

Pressure Reducing Valve (PRV)

Model C101 – Pilot Operated - Datasheet

Description

The Socla C101 Pressure Reducing Valve controls and maintains a preset reduced outlet pressure despite varying inlet pressures. The outlet pressure is adjustable between 1.72 - 8.5 bar as standard – other ranges available. The setting of downstream pressure is always below the upstream pressure.

The outlet pressure can be adjusted at any time by removing the tamperproof cover on the pilot valve and rotating the hexagon screw. Turn clockwise to increase the pressure.

The C101 is pilot operated, which has many advantages over direct acting, including –

- Accurate downstream pressure characteristics
- Compact, with no large springs
- Controllable, ancillary pilot valves control main valve

Two factory fitted pressure gauges are supplied with each PRV, which indicate the supply and outlet pressure. Gauge isolating valves are provided for extra security (use as drain tap with gauge removed).

The valve can be installed horizontally or vertically. For horizontal installation, the cap of the valve should be oriented to the top and inclined at 45° maximum. For vertical installation, the main spring of the valve needs to be changed (option PRVOPT7).

A strainer should be installed upstream of the C101. Upstream and downstream Servicing Valves are strongly recommended to avoid draining for maintenance – e.g. resilient seat Gate Valves as supplied by Arrow Valves.

Connection Pipes

PN16 flange as standard. Indicate flange drilling (PN10 – PN16 – PN25) when ordering.

Copper - Compression ring to 108 mm, Braze to PN16 flange

Steel - Weld or screw to steel PN16 flange

Plastic - PN16 flange with backing ring

Specification

Pressure Inlet	16 bar (PN16) standard 25 bar (PN25) optional
Pressure Outlet	0.4 – 5.51 bar (low) 1.72 – 8.5 bar (standard) 2.06 – 24.5 bar (high)
Minimum Inlet Pressure	1 bar
Temperature	85° C max.

Materials

Body	Cast Iron, epoxy coated
Seat	Bronze
Springs	Stainless Steel
Pilot	Bronze, Stainless Steel, Brass

Applications

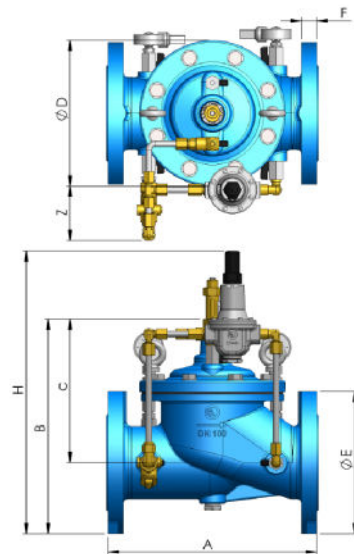
- Reducing excessive mains pressure
- Controlling pump outlet pressure
- Pressure regulation per floor
- Water conservation

Options

- Vertical mounting spring
- Flanges drilled for PN different from standard



Dimensions



DN	A	B	C	D	E	F	H	Z	K _v	Kg
50	230	285	210	170	161	23	400	254	12.68	13
65	290	352	257	200	185	24	470	254	16.08	21
80	310	372	272	217	200	26	500	254	22.22	26
100	350	423	302	241	235	28	510	254	37.78	39
125	400	506	371	296	270	30	570	254	61.11	59
150	480	551	401	363	300	20	650	254	73.33	73
200	600	709	529	467	360	22	750	254	166.67	122

Notes

1. Dimensions in mm.
2. PN according to EN 1092-2.
3. K_v (in Lt/s) is flow required to produce 1 bar differential pressure drop with valve fully open.

Codes and Descriptions

Size	Code	Description
DN50	PRV50PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN65	PRV65PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN80	PRV80PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN100	PRV100PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN125	PRV125PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN150	PRV150PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
DN200	PRV200PNC101-G	C101 Pressure Reducing Valve, 2 Gauges, PN16
All	PRVOPT7	PRV Option 7 Vertical Mount Spring



Arrow Valves Ltd

Tel: 01442 823123 Fax: 01442 823234

www.arrowvalves.co.uk

Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.

All unit-less dimensions in mm.

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