

# PLUG VALVES

PLV  
SERIES



## PLV FEATURES

- Tight shut-off with throttling capability
- One piece body design
- Replaceable plug assembly
- Stainless steel and Brass construction
- MAWP\* 3000 psi (206 bar)
- MAWT\* 400°F (204°C)
- Variable end connection types and sizes from 1/8" to 1/2" (6mm to 12mm)
- Colored Nylon handles
- Low-operating torque
- Easy to maintain and clean
- Choice of O-rings for chemical compatibility
- Passivated Body

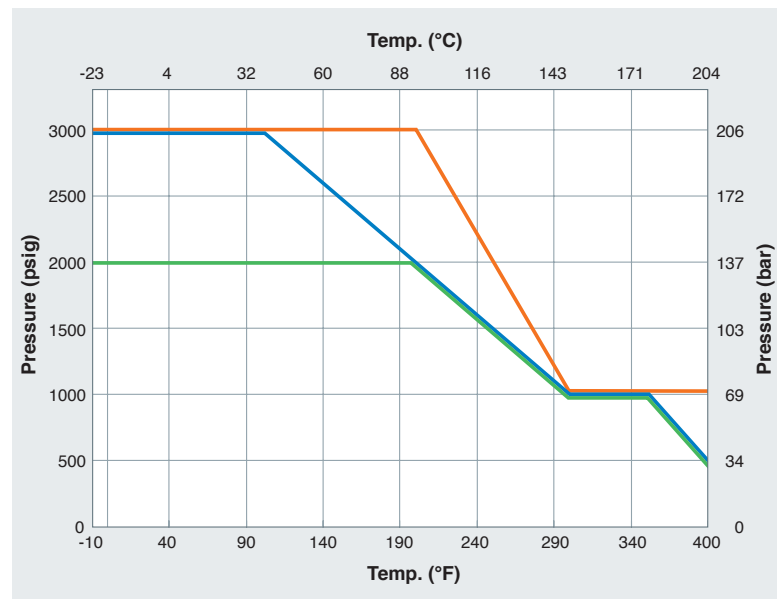
## MATERIAL OF CONSTRUCTION

No.	Part	Qty	Material	
			Stainless Steel	Brass
1	Handle	1	Polythermide	
2	Pin	1	St.St.316	
3	*Plug	1	PTFE coated St.St.316 A479	PTFE coated Brass ASTM B-16
4	*O-rings	2	PTFE coated fluorocarbon FKM	
5	* O-ring	1	PTFE coated fluorocarbon FKM	
6	Pin	1	St.St.316	
7	*Body	1	St.St.316 A479	Brass ASTM B-16
8	Retaining Ring	1	PH 15-7 Mo St.St.	
	Lubricant		Silicone based	

\* Wetted parts

## PRESSURE TEMPERATURE RAITING

Based on PTFE coated Fluorocarbon FKM O-rings.



— St.St. PLV4 & PLV6 — Brass PLV4 — Brass PLV6

## GENERAL

The PLV series offers a manually operated plug valve that features tight shut-off with high-pressure throttling capability, long life cycle service and low-operating torque.

The plug valve is rated to 3000 psig making it an optimal choice for a variety of instrumentation systems such as sampling, analytical purging and cleaning applications.



## O-RINGS

Different materials are available for special applications.

