



1PAA95/ 1PAAG95 PRESSURE REDUCING VALVES

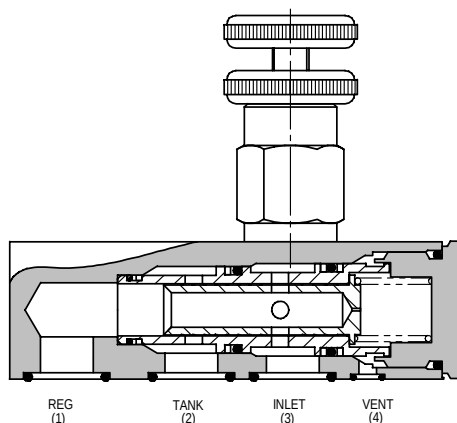
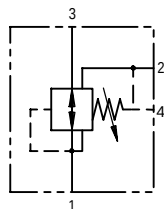
PILOT OPERATED WITH RELIEF

1PAA95

LINE MOUNTED

1PAAG95

GASKET MOUNTED



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APPLICATION

These pilot operated valves can be used with flows up to 115 litres/min (30 US GPM) and reduced pressures up to 210 bar (3000 psi), both in reducing and relieving modes. Without the use of a separate relief valve it will allow externally induced pressures on the regulated line to relieve to tank. The vent port can also be used for remote control applications.

OPERATION

This valve is normally open allowing inlet oil to pass to the regulated line until the outlet (regulated) pressure exceeds the setting of the pilot section. When this setting is achieved a pilot flow occurs, causing a pressure imbalance across the main spool, which then moves, throttling the inlet flow and preventing any further pressure rise in the regulated line. If any external force causes the regulated pressure to rise more than 5-10% above the setting, the main spool moves back further, opening the regulated port to the tank line, thus working as a relief valve.

FEATURES

Cuts costs - does two functions in one valve. High capacity reducing or relieving. Line or gasket mounted models.

VENT FEATURES

During normal operation of the valve, the vent port must be blocked. Vent feature allows remote piloting or two pressure systems.

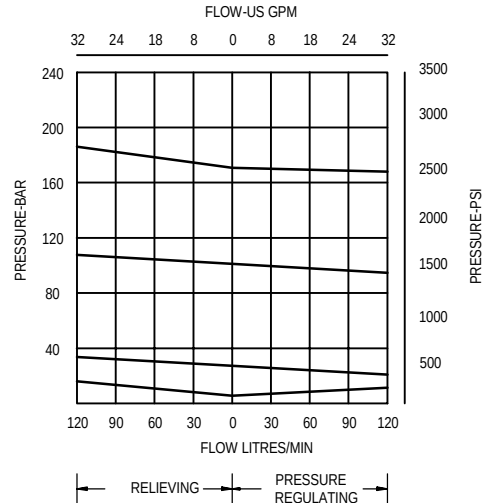
SPECIFICATIONS

Figures based on: Oil Temp = 40°C Viscosity = 40 cSt

Rated Flow	Reducing 115 litres/min (30 US GPM) Relieving 115 litres/min (30 US GPM) Pilot flow to tank approximately 0.4 litres/min (0.1 US GPM)
Max Setting	Inlet: 245 bar (3500 psi) max Reg: 10 to 210 bar (150 to 3000 psi)
Cartridge Material	Working parts hardened and ground steel. External steel surfaces zinc plated
Body Material	Standard aluminium (up to 210 bar*) Add suffix '377' for steel option
Mounting Position	Line mounted
Weight	1.19 kg (2.6 lbs)
Seal Kit Number	1PAA95 SK201 (Nitrile) SK201V (Viton) 1PAAG95 SK351 (Nitrile) SK351V (Viton)
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)
Operating Temp	-20°C to +90°C
Leakage	35 millilitres/min @ 280 bar 1 to 2 or 1 to 3
Nominal Viscosity Range	5 to 500 cSt

*For applications above 210 bar please consult our technical department or use the steel body option.

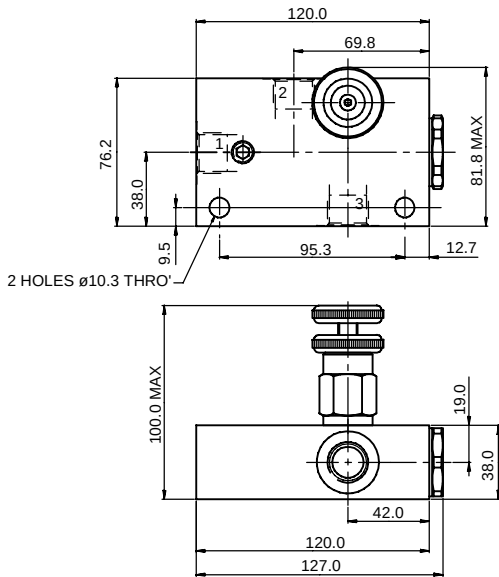
PRESSURE DROP



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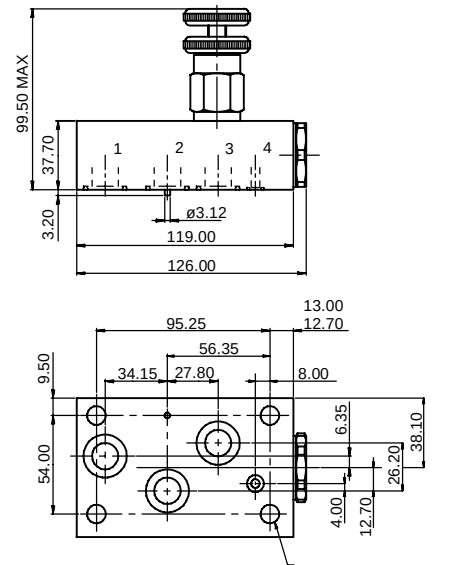
COMPLETE VALVE 1/2" 3/4" PORTS

BASIC CODE: 1PAA95 (LINE MOUNTED)



COMPLETE VALVE

BASIC CODE: 1PAAG95 (GASKET MOUNTED)



Where measurements are critical request certified drawings

4 HOLES Ø10.3 THRO'

ORDERING CODE EXAMPLE

1PAA*** P 4W 10 S

Basic Code

1PAA95 = Cartridge and Body line mounted
1PAAG95 = Cartridge and Body gasket mounted

Adjustment Means

P = Leakproof Screw Adjustment
R = Handknob Adjustment
G = Tamperproof Cap
(See page 5-102 for dimensions)

Port Sizes - Bodied Valves Only

4W = 1/2" BSP 8T = 1/2" SAE
6W = 3/4" BSP 12T = 3/4" SAE
10G = Gasket Ports - 14.5 mm (1PAAG95)

Seals

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

Pressure Range @ zero flow

10 = 7-100 bar. Std setting 70 bar
20 = 10-210 bar. Std setting 100 bar
Std setting made at zero flow (dead head)

We reserve the right to change specifications without notice