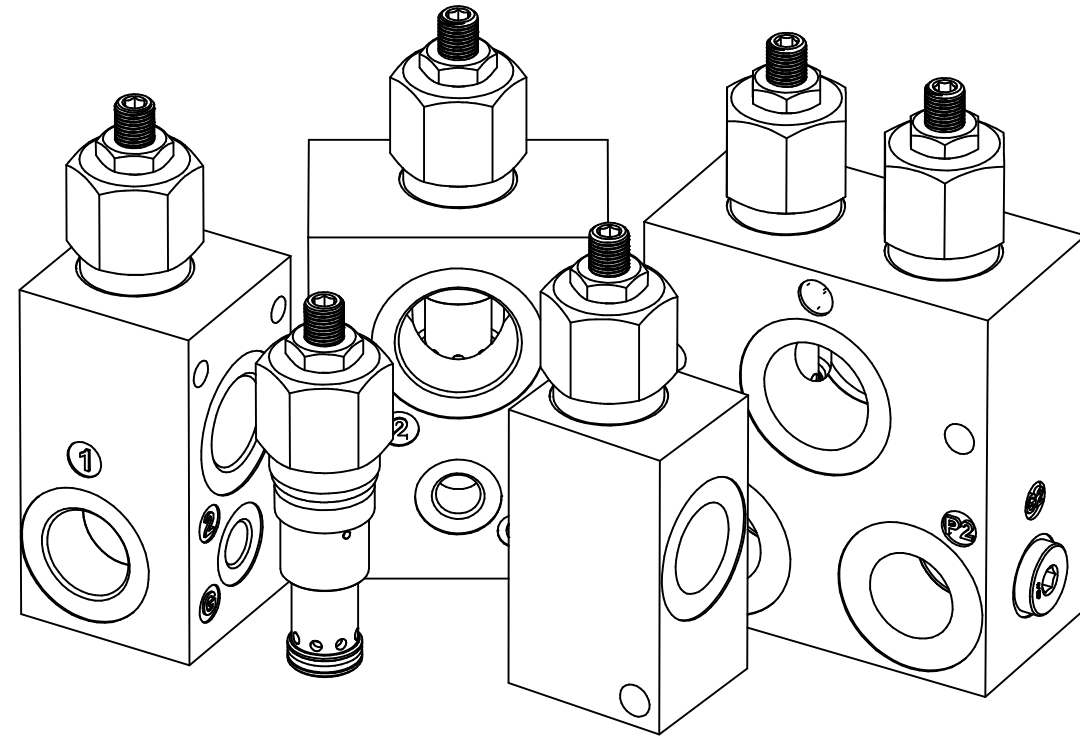
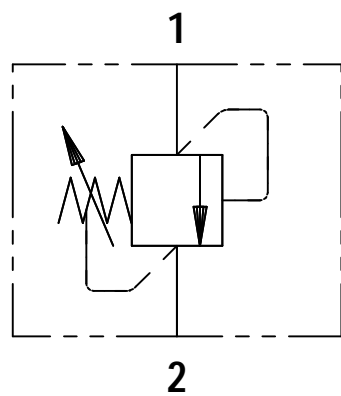




AR150

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.

