUR PURCHASE ORDER: 4553

FACTORY REFERENCE: WORK ORDER 449909, SALES ORDER 618992

ENCLOSED IS: 1 SET OF PACKAGE 3 - INSTALLATION & CROSS SECTION DRAWINGS.

ADDITIONAL INFORMATION:

******Note**** On approval orders only, written submittal approval must be received by your factory representative before production can be authorized.**

PLEASE DIRECT ALL INQUIRIES AND CORRESPONDENCE TO THE FOLLOWING REPRESENTATIVES.

MELLEN & ASSOCIATES
3404 S 11TH ST
COUNCIL BLUFFS, IA 51501-8008

712-322-9333

CHECK VALVES SHALL BE TESTED AT THE FACTORY AND SHALL BE DRIP TIGHT UNDER A HYDROSTATIC PRESSURE OF 200 PSI APPLIED TO THE DOWNSTREAM SIDE OF THE DISC.

MKEC ENGINEERING, INC.	
411 N. WEBB ROAD • WICHITA, KS 67206	
<input type="checkbox"/> Reviewed	<input type="checkbox"/> Revise and Resubmit
<input checked="" type="checkbox"/> Reviewed as Noted	<input type="checkbox"/> Rejected
<input type="checkbox"/> Not Required by the Contract Documents	
Reviewed for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication process or to techniques of construction; and for coordination of the work of all trades.	
BY <u>Bryce Z. Bahrs</u>	DATE <u>6/14/16</u>



June 13, 2016

APPROVAL DRAWINGS

PROJECT NAME

WICHITA RE-USE WATER PUMP STATION

PURCHASE ORDER

4553

VALVE TYPE

SWING CHECK VALVE

CONTRACTOR: WILDCAT CONSTRUCTION CO., INC
3219 WEST MAY
WICHITA, KS 67213

LOCAL SUPPLIER: MELLEN & ASSOCIATES
3404 S 11TH ST
COUNCIL BLUFFS, IA 51501-8008
712-322-9333

MANUFACTURER: DeZURIK
250 RIVERSIDE AVE NORTH
SARTELL, MN 56377
(320) 259-2000

Factory Work Order 449909
Factory Sales Order 618992



TABLE OF CONTENTS

A Data Sheet is included for each line item on the purchase order.
Document numbers are listed at the bottom of the Data Sheet.
Any one drawing may apply to more than one item number.
All documents are assembled in alpha/numeric order within each section.

