

DRVD PN16 and PN25

Pressure regulator

Technical Data Sheet



Description

The pressure regulator DRVD can be used on water, compressed air, air with oil removed or all neutrals gases. It maintains automatically the downstream to the set point pressure. The DRVD is insensitive to variations in upstream pressure. It is particularly recommended for collective or industrial installations.

- PFA 16 bar pressure setting range = from 1.5 to 6 bar (standard) or from 2 to 8 bar.
- PFA 25 bar pressure setting range from 4 to 12 bar
- Model with balanced valve and piston, guaranteeing a very high reliability and longevity
- Body ductile cast iron covered epoxy vanish 250µ
- NBR valve seal
- Flanged connections according to EN 1092-2

DRVD PN16 and PN25

Pressure reducing valve



DN		Adjustment range	PFA in bar	PS in bar	Ref.	Weight Kg
mm	"			L1		
50		1,5 at 6 bar	16	16	22L0504053	13,36
65		1,5 at 6 bar	16	16	22L0504068	20,39
80		1,5 at 6 bar	16	16	22L0504083	25,55
100		1,5 at 6 bar	16	16	22L0504103	34,6
125		1,5 at 6 bar	16	16	22L0504128	75
150		1,5 at 6 bar	16	16	22L0504153	85
200*		1,5 at 6 bar	16	16	22L0504203	182
50		2 at 8 bar	16	16	0504054	13,36
65		2 at 8 bar	16	16	0504069	20,39
80		2 at 8 bar	16	16	0504084	25,55
100		2 at 8 bar	16	16	0504104	34,6
125*		2 at 8 bar	16	16	0504129	75
150*		2 at 8 bar	16	16	0504154	85
200*		2 at 8 bar	16	16	0504204	182

*On request, consult us

DN		Adjustment range	PFA in bar	PS in bar	Ref.	Weight Kg
mm	"			L1		
50		4 at 12 bar	25	16	22L0504050	20,3
65		4 at 12 bar	25	16	22L0504065	20,3
80		4 at 12 bar	25	16	22L0504080	25,26
100		4 at 12 bar	25	16	22L0504100	35,6
125		4 at 12 bar	25	16	22L0504125	68
150		4 at 12 bar	25	16	22L0504150	-

Important notice :

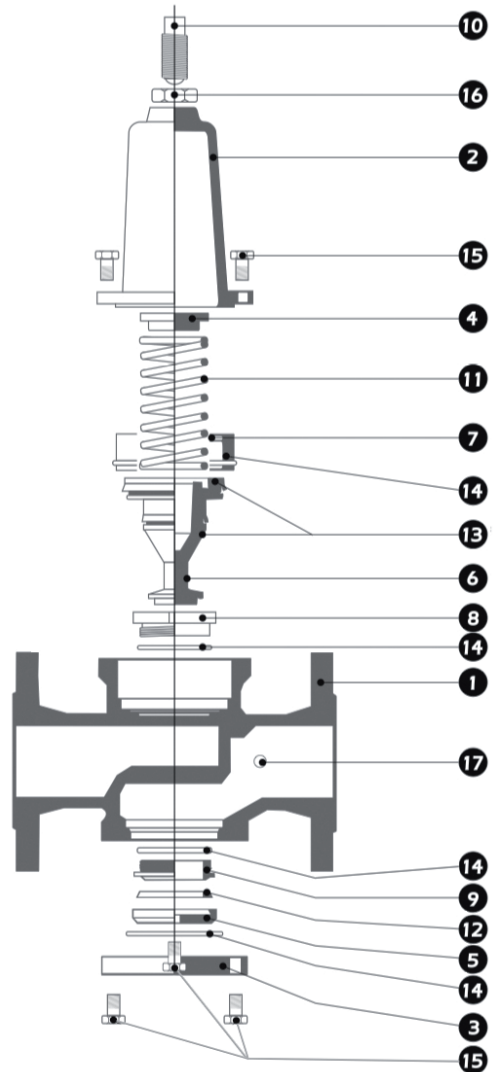
The temperature and pressure indications given are under no circumstances a guarantee that they are suitable for your system. Therefore, it is essential to validate the use of the products under given operating conditions with our technical department.

