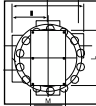




2017 CATALOGUE

is available online at
www.praherplastics.ca

UNIONS	2		WAFER CHECK VALVES	23	
BLOCKED SINGLE UNION BALL VALVES	6		SWING CHECK VALVES	24	
DRAIN VALVES	7		KNIFE GATE VALVES	25	
ECONO SEAL BALL VALVES	8		UNIBODY GATE VALVES	27	
LAB COCK VALVES	8		INLINE SIGHT GLASS	28	
TRUE UNION BALL VALVES	9		MULTIPORT BACKWASH VALVES	29	
3-WAY TRUE UNION BALL VALVES	11		PIPE CLAMPS AND PIPE EXTENDERS	37	
HIGH HEAT 3-WAY BALL VALVES	12		INSERT FITTINGS	38	
DIVERTER VALVES	14		SPARE PARTS	39	
FLAPPER CHECK VALVES	15		TECHNICAL DATA	60	
DIAPHRAGM VALVES	16				
BUTTERFLY VALVES FLANGE KITS	17				
INLINE STRAINERS	18				
SINGLE UNION CHECK VALVES	20				
SLIM-LINE CHECK VALVES	21				
DOUBLE UNION CLEAR SPRING CHECK VALVES	22				

UNIONS



PRAHER
PLASTICS

Size:	1/2" to 3"
Material:	Grade 1 PVC
O-Rings:	EPDM
Press. Rating	150 PSI
Design:	Schedule 40
	3" Schedule 80

New Prices



SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1/2"	050-100	SKT X SKT	\$9.05	40
3/4"	075-100	SKT X SKT	\$10.40	40
1"	100-100	SKT X SKT	\$10.62	40
1 1/2"	150-100	SKT X SKT	\$6.00	50
1 1/2"-2"	150-201	1 1/2" SKT X 2" SKT	\$9.00	50
2"	200-100	SKT X SKT	\$8.00	50
2.5"	250-100	SKT X SKT	\$16.00	25
3"	300-100	SKT X SKT	\$71.24	4



250-100

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-300	FIP/FIP	\$12.00	50
2"	200-300	FIP/FIP	\$15.96	50
3"	300-300	FIP/FIP	\$100.00	4



200-300

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRT
1 1/2"	150-904	MIP X DUAL HOSE BARB C/W O-RING	\$11.44	50



150-904

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-903	MIP X SKT C/W O-RING	\$7.00	50
2"	200-903	MIP X SKT C/W O-RING	\$9.00	50
2"	200-993	MIP X 2" SKT 90 DEGREE C/W O-RING	\$16.00	25
3"	300-900	DISCONTINUED: See high heat unions	\$92.11	4
1 1/2" X 2"	200-90015	1 1/2" MIP X 2" SKT C/W O-RING	\$12.00	25



150-903

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-600	MIP X MIP	\$12.00	50



150-600

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-805	MIP X FIP	\$12.00	50



150-805



UNIONS

Size:	1/2" to 3"
Material:	Grade 1 PVC
O-Rings:	EPDM
Press. Rating	150 PSI
Design:	Schedule 40
	3" Schedule 80

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-800	FIP X SKT	\$12.00	50
2"	200-800	FIP X SKT	\$15.96	50

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
2"- 1 1/2"	200-950	2" MIP C/W O-RING X 1 1/2" SKT	\$18.47	50



200-950

TRANSITION UNIONS METRIC-ASTM



SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-100M	1 1/2" ASTM BODY SKT X 50MM SKT	\$13.52	50
1 1/2"	150-M100	50MM SKT BODY X 1 1/2" ASTM SKT	\$13.52	50
1 1/2"	150-900M	1 1/2" MIP/NPT BODY X 50MM SKT	\$14.56	50
1 1/2"	200-M150	60MM SKT BODY X 1 1/2"	\$14.56	50
2"	200-900M	2" MIP/NPT BODY X 63MM SKT	\$14.56	50
2"-1 1/2"	200-850M	2" FIP/NPT BODY X 50MM SKT	\$24.40	50
2"	200-863M	2" FIP/NPT BODY X 63MM SKT	\$24.40	50
2"	200-150M	2" SKT ASTM BODY X 50MM SKT	\$14.56	50
2"	200-M100	63MM BODY SKT X 2" ASTM SKT	\$16.64	50
2"	200-100M	2" SKT ASTM BODY X 63MM SKT	\$16.64	50
1 1/2"	150-100MM	1 1/2" METRIC UNION 50MM X 50MM	\$14.56	50
2"	200-100MM	2" METRIC UNION 63MM X 63MM	\$17.68	50

SEE PAGE 48 FOR BODY-SOCKET END ORIENTATION

HIGH HEAT PUMP UNIONS



Size:	3/4" to 2"
Material:	High temp. polymer
O-Rings:	EPDM
Press. Rating	100 PSI
Max working temp.	176 F @50 PSI



Patented design
U.S. Pat D594938



200-996



215-906



216-906



200-9061



150-906



075-906



200-906

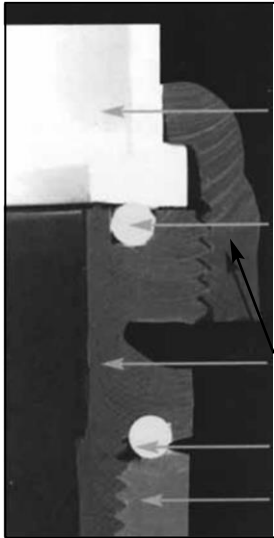


225-9061

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
3/4"	075-906	MIP X SKT C/W O-RING, HEAT RESISTANT	\$11.23	25
1"	100-906	MIP X SKT C/W O-RING, HEAT RESISTANT	\$11.23	25
1 1/2"	150-906	MIP X SKT C/W O-RING, HEAT RESISTANT	\$10.00	50
2"	200-906	MIP X SKT C/W O-RING, HEAT RESISTANT	\$13.00	50
2"-1 1/2"	215-906	2" SOCKET X 1.5" MIP, HEAT RESISTANT	\$15.00	50
1 1/2"-2"	216-906	1 1/2" MIP X 2"SKT C/W O-RING HR	\$15.00	50
2"-2"	200-996	2" MIP X 2"SKT- 90° C/W O-RING HR	\$15.00	25
2"	200-9061	MIP X SKT C/W O-RING, HEAT R. LONG NECK	\$18.00	20
2"-2.5"	225-9061	2" MIP SKT C/W O-RING, HEAT R. LONG NECK	\$20.00	20
3"	300-906	3" MIP SKT C/W O-RING, HEAT R. LONG NECK	\$92.11	4

NO MORE:

CRACKED THREADS, LEAKS OR THREAD SEALANTS REQUIRED



GRADE 1 PVC SOCKET
(USE STANDARD CEMENT)

HIGH TEMPERATURE
O-RINGS (EPDM)

HIGH TEMPERATURE
(220°F HEAT DEFLECTION)
polymer NUT AND BODY

100% COMPRESSION SEAL

NO STRESS ON MATING PART



IDEAL PUMP UNION DISCONNECTS

ALL MODELS PATENT PENDING

MAXIMUM SERVICE SPECIFICATIONS 80°C/176°F @ 3.5 BAR/50PSI

FEATURES

- Designed to install into pump volute and suction connection to prevent the failure of high temperature build up in pump volutes when dry running pumps build up severe heat.
- Eliminates stressing outer thread of mating parts due to overtightening and possible consequent cracking.
- Eliminates the requirement of thread sealants while providing a reliable seal on the O-ring surface (high temp. EPDM).
- Provides easy installation while supplying a union connection for future servicing needs.



SINGLE UNION BALL VALVES

Size:	1 1/2" & 2"
	PVC White
Material:	Grade 1 PVC
O-Rings:	EPDM
Ball Seats:	Polyethylene
Pressure Rating:	150 PSI
Schedule:	80 bore

Also available in metric

Praher's unique pinned true single union ball valve design provides for:

- user friendly handle operation - union nut load does not transfer onto ball seat, thereby providing user with easy handle operation even if valve not operated for a long period of time.
- "below grade - blocked seat flooded suction design" - valve seat will not blow out from static pressure if union nut removed.



Spare pin serves as a tool for valve servicing/repair (remove from handle to assist in pin removal when servicing valve seat)



150-010



150-015



150-HB-MAXI



200-016

"BLOCKED" SINGLE UNION BALL VALVE

Allows disconnection of lines without fear of retainer-ring or ball moving. Retainer-ring is locked with two pins in the body.

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CRTN.
1 1/2"	150-0100	S.U. BL. B.V. SKT/SKT	\$20.00	100
1 1/2"	150-010	S.U. BL. B.V. SKT/SKT	\$24.96	25
1 1/2"	150-011	S.U. BL. B.V. SKT/FIP	\$30.16	25
1 1/2"	150-015	S.U. BL. B.V. MIP/FIP	\$24.96	30
1 1/2"	150-052	S.U. B.L. B.V. SKT/MIP	\$24.96	18
1 1/2"	150-016	S.U. BL. B.V. MIP/SKT	\$24.96	25
1 1/2"	150-HB MAXI	S.U. BL. B.V. MIP/DUAL HOSE - FULL SIZE	\$30.21	20
1 1/2"	150-0155	S.U. BL. B.V. MIP X MIP	\$27.04	20
1 1/2"	150-111	SU BL. B.V. FIP/FIP	\$31.62	25
2"	200-0100	S.U. B.L. B.V. SKT/SKT	\$31.20	100
2"	200-010	S.U. BL. B.V. SKT/SKT	\$34.66	17
2"	200-011	S.U. BL. B.V. SKT/FIP	\$41.33	17
2"	200-111	S.U. BL.B.V. FIP/FIP	\$45.56	17
2"	200-016	S.U. BL. B.V. MIP/SKT	\$40.12	17

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

SINGLE UNION BALL VALVES



PRAHER
PLASTICS

PRODUCTS

Size:	1/2" - 1"
Material:	Grade 1 PVC
	Colour Grey or White
O-Rings:	EPDM
Ball Seats:	Polyethylene
Pressure Rating:	200 PSI
Schedule:	80 bore

100-000



Praher's unique spanner wrench handle provides for easy valve seat servicing - just pull handle off ball stem & use as a tool (see picture).
Praher's unique threaded true single union ball valve design provides for:

- user friendly handle operation - union nut load does not transfer onto ball seat, thereby providing user with easy handle operation even if valve not operated for a long period of time.
- below grade - blocked seat flooded suction design - valve seat will not blow out from static pressure if union nut removed.



FEATURE:

- Handle can be used as tool to adjust threaded seal carrier.

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

GREY SKT x SKT			GREY FIP x FIP		
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	QTY PER CRTN
1/2"	050-000	\$14.56	050-111	\$15.66	30
3/4"	075-000	\$16.64	075-111	\$17.68	30
1"	100-000	\$19.76	100-111	\$20.80	30

WHITE SKT x SKT			WHITE FIP x FIP		
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	QTY PER CRTN
1/2"	050-000W	\$14.56	050-111W	\$15.60	30
3/4"	075-000W	\$16.64	075-111W	\$17.68	30
1"	100-000W	\$19.76	100-111W	\$20.80	30

NOTE: PLEASE ORDER BY MODEL # ONLY

DRAIN VALVES

Size:	3/4"
Material:	Polypropylene
O-RINGS:	EPDM



DV010



DV020

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
3/4"	075-DV010	MIP X GARDEN HOSE MALE THREAD	\$7.28	100
3/4"	075-DV020	MIP X "GARDENA" MALE DISCONNECT	\$7.28	100
3/4"	075-DV011	MIP X MIP	\$7.28	100

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS



LABORATORY BALL COCK VALVES

Size:	1/4"-sch80, astm-d2464
Material:	PVC or PVDF
O-Rings:	EPDM or VITON
Ball Seats:	PTFE
Ends:	Male threaded x female threaded with one MPT x hose fitting



Ideal for instrumentation lines, chlorine feeder drain and general laboratory use.

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CRT.
1/4"	LC-PV	PVC/EPDM/ -MIP X FIP WITH OUT FTG	\$25.30	10
1/4"	LC-PV-1	PVC/EPDM/ -MIP X FIP WITH HOSE FTG	\$30.35	10
1/4"	LC-PV-2	PVC/VITON/ -MIP X FIP WITH HOSE FTG	\$33.20	10
1/4"	LC-VDF-2	PVDF/VITON/ -MIP X FIP WITH HOSE FTG	\$78.70	10

ECONO-SEAL BALL VALVES

Size:	1/2" - 2 1/2" socket x 2" spigot 2" socket x 2 1/2" spigot, 2.5"
Material:	NSF 61 PVC
O-Rings:	BUNA-N
Seals:	HDPE
Press Rating:	150 PSI
Design:	SCH 40, Socket
Vacuum Rating:	29.9" Mercury



200-ESPSP spigot x spigot

SOCKET PORTS			
SIZE	MODEL#	LIST PRICE	QTY./CARTON
1/2"	050-ES00	\$13.00	25
3/4"	075-ES00	\$14.04	25
1"	100-ES00	\$16.64	25
1 1/2"	150-ES00	\$20.80	30
2"	200-ES00	\$24.96	20
2"	200-ESPSP	\$24.96	20
2.5"	250-ES00	\$54.08	4
4"	400-ES00	\$161.50	1

THREADED PORTS			
SIZE	MODEL #	LIST PRICE	QTY./CARTON
1/2"	050-ES00T	\$14.04	25
3/4"	075-ES00T	\$15.60	25
1"	100-ES00T	\$17.68	25
1 1/2"	150-ES00T	\$20.80	30
2"	200-ES00T	\$29.12	20
4"	400-ES00T	\$180.00	1

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS



TRUE UNION BALL VALVES S4 SERIES

Size:	1/2" to 4"
Material:	Grade 1 PVC
O-Rings:	EPDM, VITON
Seats:	Teflon, NSF 61
Design:	Schedule 80 full port
Ends:	Socket, thread and flanged
Pressure rating:	1/2" - 2" 232 PSI @ 73° F 2 1/2" - 4" 150 PSI @ 73° F

**SAFETY HANDLE -
locks into closed
position**



TOP OF THE LINE IN QUALITY AND PERFORMANCE

FEATURES:

- Threaded in retainer ring (stem torques are not increased by piping or union nut)
- Heavy stem with double o-ring
- low volume cavity between ball and body
- Floating ball-thus fluid pressure aids seating
- Retainer ring removal tool moulded directly into top of pp handle
- Backing o-rings continuously compensate for wear of teflon ball seats
- Large union seal o-rings
- Full pressure rated with downstream nut removal (din3441)
- Electrically actuated as an option (24, 110 & 220v ac), also pneumatically actuated as an option
- Pvc compound - type 1, grade 1, astm d-1784-nsf-6i
- Pp compound- type 1, grade 1
- PvdF ("kynar" or equivalent) type 1, grade 1, (non-pigmented)
- Schedule 80 sockets • schedule 80 threaded ends
- Flanged ends
- All valves are available in metric sizes

DESIGNED FOR SAFETY

← INCLUDES SOCKET ENDS UP TO 2"

Material: Grade 1 PVC (Grey), EPDM O-Rings, Teflon Ball Seats

SKT x SKT			FIP x FIP		
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	QTY. PER CRTN.
3/8"	12-1939	\$49.60	12-1229	\$59.50	20
1/2"	12-1760	\$49.60	12-1230	\$48.30	20
3/4"	12-2073	\$51.95	12-1231	\$53.55	15
1"	12-2069	\$59.00	12-1232	\$60.90	10
1 1/4"	12-2077	\$93.20	12-1233	\$87.15	15
1 1/2"	12-1107	\$105.00	12-1234	\$109.20	10
2"	12-1108	\$138.00	12-1235	\$145.95	8
2 1/2"	12-0323	\$300.85	11-0126	\$288.75	4
3"	12-0362	\$383.40	11-0263	\$420.00	1
*4"	12-2143	\$602.80			1

* 3" valve orifice with 4" molded sockets

TRUE UNION BALL VALVES



S6 SERIES

Size:	1/2" to 4"
Material:	Grade 1 PVC
O-Rings:	EPDM
Ball Seats:	Polyethylene
Pressure Rating:	1/2" – 2" 232 PSI @ 73F
	2.5" – 4" 150 PSI @ 73
Adjustable Ball seat pressure (Safe Block)	



FEATURE:

- Handle can be used as tool to adjust threaded seal carrier.

WATER APPLICATION

SKT x SKT			FIP x FIP		
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	QTY./CARTON
1/2"	BV6-0501PES	\$19.76	BV6-0501PET	\$32.82	50
3/4"	BV6-0751PES	\$20.80	BV6-0751PET	\$34.08	50
1"	BV6-1001PES	\$26.00	BV6-1001PET	\$45.96	40
1 1/4"	BV6-1251PES	\$37.44	BV6-1251PET	\$49.05	10
1 1/2"	BV6-1501PES	\$37.44	BV6-1501PET	\$60.94	20
2"	BV6-2001PES	\$48.88	BV6-2001PET	\$76.45	10
2 1/2"	BV6-2501PES	\$176.80	BV6-2501PET	\$212.54	4
3"	BV6-3001PES	\$325.13	BV6-3001PET	\$477.87	4
*4"	BV6-4001PES	\$600.00	N/A	N.A.	4

* 3" valve with 4" molded sockets

3-WAY TRUE UNION BALL VALVES

Material:	Grade 1 PVC/PP/PVDF
O-Rings:	EPDM
Ball Seats:	Teflon
Pressure Rating:	232 PSI -1/2" - 1"
	150 PSI -1 1/2"-2"
Design:	Schedule 80



FEATURES:

- Handle with locking and positive indexing feature.
- Retainer ring removal/adjusting tool moulded into handle.
- Adjustable seat pressure.
- Available with Tor L ball configuration.
- Available with electric actuators.
- Also available with Viton O-Rings.
- True union safe block style.

**PVC-3-WAY TRUE UNION S4 BALL VALVES SOCKET STYLE-ASTM,
EPDM O-RINGS, TEFLON BALL SEATS**

SIZE	MODEL #		LIST PRICE	CTN QTY	WEIGHT/LBS
	T-BALL	L-BALL			
3/8"	12-0629	12-0630	\$108.00	15	
1/2"	12-0631	12-0633	\$108.00	15	0.7
3/4"	12-2995	12-2996	\$114.65	15	1.45
1"	12-2195	12-1897	\$131.00	15	1.54
1 1/4"	12-2997	12-2998	\$158.35	5	2.64
1 1/2"	12-2752	12-2753	\$196.55	5	3.74
2"	12-2754	12-2755	\$218.40	4	3.96

HIGH HEAT 3-WAY VALVES



PRAHER
PLASTICS

Size:	1 1/2" - 2" - 2 1/2" spigot
Material:	CPVC body black, Glass filled Noryl rotor, ABS handle, NSF 61
O-RINGS:	EPDM
Rotor Seal:	High temperature silicone gasket with teflon jacket
Pressure Rating:	50 PSI
Positive seal back pressure:	15 PSI
Vacuum Rating:	29" Mercury

FEATURES:

- Proportional mixing availability.
- Double O-ring shaft seal.
- Permanently lubricated rotor seal with extreme wear resistance, exceeds 3000 dry cycle requirement.
- Chlorine, acid and ozone resistant construction.
- Handle-locking knob provides eye-let for lock attachment.
- Engineered "PLAST-TITE" screws (18.8 stainless) will not crack plastic when servicing valve.
- Universal shaft spline pattern adapts to most actuators.
- All wetted materials are of NSF-50 or 61 designation.
- **patented design us 6497250**

PRIVATE LOGO AVAILABLE
(size: 7/16" 1 3/4")

FIRST GLANCE TWO COLOUR
FLOW INDICATOR MARKINGS
"OPEN-CLOSED-FLOW DIRECTIONS"



OV2-2010

CPVC BODY



NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
2" - 2 1/2"	OV3-2000	3 PORT CPVC VALVE C/W 3 X 1 1/2" BUSHINGS	\$58.24	12
2" - 2 1/2"	OV3-2010	3 PORT CPVC VALVE SOCKET	\$55.00	12
1 1/2" - 2"	OV3-1500	3 PORT CPVC VALVE SOCKET	\$52.00	12
1 1/2"	OV3-1503	3 PORT CPVC VALVE - 1 1/2" FIP THREADED NPT	\$52.00	12
2"-2 1/2"	OV2-2090	2 PORT CPVC VALVE 90° SOCKET	\$45.76	12
1 1/2"-2"	OV2-1590	2 PORT CPVC VALVE 90° SOCKET	\$45.76	12
2"-2 1/2"	OV2-2000	2 PORT CPVC VALVE SKT, C/W BUSHINGS	\$49.92	12
2"-2 1/2"	OV2-2010	2 PORT CPVC VALVE, SOCKET	\$45.76	12
1 1/2"-2"	OV2-1500	2 PORT CPVC VALVE, SOCKET	\$45.76	12

NEW*

SIZE	MODEL #	DESCRIPTIO	LIST PRICE
1 1/2"	OV3-1500-NP	3 PORT CPVC VALVE SOCKET W/SOLAR BY-PASS	\$52.00



HIGH HEAT 3-WAY VALVES C/W UNIONS

Size: 1 1/2" - 2"



OV3 - 2010U

CPVC BODY



NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS



OV2 - 2010U

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. /CTN.
1 1/2"	OV3-1500U	3 PORT CPVC VALVE-UNIONIZED	\$81.12	12
2"	OV3-2010U	3 PORT CPVC VALVE -UNIONIZED	\$81.12	10
1 1/2"	OV3-1503U	3 PORT CPVC VALVE FIPT-UNIONIZED	\$81.12	12
1 1/2"	OV3-15SSMU	3 PORT CPVC UNIONIZED, 2X SOCKET, 1X MIP THREAD	\$93.60	10
2"	OV3-20SSMU	3 PORT CPVC UNIONIZED, 2X SOCKET, 1X MIP THREAD	\$104.00	8
1 1/2"	OV3-15FFMU	3 PORT CPVC UNIONIZED, FIP X FIP X MIP	\$93.60	10
2"	OV2-2010U	2 PORT CPVC VALVE WITH UNION	\$62.40	12
2"	OV2-2090U	2 PORT CPVC 90° MODEL WITH UNIONS, SOCKET	\$70.72	12
1 1/2"	OV2-1590U	2 PORT CPVC 90° MODEL WITH UNIONS, SOCKET	\$70.72	12
2"	OV2-2093U	2 PORT CPVC 90° MODEL WITH UNIONS, FIP	\$70.72	12
1 1/2"	OV2-1593U	2 PORT CPVC 90° MODEL WITH UNIONS, FIP	\$70.72	12
1 1/2"	OV2-1500U	2 PORT CPVC WITH UNIONS, SOCKET	\$70.72	12

VARIABLE FLOW VALVES

FEATURES:

- 2 port, 2" socket design, same construction as OV3 series
- Indicator on lid and handle
- New flow control handle for easy flow adjustment
- Handle is in line with pipe if fully open
- Auxiliary side port (1/2"socket): for field installation of pressure gauge etc
- Valve is supplied with 1/2"spigot x 1/4"FNPT bushing



VF2-2010

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
2"	VF2-2010	2"-2 PORT WITH FLOW INDICATOR HANDLE	\$45.76	12

3 WAY DIVERTER VALVES



Size:	2.5" socket—3"spigot
Material:	Body, cover, nut , NSF approved PVC-grey
Rotor:	NSF approved glass reinforced Polyphenylene oxide
O-Rings:	NSF approved EPDM
Rotor seal:	NSF approved low friction ethylene elastomer
Rotor load bearings:	NSF approved low friction polyoxymethylene
Pressure rating:	50 PSI with full seal back pressure rating
Vacuum rating:	29 inch mercury Burst pressure: 500 PSI
Flow rating:	400 GPM @ 4.4 PSI head loss



FEATURES:

- Easy read valve position indicator
- Low friction elastomeric seal with full vacuum rating
- High strength diverter with precision machined load bearings
- Easy valve servicing with spin off union nut—no special tools required
- Double shaft seal O-rings
- Patented rotor seal de-energizing chamber for "off service position"
- Patented internal "ANTI SEAL PINCH" design
- Electric Actuator package 24VAC or 110VAC -
(600 inch pounds torque, amps drawn for 24VAC = 2.6, 110VAC = 1.0)
- Easy actuator retrofitting
- Multiple (4) indexing positions for common port selection
- Made in North America (Canada)



THE BIG KAHUNA

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CTN.
3"	OV3-3000	3 SPGT PVC DIVERTER VALVE	\$312.00	1
3"	OV3-3024	3-PORT PVC DIVERTER VALVE 2 1/2" SKT X 3" SPG w/ 12-24 VAC/DC ACTUATOR	\$1372.80	1
3"	OV3-3110	3-PORT PVC DIVERTER VALVE 2 1/2" SKT X 3" SPG w/ 85-240 VAC/DC ACTUATOR	\$1372.80	1



FLAPPER CHECK VALVES

Size:	2" - 2 1/2"
Material:	CPVC body, clear lid, NSF 61
O-Rings:	EPDM
Flapper Seal:	Viton
Pressure Rating:	50 PSI
Hardware	corrosion proof pin and stainless steel spring (3/4 lbs)

FEATURES:

- CPVC body for most demanding applications
- Clear lid for easy inspection and access
- Reversible flow
- Flow indication arrow on lid
- Unique seal technology
- All wetted materials are of NSF-50 or 61 designation
- 1 PSI headloss at 88 GP
- Cracked open pressure .5 PSI



FCV - 2010



Moulded TPV seal with engineered triple ridge geometry provides leading edge sealing function. Unique design allows seal to be removed without tools and replaced with standard Viton O-ring for highly corrosive applications.

