

SPRINGLOADED LOW PRESSURE REGULATOR LPRS SERIES

HIGH ACCURACY VERSION OF RS10 & RS15



MAIN FEATURES

- ss 316L
- balanced valve
- Cv 1" 3.84, Cv 1½" 7.3
- large diaphragm - higher accuracy
- high flows
- leak tight shut-off
- suction tube reduces droop
- ideal as second stage regulator
- elastomer seat insert
- choice of o-ring materials
- shell design according to EN 12516
- delivery according to PED

CHARACTERISTICS

Inlet pressure	: 16 bar
Outlet range	: 0,1 – 3 bar (16 bar design)
Seat diameter:	: 1" model : 14 mm
	: 1½" model : 19 mm

Cv (Kv):

- 1" model : 3.84 (3.28)
- 1½" model : 7.3 (6.3)

Materials:

- Body & Trim : ss 316L
- Spring housing : ss 316L
- Seat insert : elastomer
- Seals & Diaphragm : elastomer

Connections*

- LPRS10 : 1" bspp, npt
- LPRS15 : 1½" bspp, npt
- Gauge ports : 2x ¼" bspp, npt

Weight:

- LPRS10 : 8 kg (without flanges)
- LPRS15 : 10 kg (without flanges)

Temperature range : -20 to +80°C *

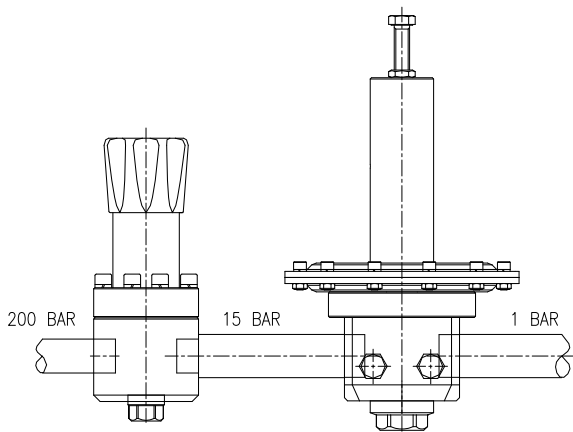
* **Note:** npt threaded regulator come with npt gauge ports only. The same goes for bspp.

CLEANING

This regulator is ultrasonically cleaned and degreased. Oxygen cleaning based on ASTM-G93 Level C / CGA 4.1 is optional.

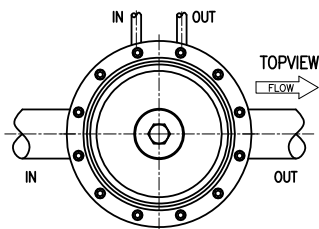
Do not use teflon tape or anaerobic sealing compounds on the bspp threads.

* Actual range depends on choice of seat- and seal material.



Typical 2-stage reduction

PORTING STYLE



Swagelok regulators are not "Safety Accessories" as defined in the Pressure Equipment Directive 97/23/EC:

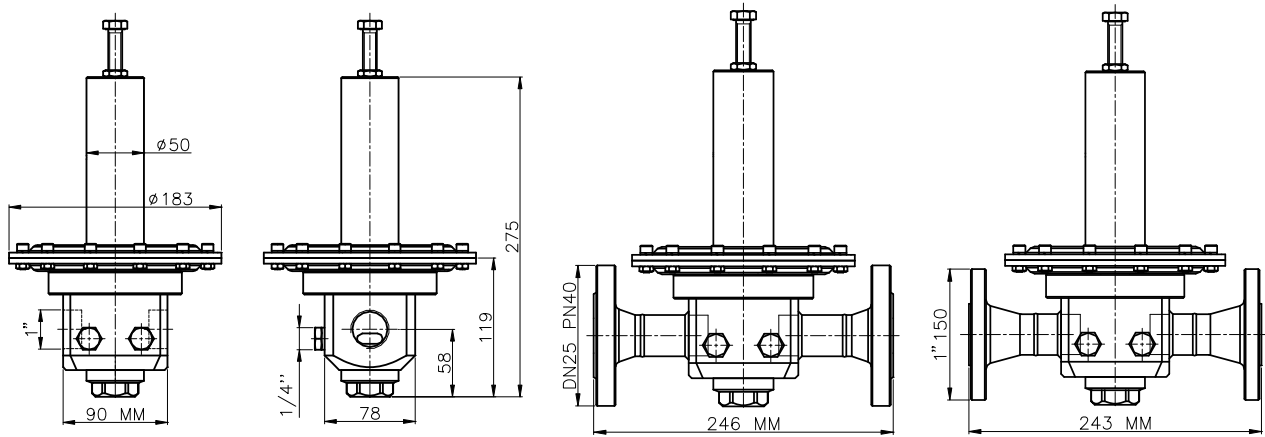


Do not use the regulator as a shut off device.

