

2024
VALVES & CANAL GATES



- ARCHER VALVES
- 200 PSI
- NICKEL PLATED DUCTILE IRON DISC
- SS416 STEM SHAFT
- WAFER STYLE
- BUNA NITRILE SEAT
- CAST IRON BODY
- 100% HYDRO STATICALLY TESTED IN BOTH DIRECTIONS IN COMPLIANCE OF API 598



GREEN ARCHER™ BUTTERFLY VALVES



BUTTERFLY VALVES - GEAR

PART #	DESCRIPTION	LBS.	LIST
BFV-030G	3" Butterfly Valve - Gear	19	140.00
BFV-040G	4" Butterfly Valve - Gear	22	167.00
BFV-050G	5" Butterfly Valve - Gear	22	204.00
BFV-060G	6" Butterfly Valve - Gear	30	220.00
BFV-080G	8" Butterfly Valve - Gear	54	350.00
BFV-100G	10" Butterfly Valve - Gear	67	459.00
BFV-120G	12" Butterfly Valve - Gear	100	572.00
BFV-140G	14" Butterfly Valve - Gear	124	1,128.60
BFV-160G	16" Butterfly Valve - Gear	260	1,938.60
BFV-180G	18" Butterfly Valve - Gear	300	2,055.00
BFV-200G	20" Butterfly Valve - Gear	408	2,934.90
BFV-240G	24" Butterfly Valve - Gear	575	4,915.00

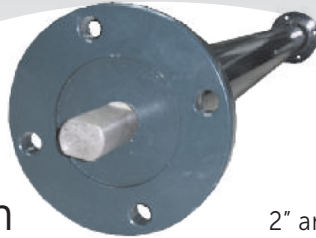


BUTTERFLY VALVES - LEVER

PART #	DESCRIPTION	LBS.	LIST
BFV-020L	2" Butterfly Valve - Lever	8	98.20
BFV-030L	3" Butterfly Valve - Lever	11	92.00
BFV-040L	4" Butterfly Valve - Lever	13	115.00
BFV-050L	5" Butterfly Valve - Lever	14	145.00
BFV-060L	6" Butterfly Valve - Lever	21	166.00
BFV-080L	8" Butterfly Valve - Lever	35	255.00
BFV-100L	10" Butterfly Valve - Lever	52	375.00
BFV-120L	12" Butterfly Valve - Lever	82	485.00

DIMENSIONS AND SPECIFICATIONS SEE PAGE 39

Green Archer™ Extensions



Green Archer™ Extension

Green Archer Valves extensions, gear operators 2" and 3" • 5" and 6" • 12" and 14" are interchangeable.

GREEN ARCHER™ VALVE EXTENSIONS

PART NO.	DESCRIPTION	LIST
BFVE-040-36	4" x 36" Extension	170.00
BFVE-040-48	4" x 48" Extension	185.00
BFVE-040-60	4" x 60" Extension	215.00
BFVE-060-36	6" x 36" Extension	185.00
BFVE-060-48	6" x 48" Extension	205.00
BFVE-060-60	6" x 60" Extension	250.00
BFVE-060-72	6" x 72" Extension	290.00
BFVE-080-36	8" x 36" Extension	230.00
BFVE-080-48	8" x 48" Extension	260.00
BFVE-080-60	8" x 60" Extension	320.00
BFVE-080-72	8" x 72" Extension	380.00

GREEN ARCHER™ VALVE EXTENSIONS

PART NO.	DESCRIPTION	LIST
BFVE-100-36	10" x 36" Extension	260.00
BFVE-100-48	10" x 48" Extension	260.00
BFVE-100-60	10" x 60" Extension	320.00
BFVE-100-72	10" x 72" Extension	375.00
BFVE-120-36	12" x 36" Extension	360.00
BFVE-120-48	12" x 48" Extension	455.00
BFVE-120-60	12" x 60" Extension	525.00
BFVE-120-72	12" x 72" Extension	610.00
BFVE-BK46	Extension Bolt Kit 4" - 6"	20.00
BFVE-BK812	Extension Bolt Kit 8" - 12"	20.00
Extensions include gasket and bolt kit		

Green Archer™ Parts



GREEN ARCHER™ GEAR BOXES

PART NO.	DESCRIPTION	LIST
BFVO-030G	3" Gear Operator w/Wheel	65.00
BFVO-040G	4" Gear Operator w/Wheel	95.00
BFVO-060G	6" Gear Operator w/Wheel	115.00
BFVO-080G	8" Gear Operator w/Wheel	155.00
BFVO-100G	10" Gear Operator w/Wheel	210.00
BFVO-120G	12" Gear Operator w/Wheel	235.00
BFVHW-46	Hand Wheel 4" - 6"	25.00
BFVHW-812	Hand Wheel 8" - 12"	35.00
BFV-PIN46	Pin for 4" - 6"	2.00
BFV-PIN	Pin for 8" - 12"	2.75

GREEN ARCHER™ LEVER HANDLES

PART NO.	DESCRIPTION	LIST
BFVH-040L	4" Lever Handle	25.00
BFVH-060L	6" Lever Handle	35.00
BFVH-080L	8" Lever Handle	35.00
BFVH-100L	10" Lever Handle	35.00
BFVH-120L	12" Lever Handle	45.00
Includes Lock Plate		

- DOUBLE SEAL SEAT DESIGN ELIMINATES NEED FOR FLANGE GASKETS - BUNA N
- TWO-PIECE STAINLESS STEEL STEM DESIGN WITH FLOATING STAINLESS STEEL DISC
- DRIVE STEM FLATTENED FOR EASY FIT ACTUATION
- STREAMLINED DISC FOR MAXIMUM FLOW
- LOCATING LUGS FOR EASY INSTALLATION



SILVER ARCHER™ BUTTERFLY VALVES



STAINLESS STEEL DISC - GEAR

PART #	DESCRIPTION	LBS.	LIST
BFS-2SSG	2" Stainless Butterfly Valve - Gear	15	157.14
BFS-2.5SSG	2 1/2" S. S. Butterfly Valve - Gear	16	168.78
BFS-3SSG	3" Stainless Butterfly Valve - Gear	19	175.57
BFS-4SSG	4" Stainless Butterfly Valve - Gear	24	223.10
BFS-5SSG	5" Stainless Butterfly Valve - Gear	30	257.05
BFS-6SSG	6" Stainless Butterfly Valve - Gear	30	303.61
BFS-8SSG	8" Stainless Butterfly Valve - Gear	54	493.73
BFS-10SSG	10" Stainless Butterfly Valve - Gear	67	725.56
BFS-12SSG	12" Stainless Butterfly Valve - Gear	100	970.97



STAINLESS STEEL DISC - LEVER

PART #	DESCRIPTION	LBS.	LIST
BFS-2SSL	2" Stainless Butterfly Valve - Lever	9	93.12
BFS-2.5SSL	2 1/2" S. S. Butterfly Valve - Lever	10	102.82
BFS-3SSL	3" Stainless Butterfly Valve - Lever	12	116.40
BFS-4SSL	4" Stainless Butterfly Valve - Lever	14	158.11
BFS-5SSL	5" Stainless Butterfly Valve - Lever	21	193.03
BFS-6SSL	6" Stainless Butterfly Valve - Lever	21	243.47
BFS-8SSL	8" Stainless Butterfly Valve - Lever	35	374.42
BFS-10SSL	10" Stainless Butterfly Valve - Lever	52	606.25
BFS-12SSL	12" Stainless Butterfly Valve - Lever	82	703.00

DIMENSIONS AND SPECIFICATIONS SEE PAGE 38

- DOUBLE SEAL SEAT DESIGN ELIMINATES NEED FOR FLANGE GASKETS - BUNA N
- TWO-PIECE STAINLESS STEEL STEM DESIGN WITH FLOATING DUCTILE IRON DISC
- DRIVE STEM FLATTENED FOR EASY FIT ACTUATION
- STREAMLINED DISC FOR MAXIMUM FLOW
- LOCATING LUGS FOR EASY INSTALLATION



EMERALD ARCHER™ BUTTERFLY VALVES



DUCTILE IRON DISC - GEAR

PART #	DESCRIPTION	LBS.	LIST
BFEA-020G	2" D.I. Butterfly Valve - Gear	15	150.35
BFEA-030G	3" D. I Butterfly Valve - Gear	19	161.02
BFEA-040G	4" D.I. Butterfly Valve - Gear	24	187.21
BFEA-050G	5" D.I. Butterfly Valve - Gear	30	218.25
BFEA-060G	6" D.I. Butterfly Valve - Gear	30	243.47
BFEA-080G	8" D.I. Butterfly Valve - Gear	54	390.91
BFEA-100G	10" D.I. Butterfly Valve - Gear	67	508.28
BFEA-120G	12" D.I. Butterfly Valve - Gear	100	632.44



DUCTILE IRON DISC - LEVER

PART #	DESCRIPTION	LBS.	LIST
BFEA-020L	2" D.I. Butterfly Valve - Lever	9	86.33
BFEA-030L	3" D.I. Butterfly Valve - Lever	12	101.85
BFEA-040L	4" D.I. Butterfly Valve - Lever	14	128.04
BFEA-050L	5" D.I. Butterfly Valve - Lever	21	161.02
BFEA-060L	6" D.I. Butterfly Valve - Lever	21	183.33
BFEA-080L	8" D.I. Butterfly Valve - Lever	35	271.60
BFEA-100L	10" D.I. Butterfly Valve - Lever	52	388.97

DIMENSIONS AND SPECIFICATIONS SEE PAGE 38

TERMS: SEE DISCOUNT SCHEDULE. PRICING SUBJECT TO CHANGE WITHOUT NOTICE
 CHECK [HTTP://WWW.BAFISCHER.COM/CATALOGS/](http://WWW.BAFISCHER.COM/CATALOGS/) FOR CURRENT PRICING

MONARCH BUTTERFLY VALVES



DUCTILE IRON DISC GEAR OP

PART #	DESCRIPTION	LIST
MBVGO3	3" Gear Op	140.65
MBVGO4	4" Gear Op	163.93
MBVGO6	6" Gear Op	212.43
MBVGO8	8" Gear Op	349.20
MBVGO10	10" Gear Op	453.96
MBVGO12	12" Gear Op	565.51

DUCTILE IRON DISC LEVER

PART #	DESCRIPTION	LIST
MBVLO3	3" Lever Op	88.27
MBVLO4	4" Lever Op	111.55
MBVLO6	6" Lever Op	160.05
MBVLO8	8" Lever Op	242.50
MBVLO10	10" Lever Op	347.26



STAINLESS STEEL DISC GEAR OP

PART #	DESCRIPTION	LIST
MBVGO3-S	3" Gear Op	153.26
MBVGO4-S	4" Gear Op	190.12
MBVGO6-S	6" Gear Op	265.78
MBVGO8-S	8" Gear Op	441.35
MBVGO10-S	10" Gear Op	648.93
MBVGO12-S	12" Gear Op	868.15

STAINLESS STEEL DISC LEVER

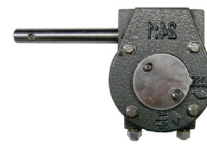
PART #	DESCRIPTION	LIST
MBVLO3-S	3" Lever Op	100.88
MBVLO4-S	4" Lever Op	137.74
MBVLO6-S	6" Lever Op	213.40
MBVLO8-S	8" Lever Op	334.65
MBVLO10-S	10" Lever Op	542.23

Silver, Emerald and Monarch Butterfly Valve Extensions & Parts



SILVER, EMERALD & MONARCH EXTENSIONS

PART NO.	DESCRIPTION	LIST
BVEXT24.2-6	2" - 6" x 24" Extension	146.60
BVEXT24.8-12	8" - 12" x 24" Extension	228.40
BVEXT36.2-6	2" - 6" x 36" Extension	176.35
BVEXT36.8-12	8" - 12" x 36" Extension	309.40
BVEXT48.2-6	2" - 6" x 48" Extension	231.75
BVEXT48.8-12	8" - 12" x 48" Extension	382.60
BVEXT60.2-6	2" - 6" x 60" Extension	261.65
BVEXT60.8-12	8" - 12" x 60" Extension	460.60
BVEXT72.2-6	2" - 6" x 72" Extension	320.95
BVEXT72.8-12	8" - 12" x 72" Extension	534.95
BVEXTKIT2-6	SS Bolt, Nut and Gasket Kit	33.35
BVEXTKIT8-12	SS Bolt, Nut and Gasket Kit	44.45



SILVER, EMERALD & MONARCH PARTS

PART NO.	DESCRIPTION	LIST
BVBOX2-6-B	Blue Gear Box for 2" - 6"	151.80
BVBOX2-6-G	Gray Gear Box for 2" - 6"	151.80
BVBOX8-12-B	Blue Gear Box for 8" - 12"	219.10
BVBOX8-12-G	Gray Gear Box for 8" - 12"	219.10
BVHW2-6-B	Blue Hand Wheel for 2" - 6"	37.05
BVHW2-6-G	Gray Hand Wheel for 2" - 6"	37.05
BVHW8-12-B	Blue Hand Wheel for 8" - 12"	44.45
BVHW8-12-G	Gray Hand Wheel for 8" - 12"	44.45
BVHDL2-6-G	Gray Handle for 2" - 6"	35.60
BVHDL8-12-G	Gray Handle for 8" - 12"	39.90
BVLP2-6	Lever Lock Plate for 2" - 6"	26.15
BVLP8-12	Lever Lock Plate for 8" - 12"	85.25

LUG BUTTERFLY VALVES



STAINLESS STEEL DISC
EPDM SEAT - GEAR

PART #	SIZE	LBS.	LIST
BFLUGSS-020G	2"	14.5	143.30
BFLUGSS-030G	3"	17.6	178.15
BFLUGSS-040G	4"	24	238.80
BFLUGSS-060G	6"	32.9	346.00
BFLUGSS-080G	8"	53.7	614.80
BFLUGSS-100G	10"	85.4	1,009.65
BFLUGSS-120G	12"	116.6	1,430.30

DUCTILE IRON DISC
BUNA SEAT - GEAR

PART #	SIZE	LBS.	LIST
BFLUGDI-020G	2"	13.6	128.50
BFLUGDI-030G	3"	16.2	161.10
BFLUGDI-040G	4"	18.5	211.55
BFLUGDI-060G	6"	23.8	271.70
BFLUGDI-080G	8"	43.6	463.05
BFLUGDI-100G	10"	60.3	652.85
BFLUGDI-120G	12"	88	784.60



STAINLESS STEEL DISC
EPDM SEAT - LEVER

PART #	SIZE	LBS.	LIST
BFLUGSS-030L	3"	17.6	125.55
BFLUGSS-040L	4"	24	183.40
BFLUGSS-050L	5"	32.9	242.65
BFLUGSS-060L	6"	32.9	301.05
BFLUGSS-080L	8"	53.7	528.50
BFLUGSS-100L	10"	85.4	894.65
BFLUGSS-120L	12"	116.6	1,263.40

DUCTILE IRON DISC
BUNA SEAT - LEVER

PART #	SIZE	LBS.	LIST
BFLUGDI-030L	3"	10.2	107.30
BFLUGDI-040L	4"	17.6	154.35
BFLUGDI-050L	5"	22	195.00
BFLUGDI-060L	6"	26	221.50
BFLUGDI-080L	8"	40	357.55
BFLUGDI-100L	10"	66	529.00
BFLUGDI-120L	12"	97	700.15

LUG AND BF9650 EXTENSIONS



PART NO.	DESCRIPTION	LIST
BF9650EX2324	2" - 3" x 24" Long	230.00
BF9650EX2336	2" - 3" x 36" Long	215.00
BF9650EX2348	2" - 3" x 48" Long	280.00
BF9650EX2360	2" - 3" x 60" Long	300.00
BF9650EX2372	2" - 3" x 72" Long	330.00
BF9650EX4624	4" - 6" x 24" Long	260.00
BF9650EX4636	4" - 6" x 36" Long	280.00
BF9650EX4648	4" - 6" x 48" Long	320.00
BF9650EX4660	4" - 6" x 60" Long	360.00
BF9650EX4672	4" - 6" x 72" Long	400.00

WAFER BUTTERFLY VALVES



**DUCTILE IRON DISC
BUNA SEAT - GEAR**

PART #	SIZE	LBS.	LIST
BF9650G2	2"	13.7	131.40
BF9650G3	3"	16.2	148.60
BF9650G4	4"	18.8	186.55
BF9650G6	6"	23.8	234.25
BF9650G8	8"	43.7	415.85
BF9650G10	10"	61.5	553.20
BF9650G12	12"	88	740.20

**STAINLESS STEEL DISC
EPDM SEAT - GEAR**

PART #	SIZE	LBS.	LIST
BF9650G2SE	2"	13.7	140.40
BF9650G3SE	3"	16.2	169.85
BF9650G4SE	4"	18.8	226.90
BF9650G6SE	6"	23.8	325.10
BF9650G8SE	8"	43.7	635.75
BF9650G10SE	10"	61.5	926.30
BF9650G12SE	12"	88	1,272.10



**DUCTILE IRON DISC
BUNA SEAT - LEVER**

PART #	SIZE	LBS.	LIST
BF9650L2	2"	7.3	69.25
BF9650L3	3"	9.8	88.65
BF9650L4	4"	12.1	121.85
BF9650L5	5"	16.2	156.00
BF9650L6	6"	16.9	175.30
BF9650L8	8"	30.3	320.60
BF9650L10	10"	44.5	435.75
BF9650L12	12"	51.6	568.30

