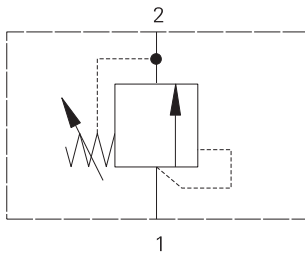


IGR60 - Relief valve

Spool, direct acting
60 L/min (16 USgpm) • 40 bar (600 psi)



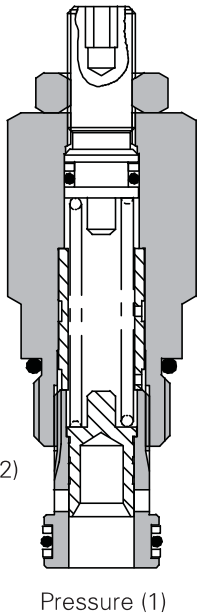
Operation

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.

Sectional view



Performance data

Ratings and specifications

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

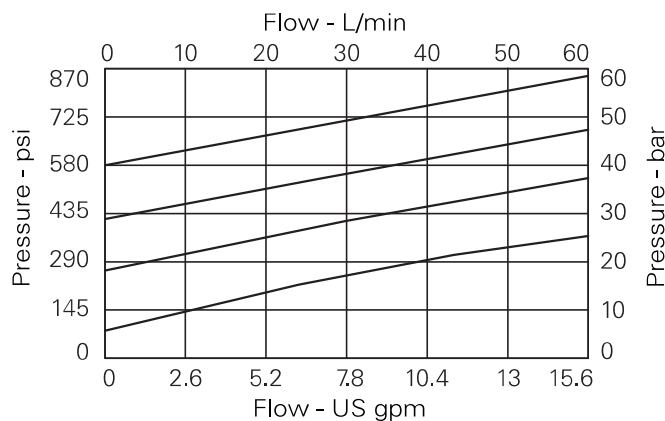
Rated flow	60 L/min (16 USgpm)	
Max setting	40 bar (600 psi)	
Cartridge material	Working parts hardened and ground steel. External surfaces zinc plated.	
Body material	Standard aluminium (up to 210 bar*). Add suffix "377" for steel option.	
Mounting position	Unrestricted	
Cavity	CVA20-01-0 (See Section M)	
Torque cartridge into Cavity	45 Nm (33 lbs ft)	
Weight	1GR60	0.18 kg (0.4 lbs)
	1GR65	0.36 kg (0.8 lbs)
	1GR66	0.48 kg (1.0 lbs)
Seal Kit	SK696 (Nitrile)	
	SK696V (Viton®)	
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)	
Operating temp	-30°C to +90°C (-22° to +194°F)	
Leakage	35 milliliters/min @ 210 bar	
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

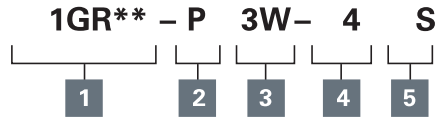


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

1GR60 - Relief valve

Spool, direct acting
60 L/min (16 USgpm) • 40 bar (600 psi)

Model code



1 Function

1GR60 - Cartridge Only
1GR65 - Cartridge and Body
1GR66 - 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 sizes

Code	Port size	Housing number - body only			
		Aluminium		Steel	
		1GR65	1GR65	1GR66	1GR66
3W	3/8" BSP	A13758	A13615		
4W	1/2" BSP	A8532		B13011	B13473
6T	3/8" SAE	A10780			
8T	1/2" SAE	A10781	A11798	B10783	B13477

4 Pressure range

Note: Code based on pressure in bar.

