

Type 26 True Union Ball Valves



CPVC

CRN REGISTRATION
PENDING

SERIES: Type 26

SIZES: 1/2" to 4"

ENDS: Socket, Threaded, Flanged or ChemFlare™

SEATS: PTFE

SEALS: EPDM or FKM (Viton®)



**with Locking Handle
and Hasp** in closed
position



with Locking Handle
in open position

Chemline's **Type 26** True Union ball valve is a full port, fully blocking valve, pressure rated at 230 psi (16 bar). This heavy duty CPVC industrial valve is used in many chemical plants. Actuation is easy using the ISO standard mounting kits. An integral base mounting pad is provided for panel mounting. Valves are certified under NSF/ANSI Standard 61 for contact with drinking water.

Features

Fully Blocking

- Downstream union nut may be safely disassembled for piping maintenance while valve is closed off under full pressure

Double Stem O-Rings

- Provide for high degree of safety on hazardous fluid applications

230 psi Working Pressure

Easy to Actuate

- Electric or pneumatic actuators may be easily mounted using ISO standard mounting kits

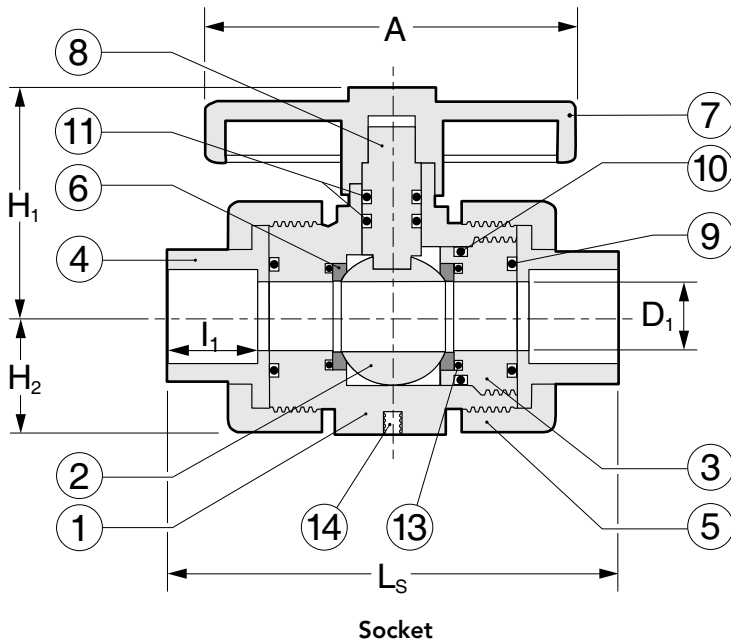
Panel Mountable

- Threaded inserts in valve base allow valve to be securely anchored to panel or support

NSF

- Valves are certified to NSF/ANSI Standard 61 for contact with drinking water

Type 26 True Union Ball Valves



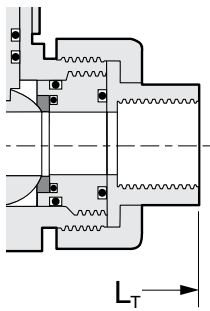
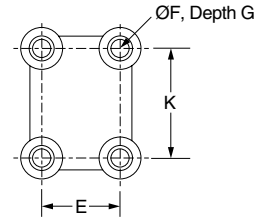
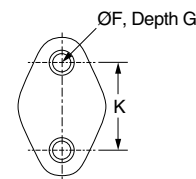
PARTS

No.	Part	Pcs.	Materials
1	Body	1	CPVC
2	Ball	1	CPVC
3	Carrier	1	CPVC
4	End Connector	2	CPVC
5	Union Nut	5	CPVC
6	Ball Seat	2	PTFE
7	Handle	1	ABS
8	Stem	1	CPVC
9	Carrier Face O-Ring	1	EPDM, FKM(Viton®)
10	Carrier O-Ring	1	EPDM, FKM(Viton®)
11	Stem O-Ring	2	EPDM, FKM(Viton®)
12	Face O-Ring	1	EPDM, FKM(Viton®)
13	Seat Cushion	2	EPDM, FKM(Viton®)
14	Screw Inserts	4/8	Brass, 304 SS

