

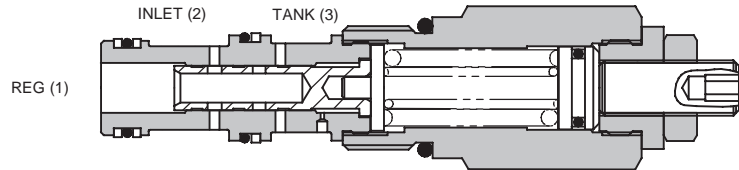
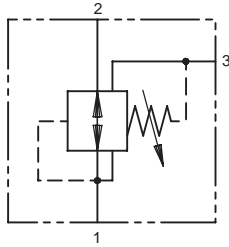


1PD SERIES PRESSURE REDUCING VALVE

DIRECT ACTING WITH REVERSE RELIEF

1PD20

SLIDING SPOOL TYPE



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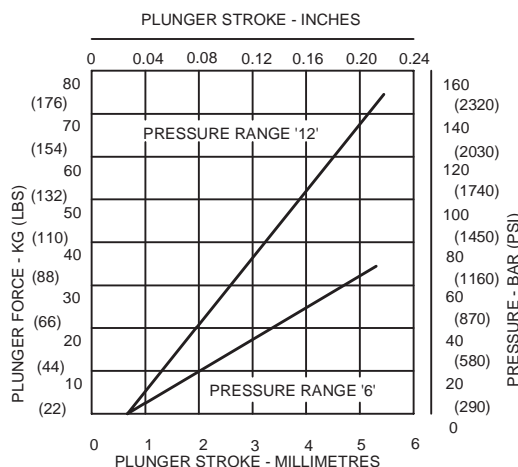
APPLICATION

To provide an adjustable regulated pressure which is lower than supply pressure, as when more than one operating pressure is required from one pump. Direct acting models are suited to lower flow applications and regulated pressures to 140 bar (2000 psi). This valve also acts as a relief valve, relieving from regulated line to tank if shock or surge pressures occur in the regulated line.

OPERATION

Normally open, the valve throttles or closes to maintain constant pressure in the regulated line. As in the other direct acting valves, the spring force holds the valve open.

PLUNGER ADJUSTMENT RANGE



FEATURES

Hardened steel working parts are individually match ground to assure long life, reliability and high accuracy.

SPECIFICATIONS

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

Rated Flow	30 litres/min (8 US GPM)
Max Setting	Up to 140 bar (2000 psi)
Max Inlet Pressure	350 bar (5000 psi)
Max Differential	210 bar (3000 psi) between 1 and 2
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 Number	A5572 (See Section 17)
Torque Cartridge into Cavity	60 Nm (44 lbs ft)
Weight	1PD20 0.24 kg (0.53 lbs) 1PD25 1.15 kg (2.53 lbs) 1PDC25 1.25 kg (2.75 lbs)
Seal Kit Number	SK339 (Nitrile) SK339V (Viton)
Recommended Filtration Level	BS5540/4 Class 18/13 (25 micron nominal)
Operating Temp	-20°C to +90°C
Leakage	35 millilitres/min nominal
Nominal Viscosity Range	5 to 500 cSt

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

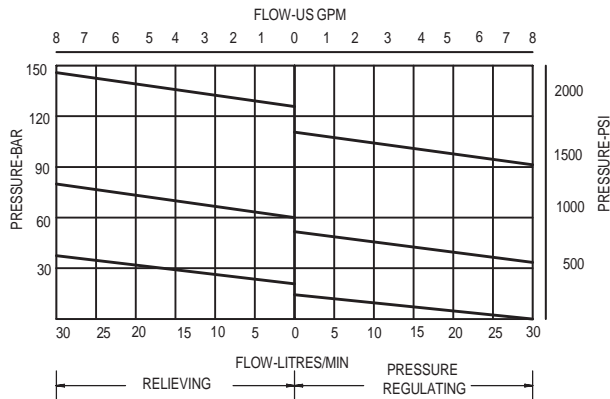
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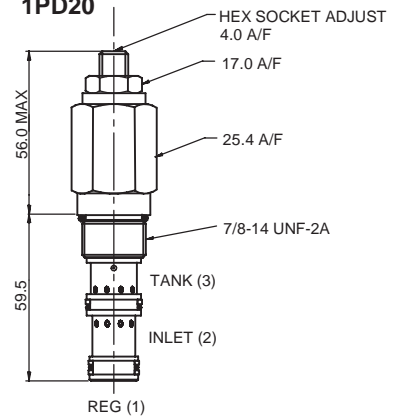
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PRESSURE DROP