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
1 1/2" - 2"	FCV-1510	CPVC / EPDM STRAIGHT CHECK VALVE, SKT X SKT	\$50.00	12
1 1/2" - 2"	FCV-1590	CPVC / EPDM 90° CHECK VALVE, SKT X SKT	\$50.00	12
2"- 2 1/2"	FCV-2010	CPVC / EPDM STRAIGHT CHECK VALVE, SKT X SKT	\$50.00	12
2"- 2 1/2"	FCV-2090	CPVC / EPDM 90° CHECK VALVE, SKT X SKT	\$50.00	12



PARTS - FLAPPER CHECK VALVE TOP ASSEMBLY FCV-200-1
LIST PRICE: \$30.00



DIAPHRAGM VALVES

Size:	1/2" to 2"
Material:	PVC
Diaphragm:	EPDM/Viton/Teflon
Operator:	Hand wheel with position and wheel lock
Style:	True union/PVC-socket end ASTM
	Metric butt fusion spigots for PP & PVDF



	PVC/EPDM/UNION		PVC/VITON/UNION		PVC/TEFLON*/UNION	
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1/2"	122-905	\$127.00	122-911	\$242.00	122-926	\$256.00
3/4"	122-906	\$139.00	122-912	\$254.00	122-927	\$268.00
1"	122-907	\$173.00	122-913	\$291.00	122-928	\$307.00
1 1/4"	122-908	\$245.00	122-914	\$410.00	122-929	\$434.00
1 1/2"	122-909	\$276.00	122-915	\$447.00	122-930	\$473.00
2"	122-910	\$329.00	122-916	\$567.00	122-931	\$597.00

consult praher for actuation package

Size:	1/2" to 5"
Material:	PVC
Diaphragm:	EPDM
Operator:	Hand wheel with position indicator and wheel lock
Style:	Flanged



PVC DIAPHRAGM VALVES - FLANGED ENDS

	EPDM		VITON		TEFLON*	
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1/2"	120-189	\$182.00	120-202	\$264.60	120-212	\$321.00
3/4"	120-190	\$200.00	120-203	\$298.00	120-213	\$334.00
1"	120-191	\$255.00	120-205	\$330.75	120-216	\$396.90
5/4"	120-192	\$364.00	120-206	\$476.00	120-217	\$618.45
1.5"	120-193	\$400.00	120-208	\$498.00	120-218	\$645.00
2"	120-194	\$492.00	120-209	\$625.00	120-219	\$813.65
2.5"	120-198	\$1080.00	120-210	\$1197.00	120-227	\$1551.00
3"	120-200	\$1274.00	120-211	\$1333.00	120-228	\$1737.00
4"	120-898	\$1819.00			120-896	\$2313.00
5"	120-899	\$2304.00			120-897	\$2976.75

consult praher for actuation package

BUTTERFLY VALVES

Valve Sizes:	3" to 8"
Valve Materials:	PVC, PP, PVDF
Seals and O-rings:	EPDM/VITON
Pressure Rating:	150 PSI at 70°F



K4 Series

FEATURES:

- Excellent flow rates
- Full liner with integrated material ID and position lock (liner will not pinch during disc seating)
- Full bolt circle - light weight body (40% lighter than PVC)
- Glass filled Polypropylene body (service temperature of 250°F)
- 316 Stainless steel hexagon shaft-non wetted
- Extremely low stress distribution from shaft to disc due to hexagon shaft design
- Double O-ring shaft seals with PVDF non wearing shaft bearing
- Integrated ISO actuator mounting pad (mounting bolts included)
- Integrated valve mounting pad at bottom of valve for supporting piping system
- Multiple valve position locks for fine flow control - resists high torque loads
- Lockable rugged plastic (PPGF) handle with removable colour coded ID plate
- Service friendly - liner can be changed in minutes without special tools
- Fits ANSI 150lbs and ISO metric flanges • pressure rating - 150PSI-all sizes

PVC HAND LEVER OPERATED				
SIZE	EPDM Seats		Viton Seats	
	MODEL #	LIST PRICE	MODEL #	LIST PRICE
3"	125-861	\$349.00	125-866	\$581.25
4"	125-862	\$356.10	125-867	\$608.60
6"	125-863	\$518.20	125-868	\$719.75
8"	125-864	\$651.55	125-869	\$1133.85
10"	HL-10100	\$4395.00	HL-10100V	\$16860.00
12"	HL-10120	\$5315.00	HL-10120V	\$23075.00
14"	HL-10140	\$20595.00	HL-10140V	\$58960.00

PVC "VAN STONE" STYLE FLANGE KITS FOR PRAHER BUTTERFLY VALVES (INCLUDING HARDWARE)		
PIPE SIZE	MODEL #	LIST PRICE
3"	FK4-300	\$216.00 / Kit
4"	FK4-400	\$264.00 / Kit
6"	FK4-600	\$456.00 / Kit
8"	FK4-800	\$622.00 / Kit



Kits consist of 2 flanges plus hardware. For dimensions see page 75
 Grade 5 steel bolt zinc plated with hex nut and two flat washers
 Recommended Torque rating for flanges: 3 - 4" 25ft. lbs., 6 - 8" 40ft.lbs

TRUE UNION INLINE STRAINERS

Size:	3/8" - 3"	
Ends:	Socket	
Seal:	EPDM	
Body:	PVC transparent	
Screen:	Natural polypropylene -	1800 micron - coarse
	STAINLESS STEEL	1000, 750 micron - medium
	STAINLESS STEEL	500 micron - fine


S4 Series

NOTE: 500 MICRON = 36 MESH SIZE
 750 MICRON = 26 MESH SIZE

NOTE: ALSO AVAILABLE IN POLYPROPYLENE

1800 MICRON- PVC-EPDM-SOCKET-PP MESH

SIZE	MODEL #	DESCRIPTION	LIST PRICE	CTN. QTY.	CV VALUE*
3/8"	120-557	3/8" PVC inline strainer 1800 micron	\$56.25	20	6
1/2"	120-558	1/2" PVC inline strainer 1800 micron	\$57.00	20	6
3/4"	120-559	3/4" PVC inline strainer 1800 micron	\$57.30	20	12
1"	120-560	1" PVC inline strainer 1800 micron	\$58.00	15	14
1 1/4"	120-561	1 1/4" PVC inline strainer 1800 micron	\$77.20	20	27
1 1/2"	120-562	1 1/2" PVC inline strainer 1800 micron	\$99.25	10	50
2"	120-563	2" PVC inline strainer 1800 micron	\$110.25	8	65
2 1/2"	120-564	2 1/2" PVC inline strainer 1800 micron	\$145.00	4	100
3"	120-565	3" PVC inline strainer 1800 micron	\$329.00	1	140
4"	120-566	4" PVC inline strainer 1800 micron	\$612.60	1	140
*US GPM @ 1PSI headloss					

1000 MICRON- PVC-EPDM-SOCKET-SS MESH

SIZE	3/8"	1/2"	3/4"	1"	1 1/4"	1.5"	2"	2.5"	3"	4"
PART #	124-73510	124-73610	124-73710	124-73810	124-73910	124-74010	124-74110	124-74210	124-74310	124-74410
LIST PRICE	\$59.55	\$72.35	\$73.00	\$83.95	\$102.55	\$120.20	\$166.50	\$361.00	\$426.00	\$683.30

750 MICRON-PVC-EPDM-SOCKET-SS MESH

SIZE	3/8"	1/2"	3/4"	1"	1 1/4"	1.5"	2"	2.5"	3"	4"
PART #	124-73507	124-73607	124-73707	124-73807	124-73907	124-74007	124-74107	124-74207	124-74307	124-74407
LIST PRICE	\$59.55	\$72.35	\$73.00	\$83.95	\$102.55	\$120.20	\$166.50	\$361.00	\$426.00	\$683.30

500 MICRON- PVC-EPDM-SOCKET-SS MESH

SIZE	3/8"	1/2"	3/4"	1"	1 1/4"	1.5"	2"	2.5"	3"	4"
PART #	124-73505	124-73605	124-73705	124-73805	124-73905	124-74005	124-74105	124-74205	124-74305	124-74405
LIST PRICE	\$59.55	\$72.35	\$73.00	\$83.95	\$102.55	\$120.20	\$166.50	\$361.00	\$426.00	\$683.30

DOUBLE UNION SPRING CHECK VALVES

Size:	1/2" to 3"
Material:	PVC, PP, PVDF
O-Rings:	EPDM, Viton
Design:	Schedule 80
Note:	1/2" - 2" - 232 PSI @ 73°F
	3" - 150 PSI @ 73°F


FEATURE:

- Corrosion resistant stainless steel compression spring or Teflon coated spring
- Spring cracking pressure: 1 PSI

PVC/EPDM/STAINLESS STEEL SPRING

SKT x			
SIZE	MODEL #	LIST PRICE	QTY. PER CRTN.
1/2"	3-050	\$43.55	20
3/4"	3-075	\$50.30	20
1"	3-100	\$57.10	15
1 1/4"	3-125	\$68.90	20
1 1/2"	3-150	\$75.45	10
2"	3-200	\$90.00	8
2 1/2"	3-250	\$158.70	4
3"	3-300	\$362.45	1
4"	3-400	DISCONTINUED	

FIP x FIP		
MODEL #	LIST PRICE	QTY. PER CRTN.
3-051	\$44.10	20
3-076	\$50.85	20
3-101	\$57.35	15
3-126	\$69.00	20
3-151	\$77.30	10
3-201	\$93.10	8
3-251	\$165.90	4
3-301	\$383.65	1

PVC/VITON/ STAINLESS STEEL SPRING

SKT x			
SIZE	MODEL #	LIST PRICE	QTY. PER CRTN.
1/2"	3-050-V	\$61.25	20
3/4"	3-075-V	\$61.75	20
1"	3-100-V	\$73.50	15
1 1/4"	3-125-V	\$87.45	20
1 1/2"	3-150-V	\$95.10	10
2"	3-200-V	\$106.00	8
2 1/2"	3-250-V	\$187.10	4
3"	3-300-V	\$427.20	1

FIP x FIP		
MODEL #	LIST PRICE	QTY. PER CRTN.
3-051-V	\$62.50	20
3-076-V	\$63.00	20
3-101-V	\$75.00	15
3-126-V	\$89.20	20
3-151-V	\$97.00	10
3-201-V	\$108.10	8
3-251-V	\$190.85	4
3-301-V	\$436.75	1

PVC/VITON/TEFLON COATED SPRING

SKT x			
SIZE	MODEL #	LIST PRICE	QTY. PER CRTN.
1/2"	3-050-VT	\$71.55	20
3/4"	3-075-VT	\$86.30	20
1"	3-100-VT	\$101.55	15
1 1/4"	3-125-VT	\$124.95	20
1 1/2"	3-150-VT	\$149.90	10
2"	3-200-VT	\$203.95	8
2 1/2"	3-250-VT	\$466.75	4
3"	3-300-VT	\$577.40	1

FIP x FIP		
MODEL #	LIST PRICE	QTY. PER CRTN.
3-051-VT	\$73.00	20
3-076-VT	\$88.00	20
3-101-VT	\$103.55	15
3-126-VT	\$127.45	20
3-151-VT	\$152.90	10
3-201-VT	\$208.00	8
3-251-VT	\$476.00	4
3-301-VT	\$588.95	1



SINGLE UNION SPRING CHECK VALVES

Material: Grade 1 PVC (White)

O-Rings: EPDM, Viton

Compression Spring: 2.2.302, Hastelloy

C Pressure Rating: 150 PSI



FEATURE:

- Available with multiple spring loads.
- Flow check can be reversed by switching poppet assembly.
- 1 1/2" body can be glued onto 1 1/2" pipe or into 2" socket.
- **Valve packaged with 3 spring loads** (1/4 lb, 1/2lb and 2 lb) - "TRI".
- 1 1/2" model = 1 PSI headloss @ 60 GPM
- 2" model = 1 PSI headloss @ 90 GPM

1 1/2"

2"

SKT x SKT				SKT x SKT			
MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON	MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON
150-CV-025	1/4 LB	\$23.92	30	200-CV-025	1/4 LB	\$27.56	18
150-CV-050	1/2 LB	\$23.92	30	200-CV-050	1/2 LB	\$27.56	18
150-CV-200	2 LB	\$24.98	30	200-CV-200	2 LB	\$29.52	18
150-CV-350	3 1/2 LB	\$24.98	30	200-CV-350	3 1/2 LB	\$29.52	18
150-CV-500	5 LB	\$24.98	30	200-CV-500	5 LB	\$29.52	18
150-CV-1000	10 LB	\$24.98	30	200-CV-1000	10 LB	\$29.52	18
150-CV-TRI	1/4 - 2 LB	\$28.60	30	200-CV-TRI	1/4 - 2 LB	\$33.80	18

High corrosion resistant 2 lbs valves - (viton seals) Hastelloy-C springs

SIZE	MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON
1 1/2"	150-CV-200CR	2 LB	\$37.02	30
2"	200-CV-200CR	2 LB	\$41.18	18
1 1/2"	150-CVC-200CR	2 LB	\$41.18	30 CLEAR BODY
2"	200-CVC-200CR	2 LB	\$45.34	18 CLEAR BODY

CLEAR BODY CHECK VALVES

SIZE	MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON
1 1/2"	150-CVC-025	1/4 LB	\$28.08	30
2"	200-CVC-025	1/4 LB	\$31.72	18
1 1/2"	150-CVC-TRI	1/4-2LB	\$32.76	30
2"	200-CVC-TRI	1/4-2LB	\$37.96	18





SLIM-LINE CHECK VALVES

Size:	2" -SCH 80
Ends:	2" Socket
Seal:	EPDM
Body:	PVC
Press Rating:	150 PSI

FEATURE:

- Full 2" Flow
- 1 PSI Head Loss at 90 GPM
- 2" socket - 2 1/2" spigot ends



PRODUCTS

MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON
200-CVS-025	1/4 LB	\$24.80	30
200-CVS-050	1/2 LB	\$24.80	30
200-CVS-200	2 LB	\$26.52	30
200-CVS-350	3 1/2 LB	\$26.52	30
200-CVS-500	5LB	\$26.52	30
215-CVS-050	1/2 LB	\$26.00	20

215-CVS-050 - 1 1/2" X 2" X 2 1/2" - 2" valve with reducer bushings



DOUBLE UNION SPRING CHECK VALVES

Size:	1 1/2" - 2"
Ends:	Socket 1 1/2" and 2"
Seal:	EPDM
Body:	transparent PVC
Press Rating:	150 PSI



1 1/2"

2"

SKT x SKT				SKT x SKT			
MODEL #	SPRING LOAD	LIST PRICE	QTY. PER CARTON	MODEL #	SPRING LOAD	LIST PRICE	QTY PER CARTON
152-CVC-025	1/4 LB	\$31.20	30	202-CVC-025	1/4 LB	\$41.60	18
152-CVC-050	1/2 LB	\$31.20	30	202-CVC-050	1/2 LB	\$41.60	18
152-CVC-200	2 LB	\$31.20	30	202-CVC-200	2 LB	\$41.60	18
152-CVC-1000	10LB	\$36.40	30	202-CVC-1000	10LB	\$41.60	18
152-CVC-TRI	1/4 - 2 LB	\$36.40	30	202-CVC-TRI	1/4 - 2 LB	\$41.60	18
152-CVC-025CR	1/4 LB	\$40.00	30	202-CVC-025CR	1/4 LB	\$50.00	18
152-CVC-050CR	1/2 LB	\$40.00	30	202-CVC-050CR	1/2 LB	\$50.00	18
152-CVC-200CR	2LB	\$40.00	30	202-CVC-200CR	2LB	\$50.00	18

Transparent PVC is not suited for long term UV exposure



WAFER CHECK VALVES K6 SERIES

NEW ITEM

Features:

- No spacer required on newest generation of wafer check
- Easy spring installation without any special tool requirements
- Easy installation due to integrated flange bolt guides for DIN 2501 PN10 and ANSI Class 150
- Rated to 150 psi on all sizes

PVC/EPDM W/SS SPRING

SIZE	PART #	LIST PRICE
2"	-129101	\$ 280.00
2-1/2"	-129102	\$ 329.00
3"	-129103	\$ 369.00
4"	-129104	\$ 472.00
6"	-129106	\$ 712.00
8"	-129107	\$ 1,169.00

PVC/VITON W/SS SPRING

SIZE	PART #	LIST PRICE
2"	-129112	\$ 336.00
2-1/2"	-129113	\$ 395.00
3"	-129114	\$ 443.00
4"	-129115	\$ 567.00
6"	-129117	\$ 855.00
8"	-129118	\$ 1,403.00

WAFER CHECK VALVES

Sizes:	2" to 20"
	24"-40" also available P.U.R.
Material:	PVC, PP, PVDF
O-rings:	Buna N, EPDM, Viton or Teflon
Spring:	316 S.S., HASTELLOY C

FEATURES:

- Economical, space saving design.
- Light weight, non-corrosive construction.

NOTE: Spacer rings for full disc opening recommended

FOR TECHNICAL INFORMATION SEE PAGE 64 AND 65



PRODUCTS

PVC/EPDM		
SIZE	MODEL #	LIST PRICE
1½"	460-15-E	\$270.27
2½"	460-25-E	\$314.72
3"	460-30-E	\$350.76
10"	460-100-E	\$1296.40
12"	460-120-E	\$1722.60
14"	460-140-E	\$5951.60
16"	460-160-E	P.U.R.
20"	460-200-E	P.U.R.

PVC/VITON		
SIZE	MODEL #	LIST PRICE
1½"	460-15-V	\$287.17
2½"	460-25-V	\$343.62
3"	460-30-V	\$380.90
10"	460-100-V	\$2062.55
12"	460-120-V	\$2753.25
14"	460-140-V	\$7141.90
16"	460-160-V	P.U.R.

PVC/EPDM with SS Spring		
SIZE	MODEL #	LIST PRICE
1½"	470-15-E	\$321.93
2½"	470-25-E	\$367.57
5"	470-50-E	\$584.99
10"	470-100-E	\$1545.00
12"	470-120-E	\$2380.00
14"	470-140-E	\$6435.50
16"	470-160-E	P.U.R.

PVC/VITON/316SS		
SIZE	MODEL #	LIST PRICE
1½"	470-15-V	\$338.83
2½"	470-25-V	\$393.71
5"	470-50-V	\$634.99
10"	470-100-V	\$2210.40
12"	470-120-V	\$2890.80
14"	470-140-V	\$7722.60
16"	470-160-V	P.U.R.

SPACERS FOR WAFER CHECK VALVES

SIZE	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"
MODEL #	3-20-7	3-25-7	3-30-7	3-40-7	3-50-7	3-60-7	3-80-7	3-100-7	3-120-7	3-140-7	3-160-7
LIST PRICE	\$76.50	\$93.75	\$128.00	\$156.25	\$260.42	\$260.42	\$381.95	\$1000.00	\$1142.85	\$4838.70	P.U.R.



SWING CHECK VALVES



PRAHER
PLASTICS

Size:	3" to 10"
Material:	PVC
O-Rings:	EPDM, Viton
Pressure Rating:	150 PSI Press Rated at 72°F
	Non-Wetted stainless steel spring with position indicator.
	No spacer ring required
	Universal Flange Bolt Pattern

FEATURES:

- No spacer ring required
Mounts between 150 lbs ANSI flanges and DIN flanges
Spring assisted spring closing of disc for vertical and horizontal installations
- External sight glass to view disc position with indicator pin
- Full non corrosive construction- stainless spring is non wetted
- Stainless spring can be serviced through the sight glass mounting hole
- High flow capacity
- Rugged design



K4 Series

PVC/EPDM		
SIZE	MODEL #	LIST PRICE
3"	SCV-1030	\$550.00
4"	SCV-1040	\$630.00
6"	SCV-1060	\$900.00
8"	SCV-1080	\$1869.00
10"	SCV-10100	\$2493.00
PVC/VITON		
3"	SCV-1030V	\$ 600.00
4"	SCV-1040V	\$ 700.00
6"	SCV-1060V	\$ 990.00
8"	SCV-1080V	\$1995.00
10"	SCV-10100V	\$2711.00
PVC SWING CHECK VALVE FLANGE KIT		
3"	FK-SCV300	\$226.00
4"	FK-SCV400	\$275.00
6"	FK-SCV600	\$469.00
8"	FK-SCV800	\$646.00
10"	FK-SCV10100	P.U.R.

