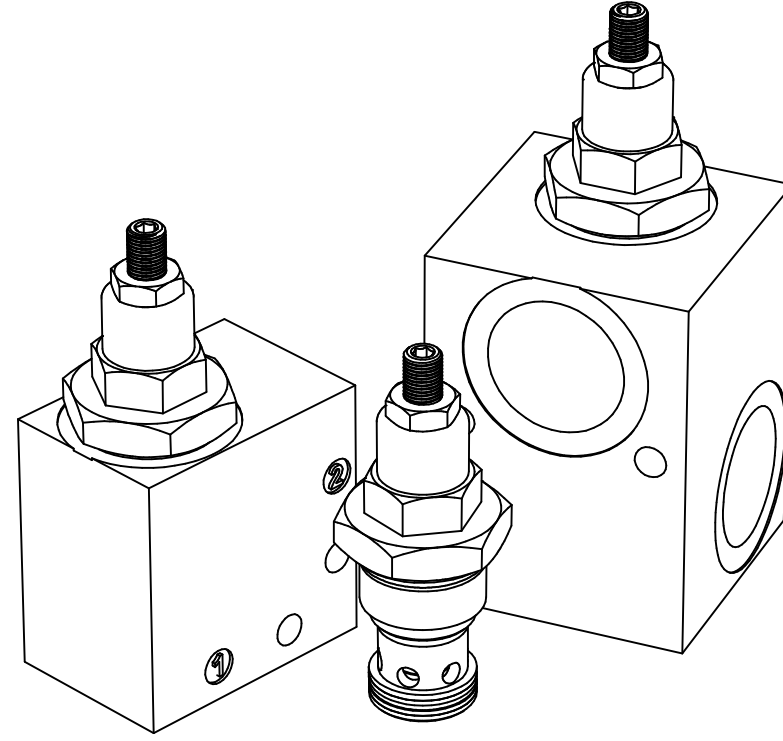
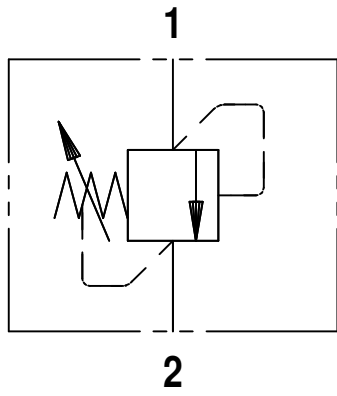




AR 16

FLUID POWER SYMBOL



APPLICATION

Pressure Relief valves are used to limit the pressure in the system as set on the valve. Pilot Operated Relief Valves are applicable more in systems where pressure regulation is needed over pressure safety. The barrel-piston assembly of the valve implies that the valve is not a zero-leak valve and cannot be used for load holding applications. The valve is ideal for continuous duty providing accurate pressure control with constant or varying flows.