DATA SHEETS

Data Sheets

INSTALLATION DRAWINGS

Dimensional Drawings

CROSS SECTION DRAWINGS

Cross Section/Parts List Drawings
Basic Valve Materials of Construction

ADDITIONAL DATA

Storage Procedure



Submittal Data Sheet

Date: 06/13/16

WILDCAT CONSTRUCTION CO., INC
3219 WEST MAY
WICHITA, KS 67213

P.O. 14936
FACTORY ORDER NO 4553
FACTORY SALES ORDER NO 618992
REV 0

PROJ. NAME WICHITA RE-USE WATER
PUMP STATION

Fact. ITEM	Cust. ITEM	QTY	DESCRIPTION	PART NO. 9664663
1	1	3	CVS,8,6000A,F1,DI,DI-S11-S2-EPDM,DTR*LW*BXX136	

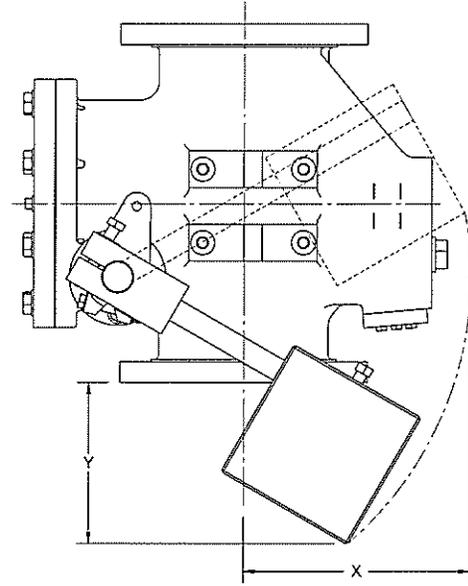
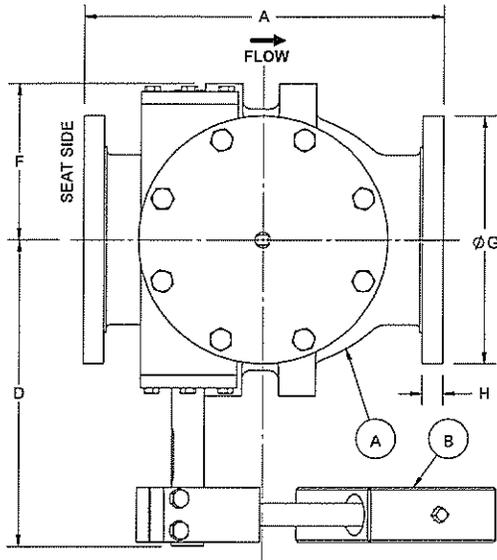
Style	CVS	APCO Swing Check Valves
Size	8	8 Inch (200mm) ✓
Body Style	6000A	Series 6000 Swing Check Valve
End Connection	F1	Flanged; ASME 125/150
Body Material	DI	Ductile Iron ✓
Disc Material	DI	Ductile Iron
Shaft Material	S11	303 Stainless Steel
Body Seat Material	S2	316 Stainless Steel
Disc Seat Material	EPDM	Terpolymer of Ethylene Propylene & A Diene (EPDM)
Option	DTR	DeZURIK Standard Certified Production Hydrostatic Shell and Seat Test Report
Coating		12 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Interior with Standard (SP10) surface prep and 12 mils minimum (non-stainless steel parts) of Blue DeZURIK Epoxy (NSF Std. 61) on Exterior with Standard (SP10) surface prep
Act Type	LW	Lever & Weight
Modifier	BXX136	ONE GREASE FITTING IN EACH BUSHING ON BOTH SIDES ✓

RELATED DOCUMENTS

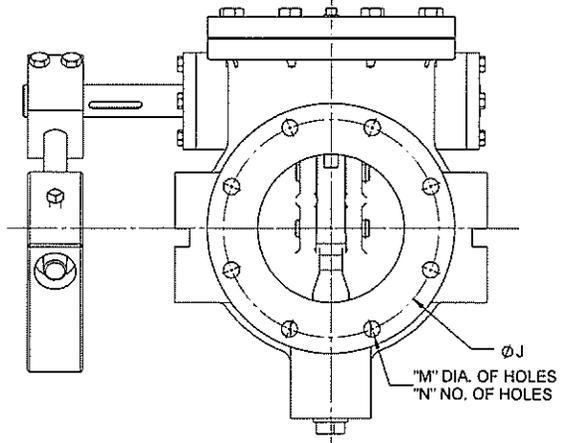
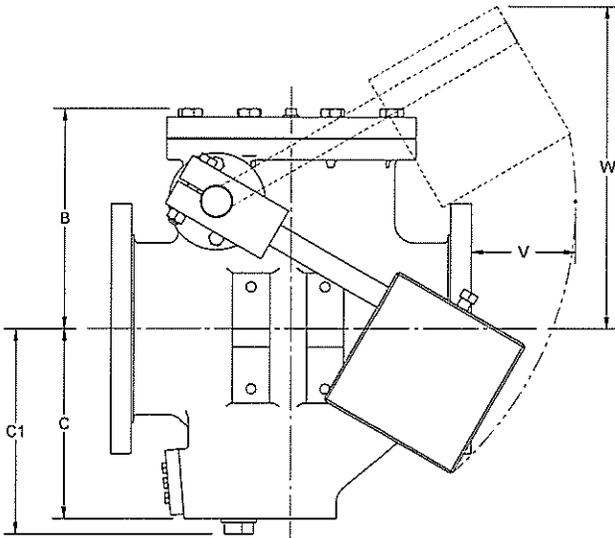
A70034	DWG INST CVS F1 LW 2-30" 6000/
A70056	DWG VALVE ASSY FLG 2-66" 6000/
A70058	DWG CLOSURE CONTROL LW/CLW 600