Each kit consists of 2 flanges, Grade 5 steel bolt zinc plated with hex nut and two flat washers

KNIFE GATE VALVES

Sizes:	1" to 4"
Material:	Grade 1 PVC
O-Rings:	EPDM
Seals:	TPE Ozone Resistant (Santoprene) Pressure
Rating:	50 PSI. (1 1/2" & 2 1/2") 40 PSI. (3" & 4")
Gate:	POM (1 1/2" to 2 1/2") PVC-(3" & 4")
Shaft:	316 stainless steel
	1" - 2 1/2" = white, 3" & 4" = grey



GATE=skt x skt



SLSP= skt x spigot



150-GMFT



HB4PMT MPT x VAC hose barb (1.5")



150-HB4PX2



151-GMFT

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CTRN.
1"	100-GATE	SKT X SKT	\$17.03	30
1 1/2"	150-GMFT	MIP X FIP (WHITE)	\$17.54	18
1 1/2"	151-GMFT	MIP X FIP (BLACK)	\$17.54	18
1 1/2"	150-GMMT	MIP X MIP	\$17.03	30
1 1/2"	150-GATE	SKT X SKT	\$17.03	24
1 1/2"	150-SLSP	SKT X SPIGOT	\$17.03	24
1 1/2"	150-UNIO	150-GATE W. UNION	\$24.40	17
1 1/2"	150-UNKT	UNION KIT- TO UNIONIZE 150-GATE	\$12.48	24
1 1/2"	150-HBMT	1 1/2" HOSE X MIP	\$17.54	30
1 1/2"	150-GFFT	FIP X FIP (WHITE)	\$17.54	24
1 1/2"	151-GFFT	FIP X FIP (BLACK)	\$17.54	24
1 1/2"	150-SLMT	SKT X MIP (WHITE)	\$17.54	18

NOTE:

- Pool hose barbs (HB4) accommodate vacuum hose inside diameter of 1.5"
- Our model 150-HBMT accommodates "FLEX" PVC pipe and poly hose [barb diameter (1 & 5/8")]

KNIFE GATE VALVES

PRODUCTS



150-UNIO

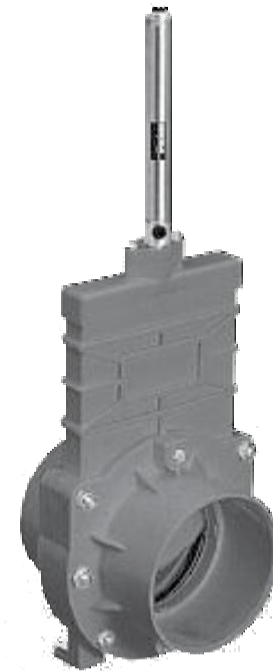


150-HBMT



SAFETY CLIP

SIZE	MODEL #	LIST PRICE	QTY. PER CARTON
1 1/2"	150-CLP	\$0.89	50
2"	210-CLP	\$0.89	50
2 1/2"	260-CLP	\$0.89	50
3" - 4"	400-CLP	\$3.60	10



4" with pneumatic actuator

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
1 1/2"	150-HBX2	1 1/2" HOSE X 1 1/2" HOSE	\$17.54	18
1 1/2"	150-HB4PMT	1 1/2" POOL HOSE X 1 1/2" MIP	\$17.54	18
1 1/2"	150-HB4PX2	1 1/2" POOL HOSE X 1 1/2" POOL HOSE	\$17.54	30
2"	200-GATE	SKT X SKT	\$22.71	25
2"	200-SLSP	SKT X SPIGOT	\$22.71	25
2"	200-UNIO	VALVE WITH UNION 2"	\$34.82	25
2 1/2"	250-GATE	SKT X SKT	\$36.12	12
2 1/2"	250-SLSP	SKT X SPIGOT	\$36.12	12
3"	300-GATE	SKT X SKT GREY inc. safety clip	\$83.20	2
3"	300-GV16	SKT X SKT WHITE	\$50.32	4
4"	400-GATE	SKT X SKT GREY inc. safety clip	\$112.32	2

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
2"	200-GAIR	2" GATE VALVE WITH AIR ACTUATOR D.A.	\$310.00	1
3"	300-GAIR	3" GATE VALVE WITH AIR ACTUATOR D.A.	\$730.00	1
4"	400-GAIR	4" GATE VALVE WITH AIR ACTUATOR D.A.	\$730.00	1

UNI-BODY KNIFE GATE VALVES

Feature:	Patent Pending gate design with integrated O-ring
	Safety clip included to keep gate open
	Internal gate snap lock feature to keep gate open
Material:	PVC white
O-Rings:	Buna Nitrile, EPDM, Viton
Ports:	2" socket by 2.5" spigot, 2.5" socket by 3" spigot
Pressure:	max. 50PSI

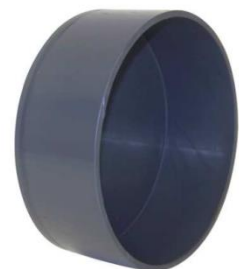


PRODUCTS

SIZE	MODEL #	DESCRIPTION	LIST PRICE	CTN. QTY.
2"	210-GATE	PVC UNIBODY GATE VALVE SKTXSKT	\$19.76	BULK
2"	210-GSLSP	PVC UNIBODY GATE VALVE SKTXSPIGOT	\$19.76	BULK
2 1/2"	260-GATE	PVC UNIBODY GATE VALVE SKTXSKT	\$34.32	BULK
2 1/2"	260-GSLSP	PVC UNIBODY GATE VALVE SKTXSPIGOT	\$34.32	BULK

END CAPS

Material: PVC
Schedule: 80



SIZE	MODEL #	DESCRIPTION	LIST PRICE	CTN. QTY.
6"	847-060	6" PVC END CAP SCHEDULE 80	\$51.00	1



INLINE SIGHT GLASS

Size:	1 1/2" - 3"
Material:	PVC- clear
O-Rings:	EPDM

FEATURES:

- Fully unionized inline sight glass for easy cleaning



MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
152-ISG	1 1/2" INLINE SIGHT GLASS SKT X SKT	\$41.60	1
202-ISG	2" INLINE SIGHT GLASS SKT X SKT	\$52.00	1
252-ISG	2 1/2" INLINE SIGHT GLASS SKT X SKT	\$83.20	1
302-ISG	3" INLINE SIGHT GLASS SKT X SKT	\$156.00	1

PLASTIC CLAMP RING FOR TOP MOUNTED L-STYLE FLANGE

MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
12L-CLP	CLAMP RING INCLUDING HARDWARE	\$18.59	1

NOTE: FITS ON TM -22-L, TM-12-L, TM-15-L & TM-12-H8 VALVES



BACKWASH - SIGHT GLASS

Size:	1 1/2"
Material:	PVC, ABS, Acrylic
O-Rings:	EPDM

FEATURES:

- Non corrosive plastic construction
- Threaded cleaning plug
- Light weight

APPLICATION:

Radial installation in 3" or 4" backwashline



MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
SGS-150	1 1/2" BACKWASH SIGHT GLASS	\$79.44	6

TOP MOUNT MULTIPOINT VALVES

Sizes:	1/2" & 2"
Material:	ABS (white or black)
	Noryl - glass filled
O-Rings:	EPDM

FEATURES:

- Choice of socket or threaded (BSP or NPT) ports.
- Choice of screw-down, bolt-down or clamp-down models
- O-ring for stand pipe standard

PORTING OF TM12 CFC ONLY
DOES NOT MATCH OEM



TM-12-CFC

TM-12L

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CRTN.
1 1/2"	TM-12-A	6" UNC THREAD (FINE V-THREAD)	\$135.20	1
1 1/2"	TM-12-B	6" BUTTRESS THREAD (COURSE V-THREAD)	\$135.20	1
1 1/2"	TM-12-E	BOLT DOWN 8 BOLTS (7-11)	\$135.20	1
1 1/2"	TM-12-S	CLAMP DOWN 7.5" CLAMP FLANGE (American)	\$135.20	1
1 1/2"	TM-12-S8	CLAMP DOWN 8.22" CLAMP FLANGE (American)	\$135.20	1
1 1/2"	TM-12-H8	CLAMP DOWN 8" CLAMP FLANGE (SP711-13)	\$135.20	1
1 1/2"	TM-12-L	CLAMP DOWN 8.25" CLAMP FLANGE	\$135.20	1
1 1/2"	TM-12-JL	DISCONTINUED		
1 1/2"	TM-12-JL7	BOLT DOWN 6 BOLTS LASER FILTER/CODE 130167	\$135.20	1
1 1/2"	TM-12-PB	5.98" BUTTRESS THREAD	\$135.20	1
1 1/2"	TM-12-CFC	CLAMP DOWN 6.5" CLAMP FLANGE 130885	\$135.20	1
1 1/2"	TM-12-9BH	CLAMP DOWN 9" CLAMP FLANGE	\$135.20	1
2"	TM-22-L	CLAMP DOWN 8.25" CLAMP FLANGE	\$187.20	1
2"	TM-22-JAC	7 1/16" BUTTRESS THREAD	\$187.20	1
2"	TM-22-PB	CLAMP DOWN 8.22" CLAMP FLANGE	\$187.20	1
2"	TM-22-E	BOLT DOWN 8 BOLTS	\$187.20	1
2"	TM-22-PA	CLAMP DOWN 8.22" CLAMP FLANGE	\$187.20	1
		W/O DIFFUSER BASKET		
2"	TM-22-H8	CLAMP DOWN 8" CLAMP FLANGE (SP716-21)	\$187.20	1
2"	TM-22-LA	1 BOLT DOWN 12 BOLTS, 247BC	\$187.20	1

FLOW RATES

1 1/2" Top Mount MPV flow rate in GPMs	20	30	40	50	60	70	80	
1 1/2" Top Mount MPV head loss in PSI	1.0	1.8	2.9	4.2	5.6	7.3	9.0	
2" Top Mount MPV flow rate in GPMs	70	80	90	100	110	120	130	140
2" Top Mount MPV head loss in PSI	2.2	2.8	3.6	4.4	5.3	6.3	7.4	8.7



SIDE MOUNT MULTIPORT VALVES

Size:	1/2", 2" and 3"
Material:	• High impact ABS (white or black).
Option:	• Glass filled NORYL for high pressure applications (75 PSI. operating pressure).



FEATURES:

- Choice of socket or threaded (FIP)
- NPT, BSP or JIS threads
- Four piping variations including all open ports
- Two plugs will be supplied with all open port models.

3" MODELS:

All open ports with socket ports only

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CRTN
1 1/2"	SM-10-2	ABS S.M. MPV THR PORTS FOR D.E. FILTER	\$114.40	1
1 1/2"	SM-10-3	ABS S.M. MPV THR PORTS FOR SAND FILTER	\$114.40	1
1 1/2"	SM-10-AO	ABS S.M. MPV ALL OPEN THR PORTS C/W PLUGS (SAND OR DE)	\$119.60	1
2"	SM-20-2	ABS S.M. MPV THR PORTS FOR D.E. FILTER	\$145.60	1
2"	SM-20-3	ABS S.M. MPV THR PORTS FOR SAND FILTER	\$145.60	1
2"	SM-20-AO	ABS S.M. MPV ALL OPEN THR PORTS C/W PLUGS (SAND OR DE)	\$150.80	1
1 1/2"	SM-10-AOS	ABS S.M. MPV ALL OPEN SLIP PORTS (SAND OR DE)	\$114.40	1
2"	SM-20-AOS	ABS S.M. MPV ALL OPEN SLIP PORTS (SAND OR DE)	\$150.80	1
3"	SM-30-AO	DISCONTINUED	\$1189.76	1
3"	SM-30-AOB	(BLACK) ABS S.M. MPV ALL OPEN SLIP PORTS (SAND OR DE)	\$1189.76	1

ALL SM30 MODELS AFTER JANUARY 2002 WILL HAVE SPIDER GASKET IN ROTOR

FLOW RATES

3" Side Mount MPV flow rate in GPMs	170	185	200	220	240	255	270	300	320	340
3" Side Mount MPV head loss in PSI	1.6	2.0	2.6	3.0	3.5	4.0	4.8	5.5	6.2	7.0

PRE-PLUMBED MULTIPORT VALVES

FEATURES:

- Molded 90° plumbing sweep for optimum flow performance
- Socket ends add (s to part #)



SM2-PP3

SM1-PP2

NOTE: VISIT www.nsf.org FOR UPDATED LISTINGS

PRODUCTS

PREPLUMBED MPVS FOR SAND FILTERS

SIZE	MODEL #	DESCRIPTION	LIST PRICE
1.5"	SM1-HP3	SM-10-3 W HAYWARD PLUMBING (5" CENTER) 1.5" FIP	\$156.00
1.5"	SM1-HPX62	SM-10-3 W. HAYWARD PLUMBING F. PRO SERIES - 6" CENTERS	\$156.00
2"	SM2-HP3	SM 20-3 W/ HAYWARD (5" CENTER) 2" FIP	\$223.60
		(6" CENTRE TO CENTRE PLUMBING) 1.5" FIP	
1.5"	SM1-PP3	SM-10-3 W. Pentair, 1.5" FIP	\$166.40
2"	SM2-PP3	SM-20-3 W. Pentair 2" FIP	\$223.60
2"	SM2-HPX62	SM-20-3 W. HAYWARD PLUMBING 2" FIP, PRO SERIES 6" CENTER	\$223.60

PREPLUMBED MPVS FOR D.E. FILTERS

SIZE	MODEL #	DESCRIPTION	LIST PRICE
1.5"	SM1-HP2	SM10-2 W. HAYWARD PLUMBING 5" CENTER, 1.5" FIP	\$156.00
2"	SM2-HPXR50	SM20-2 W. HAYWARD PLUMBING 5" CENTER, 2" FIP	\$223.60
2"	SM2-HPXR50S	SM20-2 W. HAYWARD PLUMBING 5" CENTER, 2" SOCKET	\$223.60
1.5"	SM1-PP21	SM10-2 W. Pentair 1.5" FIP-FNS 4800 discontinued, replaced with SM1-PP	\$156.00
1.5"	SM1-PP2	SM10-2 W. Pentair 1.5" FIP	\$156.00
2"	SM2-PP2	SM20-2 W. Pentair 2" FIP	\$223.60

PREPLUMBED MPVS FOR STA-RITE FILTERS

SIZE	MODEL #	DESCRIPTION	LIST PRICE
2"	SM2-SR3U	SM-20-3 W. STA-RITE PLUMBING, 2" FIP WHITE	\$312.00
2"	SM2-SR2	SM20-2 W. STA-RITE PLUMBING 2" FIP, BLACK	\$223.60

FLOW RATES

	20	30	40	50	60	70	80	
1 1/2" Side Mount MPV flow rate in GPMs	0.8	1.5	2.5	3.8	5.0	6.5	8.0	
1 1/2" Side Mount MPV head loss in PSI								
2" Side Mount MPV flow rate in GPMs	70	80	90	100	110	120	130	140
2" Side Mount MPV head loss in PSI	3.2	4.3	5.5	6.6	8.2	10.0	11.0	12.0



PUSH PULL VALVES

MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
PPV-J-SLD	2" Black PVC Push Pull Valve 8" center c/w union kit	\$151.80	1
PPV-P-75U	2" Almond PVC Push Pull Valve 7.5" center c/w union kit	\$151.80	1



PUSH PULL VALVES PARTS

MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
PSP-263055	Shaft and Piston for Push Pull Valve	\$87.09	1

BULK HEAD ADAPTER HALF UNION

MODEL #	DESCRIPTION	LIST PRICE	QTY. PER CARTON
UNK-1TRITON	1 1/2" SPIGOT HALF UNION C/W O-RING	\$29.12	1
UNK-2TRITON	2" SPIGOT HALF UNION C/W O-RING	\$29.12	1
UNK-1HAY	1 1/2" SPIGOT HALF UNION C/W O-RING	\$29.12	1
UNK-2HAY	2" SPIGOT HALF UNION C/W O-RING	\$29.12	1
UNK-2SR	2" SPIGOT HALF UNION C/W O-RING	\$33.28	1
	MACHINED 2"		



24 VAC MULTIPOSITION AQUASTAR C/W MULTIPORT VALVE



PRAHER
PLASTICS



**For clean water use only.
Not to be used in a high humidity
environment or direct sunlight**

NOTE:

CONTROLS SUCH AS PRESSURE SWITCH, TIMERS, RELAYS, ON & OFF SWITCHES FOR CONTROLLING AQUASTAR ACTUATOR ARE NOT INCLUDED, AND MUST BE PROVIDED BY YOUR OWN PLC SYSTEM.

FEATURES:

- 24 VAC (max. 0.5 Amp.) 6 position valve actuator.
- With or without manual override (override only available on 1.5" and 2").
- Controls and power supply to be supplied by others.
- Very economical and the most universal automated valve actuator on the market.
- Internal pump limit switch will disrupt pump during actuator's positioning mode.
- ISO 9001 facility.
- Also available in 1 1/2"-2" top mount models (TM)
- WIRING DIAGRAM AND MORE DATA SEE PAGE 74
- MP = PROGRAMMABLE LOGIC CONTROL
- See page 35 for Union Kits

APPLICATIONS:

- On all existing and new sand filters with automatic backwash requirements that can provide pressure monitoring or timing and are able to provide control signal to MP-Aquastar actuator.

MODEL #	VALVE	DESCRIPTION	LIST PRICE
AMP-SM10AO	1 1/2"	24VAC/MULTIPOSITION/SM-10-AO/6POS.	\$2340.00
AMP-SM20AO	2"	24VAC/MULTIPOSITION/SM-20-AO/6POS.	\$2340.00
AMP-SM30AOB	3"	24VAC/MULTIPOSITION/SM-30-AO/6 POS.	\$3848.00
130888	1 1/2" - 2"	ACTUATOR WITHOUT VALVE - 24V AC	\$2132.00
130889	3"	ACTUATOR WITHOUT VALVE - 24V AC	\$2600.00

PART #	DESCRIPTION	LIST PRICE
101384	Actuator Cover Clear	\$70.00
140034	Lifting Cam with Roller Bearings	\$88.00
140482	Plastic Main Lifting Gear	\$88.00
140035	Motor Assembly Complete with Gear 24V	\$550.00
31341	Circuit Board Multi-position 24V	\$680.00
30173	Pump Limit Switch	\$54.35
140224	Actuator /Valve Shaft Coupler for 1.5" – 2"	\$54.35
140474	Actuator /Valve Shaft Coupler for 3"	\$54.35
50092	Pressure Switch 10-100 PSI	\$225.00
50154	Rubber Boot for Pressure Switch	\$45.00
101393	Locking Insert for 3"	\$50.00
101862	Black ABS Handle for Aquastar	\$62.40
141838	Position Indicator for Multi-Position Aquastar	\$61.40



COMFORT SERIES AQUASTAR

FEATURES:

- Time and pressure back wash cycle release
- Adjustable pressure sensor switch (adjusted with dip switches on circuit board) (0.4 bar – 5.75 bar or 5.8 PSI – 83 PSI)
- Basic Timer with three basic settings on dip switch (3 days, 1 week, 2 week backwash interval settings)
- Digital time clock for flexible time controlled backwash release cycles (up to 25 release times)
- Option of external backwash cycle release included
- RECIRCULATION (Filter BY PASS Actuator Position) actuator-valve position for filter maintenance standard
- DRAIN position for lowering water level or service
- Integrated pump control (interlock) relay contacts
- Adjustable backwash timers (potentiometers) 50 sec-9 minutes
- Adjustable rinse timers (potentiometers) 25-200 seconds
- Adjustable backwash cycle delay timer 20 sec-32 min—with integrated relay contact for heater or chemical feeder control
- Auxiliary relay control-contacts for secondary valve control. i.e. city water backwash
- Power control terminal for external back wash cycle start release from other control sources
- Watertight-chemical resistant touch pad control

AQUASTAR COMFORT 6001

MODEL #	DESCRIPTION	LIST PRICE
A61-TM12H8	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-12-H8	\$3016.00
A61-TM12L	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-12-L	\$3016.00
A61-TM12PB	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-12-PB	\$3016.00
A61-TM22L	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-22-L	\$3120.00
A61-TM22PB	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-22-PB	\$3120.00
A61-TM22H8	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON TM-22-H8	\$3120.00
A61-SM30AOB	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM-30-AOB (SLIP)	\$4888.00
A61-SM20AO	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM-20-AO (FPT)	\$3224.00
A61-SM10AO	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM-10-AO (FPT)	\$3224.00
A61-SM1PP3S	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM1-PP3 (SLIP)	\$3276.00
A61-SM1PP3	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM1-PP3 (FPT)	\$3276.00
A61-SM1PP2	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM1-PP2 (FPT)	\$3276.00
A61-SM2PP3S	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM2-PP3S (SLIP)	\$3276.00
A61-SM2PP3	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM2-PP3 (FPT)	\$3276.00
A61-SM2PP2	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM2-PP2 (FPT)	\$3276.00
A61-SM2SR2	AUTO BW VALVE AQUASTAR 6001 24V AC/DC ON SM2-SR2 (FPT)	\$3276.00
131266	ACTUATOR FOR 1.5" & 2" VALVE, 24V AC/DC	\$2880.80
131267	ACTUATOR FOR 1.5" & 2" VALVE, 24V AC/DC OR 110-240V AC OR 170-300V DC	\$2880.80
131268	ACTUATOR FOR 3" VALVE, 24V AC/DC	\$3848.00
131269	ACTUATOR FOR 3" VALVE, 24 V AC/DC OR 110-240V AC OR 170-300V DC	\$3848.00

AQUASTAR COMFORT 6001



AQUASTAR RELAY SEQUENCING CHART

RELAY TERMINAL numbers	SEQUENCE OF AUTOMATIC BACKWASH CYCLE									REQUIRES MANUAL ACTIVATION	
	Trigger of back wash cycle	Delay Time	Cycle Start	During actuator travel	Back washing	Travel	Rinsing	Travel	FILTER position	DRAIN position	RECIRC. position
13/14 max. 8 AMP	closed pump running	CLOSED	open pump running	open	CLOSED	open	CLOSED	open	CLOSED	CLOSED	CLOSED
4/G/3 max. 8 AMP	G-4 closed	G-4 closed	G-4 closed	G-4 closed	G-4 closed	G-4 closed	G-4 closed	G-4 closed	G-3 closed	G-4 closed	G-4 closed
27/28 max. 4 AMP	open	open	open	open	CLOSED	open	open	open	open	open	open
24/25 max. 4 AMP	open	open	open	open	open	open	CLOSED	open	open	open	open
29/30 max. 4 AMP	open	open	open	open	open	open	open	open	open	open	CLOSED
31/32 max. 4 AMP	open	open	open	open	open	open	open	open	open	CLOSED	open
21/22 max. 4 AMP	open heater off	open	open	open	open	open	open	open	CLOSED heater on	open	open
18/19/20 max. 4 AMP serial connection of multiple Aqua stars	19/20 CLOSED	19/20 CLOSED	18/19 CLOSED	18/19 CLOSED	18/19 CLOSED	18/19 CLOSED	18/19 CLOSED	18/19 CLOSED	19/20 CLOSED signal will start second actuator cycle	19/20 CLOSED	19/20 CLOSED

Terminal 11-12 -low voltage DC output-needs to be closed by external source to start backwash cycle

PARTS - AQUASTAR COMFORT 6001

PART #	DESCRIPTION	LIST PRICE
31372	High Voltage Sub-Board 100-240V AC or 170-300V DC	\$100.00
131317	Circuit Board for Aquastar 6001 for 1.5" – 3" valves 24V AC/DC	\$1248.00
1313317	Circuit Board for Aquastar Fish	\$1800.00
141845	Lifting Cam with Magnets & Roller Bearings for 1.5" – 2" Valves	\$124.80
141846	Lifting Cam with Magnets & Roller Bearings for 3" Valves	\$124.80
50894	6V DC Motor with Gear Box for 6000 & 6001 Models	\$572.00
100180B	Plastic Main Lifting Gear	\$104.00
141654	Actuator/Valve Shaft Coupler for 1.5" – 2" Valves	\$52.00
141310	Actuator/Valve Shaft Coupler for 3" Valve	\$52.00
101862	Black ABS Handle for Aquastar	\$62.40
50831	SS Springs 9 x 15mm external	\$6.24
140902	Gasket for Aquastar Cover	\$10.40
101384	Translucent Blue Cover for 6001 Model	\$62.40
101387	Round Access Cover Translucent Blue	\$31.20
50720	O-Ring for Round Access Cover	\$3.12
Misc	M4 x 16 Cover Screw, set of 6	\$9.36
102026	Blue Adapter Washer for 2" Valve	\$2.08
141914	Position Indicator for 6001 Model	\$61.40
80254	Large Hex Brass Bolt	\$16.45

ELECTRICALLY ACTUATED BALL VALVES HEAVY DUTY (S4 TYPE)



PRAHER
PLASTICS

Size:	1/2" to 3"
Voltage:	24 VAC, 115 VAC, 220 VAC
Open-close:	6 seconds (1 1/2" to 4") 20 seconds (1/2" to 1")
Enclosures:	Nema 4 (IP56)
Pressure rating:	150 PSI. 3/8"-2" 90 PSI. 2 1/2", 3" and 4"
Duty cycle:	60%



FEATURES:

- 0°-90°-adjustable limit switches are standard (1 1/2" to 4" only)
- Mounted with Praher Thermoplastic (PVC, PP, PVDF)
- Mounting bracket set on True Union Ball Valves.
- All actuators are equipped with manual overrides.
- Power failure supply pack optional

Note: 1/2" - 1" are light duty actuators

Actuator Torques: 10 Nm (87 inch lbs) (1/2" - 1")
(24 & 220V) - 12 Nm (104 inch lbs) (1 1/2" - 2")
(24 & 220V) - 25 Nm (216.5 inch lbs) (2 1/2" - 4")
(110 VAC) - 150 inch lbs (1 1/2" - 2),
300 inch lbs (2 1/2" - 4")

PVC TRUE UNION BALL VALVES WITH ACTUATOR (24 VAC AND 220.00 VAC)

SIZE	MODEL #	DESCRIPTION	LIST PRICE
1/2"	11-0017-24	24VAC	\$613.60
1/2"	11-0017-220	220VAC	\$613.60
3/4"	11-0032-24	24VAC	\$634.40
3/4"	11-0032-220	220VAC	\$634.40
1"	11-0047-24	24VAC	\$655.20
1"	11-0047-220	220VAC	\$655.20
1 1/2"	115-24	24VAC	\$1872.00
1 1/2"	115-220	220VAC	\$1872.00
2"	120-24	24VAC	\$1972.00
2"	120-220	220VAC	\$1976.00
2 1/2"	125-24	24VAC	\$2704.00
2 1/2"	125-220	220VAC	\$2704.00
3"	130-24	24VAC	\$2184.00
3"	130-220	220VAC	\$2808.00
4"	140-24	24VAC	\$2288.00
4"	140-220	220VAC	\$2808.00

PVC TRUE UNION BALL VALVES WITH 110 VAC ACTUATOR

SIZE	MODEL #	LIST PRICE
1/2"	11-0017-110	\$613.60
3/4"	11-0032-110	\$634.40
1"	11-0047-110	\$655.20
1 1/2"	115-110	\$1456.00
2"	120-110	\$1456.00
2 1/2"	125-110	\$2080.00
3"	130-110	\$2184.00
4"	140-110	\$2288.00

PVC 3 WAY BALL VALVE (T-BALL) WITH 2 POSITION ACTUATOR

SIZE	MODEL #	DESCRIPTION	LIST PRICE
1 1/2"	115-3-24-T	T-BALL 24VAC	\$1847.42
1 1/2"	115-3-110-T	T-BALL 110VAC	\$1847.42
1 1/2"	115-3-24-L	L-BALL 24VAC	\$1847.42
1 1/2"	115-3-110-L	L-BALL 110VAC	\$1847.42
2"	120-3-24-T	T-BALL 24VAC	\$1913.60
2"	120-3-110-T	T-BALL 110VAC	\$1913.60
2"	120-3-24-L	L-BALL 24VAC	\$1913.60
2"	120-3-110-L	L-BALL 110VAC	\$1913.60