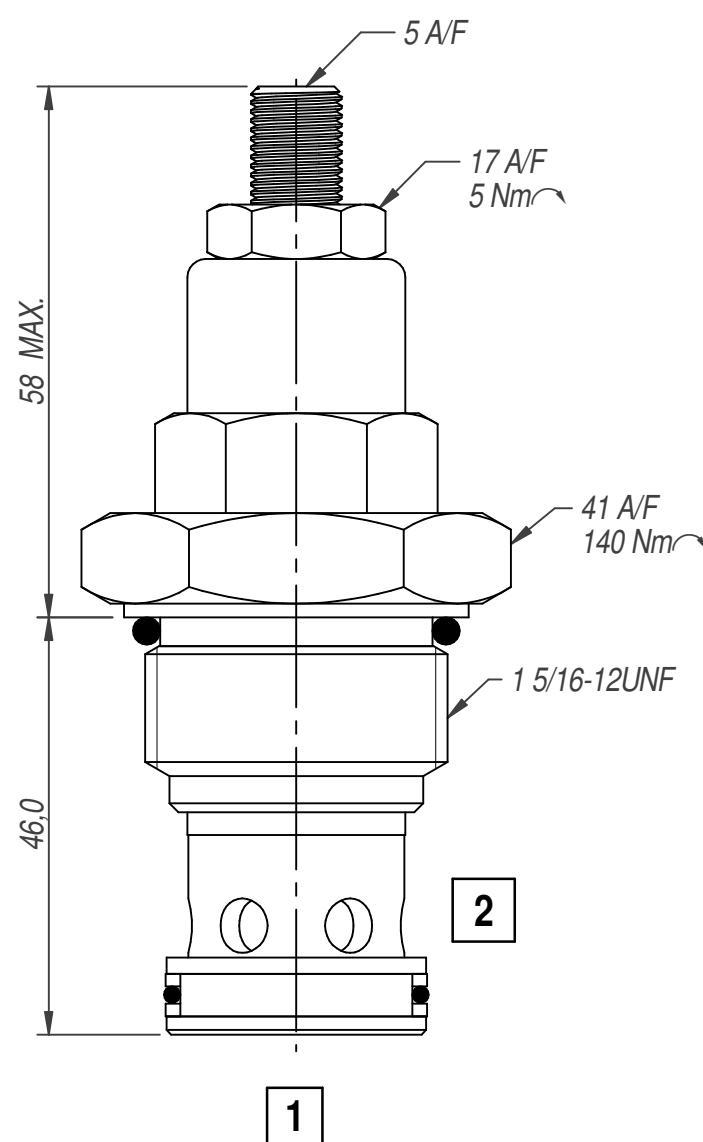
OPERATION

When the inlet pressure at Port 1 (Pressure) exceeds the setting of the valve, the ball unseats causing the pilot section to open. This results in a small flow across the orifice in the main spool. The subsequent pressure drop moves the secondary spool against a light spring opening a ring of radial holes in the sleeve and allowing relief flow to Port 2 (Tank)

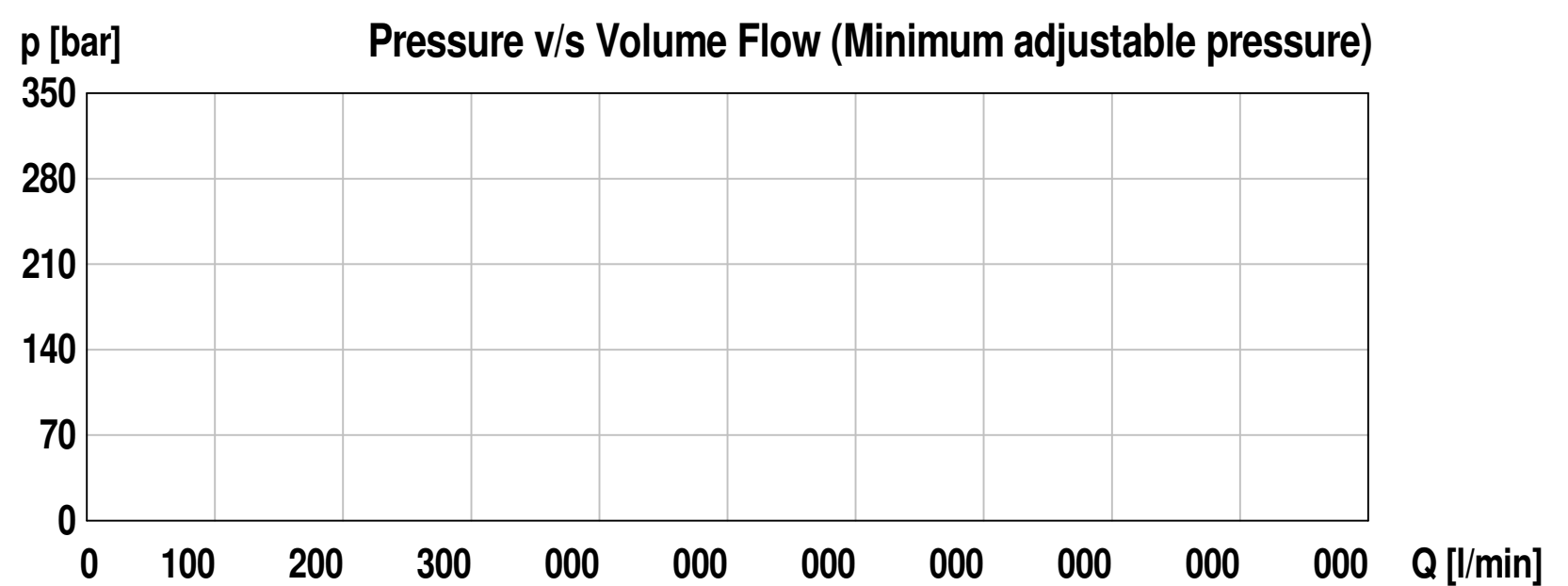
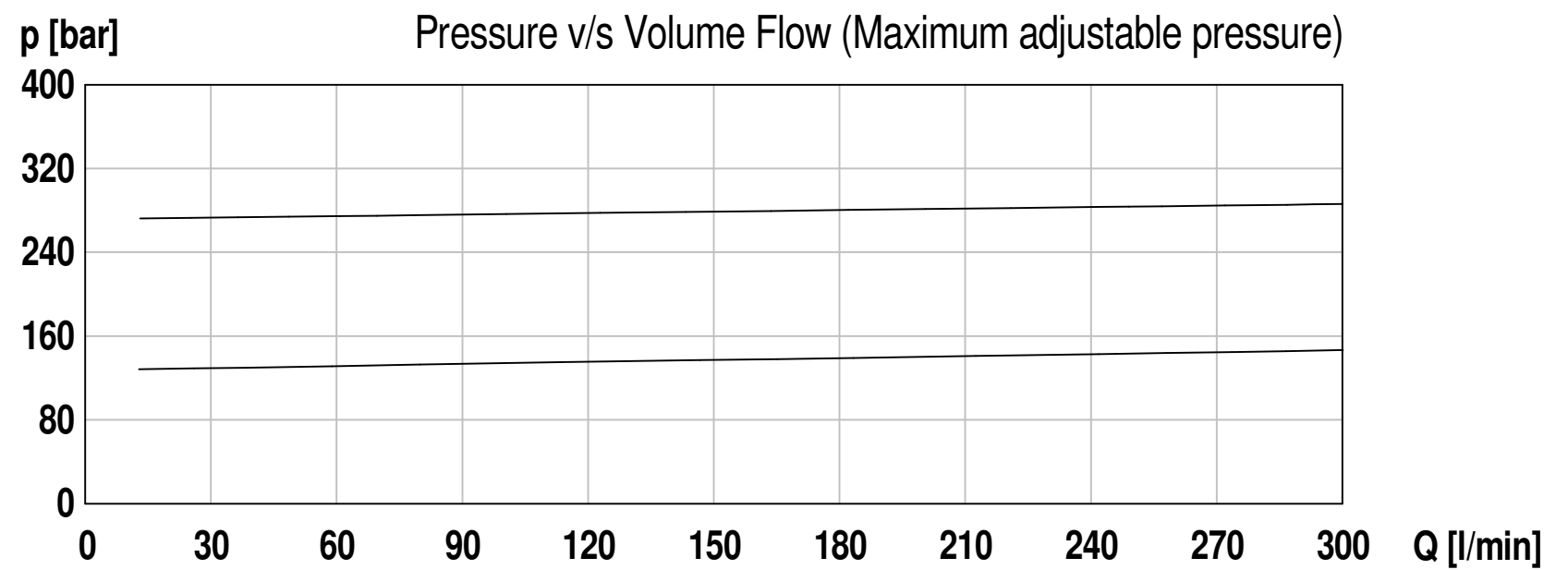
FEATURES