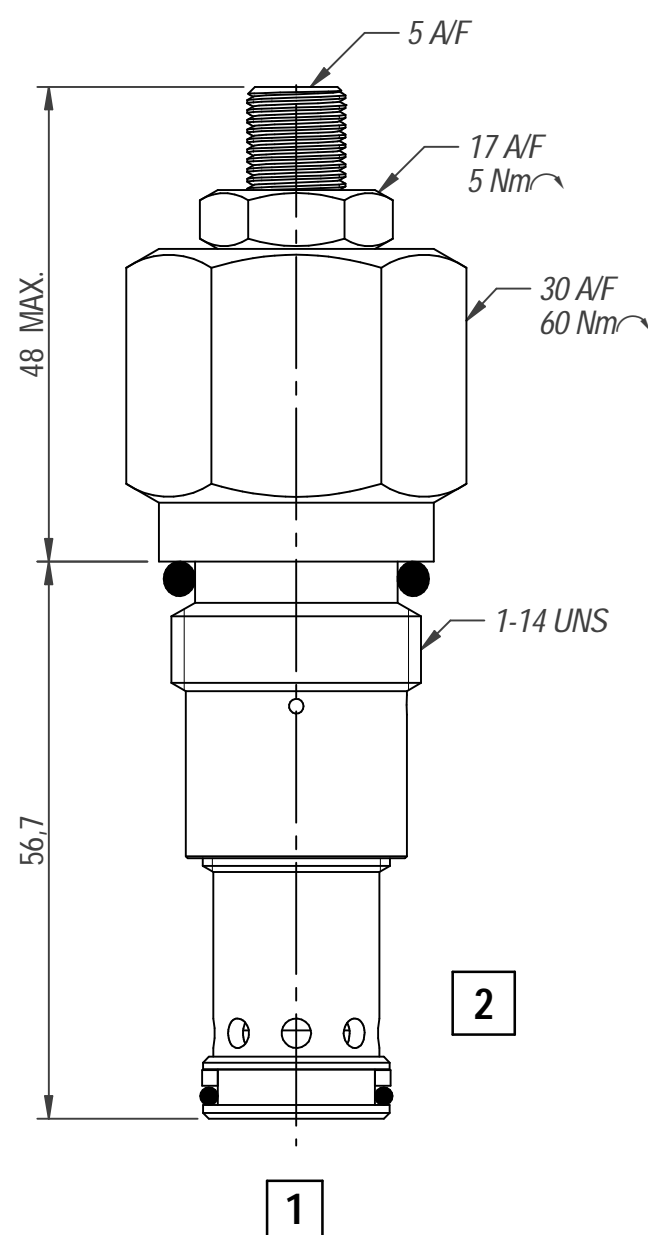
OPERATION

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)