VALVE SIZE	DIMENSIONS (INCHES / MM)																		
	A	B	C	C1	D	F	G	H	J	K	L	M	N	V	W	X	Y		
8	10.50 266.7	12.00 304.8	10.25 260.4	11.75 298.5	15.75 400.0	6.50 165.1	13.50 342.9	1.12 28.6	11.75 298.5	-	-	0.86 21.8	B	0.25 6.4	18.00 457.2	13.00 330.2	9.25 235.0		

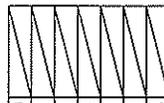
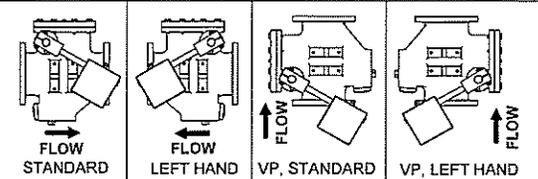
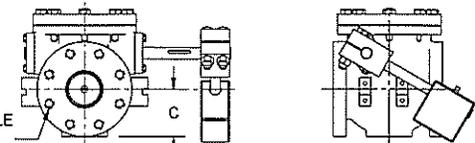
ITEM NO.	DESCRIPTION
A	VALVE
B	LEVER & WEIGHT CLOSURE CONTROL



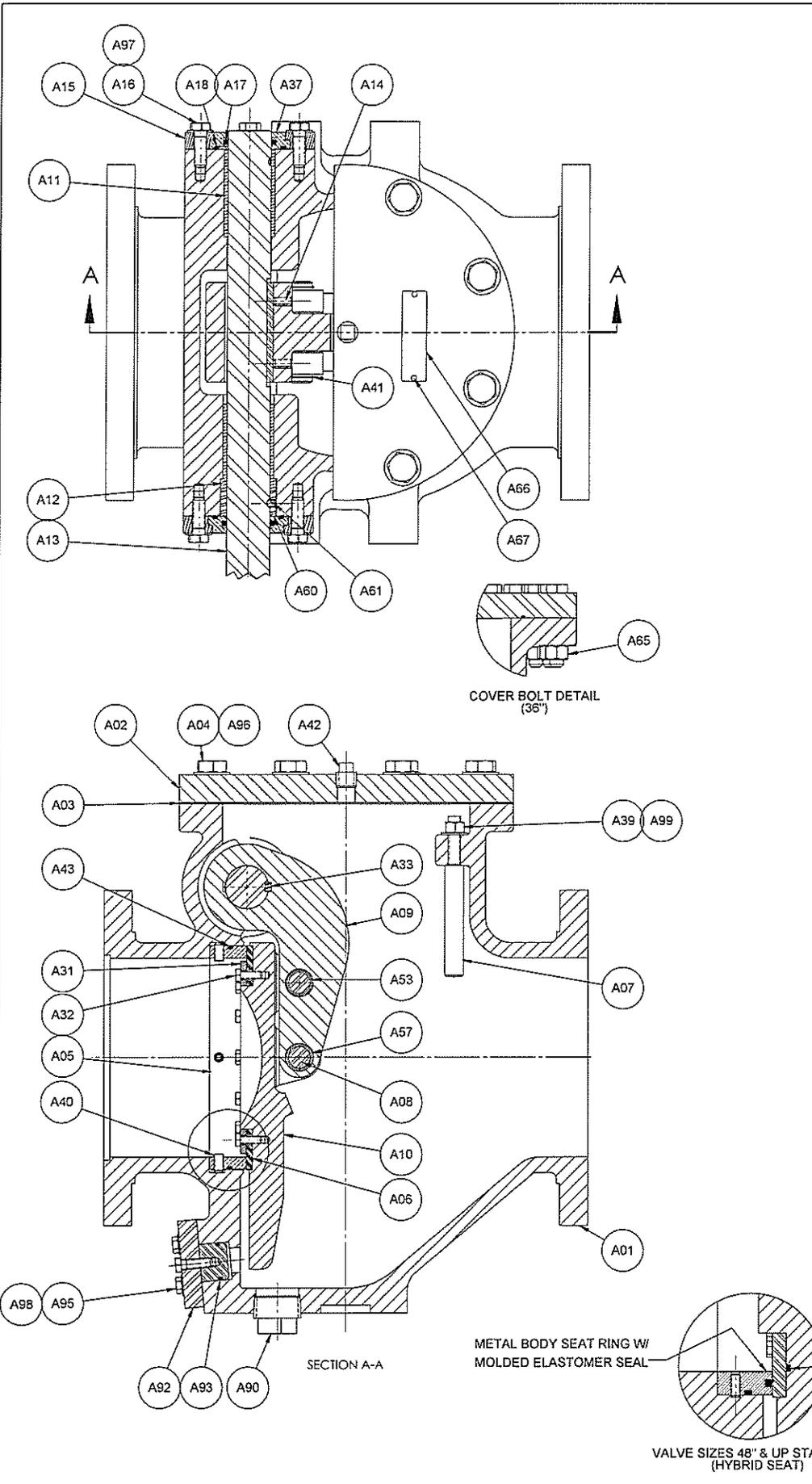
VP - VERTICAL FLOW UP
LEVER ARM SWING



"K" TAP HOLE SIZE
"L" DEPTH OF TAP HOLE
"N" NO. OF HOLES



APCO CVS - SWING CHECK VALVE, SIZES 2" THRU 30" 6000 SERIES, LW - LEVER & WEIGHT CLOSURE CONTROL, F1			
DOCT CODE	DRAWN	JPD	APPROVED
C1	CHEAED	TGM	DWZ
DATE			4/28/2015
			A70034



ITEM NO.	DESCRIPTION	RESTRICTIONS	QTY
A01	BODY		1
A02	COVER		1
A03	COVER SEAL		1
A04	COVER BOLTS	2.5" - 8"	8
		8" - 16"	2
		16" - 24"	2
		24" - 36"	2
		36" - 42"	2
		42" - 48"	2
		48" - 54"	2
		54" - 66"	2
A05	BODY SEAT RING		1
A06	DISC SEAT		1
A07	DISC STOP		1
A08	DISC PIN		2
A09	DISC ARM		1