220V MODELS AVAILABLE-CONSULT FACTORY



PIPE CLAMPS S4 SERIES

Materials: High impact copolymer
polypropylene (grey) UV stabilized



SIZE	DIAMETER RANGE MM	MODEL #	LIST PRICE LESS THAN 1000	1000	2000	5000	10000	CRTN. QTY.
3/8"	17-19 mm	PP-038	\$1.40	\$1.18	\$0.99	\$0.96	\$0.91	1200
1/2"	20-23 mm	PP-050	\$1.62	\$1.36	\$1.30	\$1.05	\$0.96	1000
3/4"	25-28 mm	PP-075	\$1.92	\$1.60	\$1.41	\$1.10	\$0.99	600
1"	31-35 mm	PP-100	\$2.28	\$1.90	\$1.64	\$1.30	\$1.17	500
1 1/4"	39-43 mm	PP-125	\$2.59	\$2.16	\$1.76	\$1.39	\$1.25	350
1 1/2"	47-51 mm	PP-150	\$2.90	\$2.30	\$1.83	\$1.46	\$1.36	225
2"	60-65 mm	PP-200	\$3.05	\$2.54	\$2.00	\$1.64	\$1.55	125
2 1/2"	72-77 mm	PP-250	\$5.68	\$4.73	\$4.47	\$4.08	\$3.78	150
3"	88-92 mm	PP-300	\$7.80	\$6.50	\$5.05	\$4.31	\$4.05	100

Technical specifications see page 82

PIPE EXTENDERS

Materials: PVC white
PVC sch40



FRAME AND GRATE

MODEL	DESCRIPTION	LIST PRICE	QTY./CART
FG-10-VG	10" X10" ABS FRAME & GRATE VGB APPROVED	\$102.96	1

INSIDE X SPIGOT SCH40			
SIZE	MODEL #	LIST PRICE	CARTON QTY.
1/2"	ISPX-050	\$2.38	50
3/4"	ISPX-075	\$2.38	50
1"	ISPX-100	\$3.56	50
1 1/2"	ISPX-150	\$4.75	50
2"	ISPX-200	\$5.24	50



INSERT FITTINGS



FOR POLYETHYLENE HOSE (HOSE INSIDE DIAMETER 1 & 5/8")

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CARTON
1 1/2"	150-MTH4	1 1/2" MIP X 1 1/2" HOSE BARB ABS (WHITE)	\$1.58	50
1 1/2"	150-SPH4	1 1/2" SPIGOT X 1 1/2" HOSE BARB PVC (WHITE)	\$1.74	50

FOR FLEX PVC OR EXTRUDED POOL HOSE (HOSE I.D. 1.5")

SIZE	MODEL #	DESCRIPTION	LIST PRICE	QTY./CARTON
1 1/2"	150-MTH4P	1 1/2" MIP X 1 1/2" POOL HOSE (ABS) BLACK	\$1.47	50
1 1/2"	150-SPH4P	1 1/2" SPIGOT X 1 1/2" POOL HOSE (PVC) GREY	\$1.73	50
1 1/2"	150-314	1 1/2" MIP X 1 1/2" POOL HOSE (CLEAR)	\$4.08	10
1 1/2"	150-HCOUP	1 1/2" POOL HOSE COUPLER	\$1.47	50
1 1/2"	150-317	1 1/2" DUAL HOSE (WHITE) ADAPTER	\$1.71	50
1 1/2"	150-258	50MM SPGT. X 1.5" - 1.25" HOSE BARB ABS WHITE	\$4.68	50

WINTERIZING PLUGS

SIZE	MODEL #	LIST PRICE
1/4"	025-PLG	\$0.75
1 1/2"	150-PLG	\$2.08
2"	200-PLG	\$5.23



SKIMMER SAFETY COVER

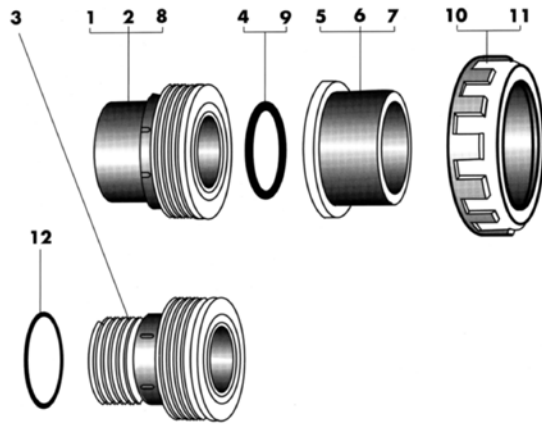
SIZE	MODEL #	LIST PRICE
SSC-12B	12" BEIGE SKIMMER SAFETY COVER	\$65.00
SSC-12W	12" WHITE SKIMMER SAFETY COVER	\$65.00
SSC-12G	12" GREY SKIMMER SAFETY COVER	\$65.00



PARTS - PVC UNIONS



PRAHER
PLASTICS

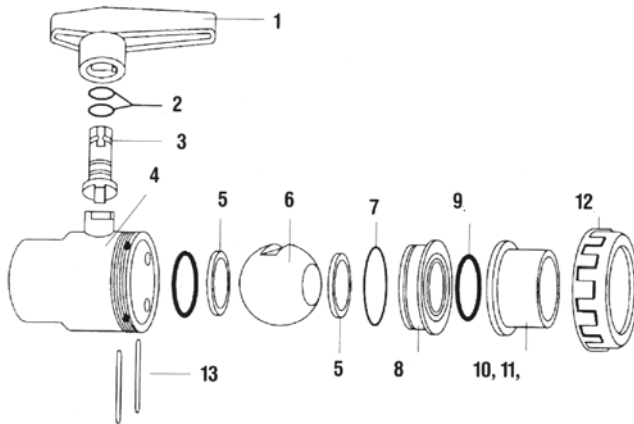


2 1/2"			
POS.	DESCRIPTION	MODEL #	LIST PRICE
1	UNION BODY-SLIP	U-2501S	\$9.00
3.1	UNION BODY MPT-HEAT	U-225-1MTH	\$12.00
4	O-RING	E-336	\$3.00
5	SOCKET SLIP	U-250-5S	\$6.00
10	STANDARD NUT	U-250-11	\$7.00
11	HIGH HEAT NUT	U-250-11H	\$9.00
12	O-RING FOR MPT	E331	\$2.10

1 1/2"				2"		3"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1	UNION BODY-SLIP	U-150-1S	\$3.30	U-200-1S	\$4.00	U-300-1S	\$20.00
2	UNION BODY-FPT	U-150-1FT	\$4.60	U-200-1FT	\$5.80	U-300-1FT	\$28.00
3	UNION BODY-MPT	U-150-1MT	\$4.00	U-200-1MT	\$4.90	U-300-1MT	\$22.00
3.1	UNION BODY-MPT-HEAT	U-150-1MTH	\$6.00	U-200-1MTH	\$8.00		
3.2	UNION BODY-MPT-HEAT-LONG			U-200-1MTH L	\$8.00		
4	O-RING	E328	\$1.40	E331	\$2.10	E74X6	\$22.00
5	SOCKET SLIP	U-150-3S	\$3.00	U-200-3S	\$3.60	U-300-3S	\$20.00
5.1	SOCKET SLIP	U-200-3SG	\$3.80	N/A	N/A	N/A	N/A
5.2	DOUBLE HOSE BARD END	U-150133	\$5.00				
6	SOCKET FPT	U-150-3T	\$4.10	U-200-3T	\$5.50	U-300-3T	\$24.00
11	STANDARD NUT	U-150-4	\$6.00	U-200-4	\$4.00	U-300-4	\$27.00
11.1	HIGH HEAT NUT	U-150-4H	\$6.00	U-200-4H			
12	O-RING FOR MPT	E224	\$1.00	E331	\$2.10		
2	63 MM BODY SLIP			U-200-163	\$5.00		
6	63 MM SOCKET SLIP			U-200-363	\$4.60		
6	50 MM SOCKET SLIP	U-150-350	\$4.00				

PARTS - PVC SINGLE UNION BALL VALVES

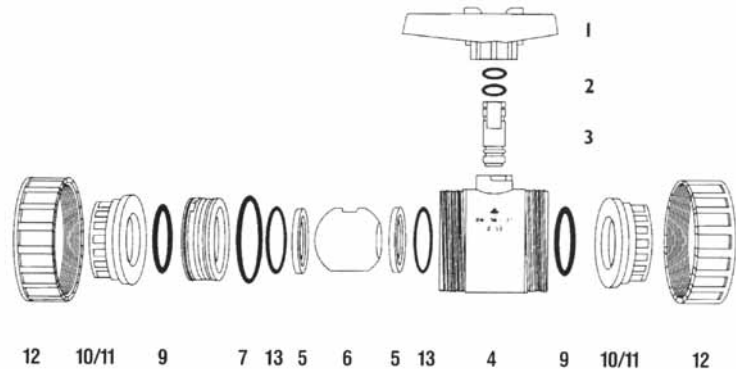
PARTS



*FOR 150 HBMAXII

POS.	DESCRIPTION	1/2"		3/4"		1"		1 1/2"		2"	
		MODEL #	LIST	MODEL #	LIST	MODEL #	LIST	MODEL #	LIST	MODEL #	LIST
1	HANDLE BLUE	SU-050-1B	\$3.75	SU-075-1B	\$3.80	SU-100-1B	\$3.80	SU-150-1B	\$2.00	SU-200-1B	\$4.00
1.1		-	-	-	-	-	-	SU-150-1 SHORT	\$2.00	-	-
2	STEM O-RINGS	N-9X2	\$0.50	N-111	\$0.50	N-111	\$0.50	N-113	\$0.50	N-115	\$0.55
3	STEM	TU-050-3	\$2.60	TU-075-3	\$2.85	TU-075-3	\$2.85	SU-150-3	\$3.00	SU-200-3	\$4.30
4	BODY-SLIP	SU-050-4	\$4.50	SU-075-4	\$4.80	SU-100-4	\$5.20	SU-150-4	\$6.00	SU-200-4	\$8.50
5	HDPE BALL SEAT	SU-050-5	\$0.90	SU-075-5	\$0.90	SU-100-5	\$0.90	SU-150-5	\$1.10	SU-200-5	\$1.50
6	BALL	SU-050-6	\$2.70	SU-075-6	\$2.90	SU-100-6	\$3.00	SU-150-6	\$3.80	SU-200-6	\$4.90
7	O-RING	N26X3	\$0.90	N-33X3	\$0.90	N38X3	\$0.90	N-142	\$1.00	N-232	\$2.05
8	RETAINER RING	SU-050-8	\$2.70	SU-075-8	\$2.80	SU-100-8	\$3.00	SU-150-8	\$3.90	SU-200-8	\$5.00
9	O-RING	N26X3	\$0.90	N-215	\$0.90	N-218	\$0.90	N-328	\$1.40	N-331	\$2.10
10	SLIP END	SU-050-10	\$2.60	SU-075-10	\$2.95	SU-100-10	\$3.10	SU-150-10	\$3.80	SU-200-10	\$4.70
11	THREADED END	SU-050-11	\$4.00	SU-075-11	\$4.80	SU-100-11	\$5.00	SU-150-11	\$7.00	SU-200-11	\$9.00
12	NUT	SU-050-12	\$3.60	SU-075-12	\$3.70	SU-100-12	\$3.80	SU-150-12	\$4.50	SU-200-12	\$6.00
13	PINS	-	-	-	-	-	-	SU-150-14	\$0.40	SU-200-14	\$0.50

PARTS - S6 PVC TRUE UNION BALL VALVES



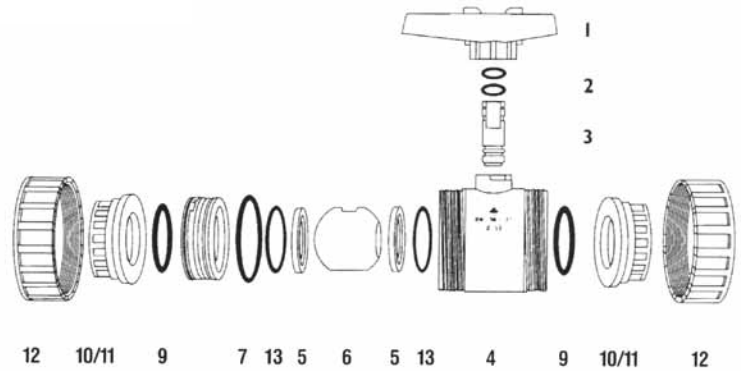
	#1 - HANDLE		#2 - STEM O-RINGS		#3 - STEM		#4 - BODY	
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1/2"	100593A	\$ 5.50	E10X2	\$ 1.60	140163	\$ 2.60	101929	\$ 8.90
3/4"	100594A	\$ 5.60	E111	\$ 1.68	160610	\$ 2.85	101930	\$ 9.00
1"	100805A	\$ 5.80	E111	\$ 1.68	140610	\$ 2.85	101931	\$ 9.25
1-1/4"	100595A	\$ 7.20	E113	\$ 1.75	140618	\$ 3.05		\$ 12.00
1-1/2"	100583A	\$ 7.30	E115	\$ 1.89	140094	\$ 4.20	101515A	\$ 13.00
2"	101169A	\$ 7.80	E115	\$ 1.89	140094	\$ 4.30	11516	\$ 16.00

	#5 - TEFLON BALL SEAT		#6 - BALL		#7 - CARRIER O-RING		#8 - RETAINER RING	
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1/2"	50940	\$ 4.40	101933	\$ 8.00	E28X3	\$ 4.20	101937	\$ 9.00
3/4"	50941	\$ 4.50	101934	\$ 8.60	E33X3	\$ 4.60	101938	\$ 10.00
1"	50942	\$ 5.00	101935	\$ 9.00	E38X3	\$ 6.00	101939	\$ 13.00
1-1/4"	50943	\$ 8.00	101936	\$ 10.00		\$ 7.00	101940	\$ 13.80
1-1/2"	50736	\$ 8.00	101517	\$ 13.00	E228	\$ 7.00	101513	\$ 14.00
2"	50737	\$ 10.00	101518	\$ 16.00	E232	\$ 7.00	101514	\$ 16.00

	#9 - FACE O-RING		#10 - UNION SOCKET END		#11 - UNION THREADED END		#12 - NUT	
SIZE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
1/2"	E22X3	\$ 4.00	100554	\$ 6.00	140417	\$ 7.00	101941	\$ 8.00
3/4"	E216	\$ 4.00	101021	\$ 6.00	140420	\$ 7.20	101942	\$ 8.60
1"	E218	\$ 4.00	100974	\$ 7.00	140423	\$ 8.90	101943	\$ 9.00
1-1/4"		\$ 5.50	101022	\$ 9.00	140426	\$ 9.90	101944	\$ 10.00
1-1/2"	E328	\$ 1.40	100560	\$ 9.50	140240	\$ 11.50	101519	\$ 13.00
2"	E331	\$ 2.10	100561	\$ 11.00	140405	\$ 15.00	101520	\$ 16.00



PARTS – S4 PVC TRUE UNION BALL VALVES



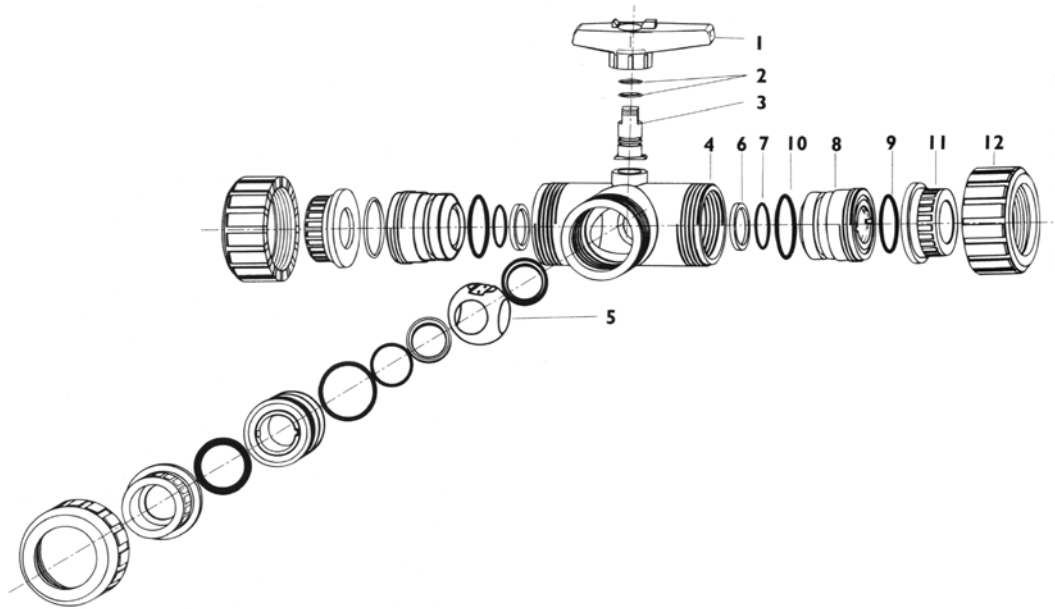
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	LIST PRICE	LIST PRICE
1/2"			3/4"		1"		
1	HANDLE	TU0501	\$3.47	TU0751	\$3.60	TU1001	\$3.78
2	O-RINGS	E10X2	\$1.60	E111	\$1.68	E111	\$1.68
3	STEM	TU0503	\$2.60	TU0753	\$2.85	TU0753	\$2.85
4	BODY	TU0504	\$6.90	TU0754	\$7.00	TU1004	\$7.25
5	BALL SEAT TEFLON	TU0505	\$4.40	TU0755	\$4.50	TU1005	\$5.00
6	BALL	TU0506	\$8.00	TU0756	\$8.60	TU1006	\$9.00
7	O-RING	E26X3	\$4.20	E33X3	\$4.60	E38X3	\$6.00
8	RETAINER RING	TU0508	\$9.00	TU0758	\$10.00	TU1008	\$13.00
9	O-RING	E20X3	\$4.00	E215	\$4.00	E218	\$4.00
10	SLIP SOCKET	TU05010	\$6.00	TU07510	\$6.00	TU10010	\$7.00
11	THREADED SOCKET	TU05011	\$7.00	TU07511	\$7.20	TU10011	\$8.90
12	NUT	TU05012	\$8.00	TU07512	\$8.60	TU10012	\$9.00
13	O-RING	E19X2	\$4.00	E25X2	\$4.00	E30X2	\$4.60
14	VITON O-RING KIT	TU050VK	\$40.00	TU075VK	\$43.00	TU100VK	\$51.00

1 1/4"			1 1/2"		2"		
1	HANDLE	TU1251	\$5.20	TU1501	\$5.30	TU2001	\$5.80
2	O-RINGS	E113	\$1.75	E115	\$1.89	E115	\$1.89
3	STEM	TU1253	\$3.05	TU1503	\$4.20	TU2003	\$4.30
4	BODY	TU1254	\$10.00	TU1504	\$11.00	TU2004	\$14.00
5	BALL SEAT TEFLON	TU1255	\$8.00	TU1505	\$8.00	TU2005	\$10.00
6	BALL	TU1256	\$10.00	TU1506	\$13.00	TU2006	\$16.00
7	O-RING	E50X3	\$7.00	E142	\$7.00	E233	\$7.00
8	RETAINER RING	TU1258	\$13.80	TU1508	\$14.00	TU2008	\$16.00
9	O-RING	E223	\$5.50	E328	\$1.40	E331	\$2.10
10	SLIP SOCKET	TU12510	\$9.00	TU15010	\$9.50	TU20010	\$11.00
11	THREADED SOCKET	TU12511	\$9.90	TU15011	\$11.50	TU20011	\$15.00
12	NUT	TU12512	\$10.00	TU15012	\$13.00	TU20012	\$16.00
13	O-RING	E126	\$4.00	E135	\$4.90	E58X3	\$10.00
14	VITON O-RING KIT	TU125VK	\$59.00	TU150VK	\$67.00	TU200VK	\$73.00

2 1/2"			3"		4"		
1	HANDLE	TU2501	\$10.00	TU3001	\$10.00	TU4001	\$10.00
2	O-RINGS	E24X3	\$4.00	E214	\$6.00	E214	\$6.00
3	STEM	TU2503	\$10.40	TU3003	\$14.00	TU3003	\$14.00
4	BODY	TU2504	\$48.00	TU3004	\$75.00	TU4004	\$83.00
5	BALL SEAT TEFLON	TU2505	\$30.00	TU3005	\$42.00	TU3005	\$42.00
6	BALL	TU2506	\$27.00	TU3006	\$48.00	TU3006	\$48.00
7	O-RING	E98X4	\$25.00	E124X5.7	\$33.00	E124X5.7	\$33.00
8	RETAINER RING	TU2508	\$28.00	TU3008	\$50.00	TU4008	\$59.00
9	O-RING	E75X6	\$20.00	E90X6	\$46.00	E347	\$46.00
10	SLIP SOCKET	TU25010	\$20.00	TU30010	\$45.00	TU40010	\$76.00
11	THREADED SOCKET	TU25011	\$33.00	TU30011	\$59.00	TU40011	\$88.00
12	NUT	TU25012	\$27.00	TU30012	\$48.00	TU40012	\$68.00
13	O-RING	E78X3	\$30.00	E94X3	\$42.00	E94X3	\$42.00
14	VITON O-RING KIT	TU250VK	\$155.00	TU300VK	\$282.00	TU400VK	\$304.00

DESCRIPTION	MODEL #	LIST PRICE
SLIP SOCKET 3/8"	TU03710	\$8.00
THR. SOCKET 3/8	TU03711	\$10.00

PARTS - PVC 3-WAY BALL VALVES



PARTS

POS.	DESCRIPTION	1"		1 1/2"		2"	
		MODEL #	LIST PRICE	MODEL #	LIST PRICE	LIST PRICE	LIST PRICE
1	L-HANDLE	3W1001L	\$3.78	3W1501L	\$4.62	3W2001L	\$4.62
1	T-HANDLE	3W1001T	\$3.78	3W1501T	\$4.62	3W2001T	\$4.62
2	O-RING	E111	\$1.62	E115	\$1.89	E115	\$1.89
3	STEM	TU0503	\$2.85	TU1503	\$4.20	TU1503	\$4.20
4	BODY	3W1004	\$20.58	3W1504	\$37.80	3W2004	\$46.20
5	L-BALL	3W1005L	\$12.39	3W1505L	\$13.44	3W2005L	\$18.06
5	T-BALL	3W1005T	\$12.39	3W1505T	\$13.44	3W2005T	\$18.06
6	BALL SEAT	3W1006	\$6.72	3W1506	\$7.56	3W2006	\$7.56
7	O-RING	E024	\$3.36	E129	\$4.20	E135	\$4.20
8	RETAINER RING	3W1008	\$7.98	3W1508	\$10.08	3W2008	\$10.92
9	O-RING	E218	\$4.00	E328	\$1.40	E331	\$2.10
10	CARRIER O-RING	E38X3	\$6.00	E228	\$5.00	E231	\$5.00
11	UNION SOCKET	TU10010	\$8.00	TU15010	\$11.00	TU20010	\$12.00
12	NUT	TU10012	\$9.00	3W15012	\$7.52	3W20012	\$13.65

VITON O-RING KITS

1"		1 1/2"		2"	
MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
3W10VK	\$27.77	3W15VK	\$37.44	3W-20VK	\$41.25



PARTS - INLINE STRAINER (500, 750, 1000 MICRON)

PARTS

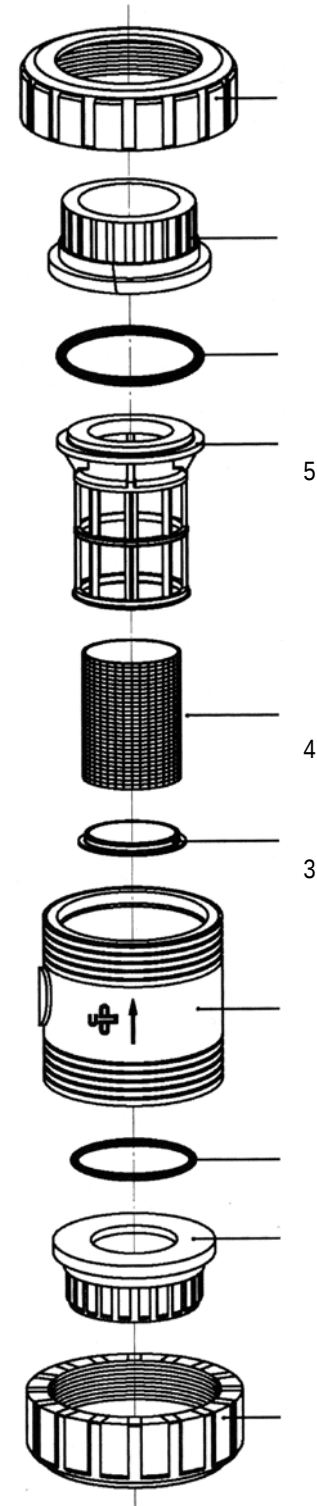
POS.	DESCRIPTION	MODEL #	SIZE	LIST PRICE
3	SCREEN RETAINER RING	101463	1/2"	\$10.00
3	SCREEN RETAINER RING	101464	3/4"	\$10.00
3	SCREEN RETAINER RING	101465	1"	\$10.00
3	SCREEN RETAINER RING	101466	1 1/4"	\$15.00
3	SCREEN RETAINER RING	101467	1 1/2"	\$15.00
3	SCREEN RETAINER RING	101468	2"	\$15.00
3	SCREEN RETAINER RING	101469	2 1/2"	\$15.00
3	SCREEN RETAINER RING	101470	3"	\$20.00
3	SCREEN RETAINER RING	101470	4"	\$20.00

