

# 9660

Pilot operated Ductile Iron Pressure Reducing Valve



Via Circonvallazione, 10  
13018 Valduggia (VC), Italy  
Tel: +39 0163 47891  
Fax: +39 0163 47895  
www.vironline.com



Ductile Iron pressure reducing valve  
Flanged PN16  
Max pressure reduction ratio 3:1  
Downstream setting pressure range from 2,0bar to 11,0bar  
Operation with pilot valve to stabilize the pressure independent of the flow rate  
Coating with minimum thickness of 150µm

PN16  
Free of CE marking (cat. according to Art. 4.3 Dir. 2014/68/EU)

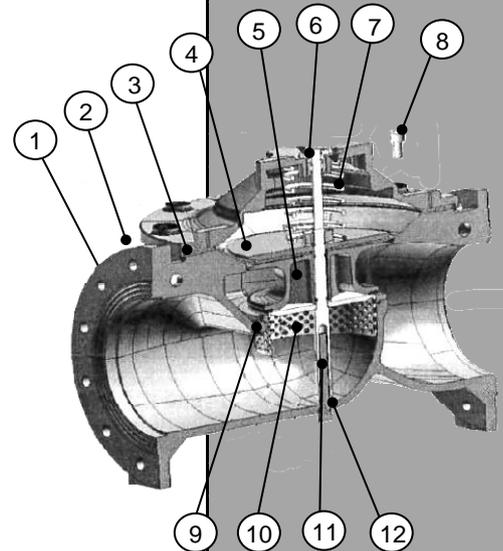
Working conditions:

- Suitable for: water, 0°C to +60°C
- Suitable for: air, 0°C to +60°C



## PARTLIST

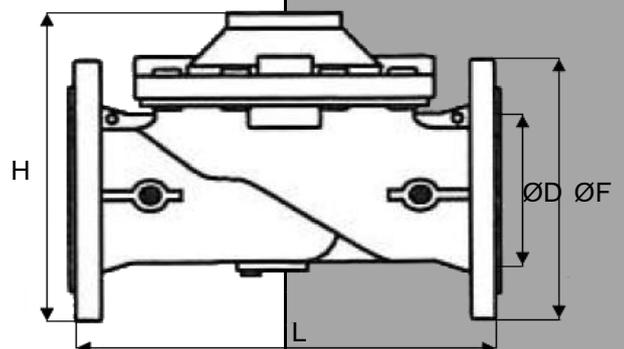
N.	Part	Material	Norm
1	Body and Cover	Ductile Iron	GGG40
2	Coating	Epoxy-polyester	-
3	Diaphragm	NBR Nylon reinforced	-
4	Upper Disc	Epoxy coated steel	-
5	Spacer	Epoxy coated GS	-
6	Upper Guide	Brass	-
7	Spring	Steel	AISI 304
8	Bolts	Steel	-
9	Seat	Steel	AISI 304
10	Retainer	Epoxy coated steel	AISI 304
11	Stem	Steel	AISI 304
12	Lower Guide	Steel	AISI 304



## DIMENSIONS

DN	ØD [mm]	ØF [mm]	H [mm]	L [mm]	Flow <sup>1</sup> [m³/h]	Weight [kg]
50	50	165	195	230	22	17
65	65	185	205	290	26	20
80	80	200	270	310	37	33
100	100	235	290	350	58	35
125	125	270	320	400	86	48
150	150	300	390	480	125	80
200	200	360	460	600	195	180
250	250	425	495	730	415	200
300	300	485	700	850	720	460

<sup>1</sup>Suggested flow rate with Δp=0,2bar, max flow rate is about double the indicated value.



