

Relief Valves

1ARC100

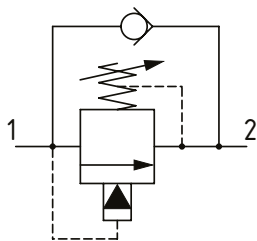
Relief valve, Pilot Operated, Spool Type with Reverse Free Flow

400 bar [5800 psi] • 150 l/min [40 US gpm]

DESCRIPTION AND OPERATION

This is a pilot operated, spool type relief valve that relieves from port 1 to port 2 with an integrated reverse flow check valve from port 2 to 1. It can be used to limit pressure in a system or on a service line of a directional valve. It maintains accurate pressure control with constant or varying flows, while also allowing make up flow through in the reverse direction.

SCHEMATIC

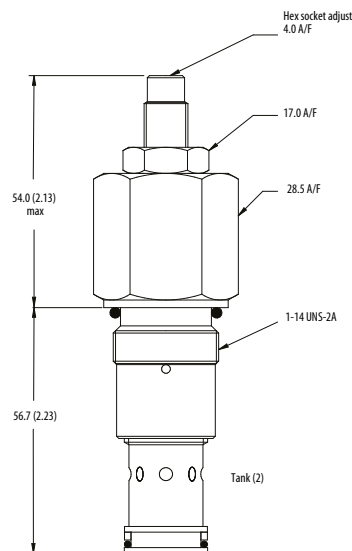


PERFORMANCE DATA

Rated pressure	400 bar [5800 psi]
Rated flow	150 l/min [40 US gpm]
Leakage	125 ml/min @ 280 bar [4060 psi]
Weight	0.14 kg [0.3 lb]
Cavity	A881

DIMENSIONS

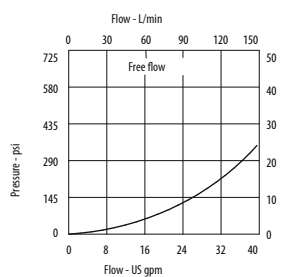
mm [in]



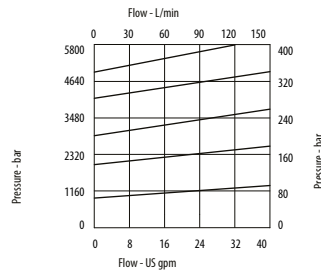
Installation torque
60 Nm [44 ft. lbs]

PERFORMANCE CURVES

Pressure Drop



Pressure Override



MODEL CODE

1ARC100 - P - 3W - 40 - S - 377 - 60

Basic Code

1ARC100 - No Housing
1ARC145 - Cartridge and housing
1ARC150/1ARC155 - Cartridge and housing through ported

Adjustment Option

P - External
R - Knob
G - Tamper resistant

Housing

Code	Ports	Housing Model Code				
		Aluminum 1ARC145	Aluminum 1ARC150	Steel 1ARC150	Aluminum 1ARC155	Steel 1ARC155
Omit	No Housing					
3W	3/8" BSP		C1084			
4W	1/2" BSP	B4851	C1044	C593		
6W	3/4" BSP	B3954	C1086	C4917		
8W	1" BSP				B1617	B4596
6T	3/8" SAE		B10784			
8T	1/2" SAE	B19403	C7140			
12T	3/4" SAE	B19404	B10506	B10742		
16T	1" SAE				B1037	B24040

Pressure Setting

Code - Pressure setting in bar (5 bar increments within specified Pressure Range)
XXX - Standard setting (see Pressure Range for value)
Example:

Code	Bar	Psi
60	60	[870]

Housing Material

Omit - Aluminum/No housing
377 - Steel

Seal Option

Code	Seal Kit
S - Nitrile	SK164
SV - Viton	SK164V

Pressure Range

Code	Bar	Psi
7	10-70	[145-1015]
Standard Setting	35	[510]
20	10-210	[145-3000]
Standard Setting	100	[1450]
40	50-400	[725-5800]
Standard Setting	280	[4060]

Pressure setting made at 14 l/min

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

* Additional housings available