4	500 MICRON SCREEN	50606	1/2"	\$20.00
4	500 MICRON SCREEN	50608	3/4"	\$20.00
4	500 MICRON SCREEN	50608	1"	\$20.00
4	500 MICRON SCREEN	50609	1 1/4"	\$35.00
4	500 MICRON SCREEN	50610	1 1/2"	\$35.00
4	500 MICRON SCREEN	50611	2"	\$38.00
4	500 MICRON SCREEN	50612	2 1/2"	\$60.00
4	500 MICRON SCREEN	50613	3"	\$60.00
4	500 MICRON SCREEN	50613	4"	\$60.00

4.1	750 MICRON SCREEN	50614	1/2"	\$20.00
4.1	750 MICRON SCREEN	50616	3/4"	\$20.00
4.1	750 MICRON SCREEN	50616	1"	\$20.00
4.1	750 MICRON SCREEN	50617	1 1/4"	\$30.00
4.1	750 MICRON SCREEN	50618	1 1/2"	\$30.00
4.1	750 MICRON SCREEN	50619	2"	\$38.00
4.1	750 MICRON SCREEN	50620	2 1/2"	\$60.00
4.1	750 MICRON SCREEN	50621	3"	\$60.00
4.1	750 MICRON SCREEN	50621	4"	\$60.00

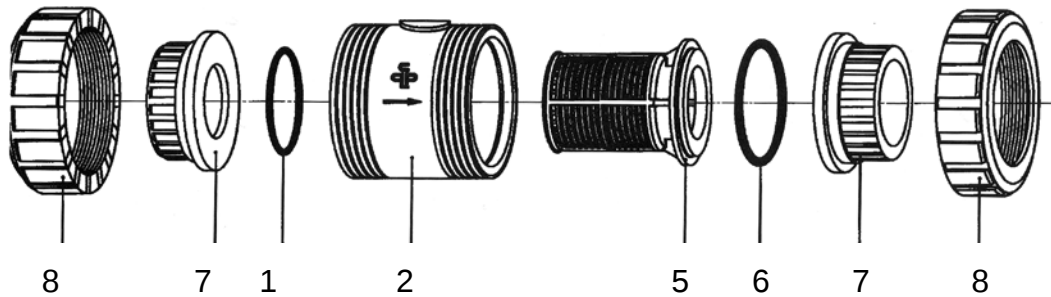
4.2	1000 MICRON SCREEN	50622	1/2"	\$20.00
4.2	1000 MICRON SCREEN	50624	3/4"	\$20.00
4.2	1000 MICRON SCREEN	50624	1"	\$30.00
4.2	1000 MICRON SCREEN	50625	1 1/4"	\$30.00
4.2	1000 MICRON SCREEN	50626	1 1/2"	\$38.00
4.2	1000 MICRON SCREEN	50627	2"	\$60.00
4.2	1000 MICRON SCREEN	50628	2 1/2"	\$60.00
4.2	1000 MICRON SCREEN	50629	3"	\$60.00
4.2	1000 MICRON SCREEN	50629	4"	\$60.00

5	SCREEN CAGE	100352	1/2"	\$30.00
5	SCREEN CAGE	100353	3/4"	\$30.00
5	SCREEN CAGE	100355	1"	\$30.00
5	SCREEN CAGE	100356	1 1/4"	\$30.00
5	SCREEN CAGE	100520	1 1/2"	\$40.00
5	SCREEN CAGE	100522	2"	\$40.00
5	SCREEN CAGE	100484	2 1/2"	\$60.00
5	SCREEN CAGE	100492	3"	\$60.00
5	SCREEN CAGE	100492	4"	\$60.00





PARTS - INLINE STRAINER (1800 MICRON)



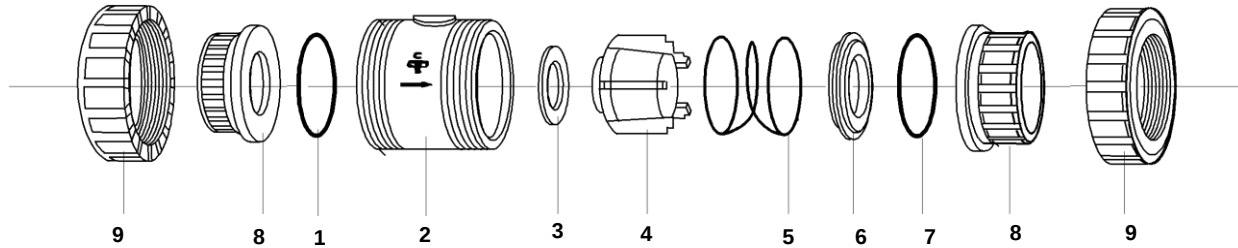
1/2"				3/4"		1"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL	LIST PRICE
1	O-RING	E 20X3	\$4.00	E 26X3.5	\$4.00	E 32X3.5	\$4.00
2	BODY	100475	\$12.00	100476	\$15.00	100477	\$20.00
5	1800 MICRON INSERT	100276	\$18.00	100277	\$18.00	100325	\$22.00
6	O-RING	E 216	\$7.00	E 35X3.5	\$7.00	E 40X3.5	\$12.00
7	SOCKET END CONNECTOR	100554	\$6.00	101021	\$6.00	100974	\$7.00
8	NUT	100454	\$8.00	100455	\$8.60	100456	\$9.00

1 1/4"				1 1/2"		2"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL	LIST PRICE
1	O-RING	E 40X3.5	\$5.50	E 328	\$8.60	E 331	\$8.80
2	BODY	100478	\$30.00	100479	\$30.00	100480	\$45.00
5	1800 MICRON INSERT	100326	\$30.00	100518	\$36.00	100521	\$40.00
6	O-RING	E 52X3.5	\$12.00	E 332	\$8.80	E 337	\$12.00
7	SOCKET END CONNECTOR	101022	\$9.00	100560	\$9.50	100561	\$11.00
8	NUT	100457	\$10.00	100423	\$13.00	100499	\$16.00

2 1/2"				3"		4"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL	LIST PRICE
1	O-RING	E 75X6	\$20.00	E 90X6	\$46.00	E 108X6	\$46.00
2	BODY	140971	\$80.00	140972	\$110.00	141039	\$100.00
5	1800 MICRON INSERT	100483	\$50.00	100491	\$88.00	100491	\$80.00
6	O-RING	E 100X6	\$46.00	E 130X6	\$48.00	E 130X6	\$48.00
7	SOCKET END CONNECTOR	140565	\$20.00	140020	\$50.00	140941	\$76.00
8	NUT	100550	\$27.00	100288	\$53.00	140688	\$68.00

PARTS - PVC DOUBLE UNION SPRING CHECK VALVES

PARTS



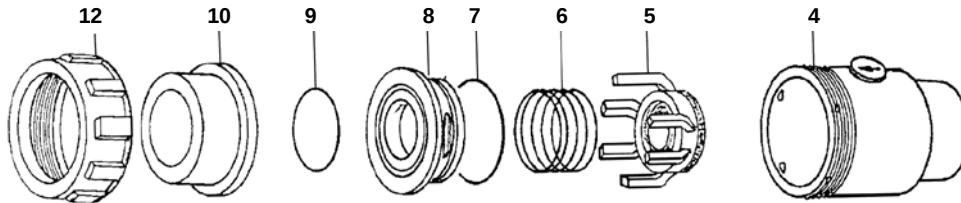
NOTE: End connector (pos. 8) and o-ring (pos. 1) as well as nuts (pos. 9) are identical to "PVC TRUE UNION BALL VALVES". Please refer to page 41.

1/2"				3/4"		1"		1 1/4"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
2	BODY	3-050-2	\$7.65	3-075-2	\$8.10	3-100-2	\$9.00	3-125-2	\$12.00
3	SEAL	3-050-3	\$2.00	3-075-3	\$2.10	3-100-3	\$3.00	3-125-3	\$3.80
4	CONE	3-050-4	\$10.41	3-075-4	\$10.60	3-100-4	\$13.00	3-125-4	\$13.50
5	SPRING	3-050-5	\$5.00	3-075-5	\$5.60	3-100-5	\$7.00	3-125-5	\$8.00
6	RETAINER RING	3-050-6	\$5.00	3-075-6	\$5.10	3-100-6	\$7.00	3-125-6	\$7.00
7	O-RING	E216	\$0.85	E220	\$1.21	E223	\$5.00	E226	\$2.40

1 1/2"				2"		2 1/2"		3"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE
2	BODY	3-150-2	\$12.10	3-200-2	\$13.10	3-250-2	\$52.00	3-300-2	\$65.00
3	SEAL	3-150-3	\$4.00	3-200-3	\$4.50	3-250-3	\$8.00	3-300-3	\$11.00
4	CONE	3-150-4	\$18.00	3-200-4	\$18.10	3-250-4	\$30.00	3-300-4	\$42.00
5	SPRING	3-150-5	\$10.10	3-200-5	\$12.00	3-250-5	\$18.00	3-300-5	\$23.00
6	RETAINER RING	3-150-6	\$7.50	3-200-6	\$8.10	3-250-6	\$10.10	3-300-6	\$18.00
7	O-RING	E332	\$3.00	E337	\$3.80	E100X6	\$6.10	E128X6	\$10.00



PARTS - PVC SINGLE UNION CHECK VALVES



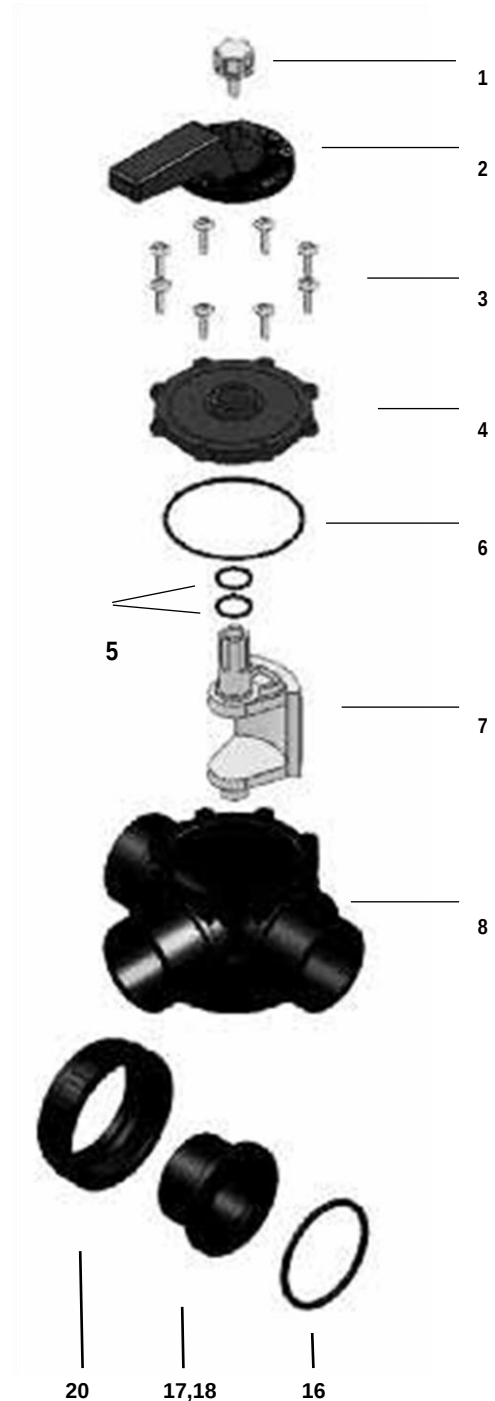
Note: Item (pos.) 6-12 are identical to pvc single union ball valve parts. (see page 44) not shown 2" spring guide

		1 1/2"		2"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE
6	¼ LB. SPRING	SPR-150025	\$5.60	SPR-200025	\$5.60
6	½ LB. SPRING	SPR-150050	\$5.60		
6	2 LB. SPRING	SPR-150200	\$5.60		
6	3 ½ LB. SPRING	SPR-150350	\$10.10		
6	5 LB. SPRING	SPR-150500	\$10.10		
6	10 LB. SPRING	SPR-1501000	\$11.20		
5	POPPET CONE ASSEMBLY	CV-150-5	\$7.00	CV-200-5	\$12.00
4	BODY	CV-150-4	\$7.80	CV-200-4	\$12.00
NOT SHOWN	2" SPRING GUIDE			CV-200-11	\$12.00

PARTS - 3 PORT VALVE PERMA-SEAL

PARTS

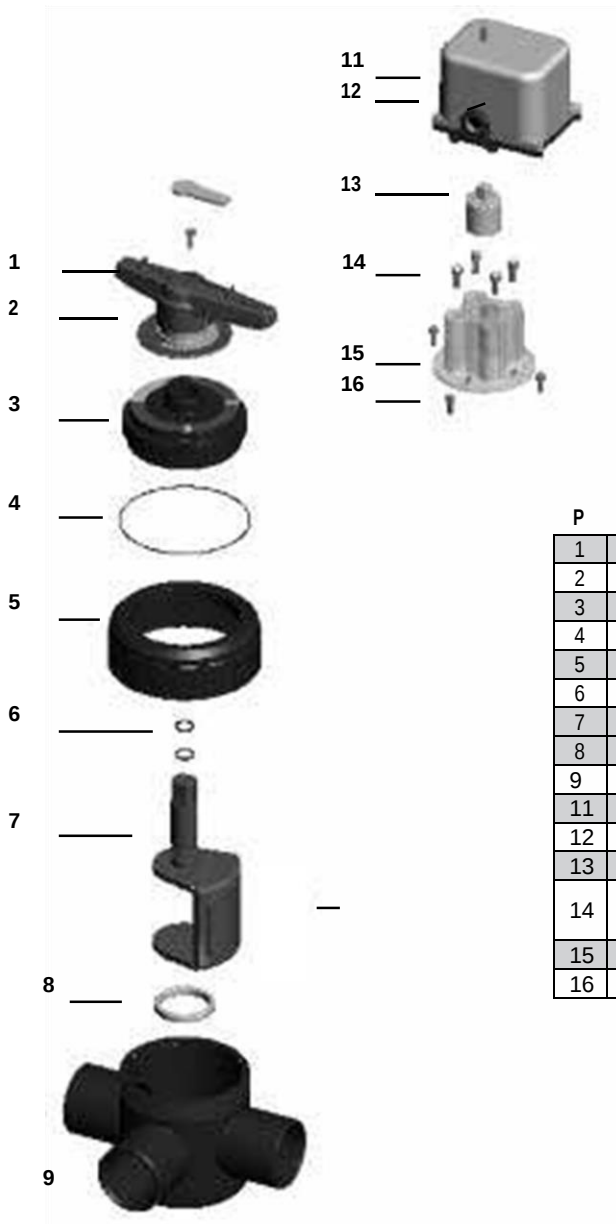
POS.	MODEL #	DESCRIPTION	LIST PRICE
1	OV3-200-1	KNOB-3 PORT VALVE (BLACK)	\$5.21
2	OV3-200-2	HANDLE-3PORT VALVE	\$6.42
2	OV2-200-FIH	FLOW INDICATOR HANDLE	\$6.42
3	OV3-200-3	# 14 X 3/4" SCREW P.T.	\$1.39
4	OV3-200-4	COVER-3PORT VALVE	\$4.34
5	E-116	O-RING	\$0.69
6	E-151	O-RING	\$1.09
7	OV3-200-7	ROTOR ASSY-3PORT VALVE	\$27.78
8	OV3-150-8	BODY-3PORT VALVE - 2"ASTM	\$41.67
8b	FCV-2BDY	2" CPVC body for check valve	\$21.55
9	OV3-150-9	BODY-3PORT VALVE 1 1/2" FIP	\$41.67
10	OV3-200-U	BODY-3PORT VALVE 1 1/2" OR 2" UNION*	\$41.67
11	OV2-200-11	BODY-2 PORT-2" ASTM SKT	\$33.00
12	OV2-200-12	BODY-90°-2" ASTM SKT	\$33.00
13	OV2-150-13	BODY-2 PORT-1.1/2" ASTM SKT	\$33.00
14	OV3-999	KEY-HUB ASSY (4-7)	\$33.90
15	OV3-10RB	REDUCER BUSHING 2"X1 1/2	\$4.00
16	N-231	O-RING FOR UNION	\$2.05
17	SU-150-10G	1.1/2" SOCKET FOR UNION	\$3.80
18	U-200-3SG	2" SOCKET FOR UNION	\$3.80
19	SU-150-11G	1 1/2" THREADED FIP UNION SOCKET	\$7.00
20	SU-150-12B	NUT FOR UNION BLACK	\$4.50
22	OV2-200-U	BODY-2 PORT FOR UNION	\$41.57
23	OV2-290-U	BODY-2 PORT-90° FOR UNION	\$41.57
24	SU-150-11MT	MALE THREADED END CONNECTOR 1 1/2" WHITE	\$5.00
25	SU-175-11MT	MALE THREADED END CONNECTOR 2" GREY	\$8.00
26	SU-175-11MH	2" BLACK MIP HIGH HEAT END CONNECTOR	\$11.00
27	SU-150-11MH	1.5" BLACK MIP HIGH HEAT END CONNECTOR	\$7.00
28	SU-150-10B	1.5" SOCKET END BLACK (SU)	\$4.50
29	U-200-3SB	2" SOCKET END BLACK (UNION)	\$4.50
	FCV-2002P	Plastic hinge pin for check valve	\$1.84
	FCV-2003	Flapper w. Gasket EPDM for check valve	\$8.71



FLOW INDICATOR HANDLE
 OV2-200 FIH



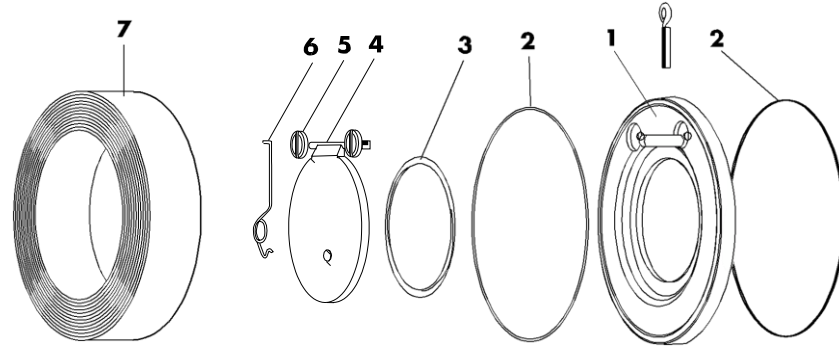
PARTS - BIG KAHUNA 3" PVC, 3 PORT ROTARY DIVERTER VALVE



P	DESCRIPTION	Q	MODEL #	LIST
1	VALVE HANDLE ABS RED	1	100303	\$35
2	POSITION INDICATOR W.LABEL	1	OV3-3003	\$18
3	VALVE COVER PVC WITH LABEL	1	OV3-3007	\$68
4	O-RING E-151-FOR COVER	1	E-251	\$10
5	4" PVC BALL VALVE NUT	1	101586	\$68
6	O-RING E-215 FOR ROTOR SHAFT	2	E-215	\$10
7	3" VALVE ROTOR OV3	1	OV3-3010	\$1.05
8	OV3 BUSHING POM 10/60/75	1	OV3-3009	\$33
9	OV3 PVC BODY ASTM 3" SPIGOT	1	OV3-3001	\$150
11	24vac ACTUATOR 600INCHLBS	1	LCR-24VAC-	\$1100
12	120VAC ACTUATOR 600INCH LBS	1	LCR-120VAC-	\$1100
13	ACTUATOR SHAFT COUPLING FOR OV3	1	OV3-30012	\$89
14	BELL HOUSING SCREWS 14-14-3/4 IND HEX WSR "B" T/S 18-8	4	14B75IWBS	\$15
15	CLEAR BELL HOUSING FOR OV3-3000	1	OV3-30011	\$55
16	ACTUATOR MOUNTING SCREWS OV3 3000	4	M8x20mm	\$22



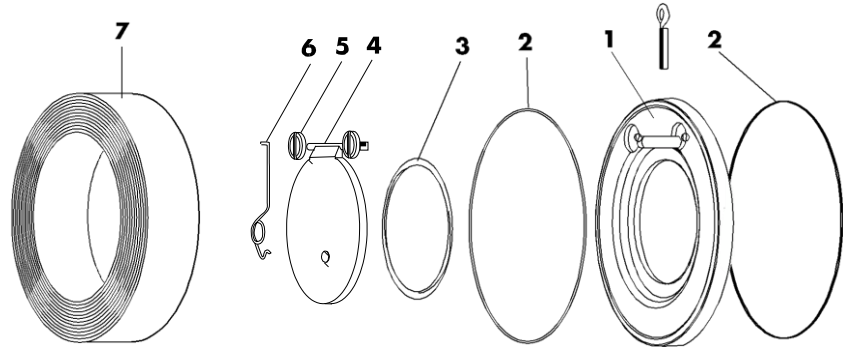
PARTS - PVC, PP & PVDF WAFER CHECK VALVES



2"					2 1/2"					3"				
POS.	DESCRIPTION	MODEL #		LIST PRICE	MODEL #		LIST PRICE		LIST PRICE			LIST PRICE		LIST PRICE
1	BODY-PVC	460-20-1		\$400.00	460-25-1		\$420.00		460-30-1			\$448.00		
1	BODY-PP	461-20-1		\$400.00	461-25-1		\$420.00		461-30-1			\$448.00		
1	BODY-PVDF	462-20-1		\$990.00	462-25-1		\$1,015.00		462-30-1			\$1,125.00		
2	O-RING EPDM	E235		\$3.25	E241		\$4.20		E245			\$5.12		
2	O-RING VITON	V235		\$11.00	V241		\$12.92		V245			\$15.10		
2	O-RING VITON/TEFLON	VT235		\$72.00	VT241		\$84.00		VT245			\$90.00		
3	O-RING EPDM	E220		\$1.21	E327		\$3.50		E331			\$2.10		
3	O-RING VITON	V220		\$5.00	V327		\$14.20		V331			\$14.70		
3	O-RING VITON/TEFLON	VT220		\$66.70	VT327		\$80.00		VT331			\$84.00		
4	DISC-PVC	460-20-4		\$60.00	460-25-4		\$63.00		460-30-4			\$69.00		
4	DISC-PP	461-20-4		\$60.00	461-25-4		\$63.00		461-30-4			\$69.00		
4	DISC-PVDF	462-20-4		\$130.00	462-25-4		\$165.00		462-30-4			\$225.00		
5	SCREW-PP	461-20-5		\$27.50	461-25-5		\$28.00		461-30-5			\$39.00		
6	SPRING STAINLESS ST.	460-20-6		\$71.00	460-25-6		\$84.00		460-30-6			\$86.00		
6.1	SPRING HASTELLOY	460-20-6.1		\$120.00	460-25-6.1		\$130.00		460-30-6.1			\$142.00		
7	SPACER PVC	3-20-7		\$76.50	3-25-7		\$93.75		3-30-7			\$128.00		
7	SPACER-PP	4-20-7		\$76.00	4-25-7		\$93.75		4-30-7			\$128.00		