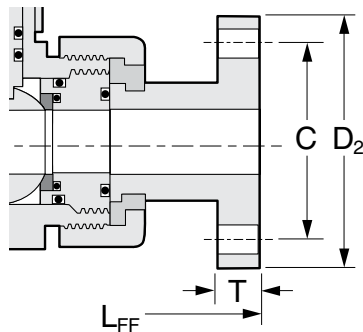
Base Mounting Pad and Mounting Platform

1/2" to 2" Valves

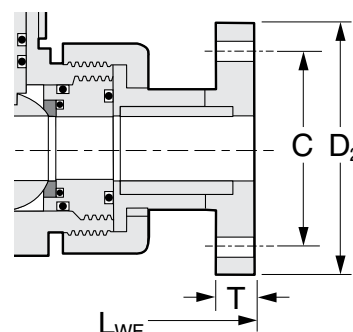
2-1/2" to 4" Valves



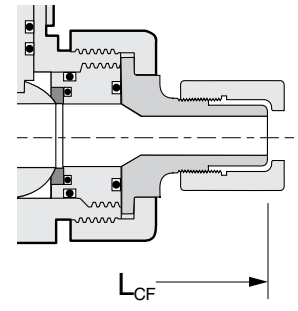
Threaded



Factory Flanged



Welded Flanged



ChemFlare™

DIMENSIONS INCHES

Size	A	B	C	D ₁	D ₂	H ₁	H ₂	L _s	L _s	L _T	L _{FF}	L _{WF} ¹	ChemFlare™		F						
													L _{CF}	Tube	e	n	T	E	UNC	G	K
1/2"	3.25	2.10	2.38	0.59	3.50	2.00	1.05	0.88	4.53	4.53	6.02	6.7	6.2	1/2"	0.63	4	0.59	-	0.16	4	1.22
3/4"	3.98	2.48	2.75	0.75	3.88	2.48	1.24	1.00	4.96	4.96	6.50	7.3	6.4	3/4"	0.63	4	0.59	-	0.24	4	1.45
1"	4.40	2.84	3.13	0.98	4.25	2.83	1.42	1.13	5.67	5.67	7.44	8.3	7.2	1"	0.63	4	0.66	-	0.24	4	1.57
1-1/4"	4.78	3.82	3.50	1.50	4.63	3.38	1.91	1.13	7.13	7.13	8.90	10.0	-	-	0.63	4	0.66	-	0.32	4	2.16
1-1/2"	4.78	3.82	3.88	1.50	5.00	3.38	1.91	1.38	7.13	7.13	8.90	10.5	-	-	0.63	4	0.75	-	0.32	4	2.16
2"	5.88	4.68	4.75	1.89	6.00	3.93	2.34	1.50	7.95	7.95	9.92	11.4	-	-	0.75	4	0.83	-	0.32	4	2.67
2-1/2"	7.48	5.91	5.50	2.56	7.00	5.51	2.55	1.75	8.94	8.94	11.06	13.4	-	-	0.75	4	0.83	1.61	0.32	8	3.15
3"	9.06	7.24	6.00	3.07	7.50	6.50	3.62	1.75	10.83	10.83	12.99	15.5	-	-	0.75	4	0.87	1.61	0.32	8	3.15
4"	10.97	8.90	7.50	4.01	9.00	6.77	4.45	2.25	12.64	12.64	15.24	17.6	-	-	0.75	8	0.87	1.61	0.32	8	4.76

¹ Dimension L_{WF} is approximate for welded flanged valves. Before ordering, please specify a specific L_{WF} if required.

Type 26 True Union Ball Valves



WORKING PRESSURES PSI

NET WEIGHTS LBS. Cv VALUES

Size	CPVC						Socket/ Threaded Flanged		USGPM Flow at 1 psi ΔP
	20°C 68°F	40°C 104°F	50°C 122°F	60°C 140°F	80°C 176°F	90°C 194°F			
1/2"	230	230	190	150	110	60	0.50	1.10	15
3/4"	230	230	190	150	110	60	0.85	1.40	30
1"	230	230	190	150	110	60	1.15	2.10	50
1-1/4"	230	230	190	150	110	60	2.4	3.9	70
1-1/2"	230	230	190	150	110	60	2.4	3.6	150
2"	230	230	190	150	110	60	4.1	6.0	190
2-1/2"	230	230	190	150	110	60	7.2	9.8	360
3"	230	230	190	130	95	60	13.0	15.9	410
4"	230	230	190	130	95	60	19.5	26.0	700