RHPS Series

Swagelok

DIMENSIONS – 1" model DN25

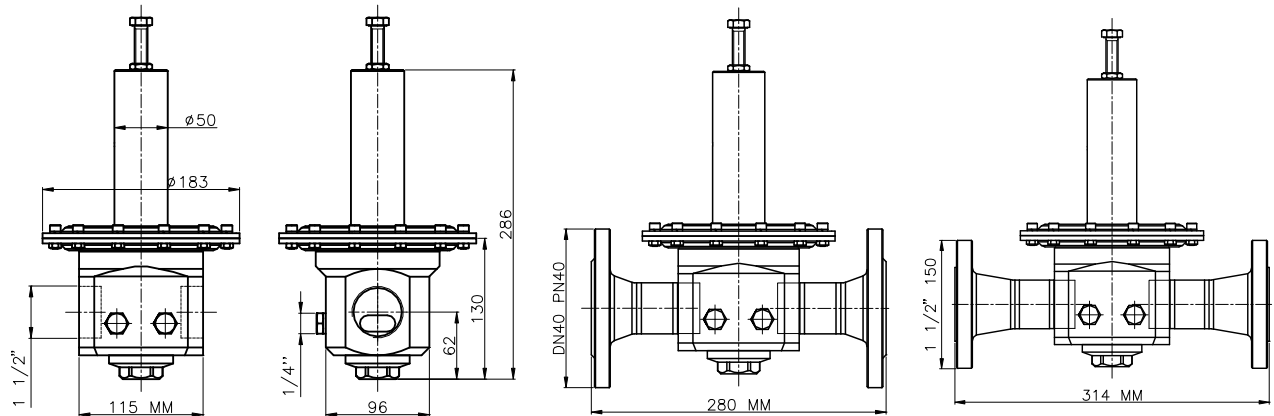


1" BSPP – ISO R/228/1
1" NPT– ANSI B1.20.1

DN25 PN40 – DIN 2635

1" 150# - ANSI B 16.5

DIMENSIONS – 1½" model DN40



1½" BSPP – ISO R/228/1
1½" NPT– ANSI B1.20.1

DN40 PN40 – DIN 2635

1½" 150# - ANSI B 16.5

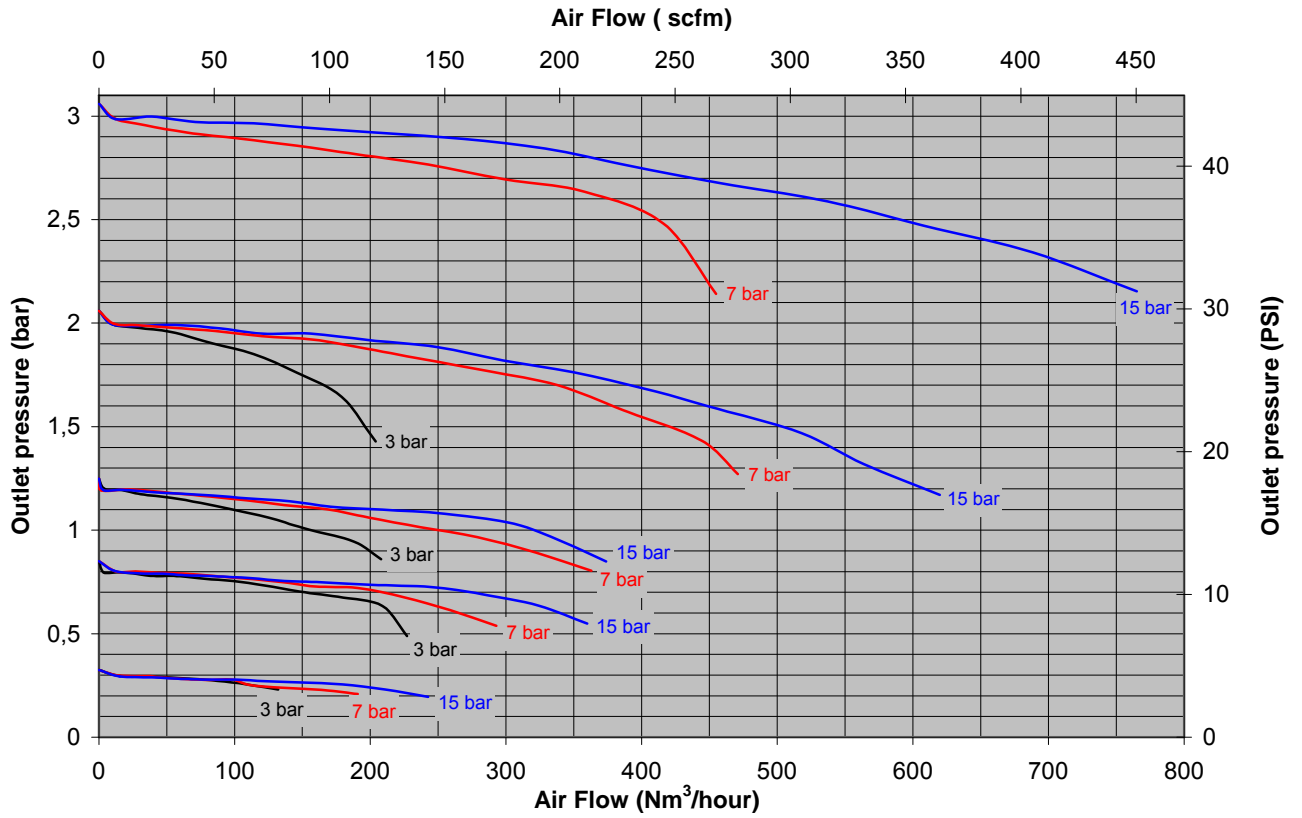
FLOWTABLE

Outlet pressure Range (bar)	Set Pressure P2 (bar)	Inlet Pressure P1 (bar)	LPRS(F)10 airflow (Nm ³ /hr)		LPRS(F)15 airflow (Nm ³ /hr)	
			10% droop	20% droop	10% droop	20% droop
0.1 – 1	0.3	3	55	100	65	120
		7	80	120	90	180
		15	120	200	170	250
	0.8	3	100	210	120	250
		7	190	240	250	440
		15	240	320	320	550
0.3 - 3	1.2	3	110	200	120	230
		7	180	290	220	370
		15	250	360	300	600
	2	3	140	180	170	290
		7	250	370	320	610
		15	310	450	600	900
	3	3	--	--	--	--
		7	300	430	450	790
		15	430	710	700	1200