PARTS - PVC, PP & PVDF WAFER CHECK VALVES



PARTS

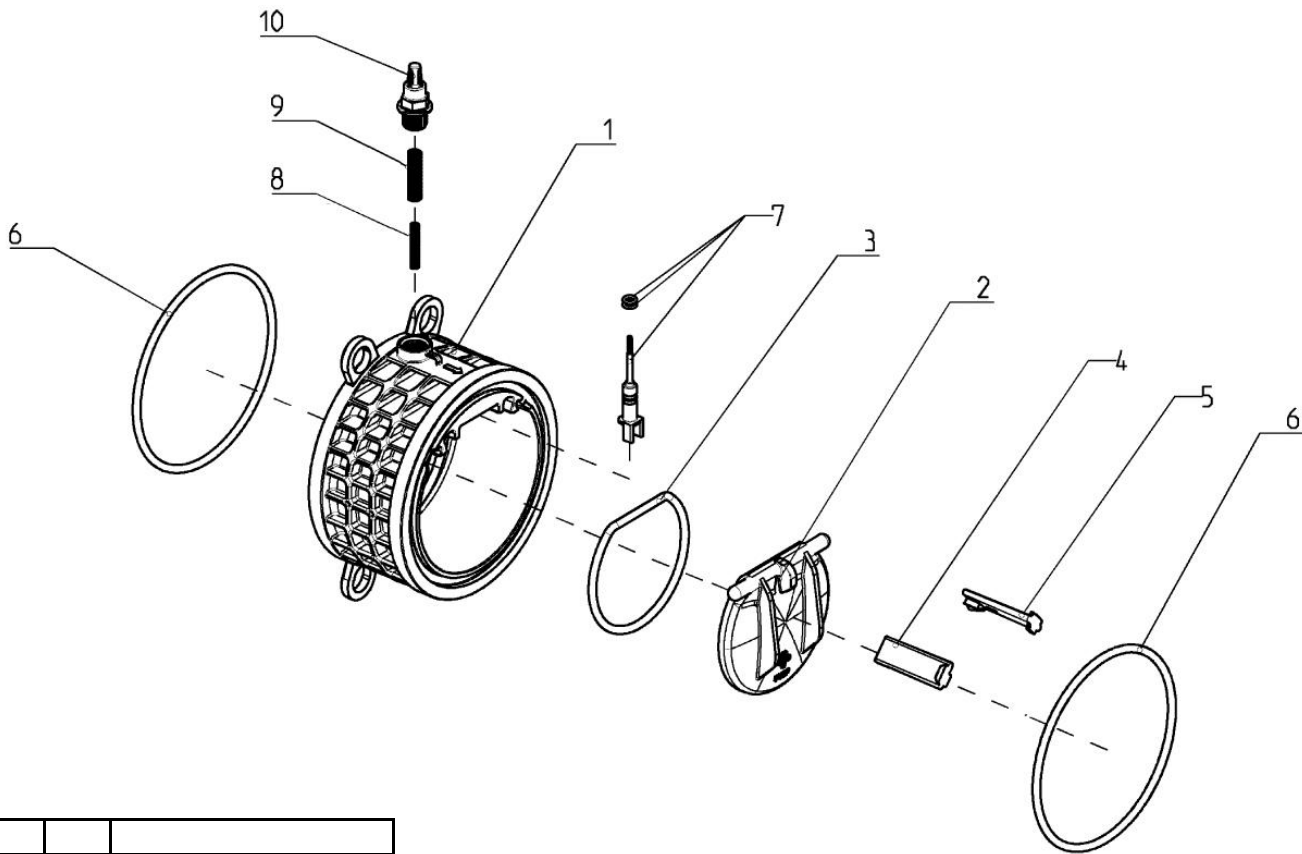
		4"		6"		8"		10"		12"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	LIST PRICE	LIST PRICE
1	BODY PVC	460-40-1	\$500.00	460-601	\$830.00	460-80-1	\$951.00	460-100-1	\$1,566.00	460-120-1	\$2,299.50
1	BODY-PP	461-40-1	\$500.00	461-60-1	\$830.00	461-80-1	\$951.00	461-100-1	\$1,566.00	461-120-1	\$2,299.00
1	BODY-PVDF	462-40-1	\$1,550.00	462-60-1	\$2,950.00	462-80-1	\$7,505.00	462-100-1	\$7,800.00	462-120-1	\$8,600.00
2	O-RING EPDM	E254	\$7.90	E264	\$13.00	E273	\$20.00	E278	\$25.70	E280	\$28.00
2	O-RING VITON	V254	\$18.50	V264	\$27.20	V273	\$36.50	V278	\$42.00	V280	\$51.00
2	RING VITON/TEFLON	VT254	\$96.00	VT264	\$128.00	VT273	\$160.00	VT278	\$170.00	VT280	\$188.00
3	O-RING EPDM	E336	\$5.12	E425	\$11.46	E437	\$18.44	E195X8	\$24.00	E230X8	\$28.00
3	O-RING VITON	V336	\$18.65	V425	\$42.00	V437	\$60.00	V195X8	\$290.00	V230X8	\$340.00
3	RING VITON/TEFLON	VT336	\$90.00	VT425	\$128.00	VT437	\$132.00	VT195X8	\$170.00	VT230X8	\$200.00
4	DISC-PVC	460-40-4	\$86.00	460-60-4	\$110.00	460-80-4	\$220.00	460-100-4	\$240.00	460-120-4	\$280.00
4	DISC-PP	461-40-4	\$86.00	461-60-04	\$110.00	461-80-4	\$220.00	461-100-4	\$240.00	461-120-4	\$280.00
4	DISC-PVDF	462-40-4	\$325.00	462-60-4	\$750.00	462-80-4	\$1,355.00	462-100-4	\$2,500.00	462-120-4	\$2,500.00
5	SCREW-PP	461-40-5	\$42.50	461-60-5	\$57.00	461-80-5	\$59.00	461-100-5	\$67.00	461-120-5	\$71.00
6	S.S. SPRING	460-40-6	\$90.00	460-60-6	\$110.00	460-80-6	\$115.00	460-100-6	\$190.00	460-120-6	\$230.00
6.1	SPRING HASTELLOY	460-40-6.1	\$155.00	460-60-6.1	\$175.00	460-80-6.1	\$180.00	460-100-6.1	\$200.00	460-120-6.1	\$255.00
7	SPACER PVC	3-40-7	\$156.25	3-60-7	\$260.42	3-80-7	\$381.95	3-100-7	N/A	3-120-7	N/A
7	SPACER-PP	4-40-7	\$156.25	4-60-7	\$260.42	4-80-7	\$381.95	4-100-7	N/A	4-120-7	N/A

PARTS - K4 SWING CHECK VALVE WITH SPRING



PRAHER
PLASTICS

PARTS

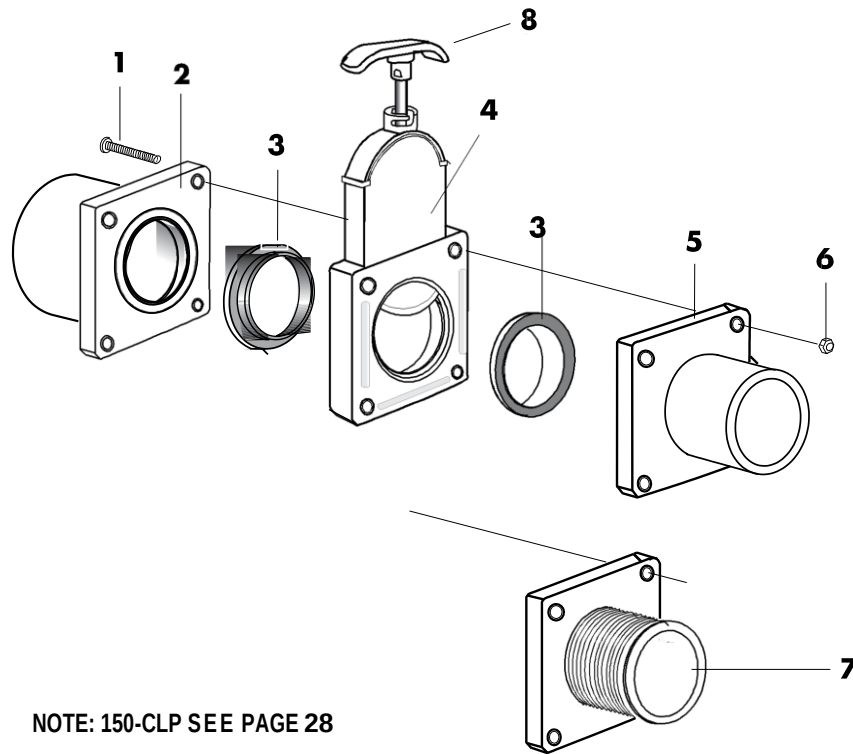


POS.	PCS.	DESCRIPTION
1	1	BODY
2	1	DISC
3	1	DISC O-RING
4	1	LEFT POST
5	1	RIGHT POST
6	2	BODY O-RING
7	1	INDICATOR PIN WITH O-RING
8	1	NON-WETTED 50 PSI SS SPRING
9	1	NON-WETTED 100 PSI SS SPRING
10	1	CAP, CLEAR

POS.	DESCRIPTION	3"		4"		6"		8"	
		MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LISTPRICE	MODEL #	LIST PRICE
3	FLAPPER O-RING (EPDM)	330-EP60	\$28.00	337-EP60	\$33.00	425-EP60	\$55.00	438-EP60	\$63.00
3	FLAPPER O-RING (VITON)	330-VP60	\$92.00	330-VP60	\$110.00	425-VP60	\$184.00		
4/5	FLAPPER W/ O-RING & LEFT & RIGHT	141745	\$138.00	141747	\$160.00	141749	\$221.00	141751	\$309.00
6	BODY O-RING (EPDM)	Q-346EP60	\$44.00	Q-354EP60	\$50.00	Q-441EP60	\$79.00	Q-233X7EP60	\$109.00
6	BODY O-RING (VITON)	Q-346VP60	\$130.00	Q-354VP60	\$165.00	Q-441VP60	\$265.00	Q-233X7VP60	\$364.00
7	INDICATOR PIN O-RING (EPDM)	109-EP60	\$17.00	109-EP60	\$17.00	109-EP60	\$17.00	109-EP60	\$17.00
7	INDICATOR PIN O-RING (VITON)	109-EP60	\$55.00	109-EP60	\$55.00	109-EP60	\$55.00	109-EP60	\$55.00
8	SMALL SPRING	50845	\$17.00	50845	\$17.00	50853	\$20.00	50853	\$20.00
9	LARGE SPRING	50844	\$17.00	50844	\$17.00	50852	\$20.00	50852	\$20.00
10	INDICATOR COVER	101764	\$10.00	101764	\$10.00	101789	\$10.00	101789	\$10.00



PARTS - PVC GATE VALVES



NOTE: 150-CLP SEE PAGE 28

		1 1/2"		2"		2 1/2"		3"		4"	
POS.	DESCRIPTION	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	MODEL #	LIST PRICE	LIST PRICE	LIST PRICE
1	BOLT (SET OF 4)	150-G1	\$4.00	150-G1	\$4.00	250-G1	\$4.80	-	-	-	-
1.1	SELF TAPING SCREW	-	-	-	-	-	-	300-G1.1	\$2.00	300-G1.1	\$2.00
1	BOLT 5/16" X 2	-	-	-	-	-	-	300-G1	\$5.00	300-G1	\$5.00
2	PVC-SOCKET END	150-G2	\$3.00	200-G2	\$4.00	250-G2	\$9.00	-	-	-	-
2	PVC-SOCKET END-ASTM	-	-	-	-	-	-	300-G2	\$41.66	400-G2	\$41.66
2.1	PVC-SOCKET END-METRIC	-	-	-	-	-	-	300-G2.1	\$41.66	400-G2.1	\$41.66
3	GASKET (SET OF 2)	150-G3	\$4.00	200-G3	\$4.60	250-G3	\$9.00	-	-	-	-
3	T.P.E. GASKET	-	-	-	-	-	-	300-G3	\$17.36	300-G3	\$17.36
4	BODY ASSEMBLY	150-BA	\$14.00	200-BA	\$14.00	250-BA	\$24.30	-	-	-	-
4	BODY ASSEMBLY INC. HANDLE	-	-	-	-	-	-	300-G4	\$69.44	300-G4	\$69.44
5	SPIGOT END PVC	150-G5	\$3.00	200-G5	\$4.00	250-G5	\$9.00	N/A	N/A	N/A	N/A
6	LOCKNUT (SET OF 4)	150-G6	\$1.00	150-G6	\$1.00	250-G6	\$2.60	-	-	-	-
6	5/16" S.S. HEXNUT	-	-	-	-	-	-	300-G6	\$3.47	300-G6	\$3.47
7	MPT-END PVC	150-G8	\$3.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	VALVE HANDLE ABS	150-G9	\$4.00	200-G9	\$4.00	250-G9	\$5.00	-	-	-	-
9	VALVE HANDLE	-	-	-	-	-	-	300-G9	\$13.89	300-G9	\$13.89



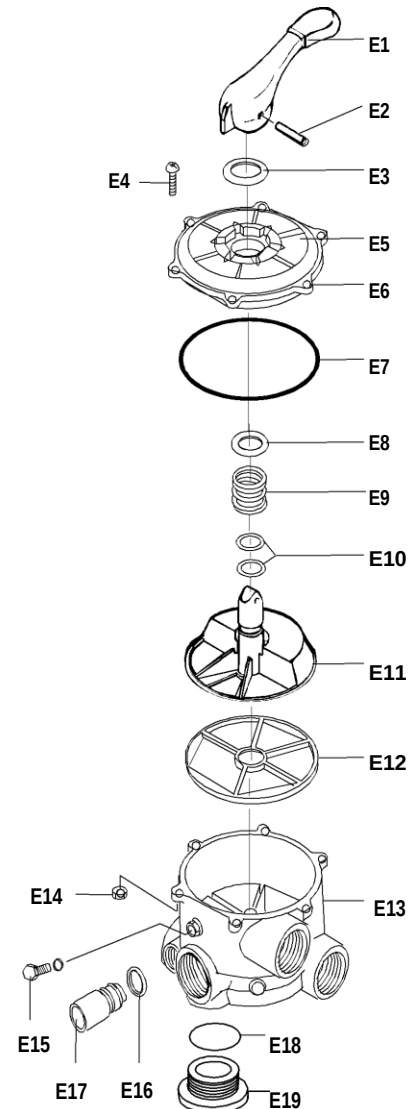
PARTS - ABS SIDE MOUNT MULTIPORT VALVES

PARTS

PO	DESCRIPTION	VALVE	MODEL #	LIST
E1	HANDLE ABS BLACK	1 1/2" & 2"	E-1-S1	\$7.00
E1	HANDLE ABS BLACK	3"	E-1-S3	\$70.00
E2	PIN (SS 304)	1 1/2" & 2"	E-2-S1	\$3.00
E2	PIN (SS 304)	3"	E-2-S3	\$10.00
E3	WASHER (P.O.M)	1 1/2" & 2"	E-3-S1	\$2.00
E3	WASHER (P.O.M)	3"	E-3-S3	\$10.00
E4	SCREW M6 (SS 304)	1 1/2", 2" & 3"	E-4-S1	\$1.00
E5	DECAL (ALU-FOILED)	1 1/2"	E-5-S1	\$6.00
E5	DECAL (ALU-FOILED)	2"	E-5-S2	\$6.00
E5	DECAL (ALU-FOILED)	3"	E-5-S3	\$28.00
E6	COVER ABS (WHITE)	1 1/2"	E-6-S1	\$12.00
E6	COVER ABS (BLACK)	1 1/2"	E-6-S1B	\$12.00
E6	COVER ABS (WHITE)	2"	E-6-S2	\$18.00
E6	COVER ABS (BLACK)	2"	E-6-S2B	\$18.00
E6	COVER ABS (WHITE)	3"	E-6-S3	\$200.00
E6	COVER ABS (BLACK)	3"	E-6-S3B	\$200.00
E6	HIGH PRESSURE COVER (BEIGE)	3"	141340	\$200.00

E6	<i>COVER ABS (WHITE)</i> NEW PART AS OF JANUARY 1, 2002	3"	140-561*	\$200.00
E7	O-RING-COVER, #252	1 1/2"	E-7-S1	\$4.00
E7	O-RING-COVER, #172X4	2"	E-7-S2	\$4.00
E7	O-RING-COVER, #250X6	3"	E-7-S3	\$28.00
E8	WASHER (P.O.M)	1 1/2" & 2"	E-8-S1	\$2.00
E8	WASHER (P.O.M)	3"	E-8-S3	\$10.00
E9	SPRING (SS 304)	1 1/2" & 2"	E-9-S1	\$9.00
E9	SPRING (SS 304)	3"	E-9-S3	\$50.00
E10	O-RING DIVERter #212	1 1/2" & 2"	E-10-S1	\$2.00
E10	O-RING DIVERter #215	3"	E-10-S3	\$30.00
E11	DIVERter (NORYL)	1 1/2"	E-11-S1	\$16.00
E11	DIVERter (NORYL)	2"	E-11-S2	\$18.00
E11	DIVERter (NORYL)	3"	E-11-S3	\$200.00

E11	<i>DIVERter WITH GASKET MOLDED</i> NEW PART AS OF JANUARY 1, 2002	3"	141-341	\$260.00
E12	SPIDER GASKET (T.P.E)	1 1/2"	E-12-S1	\$7.00
E12	SPIDER GASKET (T.P.E)	2"	E-12-S2	\$9.00
E12	SPIDER GASKET (T.P.E) 5spoke old style	3"	E-12-S3	\$70.00
E12	Spider Gasket (50054A) 4 spoke new style	3"	E-12B-S3	\$70.00
E13	VALVE BODY 1 1/2" N.P.T, SM-10-AO	1 1/2"	E-13-S1	\$36.00
E13	VALVE BODY 2" N.P.T, SM-20-AO	2"	E-13-S2	\$52.00
E13	VALVE BODY 2" N.P.T, SM-20-AO	2"	E-13-S2B	\$52.00
E13	VALVE BODY 3" SKT, SM-30-AO (WHITE)	3"	E-13-S3	Discontinued
E14	NUT M6 (SS 304)	1 1/2", 2" & 3"	E-14-S1	\$0.50
E15	1/4" PLUG (ABS) WHITE	1 1/2" & 2"	E-15-S1	\$1.00
E16	SIGHT GLASS GASKET	1 1/2" & 2"	E-16-S1	\$1.10
E17	SIGHT GLASS (LEXAN)	1 1/2" & 2"	E-17-S1	\$3.00



*THOSE ITEMS ARE REQUIRED FOR SERVICING VALVES
 MANUFACTURED AFTER JANUARY 1, 2002

Spider gasket replacement for Multiport Backwash Valves-see page 70 for instructions



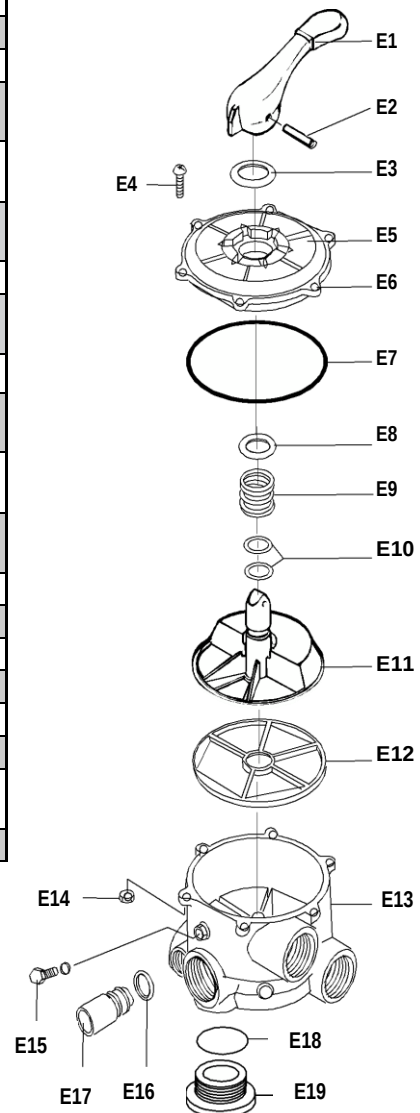
PARTS - ABS SIDE MOUNT CONTINUED

POS.	DESCRIPTION	VALVE SIZE	MODEL #	LIST PRICE
E-18	O-RING-AO. PLUG THREADED	1 1/2"	E-18-S1	\$1.00
E-18	O-RING-AO. PLUG THREADED	2"	E-18-S2	\$1.00
E-19	A.O PLUG 1 1/2" MPT-WHITE	1 1/2"	E-19-S1	\$5.00
E-19	A.O PLUG 2" MPT-WHITE	2"	E-19-S2	\$6.00
E-19	A.O PLUG 2" MPT-BLACK	2"	E-19-S2B	\$6.00
E-19	A.O PLUG 2" SPIGOT-BLACK	2"	E-19-S2SB	\$6.00
E-19	A.O PLUG 3" SPIGOT-WHITE	3"	E-19-S3	\$20.00
E-19	A.O PLUG 3" SPIGOT-BLACK	3"	E-19-S3B	\$20.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) WHITE	1 1/2"	E-50-S1	\$70.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) WHITE	2"	E-50-S2	\$80.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) WHITE OLD STYLE - W/O GASKET	3"	E-50-S3	\$640.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) BLACK NEW STYLE - WITH GASKET	3"	E-50-S3B	\$640.00
E-50	KEY HUB ASSEMBLY WITH GASKET WHITE NEW PART AS OF JANUARY 1, 2002	3"	130711*	\$640.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) BLACK	1 1/2"	E-50-S1B	\$70.00
E-50	KEY HUB ASSEMBLY for TM-12-JL7 and TM-12-CFC	1 1/2"	E-50-S1BJL	\$70.00
E-50	KEY HUB ASSEMBLY (POS. E1-E11) BLACK	2"	E-50-S2B	\$80.00
E-55	BODY ASSEMBLY (#12-#19) SM-10AO-WHITE	1 1/2"	E-55-S1	\$48.00
E-55	BODY ASSEMBLY (#12-#19) SM-20AO-WHITE	2"	E-55-S2	\$66.00
E-55	BODY ASSEMBLY (#12-#19) SM-20AO-BLACK	2"	E-55-S2B	\$66.00
E-55	BODY ASSEMBLY, SM1-HP3, WHITE	1 1/2"	E-55-S1HP3	\$85.00
E-55	BODY ASSEMBLY, SM1-HP2, WHITE	1 1/2"	E-55-S1HP2	\$85.00
E-55	BODY ASSEMBLY, SM1-PP3, WHITE	1 1/2"	E-55-S1PP3	\$85.00
E-55	BODY ASSEMBLY, SM1-PP2, WHITE	1 1/2"	E-55-S1PP2	\$85.00
E-55	BODY ASSEMBLY, SM2-PP3, WHITE	2"	E-55-S2PP3	\$110.00
E-55	BODY ASSEMBLY, SM2-PP2, WHITE	2"	E-55-S2PP2	\$110.00
E-55	BODY ASSEMBLY, SM2-SR2, BLACK OLD STYLE	2"	E-55-SR2	\$110.00
E-55	BODY ASSEMBLY, 3" ABS WHT, SKT	3"	100304	\$490.00

*THOSE ITEMS ARE REQUIRED FOR SERVICING VALVES
 MANUFACTURED AFTER JANUARY 1, 2002 (E-1E-12)
 ALL 1 1/2" AND 2" E-55 BODY ASSEMBLIES ARE FIP
 PORTS!