A10	DISC		1
A11	PIVOT SHAFT STRAIGHT BUSHING		1
A12	PIVOT SHAFT FLANGED BUSHING	ALL EXCEPT 42"	1
A13	PIVOT SHAFT		1
A14	DISC ARM SET SCREW	8" - 66"	2
A15	PIVOT SHAFT COVER		2
A16	PIVOT SHAFT COVER BOLT	8" - 16", 24"	6
		16" - 24"	2
A17	PIVOT SHAFT SEAL		2
A18	PIVOT SHAFT COVER SEAL		2
A31	SEAT RETAINING RING	2" - 36" RESILIENT SEATED ONLY	1
		36" - 42"	1
A32	SEAT RETAINING SCREW	8" - 10"	12
		10" - 12"	12
		12" - 14"	12
		14" - 16"	12
A33	PIVOT SHAFT KEY		-
A37	PIVOT SHAFT SEAL RETAINER		2
A39	DISC STOP LOCKNUT		1
A40	BODY SEAT RETAINING SET SCREW		4
A41	DISC PIN RETAINER		4
A42	COVER PIPE PLUG		1
A43	BODY SEAT SEAL		1
A53	PIVOT SLEEVE BEARING		1
A57	DISC ARM SLEEVE		1
A60	PIVOT SHAFT COLLAR (NOTE 2)	4" - 12"	1
A61	PIVOT SHAFT SET SCREW (NOTE 2)	4" - 12"	1
A66	DATA PLATE		1
A67	DRIVE SCREW		2
A90	BODY PIPE PLUG	8" - 66"	1
A92	BMB PLUG (NOTE 1)	8" - 66"	1
A93	BMB PLUG SEAL (NOTE 1)	8" - 66"	1
A95	BMB PLUG RETAINING SCREW (NOTE 1)	8" - 66"	4
A96	COVER BOLT WASHER		-
A97	PIVOT SHAFT COVER WASHER		-
A98	BMB COVER WASHER (NOTE 1)	8" - 66"	4
A99	DISC STOP WASHER		1