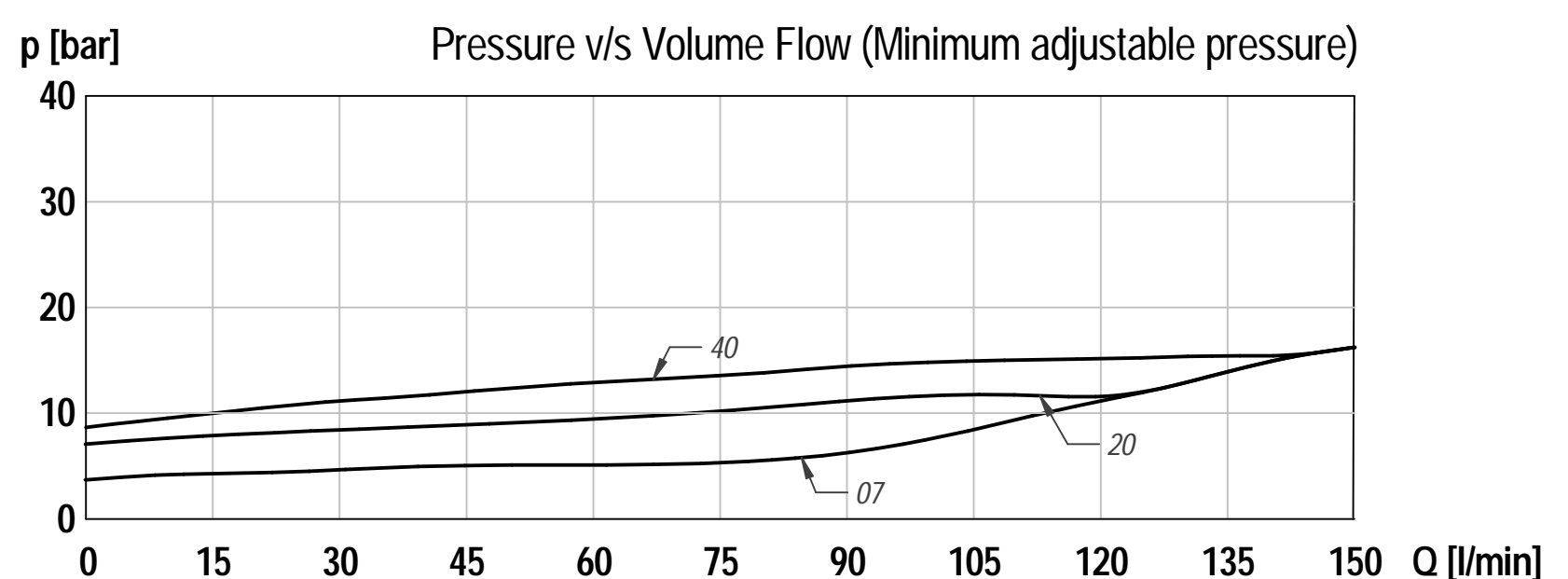
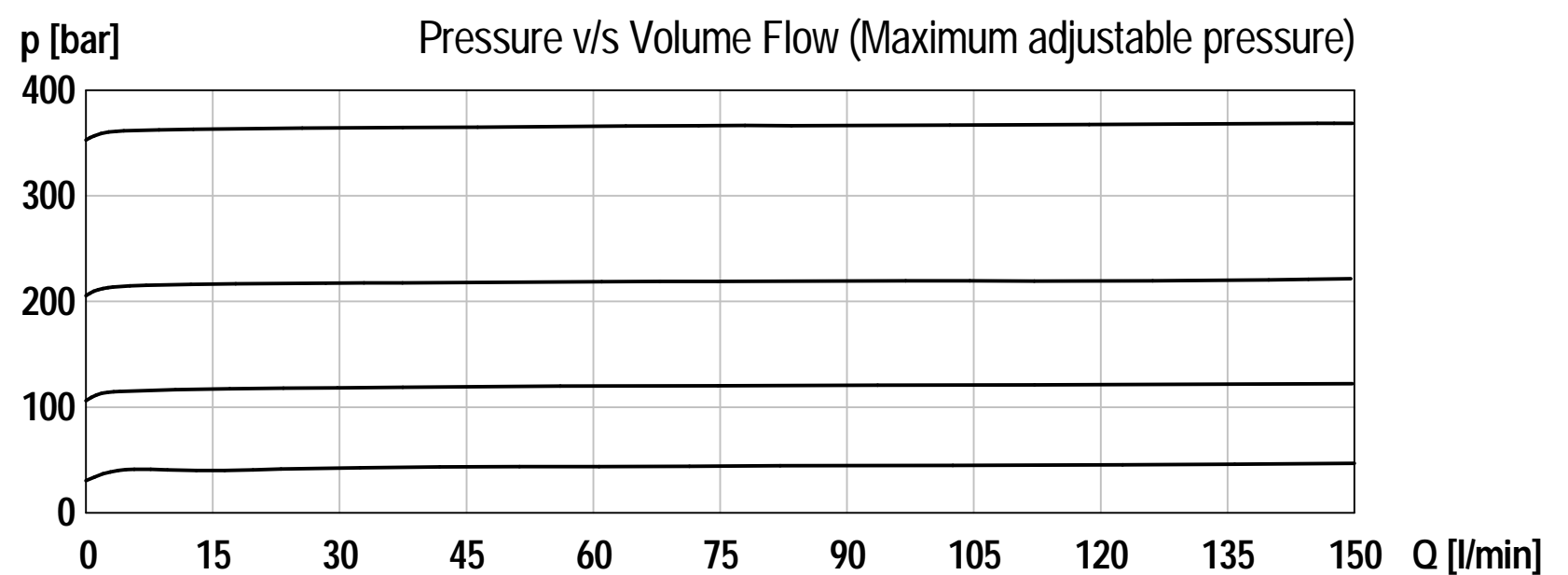
FEATURES

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" x 14UNS screw thread for cartridge Threaded ports for housings.
Installation Position	any
Tightening Torque	60 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	TH881 (Refer Cavities Section)
Weight	AR 150 Cartridge: 0.30 kg AR 150 * 6W **: 0.76 kg AR 150 * 8W **: 1.05 kg AR 151 * 6W **: 1.00 kg AR2 150 * 6W **: 1.80 kg

Hydraulic Specifications

Hydraulic Fluid	Mineral oils. Contact sales office for other fluids.
Max. Pressure	400 bar
Rated Flow	150 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	180 lpm
Seal Kit Number	SKAR150 (Nitrile)