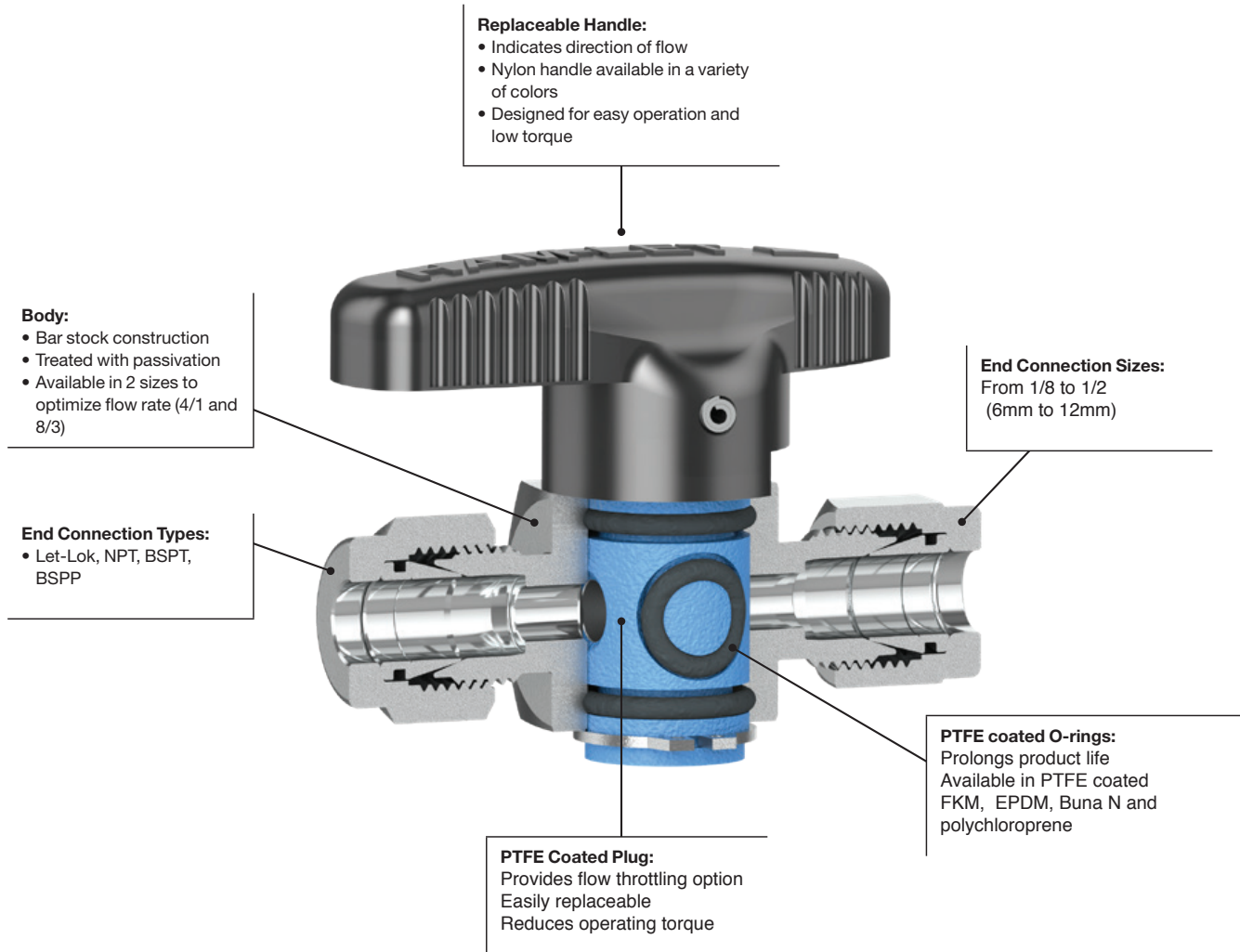
O-ring Material	Temperature Rating °F (°C)
PTFE coated Buna N	-10 to 250 (-23 to 121)
PTFE coated EPDM	-50 to 300 (-45 to 148)
PTFE coated Fluorocarbon FKM	-10 to 400 (-23 to 204)
PTFE coated Polychloroprene (CR)	-40 to 250 (-40 to 121)

