

# Relief Valves

## 1GR100

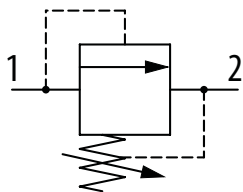
Relief Valve, Direct Acting, Spool Type

350 bar [5000 psi] • 150 l/min [40 US gpm]

### DESCRIPTION AND OPERATION

This is a direct acting spool, type relief valve that relieves from port 1 to 2. It has been designed to give stable performance at lower pressure and can be used as a purge relief, bypass filter elements or in applications that require better control.

### SCHEMATIC



### PERFORMANCE DATA

<b>Rated pressure</b>	<b>350 bar [5000 psi]</b>
<b>Rated flow</b>	<b>150 l/min [40 US gpm]</b>
<b>Max Pressure Setting</b>	40 bar [580 psi]
<b>Leakage</b>	15 ml/min nominal
<b>Weight</b>	0.31 kg [0.7 lb]
<b>Cavity</b>	A881

### MODEL CODE

**1GR100 - P - 3W - 0.6 - S - 377 - 60**

#### Basic Code

1GR100 - No housing  
 1GR145 - Cartridge and housing  
 1GR150 - Cartridge and housing  
 Through Ported  
 1GR155 - Cartridge and housing  
 Through Ported

#### Adjustment Option

P - External  
 R - Knob  
 G - Tamper resistant

#### Housing

Code	Ports	Housing Model Code				
		Aluminum 1GR145	Aluminum 1GR150	Steel 1GR150	Aluminum 1GR155	Steel 1GR155
<b>Omit</b>	No Housing					
<b>3W</b>	3/8" BSP		C1084			
<b>4W</b>	1/2" BSP	B4851	C1044	C593		
<b>6W</b>	3/4" BSP	B3954	C1086	C4917		
<b>8W</b>	1" BSP				B1617	B4596
<b>6T</b>	3/8" SAE		B10784			
<b>8T</b>	1/2" SAE	B19403	C7140			
<b>12T</b>	3/4" SAE	B19404	B10506	B10742		
<b>16T</b>	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	SK190
SV-Viton	SK190V

#### Pressure Range

Code	Bar	Psi
<b>0.6</b>	0.3-6	[4.3-90]
Standard Setting	6	[90]
<b>2</b>	5-25	[75-360]
Standard Setting	20	[290]
<b>4</b>	5-40	[75-580]
Standard Setting	28	[400]

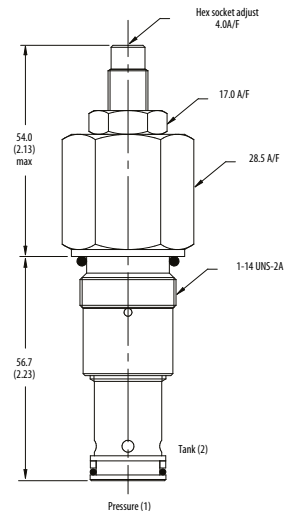
Pressure setting made at 4.8 l/min

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

\* Additional housings available

### DIMENSIONS

mm [in]



**Installation torque**  
 60 Nm [44 ft. lbs]

### PERFORMANCE CURVES

#### Pressure Override

