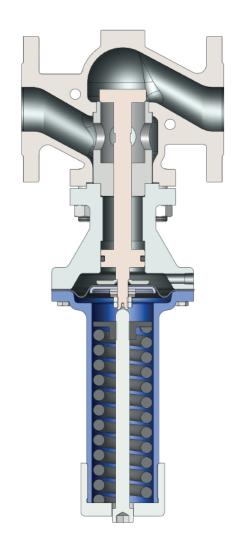


# Pressure Reducing Valve PRV50065 HP





### **Features**

- » Compact construction
- » Closed spring cap
- » Does not require compensating chamber for steam application
- » Medium-wetted internal parts made of stainless steel AISI 316
- » High regulating accuracy due to the balance plug
- » Robust design

- » Leakage class for metal sealing Class V or 0,0005% of Kvs value
- » Leakage class for soft sealing bubble tight or RATE A acc. to EN12266-1
- » Body made of 1.0619/A216WCB/WCC or stainless steel 1.4408/A351CF8M
- » FKM special elastomeres
- » Quick change of internal trims: seat, cone/plug, and spring

# **Typical Applications**

- » Steam, water, condensate cycle system
- » Industrial air
- » Technical gases

- » Conventional heat exchangers
- » Conventional fuel supply and residues disposal



# **Technical Information**

#### Technical Data

Connection DN	15 - 100*
Nominal Pressure PN	40
Inlet Pressure	up to 40 barg**
Outlet Pressure	0.14 - 15 barg
K <sub>vs</sub> Value	0.08 - 108 m³/h
Temperature	-19°C (-30°C with stainless steel body) to 250°C (150°C for soft seal plug)
Medium	Steam, liquids, gases

<sup>\*</sup> DN65 and DN100 available with PN16 DN125 and DN150 under request

#### Materials

Body	1.0619/A216WCB/WCC or Stainless steel 1.4408/A351CF8M
Diaphragm Housing	Cast iron - Stainless steel
Medium wetted Internal Parts	Stainless steel 1.4408 / AISI 316
Valve Seal	Stainless steel 1.4408 / AISI 316
Diaphragm	FKM special
O-ring	FKM special

#### Turndown

	Standa	rd plug	Perfora	ted plug	
DN	Kvs	Rangeability	Kvs	Rangeability	
15	4.9	23.3	2	25.0	
20	4.9	23.3	2	25.0	
25	8	20.0	6	22.2	
32	15	29.4	11	33.3	
40	25	29.4	19	33.3	
50	36	34.0	27	37.5	
65	60	43.8	42	43.8	
80	81	47.9	57	47.9	
100	108	51.4	71	51.4	

# Dimensions [mm]

DN	L	H1	H2	D	Weights [kg]
15	130	45	400	162	16
20	150	50	400	162	17
25	160	60	400	162	19
32	180	70	405	162	21
40	200	85	545	162	29
50	230	90	540	162	31
65	290	100	590	162	39
80	310	120	590	162	51
100	350	140	610	162	71

# Working conditions

Т	-10 °C	130 °C	150 °C	200 °C	250 °C
barg	40	38	36	33	30

# Spring range (barg)

Available ranges according to DN											
D	N	15	20	25	32	40	50	65	80	100	
	1	0.2	.1.5		0.3	.1.4	0.31.4				
N° spring range	2	0.3	.2.4	0.52.3			0.62.3				
gra	3	0.4	.4.3	0.94.0			1.14.0				
prin	4	0.8	.6.8		1.66.3				2.06.2		
S <sub>s</sub>	5	1.5	.9.6	3.08.5			3.68.5				
	6	2.9	15.8		5.7	14.3		6.913.8			

# Reduction Ratio (max. p1/p2)

Inlet Pressure (barg) * PN	5**	10	15	20	25	30	35	40
		Lic	quids					
Outlet Pressure Minimum (barg) Std plug/Soft seal	1,5	3	4.5	7	10	13	15	16
Outlet Pressure Minimum (barg) Hardened Perforated Plug	0,5	1	2	3	4	6	8	10
	9	Steam	& ga	ses				
Outlet Pressure Minimum (barg) Standard plug	0.5	1	2	2.5	3	3.4	3.8	4
Outlet Pressure Minimum (barg) Hardened Perforated Plug	0	0	0.1	0.2	0.4	0.6	0.8	1

If the inlet pressure is 25 barg, outlet pressure can be reduced up to 10 barg with standar plug and up to 4 barg with hardened perforated plug. For more differential pressure please contact BVALVE

Information in table is calculated for sizes from DN15 to DN100

# K<sub>vs</sub> Values [m<sup>3</sup>/h]

DN	15	20	25	32	40	50	65	80	100
		0.08							
Low Kvs	Low Kvs 0.15								
plug <sub>0.38</sub>									
		0.8							
Std plug / Soft seal plug	4.9	9	8	15	25	36	60	81	108
Hardened Perforated plug	2		6	11	19	27	42	57	71

<sup>\*\*</sup> Steam up to 25bar

<sup>\*\*</sup> Less than inlet pressure of 5 barg, outlet pressure can be reduced:
- DN15 and DN20 up to 0,2 barg
- DN25, DN32, DN40 and DN 50 up to 0,3 barg
- DN65, DN80 and DN100 up to 0,3 barg