Temperature Range: 0 to 90°C (32 to 194°F)

SAMPLE SPECIFICATION

- All CPVC ball valves 1/2" to 4" will be Chemline Type 26 True Union or equal.
 - CPVC valves with EPDM or FKM (Viton®) seals will be 230 psi rated.
 - Valves will be suitable for temperatures up to up to 90°C/195°F.¹
 - Valves will be NSF/ANSI 61 certified for contact with drinking water.
 - Valves will be full port with a threaded-in seat carrier, two-way blocking design
 - Handle will have a built-in spanner wrench for adjustment or removal of the seat carrier.
 - Valves will have blowout-proof stems with double o-rings for safety.
 - Ball seats will be PTFE with elastomer cushions for and better sealing at low pressures and longer life.
 - Valves will have a base with threaded inserts for screws to panel mount or anchor the valve.
 - Socket ends shall be Schedule 80 and conform to ASTM D-2467.
 - Threaded ends shall be Schedule 80 and conform to ASTM D-2464.
 - ChemFlare™ ends will be compatible with Chemline's ChemFlare™ leak-free tubing system.
 - Flanged ends shall be ANSI Class 150.
 - Every valve will undergo a factory hydrostatic pressure test to assure quality.
- ¹ At maximum temperatures, pressure ratings are lower than the maximums stated. Refer to the Chemline data sheet.

OTHER OPTIONS & ACCESSORIES

- **Municipal Operating Nut**
- **Lubrication-free Valves** – factory clean room assembled
- **ChemFlare™ Ends** – for connection to PFA tubing system for leak-free connections for difficult services such as sodium hypochlorite.
- **Valve Tags** – stainless steel tags that indicate drilled ball for sodium hypochlorite.



ORDERING EXAMPLE

Chemline Type 26 True Union Ball Valve	26	C	005	E	S
Body Material	C – CPVC				
Size	005 – 1/2"	007 – 3/4"	010 – 1"	012 – 1-1/4"	015 – 1-1/2"
	020 – 2"	025 – 2-1/2"	030 – 3"	040 – 4"	
Seals	E – EPDM V – FKM (Viton®)				
Ends	S – Socket	T – Threaded	FF – Factory Flanged	WF – Welded Flanged	ChemFlare™ – Use Item Numbers below

Example: Chemline Type 26 CPVC True Union Ball Valve, 1/2", with EPDM seals, socket end connectors

CHEMFLARE™ ITEM NUMBERS

Valve Size	Tube O.D.	End Connector	Nut	Item Number
1/2"	1/4"	PVDF	PVDF	K4N-1
1/2"	3/8"	PVDF	PVDF	K6N-1
1/2"	1/2"	PVDF	PVDF	K8N-1
3/4"	3/4"	PVDF	PVDF	K12N-1
1"	1"	PVDF	PVDF	K16N-1

Type 26.DS.11.29.23

Type 26 True Union Ball Valves



Electric Actuation

Refer to actuator data page for detailed information

All electric actuators have these STANDARD FEATURES:

- Polyamide plastic housings or covers – corrosion resistant and light weight
- NEMA 4X/IP65 water resistance enclosure rating
- CSA Approved or Special Inspection labelled
- Reversible operation
- Multi-voltage operation
- Standard ISO 5211 mounting dimensions
- Irreversible gearing – backlash is impossible
- Adjustable travel through the full range
- No maintenance is required
- Heater/thermostats for humid locations and cold weather operation
- Two extra switches for valve position feedback



