



SURPLUSSING VALVE FOR STEAM

MODEL SP-COSR-16

SELF-ACTUATED PRIMARY PRESSURE CONTROL VALVE

Features

Pilot operated surplussing valve to rapidly and accurately release excess pressure from steam equipment. Also ideal for controlling the pressure of flash steam recovery systems.

1. Self-aligning and shock-absorbing spherical piston ensures high accuracy of control.
2. Proportional Regulation with very small P-Offset.
3. Pilot valve protected by fine mesh screen.
4. Internal pressure sensing channel makes external sensing line unnecessary.
5. Wide pressure setting range with one adjustment spring.
6. Major internal components made of stainless steel.



Specifications

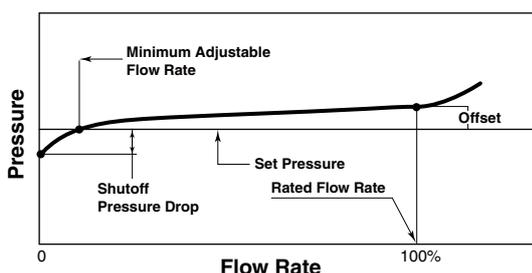
Model	SP-COSR-16	
Connection	Screwed	Flanged
Size (mm)	15, 20, 25, 32, 40, 50	
Body Material	Cast Iron (FC250)	
Maximum Operating Pressure (MPaG) PMO	1.6	
Maximum Operating Temperature (°C) TMO	220	
Minimum Adjustable Flow Rate	5% of Rated Flow Rate	
Pressure Setting Range (MPaG)	0.1–1.0	
Valve Seat Leak Rate	less than 0.05% of Rated Flow Rate	
Shutoff Pressure (MPa)	max. 0.02	
Offset (MPa)	max. 0.03	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.6 1 MPa = 10.197 kg/cm²
Maximum Allowable Temperature (°C) TMA: 220



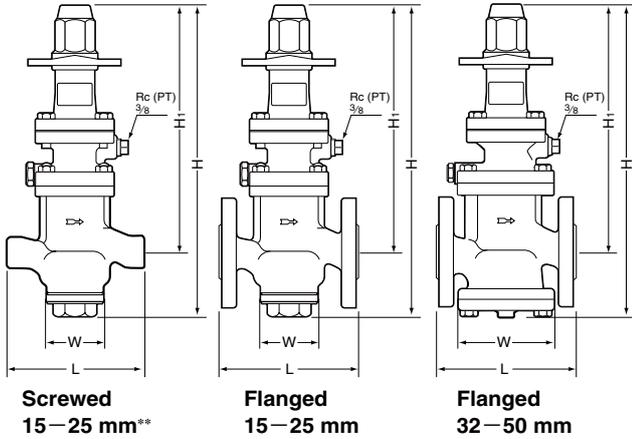
To avoid abnormal operation, accidents or serious injury, **DO NOT** use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

Flow Characteristics



Dimensions

● **SP-COSR-16**



**Shape of 32—50 mm base same as flanged 32—50 mm

SP-COSR-16 Screwed* (mm)

Size	L	H	H ₁	W	Weight (kg)
15	175	392	320	93	9
20					9.5
25	190		317		11
32	220	427	337	126	15
40					16
50	260	447	350	157	21

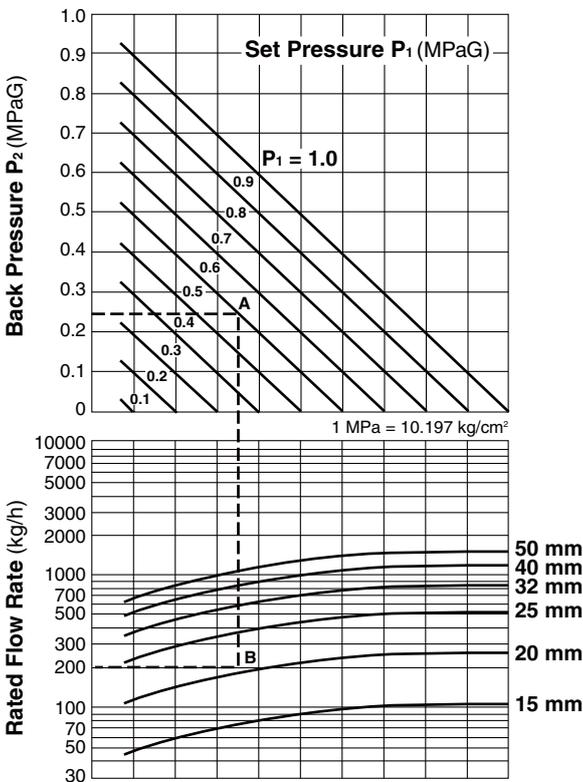
* Rc (PT), other standards available

SP-COSR-16 Flanged (mm)

Size	L				H	H ₁	W	Weight* (kg)
	ASME Class							
	125FF	(150RF)	250RF	(300RF)				
(15)	—	170	—	170	392	320	93	[9.5]
(20)	—	182	—	182				[11]
25	176	188	188	192	427	337	126	13
32	206	220	220	220	447	350	157	17
40	209		222	224				19
50	247	255	260	261				26

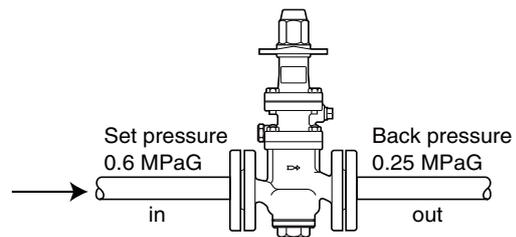
() No ASME standard exists for cast iron; machined to fit steel flanges
 Class 125 FF can connect to 150 RF, 250 RF can connect to 300 RF
 Other standards available, but length and weight may vary
 * Weight is for Class 250 RF [300 RF]

Sizing Charts



Sizing Example

For a set pressure of 0.6 MPaG, back pressure of 0.25 MPaG and a saturated steam flow rate of 200 kg/h, select an appropriate size.
 Locate intersecting point A of 0.6 MPaG and 0.25 MPaG in the upper graph and go down until 200 kg/h, point B in the lower graph is reached. Since point B is located between 20 mm and 25 mm, the larger size, 25mm should be chosen.



Manufacturer

ISO 9001/ISO 14001

TLV CO., LTD.
 Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