**STAINLESS STEEL DISC
EPDM SEAT - LEVER**

PART #	SIZE	LBS.	LIST
BF9650L2SE	2"	7.3	85.25
BF9650L3SE	3"	9.8	111.75
BF9650L4SE	4"	12.1	173.80
BF9650L5SE	5"	16.2	221.24
BF9650L6SE	6"	16.9	271.00
BF9650L8SE	8"	30.3	537.45
BF9650L10SE	10"	44.5	818.07
BF9650L12SE	12"	51.6	1,161.70



LUG AND BF9650 PARTS

PART NO.	DESCRIPTION	LIST
BF9650G23	2" - 3" Gear Operator	70.30
BF9650G46	4" - 6" Gear Operator	70.30
BF9650G812	8" - 12" Gear Operator	125.20
BF9650HW23	2" - 3" Wheel Handle	15.65
BF9650HW46	4" - 6" Wheel Handle	15.65
BF9650HW812	8" - 12" Wheel Handle	39.80
BF9650IP23	2" - 3" Index Plate	4.30
BF9650IP46	4" - 6" Index Plate	4.40
BF9650IP812	8" - 12" Index Plate	8.50
BF9650L23	2" - 3" Lever Handle	8.05
BF9650L46	4" - 6" Lever Handle	9.30
BF9650L810	8" - 10" Lever Handle	16.85
BF9650L120	12" Lever Handle	32.30

PVC WAFER STYLE BUTTERFLY VALVES



405 NON-NSF

PART #	DESCRIPTION	LIST
BFPVC405-020	2" PVC Butterfly Valve	53.35
BFPVC405-025	2 1/2" PVC Butterfly Valve	51.45
BFPVC405-030	3" PVC Butterfly Valve	68.25
BFPVC405-040	4" PVC Butterfly Valve	78.80
BFPVC405-050	5" PVC Butterfly Valve	113.35
BFPVC405-060	6" PVC Butterfly Valve	173.30
BFPVC405-080	8" PVC Butterfly Valve	257.05

- EPDM Liner
- Max water pressure 150 psi
- Temp range 40F to 140F



585 NSF

PART #	DESCRIPTION	LIST
BFPVC585-020	2" PVC Butterfly Valve	143.15
BFPVC585-030	3" PVC Butterfly Valve	186.70
BFPVC585-040	4" PVC Butterfly Valve	240.40
BFPVC585-060	6" PVC Butterfly Valve	348.85
BFPVC585-080	8" PVC Butterfly Valve	622.20

- Pressure rating 150 psi at 73F water, non-shock
- Max. service temperature 140F
- EPDM (Viton Optional). O-rings and Boot.
- Compatible with ANSI B16.5 Class 150.
- Naturally Lead Free
- Corrosion Resistance



D.I. RING-TITE GATE VALVE

PART #	SIZE / OPERATOR	WIDTH	LBS.	LIST
IGVRT-200	2" Op Nut or Wheel	10.24"	20	262.60
IGVRT-300	3" Op Nut or Wheel	12.00"	33	383.50
IGVRT-400	4" Op Nut or Wheel	13.70"	43	483.00
IGVRT-600	6" Op Nut or Wheel	16.85"	90	831.55
IGVRT-800	8" Op Nut or Wheel	18.50"	154	1,461.55

- DESIGN STANDARD AWWA C515 INSPECTION AND TESTING
- NON-RISING STEM, RESILIENT SEATED
- FACE TO FACE: ASME B16.10, FLANGES STANDARD AWWA C110/A21.10
- FUSION BONDED EPOXY COATED INTERIOR AND EXTERIOR TO C550 STANDARD
- WORKING PRESSURE 250 PSI
- WORKING TEMPERATURE: -20°C TO 85°C (-4°F TO 212°F)
- 2" OP NUT OR HAND WHEEL

DUCTILE IRON GATE VALVES



FLANGED

PART #	SIZE/OPERATOR	WIDTH	LBS.	LIST
IGV-200	2" Wheel or Op Nut	7.00"	27	285.90
IGV-250	2 1/2" Wheel or Op Nut	7.48"	38	342.75
IGV-300	3" Wheel or Op Nut	8.00"	49	430.50
IGV-400	4" Wheel or Op Nut	9.00"	64	478.05
IGV-500	5" Wheel or Op Nut	10.00"	94	738.75
IGV-600	6" Wheel or Op Nut	10.51"	126	817.20
IGV-800	8" Wheel or Op Nut	11.49"	176	1,380.95
IGV-1000	10" Wheel or Op Nut	13.00"	269	2,155.50
IGV-1200	12" Wheel or Op Nut	14.00"	392	2,840.95
IGV-1400	14" Wheel or Op Nut	15.00"	596	4,598.95
IGV-1600	16" Wheel or Op Nut	15.98"	772	4,952.25
IGV-1800	18" Wheel or Op Nut	17.00"	992	6,747.50
IGV-2000	20" Wheel or Op Nut	17.99"	1,322	9,812.85
IGV-2400	24" Wheel or Op Nut	20.00"	1,764	14,328.95
EVK	Expandable Valve Key for Op Nut			97.60



MECHANICAL JOINT

PART #	SIZE/OPERATOR	WIDTH	LBS.	LIST
MJV-400	4" Op Nut	9.02"	66	478.20
MJV-600	6" Op Nut	10.50"	108	817.20
MJV-800	8" Op Nut	11.50"	182	1,503.50
MJV-1000	10" Op Nut	13.00"	297	2,174.25



THREADED

PART #	SIZE/OPERATOR	WIDTH	LBS.	LIST
IGVT-200	2" Wheel or Op Nut	7.24"	16	245.00
IGVT-250	2 1/2" Wheel or Nut	6.50"	20	410.00
IGVT-300	3" Wheel or Op Nut	8.00"	26	430.00
IGVT-400	4" Wheel or Op Nut	9.00"	50	545.00
IGVT-600	6" Wheel or Op Nut	10.50"	84	930.00

DUCTILE IRON WAFER CHECK VALVE



BACK FLOW PREVENTION			
PART #	DESCRIPTION	WIDTH	LIST
WCV-200	2" Wafer Check Valve D.I.	2.13"	80.00
WCV-250	2 1/2" Wafer Check Valve D.I.	2.13"	95.00
WCV-300	3" Wafer Check Valve D.I.	2.24"	115.00
WCV-400	4" Wafer Check Valve D.I.	2.52"	165.00
WCV-500	5" Wafer Check Valve D.I.	2.75"	255.00
WCV-600	6" Wafer Check Valve D.I.	2.99"	300.00
WCV-800	8" Wafer Check Valve D.I.	3.50"	465.00
WCV-1000	10" Wafer Check Valve D.I.	4.49"	680.00
WCV-1200	12" Wafer Check Valve D.I.	4.49"	820.00
WCV-1400	14" Wafer Check Valve D.I.	7.24"	1,770.00
WCV-1600	16" Wafer Check Valve D.I.	7.52"	3,150.00
WCV-1800	18" Wafer Check Valve D.I.		4,270.00
WCV-2000	20" Wafer Check Valve D.I.		5,500.00
WCV-2400	24" Wafer Check Valve D.I.		8,225.00

CAST IRON FLANGED FLEX CHECK VALVE



BACK FLOW PREVENTION			
PART #	DESCRIPTION	WIDTH	LIST
FCV-200	2" Flex Check Valve	7.99"	245.00
FCV-250	2 1/2" Flex Check Valve	7.99"	285.00
FCV-300	3" Flex Check Valve	9.57"	360.00
FCV-400	4" Flex Check Valve	11.50"	440.00
FCV-500	5" Flex Check Valve	13.74"	680.00
FCV-600	6" Flex Check Valve	15.00"	930.00
FCV-800	8" Flex Check Valve	19.49"	1,495.00
FCV-1000	10" Flex Check Valve	24.49"	2,310.00
FCV-1200	12" Flex Check Valve	27.52"	3,420.00

CAST IRON FLANGED SILENT GLOBE CHECK VALVE



PART #	DESCRIPTION	WIDTH	LIST
FSGCV-400	4" Silent Globe Check Valve	6.69"	600.00
FSGCV-600	6" Silent Globe Check Valve	9.06"	985.00
FSGCV-800	8" Silent Globe Check Valve	11.34"	1,590.00
FSGCV-1000	10" Silent Globe Check Valve	13.94"	2,650.00
FSGCV-1200	12" Silent Globe Check Valve	16.14"	3,885.00

STEEL FLANGES



STEEL FLANGE 1/2" OD

PART NO.	SIZE	LIST
S2	2"	10.35
S2.5	2 1/2"	12.50
S3	3"	13.90
S4	4"	18.20
S5	5"	21.90
S6	6"	24.50
S8	8"	34.90
S10	10"	46.90
S12	12"	66.80

STEEL FLANGE 1/2" IPS

PART NO.	SIZE / I. D.	LIST
S25	2" - 2.44"	10.35
S2.94	2 1/2" - 2.94"	12.50
S35	3" - 3.57"	13.90
S45	4" - 4.57"	18.20
S55	5" - 5.66"	21.90
S65	6" - 6.72"	24.50
S85	8" - 8.72"	34.90
S1075	10" - 10.88"	46.90
S1275	12" - 12.88"	66.80

STEEL FLANGE CLASS D OD

PART NO.	SIZE & THICKNESS	LIST
SD8	8" x 5/8"	70.00
SD10	10" x 5/8"	90.00
SD12	12" x 3/4"	170.00
SD14	14" x 3/4"	210.00
SD16	16" x 1"	275.00
SD18	18" x 1 1/16"	300.00
SD20	20" x 1 1/8"	385.00
SD24	24" x 1 1/4"	580.00

STEEL FLANGE CLASS D IPS

PART NO.	SIZE & THICKNESS	LIST
SD225	2.44" x 5/8"	21.75
SD35	3.57" x 5/8"	32.50
SD45	4.57" x 5/8"	47.25
SD55	5.66" x 5/8"	53.35
SD65	6.72" x 11/16"	66.65
SD85	8.72" x 11/16"	70.00
SD1075	10.88" x 11/16"	90.00
SD1275	12.88" x 13/16"	170.00

BLIND FLANGE

PART NO.	SIZE	LIST
SB4	4"	36.25
SB5	5"	39.60
SB6	6"	45.10
SB8	8"	67.70
SB10	10"	103.75
SB12	12"	121.90

THREADED FLANGES

PART NO.	SIZE	LIST
SFT2	2"	34.35
SFT25	2 1/2"	56.60
SFT3	3"	42.35
SFT4	4"	49.50
SFT5	5"	103.60
SFT6	6"	115.70
SFT8	8"	195.60

PVC FLANGES & BOLT KITS



SOLVENT WELD PVC FLANGES IPS & PIP

PART NO.	SIZE	LIST
IPS PVC Flanges		
PVCF25	2.57"	30.00
PVCF35	3.57"	51.15
PVCF45	4.57"	65.00
PVCF55	5.66"	101.75
PVCF65	6.72"	101.75
PVCF85	8.72"	165.70
PVCF1075	10.88"	215.00
PVCF1275	12.88"	231.30
PIP PVC Flanges		
PVCF60	6.14"	116.45
PVCF80	8.16"	176.45
PVCF100	10.2"	248.10
PVCF120	12.24"	359.35
PVCF1415	14" Flange x 15.3"	957.85
PVCF1615	16" Flange x 15.3"	1,092.65
PVCF180PIP	18" Flange x 18.7"	1,659.95
PVCF2021	20" Flange x 22.047"	3,970.35
PVCF240PIP	24" Flange x 24.803"	3,702.80
Flush Reducer Bushing		
PVCI6	6" IPS x PIP	33.85
PVCI8	8" IPS x PIP	37.35
PVCI10	10" IPS x PIP	53.60
PVCI12	12" IPS x PIP	81.75

GASKETED PVC FLANGES PIP

PART NO.	SIZE	LIST
165306	6" Flange x Gasket 125# PIP	162.85
165308	8" Flange x Gasket 125# PIP	239.00
1653010	10" Flange x Gasket 125# PIP	352.20
1653012	12" Flange x Gasket 125# PIP	530.35
1653014-15	14" Flange x 15" Gsk. 125# PIP	1,206.40
1653016-15	16" Flange x 15" Gsk. 125# PIP	1,281.75
1653018.7	18" Flange x Gasket 125# PIP	1,988.55

BOLT KIT FOR BUTTERFLY VALVE & 1/2" FLANGE

PART NO.	SIZE	BOLT LENGTH	LIST
BKB-030	2" & 3"	5/8" x 4"	8.50
BKB-040	4"	5/8" x 4"	17.50
BKB-060	5" & 6"	3/4" x 4"	25.20
BKB-080	8"	3/4" x 5"	31.95
BKB-100	10"	7/8" x 5"	75.00
BKB-120	12"	7/8" x 6"	85.00

BOLT KIT FOR BUTTERFLY VALVE & PVC FLANGE

PART NO.	SIZE	BOLT LENGTH	LIST
BKP-030	2" & 3"	5/8" x 5"	14.65
BKP-040	4"	5/8" x 5"	29.75
BKP-060	5" & 6"	3/4" x 6"	40.15
BKP-080	8"	3/4" x 6 1/2"	47.00
BKP-100	10"	7/8" x 7"	115.70
BKP-120	12"	7/8" x 7 1/2"	155.00

BOLT KIT STEEL FLANGES

PART NO.	SIZE	BOLT LENGTH	LIST
BKF-030	2" & 3"	5/8" x 2"	6.50
BKF-040	4"	5/8" x 2"	15.80
BKF-080	5", 6", & 8"	3/4" x 2"	17.15
BKF-120	10" & 12"	7/8" x 2"	45.30

BOLT KIT FOR FLOW METER

PART NO.	SIZE	BOLT LENGTH	LIST
BKM-040	4"	5/8" x 2 1/2"	36.15
BKM-68	6" & 8"	3/4" x 2 1/2"	48.50
BKM-1012	10" & 12"	7/8" x 2 1/2"	111.35
BKMP-040	4"	5/8" x 3 1/2"	60.25
BKMP-080	6" & 8"	3/4" x 3 1/2"	72.30
BKMP-120	10" & 12"	7/8" x 3 1/2"	168.70

BRASS GATE VALVES - FULL PORT

- ISO-9001
- 200 WOG - 125 SWP
- CAST BRASS
- NON-RISING STEM
- THREADED BONNET
- IAPMO APPROVED
- THREADED ENDS CONFORM TO ANSI STANDARDS B2.1
- VALVES ARE TESTED IN ACCORDANCE W/ MSS-SP-82
- SIZES 1/4" - 4"



PART NO.	SIZE	LIST
BGV-050	1/2" Brass Gate Valve	11.10
BGV-075	3/4" Brass Gate Valve	15.10
BGV-100	1" Brass Gate Valve	21.90
BGV-125	1 1/4" Brass Gate Valve	34.10
BGV-150	1 1/2" Brass Gate Valve	42.05
BGV-200	2" Brass Gate Valve	62.65
BGV-250	2 1/2" Brass Gate Valve	117.35
BGV-300	3" Brass Gate Valve	155.45
BGV-400	4" Brass Gate Valve	234.80

BRASS BALL VALVES - FULL PORT

- 600 WOG - 150 SWP
- CSA CERTIFIED 1/2" - 2"
- FULL PORT
- FORGED BRASS BODY
- BLOW OUT PROOF STEM
- PTFE SEATS
- THREADED ENDS COMPLY WITH ANSI B1.20.1
- CONFORMS TO MSS-SP-110 SPECIFICATIONS
- SIZES 1/4" - 4"



THREADED

PART NO.	SIZE	LIST
BV-025	1/4" Brass Ball Valve	6.50
BV-050	1/2" Brass Ball Valve	9.05
BV-075	3/4" Brass Ball Valve	13.20
BV-100	1" Brass Ball Valve	20.20
BV-125	1 1/4" Brass Ball Valve	32.30
BV-150	1 1/2" Brass Ball Valve	44.20
BV-200	2" Brass Ball Valve	67.05
BV-250	2 1/2" Brass Ball Valve	182.05
BV-300	3" Brass Ball Valve	250.50
BV-400	4" Brass Ball Valve	396.45

PVC BALL VALVES THREADED & SLIP

PART NO.	THREADED SIZE	LIST
BVPVC-50	1/2" PVC Ball Valve	1.50
BVPVC-75	3/4" PVC Ball Valve	2.25
BVPVC-100	1" PVC Ball Valve	3.15
BVPVC-125	1 1/4" PVC Ball Valve	4.75
BVPVC-150	1 1/2" PVC Ball Valve	6.30
BVPVC-200	2" PVC Ball Valve	9.75
BVPVC-250	2 1/2" PVC Ball Valve	21.75
BVPVC-300	3" PVC Ball Valve	35.50
BVPVC-400	4" PVC Ball Valve	72.50



PART NO.	SLIP SIZE	LIST
BVPVC-50-S	1/2" PVC Ball Valve	1.50
BVPVC-75-S	3/4" PVC Ball Valve	2.25
BVPVC-100-S	1" PVC Ball Valve	3.15
BVPVC-125-S	1 1/4" PVC Ball Valve	4.75
BVPVC-150-S	1 1/2" PVC Ball Valve	6.30
BVPVC-200-S	2" PVC Ball Valve	9.75
BVPVC-250-S	2 1/2" PVC Ball Valve	21.75
BVPVC-300-S	3" PVC Ball Valve	35.50
BVPVC-400-S	4" PVC Ball Valve	72.50

