Relief Valves

RV1-12

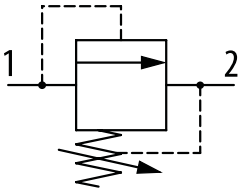
Relief valve, Direct Acting, Poppet Type

350 bar [5000 psi] • 114 l/min [30 US gpm]

DESCRIPTION AND OPERATION

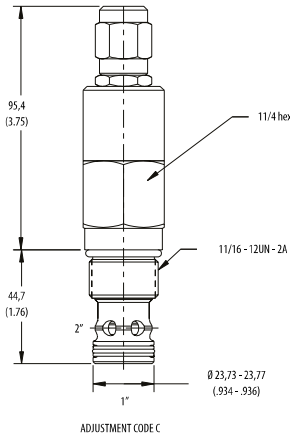
This is a direct acting, poppet type relief valve that relieves from port 1 to 2. It can be used as a cost-effective main relief or to protect an actuator from over-pressurization.

SCHEMATIC



DIMENSIONS

mm [in]

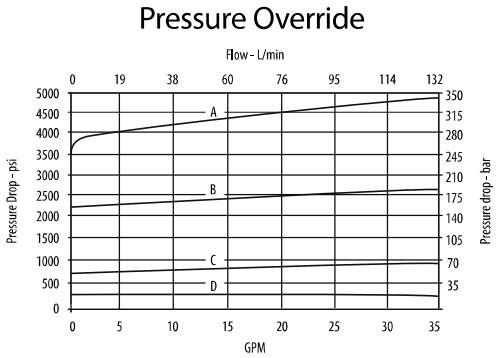


Installation torque
A - 81-95 Nm [60-70 ft. lbs]
S - 102-115 Nm [75-85 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**114 l/min [30 US gpm]**
Leakage	5 drops/min @ 80% of pressure setting
Weight	0.49 kg [1.08 lb]
Cavity	C-12-2 or C-12-2U

PERFORMANCE CURVES



A - 40 spring • **B** - 22 spring • **C** - 8.5 spring • **D** - 2.5 spring

MODEL CODE

RV1 - 12 - V - C - A - 4G - U - 2.5 - 10

Seal Option

Code	Seal Kit
Omit-Buna - N	02-165881
V-Viton	02-165888

Adjustment Option

C - Tamper Resistant
K - Knob
S - External

Housing Material

Omit - No Housing
A - Aluminum
S - Steel

Housing

Code	Ports	Housing Model Code			
		C-12-2 Aluminum Heavy Duty	C-12-2U Aluminum Heavy Duty	C-12-2 Steel Heavy Duty	C-12-2U Steel Heavy Duty
0	No Housing				
4G	1/2" BSP	02-161118	02-161116	02-172062	02-172512
6G	1/4" BSP	02-161117	02-161115	02-169665	02-162922
10T	#10 SAE	02-160640	02-160641	02-169744	02-169817
12T	#12 SAE	02-160644	02-160645	02-169782	02-169790

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Pressure Setting

Code x100 **-** Pressure setting in psi (50 psi increments within specified Pressure Range)
XXX-Standard setting (see Pressure Range for value)
Examples:

Code	Bar	Psi
10	69	[1000]
10.5	72.4	[1050]

Pressure Range

Code	Bar	Psi
2.5	3.4-17	[50-250]
Standard Setting	8.6	[125]
8.5	13-55	[200-850]
Standard Setting	29	[425]
22	20-150	[300-2200]
Standard Setting	76	[1100]
40	40-275	[600-4000]
Standard Setting	138	[2000]

Cavity

Omit - Cavity without undercut/No housing
U - Cavity with undercut