

# Reduced Capacity Safety Relief Valve

Data Sheet

Type: SR1R



## Purpose:

Reduced capacity safety relief valves (SR1R) are conventional, direct spring loaded safety relief valves, designed to protect small vessels, oil pots and other critical system components such as heat exchangers, condensers and coolers from the effects of system blockages and continued heat input.

The SR1R is based off of the popular SR series of safety relief valves and features the same lay in length. The reduced capacity allows for smaller relief piping to be used and provides a more cost effective solution for small vessels.



## Contact Information:

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## Product Features:

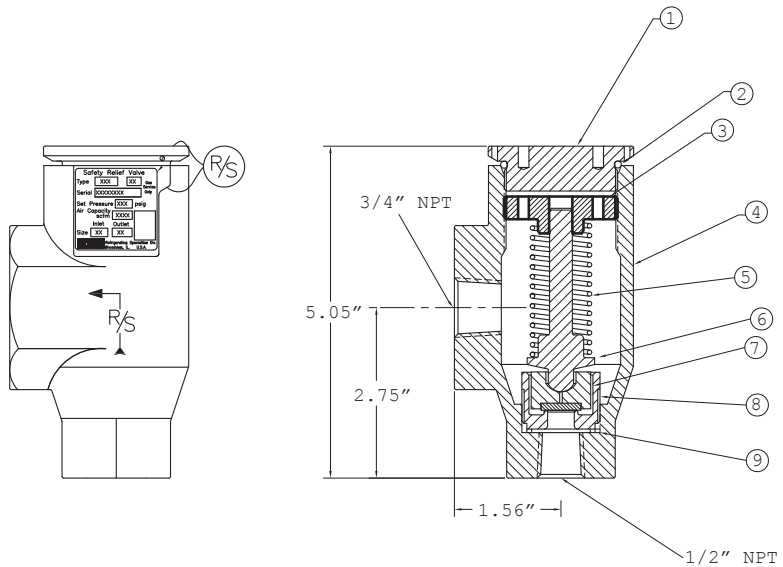
- Ideal for oil pots and other small vessels
- Suitable for ammonia and halocarbon refrigerants
- ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 compliant
- ANSI/ASHRAE 15 safety standard for refrigeration systems
- All stainless steel internal parts
- Non-stick PTFE seat
- Can be used with the M1 manifold in a dual relief arrangement
- Set pressure tolerance of  $\pm 3\%$
- Unaffected by vibration
- Excellent repeatability



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## Technical Data

- Ambient Temperature:  
-40°C to 150°C (-40°F to 300°F)
- Maximum Rated Pressure:  
28 bar (400 psig)
- Pressure Settings Range:  
10.3 to 27.6 bar (150 to 400 psig)  
±3% set pressure tolerance
- 20% below set point re-seat pressure  
after release
- 50% blow down to reseat



### Important:

Recommended sizing guidelines should follow local codes ANSI/ASHRAE 15, IIAR, ASME Section VIII Division 1 and API-520.

### Cross-Section: Reduced Capacity Safety Relief Valve (SR1R)

No.	Part Description	Material
1	Cap	Steel
2	O-ring, Cap	Neoprene
3	Plate, Spring	Stainless Steel
4	Valve Body	Ductile Iron
5	Spring	Stainless Steel
6	Stem	Stainless Steel
7	Disc/Holder	PTFE/Stainless Steel
8	Seat, Valve	Stainless Steel
9	Gasket, Seat	Non-Asbestos Gylon

Valve Type	Inlet Connection (FPT)	Outlet Connection (FPT)	Orifice Diameter	Pressure Setting	Flow Capacity (air)	
	inch	inch			Lbs. per min	SCFM
SR1R	1/2	3/4	1/2	150	4.5	59
				200	5.8	77
				250	7.2	95
				300	8.6	113
				350	10.0	131
				400	11.4	149