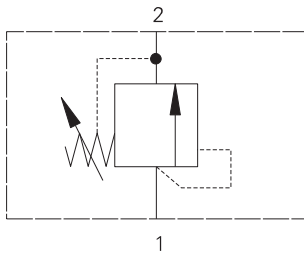
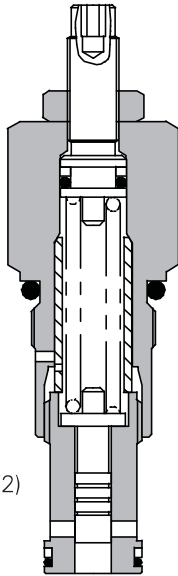


1GR30 - Relief valve

Spool, direct acting
30 L/min (8 USgpm) • 160 bar (2300 psi)



Sectional view



Pressure (1)

Tank (2)

Operation

The valve is held closed by the spring until pressure on the piston overcomes the valve setting, allowing relief flow to tank through a ring of radial holes.

Features

Stable, quiet operation.
Cartridge construction gives maximum flexibility in mounting. Offering good repeatability and reseal.

Performance data

Ratings and specifications

Figures based on: Oil Temp = 40°C Viscosity = 32 cStt (150 SUS)

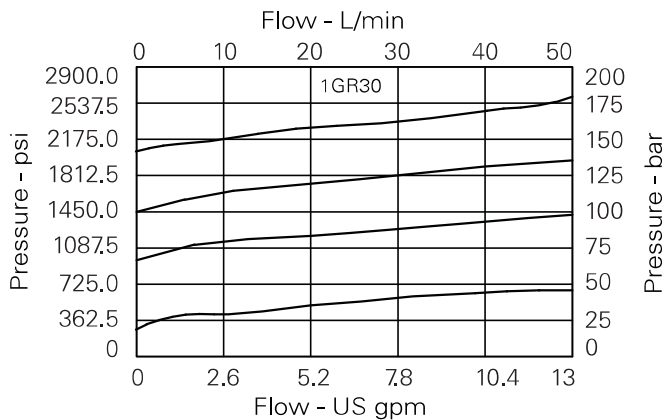
Rated flow	30 L/min (8 USgpm)	
Max setting	160 bar (2300 psi)	
Cartridge material	Working parts hardened and ground steel. External surfaces zinc plated.	
Body material	Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.	
Mounting position	Unrestricted	
Cavity	A881 (See Section M)	
Torque cartridge into cavity	60 Nm (44 lbs ft)	
Weight	1GR30	0.31 kg (0.7 lbs)
	1GR35	0.54 kg (1.2 lbs)
	1GR36	0.91 kg (2.0 lbs)
Seal kit	SK190 (Nitrile) SK190V (Viton®)	
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating temp	-30° to +90°C (-22° to +194°F)	
Leakage	15 milliliters/min nominal	
Nominal viscosity range	5 to 500 cSt	

Viton is a registered trademark of E.I. DuPont

Description

This is a direct acting spool type screw in cartridge relief valve. Ideal for low pressure applications, giving good control with fairly constant flow. Also very quiet in operation when applied on low flow or unstable hydraulic systems.

Pressure drop curves



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

1GR30 - Relief valve

Spool, direct acting
30 L/min (8 USgpm) • 160 bar (2300 psi)

Model code



1 Basic code

1GR30 - Cartridge Only
1GR35 - Cartridge and Body
1GR36 - Cartridge and Body Through Ported

2 Adjustment means

P - Leakproof Screw Adjustment
R - Handknob Adjustment
G - Tamperproof Cap
(See page E-7 for dimensions)

3 Port size

Code	Port size	Housing number - body only		
		Aluminium 1GR35	Aluminium 1GR36	Steel 1GR36
3W	3/8" BSP		C1084	
4W	1/2" BSP	B4851	C1044	C593
6W	3/4" BSP	B3954	C1086	C4917
6T	3/8" SAE		B10784	
8T	1/2" SAE		C7140	
12T	3/4" SAE		B10506	B10742

4 Pressure range

Note: Code based on pressure in bar.

7 - 7-70 bar.
Std setting 35 bar
16 - 14-160 bar.
Std setting 155 bar
Std setting made at 4.8 L/min

5 Seals

S - Nitrile (For use with most industrial hydraulic oils)
SV - Viton (For high temperature and most special fluid applications)

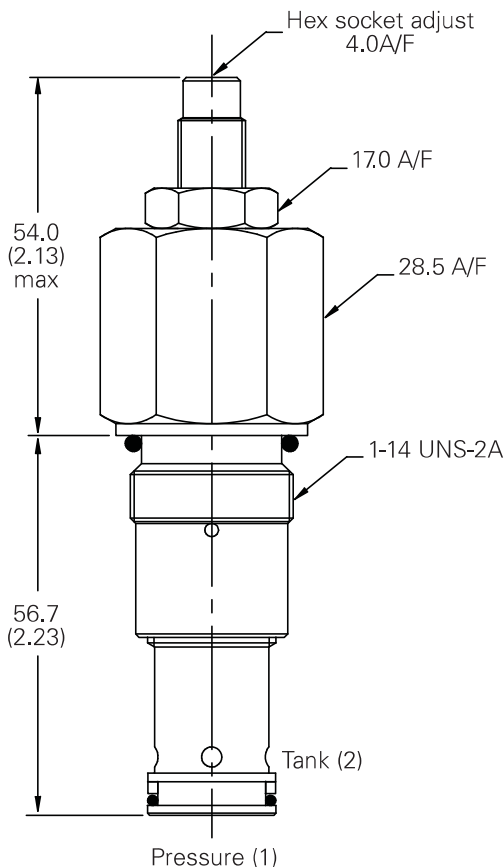
Dimensions

mm (inch)

Cartridge only

Basic Code

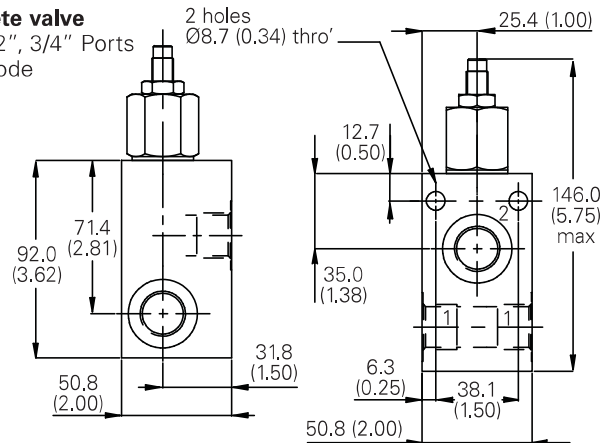
1GR30



Complete valve

3/8", 1/2", 3/4" Ports
Basic Code

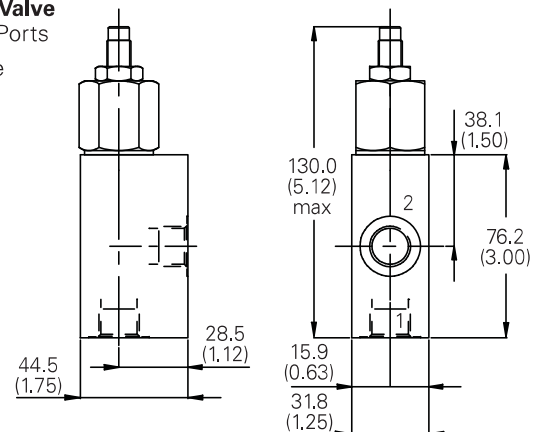
1GR36



Complete Valve

1/2", 3/4" Ports
Basic Code

1GR35



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.