

# pressure limitation valve

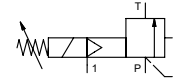
## type HPB-N 32

### 3-HPB-N 32

valve type with pilot valve



**control valve** manuel externally controlled  
**pressure range** PN 1-16 bar  
**orifice** DN 32 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**

**options**

<b>ports</b>	HPB	threads G 1 1/2	SAE connection DIN ISO 6162
<b>function</b>		stepless regulation	
<b>pressure regulation range</b>	bar	1-16	
<b>Kv value</b>	m <sup>3</sup> /h	24,0	
<b>media</b>		liquid - highly viscous - contaminated	
<b>abrasive media</b>			
<b>flow direction</b>	P ⇌ T	as marked	
<b>operating time</b>	ms	< 900	
<b>media temperature</b>	°C	0 to +60	
<b>ambient temperature</b>	°C	0 to +50	
<b>approvals</b>			
<b>mounting</b>		mounting holes	
<b>weight</b>	kg	8,3	
<b>additional equipment</b>			security valve

**electrical specifications**

**options**

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

**pneumatic specifications**

**options**

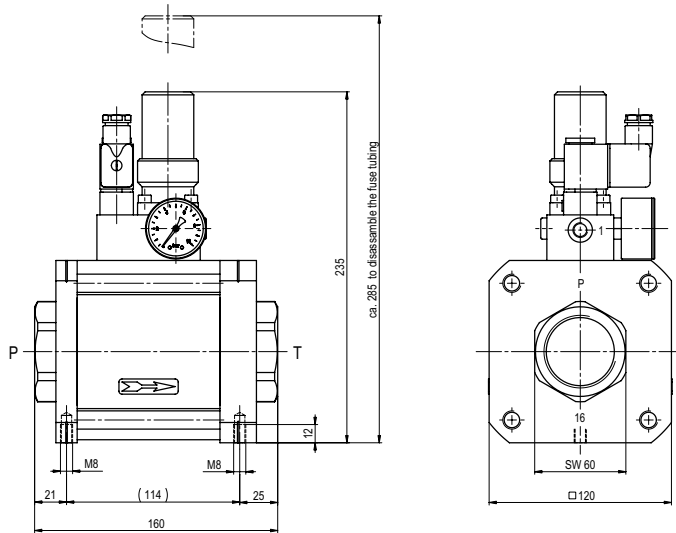
<b>actuation pressure range</b>	bar	see actuation pressure-diagram
<b>air consumption</b>		DIN ISO 8573-1 grade of compressed air quality 5/4/3
<b>control</b>		preferably 3/2-way pilot valve during low pressure circulation mode
<b>actuator ports</b>	1	G 1/8

**△** 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.

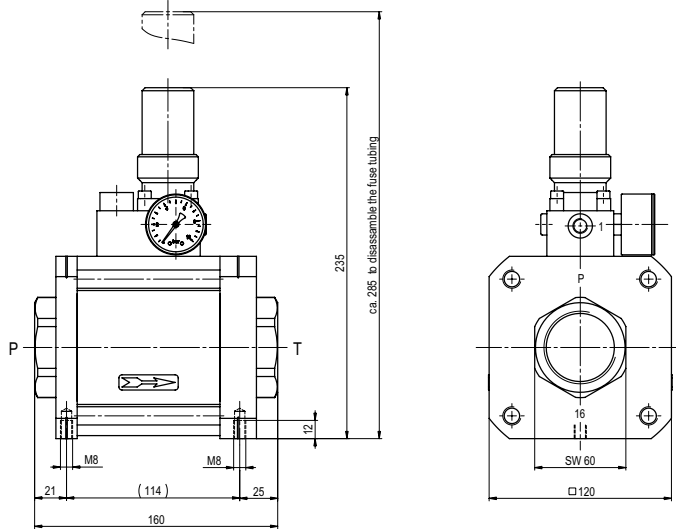
**△** If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

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

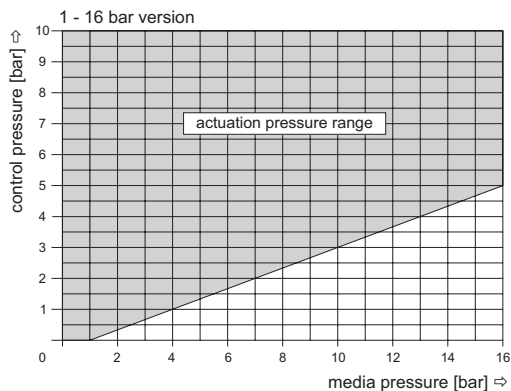
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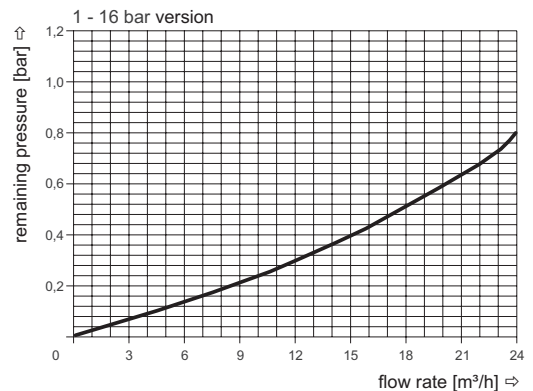
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### actuation pressure-diagram



### pressureless circulation mode



Sound creation during low pressure circulation mode and flow  $Q=24 \text{ m}^3/\text{h}$ : ca. 70 dbA