PVC BALL VALVES SCH 80

THREADED

PART NO.	SIZE	LIST
PBVL-050	1/2" PVC Ball Valve	6.20
PBVL-075	3/4" PVC Ball Valve	7.65
PBVL-100	1" PVC Ball Valve	9.50
PBVL-125	1 1/4" PVC Ball Valve	23.10
PBVL-150	1 1/2" PVC Ball Valve	25.55
PBVL-200	2" PVC Ball Valve	32.95
PBVL-250	2 1/2" PVC Ball Valve	113.65
PBVL-300	3" PVC Ball Valve	131.75
PBVL-400	4" PVC Ball Valve	214.15



SLIP

PART NO.	SIZE	LIST
PBVL-050S	1/2" PVC Ball Valve	5.55
PBVL-075S	3/4" PVC Ball Valve	7.40
PBVL-100S	1" PVC Ball Valve	8.55
PBVL-125S	1 1/4" PVC Ball Valve	20.95
PBVL-150S	1 1/2" PVC Ball Valve	23.25
PBVL-200S	2" PVC Ball Valve	29.80
PBVL-250S	2 1/2" PVC Ball Valve	107.90
PBVL-300S	3" PVC Ball Valve	126.00
PBVL-400S	4" PVC Ball Valve	203.40

BEE VALVE BOLTED POLYPROPYLENE BALL VALVE



PART NO.	SIZE	LIST
BVP-050	1/2" Full Port S.S.	35.75
BVP-075	3/4" Full Port S.S.	35.75
BVP-100	1" Full Port S.S.	35.75
BVP-150	1 1/2" Full Port S.S.	48.40
BVP-200	2" Full Port S.S.	69.40
BVP-250	2 1/2" Full Port S.S.	99.25
BVP-300	3" Full Port	169.60
BVP-400	4" Full Port	374.10

PART NO.	SIZE	LIST
BVPSP-100	1" Standard Port S.S.	35.75
BVPSP-200	2" Standard Port S.S.	47.35
BVPSP-300	3" Standard Port	99.25



- Precision molded in glass-reinforced polypropylene for stability, strength and toughness.
- Machined surfaces for easy on-off operation.
- Self-aligning ball.
- Viton® O-ring.
- Excellent chemical resistance.
- Poly-Tef® and Teflon® seats, see individual ball valves.
- Can be replaced or repaired in the field in-line (1/2" - 3" SP).

PVC INLINE CHECK VALVE WITH SS SPRING

THREADED

PART NO.	SIZE	LIST
CVPVC-50	1/2" Check Valve	8.30
CVPVC-75	3/4" Check Valve	9.25
CVPVC-100	1" Check Valve	12.25
CVPVC-125	1 1/4" Check Valve	17.80
CVPVC-150	1 1/2" Check Valve	19.35
CVPVC-200	2" Check Valve	23.25



SLIP

PART NO.	SIZE	LIST
CVPVC-50-S	1/2" Check Valve	8.30
CVPVC-75-S	3/4" Check Valve	9.25
CVPVC-100-S	1" Check Valve	12.25
CVPVC-125-S	1 1/4" Check Valve	17.80
CVPVC-150-S	1 1/2" Check Valve	19.35
CVPVC-200-S	2" Check Valve	23.25

PRESSURE GUARD™ PRESSURE RELIEF VALVES

Superior Industry Quality - Built in the USA
Pressure Lock™

Pressure Guard™ to provide Pressure Relief Valves are designed maximum pressure surge protection for irrigation systems. These high-quality spring-loaded valves can be either field set or factory preset to ensure accurate and dependable operation.

- Pressure Lock™ Tamper Resistant Locking Cap
- Sizes: 2", 2.5", 3" and 4"
- Corrosion Resistant Galvanized Body, Vulcanized Rubber Seat
- Cast Iron Base, Stainless Stem, Painted Spring
- Available in Four Spring Configurations to Meet Varied Pressure and Surge Requirements
- Pressure Guard™ Pressure Relief Valves are Designed for Years of Dependable, Reliable Service
- NRCS Cost Share Approved



PRV3YBA
FACTORY SET
85-150 PSI



PRV3B
FIELD SET
50-80 PSI



PRESSURE RELIEF VALVES

PART #	SIZE	PRESSURE RANGE	SPRING COLOR	LIST FIELD SET	LIST FACTORY SET
PRV2G	2" NPT	0-25	Gray	87.11	122.03
PRV2Y	2" NPT	10-65	Yellow	97.78	132.70
PRV2B	2" NPT	50-80	Black	89.27	124.16
PRV2YB	2" NPT	85-150	Yellow/Blue	123.77	158.69
PRV2.5G	2.5" NPT	0-25	Gray	87.11	122.03
PRV2.5Y	2.5" NPT	10-65	Yellow	97.78	132.70
PRV2.5B	2.5" NPT	50-80	Black	89.24	124.16
PRV2.5YB	2.5" NPT	85-150	Yellow/Blue	123.77	158.69
PRV3G	3" NPT	0-25	Gray	94.87	129.79
PRV3Y	3" NPT	10-65	Yellow	106.51	141.43
PRV3B	3" NPT	50-80	Black	93.61	128.53
PRV3YB	3" NPT	85-150	Yellow/Blue	132.02	166.94
PRV4G	4" NPT	0-25	Gray	146.37	181.29
PRV4Y	4" NPT	10-65	Yellow	158.60	193.52
PRV4B	4" NPT	50-80	Black	139.20	174.12
PRV4YB	4" NPT	85-150	Yellow/Blue	184.11	219.03

PRESSURE GUARD™ 3" INTERNAL SPRING PRESSURE RELIEF VALVE



- Only Internal Spring PRV that is Field Adjustable Without Removal
- 1" and 1/4" Multiple Porting for Addition of Air Vent and PSI Gauges
- Cast Iron Body with 3" NPT Male Threads
- PSI Range: 25 to 120 psi
- Replaceable Rubber Seat
- Stainless Stem and Brass Bushings for Long Life
- Splash Guard for Ease of Adjustment

PRESSURE GUARD™ INTERNAL SPRING PRV

PART NO.	DESCRIPTION	LIST
ISPRV3	3" Internal Spring Pressure Relief Valve	98.75

AIR-O-MAX™ AIR VENTS



AVAR2

CAVAR2

Features

- 1", 1 1/4" and 2" NPT
- Corrosion resistant materials
- Glass-filled nylon body and base
- Polypropylene float
- Aerodynamic design resists blowing closed
- Working pressure up to 125 psi
- Internal protection screen
- Discharge elbow with NPT

Applications

- Pump start up high-capacity air venting
- Pump shut down vacuum relief
- Filter back flush
- Venting at pipeline high points
- Continuous acting air venting during system operation (CAVAR)
- CAVAR2 comes with optional 1/8" NPT Schrader valve

AIR VACUUM AND AIR RELIEF

PART NO.	DESCRIPTION	LIST
AVAR1	1" Air-O-Max Air™ Vent	14.40
AVAR1.25	1 1/4" Air-O-Max™ Air Vent	14.40
AVAR2	2" Air-O-Max™ Air Vent	23.40

CONTINUOUS ACTING AIR VACUUM AND AIR RELIEF

PART NO.	DESCRIPTION	LIST
CAVAR1	1" Air Vent Continuous Acting	19.40
CAVAR1.25	1 1/4" Air Vent Continuous Acting	19.40
CAVAR2	2" Air Vent Continuous Acting	34.80



VRV2



VRV3

AIR VENT / VACUUM RELIEF VALVE

PART NO.	DESCRIPTION	BOX	LIST
VRV1.5	1 1/2" Air Vent		23.11
VRV2	2" Air Vent	15	29.70
VRV3	3" Air Vent	4	49.40
VRV4	4" Air Vent	4	148.00

Features:

- High Quality cast aluminum
- Unique ball retention bridge
- Operates well at low and high pressures
- X series 10 - 120 psi
- NRCS cost share approved



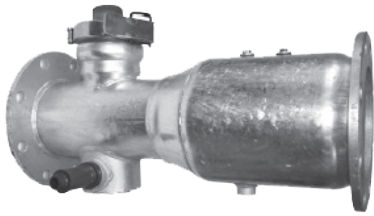
CONTINUOUS ACTING AIR VENT

PART NO.	DESCRIPTION	LIST
F035-2000	2"	285.75
F035-3000	3"	322.90
F035-4000	4"	403.90

The Series 3500 Continuous Acting Air Vent exhausts large volumes of trapped air from pipelines during line filling and continuously releases smaller amounts of entrapped air during system operation. Installed near pumps, on pressure boxes and near check valves, as well as high points and at the ends of lines.

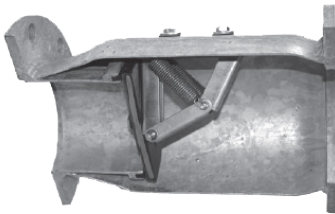


CLEMONS SPRING-LOADED CHECK VALVES



#3050 FLANGED CHEMIGATION CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
C3050-6	6" Flanged, Galv. Rubber to Rubber Seat	24.38"	Call
C3050-8	8" Flanged, Galv. Rubber to Rubber Seat	25.75"	
C3050-10	10" Flanged, Galv. Rubber to Rubber Seat	27.25"	
C3050-12	12" Flanged, Galv. Rubber to Rubber Seat	31.63"	



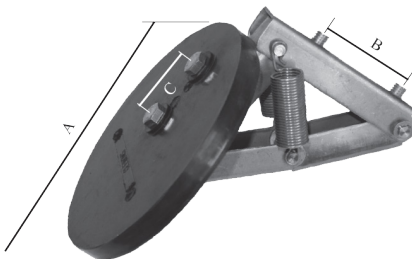
#3045 FLANGED CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
C3045-6	6" Flanged, Galv. Rubber to Rubber Seat	24.38"	Call
C3045-8	8" Flanged, Galv. Rubber to Rubber Seat	25.75"	
C3045-10	10" Flanged, Galv. Rubber to Rubber Seat	27.25"	
C3045-12	12" Flanged, Galv. Rubber to Rubber Seat	31.63"	



#3040 PLAIN CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
C3040-6	6" Plain, Galv. Rubber to Rubber Seat	24.38"	Call
C3040-8	8" Plain, Galv. Rubber to Rubber Seat	25.75"	
C3040-10	10" Plain, Galv. Rubber to Rubber Seat	27.25"	
C3040-12	12" Plain, Galv. Rubber to Rubber Seat	31.63"	



REPLACEMENT CHECK ASSEMBLY

PART #	DESCRIPTION	A	B	C	LIST
FL-4	4" Assembly	4.5"	2.5"	1.18"	Call
FL-5	5" Assembly	5.5"	2.5"	1.63"	
FL-6	6" Assembly	6.5"	2.5"	1.63"	
FL-8	8" Assembly	8.63"	3"	2.63"	
FL-10	10" Assembly	10.75"	4.25"	3.63"	
FL-12	12" Assembly	12.75"	4.5"	4.25"	



GHEEN CHECK VALVES



FLANGED CHEMIGATION CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
271-30	3" Chemigation Valve	18"	563.90
271-40	4" Chemigation Valve	18 5/8"	633.65
271-60	6" Chemigation Valve	21"	713.80
271-80	8" Chemigation Valve	23 3/8"	862.80
271-100	10" Chemigation Valve	25 5/8"	1,028.90
271-120	12" Chemigation Valve	30"	1,800.95



CHEMIGATION CHECK VALVE PARTS

PART #	DESCRIPTION	B.C.	LIST
901-02	1" Spring Drain Valve		11.90
271-CMVAV	4" Ringlock x 2" Air Vent		84.20
901-06	4" Ringlock x 2" MPT		76.30
901-60	6" Flapper Assembly	2 1/2"	318.90
901-80	8" Flapper Assembly	3 1/2"	364.55
901-100	10" Flapper Assembly	4 1/2"	417.35



FLANGED CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
261-30	3" Flanged Check Valve	9 1/16"	318.40
261-40	4" Flanged Check Valve	10 7/8"	386.20
261-60	6" Flanged Check Valve	13 3/4"	479.55
261-80	8" Flanged Check Valve	16 1/4"	564.20
261-100	10" Flanged Check Valve	18 3/8"	676.75
261-120	12" Flanged Check Valve	22 1/4"	1,351.90



PLAIN END CHECK VALVE

PART #	DESCRIPTION	WIDTH	LIST
261-30PE	3" Plain End Check Valve	8 5/16"	280.80
261-40PE	4" Plain End Check Valve	10 1/8"	311.10
261-60PE	6" Plain End Check Valve	13"	346.50
261-80PE	8" Plain End Check Valve	15 1/2"	407.70
261-100PE	10" Plain End Check Valve	17 5/8"	496.50
261-120PE	12" Plain End Check Valve	21 1/2"	913.20

RIVULIS CONTROL VALVES - V2500 PLASTIC

FEATURES: Rivulis designed the V2500 & V3500 hydraulic control valves to be one of the most efficient valve ranges on the market with wider passageways to minimize head loss, smaller control chambers for faster and more precise valve operation and increased control.

Rivulis V2500 & V3500 valves offer the following features and benefits:

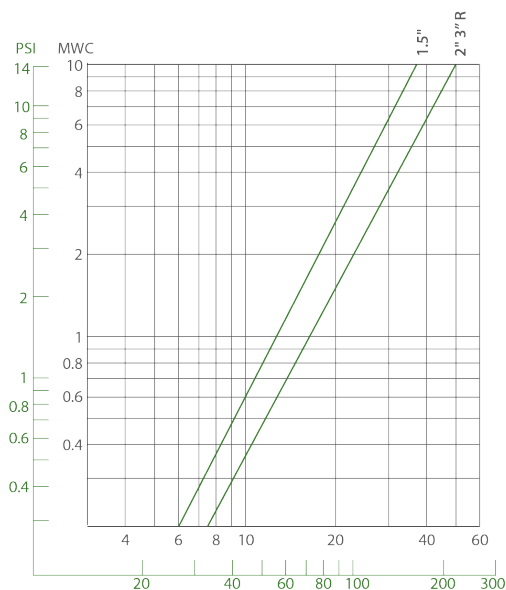
- **Pressure Control:** Increased uniformity across your field, regardless of the distance from the pump.
- **Remote Control:** Activate remotely via electric, pneumatic or hydraulic control.
- **System Protection:** Protect pumps, filters and pipeline from pressure surges while ensuring that equipment has the necessary pressure in the line to function correctly.
- **Flow Control:** To limit maximum flow rates when needed and to ensure stable flow and supply of water, including tank/reservoir level control.



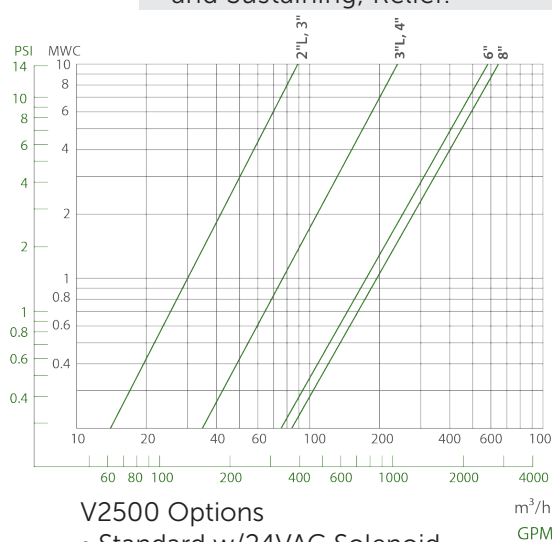
V2500 BASIC VALVE

PART NO.	DESCRIPTION	LIST
101053508	1 1/2" Threaded	105.15
101053521	2" Threaded	112.30
101053562	3" Threaded	210.30
101053633	4" Threaded	354.25
101053626	3" Flanged	210.30
101053650	4" Flanged	354.25
101053677	6" Flanged	1,413.85
101053706	8" Flanged	1,722.15

Available in Manual, Electric, Pressure Reducing and Sustaining, Relief.



$KV = Q / \sqrt{\frac{1}{\Delta P}}$ Where Q=Flow Rate (m³/h), ΔP =Pressure loss across the valve (bar), when fully open



V2500 Options

- Standard w/24VAC Solenoid
- Other voltages available
- Copper tubing
- Brass fittings
- "Critter Control" springs

RIVULIS CONTROL VALVES - V3500 METAL

FEATURES:

The Rivulis V2500 & V3500 valves are designed with an advanced oval shaped diaphragm that reduces the overall surface area of the diaphragm enabling a smaller control chamber in the valve. This allows the valve to respond quickly to changes in pressure for faster and more precise valve operation allowing your system to run at its best with increased uniformity and improved protection of your irrigation infrastructure. The Rivulis control chambers are designed to require less water to fill for faster, more precise operation and faster reaction time.

The smaller the control chamber, the faster and more precise valve operation.

Advanced Pilots: Delivering Pressure Regulation Ideal For Drip Irrigation Each pilot is designed to quickly and consistently react to fluctuations in pressure. This is very important for drip irrigation, especially when using thin wall non-PC drip lines/tapes that are susceptible to pressure changes and require consistent flow for uniformity.