## TESTING

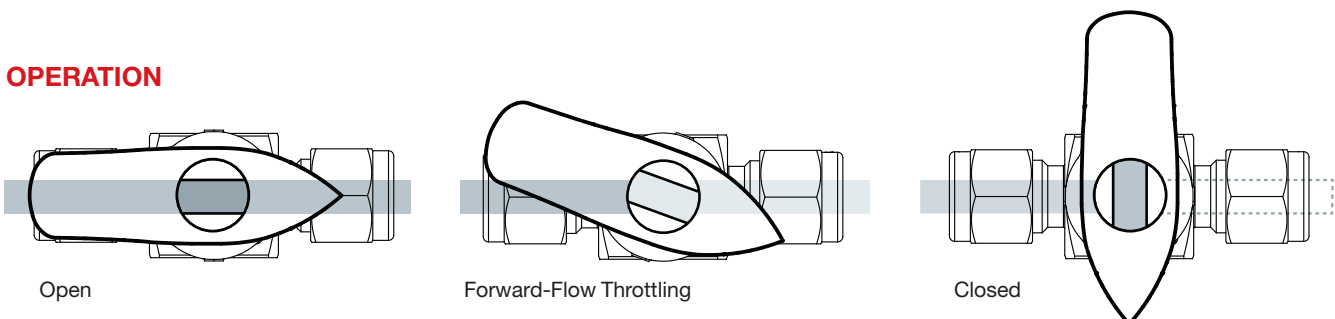
The Plug valve design has been tested for burst and proof. Standard testing for each Plug valve includes testing with nitrogen at 1000 & 80 psig. Each valve is tested for leakage through the shell and Plug seats. The maximum allowable leakage across the ball seats is 0.1 std cc/min.

## CLEANING & PACKAGING

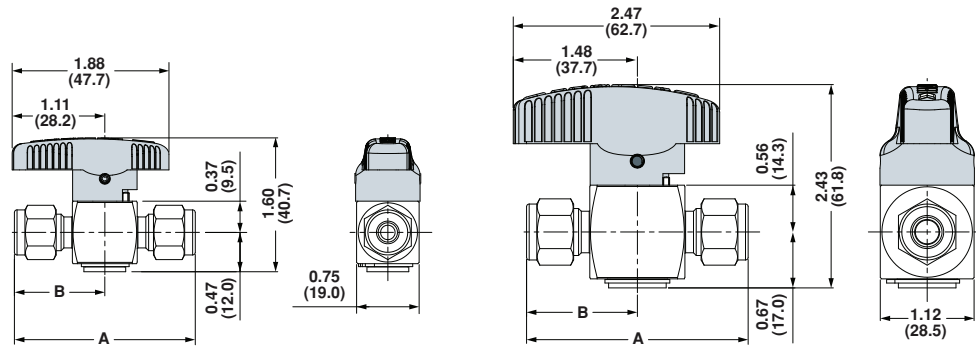
Every Plug valve is cleaned in accordance with standard cleaning and packaging (procedure 8184). Oxygen Clean & Lubricant-Free cleaning and packaging, in accordance with special cleaning and packaging (procedure 8185), is available as an option. Lubricant-free cleaned valves have significantly higher actuation torque.



## OPERATION



- Valve is capable of bi-directional flow (please note maximum differential pressure is limited to 150 psig when flow is reversed)
- Reverse-flow throttling may damage O-ring.