Spider gasket replacement for Multiport Backwash Valves

-see page 57 for instructions





PARTS - ABS TOP MOUNT VALVES

NOTE:

Please refer to parts list for side mounted valves for the following parts

E-1 through E4

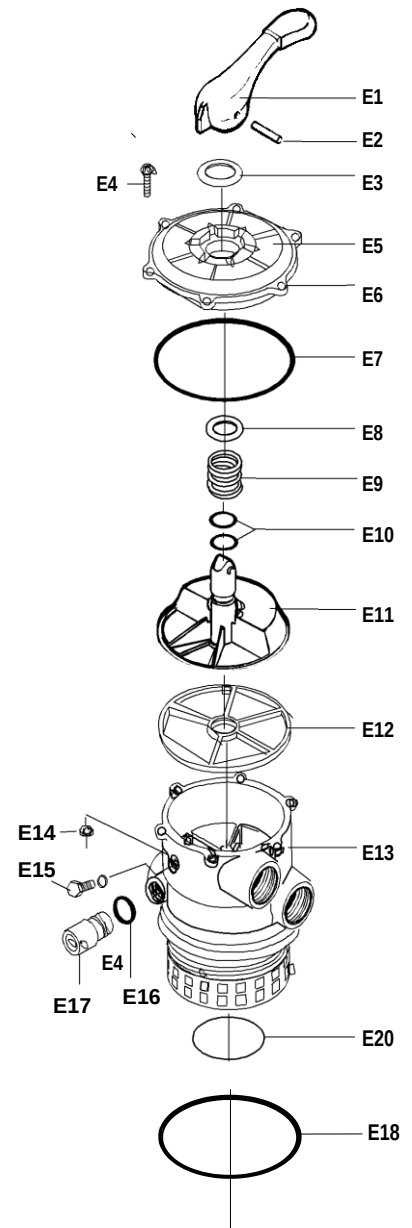
E-6 through E12

E-14 through E17

E-50

PARTS

POS.	DESCRIPTION	VALVE SIZE	MODEL #	LIST PRICE
E5	DECAL ALU-FOILED	1 1/2"	E5-T1	\$6.00
E5	DECAL ALU-FOILED	2"	E5-T2	\$6.00
E13	BODY	1 1/2", 2"	SEE BELOW	N/A
E18	#439, (1/8" THICK) SQUARE FLANGE GASKET FOR TM-12-E, 22-E	1 1/2", 2"	E-18-T439	\$7.00
E18	#1744 (1/4" THICK) SQUARE FLANGE GASKET FOR TM-12-E, TM-22-E	1 1/2", 2"	E-18-T1744	\$7.00
E18	O-RING #442 FOR TM-12-L, 22-L, TM-12-H8	1 1/2", 2"	E-18-442	\$6.00
E18	O-RING #146 FOR TM-12-A, TM-12-B	1 1/2"	E-18-146	\$6.00
E18	FLANGE O-RING #363 FOR TM-22-PB	2"	E-18-363	\$7.00
E18	FLANGE O-RING #365 FOR TM-22-H8	2"	E-18-365	\$7.00
E20	O-RING #225 FOR 1 1/2" STANDPIPE	1 1/2"	E-20-T1	\$1.00
E20	O-RING #229 FOR 2" STANDPIPE	2"	E-20-T2	\$2.00
E55	BODY ASSEMBLY TM-12-A WHITE	1 1/2"	E55-T12A	\$70.00
E55	BODY ASSEMBLY TM-12-B BLACK	1 1/2"	E55-T12B	\$70.00
E55	BODY ASSEMBLY TM-12-E BLACK	1 1/2"	E55-T12E	\$70.00
E55	BODY ASSEMBLY TM-12-S BLACK	1 1/2"	E55-T12S	\$70.00
E55	BODY ASSEMBLY TM-12-S8 BLACK	1 1/2"	E55-T12S8	\$70.00
E55	BODY ASSEMBLY TM-12-H BLACK	1 1/2"	E55-T12H8	\$70.00
E55	BODY ASSEMBLY TM-12-L BLACK	1 1/2"	E55-T12L	\$70.00
E55	BODY ASSEMBLY TM-12-PB BLACK	1 1/2"	E55-T12PB	\$70.00
E55	BODY ASSEMBLY TM-12-BH9 BLACK	1 1/2"	E55-T12BH9	\$70.00
E55	BODY ASSEMBLY TM-12-CFC	1 1/2"	E55-T12CFC	\$70.00
E55	BODY ASSEMBLY TM-22-L	2"	E55-T22L	\$100.00
E55	BODY ASSEMBLY TM-22-JAC	2"	E55-T22JAC	\$100.00
E55	BODY ASSEMBLY TM-22-PB	2"	E55-T22PB	\$100.00
E55	BODY ASSEMBLY TM-22-E	2"	E55-T22E	\$100.00
E55	BODY ASSEMBLY TM-22-PA	2"	E55-T22PA	\$100.00


Spider gasket replacement for Multiport Backwash Valves

- see page 57 for instructions



FREQUENTLY ASKED QUESTIONS

Spider gasket replacement for Multiport Backwash Valves

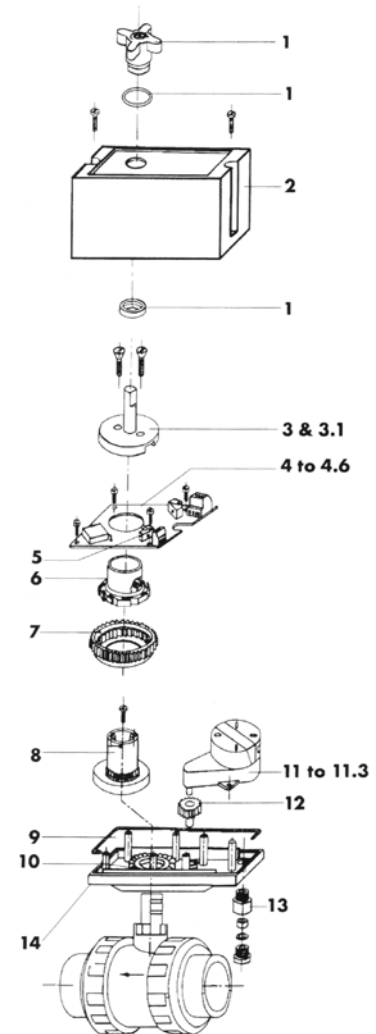
1. Stop pump and release all pressure from system.
2. Place the selector handle at the "winterize" position (this lifts the plug off the seat).
3. Remove the bolts and nuts holding the cover to the valve body.
Remove the cover assembly.
4. Remove the old gasket from the valve body.
5. Make sure that the gasket groove is free of water, grease, oils, debris and parts of the old gasket. Use alcohol to degrease.
6. **NOTICE:** Once this step is started, continue through Step 10 without interruption.
Using Loctite® 401, 403 and 416 apply glue sparingly (a bead about 1/16" wide) to the bottom only (not the sides) of the spider groove in the valve body. The glue lines must be continuous and intersect at the intersections of the grooves.
7. Insert the new gasket into the groove with the rounded bead up. Press the gasket firmly into all groove areas to seat the new gasket evenly.
8. Align the tab on the cover assembly with pin on the valve body, fastening it with the bolts and nuts removed in Step 3. Tighten all bolts evenly.
9. Depress the valve handle and rotate it to the closest standard position (FILTER or RINSE), being careful not to rub the plug on the new gasket. Release the handle, allowing the plug to hold the gasket in place while curing.
10. Minimum cure time is 2 hours. Curing for 24 hours is recommended for full strength.



PARTS - LIGHT DUTY (\$5.10) ACTUATOR

PARTS

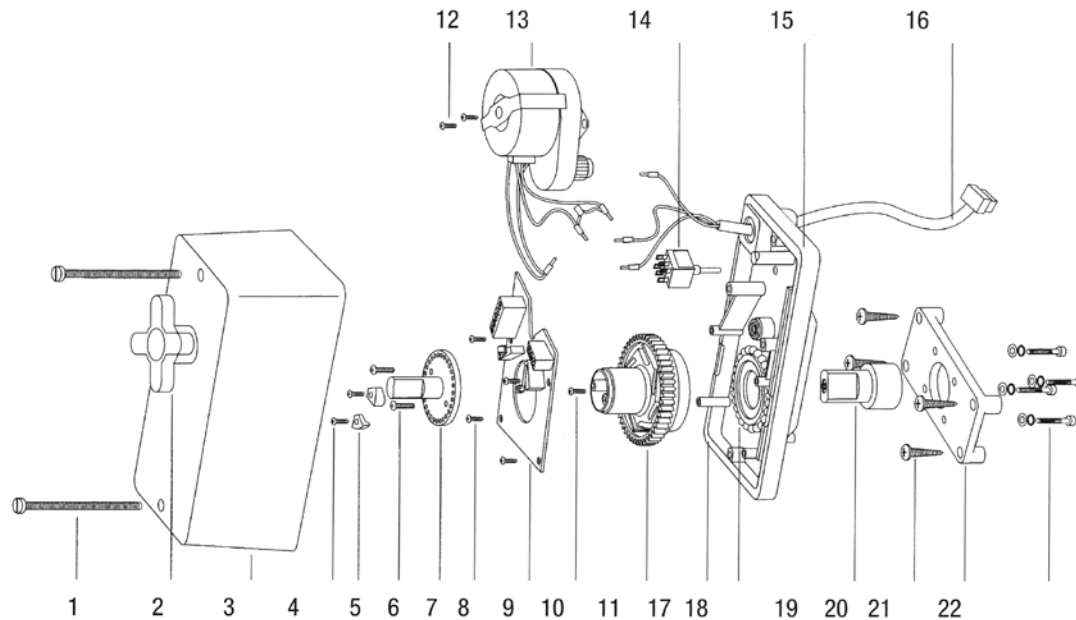
POS.	DESCRIPTION	MODEL #	LIST PRICE
1	MANUAL OVERRIDE HANDLE C/W HANDLE, O-RINGS, SNAP RING	5510-1	\$27.84
2	ACTUATOR COVER W. MOUNTING SCREWS	5510-2	\$32.00
3	CAM DISC FOR 2-WAY VALVE	5510-3	\$17.40
3.1	CAM DISC FOR 3-WAY VALVE	5510-31	\$17.40
4	CIRCUIT BOARD COMPLETE 2-WAY VALVE WITH CAPACITOR FOR 24V MOTOR/60	5510-424	\$156.60
4.1	CIRCUIT BOARD COMPLETE 2-WAY VALVE WITH CAPACITOR FOR 110V MOTOR/60	5510-4110	\$161.00
4.2	CIRCUIT BOARD COMPLETE 2-WAY VALVE WITH CAPACITOR FOR 220V MOTOR/60	5510-4220	\$161.00
4.3	CIRCUIT BOARD COMPLETE 3-WAY VALVE WITH CAPACITOR FOR 24V MOTOR/60 (2 POS.)	5510-4324	\$175.00
4.4	CIRCUIT BOARD COMPLETE 3-WAY VALVE WITH CAPACITOR FOR 110V MOTOR/60 (2 POS.)	5510-4411	\$175.00
4.5	CIRCUIT BOARD COMPLETE 3-WAY VALVE WITH CAPACITOR FOR 24V MOTOR/60 (4 POS.)	5510-4524	\$175.00
4.6	CIRCUIT BOARD COMPLETE 3-WAY VALVE WITH CAPACITOR FOR 110V MOTOR/60 (4 POS.)	5510-4611	\$179.00
5	LIMIT SWITCH-OMRON	5510-50M	\$20.00
6	CLUTCH	5510-6	\$22.50
7	MAIN DRIVE GEAR (Z=64)	5510-7	\$28.00
8	STEM ADAPTER	5510-8	\$30.00
9	HOUSING GASKET	5510-9	\$5.00
10	STEEL BALL BEARING DIA. 6MM	5510-10	\$0.60
11	MOTOR 24VAC/60 HZ	5510-11	\$208.80
11.1	MOTOR 110VAC/60 HZ	5510-111	\$208.80
11.2	MOTOR 220VAC/60 HZ	5510-112	\$208.80
11.3	MOTOR 220VAC/50 HZ	5510-113	\$208.80
12	DRIVE GEAR (Z15)	5510-12	\$5.00
13	CABLE STRAIN RELIEF BRUSHING	5510-13	\$6.00
14	ACTUATOR BASE PLATE	5510-14	\$56.00



PARTS FOR MVO LIGHT DUTY ACTUATOR EO510

POS.	DESCRIPTION	MODEL #	LIST PRICE
4.7	CIRCUIT BOARD 12-230 AC/DC	31326	\$220.00
11.4	6VDC MOTOR WITH GEAR BOX	141651	\$250.00

PARTS - 3-PVA - ACTUATOR

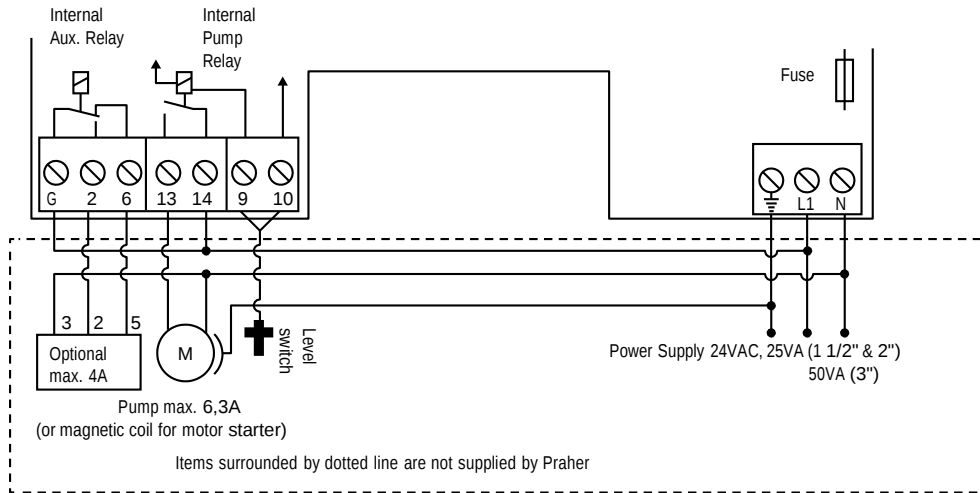


POS.	DESCRIPTION	MODEL #	LIST PRICE
1	SCREW M4 X 75	800085	\$2.00
2	POSITION INDICATOR COMPLETE	100120	\$6.00
3	BLACK ACTUATOR COVER	101180	\$32.00
4	SCREW 2.9 X 9.5	0800012	\$0.60
5	CAM	3-PVA-P5	\$2.00
6	SCREW 4.2.16	08001	\$1.00
7	CAM DISC	3-PVA-P7	\$12.00
8	SCREW 2.9 X 9.5	0800012	\$0.60
9	CIRCUIT BOARD WITHOUT CAPACITOR	180086	\$120.00
10	SCREW 2.9 X 19	80084	\$1.00
11	MAIN GEAR WITH CLUTCH	100113	\$45.00
12	SCREW 2.9 X 13	08002	\$1.00
13	24VAC MOTOR WITH CAPACITOR	140096	\$208.00
14	TOGGLE SWITCH	27941	\$30.00
15	ACTUATOR BASE PLATE	140941	\$56.00
16	WIRE HARNESS 16" WITH PLUG	9491-60	\$40.00
17	GASKET	140900	\$6.00
18	STEEL BALL	50059	\$0.60
19	DRIVER	3-PVA-P19	\$5.00
20	SCREW #14 X 1.5"	3-PVA-P20	\$1.00
21	ADAPTER PLATE	3-PVA-P21	\$12.00
22	SCREW M5 X 16	3-PVA-P22	\$1.00



AQUASTAR E-6000/F (1 1/2", 2", 3")

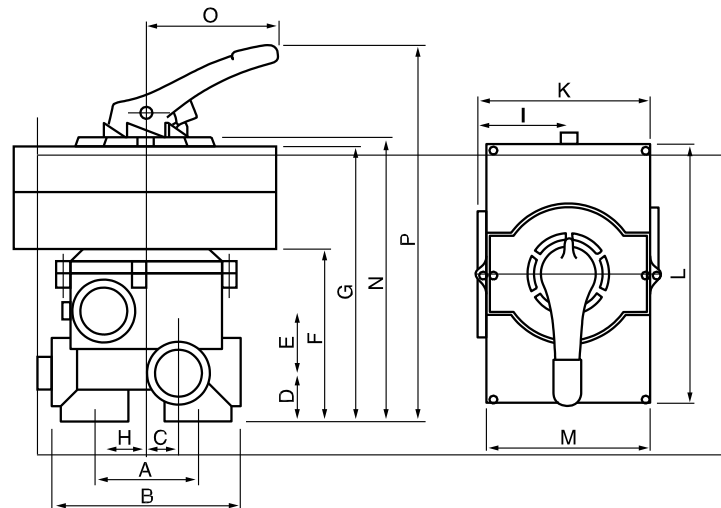
TECHNICAL DATA



Power supply	24 VAC, 50 or 60Hz
Pump control relay (Terminal 13 & 14)	max. 6.3 Amp.
Ball valve auxiliary relay (Term. G, 2, & 6)	max. 4 Amp.
Available with the following pressure switches:	
MSPS-FF-100SS	range: 0.69 - 6.9 bar (10 PSI - 100 PSI)
MSPS-FF-15SS	range: 0.10 - 1.0 bar (1.45 PSI - 14.5 PSI)
Enclosure	IP 54
Valve size	1 1/2" (70 GPM), 2" (120 GPM)
Backwash time	adjustable with built in potentiometer: 1 min. - 11 min.
Rinse time	adjustable with built in potentiometer: 20 sec.-4 min. 20 sec.
Delayed pump cut in	20 sec.
Pump and Backwash timer	"Graesslin" 2 channel digital timer with battery backup
Max. Valve operating pressure	50 PSI
Fireman cycle delay time	adjustable with built in potentiometer: 25 sec. - 25 min.

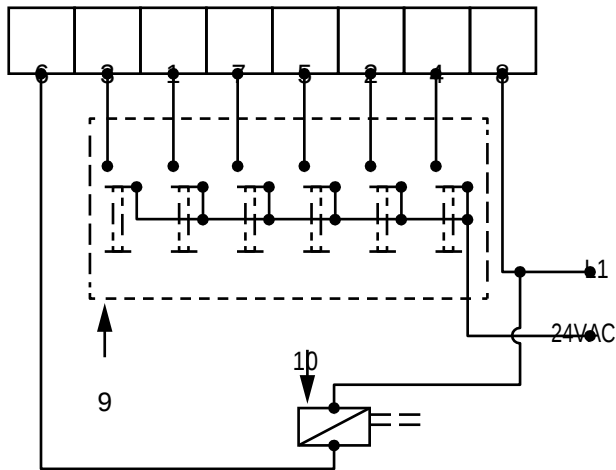
SIDE MOUNTED VALVES

	1 1/2"	2"
	inch	inch
A	3.4	4.33
B	7.16	8.98
C	1.26	1.5
D	1.85	2.36
E	2.36	3.19
F	6.46	8.27
G	10.63	12.28
H	1.5	1.34
I	3.44	4.53
K	6.89	9.05
L	10.04	9.84
M	6.3	6.3
N	11.02	12.68
O max.	5.31	5.31
P max.	14.88	16.53
weight.	13 lbs.	14 lbs.



Also available are 1 1/2" and 2" top mounted valves.

MULTIPOSITION MP-AQUASTAR



6. Pump relay control contact
3. Backwash position
1. Valve closed (no flow through inlet port)
7. Recirculation (bypass of filter)
5. Drain (to drain pool)
2. Filter (filter water)
4. Rinse position
8. L1, power supply (furnished by others)
9. PLC signals or relays (furnished by others)
10. Magnetic coil of pump motor starter (furnished by others)

TECHNICAL DATA

Wiring schematics:

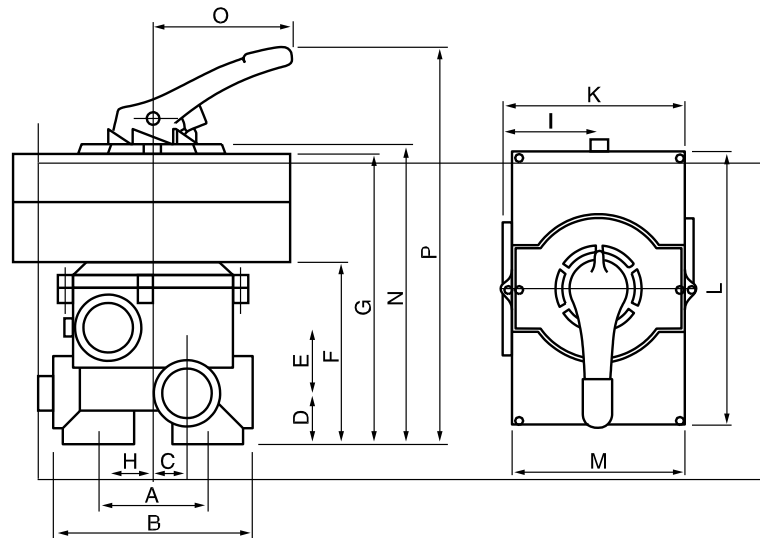
Terminal strip on circuit board:

Note: Only one of six position circuits (3, 1, 7, 5, 2 and 4) can be closed at a time.

POWER SUPPLY	24 VAC, (25 VA - 1.5" AND 2", 50 VA - 3")
Flow rates	1.5" (70 GPM), 2" (120 GPM), 3" (280 U.S. GPM max.)
Max. Valve operating pressure	50 PSI

SIDE MOUNTED VALVES

	1.5"	2"	3"
	inch	inch	inch
A	3.4	4.33	6.69
B	7.16	8.98	13.0
C	1.26	1.5	1.97
D	1.85	2.36	3.37
E	2.36	3.19	4.33
F	6.46	8.27	12.0
G	10.63	12.28	17.16
H	1.5	1.34	1.97
I	3.44	4.53	6.5
K	6.89	9.05	13.0
L	10.04	9.84	9.84
M	6.3	6.3	6.3
N	11.02	12.68	
O max.	5.31	5.31	
P max.	14.88	16.53	
weight.	13 lbs.	14 lbs.	24 lbs.

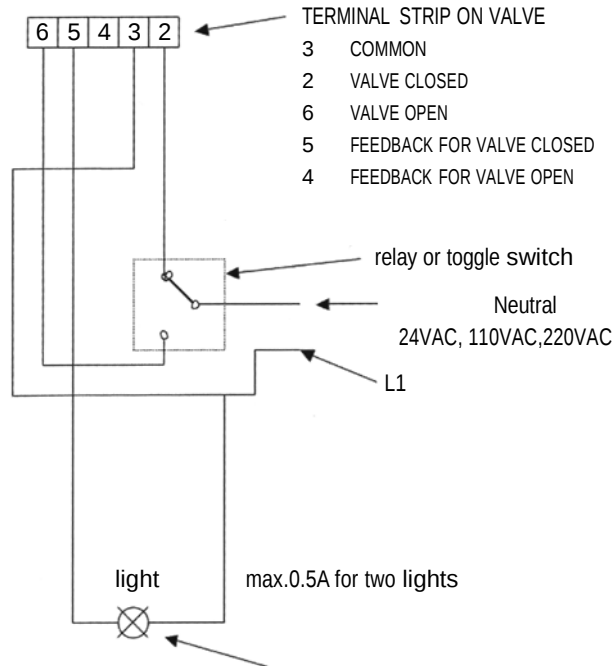


Also available are 1 1/2" and 2" top mounted valves.



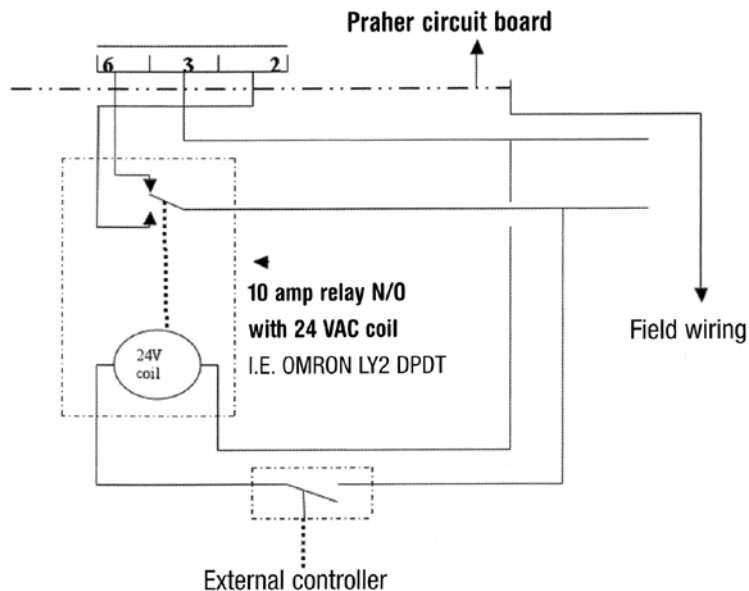
WIRING DIAGRAM FOR LIGHT DUTY S5.10 PRAHER ELECTRIC ACTUATORS

AC- VOLTAGE 24/110/220, 2-way valves



PRAHER S5.10 LIGHT DUTY VALVE ACTUATOR 24 VAC

Field wiring for N/O N/C relay
Diagram is showing N/O setup



If the external controller (Heater or chemical feeder controller) closes the contact, the ball valve will go into position closed. To reverse switching function, just reverse wires going into No 2 and No 6 of valve actuator.

WIRING DIAGRAM FOR PRAHER S4.12 AND S4.25 SERIES HEAVY DUTY 2-WAY ELECTRIC ACTUATORS

24vAC and 220vAC 4-pin DIN connector on valve

Power to Pin 1 will close the valve
Power to Pin 2 will open the valve

Actuator speed: 11 seconds for 90 degrees.