Technical features

Operating temperature	Maxi. : 40°C
Permissible operating pressure (PFA) in water	See table above
Setting range	See table above
Connection	Flanged according to EN1092-2
Gauge connection	Female 8x13 (1/4")
Mediums	Water, other mediums : consult us

Nomenclature and materials

N°	Description	Materials	EURO
1	Body	Cast iron	EN-GJS 400-15
2	Cover	Cast iron	EN-GJS 400-15
3	Flange	Cast iron	
4	Spring disc	Cadmium steel	S235JR
5	Seal support	Brass	CW612N
6	Closing system	Brass	CW612N
7	Sleeve	Bronze	CuSn5zn5Pb-5
8	Ring	Bronze	CuSn5zn5Pb-5
9	Seat	Bronze	CuSn5zn5Pb-5
10	Setting screw	Cadmium steel	
11	Spring	Cadmium steel	
12	Brace washer	NBR	
13	Lip seal	NBR	
14	Steel	NBR	
15	Cover screw	Stainless steel	X5Crni18-10
16	Nut	Cadmium steel	
17	Plug	Brass	CW614N



Approvals

ACS

International Construction Standards :

NF EN12266

Flanged connections according to EN1092-2, ISO7005-2

Application

For the protection of cold water and drinking water networks.

The device reduce and stabilize the pressure a the set value whatever the upstream pressure variations and flow in pipes.

The DRVD is ideal for any main pressure reducing or regulation of secondary circuits.

Installation

Check that the piping on which the pressure reducing valve must be installed is clean of welding residues or other waste. It is recommended to install a filter immediately upstream of the pressure regulator and the isolating valves upstream and downstream. When installing, observe the direction of the DRVD shown by the arrow engraved on the body. In order to carry out the setting of reduction unit or its maintenance provide sufficient space.

Operation

The downstream pressure acts directly in the control chamber under the upper part of the valve through a particular orifice. The downstream pressure is balanced at all times by the action of the spring, which causes the valve to move when network flow or pressure varies.

Setting

Adjustable outlet pressure :

- 1,5 à 6,0 bar : PN16
- 2,0 à 8,0 bar : PN16
- 4,0 à 12,0 bar : PN25

The setting of the downstream pressure must be conducted at flow zero.

Loosen the lock nut to release the adjustment screw (N°10 on the nomenclature). Turn the screw in a clockwise direction for more pressure and anticlockwise direction to lower the pressure.

The gauge plugs of the device are in female 8 x 13 (1/4")

Maintenance

It is recommended to ask a professional to check regularly the device.
The device is designed for easy maintenance. Disassembly operations are conducted without removing the device.
Periodically clean the filter placed immediately upstream of the DRVD.

1 - All the internal parts of the DRVD are accessible after removing the cover and the bottom flange (No. 3 on the diagram).

2 - The piston removable by unscrewing the piston screw (or nut piston depending on the diameter of the DRVD) accessible through the bottom flange on the bottom.

Provide a locking plier (e.g.: FACOM N ° 500 Locking plier or a clamp) to maintain the piston with the DRVD body. Assembly the piston-maintained with the locking plier, you can unscrew the piston screw.

3 - Piston screw loose with a standard pipe wrench (e.g.: wrench FACOM N°72) except for the DRVD diameter 125, 150 and 200 where a pipe wrench type "Nervus" is necessary (e.g.: key Nervus FACOM N°92).

The table below shows you the size of the piston screw.