Low Pressure Pilots: Ideal for thin wall drip lines and tapes 0.3 - 2.5 bar / 4.5 - 35 psi.

Medium Pressure: Ideal for medium-heavy wall drip lines 0.5 - 6.0 bar / 7 - 90 psi.

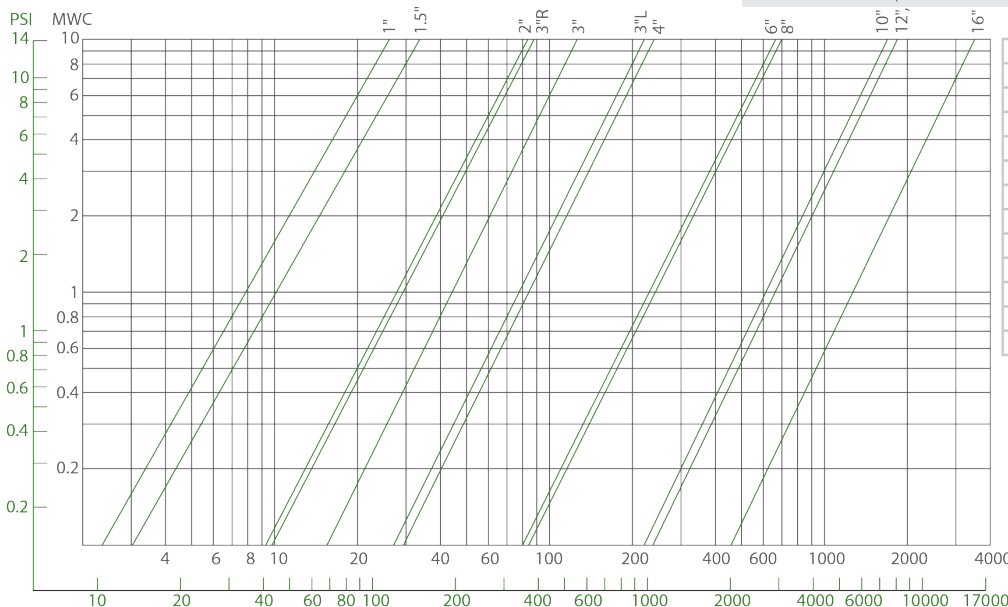
High Pressure Pilots: Ideal for sprinkler irrigation 1.0 - 10.0 bar / 14.5 - 145 psi.



V3500 BASIC VALVE

PART NO.	DESCRIPTION	LIST
101053741	1" Threaded	141.90
101053747	1 1/2" Threaded	186.80
101053756	2" Threaded	192.95
101053791	3" Threaded	494.10
101053804	3" Flanged	494.10
101053828	4" Flanged	728.90
101053852	6" Flanged	1,616.00
101053875	8" Flanged	2,458.20
101053884	10" Flanged	3,366.70

Available in Manual, Electric, Pressure Reducing and Sustaining,



Valve	KV
1"	24
1.5"	34
2", 3"R	95
3"	137
3"L	260
4"	270
6"	700
8"	713
10"	1800
12"	2000
14"	2000
16"	3500

$$KV = Q / \sqrt{\frac{1}{\Delta P}} \text{ Where } Q = \text{Flow Rate (m}^3/\text{h)},$$

ΔP = Pressure loss across the valve (bar), when fully open

m³/hr
GPM



X-MAX VALVE™

FEATURES:

- Five-Year diaphragm warranty
- Hot dipped galvanized and oven baked powder coatings
- Pilot control options: pressure reducing, pressure sustaining and pressure relief
- Electric on/off with Parker Skinner solenoid and manual three-way controller
- Solenoid available in 12v DC, 24v AC, 24v DC or 120v AC
- 6" Available with P-6000 brass pilot only
- Bolt kit included

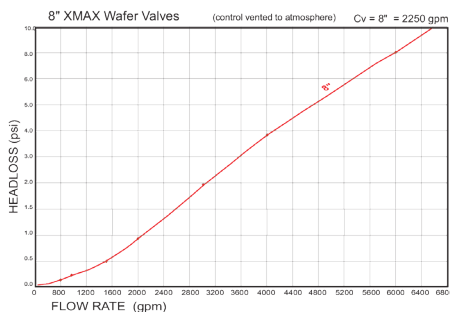
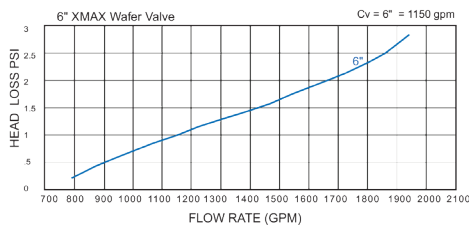
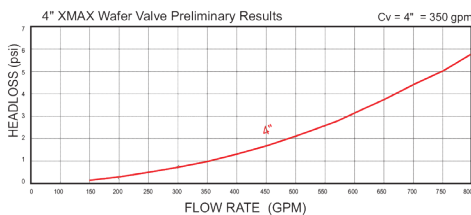
Assembled in the USA from domestic and foreign parts • High-Flow design



XMAX4WS



XMAX6II-WS



X-MAX ELECTRIC ON/OFF VALVE

PART NO.	DESCRIPTION	LIST
XMAX4WS	4" Electric On/Off Valve w/Sol.	776.97
XMAX6II-WS	6" Electric On/Off Valve w/Sol.	911.80
XMAX8WS	8" Electric On/Off Valve w/Sol.	1,390.98

X-MAX BASIC VALVE

PART NO.	DESCRIPTION	LIST
XMAX4B	4" Valve w/Plugs	617.89
XMAX6II-B	6" Valve w/Plugs	752.72
XMAX8B	8" Valve w/Plugs	1,252.27

X-MAX MANUAL PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
XMAX4MPR	4" W/P-6000 Pilot	1,191.16
XMAX6II-MPR	6" W/P-6000 Pilot	1,421.05
XMAX8MPR	8" W/P-6000 Pilot	1,919.63

X-MAX ELECTRIC PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
XMAX4EPR	4" W/P-6000 Pilot/Solenoid	1,317.26
XMAX6II-EPR	6" W/P-6000 Pilot/Solenoid	1,547.15
XMAX8EPR	8" W/P-6000 Pilot/Solenoid	2,045.73

X-MAX MANUAL PRESSURE SUSTAINING VALVE

PART NO.	DESCRIPTION	LIST
XMAX4MPS	4" W/P-6000 Pilot	1,191.16
XMAX6II-MPS	6" W/P-6000 Pilot	1,421.05
XMAX8MPS	8" W/P-6000 Pilot	1,919.63

REPLACEMENT DIAPHRAGMS

PART NO.	DESCRIPTION	LIST
XMAX4DIA	4" XMAX Diaphragm	110.00
XMAX6DIA	6" XMAX Diaphragm	140.00
XMAX8DIA	8" XMAX Diaphragm	220.00



SEAL MATIC® 3/4", 1", 1 1/4" AND 1 1/2"

Pivot Auxiliary & Corner Control Valve • Raven Smart™ Diaphragm Technology



FEATURES:

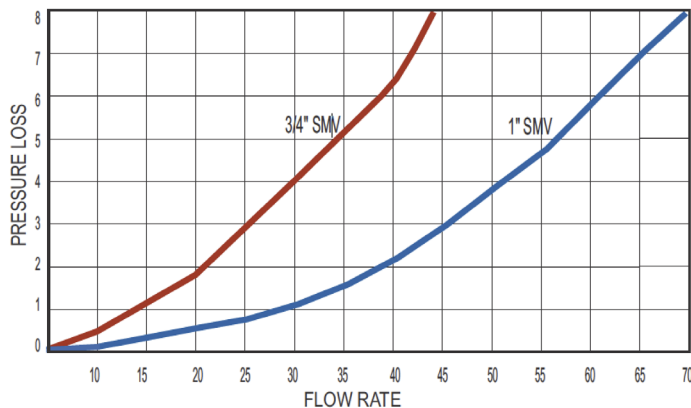
- Fully galvanized, ductile iron body and bonnet
- Brass auto-drain included with PEG model
- One diaphragm for all working pressures
- 200 psi max working pressure
- Highly efficient high-flow, low head loss design
- Easy in-place maintenance
- Pressure reducing and pressure sustaining valves come with P-6000 brass pilot

Assembled in the USA
from domestic and foreign parts
3-Year Diaphragm Guarantee



SMV75PEG

3/4" and 1" SMV Valves



Seal Matic valves are only guaranteed to perform optimally in accordance with the size and model of each valve's performance chart in standard irrigation use and practices.

Graphs Represent Results From CIT

SEAL MATIC PIVOT® END GUN VALVE

PART NO.	DESCRIPTION	LIST
SMV75PEG	3/4" w/Auto Drain and Plug	81.63
SMV1PEG	1" w/Auto Drain and Plug	81.63
SMV1.25PEG	1 1/4" w/Auto Drain and Plug	102.82
SMV1.5PEG	1 1/2" w/Auto Drain and Plug	112.13

SEAL MATIC® BASIC VALVE

PART NO.	DESCRIPTION	LIST
SMV75B	3/4" Basic w/Plugs	76.82
SMV1B	1" Basic w/Plugs	76.82
SMV1.25B	1 1/4" w/Plugs	93.02
SMV1.5B	1 1/2" w/Plugs	101.07

SEAL MATIC® ELECTRIC ON/OFF VALVE

PART NO.	DESCRIPTION	LIST
SMV75WS	3/4" w/Solenoid	311.37
SMV1WS	3/4" w/Solenoid	311.37
SMV1.25WS	1 1/4" w/Solenoid	328.83
SMV1.5WS	1 1/2" w/Solenoid	328.83

SEAL MATIC® MANUAL PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV75MPR	3/4" w/P-6000 Pilot	754.66
SMV1MPR	1" w/P-6000 Pilot	754.66
SMV1.25MPR	1 1/4" w/P-6000 Pilot	776.97
SMV1.5MPR	1 1/2" w/P-6000 Pilot	776.97

SEAL MATIC® ELECTRIC PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV75EPR	3/4" w/P-6000 Pilot/Solenoid	880.76
SMV1EPR	1" w/P-6000 Pilot/Solenoid	880.76
SMV1.25EPR	1 1/4" w/P-6000 Pilot/Solenoid	903.07
SMV1.5EPR	1 1/2" w/P-6000 Pilot/Solenoid	903.07

SEAL MATIC™ MANUAL PRESSURE SUSTAINING VALVE

PART NO.	DESCRIPTION	LIST
SMV75MPS	3/4" w/P-6000 Pilot	754.66
SMV1MPS	1" w/P-6000 Pilot	754.66
SMV1.25MPS	1 1/4" w/P-6000 Pilot	776.97
SMV1.5MPS	1 1/2" w/P-6000 Pilot	776.97

SEAL MATIC® 2" PIVOT END GUN VALVE

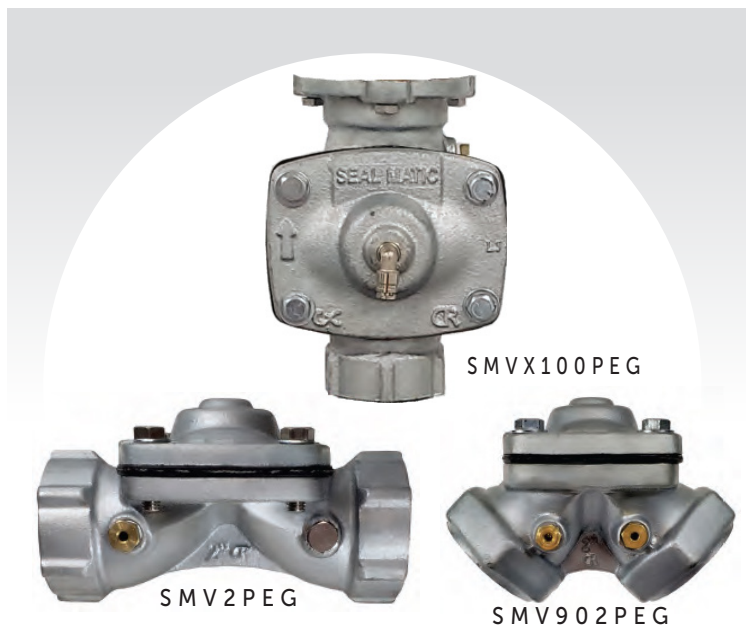


FEATURES:

Raven Smart™ Diaphragm Technology

- Fully galvanized, ductile iron body and bonnet
- Brass auto-drain included with PEG model
- One diaphragm for all working pressures
- 200 psi max working pressure
- Easy in-place maintenance
- Pressure sustaining and pressure reducing valves come with P-6000 pilot
- SMVX100PEG works with Aqua Burst™ X100 and Nelson™ SR100 and SR75

Assembled in the USA from domestic and foreign parts • 3-Year Diaphragm Guarantee



SEAL MATIC® PIVOT END GUN VALVE

PART NO.	DESCRIPTION	LIST
SMV2PEG	2" w/Auto Drain and Plug	131.73
SMV902PEG	2" 90° w/Auto Drain and Plug	131.73
SMVX100PEG	2" X100 End Gun Valve	131.73

SEAL MATIC® BASIC VALVE

PART NO.	DESCRIPTION	LIST
SMV2B	2" Basic w/Plugs	105.54
SMV902B	2" 90° Basic w/Plugs	105.54

SEAL MATIC® ELECTRIC ON/OFF VALVE

PART NO.	DESCRIPTION	LIST
SMV2WS	2" w/Solenoid	359.87
SMV902WS	2" 90° w/Solenoid	359.87
SMVX100WS	2" X100 End Gun Valve w/Solenoid	415.16

SEAL MATIC® MANUAL PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV2MPR	2" w/P-6000 Pilot	836.14
SMV902MPR	2" 90° w/P-6000 Pilot	836.14

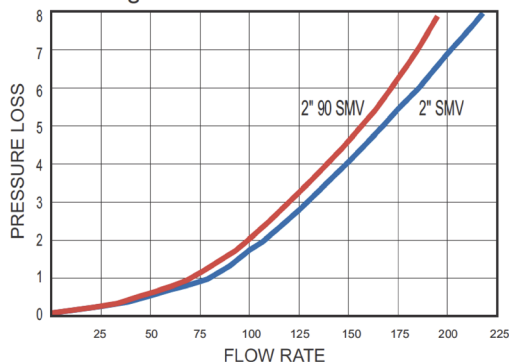
SEAL MATIC® ELECTRIC PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV2EPR	2" w/P-6000 Pilot/Solenoid	965.15
SMV902EPR	2" 90° w/P-6000 Pilot/Solenoid	965.15

SEAL MATIC® MANUAL PRESSURE SUSTAINING VALVE

PART NO.	DESCRIPTION	LIST
SMV2MPS	2" w/P-6000 Pilot	836.14
SMV902MPS	2" 90° w/P-6000 Pilot	836.14

2" Straight and 2" 90° Seal Matic™ Valves



Cv = 2" 90° = 110
Cv = 2" Str = 90

(control vented to atmosphere)

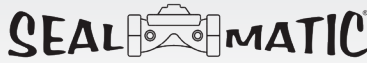
Seal Matic valves are only guaranteed to perform optimally in accordance with the size and model of each valves performance chart in standard irrigation use and practices.