Pilot Operated Relief Valve

ORDERING CODE

BASIC CODE		AR150 P 6W 20 N	SEAL KIT
AR 150 - Throught Ported Body			N: Nitrile
AR 151 - Compact Body			
AR2 150 - Dual Body			
ADJUSTMENT			PRESSURE RANGE
F: Screw Adjustment			07: 10 to 70 bar. Std setting 35 bar
			20: 10 to 210 bar. Std setting 100 bar
			35: 50 to 400 bar. Std setting 280 bar
PORT SIZE			
6W: 3/4" BSP Ports			
8W: 1" BSP Ports			
Omit for Cartridge			

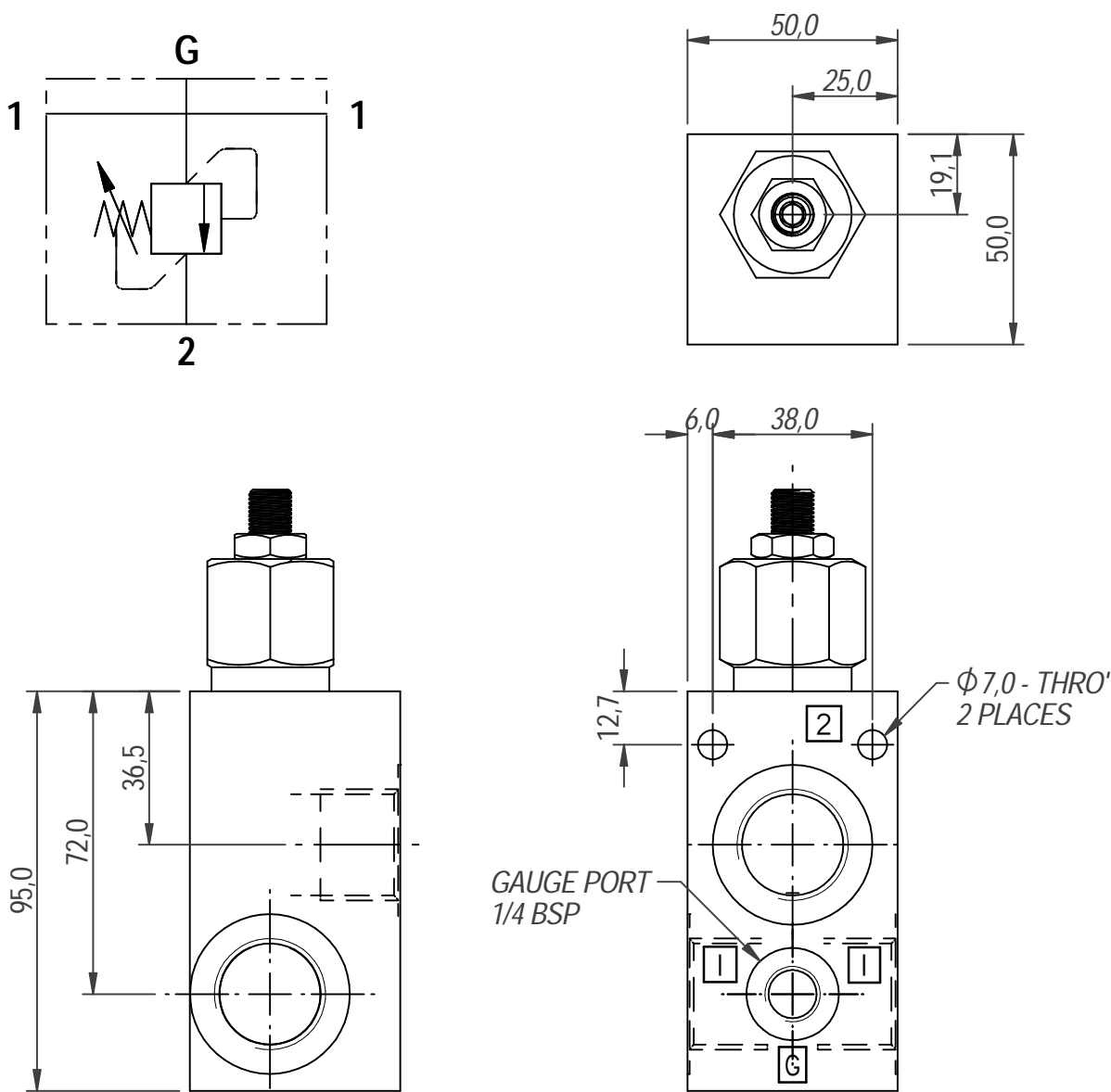
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DIMENSIONS