Spring kits (2 at 8 bar)

DRVD		DN		Designation	Ref.
Ref.	mm	"	Spare parts		
22L0504053	50			DF 8/DRVD 50	22L0599070
22L0504068	65			DF 8/DRVD 65	22L0599071
22L0504083	80			DF 8/DRVD 80	22L0599072
22L0504103	100			DF 8/DRVD 100	22L0599073
22L0504153	150			DF 8/DRVD 150	22L0599075

Spring kits (4 at 12 bar)

DRVD		DN		Designation	Ref.
Ref.	mm	"	Spare parts		
0504054	50			DF 12/DRVD 50	22L0599080
0504069	65			DF 12/DRVD 65	22L0599081
0504084	80			DF 12/DRVD 80	22L0599082
0504104	100			DF 12/DRVD 100	22L0599083
0504129	125			DF 12/DRVD 125	22L0599084
0504154	150			DF 12/DRVD 150	22L0599085
0504204	200			DF 12/DRVD 200	22L0599086

Seal kits PN16 and PN25

DN		Designation	Ref.
mm	"		
50		JT/DRVD	22L0599200
65		JT/DRVD	22L0599201
80		JT/DRVD	22L0599202
100		JT/DRVD	22L0599203
125		JT/DRVD	22L0599204
150		JT/DRVD	22L0599205
200		JT/DRVD	22L0599206

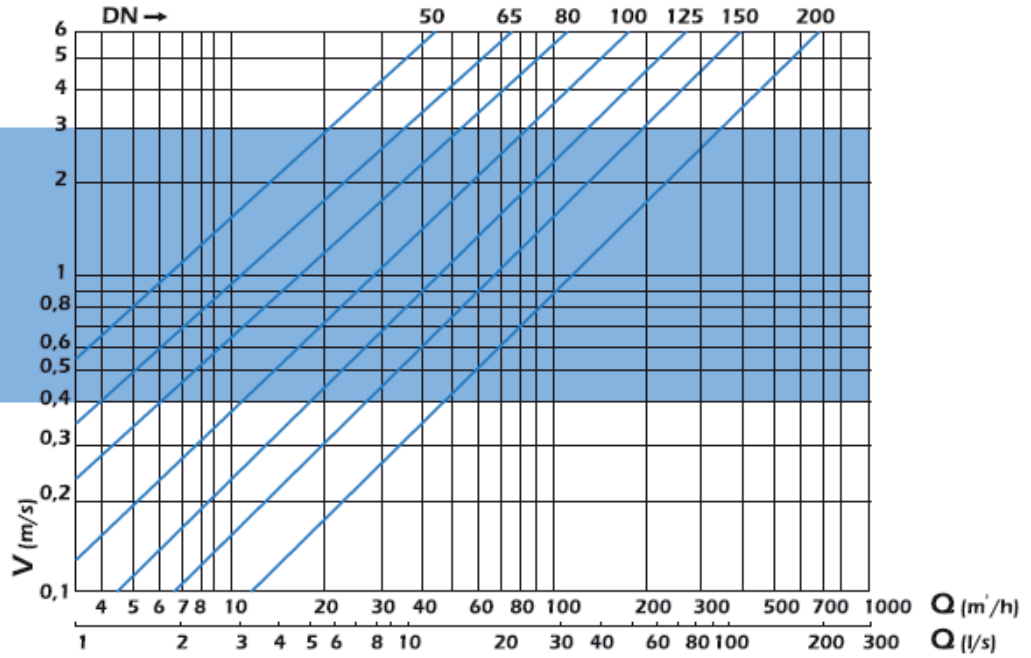
Maintenance kits shown in the table above are available; to order it, is necessary to indicate all information shown on the metal plate placed on the body of the DRVD.

Dimensioning

The sizing is done according to the flow.

Choose the DN which corresponds to speed in the device of 1,5 m/s at the regarded flow.