Graphs Represent Results From CIT



SEAL MATIC® CONTROL VALVES

Raven Smart™ Diaphragm Technology



FEATURES:

- New Super Flow design, available in 4", 6", 8"
- Fully galvanized, ductile iron body and bonnet
- One diaphragm for all working pressures
- Easy in-place maintenance
- Fully open at 5 psi
- CIT tested flow rates
- Pilot Control Options: Pressure reducing, pressure sustaining, pressure relief
- Pressure reducing/sustaining valves come with P-6000 brass pilot
- Solenoid available in 12v DC, 24v AC, 24v DC or 120v AC

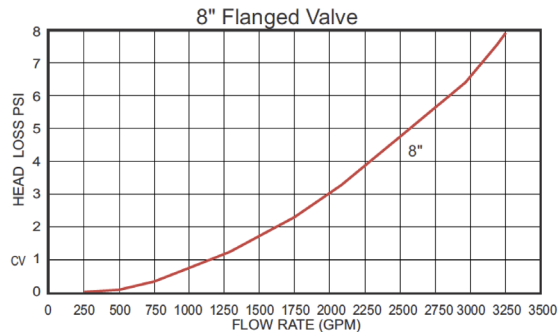
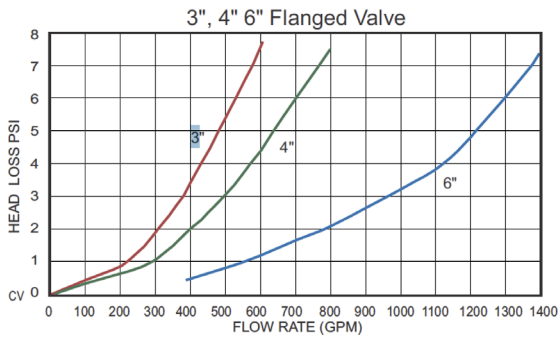
Assembled in the USA from domestic and foreign parts • 3-Year Diaphragm Guarantee



SMV6WS
6" DUAL-X™ CONTROL VALVE



SMV4B



Graphs Represent Results From CIT

SEALMATIC™ CONTROL VALVES INSTALLATION AND STORAGE GUIDE PAGE 38

SEAL MATIC® ELECTRIC ON/OFF VALVE

PART NO.	DESCRIPTION	LIST
SMV3WS	3" Electric On/Off Valve	913.74
SMV4WS	4" Electric On/Off Valve	913.74
SMV6WS	6" Electric On/Off Valve	1,412.32
SMV8WS	8" Electric On/Off Valve	2,722.79

SEAL MATIC® BASIC VALVE

PART NO.	DESCRIPTION	LIST
SMV3B	3" Basic Valve	754.66
SMV4B	4" Basic Valve	754.66
SMV6B	6" Basic Valve	1,253.24
SMV8B	8" Basic Valve	2,403.66

SEAL MATIC® MANUAL PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV3MPR	3" W/P-6000 Pilot	1,520.96
SMV4MPR	4" W/P-6000 Pilot	1,520.96
SMV6MPR	6" W/P-6000 Pilot	2,097.14
SMV8MPR	8" W/P-6000 Pilot	3,680.18

SEAL MATIC® ELECTRIC PRESSURE REDUCING VALVE

PART NO.	DESCRIPTION	LIST
SMV3EPR	3" W/P-6000 Pilot/Solenoid	1,617.96
SMV4EPR	4" W/P-6000 Pilot/Solenoid	1,617.96
SMV6EPR	6" W/P-6000 Pilot/Solenoid	2,194.14
SMV8EPR	8" W/P-6000 Pilot/Solenoid	3,815.01

SEAL MATIC® MANUAL PRESSURE SUSTAINING VALVE

PART NO.	DESCRIPTION	LIST
SMV3MPS	3" W/P-6000 Pilot	1,520.96
SMV4MPS	4" W/P-6000 Pilot	1,520.96
SMV6MPS	6" W/P-6000 Pilot	2,097.14
SMV8MPS	8" W/P-6000 Pilot	3,680.18

XCAD PRESSURE CONTROL PILOT P-6000 SERIES

FEATURES:

- Maintenance free stainless steel control springs (No greasing required)
- Calibrated pressure control (low and high)
- Both sustaining/relief and reducing function
- No pressure drop required to regulate
- Easy valve mounting bracket
- Universal design works with most control valves
- Includes vent and fittings

Assembled in the USA



PRESSURE CONTROL PILOT

PART NO.	DESCRIPTION	LIST
P-6000H	High: 30-120 psi	682.00
P-6000M	Medium: 30-60 psi	682.00
P-6000L	Low: 10-40 psi	682.00

MANUAL PRESSURE REDUCTION KIT

PART NO.	DESCRIPTION	LIST
P6MPR-H	High: 30-120 psi	780.00
P6MPR-M	Medium: 30-60 psi	780.00
P6MPR-L	Low: 10-40 psi	780.00

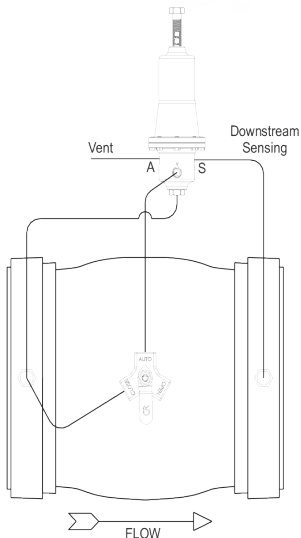
ELECTRIC ON/OFF PRESSURE REDUCTION KIT

PART NO.	DESCRIPTION	LIST
P6EPR-H	High: 30-120 psi	986.00
P6EPR-M	Medium: 30 - 60 psi	986.00
P6EPR-L	Low: 10-40 psi	986.00

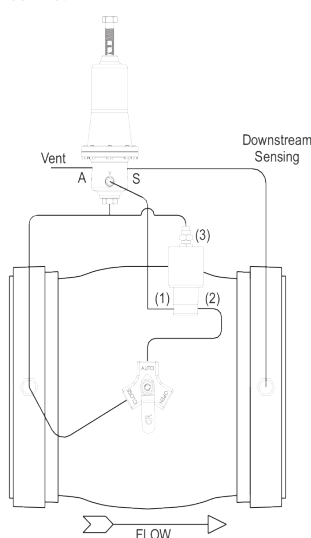
MANUAL PRESSURE SUSTAINING/RELIEF KIT

PART NO.	DESCRIPTION	LIST

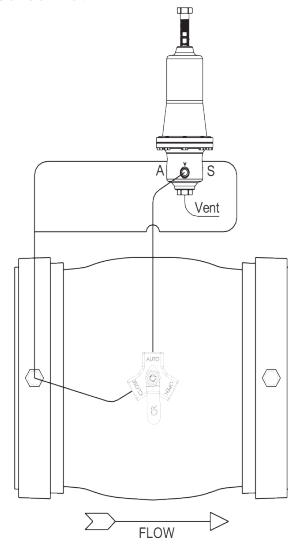
Pressure Reducing (Manual)
6000 Series Pilot



Pressure Reducing & Electric On/Off
6000 Series Pilot



Pressure Sustaining (Manual)
6000 Series Pilot



VALVE ACCESSORIES



PK SOL-LO120AC



PK SOL-120AC

3-WAY SOLENOIDS

PART #	DESCRIPTION	LIST
PK SOL-120UN	120v AC Solenoid, Unpotted	139.00
PK SOL-120AC	120v AC Solenoid, Potted	139.00
PK SOL-24AC	24v AC Solenoid	148.50
PK SOL-24DC	24v DC Solenoid	141.80
PK SOL-12DC	12v DC Solenoid	148.50
PK SOL-12DCL	12v DC Latching Solenoid	379.80
PK SOL-LO120AC	120v AC 5/32" Orifice Sol.	440.30
PK SOL-LO24AC	24v AC 5/32" Orifice Sol.	440.30
Call For Replacement Coils.		



CONTROL VALVE REPLACEMENT DIAPHRAGMS

PART #	DESCRIPTION	LIST
XCON4DIA	4" XCON Diaphragm	110.00
XCON6DIA	6" XCON Diaphragm	140.00
XCON8DIA	8" XCON Diaphragm	220.00
SMV1.5DIA	1 1/4" & 1 1/2" SMV Diaphragm	70.00
SMV75DIA	3/4" & 1" SMV Diaphragm	18.98
SMV2DIA	2" SMV Diaphragm	52.00
SMV346DIA	3", 4" & 6" SMV Diaphragm	233.54
SMV8DIA	8" SMV Diaphragm	571.58
SMV4OR	4" SMV Flange O-ring	10.40
SMV6OR	6" SMV Flange O-ring	11.70
SMV8OR	8" SMV Flange O-ring	14.83
XMAX4OR	4" XMAX O-ring	10.42
XMAX6OR	6" XMAX O-ring	11.70



LBF25



SBF25



EXTFP



3WSEL



SMVBD-AV

BRASS FILTERS AND DRAINS

PART #	DESCRIPTION	LIST
3WSEL	1/4" x 1/8" x 1/8" 1/8" 3-Way Selector	32.50
SVB-4	1/4" Brass Shuttle Valve	11.00
LBF25	1/4" x 1/4" Internal Filter Long	13.70
SBF25	1/8" x 1/4" Internal Filter Short	13.70
SMVBD-AV	1/4" Internal Brass Drain	13.20
EXTFP	1/4" x 1/4" External Plastic Filter	19.60

BRASS VALVE FITTINGS

PLATED BRASS



BRASS VALVE FITTINGS

PART NO.	DESCRIPTION	LIST
BHN2-2	1/8" NPT x 1/8" NPT Hex Nipple	1.64
BHN4-2	1/4" NPT x 1/8" NPT Hex Nipple	2.00
BHN4-4	1/4" NPT x 1/4" NPT Hex Nipple	2.20
BFHN2-2	1/8" FPT x 1/8" FPT Hex Nipple	2.00
BFHN4-4	1/4" FPT x 1/4" FPT Hex Nipple	2.61
SHH4-4	1/4" Tube OD x 1/4" Hose Swivel Connector	4.39
SHH516	5/16" Tube OD x 5/16" Hose Swivel Connector	4.50
SSN4-2	1/4" Tube OD x 1/8" NPT Swivel Straight Nipple	2.39
SSN4-4	1/4" Tube OD x 1/4" NPT Swivel Straight Nipple	2.74
SSN516-2	5/16" Tube OD x 1/8" NPT Swivel Straight Nipple	3.24
SSN516-4	5/16" Tube OD x 1/4" NPT Swivel Straight Nipple	3.48
SSN38-4	3/8" Tube OD x 1/4" NPT Swivel Straight Nipple	4.21
SSN12-4	1/2" Tube OD X 1/4" NPT Swivel Straight Nipple	5.14
SE4-2	1/4" Tube OD x 1/8" NPT Swivel Elbow	4.33
SE4-4	1/4" Tube OD x 1/4" NPT Swivel Elbow	4.84
SE516-2	5/16" Tube OD x 1/8" NPT Swivel Elbow	5.01
SE516-4	5/16" Tube OD x 1/4" NPT Swivel Elbow	5.63
SE38-4	3/8" Tube OD x 1/4" NPT Swivel Elbow	7.26
SE12-4	1/2" Tube OD x 1/4" NPT Swivel Elbow	7.93
SBT4-2	1/4" Tube OD x 1/8" NPT Swivel Branch Tee	5.88
SBT4-4	1/4" Tube OD x 1/4" NPT Swivel Branch Tee	6.09
SBT516-2	5/16" Tube OD x 1/8" NPT Swivel Branch Tee	7.06
SBT516-4	5/16" Tube OD x 1/4" NPT Swivel Branch Tee	7.37
SBT38-4	3/8" Tube OD x 1/4" NPT Swivel Branch Tee	9.11
SBT12-4	1/2" Tube OD X 1/4" NPT Swivel Branch Tee	9.21
SRT4-2	1/4" Tube OD x 1/8" NPT Swivel Run Tee	6.75
SRT4-4	1/4" Tube OD x 1/4" NPT Swivel Run Tee	6.80
SRT516-2	5/16" Tube OD x 1/8" NPT Swivel Run Tee	7.16
SRT516-4	5/16" Tube OD x 1/4" NPT Swivel Run Tee	7.48
SRT38-4	3/8" Tube OD x 1/4" NPT Swivel Run Tee	8.41
SRT12-4	1/2" Tube OD x 1/4" NPT Swivel Run Tee	8.93

BRASS VALVE FITTINGS

PLATED BRASS



SYC4-2



SYC4-4



SYC-4



SC-4



SC-38



SC-516



SUT2-2



SUT4-4



SSC4-2



SSC4-4



SST4-2



SST4-4



SST-516



RED4-2



UEF2-2



BVT14

BRASS VALVE FITTINGS

PART NO.	DESCRIPTION	LIST
SYC4-2	1/4" Tube OD x 1/8" NPT Swivel Divider Tee	6.34
SYC4-4	1/4" Tube OD x 1/4" NPT Swivel Divider Tee	6.50
SYC-4	1/4" x 1/4" x 1/4" Tube OD Swivel Divider Tee	5.91
SC-4	1/4" x 1/4" x 1/4" Tube OD Swivel Tee	5.96
SC-516	5/16" x 5/16" x 5/16" Tube OD Swivel Tee	8.13
SC-38	3/8" X 3/8" X 3/8" Tube OD Swivel Tee	9.32
SUT2-2	1/8" x 1/8" x 1/8" FPT Brass Union Tee	5.09
SUT4-4	1/4" x 1/4" x 1/4" FPT Brass Union Tee	6.01
SSC4-2	1/4" Tube OD X 1/8" NPT Swivel Speed Control	12.36
SSC4-4	1/4" Tube OD x 1/4" NPT Swivel Speed Control	13.34
SST4-2	1/4" Tube OD x 1/8" NPT Swivel Splitter Tee	7.53
SST4-4	1/4" Tube OD x 1/4" NPT Swivel Splitter Tee	7.79
SST516-4	5/16" Tube OD x 1/4" NPT Swivel Splitter Tee	9.40
FRED4-2	1/4" FPT x 1/8" FPT Hex Reducer	3.70
RED4-2	1/4" MPT x 1/8" FPT Hex Reducer	2.05
UEF2-2	1/8" FPT x 1/8" FPT Union Elbow	3.20
Heavy Duty Nylon Tubing		
BVT	1/4" OD	.47
BVT516	5/16" OD	.61
BVT38	3/8" OD	.92
BVT12	1/2" OD	1.03

NYLON VALVE FITTINGS

NYLON AND PLATED BRASS



NE4-4

NHH4-4

NSC-38

NSC-4

NSBT38-4

NSBT4-2

NSBT4-4

NSE38-4

NSE4-2

NSE4-4

NHHE4-4

NSRT38-4

NSRT4-2

NSRT4-4

NSSN4-2

NSSN4-4

NSSN12-4

NSSN38-4

NSYC-4

NSYC4-2

NSYC4-4

NSSC4-2

NSSC4-4

NYLON VALVE FITTINGS

PART NO.	DESCRIPTION	LIST
NE4-4	1/4" Tube OD x 1/4" NPT Elbow	2.54
NHH4-4	1/4" Tube OD x 1/4" Tube OD Swivel Straight Nipple	0.73
NSC-38	3/8" Tube OD Swivel Connector Tee	1.79
NSC-4	1/4" Tube OD Swivel Connector Tee	1.14
NSBT38-4	3/8" Tube OD x 1/4" NPT Swivel Branch Tee	3.09
NSBT4-2	1/4" Tube OD x 1/8" NPT Swivel Branch Tee	1.61
NSBT4-4	1/4" Tube OD x 1/4" NPT Swivel Branch Tee	1.84
NSE38-4	3/8" Tube OD x 1/4" NPT Swivel Elbow	2.22
NSE4-2	1/4" Tube OD x 1/8" NPT Swivel Elbow	1.41
NSE4-4	1/4" Tube OD x 1/4" NPT Swivel Elbow	1.79
NHHE4-4	1 1/4" Tube OD x 1/4" Hose Swivel Elbow	.73
NSRT12-4	1/2" Tube OD x 1/4" NPT Swivel Run Tee	3.74
NSRT38-4	3/8" Tube OD x 1/4" NPT Swivel Run Tee	2.82
NSRT4-2	1/4" Tube OD x 1/8" NPT Swivel Run Tee	1.52
NSRT4-4	1/4" Tube OD x 1/8" NPT Swivel Straight Nipple	1.90
NSSN4-2	1/4" Tube OD x 1/8" NPT Swivel Straight Nipple	1.01
NSSN4-4	1/4" Tube OD x 1/4" NPT Swivel Straight Nipple	1.35
NSSN38-4	3/8" Tube OD x 1/4" NPT Swivel Straight Nipple	2.60
NSSN12-4	1/2" Tube OD x 1/4" NPT Swivel Straight Nipple	2.28
NSYC-4	1/4" Tube OD Hose Swivel Y Connector	1.03
NSYC4-2	1/4" Tube OD x 1/8" NPT Swivel Y Connector	1.52
NSYC4-4	1/4" Tube OD x 1/4" NPT Swivel Y Connector	1.90
NSSC4-2	1/4" Tube OD x 1/8" NPT Swivel Speed Control/Needle Valve	3.36
NSSC4-4	1/4" Tube OD x 1/4" NPT Swivel Speed Control/Needle Valve	3.52

TOGGLE GATES

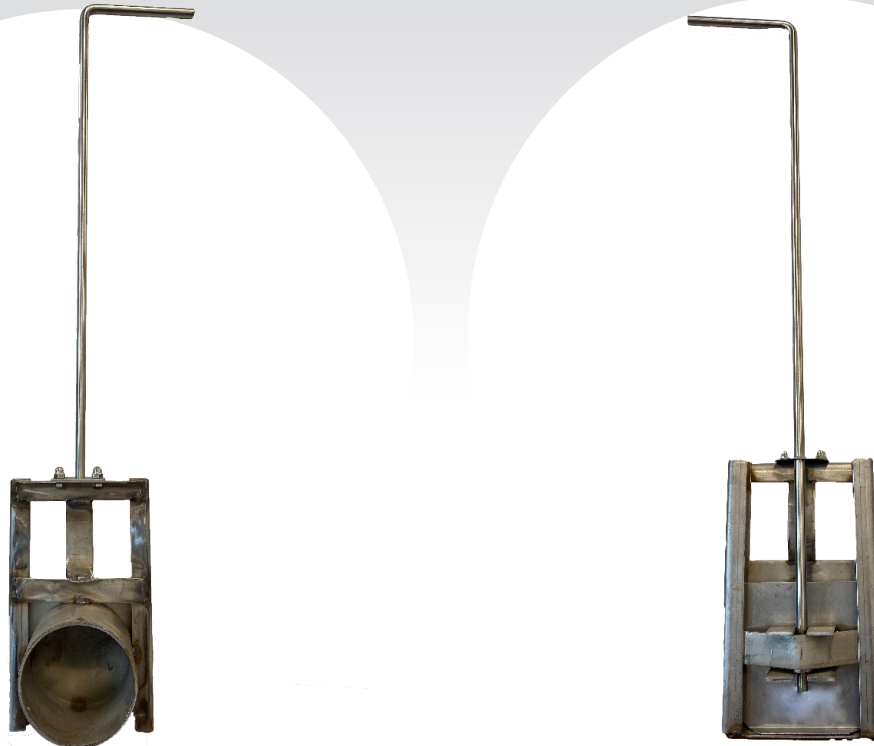
FEATURES:

CP style for concrete pipe

OD style for attachment to OD pipe

All gates have full stainless steel slides

Galvanized type are hot dipped with stainless slide



X-GATE™ TOGGLE GATES

CP GALVANIZED

PART #	SIZE	LIST
TG4-CPG	4"	55.80
TG6-CPG	6"	67.50
TG8-CPG	8"	81.90
TG10-CPG	10"	90.90
TG12-CPG	12"	107.10

OD GALVANIZED

PART #	SIZE	LIST
TG4-ODG	4"	56.70
TG6-ODG	6"	69.30
TG8-ODG	8"	82.80
TG10-ODG	10"	90.90
TG12-ODG	12"	108.00

CP STAINLESS STEEL

PART #	SIZE	LIST
TG4-CPS	4"	95.40
TG6-CPS	6"	127.80
TG8-CPS	8"	162.90
TG10-CPS	10"	190.80
TG12-CPS	12"	230.40

OD STAINLESS STEEL

PART #	SIZE	LIST
TG4-ODS	4"	101.70
TG6-ODS	6"	125.10
TG8-ODS	8"	176.40
TG10-ODS	10"	201.60
TG12-ODS	12"	245.70

X-GATE™ LOW HEAD CANAL GATES SUPER HEAVY-DUTY

X-GATE™

FEATURES:

- Heavy-duty galvanized 3" x 5" head rails and 2 1/2" guide rails standard
- Spigot back or flat back frame
- Two stainless steel stem configurations: X-type, left and right-hand thread
- Stainless steel stems standard
- Bronze lift nuts standard
- Standard Sizes 6", 8", 10", 12", 15", 18", 21", 24", 30", and 36"
- See chart for maximum frame lengths
- Extension stem adapters for all sizes

CANALGATES.COM

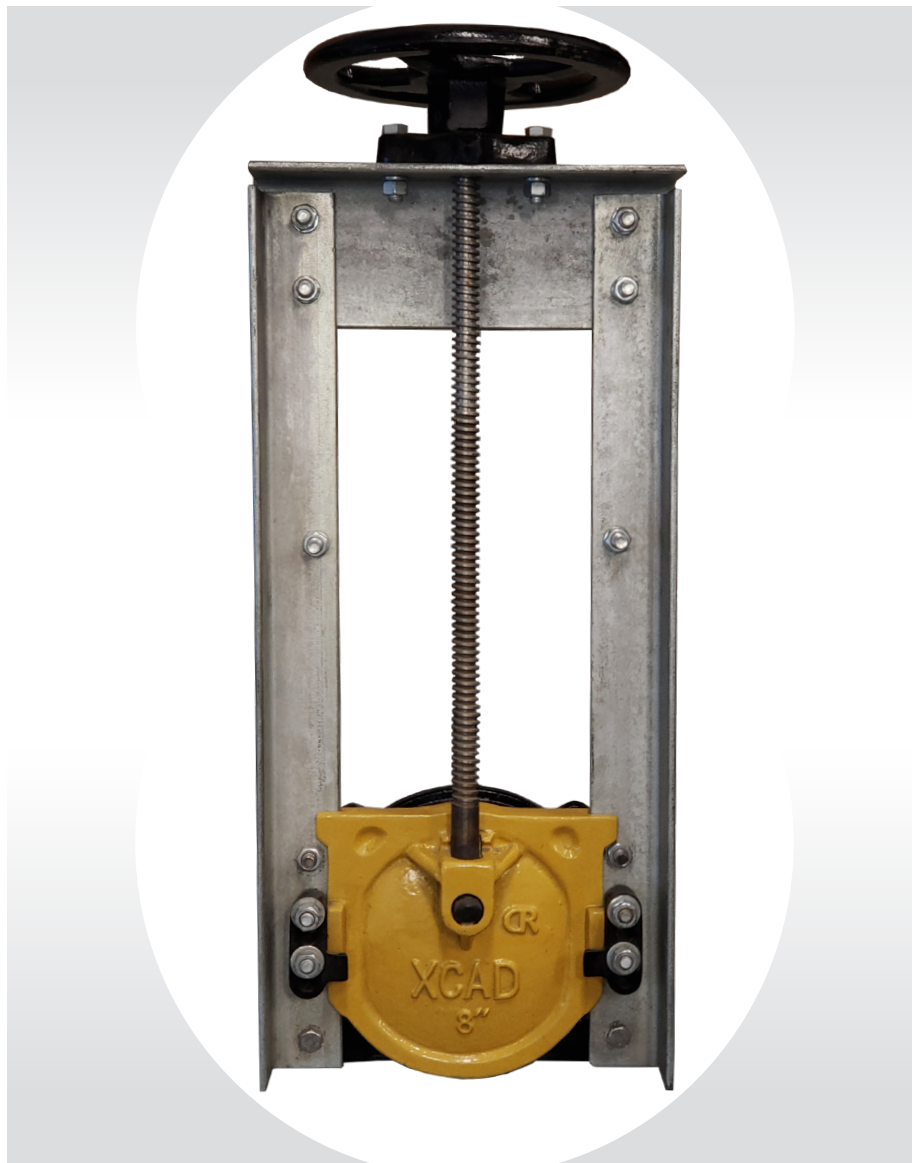
All X-GATE™ Canal Gates are available in two stem configurations. Please specify desired stem package when ordering gates (X-Type left-hand thread standard)

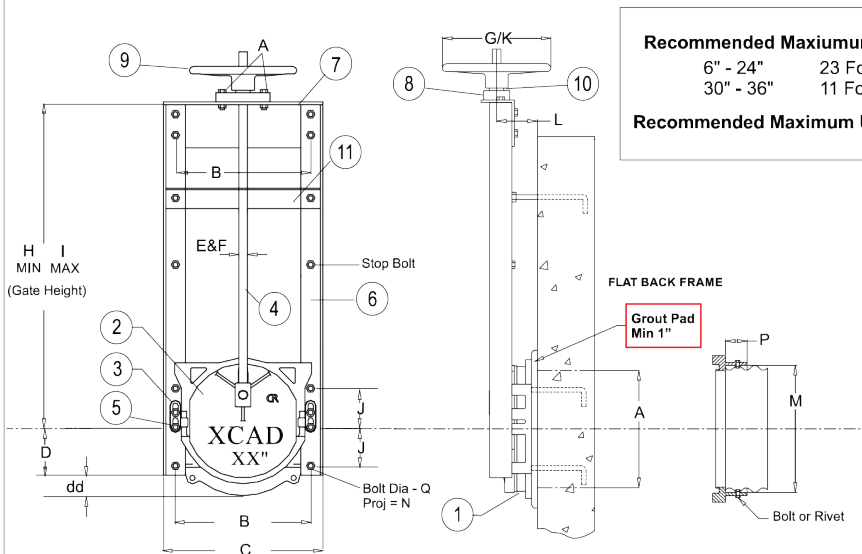
X-Type, Left Hand Thread

X-Type, Right Hand Thread

X-GATE Low Head Canal Gates are designed to XCAD's highest specifications. Frames, covers and wedges are not interchangeable with other brands.

Additional Charge
 For Non-Standard Gate Lengths
 or Gates Over 120" in length





Recommended Maximum Seating Heads
 6" - 24" 23 Foot Head
 30" - 36" 11 Foot Head

Recommended Maximum Unseating Head - 0

Parts List & Standard Features			
No.	Description	Qty.	Material
1	Frame	1	Cast Iron
2	Cover	1	Ductile Iron
3	Wedge (Rt. & Lft)	1 ea	Cast Iron
4	Stem	1	Stainless Steel
5	Wedge Bolts	4	Zinc Plated
6	Guide Rail	2	Galv. Structural Steel
7	Head Rail	1	Galv. Structural Steel
8	Lift Collar	1	Cast Iron
9	Handwheel	1	Cast Iron
10	Lift Nut	1	Bronze
11	Stem Support	1-2	Galv. Structural Steel

Cover: Cast Iron ASTM A 126 class B
Frame: Ductile Iron ASTM 65-45-120
Nut: Bronze ASTM B-584
Stem: Stainless Steel
Fasteners/Hardware: Zinc Plated
Railing: Galvanized

Flat Back
 for Headwall and Flange Mounting

Spigot Back
 for Mounting to Corrugated Pipe

Dimensions For X-GATE™ Low-Head Canal Gates

(All Measurements in Inches)

A	B	C	D	dd	E XCAD	F Fresno	G XCAD	H Min	I Max	J	K Fresno	L	M	N	P	Q
8"	10"	13"	4"	7/8"	7/8" (.875)	7/8" (.875)	10"	25 1/2"	121 1/2"	3"	10"	2.5"	9 1/8" (9.125)	3.5"	2.25"	1/2" x 12"
10"	12"	14 7/8" (14.875)	4 1/2"	1 1/2"	7/8" (.875)	7/8" (.875)	10"	26 1/4"	122 1/4"	3.5"	10"	2.5"	11 1/4" (11.25)	3.5"	2.25"	1/2" x 12"
12"	14"	16 7/8" (16.875)	5"	2"	7/8" (.875)	7/8" (.875)	10"	26 3/4"	122 3/4"	4"	10"	3"	13 1/8" (13.125)	4"	2.25"	1/2" x 12"
15"	17"	18 7/8" (18.875)	6"	2 1/2"	7/8" (.875)	7/8" (.875)	10"	39 1/2"	123 1/2"	5"	10"	3.5"	16"	4"	2.25"	1/2" x 12"
18"	21"	22 7/8" (22.875)	7"	3 1/2"	1"	1 1/8" (1.125)	12"	40 1/4"	124 1/4"	6"	14"	4.25"	19 1/8" (19.125)	4.5"	2.25"	5/8" x 12"
24"	27 1/4" (27.25)	29 1/8" (29.125)	9"	4 3/4"	1"	1 1/8" (1.125)	12"	53 1/2"	125 1/2"	8"	14"	4.125"	25"	4.5"	2.25"	5/8" x 12"
30"	33 3/4" (33.75)	36 1/8" (36.125)	11"	6 3/4"	1 1/8" (1.125)	1 1/8" (1.125)	15"	67 1/2"	127 1/2"	10"	14"	4.5"	31 1/2" (31.5)	6"	2.25"	3/4" x 12"
36"	39 3/4" (39.75)	42 1/8" (42.125)	13"	7 1/2"	1 1/8" (1.125)	1 1/8" (1.125)	15"	80 1/4"	128 1/4"	12"	14"	5.375"	37"	6"	2.25"	3/4" x 12"

Gate Size	Gate Heights															
	Min.															Max.
8	24"	36"	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"			
10	24"	36"	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"			
12	24"	36"	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"			
15	36"	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"				
18	36"	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"				
24	48"	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"					
30	60"	72"	78"	84"	90"	96"	102"	108"	114"	120"						
36	72"	78"	84"	90"	96"	102"	108"	114"	120"							

X-GATE™ Low Head Canal Gates are designed to **XCAD USA**®'s highest specifications. Frames, covers and wedges are not interchangeable with other brands.

8" FLAT BACK FRAME

CG8FB24	8" X 24"	660.50
CG8FB36	8" X 36"	721.80
CG8FB48	8" X 48"	780.70
CG8FB60	8" X 60"	864.70
CG8FB72	8" X 72"	930.80
CG8FB84	8" X 84"	1,008.30
CG8FB96	8" X 96"	1,045.70
CG8FB108	8" X 108"	1,157.70
CG8FB120	8" X 120"	1,292.90

10" FLAT BACK FRAME

CG10FB24	10" X 24"	709.60
CG10FB36	10" X 36"	768.30
CG10FB48	10" X 48"	834.60
CG10FB60	10" X 60"	919.40
CG10FB72	10" X 72"	980.80
CG10FB84	10" X 84"	1,087.20
CG10FB96	10" X 96"	1,139.90
CG10FB108	10" X 108"	1,275.40
CG10FB120	10" X 120"	1,408.10

12" FLAT BACK FRAME

CG12FB24	12" X 24"	773.50
CG12FB36	12" X 36"	839.40
CG12FB48	12" X 48"	899.40
CG12FB60	12" X 60"	992.80
CG12FB72	12" X 72"	1,059.80
CG12FB84	12" X 84"	1,216.30
CG12FB96	12" X 96"	1,299.10
CG12FB108	12" X 108"	1,439.60
CG12FB120	12" X 120"	1,572.50

15" FLAT BACK FRAME

CG15FB36	15" X 36"	976.90
CG15FB48	15" X 48"	1,040.71
CG15FB60	15" X 60"	1,130.00
CG15FB72	15" X 72"	1,194.80
CG15FB84	15" X 84"	1,359.80
CG15FB96	15" X 96"	1,441.40
CG15FB108	15" X 108"	1,585.11
CG15FB120	15" X 120"	1,718.00

18" FLAT BACK FRAME

CG18FB36	18" X 36"	1,348.60
CG18FB48	18" X 48"	1,425.40
CG18FB60	18" X 60"	1,525.50
CG18FB72	18" X 72"	1,588.20
CG18FB84	18" X 84"	1,811.70
CG18FB96	18" X 96"	1,897.50
CG18FB108	18" X 108"	2,016.80
CG18FB120	18" X 120"	2,088.90

24" FLAT BACK FRAME

CG24FB48	24" X 48"	1,782.00
CG24FB60	24" X 60"	1,890.30
CG24FB72	24" X 72"	1,964.10
CG24FB84	24" X 84"	2,207.40
CG24FB96	24" X 96"	2,297.00
CG24FB108	24" X 108"	2,436.80
CG24FB120	24" X 120"	2,508.30

30" FLAT BACK FRAME

CG30FB60	30" X 60"	2,880.30
CG30FB72	30" X 72"	2,977.50
CG30FB84	30" X 84"	3,285.00
CG30FB96	30" X 96"	3,310.00
CG30FB108	30" X 108"	3,461.40
CG30FB120	30" X 120"	3,601.70

36" FLAT BACK FRAME

CG36FB72	36" X 72"	3,649.60
CG36FB84	36" X 84"	3,735.80
CG36FB96	36" X 96"	3,800.60
CG36FB108	36" X 108"	3,902.90
CG36FB120	36" X 120"	4,039.60

8" SPIGOT BACK FRAME

CG8SB24	8" X 24"	669.80
CG8SB36	8" X 36"	734.20
CG8SB48	8" X 48"	792.50
CG8SB60	8" X 60"	878.10
CG8SB72	8" X 72"	941.20
CG8SB84	8" X 84"	1,021.90
CG8SB96	8" X 96"	1,059.40
CG8SB108	8" X 108"	1,171.40
CG8SB120	8" X 120"	1,306.50

10" SPIGOT BACK FRAME

CG10SB24	10" X 24"	725.30
CG10SB36	10" X 36"	784.50
CG10SB48	10" X 48"	850.10
CG10SB60	10" X 60"	934.90
CG10SB72	10" X 72"	994.90
CG10SB84	10" X 84"	1,105.30
CG10SB96	10" X 96"	1,155.00
CG10SB108	10" X 108"	1,293.60
CG10SB120	10" X 120"	1,426.30

36" SPIGOT BACK FRAME

CG36SB72	36" X 72"	3,801.10
CG36SB84	36" X 84"	3,890.50
CG36SB96	36" X 96"	3,955.20
CG36SB108	36" X 108"	4,058.10
CG36SB120	36" X 120"	4,194.40

12" SPIGOT BACK FRAME

CG12SB24	12" X 24"	791.00
CG12SB36	12" X 36"	857.50
CG12SB48	12" X 48"	916.30
CG12SB60	12" X 60"	1,010.40
CG12SB72	12" X 72"	1,077.80
CG12SB84	12" X 84"	1,234.30
CG12SB96	12" X 96"	1,317.10
CG12SB108	12" X 108"	1,456.70
CG12SB120	12" X 120"	1,589.70

15" SPIGOT BACK FRAME

CG15SB36	15" X 36"	987.00
CG15SB48	15" X 48"	1,049.40
CG15SB60	15" X 60"	1,140.90
CG15SB72	15" X 72"	1,205.40
CG15SB84	15" X 84"	1,370.60
CG15SB96	15" X 96"	1,452.10
CG15SB108	15" X 108"	1,595.10
CG15SB120	15" X 120"	1,729.10

18" SPIGOT BACK FRAME

CG18SB36	18" X 36"	1,351.20
CG18SB48	18" X 48"	1,428.00
CG18SB60	18" X 60"	1,528.20
CG18SB72	18" X 72"	1,591.30
CG18SB84	18" X 84"	1,814.30
CG18SB96	18" X 96"	1,900.10
CG18SB108	18" X 108"	2,023.00
CG18SB120	18" X 120"	2,095.20

24" SPIGOT BACK FRAME

CG24SB48	24" X 48"	1,886.20
CG24SB60	24" X 60"	1,994.50
CG24SB72	24" X 72"	2,068.30
CG24SB84	24" X 84"	2,316.70
CG24SB96	24" X 96"	2,406.30
CG24SB108	24" X 108"	2,543.10
CG24SB120	24" X 120"	2,614.70