2 - 5-20 bar.
Std setting 20 bar
16 - 14-160 bar.
Std setting 28 bar
Std setting made at 14 L/min

5 Seals

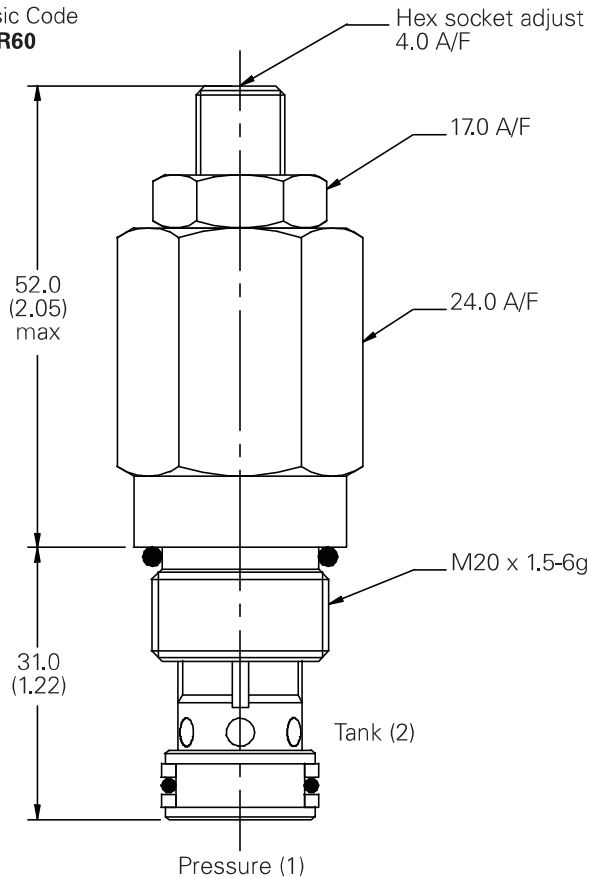
S - Nitrile (For use with most industrial hydraulic oils)
SV - Viton (For high temperature and most special fluid applications)

Dimensions

mm (inch)

Cartridge only

Basic Code
1GR60

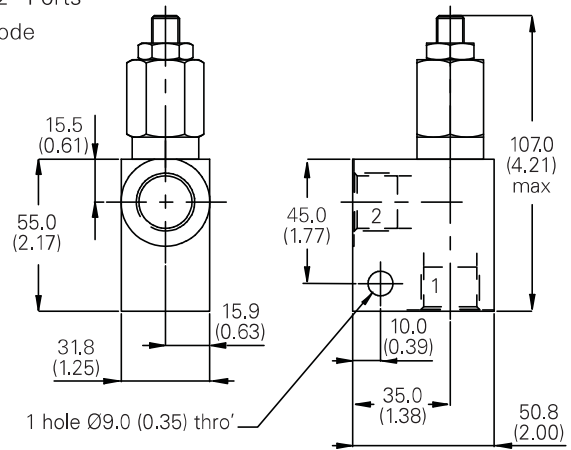


Complete valve

3/8", 1/2" Ports

Basic Code

1GR65

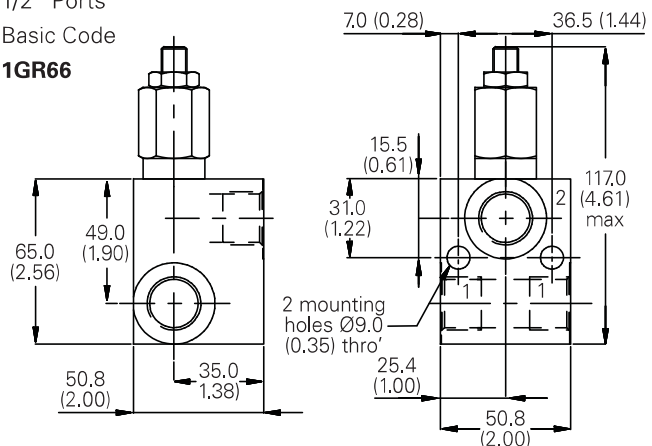


Complete valve

1/2" Ports

Basic Code

1GR66



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