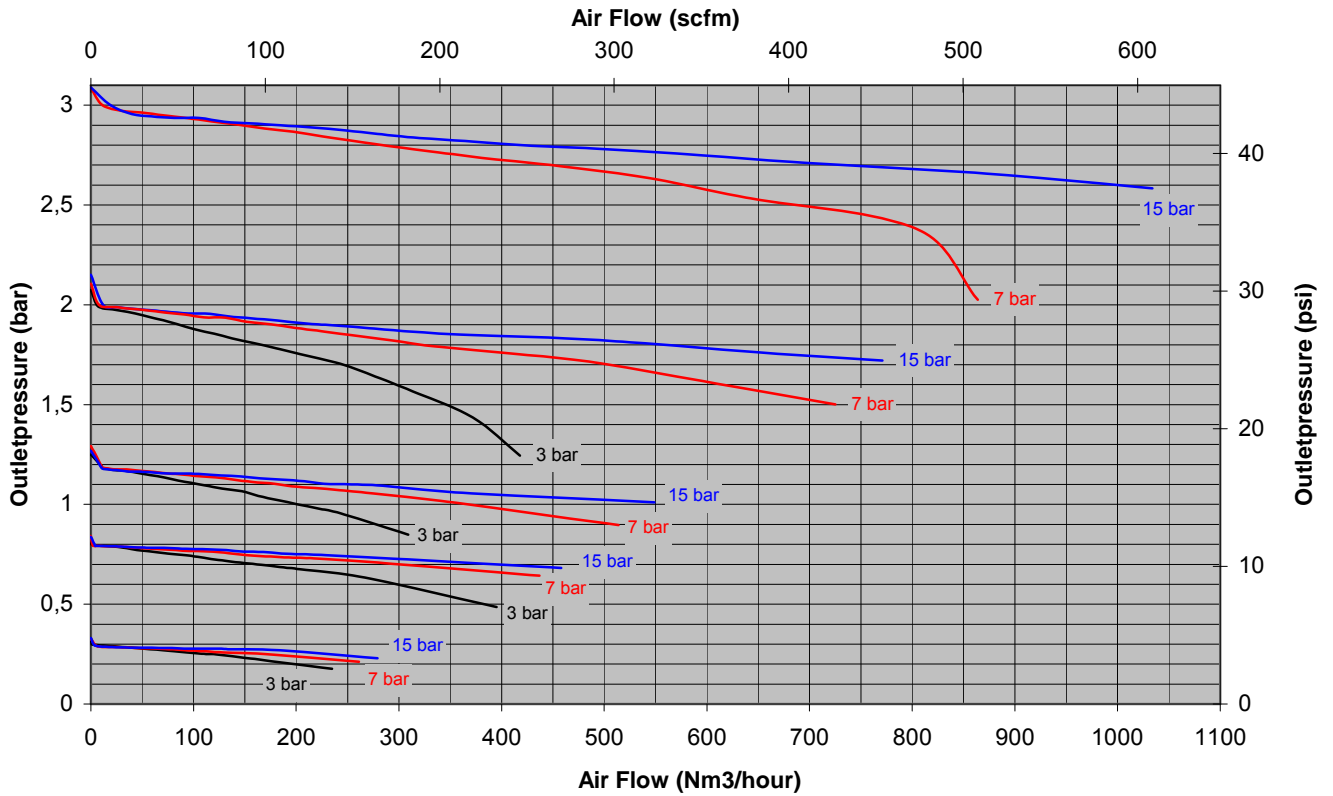
CLOSING PRESSURES

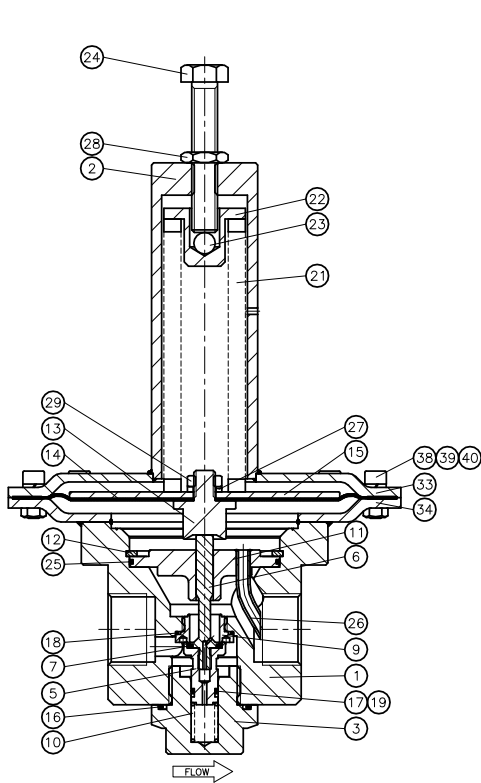
Set Pressure P2 (bar)	LPRS(F)10	LPRS(F)15
	% above set pressure	% above set pressure
0.3	10 %	10 %
0.8	8 %	8 %