NOTE:
 1. BMB PLUG ASSEMBLY NOT INCLUDED FOR VALVES WITH BMB CLOSURE CONTROL.
 2. VALVE SIZES 2" - 3", 16" - 54" & 66" HAVE A SINGLE PIECE, WELDED PIVOT SHAFT ASSEMBLY.

METAL BODY SEAT RING W/ MOLDED ELASTOMER SEAL

VALVE SIZES 48" & UP STANDARD (HYBRID SEAT)

PIVOT ASSEMBLY DETAIL (42" ONLY)

D	L	E	C	B	A
50312-37516	50312-37516	50312-37516	50312-37516	50312-37516	50312-37516



APCO CVS - SWING CHECK VALVE, 6000 SERIES BASE VALVE ASSEMBLY			
DOCT CODE	DRAWN	APPROVED	VMS
C1	CHECKED	JPD	DATE 10/28/2013
			A70056

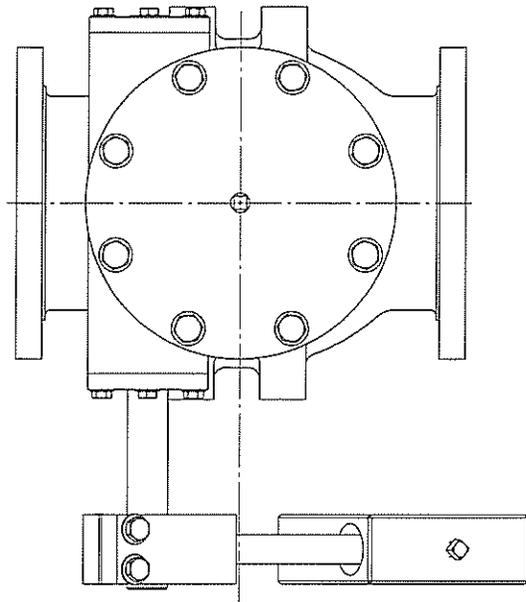


MATERIALS OF CONSTRUCTION

DRAWING(S): A70056
WORK ORDER: 449909 **PART NO:** 9664663
DESCRIPTION: CVS,8,6000A,F1,DI,DI-S11-S2-EPDM,DTR*LW*BXX136

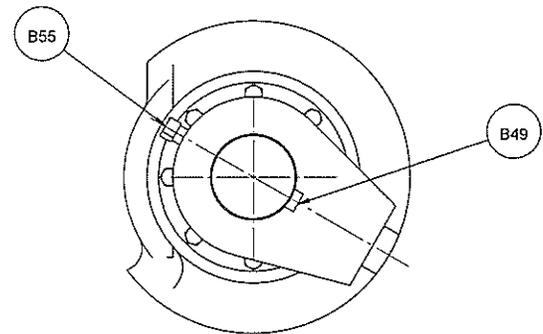
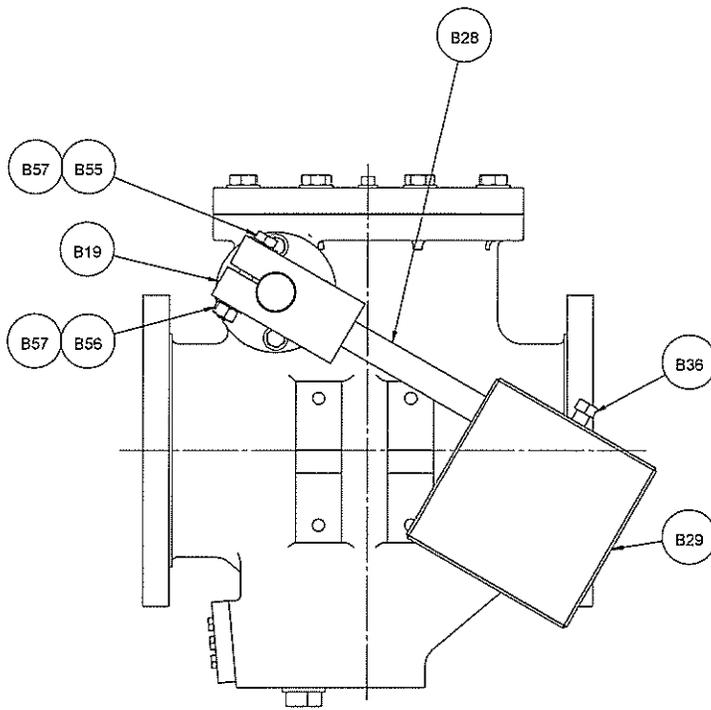
ITEM	MATERIAL
A01	DUCTILE IRON, ASTM A536, GRADE 65-45-12
A02	STEEL, ASTM A105, K03504, CERTIFIED
A03	CELLULOSE CORK FIBER NON-ASBESTOS GASKET MATERIAL
A04	CARBON STEEL, ZINC PLATED
A05	STAINLESS STEEL, TYPE CF-8M, ASTM A743, USA FOUNDRY