30" SPIGOT BACK FRAME

CG30SB60	30" X 60"	3,118.40
CG30SB72	30" X 72"	3,215.70
CG30SB84	30" X 84"	3,528.80
CG30SB96	30" X 96"	3,553.80
CG30SB108	30" X 108"	3,705.20
CG30SB120	30" X 120"	3,845.50

ADDITIONAL CHARGES FOR NON STANDARD SIZED GATES

PRICING SUBJECT TO CHANGE WITHOUT NOTICE

COMPETITIVE BRAND REPLACEMENT PARTS

WEDGE SET (2PCS)

PART #	SIZE	LIST
X-Type		
X8-15WEDGE	8"-15" Gate	13.30
X18-24WEDGE	18"-24" Gate	33.25
X30-36WEDGE	30"-36" Gate	79.90
Fresno-Type		
F6-15WEDGE	6"-15" Gate	15.45
F15-36WEDGE	15"-36" Gate	40.45

STEEL EXTENSION COUPLER

PART #	SIZE	LIST
CGE8-15	7/8" for 8"-15" Gate	110.70
CGE18-24	1" for 18"-24" Gate	120.25
CGE30-36	1 1/8" for 30"-36" Gate	149.20

STAINLESS STEEL STEMS

PART #	SIZE	LIST/FT
X-Type Left-Hand Thread Stem		
XL78ST	7/8"	Call
XL1ST	1"	
XL118ST	1 1/8"	
X-Type Right-Hand Thread Stem		
XR78ST	7/8"	Call
XR1ST	1"	
XR118ST	1 1/8"	
Fresno-Type Left-Hand Thread Stem		
FL78ST	7/8"	Call
FL118ST	1 1/8"	

HAND WHEELS

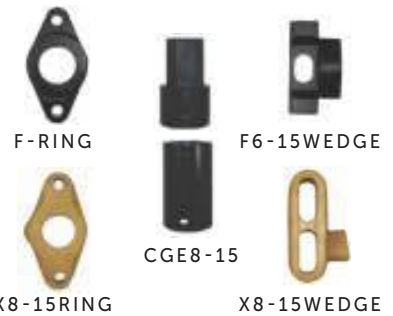
PART #	SIZE	LIST
X-Type		
X8-15WHL	8"-15" Gate	48.35
X18-24WHL	18"-24" Gate	100.45
X30-36WHL	30"-36" Gate	203.95
Fresno-Type		
F10WHL	6"-15" Gate	74.05
F14WHL	15"-36" Gate	91.35

LIFT NUTS AND GASKETS

PART #	SIZE	LIST
XL78BNUT	Fits 7/8" Stem Left	71.95
XL1BNUT	Fits 1" Stem Left	109.25
XL118BNUT	Fits 1 1/8" Stem Left	153.40
XR78BNUT	Fits 7/8" Stem Right	71.95
XR1BNUT	Fits 1" Stem Right	109.25
XR118BNUT	Fits 1 1/8" Stem Right	153.40
FL78NUT	Fits 7/8" Stem Fresno Type	111.55
FL118NUT	Fits 1 1/8" Stem Fresno Type	161.08
CGGSKT8-15	7/8" Gasket	6.30
CGGSKT18-24	1" Gasket	8.10
CGGSKT30-36	1 1/8" Gasket	10.75

LIFT COLLAR

PART #	SIZE	LIST
X-Type		
X8-15RING	Fits 7/8" Stem	17.45
X18-24RING	Fits 1" Stem	24.15
X30-36RING	Fits 1 1/8" Stem	29.15
Fresno-Type		
F-RING	Fits 7/8" and 1 1/8" Stem	24.15



STANDARD RAILING AND STEM LENGTHS

ALL STEMS ARE STAINLESS STEEL

GATE SIZE

(Rail Color Code)		8" (Red)		10" (Blue)		12" (Green)		15" (Yellow)		18" (Black)		24" (Brown)		30" (White)		36" (Pink)	
H,I Gate Height (In)	H,I Gate Height (Ft)	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length	H,I +D Total Rail Length (In)	Stem Length
"d" =		(4")		(4 1/2")		(5")		(6")		(7")		(9")		(11")		(13")	
"dd" =		(7/8")		(1 1/2")		(2")		(2 1/2")		(3 1/2")		(4 3/4")		(6 3/4")		(7 1/2")	
24"	2'	28 7/8"	30"	30"	30"	31"	30"										
36"	3'	40 7/8"	42"	42"	42"	43"	42"	44 1/2"	42"	46 1/2"	42"						
48"	4'	52 7/8"	54"	54"	54"	55"	54"	56 1/2"	54"	58 1/2"	54"	61 3/4"	54"				
60"	5'	64 7/8"	66"	66"	66"	67"	66"	68 1/2"	66"	70 1/2"	66"	73 3/4"	66"	77 3/4"	66"		
72"	6'	76 7/8"	78"	78"	78"	79"	78"	80 1/2"	78"	82 1/2"	78"	85 3/4"	78"	89 3/4"	78"	92 1/2"	78"
84"	7'	88 7/8"	90"	90"	90"	91"	90"	92 1/2"	90"	94 1/2"	90"	97 3/4"	90"	101 3/4"	90"	104 1/2"	90"
96"	8'	100 7/8"	102"	102"	102"	103"	102"	104 1/2"	102"	106 1/2"	102"	109 3/4"	102"	113 3/4"	102"	116 1/2"	102"
108"	9'	112 7/8"	114"	114"	114"	115"	114"	116 1/2"	114"	118 1/2"	114"	121 3/4"	114"	125 3/4"	114"	128 1/2"	114"
120"	10'	124 7/8"	126"	126"	126"	127"	126"	128 1/2"	126"	130 1/2"	126"	133 3/4"	126"	137 3/4"	126"	140 1/2"	126"

LOW HEAD FLAT BACK GATE

INSTALLATION GUIDE FOR FLAT BACK GATE TO CONCRETE HEAD-

NOTE: Gates and Pipe Are Heavy! Use Care and Good Working Practice in Assembly and Installation.

1 - Secure all specified anchor bolts in their proper position in concrete form, checking to see that anchor bolts, projections, perpendicular and horizontal alignments are all correct. Extra care is needed in this initial procedure to ensure that all bolts are properly set. Improperly set bolts will cause gate warpage and excess leakage between the seat surfaces.

Do Not Force Gate Onto Misaligned or Improperly Set Anchor Bolts.

2 - Each anchor bolt needs to be supplied with two nuts to facilitate proper headwall mounting of the gate. It is also recommended that you provide sufficient access to the back side of the gate, allowing easy adjustment of the back nuts. Sufficient grout space must be left for adjustment of back nuts and proper alignment of gate.

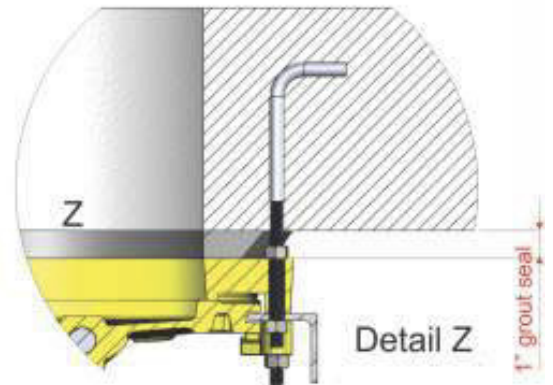
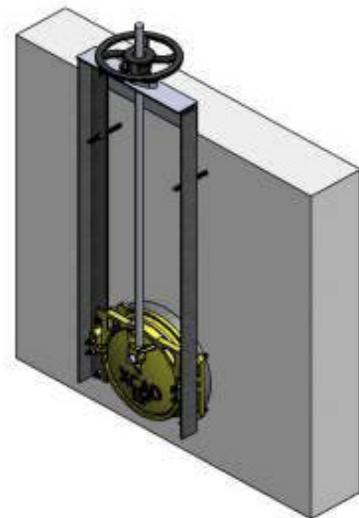
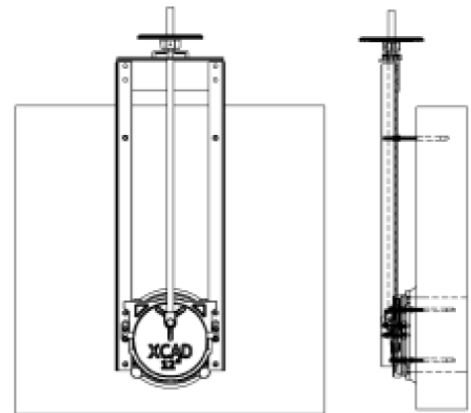
3 - After the concrete has been poured and forms stripped, place one nut on each anchor bolt and run them down so they are 1" from the headwall (See Detail Z). Carefully place the closed gate onto the anchor bolts. Do Not Force Gate onto Misaligned Anchor Bolts. Place the second nut on each anchor bolt and bring front and back nuts into finger-tight contact with the gate frame, then align gate as necessary. At this point of the installation, check all clearances between seating surfaces with a .004" feeler gauge. If there is proper seating at this point the gauge will not admit. In the event that the gate is not seated properly, check to see if the gate has been warped. If so, readjust nuts on anchor bolts to flatten gate. Adjustment of the wedges may also be necessary.

4 - After the gate is seated properly, carefully dry pack or grout in the 1" gap between frame ring and concrete headwall using a non-shrink material. Check voids and fill as necessary.

5 - Lightly tighten all exposed anchor bolt nuts uniformly so as not to warp gate to uneven surfaces.

6 - Gate is now ready for operation.

LOW HEAD FLAT BACK GATE



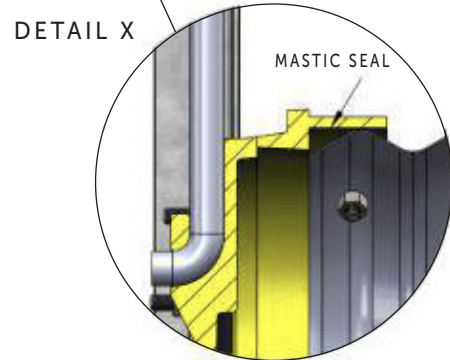
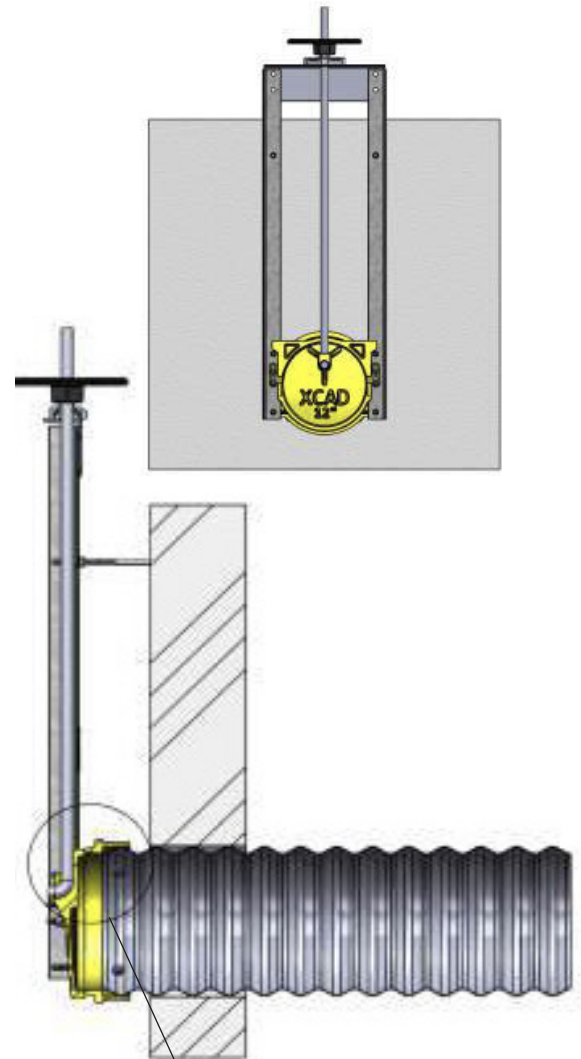
LOW HEAD SPIGOT BACK GATE

INSTALLATION GUIDE FOR SPIGOT BACK GATE TO CORRUGATED PIPE

NOTE: Gates and Pipe Are Heavy! Use Care and Good Working Practice in Assembly and Installation.

- 1 - Place spigot back gate over corrugated pipe, making sure the pipe and gate are perpendicular.
- 2 - Drill holes through corrugated pipe using holes in spigot back gate as a template (13/52" or 7/16" drill bit).
- 3 - Secure the gate to corrugated pipe using either galvanized Grade 5 steel bolts or stainless 304 bolts and nuts. Forcing Bolt May Cause Damage to Gate.
- 4 - Apply a mastic sealant to joint in between corrugated pipe and gate (See Detail X).
- 5 - Brace both pipe and gate as necessary. Deflection and distortion of corrugated pipe may cause the gate to leak.
- 6 - Place braced coupled gate and corrugated pipe into ditch or trench, then back fill or pour as required ensuring that gate is vertical from the centerline opening.
- 7 - Remove bracing, check and clean gate seat to make sure proper full periphery seating is achieved. (Use .004 feeler gauge.)
- 8 - Check the gate for any type of damage or irregularities.

LOW HEAD SPIGOT BACK GATE



XCAD INLINE CONTROL VALVES

X-MAX INSTALLATION AND STORAGE GUIDELINES

- ◆ Always flush pipelines before installation of the valve as debris may plug and/or damage valve.
- ◆ Arrow on valve housing **must** match actual flow direction. If there is no arrow on valve, make sure **line filter** is **upstream** in pipeline.
- ◆ Tighten bolts to the recommended torque for specific size and model of valve.

4" X-MAX Inline Wafer Valve – 15 Ft. Lbs. Torque

6" X-MAX Inline Wafer Valve – 20 Ft. Lbs. Torque

8" X-MAX Inline Wafer Valve – 20 Ft. Lbs. Torque

Tighten bolts alternately 180° apart. Repeat 3 times in a star pattern.

- ◆ If the valve is to be installed and operated in ambient temperatures below freezing, consult with your nearest **XCAD USA** distributor.
- ◆ If valve is shut down during cold or freezing weather, the valve control space and control system **must be drained**.
- ◆ Connect solenoid control and pressure switch to control circuit according to local electrical codes.

Optimal Flow Rate for Electric On/Off Valves - GPM

4" XMAX Inline Wafer Valve -- 200 - 800

6" XMAX Inline Wafer Valve -- 500 - 2250

8" XMAX Inline Wafer Valve -- 1200 - 4000

Specifications:

Wafer Style.

Mounts between all standard flanges.

ANSI B16,1 125 and 250

Valve Length 4" - 7 5/8"

6" - 10 1/4"

8" - 12 1/4"

Max Pressure: 140 psi

Water Temp Range: 33°F to 130°F



XMAX6II-WS
SuperMax

XCAD INLINE CONTROL VALVES

SEALMATIC™ INSTALLATION AND STORAGE GUIDELINES

SEALMATIC® Control Valves

- ◆ Always flush pipelines before installation of the valve as debris may plug and/or damage valve.
- ◆ Arrow on valve housing **must** match actual flow direction. If there is no arrow on valve, make sure **line filter is upstream** in pipeline.
- ◆ Seal-Matic® valves can be mounted either vertically or horizontally, but they must be mounted to allow the control chamber to be drained in freezing conditions.

TIGHTEN FLANGE BOLTS TO 30 FT LBS TORQUE

Tighten bolts alternately 180° apart. Repeat 3 times in a star pattern.

- ◆ If the valve is to be installed and operated in ambient temperatures below freezing, consult with your nearest **XCAD USA®** distributor.
- ◆ If valve is shut down during cold or freezing weather, the valve control space and control system **must be drained**.
- ◆ Connect solenoid control and pressure switch to control circuit according to local electrical codes.

Optimal Flow Rate for Electric On/Off Valves - GPM

3/4" Seal-Matic® – 5 to 40	2" 90° Seal-Matic® – 25 to 175
1" Seal-Matic® – 5 to 70	3" Seal-Matic® – 100 to 500
1 1/4" Seal-Matic® – 15 to 120	4" Seal-Matic® – 200 to 800
1 1/2" Seal-Matic® – 18 to 135	6" Seal-Matic® – 400 to 1400
2" Seal-Matic® – 25 to 175	8" Seal-Matic® – 1000 to 3500

Specifications: Fixed Diaphragm Style.
Mounts between all standard flanges.

Max Pressure: 125 psi

Water Temp Range: 33°F to 130°F

Valve Length (End to End) – (Flange to Flange)

3/4" and 1" – 5 1/8"	3" – 11 7/8"
1 1/4" and 1 1/2" – 6 1/2"	4" – 12 1/4"
2" – 7 3/4"	6" – 12 3/8"
	8" – 14"



SMV4WS
Super Flow

REACTIVE CONTROL VALVE SIZING

PRESSURE REDUCING AND SUSTAINING

Choosing the correct valve size is critical when designing a pressure reducing or sustaining reactive control valve system. Valves must be sized correctly for the reactive control function to work properly. Control valve system designers need to avoid the most common problems while designing and sizing a control valve system.

Problem #1 – “Over-Sizing The Valve”. An over-sized reactive pressure regulating control valve may lead to severe problems such as pressure cycling, cavitation and water hammering. Valves at the same diameter as the pipe may allow for simplified installation, however they often lead to severe throttling problems.