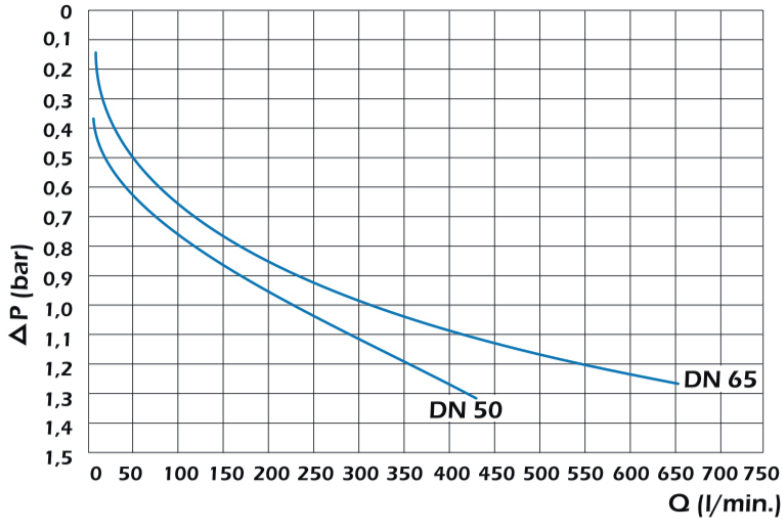
Recommended running time



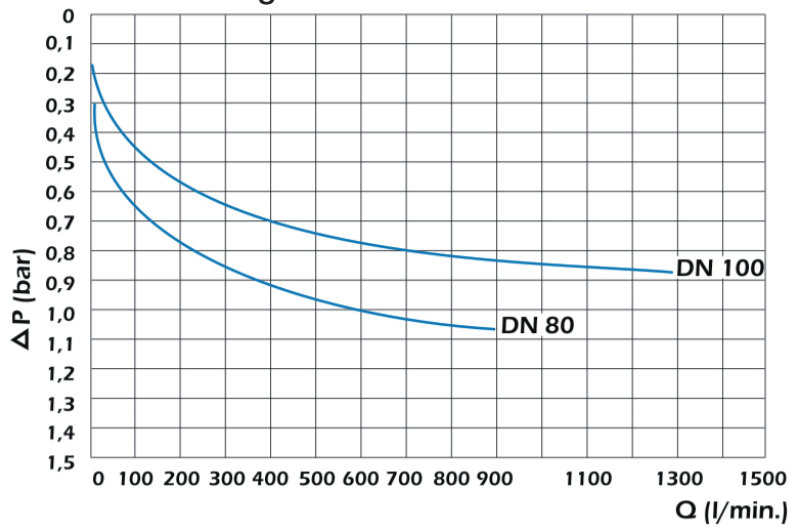
Operating characteristics

DRVD PN16 - Headloss chart

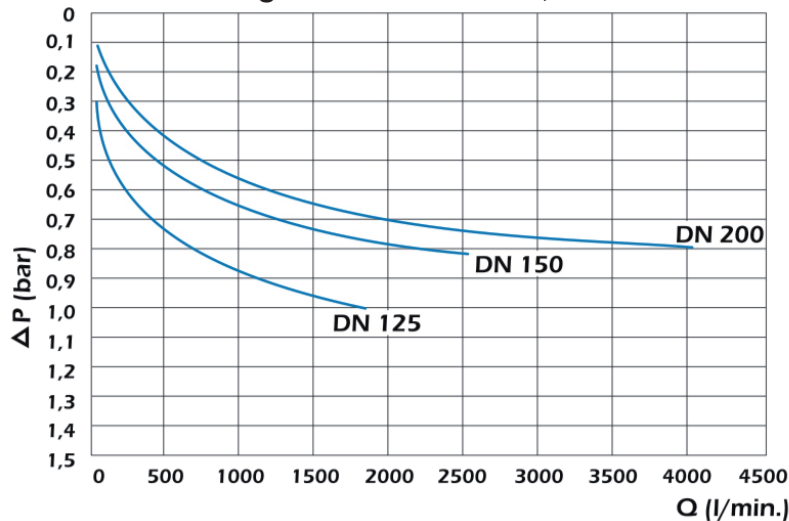
Pressure regulator DRVD - 50 and 65



Pressure regulator DRVD - 80 and 100



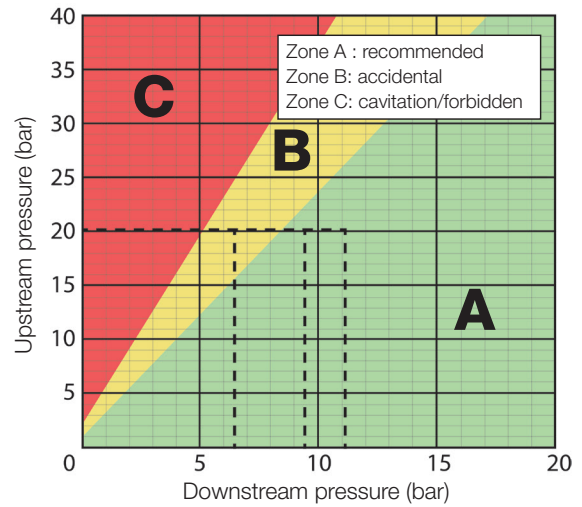
Pressure regulator DRVD - 125,150 and 200



Cavitation

Checking if the differential of pressure, between the upstream and the desired downstream pressure, is not too large is necessary to avoid cavitation risk. By putting in the graph hereafter, the upstream value and the desired downstream pressure, 3 results are possible :

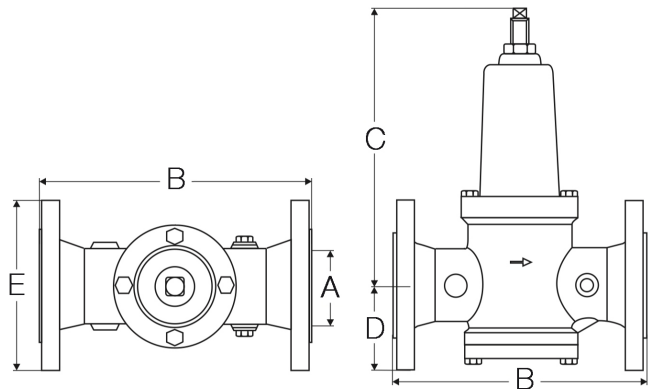
- Zone A : The point is in the no-cavitation zone, normal duty
