VALVES

MACON CONTROLS



The DR 15 pressure differential pressure valve has a proportional control characteristic, opening with rising differential pressure. It is suitable for installation in circulated pumped radiator circuits equipped with radiator thermostatic valves. Used with hot water systems.

OPERATION

Design: flow regulation with cap for concealed setting. At a given setting (number of turns "n") of the valve spindle and a given differential pressure, a given amount of water flows through the valve. If the differential pressure rises, e.g. when one or more radiators are shut off, the throughflow rate increases, relieving the pump pressure on the remaining valves.

Two pressure ranges available: 0-2.9 PSI and 0-8.7 PSI.

ADVANTAGES

- Regulates pressure changes in single and double pipe systems due to thermostatic radiator valve settings.
- Eliminates rushing noise and chattering in radiator thermostatic valves.
- Easy to fit.

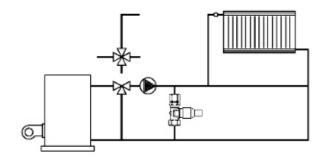
DATA

Material: Hot forged brass

Design: Straight connection, 1/2 NPT

Max. Temperature: 250°F Max. Static Pressure: 145 psi

Application example

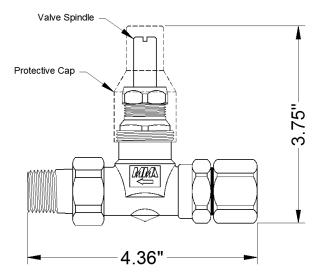


DR 15 valve installed in central heating system with 3- or 4-way shunt valve.





DIFFERENTIAL PRESSURE VALVE DR 15



bar 100 1.0 90 0.9 80 0.8 0.7 70 12 0.6 60 10 50 0.5 0.4 40 pkPa 30 0.3 Differential pressure 0.2 20 15 10 0 100 200 300 400 Flow l/h

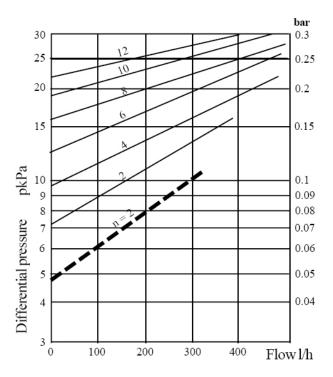
Spring for 0.1-0.6 bar (10-60KPA) pressure range.

Setting the differential pressure

Turn the valve spindle (see fig.) until it is wide open. Locate the maximum differential pressure of the pump on the vertical axis of the graph and draw a horizontal line to intersect the "n" line corresponding to the required flow rate according to the horizontal axis.

Then turn the valve spindle clockwise the number of turns indicated by the selected "n" line.

The DR 15 pressure relief valve is delivered with a spring for a differential pressure range of 0-2.9 PSI in place. To alter the range to 0-8.7 PSI, exchange the spring in the valve for the separate one delivered with it.



Spring for 0-0.2 bar (0-20KPA) pressure range. KiloPASCALS - kPa x 0.1450 = pounds force per sq. inch. BARS - bar x 14.504 = pounds force per sq. inch.

Reference numbers for ordering

Art. No.	Code	Conn. No.	Thread
4141501	DR 15	15	1/2" NPT

Compression fittings must be ordered separately.