ER Series



V Series

Electric Actuator Selection

Model	ERS Series	ER Series	ERF Series	V Series
FEATURES	STANDARD	FULL FEATURE	FAST ACTING	HIGHER TORQUE
Type 26 valve sizes	1/2" to 1-1/2"	1/2" to 4"	1/2" to 1-1/2"	1/2" to 4"
Voltage	120/240 VAC	120/240 VAC 12/24 VDC 24 VAC	12 VAC/VDC 24 VAC/VDC	120/240 VAC 12/24 VDC 24 VAC
Cycle Time sec/90°	12	12	6 3.5	30
Duty Cycle	50%	80%	30%	80%
CSA	Special Inspection Label	Approved	Special Inspection Label	Approved
ON/OFF Control	3-Wire/2-Wire	3-Wire/2-Wire	3-Wire/2-Wire	3-Wire/2-Wire
Gear Train	Spur Gears	Spur Gears	Spur Gears	Epicyclic
Mechanical Travel Stops	Fixed	Fixed	Fixed	Adjustable
DIN Plug Wiring Connectors	✓	✓	✓	✗
Two Position Feedback Switches	✓	✓	✓	✓
Valve Position Indicator	Knob	Knob	Knob	Dome
Manual Override	Declutching	Declutching	Declutching	Without Declutching
Override Device	Knob	Knob	Knob	Hand Wheel
Operating Temperature Range	-10 to 60C (15 to 140°F)	-10 to 60C (15 to 140°F)	-10 to 60C (15 to 140°F)	-20 to 70C (-4 to 158°F)
Onboard Electronic Torque Limiter	✗	✓	✗	✓
Onboard General Fault Relay	✗	✓	✗	✓
Onboard Diagnostics	✗	✓	✗	✓
ENCLOSURE OPTIONS				
Metal Cover for IP68 Rating	✗	✗	✗	✓
Low Temperature Option	✗	✗	✗	-50 to 70C (-58 to 158°F)
POSITION FEEDBACK OPTIONS				
Position Feedback Potentiometer	✓	✓	✓	✓
Transmitter	✓	✓	✓	✓
Extra Limit Switches ¹	✓	✓	✓	✓
CONTROL OPTIONS				
Digital Positioner	✗	✓	✗	✓
Failsafe Internal Battery Pack	✗	✓	✗	✓
Local/Remote Control Switch Box	✓	✓	✓	✓
MODBUS Module	✗	✓	✗	✓
Bluetooth Control	✗	✓	✗	✓

¹ 2 feedback switches are already supplied as standard

Type 26 True Union Ball Valves



Electric Actuation

Refer to actuator data page for detailed information



Electric Actuation Item Numbers

Item numbers are for actuators including mounting to valve and bench testing

Model	ERS Series				ERF Series					
	Valve Size	Max. Line Pressure (psi)	Cycle Time/90°	120/240 VAC		Max. Line Pressure (psi)	12 VAC/VDC		24 VAC/VDC	
				Item No.	Item No.		Cycle Time/90°	Item No.	Cycle Time/90°	Item No.
1/2"	150	12 sec	26005-ERS20.12	26005-ERS20.346	150	6 sec	26005-ERF20.35	3.5 sec	26005-ERF20.46	
3/4"	150	12 sec	26007-ERS20.12	26007-ERS20.346	150	6 sec	26007-ERF20.35	3.5 sec	26007-ERF20.46	
1"	150	12 sec	26010-ERS20.12	26010-ERS20.346	150	6 sec	26010-ERF20.35	3.5 sec	26010-ERF20.46	
1-1/4"	150	12 sec	26012-ERS20.12	26012-ERS20.346	150	6 sec	26012-ERF20.35	3.5 sec	26012-ERF20.46	
1-1/2"	150	12 sec	26015-ERS20.12	26015-ERS20.346	150	6 sec	26015-ERF20.35	3.5 sec	26015-ERF20.46	