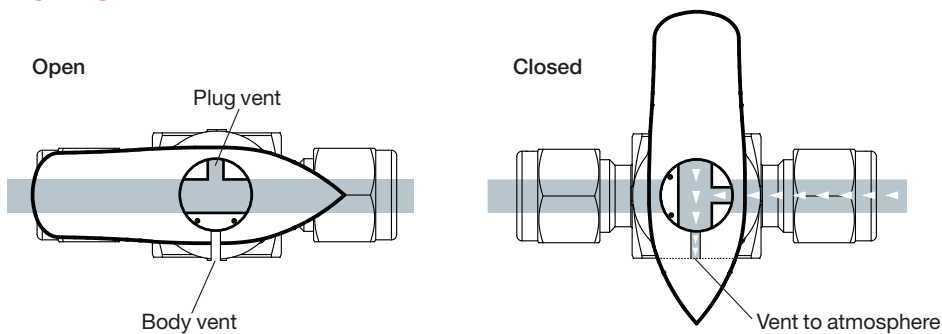


## PLV STANDARD CONFIGURATION DIMENSIONS

Series	End Connection	Size	CV	Orifice		Dimensions			
						A		B	
	Type			mm	inch	mm	inch	mm	inch
PLV4	Let-Lok Imperial	1/8	0.1	2.3	0.093	50.5	1.99	25.3	0.99
PLV4		1/4	1.6	4.4	0.172	55.1	2.17	27.6	1.08
PLV4		3/8	1.1	4.4	0.172	58.2	2.29	29.1	1.14
PLV6			6.4	7.2	0.283	67.6	2.66	33.8	1.33
PLV6		1/2	4.4	7.2	0.283	73.2	2.88	36.6	1.44
PLV4	Let-Lok Metric	6mm	1.6	4.4	0.172	55.1	2.17	27.6	1.08
PLV6		8mm	6.4	7.2	0.283	67.6	2.66	33.8	1.33
PLV6		10mm	6.4	7.2	0.283	68.1	2.68	34	1.34
PLV6		12mm	4.8	7.2	0.283	75.2	2.96	37.6	1.48
PLV4	Female NPT/BSPT	1/8	1.2	4.4	0.172	45.2	1.78	22.6	0.89
PLV4		1/4	0.9	4.4	0.172	53.1	2.09	26.6	1.05
PLV6			4.3	7.2	0.283	60.5	2.38	30.3	1.19
PLV6	Male NPT/BSPT	1/2	2.7	7.2	0.283	73.2	2.88	36.6	1.44
PLV4		1/8	1	4.4	0.172	38.9	1.53	19.5	0.76
PLV4		1/4	1	4.4	0.172	48.3	1.9	24.2	0.95
PLV6	Male NPT to Let-Lok	1/2	2.4	7.2	0.283	67.1	2.64	33.5	1.32
PLV4		1/4	0.9	4.4	0.172	51.2	2.03	25.6	1.01
PLV4	Male to Female NPT	1/4	1	4.4	0.172	50.8	2	25.4	1.00

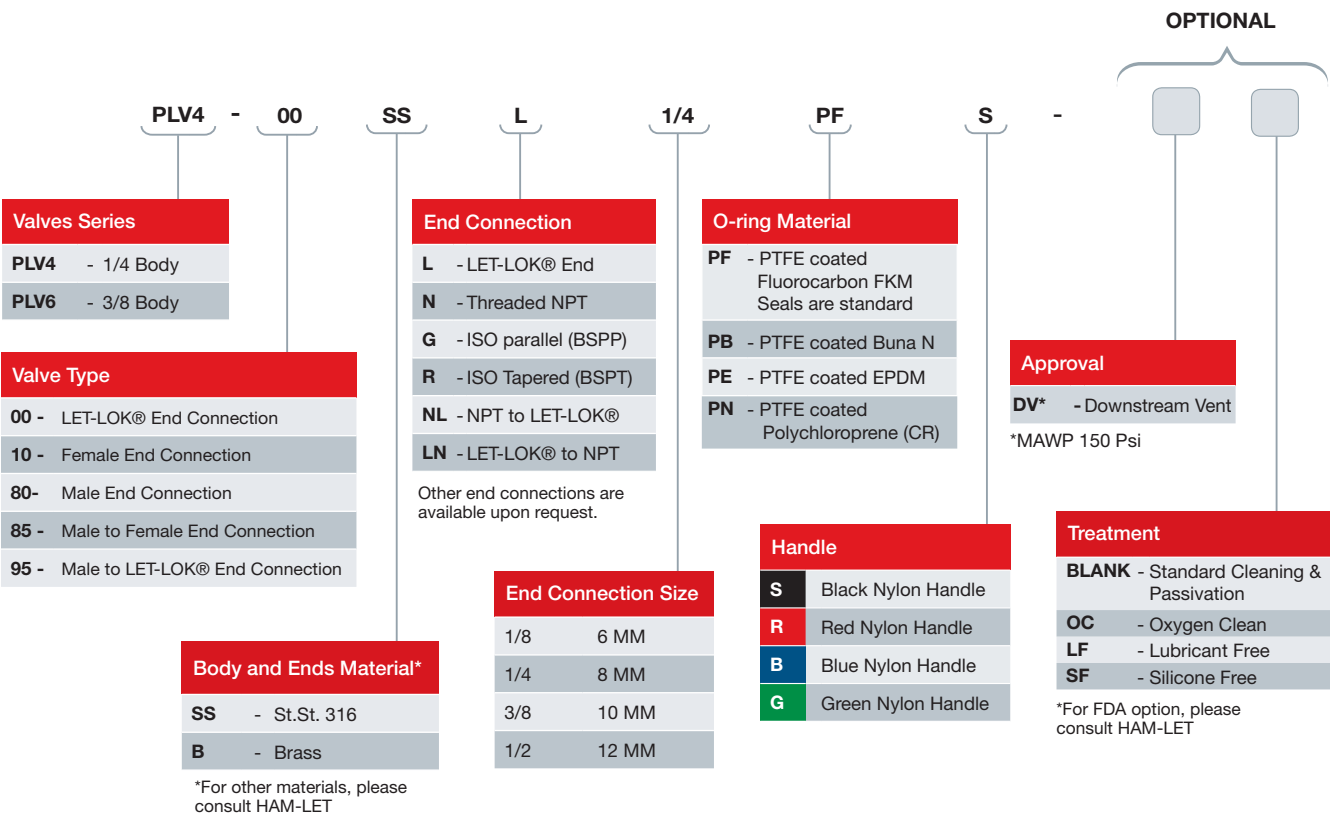
Dimensions are for reference only and are subject to change.

