



pressure reducing valve series 535



prescal - series 535

pressure reducing valve

Application

Pressure reducing valves are installed in water systems to reduce and stabilise inlet pressures from mains water supplies or boosted water systems, which generally are too high and variable for domestic appliances to function correctly.

The 535 series is specially designed for hot and cold services in semi-commercial or public buildings to equalise either the hot or cold supplies or both and prevent excessive pressure at water outlets such as taps, basins, toilets, dishwashers and other appliances.

Design

The series 535 pressure reducing valves are pre-adjustable enabling them to be set at the required discharge pressure prior to installation, by means of the adjustment knob with pressure setting indicator.

The internal cartridge and control knob mechanism is assembled as one unit to make removal for inspection, cleaning and maintenance operations easier.

The compensated seat design means that the set downstream pressure remains independent of upstream pressure variations.

The hydraulic profile of the valve makes it possible to achieve low pressure losses, even when a large number of outlets are open.

The control stem housing of the cartridge is made from a plastic material with a low co-efficient of adhesion, which reduces the probability of scale deposits forming, the main cause of pressure reducing valve malfunction.

Construction Details

Component	Material	Grade
Body	DZR Copper Alloy	BS EN 12165 CW602N
Cover	Nylon	PA 66GF30
Control stem	Stainless Steel	AISI 304
Cartridge	POM	
Internal components	DRZ Copper Alloy	BS EN 12164 CW605N
Diaphragm	Nitrile rubber	
Seals	Nitrile rubber	
Strainer screen	Stainless steel	AISI 304

Series 535 Range

Product code	Size	Connections	Type
535041	1/2"	screwed iron	M x M - with pressure gauge
535051	3/4"	screwed iron	M x M - with pressure gauge
535061	1"	screwed iron	M x M - with pressure gauge
535071	1 1/4"	screwed iron	M x M - with pressure gauge
535081	1 1/2"	screwed iron	M x M - with pressure gauge
535091	2"	screwed iron	M x M - with pressure gauge
535040	1/2"	screwed iron	M x M - with gauge port
535050	3/4"	screwed iron	M x M - with gauge port
535060	1/2"	screwed iron	M x M - with gauge port
535070	3/4"	screwed iron	M x M - with gauge port
535080	1/2"	screwed iron	M x M - with gauge port
535090	3/4"	screwed iron	M x M - with gauge port

Flow Rates

BS EN 1567 recommends an average flow velocity of 2 m/s.

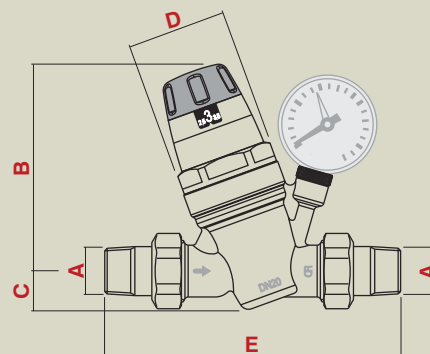
When sizing pressure reducing valves the flow velocity should be between 1 to 2 m/s.

Velocity	Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
1 m/s	Flow rate l/min	10.6	18.9	30.0	48.3	75.8	116.6
2 m/s	Flow rate l/min	21.2	37.8	60.0	96.6	151.6	233.2

E & O.E

Dimensions

Threaded Ends



Prod Code	A	B	C	D	E	Weight kg
535041	1/2"	112	20.5	54	140	0.92
535040						
535051	3/4"	112	20.5	54	160	1.06
535050						
535061	1"	112	20.5	54	180	1.38
535060						
535071	1 1/4"	178	40	73	200	2.60
535070						
535081	1 1/2"	178	40	73	220	3.40
535080						
535091	2"	178	40	73	250	4.30
535090						

Technical Data

Max inlet pressure:	25 bar
Outlet pressure setting range:	1 to 6 bar
Factory setting:	3 bar
Max working temperature:	60°C
Pressure gauge range:	0 to 10 bar
Pressure gauge connection:	G1/4
Filter mesh size:	0.51mm
Medium:	potable water
Complies with:	BS EN 1567

Installation

The valves are very simple to install with just two male union joints to make.

The union tailpipes can be pre-assembled in the pipes prior to installation.

The flow through the valve must follow the direction arrow on the valve body.

Following installation the valve can easily be removed should it be required in the future utilising the two union joints.

Sufficient clearance must be allowed for the removal of the control knob, cartridge and strainer screen for cleaning and maintenance.



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