Problem #2 – Size Selection. When selecting the size of the reactive control valve from valve flow graph minimum and maximum rates, keep in mind that such graphs do not take into account pressure drop across the valve. Since both rate of flow and pressure drop determine the diaphragm/sleeve position, both must be taken into account for proper reactive valve sizing. In order to make the control valve react correctly, the diaphragm/sleeve position should be in the middle of the fully-open and fully-closed positions.

Installation Suggestions for Reactive Valve Control

To Improve Reactive Control Accuracy

- 1 - Avoid installing a pressure trap in a turbulent flow area
- 2 - Avoid air in system
- 3 - For pressure reducing control, installing the downstream pressure trap at the end of a 24" to 30" long straight pipe will help the accuracy of the reactive control
- 4 - To be the most effective, the upstream and downstream pipe length should be a minimum of five pipe diameters long

Minimum optimal flow for reactive/piloted control valve sizing (Pressure reducing/sustaining)

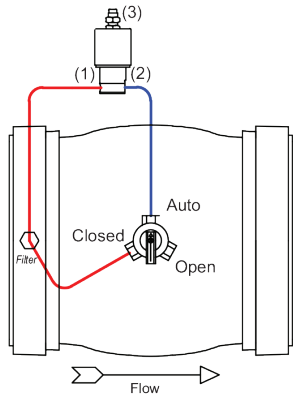
Seal-Matic				XMAX	
3/4"	25 gpm	2" 90°	125 gpm	4"	450 gpm
1"	28 gpm	3"	400 gpm	6"	800 gpm
1 1/4"	43 gpm	4"	500 gpm	8"	2250 gpm
1 1/2"	45 gpm	6"	800 gpm		
2"	125 gpm	8"	1500 gpm		



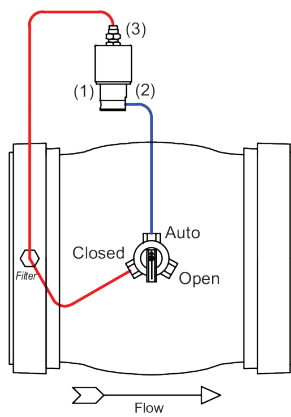
SMV6MPR
Super Flow

PILOT PLUMBING CHARTS

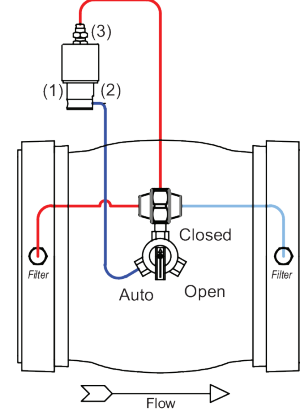
Normally Open ENERGIZED = CLOSED
NOT ENERGIZED = OPEN
OVER 80 PSI REQUIRES SPECIAL SOLENOID



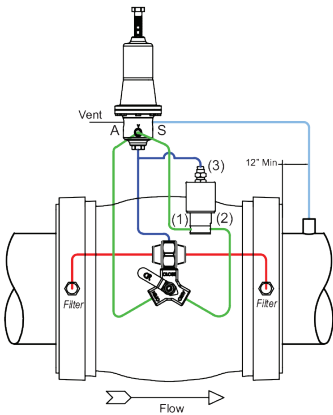
Normally Closed ENERGIZED = OPEN
NOT ENERGIZED = CLOSED



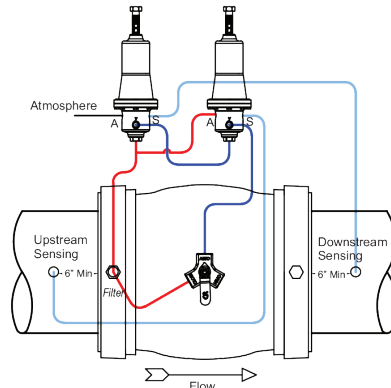
Check Valve ENERGIZED = OPEN
NOT ENERGIZED = CHECK



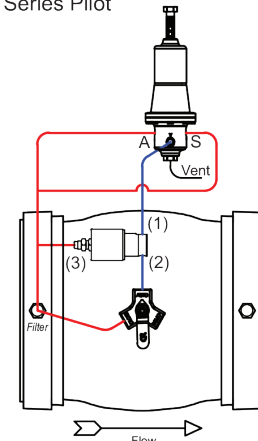
Pressure Reducing & Electric On/Off
6000 Series Pilot and Check Valve



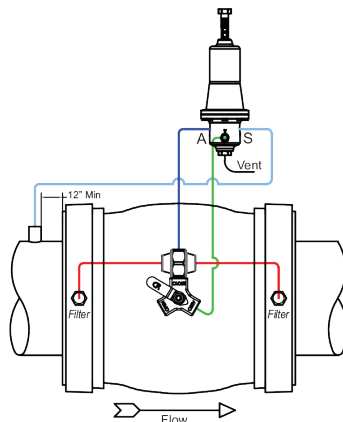
Pressure Sustaining/Reducing
6000 Series Pilot



Pressure Sustaining/Electric On/Off
6000 Series Pilot



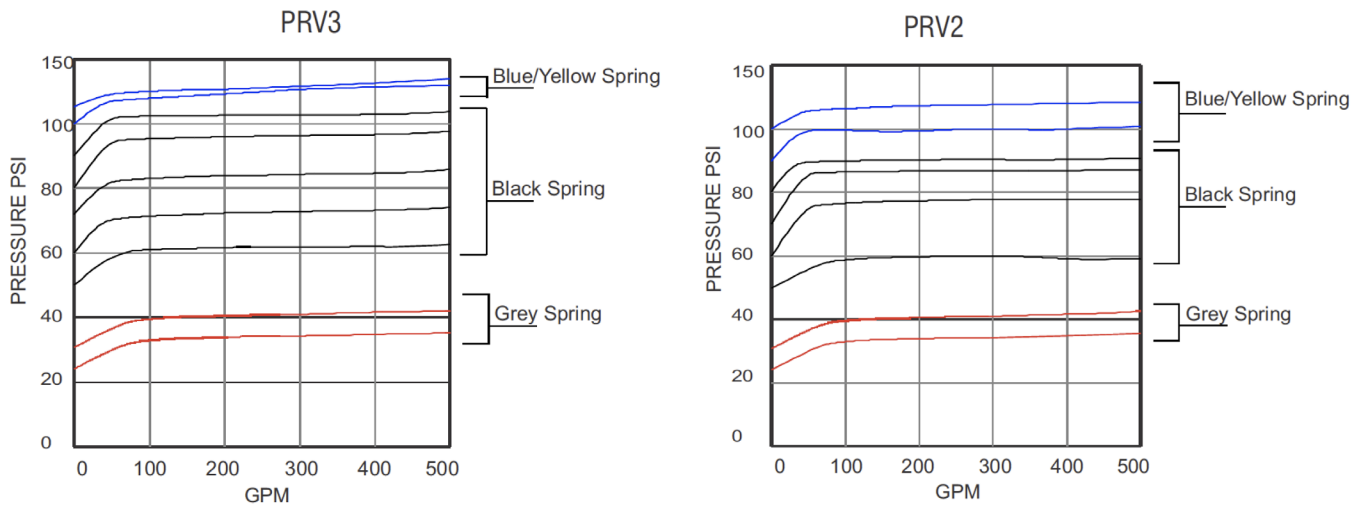
Pressure Sustaining
6000 Series Pilot and Check Valve



PRESSURE LOSS DATA - PRESSUREGUARD™



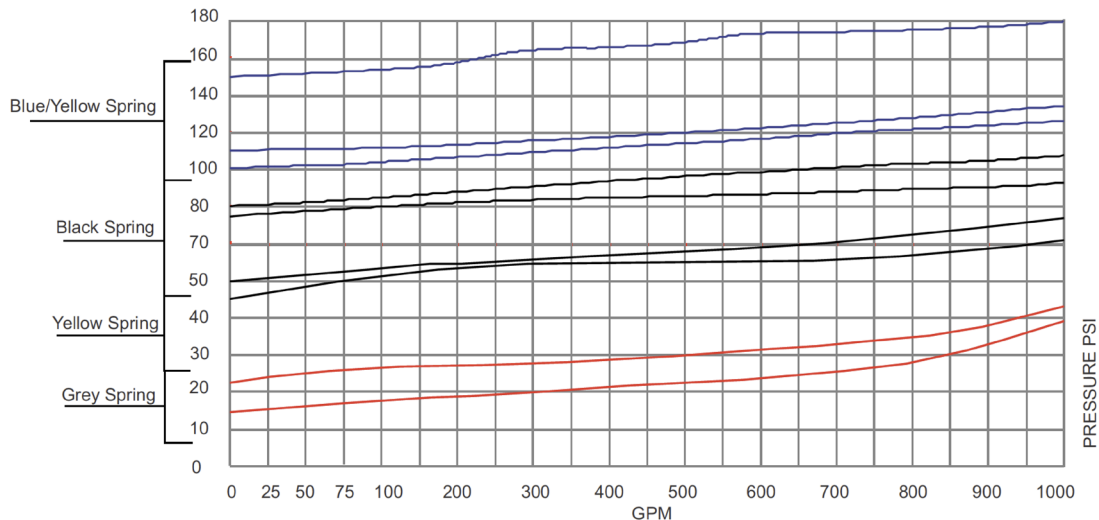
2" AND 3" PRV DISCHARGE CURVES



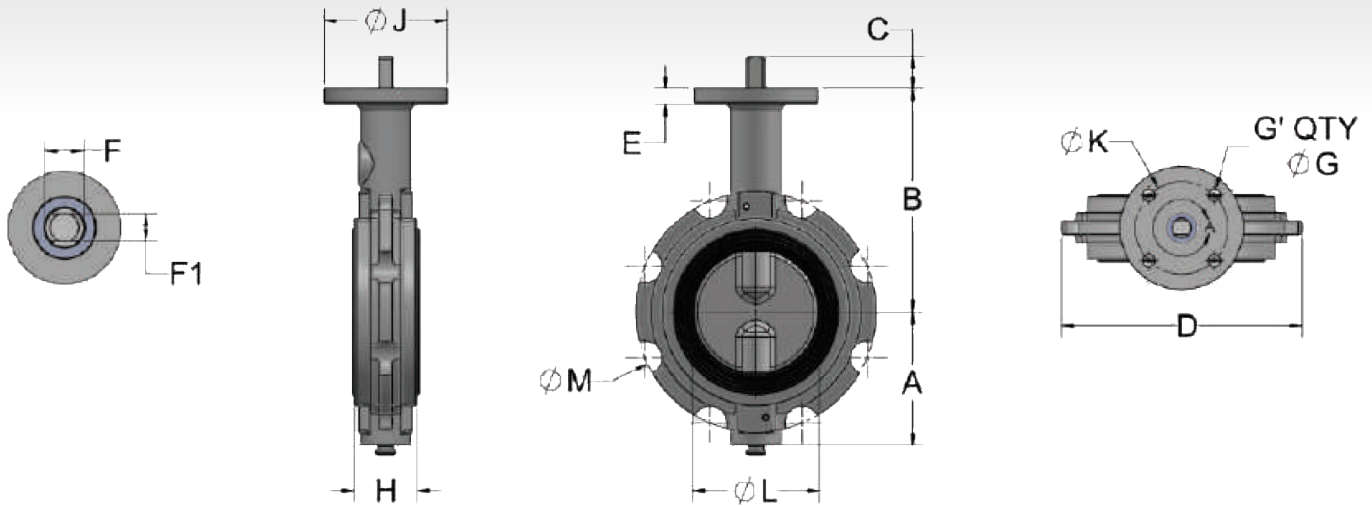
Note: Results represent actual test results from Center For Irrigation Technology (3/24/05)

Blue/Yellow Spring —
 Black Spring —
 Grey Spring —

4" PRV DISCHARGE CURVES



SILVER AND EMERALD ARCHER SPECIFICATIONS

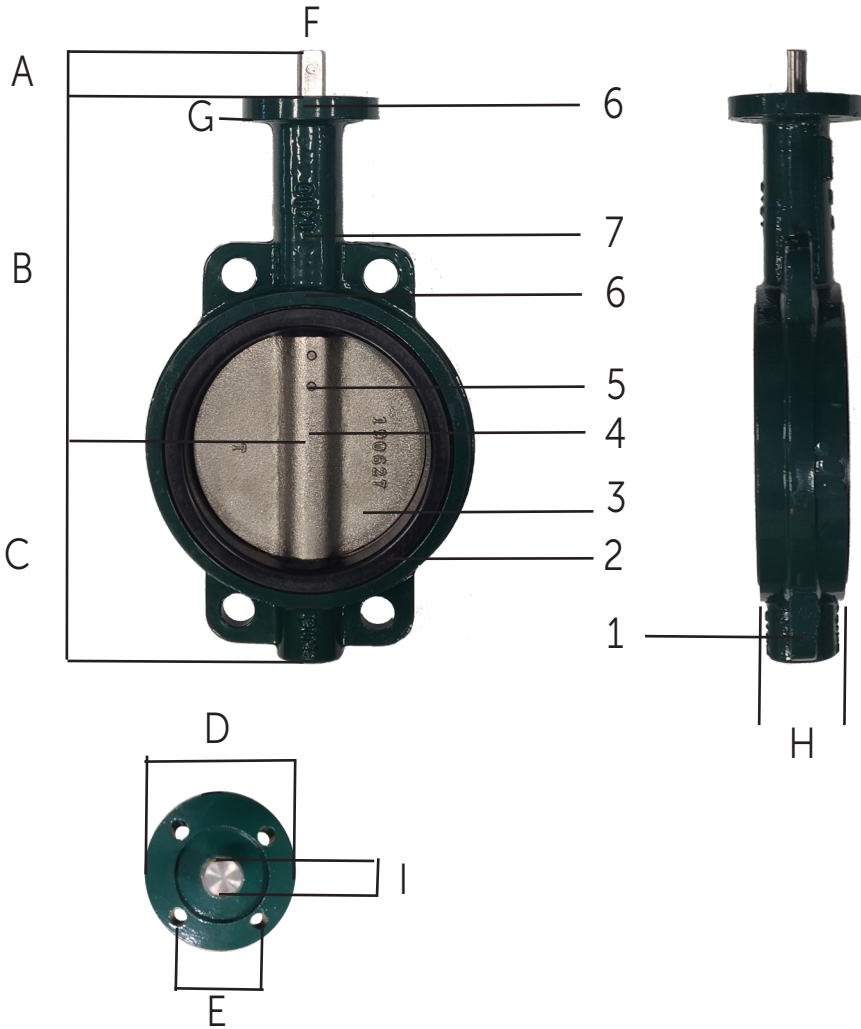


VALVE SIZE	A	B	C	D	E	F	F1	G'	G	H	J	K	L	M
2"	2.78	5.80	1.08	5.09	.54	.56	.44	4	.41	1.69	4	3	2.21	4.75
2.5"	3.03	6.30	1.06	5.73	.54	.56	.44	4	.41	1.81	4	3	2.67	5.50
3"	3.34	6.50	1.06	6.20	.54	.56	.44	4	.41	1.80	4	3	3.17	6.00
4"	4.32	7.25	1.16	7.78	.54	.64	.44	4	.41	2.06	4	3	4.18	7.50
5"	5.40	7.58	1.10	8.83	.54	.89	.44	4	.41	2.17	4	3	5.16	8.50
6"	5.60	8.38	1.06	9.38	.54	1.00	.44	4	.41	2.18	4	3	6.04	9.50
8"	7.65	9.63	1.63	11.90	.75	1.13	.75	4	.53	2.37	6	5	8.06	11.75
10"	9.03	11.05	1.63	14.69	.75	1.13	.75	4	.53	2.68	6	5	10.05	14.25
12"	10.30	12.50	1.63	17.19	.75	1.13	.75	4	.53	3.02	6	5	12.07	17.00

MATERIAL SPECIFICATIONS

Part	Material
Body	Cast Iron
Seat	Phenolic Back Cartridge w/Buna-N Seat
Disc 2"-24"	Stainless-Steel
Disc 2"-24"	Ductile Iron
Stem Top/Bottom	Stainless-Steel
Spring Pin	Stainless-Steel
Top/Bottom Bearing	Nylon
O-Rings	Buna-N

GREEN ARCHER SPECIFICATIONS



Technical Data

- Design Standard BS5115
- Nominal Pressure 200 psi
- Working Temp. -50 / 275° F
- Flange Standard ANSI B16.1

1	Body	Cast Iron
2	Seat	Buna-N
3	Disc	Ductile Iron
4	Stem	SS420
5	Pin	Stainless
6	Bushing	PTFE & Bronze
7	O-Ring	Buna-N
8	Lever	Cast Iron
9	Gear Box	Cast Iron

	A	B	C	D	E	F	G	H	I
3"	1.26	7.125	3.740	3	1.5	.5	.54	1.76	.39
4"	1.26	7.874	4.488	3.5	2	.62	.54	2.05	.47
5"	1.26	8.385	5.000	3.5	2	.75	.54	2.14	.55
6"	1.26	8.397	5.472	3.5	2	.75	.54	2.2	.55
8"	1.77	10.236	6.889	4.875	2.81	.87	.75	2.39	.67
10"	1.77	11.496	7.992	4.875	2.81	1.12	.75	2.58	.87
12"	1.77	13.267	9.527	4.875	2.81	1.25	.75	3.03	.87