- Zone B : The point is in the risk of cavitation zone, the pressure reducing valve can be damaged in case of continuous operation. If the pressure reducing valve is to operate in this zone, contact us.
- Zone C : The point is in the cavitation zone : continuous operation in this zone can cause rapid damage of the internal parts. The operation in this zone is unauthorized.



Sizing

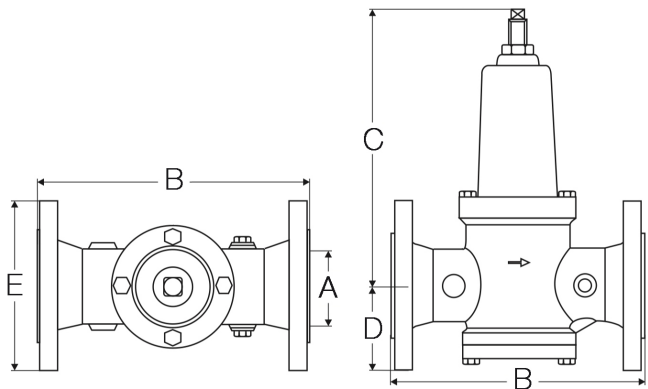
A	B	C	D	E
DN in mm	mm	mm	mm	mm
50	230	300	83	165
65	290	350	90	185
80	310	390	100	200
100	350	440	121	220
125	400	560	152	250
150	450	670	169	285
200	550	1050	234	340

DRVD PN16



A	B	C	D	E
DN in mm	mm	mm	mm	mm
50	230	300	83	165
65	290	350	90	185
80	310	390	100	200
100	350	440	121	220
125	400	560	152	250
150	450	670	169	285
200	550	1050	234	340

DRVD PN25



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