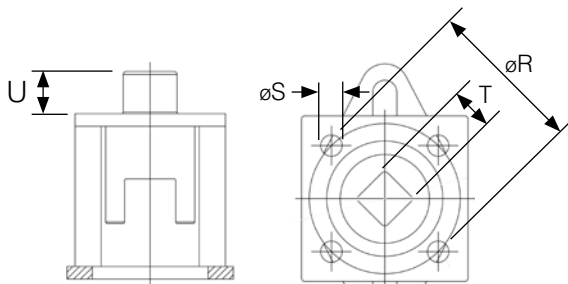
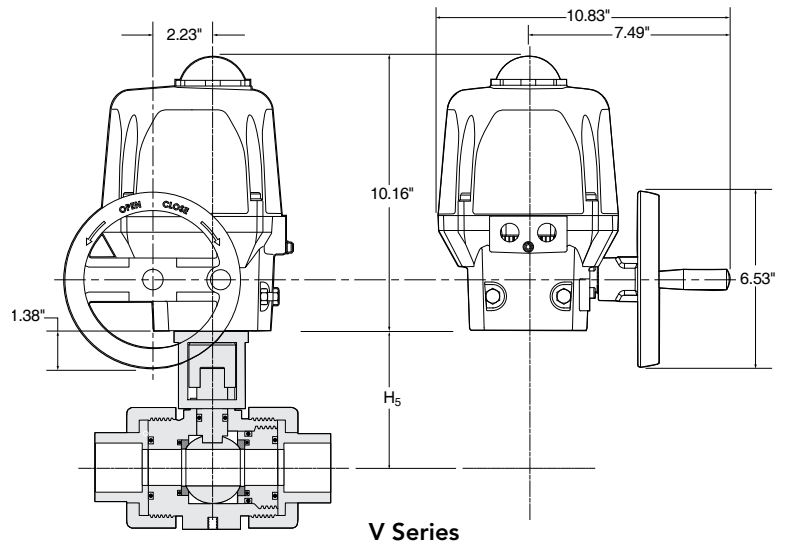
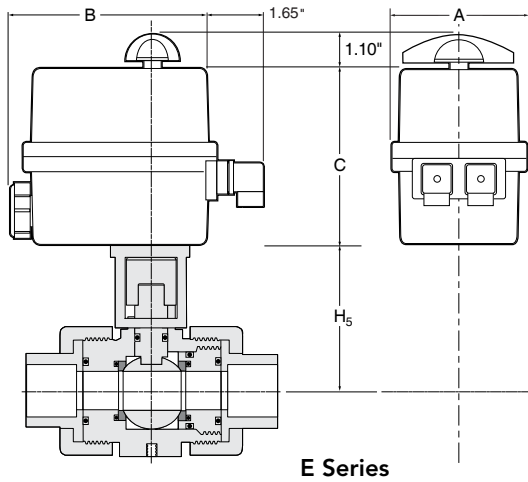
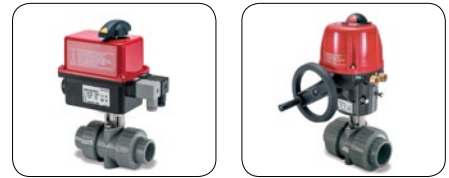
Model	ER Series				V Series						
	Valve Size	Max. Line Pressure (psi)	Cycle Time/90°	120/240 VAC		Max. Line Pressure (psi)	Cycle Time/90°	120/240 VAC		12/24 VDC & 24 VAC	
				Item No.	Item No.			Item No.	Item No.		
1/2"	150	12 sec	26005-ER20.12	26005-ER20.346	150	30 sec	26005-VS150.12		26005-VS150.346		
3/4"	150	12 sec	26007-ER20.12	26007-ER20.346	150	30 sec	26007-VS150.12		26007-VS150.346		
1"	150	12 sec	26010-ER20.12	26010-ER20.346	150	30 sec	26010-VS150.12		26010-VS150.346		
1-1/4"	150	12 sec	26012-ER20.12	26012-ER20.346	150	30 sec	26012-VS150.12		26012-VS150.346		
1-1/2"	150	12 sec	26015-ER20.12	26015-ER20.346	150	30 sec	26015-VS150.12		26015-VS150.346		
2"	150	12 sec	26020-ER35.12	26020-ER35.346	150	30 sec	26020-VS150.12		26020-VS150.346		
2-1/2"	150	12 sec	26025-ER35.12	26025-ER35.346	150	30 sec	26025-VS150.12		26025-VS150.346		
3"	150	12 sec	26030-ER60.12	26030-ER60.346	150	30 sec	26030-VS150.12		26030-VS150.346		
4"	150	12 sec	26040-ER60.12	26040-ER60.346	150	30 sec	26040-VS150.12		26040-VS150.346		

Type 26 True Union Ball Valves



Electric Actuation

Refer to actuator data page for detailed information.



Valve Top Mounting Kit

DIMENSIONS INCHES

Size	A	B	C	H ₅	ISO 5211 Topworks					
					R			S	T	U
					inches	mm	ISO			
1/2"	3.62	5.34	4.88	2.04	1.65/1.97	42/50	F04/F05	0.307	0.433	0.503
3/4"	3.62	5.34	4.88	2.69	1.65/1.97	42/50	F04/F05	0.307	0.433	0.503
1"	3.62	5.34	4.88	2.85	1.65/1.97	42/50	F04/F05	0.307	0.433	0.503
1-1/4"	3.62	5.34	4.88	3.73	1.97	50	F05	0.276	0.593	0.551
1-1/2"	3.62	5.34	4.88	3.73	1.97	50	F05	0.276	0.593	0.551
2"	5.04	5.94	5.98	4.14	1.97	50	F05	0.276	0.593	0.551
2-1/2"	5.04	5.94	5.98	5.13	2.76	70	F07	0.393	0.669	0.649
3"	5.04	5.94	5.98	6.11	2.76	70	F07	0.393	0.669	0.649
4"	5.04	5.94	5.98	6.42	2.76	70	F07	0.393	0.866	0.771