BASIC CODE: AR150 * 6W ** N

ONLY Body Part Numbers

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

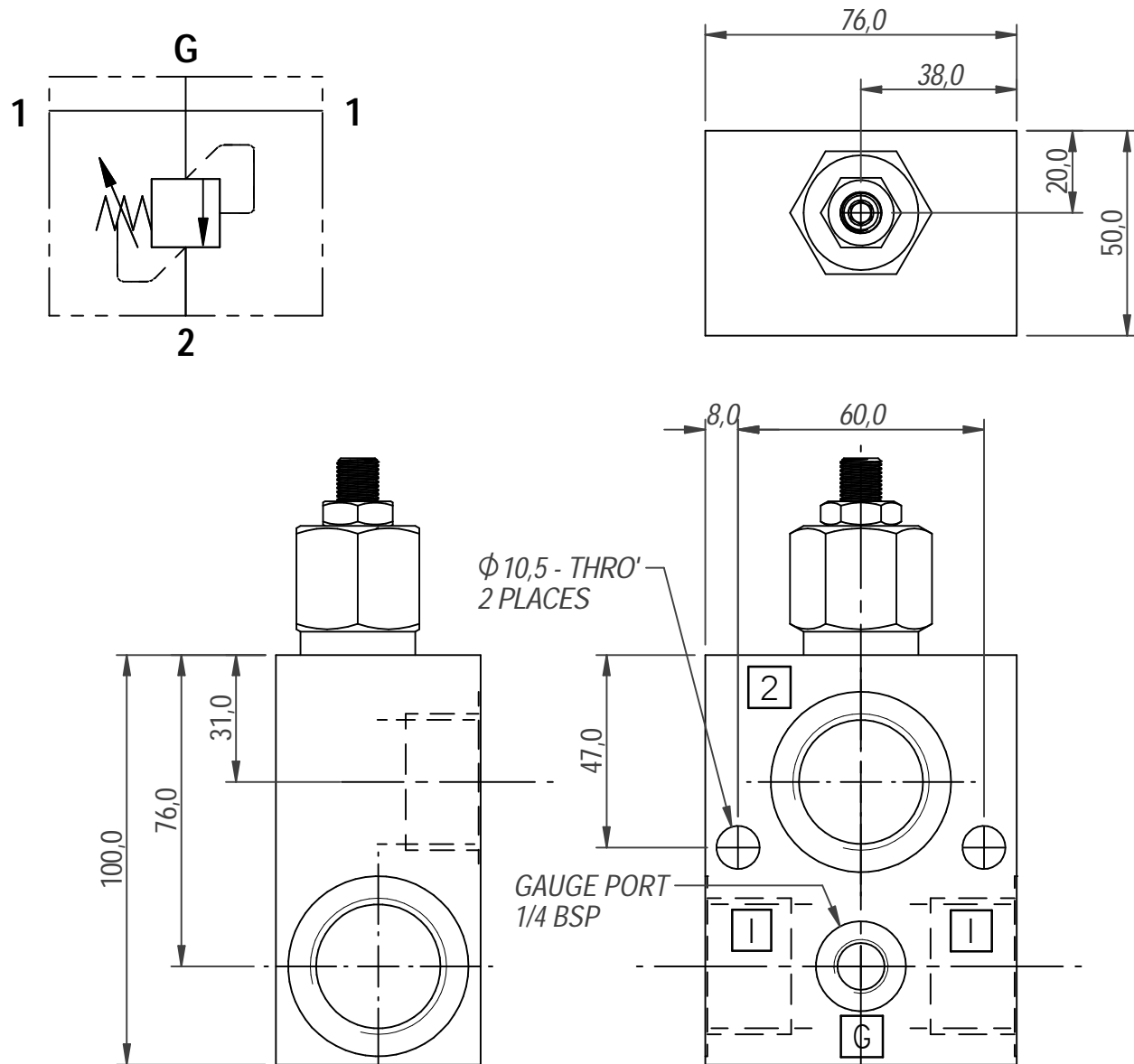


DIMENSIONS

BASIC CODE: AR150 * 8W ** N

ONLY Body Part Numbers

Aluminium SG Iron
1" BSPP - Z10385AL 1" BSPP - Z10385

