

# pressure limitation valve

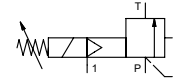
## type HPB-N 15


### 3-HPB-N 15

valve type with pilot valve



**control valve** manuel  
**pressure range** PN 1-16 bar  
**orifice** DN 15 mm  
**connection** thread  
**function** manual stepless pressure regulation



 Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** externally controlled without spring return  
**body materials** ① ④  
 ② steel, galvanized ⑤  
 ③ ⑥  
**valve seat** metal on metal  
**seal materials** FPM, PTFE

**details needed for main valve**

- orifice
- port
- pressure regulating range
- flow rate
- media
- media temperature
- ambient temperature

**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max

**general specifications**

ports	HPB	threads G 1	SAE connection DIN ISO 6162
function		stepless regulation	
pressure regulation range	bar	1-16	
Kv value	m <sup>3</sup> /h	6,0	
media		liquid - highly viscous - contaminated	
abrasive media			
flow direction	P ⇌ T	as marked	
operating time	ms	< 900	
media temperature	°C	0 to +60	
ambient temperature	°C	0 to +50	
approvals			
mounting		mounting holes	
weight	kg	2,6	
additional equipment			security valve

**options**

**electrical specifications**


nominal voltage	U <sub>n</sub>	24 V DC	special voltage upon request
	U <sub>n</sub>	230 V 50 Hz AC	special voltage upon request
power consumption	DC	4,8 W	2,5 W
	AC	pick up 11,0 VA holding 8,5 VA	
protection	IP 65 (P54)	acc. DIN 40 050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B	
additional equipment		illuminated plug with varistor	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
coil		3 positions x 90° / wire diameter 6-8 mm	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	EEx m II T5	nominal voltage U <sub>n</sub>	direct current 24 V 3,25 W
		power consumption	alternating current 230 V 50 Hz 2,90 W


**options**

**pneumatic specifications**

actuation pressure range	bar	see actuation pressure-diagram
air consumption		DIN ISO 8573-1 grade of compressed air quality 5/4/3
control		preferably 3/2-way pilot valve during low pressure circulation mode
actuator ports	1	G 1/8

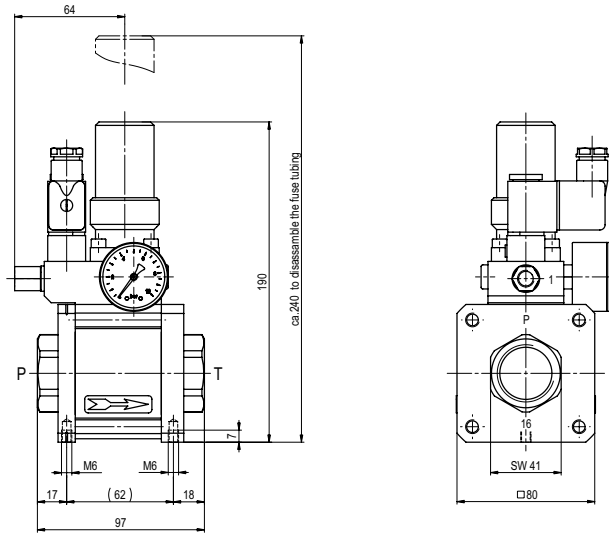
**options**

 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

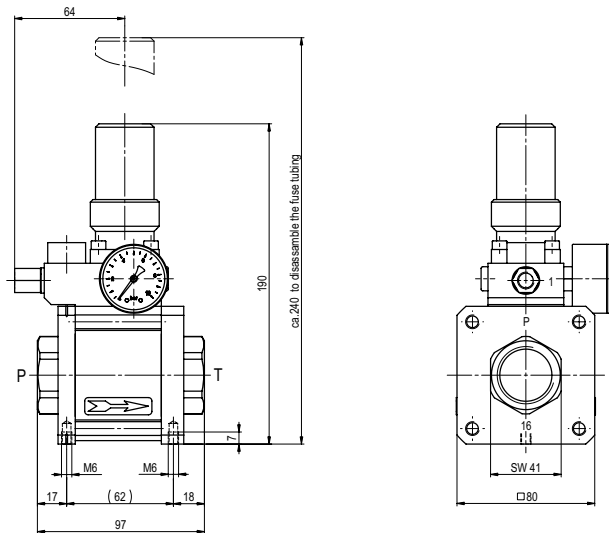
 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

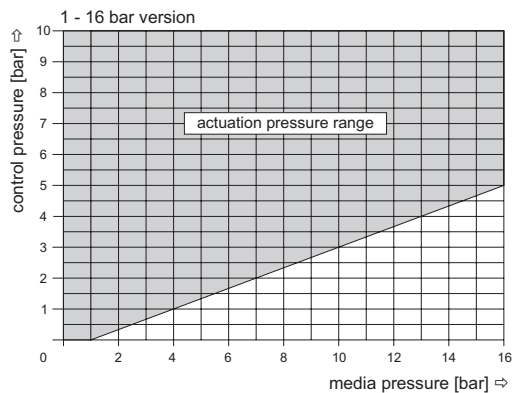
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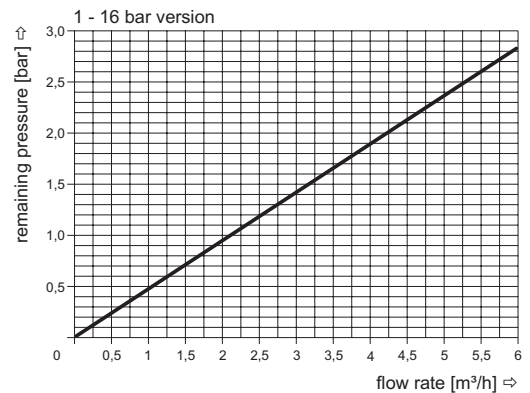
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### actuation pressure-diagram



### pressureless circulation mode



Sound creation during low pressure circulation mode and flow  $Q=6 \text{ m}^3/\text{h}$ : ca. 70 dbA

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

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