Type 26 True Union Ball Valves



Pneumatic Actuation

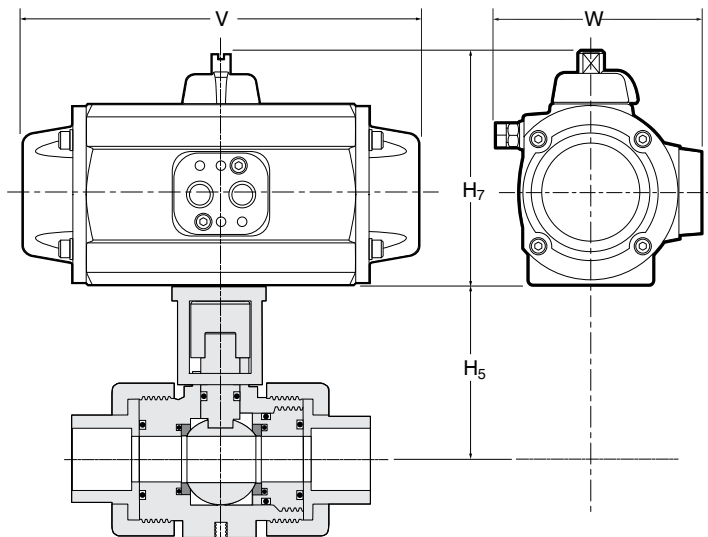
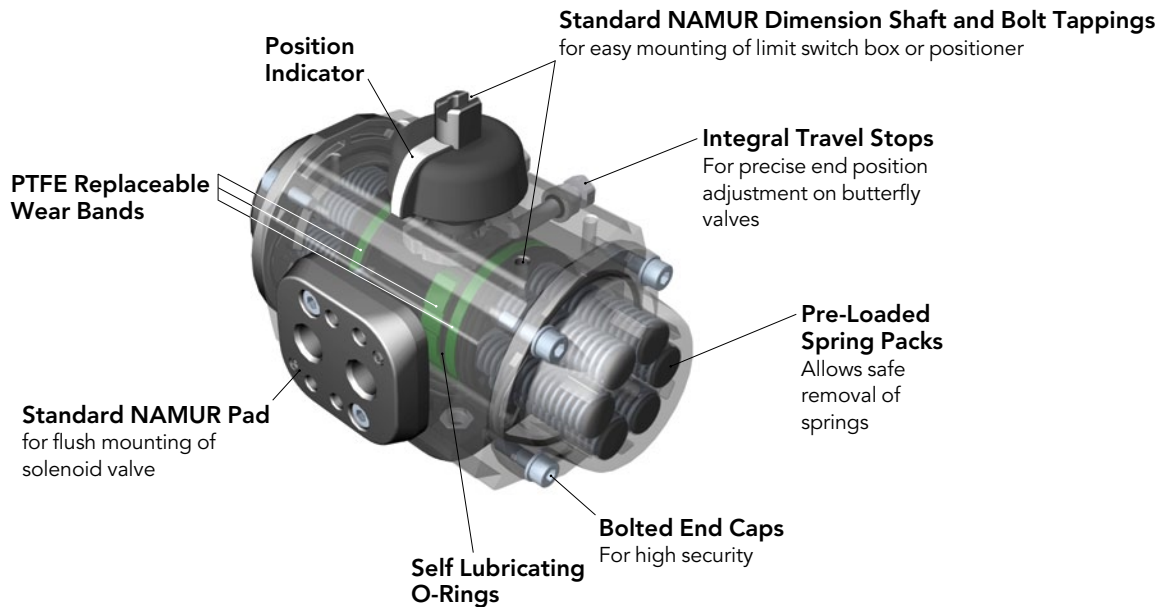
Refer to actuator data page for detailed information

All pneumatic actuators have these STANDARD FEATURES:

- Aluminum rack and pinion type
- Coating is two-part epoxy/Rilsan polyamide, applied inside and out. Epoxy offers high chemical resistance and Rilsan offers coating durability.
- Rated for over one million cycles
- ISO standard valve mounting dimensions allow for direct mounting of most valves
- Mechanical travel stops are standard. They allow up to 5 degrees of piston travel adjustment
- Standardized accessories (solenoid valves, limit switch boxes, positioners) may be direct mounted



PA Series



DIMENSIONS INCHES

Size	Double Acting				Spring Return		
	H ₅	H ₇	V	W	H ₇	V	W
1/2"	2.04	3.52	5.52	3.00	3.52	5.52	3.00
3/4"	2.69	3.52	5.52	3.00	3.52	5.52	3.00
1"	2.85	3.52	5.52	3.00	5.05	7.91	4.00
1-1/4"	3.73	3.52	5.52	3.00	5.05	7.91	4.00
1-1/2"	3.73	4.38	6.00	3.31	5.05	7.91	4.00
2"	4.14	5.05	7.91	4.00	5.21	8.83	4.08
2-1/2"	5.13	5.05	7.91	4.00	5.82	10.40	4.70
3"	6.11	5.05	7.91	4.00	5.82	10.40	4.70
4"	6.42	5.21	8.83	4.08	6.15	12.19	5.02

For actuator sizes based on normal 80 psi available air supply

Type 26 True Union Ball Valves



Pneumatic Actuation

Refer to actuator data page for detailed information

Pneumatic Actuation Item Numbers

Item numbers are for actuators including mounting to valve and bench testing. Actuators are sized for "normal" service. For gas, vapour or severe chemical service, consult Chemline.



PA Series

Double Acting

Valve Size	Max. Line Pressure (psi)	Air Supply Pressure (psi)		
		60	80	100
		Item No.	Item No.	Item No.
1/2"	150	26005-PADW	26005-PADW	26005-PADW
3/4"	150	26007-PADW	26007-PADW	26007-PADW
1"	150	26010-PAD00	26010-PADW	26010-PADW
1-1/4"	150	26012-PAD00	26012-PADW	26012-PADW
1-1/2"	150	26015-PAD05	26015-PAD00	26015-PAD00
2"	150	26020-PAD05	26020-PAD05	26020-PAD00
2-1/2"	150	26025-PAD05	26025-PAD05	26025-PAD05
3"	150	26030-PAD05	26030-PAD05	26030-PAD10
4"	150	26040-PAD15	26040-PAD10	26040-PAD05

Spring Return

Valve Size	Max. Line Pressure (psi)	Air Supply Pressure (psi)		
		60	80	100
		Item No.	Item No.	Item No.
1/2"	150	26005-PAS05	26005-PASW	26005-PASW
3/4"	150	26007-PAS05	26007-PASW	26007-PASW
1"	150	26010-PAS10	26010-PAS05	26010-PAS05
1-1/4"	150	26012-PAS10	26012-PAS05	26012-PAS05
1-1/2"	150	26015-PAS10	26015-PAS05	26015-PAS05
2"	150	26020-PAS15	26020-PAS10	26020-PAS10
2-1/2"	150	26025-PAS15	26025-PAS15	26025-PAS10
3"	150	26030-PAS20	26030-PAS15	26030-PAS15
4"	150	26040-PAS20	26040-PAS20	26040-PAS15

Accessories



Solenoid Valves

- Solenoid valves are electrically actuated. They control air supply in and out of the actuators to open or close the valve. They bolt flush onto the actuator.



Positioners

- Positioners control actuator-valve position responding to a control signal. They are either 3-15 psi pneumatic, 4-20 mA electro-pneumatic or 4-20 mA Smart (fully digital with intelligent functions).



Limit Switches

- Limit switches are for ON and/or OFF valve position feedback. They feature a valve position indicator dome with high visibility. The standard NEMA 4X/IP65 version has mechanical switches. Explosion proof versions are available.



End Cap Travel Stops

- These are to adjust the full length of piston travel but for only one direction of travel - either open for a normally closed valve or closed position for a normally open valve



Travel Stop Plate

- This is required to reduce end of travel by more than 5 degrees. It allows independent adjustment of the full length of piston travel for both opening and closing strokes.



Declutchable Gear Override

- This allows manual operation of the actuated valve in case the supply air pressure fails. It is normally disengaged. To engage, press the lever bar down.

Type 26.DS.11.29.23