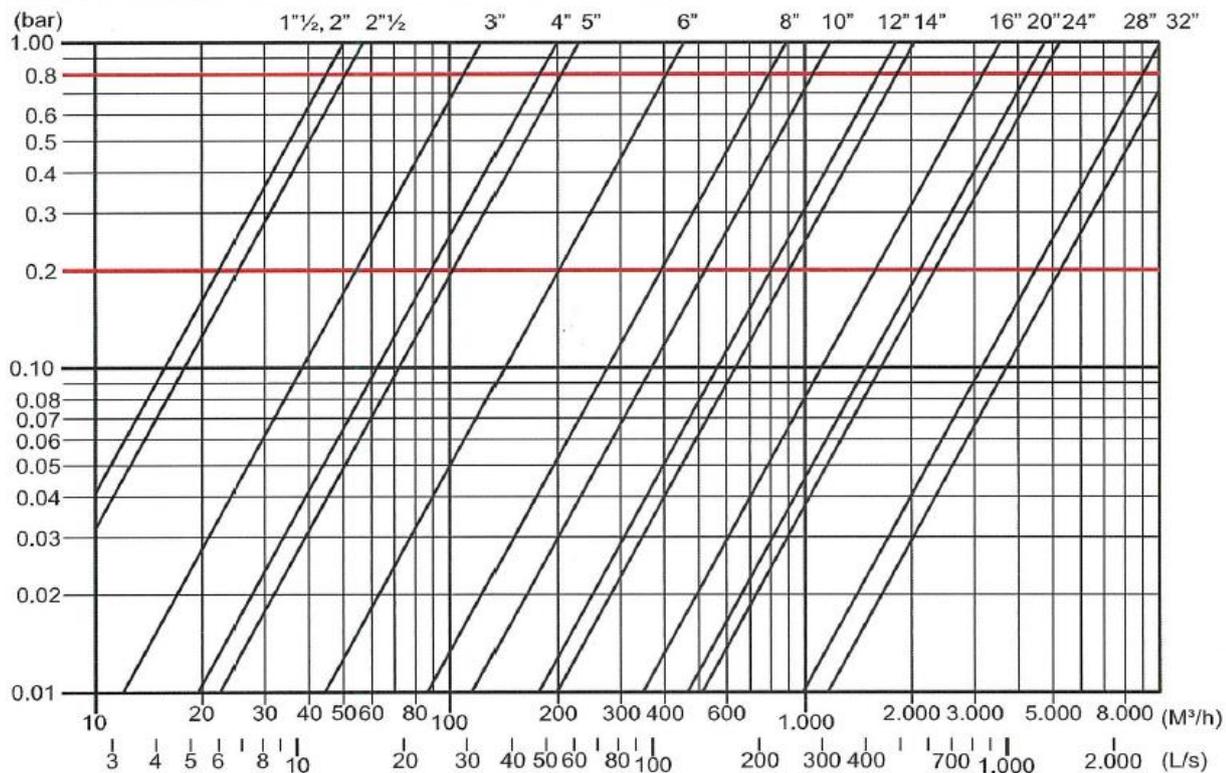
220523

# VALVE SIZING

The first step for choosing the proper Fig. 9660 pressure reducing valve for an application is to calculate the design flow (the expected maximum total flow required by the plumbing system). The national laws in-force should be taken as reference to calculate such flow.

By using the below graph (by drawing an upward line corresponding to the design flow) it's then possible to select a proper diameter by following the directions

## HEAD PRESSURE LOSS / PERDITE DI CARICO



$$K_v = Q \sqrt{\frac{m}{\Delta p}}$$

$Q$  = flow rate [m<sup>3</sup>/h]  
 $m$  = volumic weight [kg/dm<sup>3</sup>]  
 $\Delta p$  = pressure loss [bar]

NOTE(\*):  
 The recommended flow rates correspond to the following head loss:  
 Q ON-OFF: 0,2 bar  
 Q REG.: 0,8 bar

NOTA(\*):  
 Le portate consigliate corrispondono alle seguenti perdite di carico:  
 Q ON-OFF: 0,2 bar  
 Q REG.: 0,8 bar

The Fig. 9660 pressure reducing valves have a Max pressure reduction ratio of 3:1, meaning they can reduce the inlet pressure up to 3 times without generating cavitation.

Cavitation is responsible for a quick wear out of the internal components of the pressure reducer and must therefore be avoided.



Via Circonvallazione, 10  
 13018 Valduggia (VC), Italy  
 Tel: +39 0163 47891  
 Fax: +39 0163 47895  
 www.vironline.com