

# High Pressure Relief Valves

20RV Series, 20,000 psi (1379 bar)



- ❖ Soft seat relief valves.
- ❖ Set pressure: 1500 to 20,000 psig (103 to 1379 bar).
- ❖ Working temperature: 32°F to 400°F (0°C to 204°C).
- ❖ Liquid or gas service. Provide bubble tight shut-off of gas.
- ❖ Pressure settings are made at the factory and valves are tagged accordingly.
- ❖ State the required set pressure with the order please.
- ❖ Lock wired secure cap to maintain set pressure.
- ❖ Easily exchangeable seat.
- ❖ Free assembly positions.

## Features

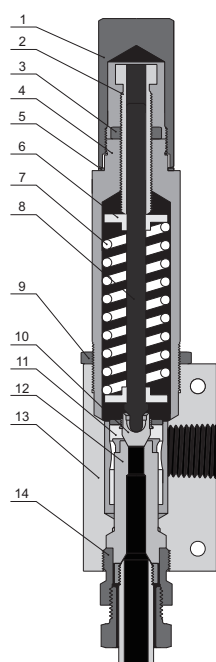
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State the required set pressure with the order please.
- ❖ Lock wired secure cap to maintain set pressure.
- ❖ Easily exchangeable seat.
- ❖ Free assembly positions.
- ❖ Field adjustable and soft seat relief valves.

## Technical Data

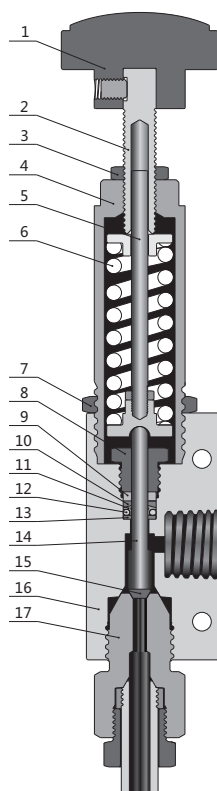
Ordering Number	Inlet		Outlet Connection Type	Orifice Size in. (mm)	Cv	Pressure Rating psig (bar)@100°F (38°C)		
	Tube OD in.	Connection Type				Minimum Set Pressure	Maximum Set Pressure	Maximum Back Pressure
20RV-MPF9-FNPT12-5-	9/16	MPF9	FNPT12	0.312 (7.92)	1.2	1500 (103)	5000 (345)	500 (34.5)
20RV-MPF9-FNPT12-10-	9/16	MPF9	FNPT12	0.25 (6.35)	0.8	5000 (345)	10,000 (690)	500 (34.5)
20RV-MPF9-FNPT12-20-	9/16	MPF9	FNPT12	0.156 (3.96)	0.3	10,000 (690)	20,000 (1379)	500 (34.5)

**NOTE:**  
Maximum system operating pressure should not exceed 90% of relief valve set pressure.

## Standard Materials of Construction

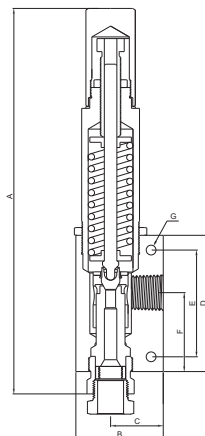


Item	Component	Valve Material
1	Cap	316 SS/A479
2	Adjusting Bolt	316 SS/A479
3	Lock Nut	316 SS/A479
4	Spring Cylinder	316 SS/A479
5	Gasket	316L SS/A276
6	Spring Washer	316 SS/A479
7	Spring	17-7PH/AMS5678
8	Spindle	316 SS/A479
9	Lock Nut	316 SS/A276
10	Plug	PEEK
11	Plug Guide	316 SS/A479
12	Seat	316 SS/A479
13	Valve Body	316 SS/A479
14	Seat Gland	316 SS/A479
Lubricant		Molybdenum Disulfide



Item	Component	Valve Material
1	Handle	6061/B211
2	Set Screw	316SS/A479
3	Lock Nut	316SS/A276
4	Bonnet	316SS/A479
5	Upper Stem	316SS/A479
6	Spring	17-7PH/AMS5678
7	Lock Nut	316SS/A276
8	Packing Gland	C63000/B150
9	Washer	C63000/B150
10	Backing Ring	PEEK
11	Backing Ring	PTFE
12	O-ring	Fluorocarbon FKM
13	Ring	PEEK
14	Lower Stem	316SS/A479
15	Plug	PEEK
16	Body	316SS/A479
17	Seat	316SS/A479
Lubricant		Molybdenum Disulfide

## Dimensions

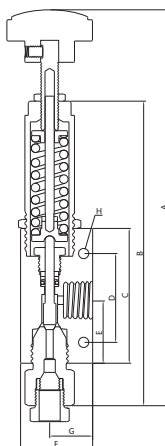


**Relief Valves Dimensions**

A	B	C	D	E	F	G
in. (mm)						
9.46 (240.4)	2.00 (50.8)	1.19 (30.2)	3.25 (82.6)	2.25 (57.1)	1.94 (49.3)	0.28 (7.1)

**NOTE:**

1. G is the dimension of Mounting Holes.
2. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or CIR-LOK Group.



A	B	C	D	E	F	G	H
in. (mm)							
10.98 (278.8)	8.45 (214.6)	3.74 (95.0)	2.46 (62.6)	1.75 (44.4)	2.00 (50.8)	1.19 (30.3)	0.28 (7.1)

**NOTE:**

1. H is the dimension of mounting Holes.
2. All dimensions are reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or CIR-LOK Group.

# How to Order

20RV— MPF9 — FNPT12 — 10 — A — 316

Series	Intel Type and Size	Outel Type and Size	Spring Designato	Adjustable	Body Material
20RV	MPF9 9/16"	FNPT12 3/4 Female NPT	5 1500-5000 psig 10 5000-10000 psig 20 10000-20000 psig	None A Adjustable	316 316 S.S.