Very low pressure rise for any increase in flow giving accurate pressure control. Smooth operation due to presence of a balanced piston. Hardened working parts ensure a long, reliable, trouble-free life. Cartridge construction gives maximum flexibility in mounting

DIMENSIONS



CHARACTERISTICS. Figures Based on: Oil Temp = 40°C, Viscosity = 40 cSt



General Specifications

Description	pilot operated relief valve
Construction	Screw-in Cartridge Construction for Cavity
Mounting	1-5/16" x 12UNF screw thread for cartridge Threaded ports for housings.
Installation Position	any
Tightening Torque	140 Nm
Ambient Temp.	-20°C to +50°C
Cartridge Material	Working parts: Hardened, ground steel External surfaces: Zinc plated
Manifold Material	Aluminium or SG Iron
Cavity Number	SAE16-2 (Refer Cavities Section)
Weight	AR 16 Cartridge: 0.40 kg AR 16 * 6W **: 1.00 kg AR 17 * 8W **: 1.60 kg

Hydraulic Specifications

Hydraulic Fluid	Mineral oils. Contact sales office for other fluids.
Max. Pressure	400 bar
Rated Flow	240 lpm
Max. Contamination Level	BS5540/4 Class 18/16/13 (25µ nominal)
Viscosity Range	5 to 500 cSt
Leakage Flow	Less than 0.3 ml/min (5 dpm)
Hydraulic Fluid Temp.	-20°C to +90°C (Standard Seals)
Mounting	Line/Subplate
Peak Pressure	400 bar
Max. Flow	300 lpm
Seal Kit Number	SKAR150 (Nitrile)