A06	ETHYLENE, PROPYLENE & DIENE TERPOLYMER (EPDM) - 85 DUROMETER
A07	STAINLESS STEEL, WROUGHT, 316, ASTM A240/A276
A08	STAINLESS STEEL, TYPE 303, ASTM A582, CONDITION A
A09	DUCTILE IRON, ASTM A536, GRADE 65-45-12
A10	DUCTILE IRON, ASTM A536, GRADE 65-45-12
A11	TIN BRONZE, ASTM B505/B584, C93200
A12	TIN BRONZE, ASTM B505/B584, C93200
A13	STAINLESS STEEL, WROUGHT, TYPE 303, ASTM 582, USA MILL
A14	STAINLESS STEEL, TYPE 316
A15	DUCTILE IRON, ASTM A536, GRADE 65-45-12
A16	STEEL, ASTM A449, GRADE 5, SAE J429
A17	ETHYLENE, PROPYLENE & DIENE TERPOLYMER (EPDM) - 70 DUROMETER
A18	ETHYLENE, PROPYLENE & DIENE TERPOLYMER (EPDM) - 70 DUROMETER
A31	STAINLESS STEEL, WROUGHT, 316, ASTM A240/A276
A32	STAINLESS STEEL, TYPE 316
A33	STAINLESS STEEL, WROUGHT, 304, ASTM A240/A276
A37	TIN BRONZE, ASTM B505/B584, C93200
A39	STAINLESS STEEL, TYPE 316
A40	STAINLESS STEEL, TYPE 316
A41	STAINLESS STEEL, WROUGHT, TYPE 632(15-7PH), ASTM A564/A693
A42	STEEL
A43	ETHYLENE, PROPYLENE & DIENE TERPOLYMER (EPDM) - 70 DUROMETER
A53	TIN BRONZE, ASTM B505/B584, C93200
A57	TIN BRONZE, ASTM B505/B584, C93200