## DOWNSTREAM VENT



- In close position the plug valve allows to release the pressure to the atmosphere
- The maximum working pressure for downstream vents is 150 psig.

PLV SERIES ORDERING INFORMATION



# ORDERING INFORMATION FOR SPARE KIT

## HANDLE KIT

Handle Kit includes handle and pin. To order a spare-parts kit, use the following format:

<b>PLV4</b>	-	<b>HK</b>	<b>S</b>
Body Designator pre series		Kit Type	Handle
<b>PLV4</b>	- 1/4 Body	<b>HK</b> - Handle KIT	<b>S</b> Black Nylon Handle
<b>PLV6</b>	- 3/8 Body	<b>PLV6</b> - 3/8 Body	<b>R</b> Red Nylon Handle
			<b>B</b> Blue Nylon Handle
			<b>G</b> Green Nylon Handle

## SEAL KIT

Sale Kit includes 3 O-rings. To order a spare -parts kit, use the following format:

<b>PLV4</b>	-	<b>SK</b>	<b>S</b>
Body Designator pre series		Kit Type series	O-ring material
<b>PLV4</b>	- 1/4 Body	<b>SK</b> - Seal Kit	<b>PF-</b> PTFE coated Fluorocarbon FKM
<b>PLV6</b>	- 3/8 Body		<b>FB-</b> PTFE coated Buna N
			<b>PE-</b> PTFE coated EPDM
			<b>PN-</b> PTFE coated Polychloroprene (CR)

## PLUG KIT

Plug Kit includes handle, plug and 3 O-rings. To order a spare -parts kit, use the following format:

<b>PLV4</b>	-	<b>SS</b>	<b>PK</b>	<b>PF</b>	<b>S</b>
Body Designator pre series		Body and Ends material	Kit Type	O-ring material	Handle
<b>PLV4</b>	- 1/4 Body	<b>SS</b> St.St. 316	<b>PK</b> - Plug Kit	<b>PF-</b> PTFE coated Fluorocarbon FKM	<b>S</b> Black Nylon Handle
<b>PLV6</b>	- 3/8 Body	<b>B</b> Brass		<b>FB-</b> PTFE coated Buna N	<b>R</b> Red Nylon Handle
				<b>PE-</b> PTFE coated EPDM	<b>B</b> Blue Nylon Handle
				<b>PN-</b> PTFE coated Polychloroprene (CR)	<b>G</b> Green Nylon Handle

### Warning!

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.