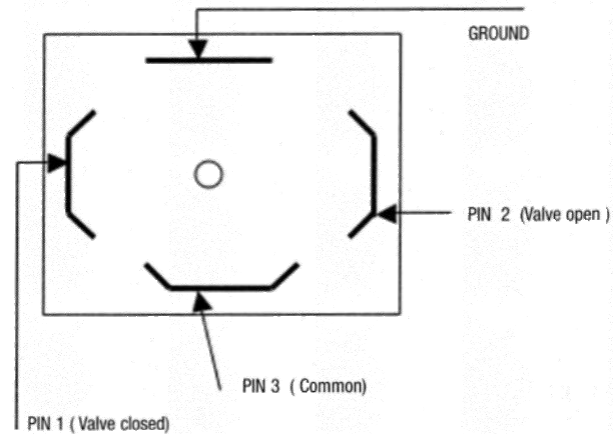
S4.12 actuator:

12 NM torque -mounted on 1.5 and 2" valves
24VAC- 42.2 mA
220VAC-55.6mA

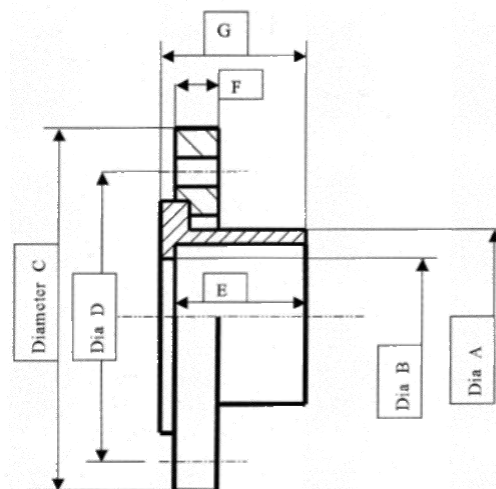
S4.25 actuator:

25 NM torque – mounted on 2.5"- 4" valves
24VAC—94mA 2
20VAC—115mA

Note: external relay or switch required to switch power between Pin 1 and Pin 2 (close-open)



PVC VAN STONE FLANGE 150LBS RATED



SIZE	dia A	dia B	dia C	dia D	E	F	G	WEIGHT/UNIT
3"	4.3	3.00	7.51	6.00	1.94	1.00	2.45	1.7lbs
4"	5.47	4.00	9.00	7.50	2.27	1.10	2.80	2.8lbs
6"	7.56	6.16	11.16	9.50	2.96	1.24	3.39	4.5lbs
8"	9.32	8.32	13.6	10.00	4.18	4.18	4.53	7.2lbs

Praher Plastics Canada Ltd ■101 Saunders Road, Barrie, Ontario L4N 9A7 ■P: 705 725-1100 ■F: 705 725-0444



S4 WAFER CHECK VALVES TECHNICAL DATA



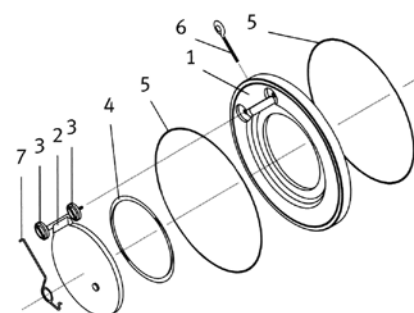
OPTIONAL SPACER RING

applications:

- Water and waste water treatment
- Contaminated and aggressive fluids
- Chemical industry
- Process technology
- Environmental technology
- Systems engineering

feature

- COMPACT - requires little space in piping system
- ECONOMICAL - Simple and robust construction
- EASY INSTALLATION - Wafer body slips between standard flanges
- LIGHT WEIGHT
- CHEMICAL RESISTANT
- NO CORROSION
- AVAILABLE WITH OR WITHOUT SPRING
- TYPE S4 60: without return spring
- TYPE S4 70: with return spring



Parts:

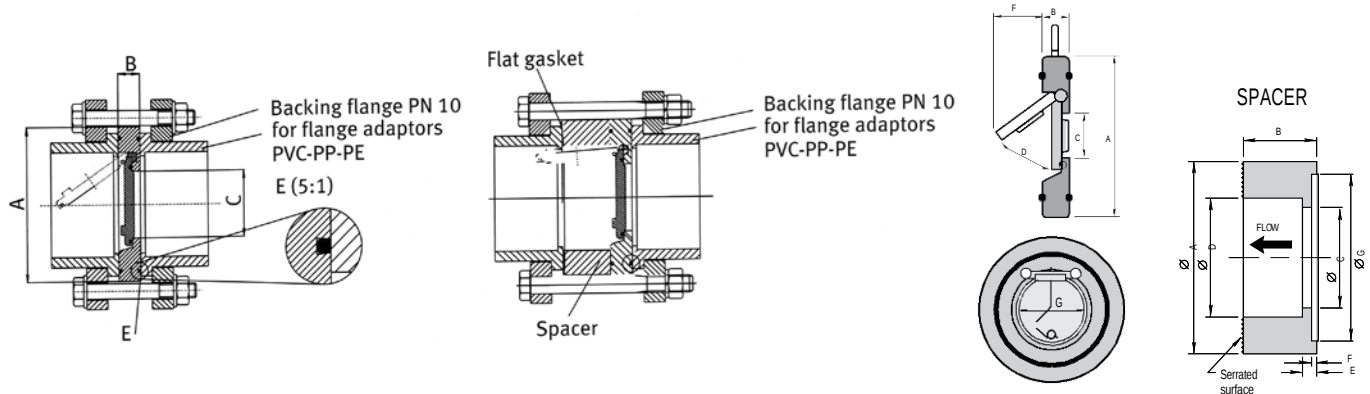
1. Body
2. Flapper
3. Flapper mounting screw
4. O-Ring
5. O-Ring
6. Installation device
7. Spring

mounting Instructions:

- The valve's wafer body slips between standard flanges and can be used in either vertical or horizontal installation.
- Use spring assisted type S4 70 valve for pulsating flow and horizontal piping.
- Use S4 60 valve for applications where it is not desirable for the process stream to come in contact with metals.
- In case of mounting on a pump (at pressure side) please note the following: - no direct mounting on pump flange or following elbow - for velocity relief zone allow 5 times the pipe diameter (install 4" valve at least 20" away from pump discharge).
- Praher offers full range of plastic spacer rings which are required for installation with SCH 80 pipe (the disc will open fully inside the spacer cavity and not slam against the inside pipe wall).

size	Weights LB		CV Values	
	Without Spacer	With Spacer	Sch 40 Without Spacer	Sch 80 With Spacer
2"	0.5	0.9	58	74
2.5"	0.6	2.1	77	108
3"	0.7	1.6	105	203
4"	1.1	3.1	224	300
6"	2.3	4.7	718	949
8"	4.5	11.0	980	1175
10"	7.0	17.4	1880	2050
12"	11.5	28.3	2520	2940

S4 WAFER CHECK VALVES TECHNICAL DATA



pipe size	inch	2	2 1/2	3	4	6	8	10	12	14	16	18	20
pipe size DN	mm	50	65	80	100	150	200	250	300	350	400	450	500
A	mm	109	123	137	164	220	275	330	380	440	491	541	596
A	in	4.3	4.85	5.39	6.45	8.66	10.82	12.99	14.96	17.32	19.33	21.3	23.46
B	mm	20	20	20	22	26	35	40	45	49	65	68	78
B	in	.787	.787	.787	.866	1.02	1.377	1.57	1.77	1.93	2.56	2.67	3
C	mm	32	40	52	70	112	150	190	216	266	310	350	400
C	in	1.26	1.57	2.04	2.76	4.4	5.9	7.48	8.62	10.47	12.2	13.78	15.75
D° opening angle	deg	68	73	75	73	72	77	73	74	70	70	70	70
E	mm	46	58	60	72	76	105	140	195	N/A	N/A	N/A	N/A
E	in	1.81	2.28	2.36	2.83	2.99	4.13	5.5	7.67	N/A	N/A	N/A	N/A
F (with spring)	in	1.8	2.0	2.9	3.6	5.8	7.5	9.0	10.2	9.64	11.22	13	15.15
G (disc diameter)	mm	45	60	72	90	132	176	222	260	300	340	390	440
G (disc diameter)	in	1.77	2.36	2.83	3.54	5.19	6.93	8.74	10.23	11.81	13.38	15.35	17.32
Pressure PN	bar	10	10	10	10	10	10	10	10	3	3	2	2
Pressure rating	PSI	145	145	145	145	145	145	145	145	43.5	43.5	27	27

Working Pressure PSI												
Size	PVC				PP				PVDF			
	20°C	40°C	60°C	80°C	20°C	40°C	60°C	80°C	20°C	40°C	60°C	80°C
Size	68°F	104°F	140°F	176°F	68°F	104°F	140°F	176°F	68°F	104°F	140°F	176°F
2"	145	130	65	20	145	130	50	20	145	130	50	20
2-1/2"	145	130	65	20	145	130	50	20	145	130	50	20
3"	145	130	65	20	145	130	50	20	145	130	50	20
4"	145	110	50	20	145	110	50	20	145	110	50	20
6"	145	110	45	20	145	110	50	20	145	110	50	20
8"	100	87	45	15	100	87	30	15	100	87	30	15
10"	87	60	36	15	87	60	30	15	87	60	30	15
12"	87	60	36	15	87	60	30	15	87	60	30	15

Spacer Dimensions PVC/PP/PVDF

Valve Size/Inch	A mm	B mm	C mm	D mm	E mm	F mm	G mm
2"	105	25	59	59	0	0	0
2.5"	123	38	79	79	4	0	0
3"	136	40	99	99	0	0	0
4"	174	50	108	114	8	4	165
6"	220	50	157	172	7	0	0
8"	277	90	213	217	7	0	0
10"	330	100	260	260	0	0	0
12"	400	150	300	340	10	0	0
14"	450	160	340	378	10	0	0
16"	492	160	400	410	10	0	0

Pressure to Open PSI			
Size	With Spring Horiz.	Without Spring	
		Horiz.	Vert.
2"	0.3	0.1	0.2
2-1/2"	0.3	0.1	0.2
3"	0.3	0.1	0.2
4"	0.3	0.1	0.2
6"	0.3	0.1	0.2
8"	0.3	0.1	0.2
10"	0.3	0.1	0.2
12"	0.3"	0.1	0.2

Sealing Pressure	
With or Without Spring	
1.0	
1.0	
1.0	
1.0	
1.0	
1.0	
1.0	
1.0	
1.0	

Max. Allowable Flow Rates	
At Start-Up & Shut Down	Running
50	60
70	80
110	125
200	250
320	400
400	750
600	1100
750	1500

Kv Values (1/min at delta P of 1 bar)

Valve Size inch	DIN PIPE PN 10 w/o spacer PVC	ANSI PVC SCH 40 w/o spacer	ANSI PVC SCH 80 with spacer
2"	950	825	1050
2.5"	1255	1105	1540
3"	1650	1505	2905
4"	3190	3200	4290
6"	9500	10260	13550
8"	14100	13990	16800
10"	26900	26900	29300
12"	32000	36000	42000
14"	50000	50000	53000
16"	60500	60500	64000
20"	80500	80500	85000

Note: 2" through 12" are measured values. 14" through 20" are estimated values.

PIPE CLAMPS - PP

GENERAL:

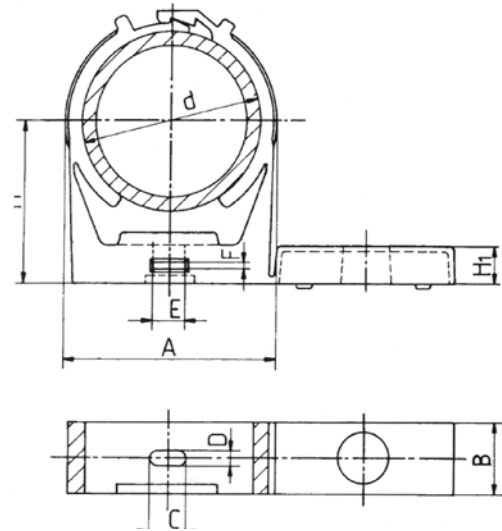
- **Body materials:** PP - Polypropylene (High impact copolymer), grey only
- UV inhibitor added

PIPE HANGER SPACING:

The recommended pipe hanger spacing relates to the maximum pipe sag of 2.5mm (0.098") between two pipe hangers and a liquid with a density of 1 g/cm³.

FEATURES:

- Self-locking
- Fits metric and imperial plastic pipe
- Corrosion resistant



PIPE HANGER SPACING FOR HORIZONTAL PIPING:

PVC-Pipes SCH40/SCH80

pipe size inch	d mm	20°C	30°C	40°C	50°C	60°C
3/8"	16	80	70	50	Continuous support	
1/2"	20	90	80	60		
3/4"	25	95	85	65	55	40
1"	32	105	90	70	60	45
1 1/4"	40	120	110	90	70	55
1 1/2"	50	140	130	110	85	65
2"	63	150	140	120	95	70
2 1/2"	75	165	155	135	110	80
3"	90	180	170	150	125	95

Dimensions in mm

PIPE HANGER DIMENSIONS:

d	mm	16-19	20-23	25-28	31-35	39-43	47-51	60-65	72-80	87-95
	inches	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
H	mm	25	27	30	30	37	40	50	70	80
H ₁	mm	8	8	8	8	8	10	10	18	18
A	mm	25	29	34	39	50	56	70	85	100
B	mm	14	14	16	16	18	20	24	26	26
C	mm	8	8	8	8	8	8	8	9	9
D	mm	4.3	4.3	4.3	4.3	4.3	4.3	4.3	6.5	6.5
E	mm	11	11	11	11	11	11	11	11	11
F	mm	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
weight	kg	0.005	0.006	0.008	0.010	0.015	0.022	0.032	0.062	0.075

Subject to technical modification.



S6 BALL VALVE - 2-WAY - TRUE UNION PVC

Materials:	PVC (grey) - Type 1, grade 1
Ball seats:	PTFE (Teflon) or HDPE (High density polyethylene)
O-rings:	EPDM (NSF 61) or FPM (Viton)
Handle:	ABS
End connections:	SOCKET or FNPT (threaded) SCH80
Pressure rating	at 22° C: 232 PSI (1/2" - 2"), 146 PSI (2.5" - 3"), 90 PSI (4")

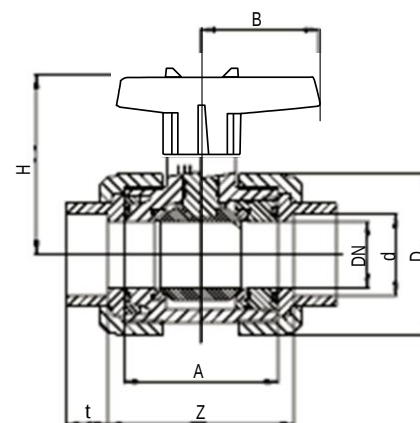
SAMPLE SPECIFICATIONS:

S6 series ball valves shall be of True union design with multi directional blocking capability. The valve handle shall be used as a tool to remove or adjust the valve seat carrier. The valve stem shall be of blow out design and equipped with two O-rings.

A "floating" ball-stem engagement design shall increase seating pressure between ball and ball seats in closed position. All valves shall have max. pressure ratings and series identification molded in exterior wall of body. Valves shall be produced in ISO 9001-2000 certified facility and meet design criteria for thermoplastic PVC valves per DIN 3441-T1. O-rings shall be EPDM or VITON and meet NSF61 criteria. PVC shall be in conformance with NSF61 and meet ASTM D1764-Cell - Class 12454.

FEATURES:

- Handle can be used as tool to adjust threaded seal carrier
- Double stem O-ring
- Available with both threaded and socket ends up to 2"
- Manufactured in ISO 9001-2000 facility

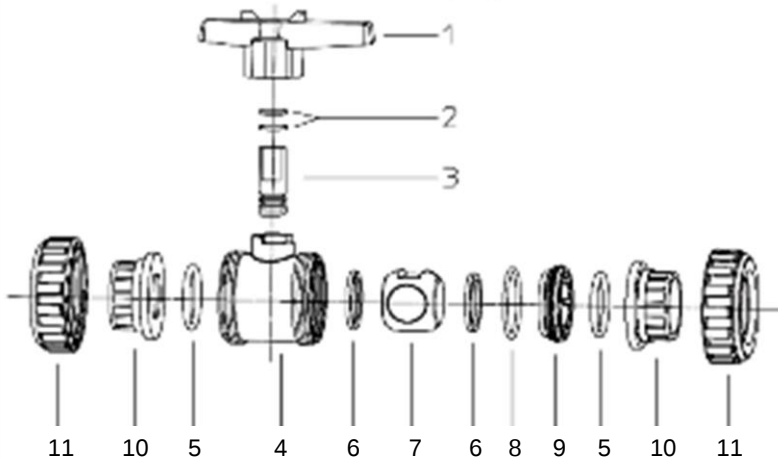


d	mm	16	20	25	32	40	50	63	75	90
G	inches	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
A	inches	1.77	1.77	1.97	2.0	2.36	3.07	3.46	5.35	6.42
Z	inches	1.89	1.89	2.13	2.24	2.76	3.19	3.78	5.83	7.24
t	inches	0.65	0.65	0.77	0.89	1.04	1.24	1.52	1.75	2.15
D	inches	2.2	2.2	2.4	2.76	3.35	3.98	4.53	5.91	7.4
H	inches	1.89	1.89	1.97	2.26	3.07	3.62	3.94	5	6.3
B	inches	1.67	1.67	2.16	2.16	2.56	2.95	2.95	4.37	5.24
Weight	lbs	0.31	0.31	0.48	0.62	1.15	1.59	2.31	6.21	11.87
Cv value	GPM 5	12	24	48	66	110	190	366	518	

S6 BALL VALVE - 2-WAY - TRUE UNION PVC



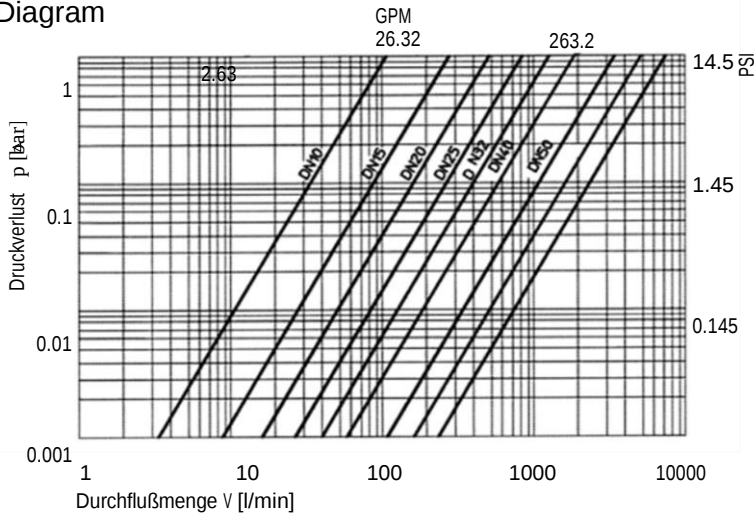
TECHNICAL DATA



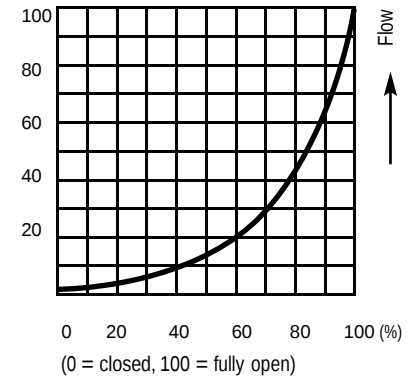
Parts:

- | | |
|-----------------|---------------------|
| 01. Handle | 07. Ball |
| 02. Stem O-Ring | 08. O-Ring |
| 03. Valve stem | 09. Seat carrier |
| 04. Body | 10. End connections |
| 05. O-Ring | 11. Nut |
| 06. Ball seat | |

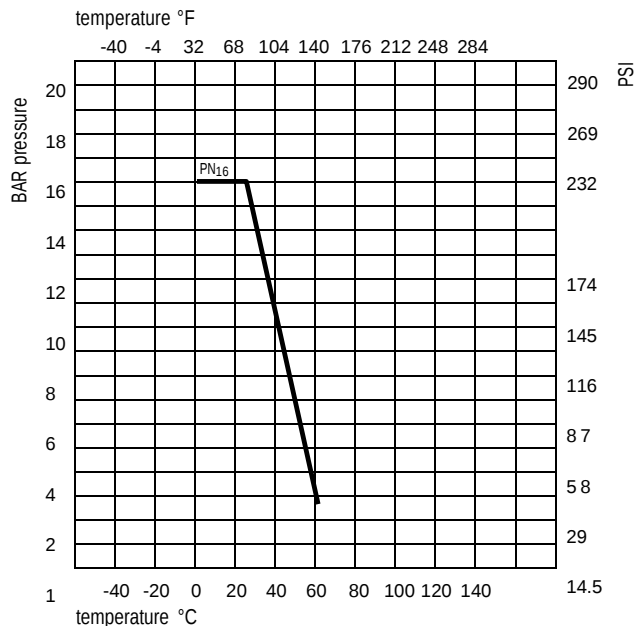
Pressure Drop Diagram



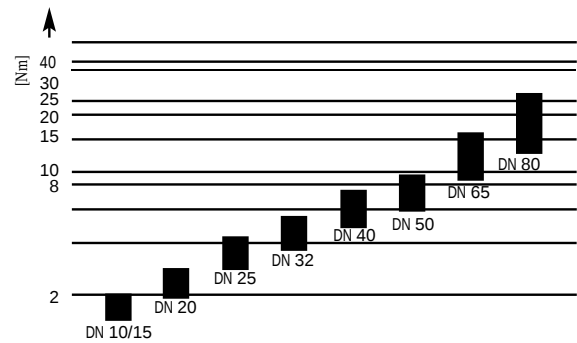
Factor characteristics



Pressure-Temperature Diagram



Torque





TERMS AND CONDITIONS OF SALE

PRICES:

All prices shown are list prices, effective January 1, 2017 and subject to change without notice. These prices do not constitute an offer to sell. All are based on standard packaging and do not include special overseas packaging or other requirements.

PLACING ORDERS:

To expedite handling of your order; please use the combination of part number, size and brief description. Our minimum order is \$150.00 net. 15% surcharge on "less than qty." per carton orders. Praher reserves the right to cancel any back order that is less than 10% of the original order.

OVER / UNDER SHIPPED QUANTITY:

Seller reserves the right to over-ship order quantity herein by 10% and undership order quantity herein by 5% or as otherwise negotiated between seller and buyer.

SHIPPING:

All shipments are F.O.B shipping point except those qualified for freight allowances. The term F.O.B. shipping point means the carrier accepts all responsibility upon accepting the shipment at our dock. Therefore, any claims for damage or loss must be settled between you and the carrier.

DELIVERY TIMES DELAYS

The estimated shipping date is based on plant production schedule at the date of the quotation. Seller shall use reasonable commercial efforts to deliver the goods within the time agreed but, unless otherwise specifically agreed to in writing, shall in no circumstance be liable for any loss or damage, consequential or otherwise, caused directly or indirectly, by any delay in delivery. Under no circumstances will the Seller be liable for delay or failure in performance due to fires, floods, strikes or other differences with workmen, accidents, labour or material or transportation shortages, war (declared or undeclared), acts of terrorism, riot, governmental orders or regulations, legal interferences or prohibitions, defaults on the part of suppliers, or other causes beyond the Seller's reasonable control.

BILLING TERMS:

Prior credit approval and nondelinquent status are necessary before shipping on an open account. Our open account terms are net 30 days. A 2% per month (24% per annum) charge is made on accounts exceeding 30 days. All taxes required by law are computed and added to your invoice.

EXPORT SHIPPING:

PRAHER will be happy to handle your export order. The terms are a letter of credit drawn on a Canadian bank. Our prices into the U.S. include freight allowance-shipping ground, with duty and brokerage fees prepaid.

CLAIMS AND RETURNS:

Claims for shortages or inaccurate filling of orders must be made to PRAHER within 10 days after receipt of goods.

Praher will not reimburse returned product with cash or cheques. Credits will be issued and a 15% restock charge may apply.

INFORMATION TO BUYER:

PRAHER will endeavor to furnish such advice as it may be able to supply with reference to the use by buyer of any materials purchased, but PRAHER makes no guarantees and assumes no obligation or liability for the advice given verbally or in the use of any material, whether used simply or in combination with other products. No suggestion for product use shall be construed as a recommendation for its use in infringement on any existing patent.

PRODUCT WARRANTY:

All products not manufactured by PRAHER carrying the original manufacturer's warranty. All products manufactured by PRAHER will be free of defects in material and workmanship for a period of one year from shipment from PRAHER. If found to be defective by us, we will repair or replace the nonconforming parts or goods at our option or return the purchase price at our option. Praher shall not be responsible for cartage, removal and/or reinstallation labor, or any such costs incurred in obtaining a warranty replacement. The product warranty expressed above is our only warranty and may not be verbally changed or modified by any representative of PRAHER. The offer to repair or replace non-conforming goods within warranty does not cover defects caused by shipping damages, damages caused by improper use or installation, or by the buyer's attempts to use the products beyond their mechanical, thermal or electrical capacity.