1.2	6 %	6 %
2	5 %	5 %
3	3 %	3 %

FLOWCURVE – LPRS10

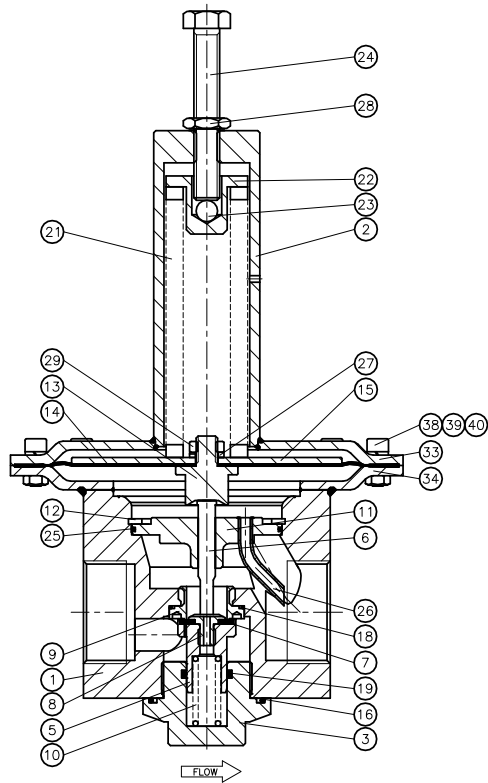


FLOWCURVE – LPRS15



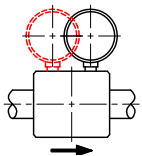


LPRS10



LPRS15

GAUGEPORT(S)
standard:



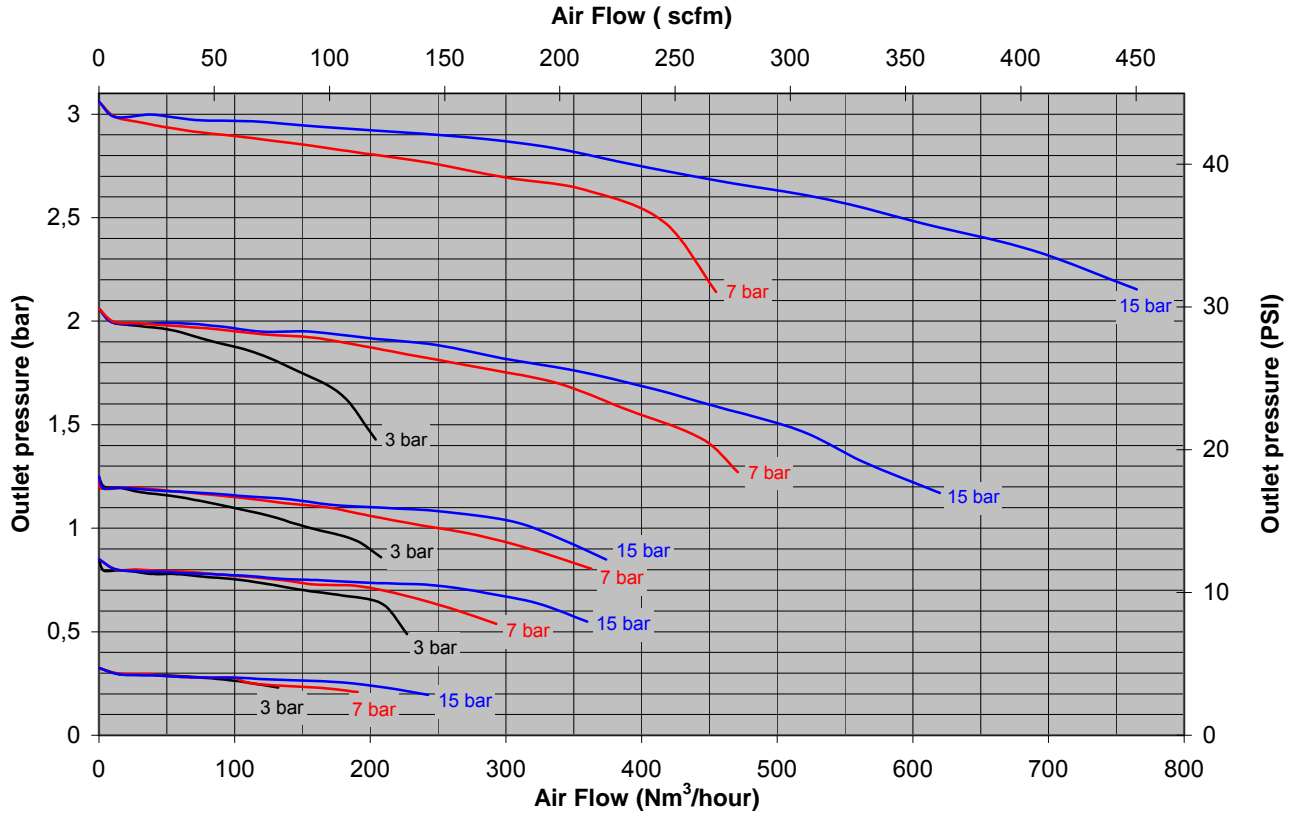
Only one gauge Ø63 fits directly into the body.