Pilot Operated Relief Valve

ORDERING CODE

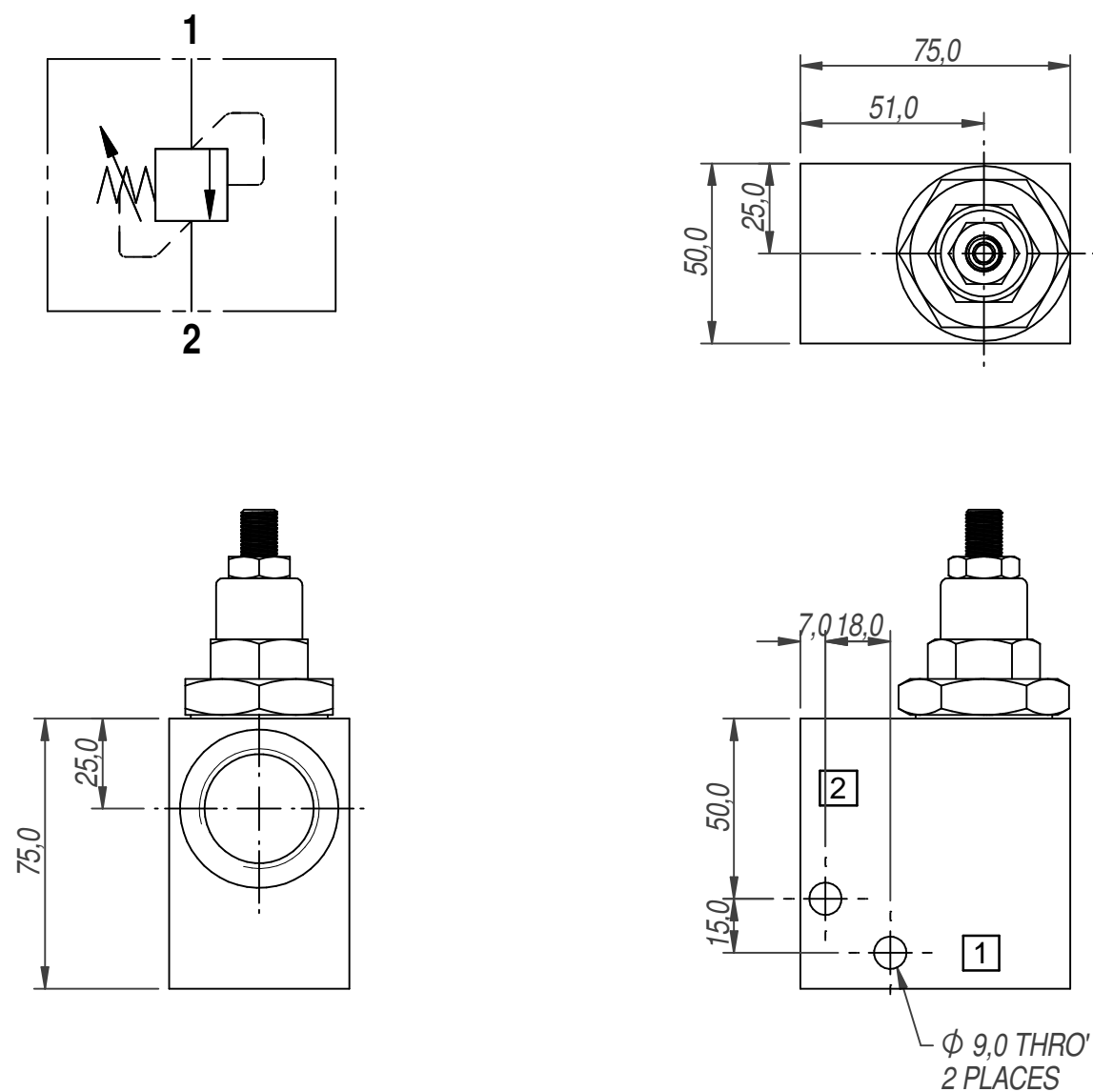
	AR16	P	8W	20	N	
BASIC CODE	AR 16 - Standard Body					SEAL KIT
	AR 17 - Throught Ported Body					N: Nitrile
ADJUSTMENT						PRESSURE RANGE
F: Screw Adjustment						20: 70 to 225 bar. Std setting 100 bar
						35: 70 to 350 bar. Std setting 210 bar
PORT SIZE						
8W: 1" BSP Ports						
10W: 1-1/4" BSP Ports						
Omit for Cartridge						

DIMENSIONS

BASIC CODE: AR150 * 6W ** N

ONLY Body Part Numbers

Aluminium SG Iron
3/4" BSPP - Z10353AL 3/4" BSPP - Z10353



DIMENSIONS

BASIC CODE: AR 17 * 10W ** N

ONLY Body Part Numbers

Aluminium SG Iron
1.1/4" BSPP - Z10455 1.1/4" BSPP - Z10455S