A60	STAINLESS STEEL, WROUGHT, 304, ASTM A240/A276
A66	STAINLESS STEEL, TYPE 316
A67	STAINLESS STEEL, TYPE 18-8
A90	IRON, MALLEABLE, ASTM A48, CLASS 40
A92	CARBON STEEL, ASTM A108, GRADE 1018
A93	ACRYLONITRILE-BUTADIENE (NBR), 70 DUROMETER
A95	CARBON STEEL, ZINC PLATED
A96	CARBON STEEL, ZINC PLATED
A97	CARBON STEEL, ZINC PLATED
A98	CARBON STEEL, ZINC PLATED
A99	STAINLESS STEEL, TYPE 316

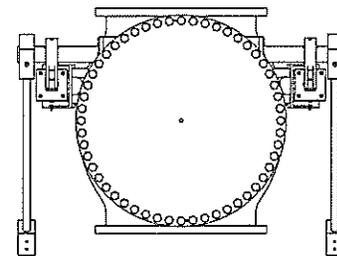


BILL OF MATERIAL FOR SINGLE ASSEMBLY			
ITEM NO.	DESCRIPTION	RESTRICTIONS ¹	QTY ¹
B19	COUNTERWEIGHT LEVER ARM		1
B28	COUNTERWEIGHT ARM		1
B29	COUNTERWEIGHT		1
B36	COUNTERWEIGHT SET SCREW	2" - 12"	1
		16" - 66"	2
		2" - 14"	2
		2" - 14"	2
B49	LEVER ARM KEY	16" - 66"	1
B55	LEVER ARM BOLT	2" - 14"	2
B55	LEVER ARM SET SCREW	16" - 66"	1
B56	LEVER ARM NUT	2" - 14"	2
B57	COUNTERWEIGHT LEVER ARM WASHER	2" - 14"	4

NOTE:
 1. SIZES 36" AND GREATER, QUANTITY OF ALL PARTS IS DOUBLED.



DETAIL A
 16" & LARGER KEYPED CONNECTION DETAIL



DETAIL B
 DOUBLE ASSEMBLY DETAIL

Q	U	L	D	C	B	A
					50312-9714/15	50311-428/15



APCO CVS - SWING CHECK VALVE, 6000 SERIES LW & CLW - LEVER & WEIGHT CLOSURE CONTROL ASSEMBLY			
QCT CODE	DRAWN	APPROVED	
C1	DWZ	DWZ	
	CHECKED	DATE	11/6/2013
	DWZ		

A70058



RECOMMENDED LONG AND SHORT TERM STORAGE PROCEDURES

LONG-TERM STORAGE

1. All resilient seated valves shall be stored in the open (unseated) position.
2. All valves with adjustable packing glands should have the packing gland loosened prior to storage.
3. Valves shall be separately packaged in a sealed polyethylene plastic enclosure with a minimum of one package of desiccant inside, dependent upon valve size.
4. Prepared valves shall be warehoused in a clean, dry, indoor facility on concrete or raised racks, with temperature ranging from 35°F to 95°F (2°C to 35°C).
5. Valves shall not be near electric motors or other equipment which may emit Ozone which can cause deterioration of elastomers used for valve and actuator components.
6. The valves shall be inspected periodically to replace the desiccant if required, and to repair any damage to the polyethylene plastic enclosures.
7. Valves with cylinder operators 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.
8. Valves with electric motor operators shall be stored in accordance with the individual motor manufacturer's recommended long-term storage procedures in addition to Paragraphs 1, 2 and 3 above.
9. All electrical components, if applicable, should be inspected and all electrical contacts cleaned before operation.
10. Valves shall be enclosed in fully sheathed wooden crates or boxes.

SHORT-TERM STORAGE

1. Valve should be protected from the weather, avoid exposure to excessive moisture or dirt. Store at temperatures ranging from 35°F to 95°F (2°C to 35°C).