ORDERING INFORMATION
example: LPRSN15-02-2-NNN

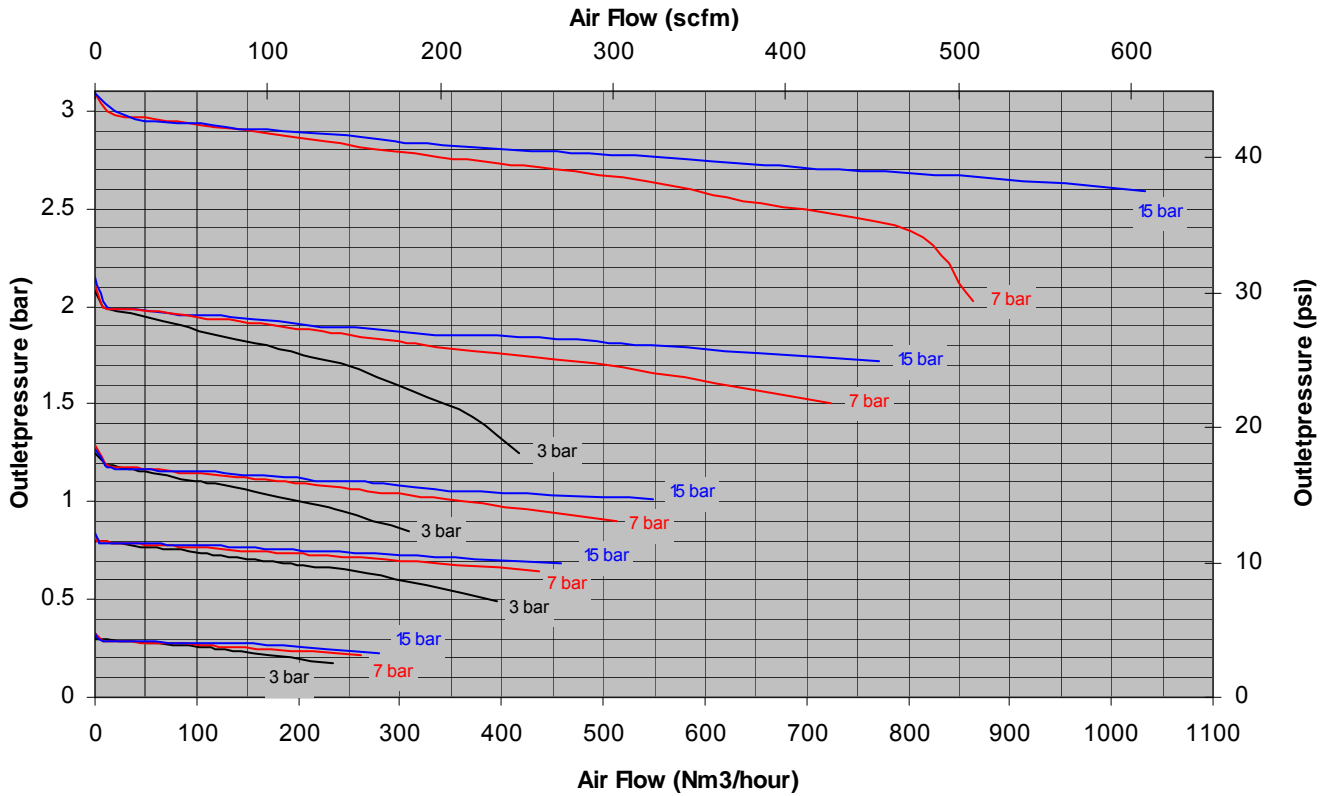
LPRS	N15	- 02	- 2	- N	N	N	
series / inlet	connection	flange facing*	material	outlet range	o-rings	diaphragm	seat
LPRS = 16 bar	B10 = 1" bspp B15 = 1½" bspp N10 = 1" npt N15 = 1½" npt ANSI flanges FA10A = 1" class 150 FA15A = 1½" class 150 DIN flanges FD10N = DN25 PN40 FD15N = DN40 PN40	(if flanges are ordered) 1 = raised face smooth	02 = ss316L	2 = 0.1 – 1 bar 3 = 0.3 – 3 bar	N = nitrile E = epdm V = viton	N = nitrile E = epdm V = viton T = ptfе	N = nitrile E = epdm V = viton

Red text identifies an example ordering number.

FLOWCURVE – LPRS10



FLOWCURVE – LPRS15



Safe Product Selection
 When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

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