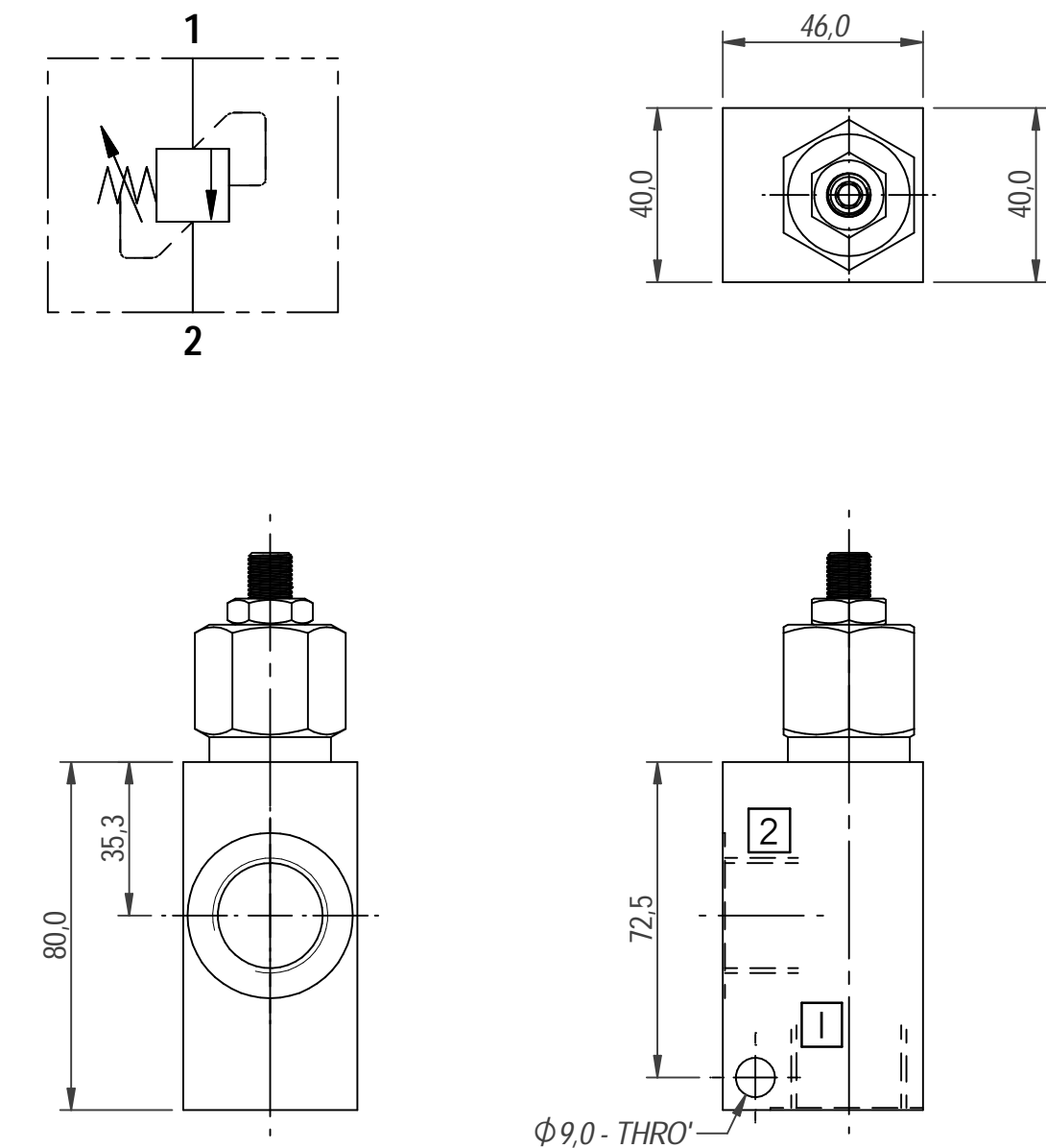


DIMENSIONS

BASIC CODE: AR151 * 6W ** N

ONLY Body Part Numbers

Aluminium SG Iron
3/4" BSPP - Z10223



DIMENSIONS

BASIC CODE: AR2 150 * 6W ** N

ONLY Body Part Numbers

Aluminium SG Iron
3/4" BSPP - Z10489 3/4" BSPP - Z10489S