CARTRIDGE ONLY

BASIC CODE: 1PD20



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COMPLETE VALVE

3/8" 1/2" PORTS

BASIC CODE: 1PD25

Body ONLY part numbers

BSP, aluminium
3/8" B13837

SAE, aluminium
3/8" B10645
1/2" B7784

BSP, steel
3/8" B13838

SAE, steel
1/2" B11805

COMPLETE VALVE

3/8" 1/2" PORTS

BASIC CODE: 1PDC25

(WITH REVERSE FLOW CHECK)

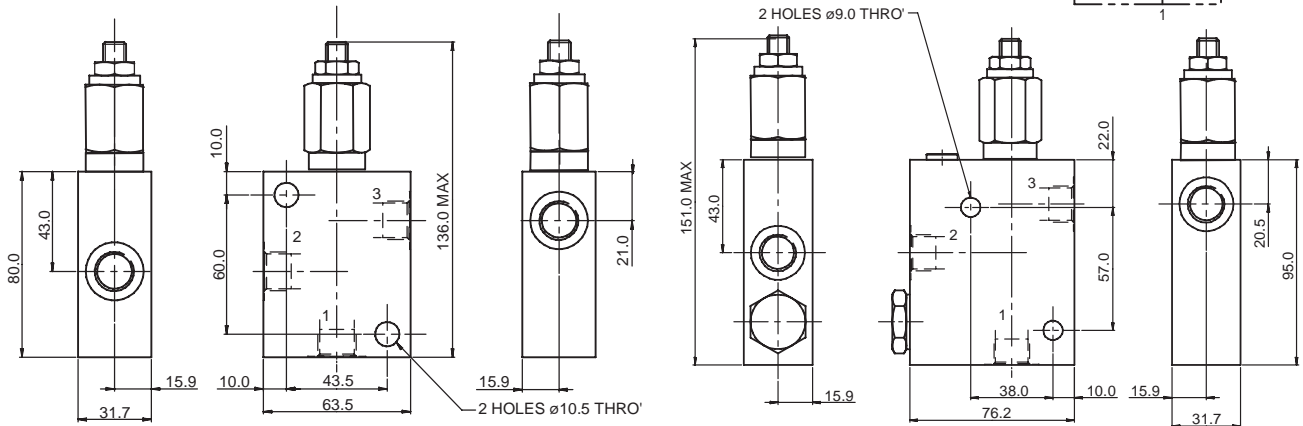
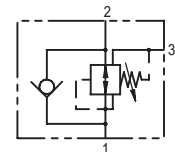
Sub-assembly part numbers

BSP, aluminium
3/8" BXP21795-3W-S

SAE, aluminium
3/8" BXP21795-6T-S
1/2" BXP21795-8T-S

BSP, steel
3/8" BXP21795-3W-S-377

SAE, steel
1/2" BXP21795-8T-S-377



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

1PD P 3W 12 S**

Basic Code

1PD20 = Cartridge Only

1PD25 = Cartridge and Body

1PDC25 = Cartridge, Body and Check

Adjustment Means

P = Leakproof Screw Adjustment

R = Handknob Adjustment

C = Plunger Actuated

G = Tamperproof Cap

(See page 5-102 for dimensions)

Port Sizes - Bodied Valves Only

3W = 3/8" BSP

6T = 3/8" SAE

8T = 1/2" SAE

Seals

S = Nitrile (For use with most industrial hydraulic oils)

SV = Viton (For high temperature and most special fluid applications)

Pressure Range @ zero flow

2 = 5 - 25 bar. Std setting 15 bar

6 = 20 - 75 bar. Std setting 30 bar

12 = 30 - 140 bar. Std setting 60 bar

Std setting made at zero flow

(dead head)

We reserve the right to change specifications without notice