

pressure limitation valve

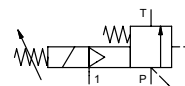
type HPB-S 50


3-HPB-S 50

valve type with pilot valve



control valve manual	externally controlled
pressure range	PN 5-64 bar
orifice	DN 50 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 with spring return
body materials	① ② ③ ④ steel, nickel plated ⑤ 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
ports	HPB threads G 1 1/2	SAE port DIN ISO 6162
function	stepless regulation	
pressure regulation range	bar 5-64	
flow rate	m³/h 48,0	
media	emulsions - oils	
abrasive media		
flow direction	P ⇌ T as marked	
settling time	ms < 900	
media temperature	°C 0 to +60	
ambient temperature	°C 0 to +50	
approvals		
mounting	mounting holes	
weight	kg 11,9	
additional equipment		security valve

electrical specifications		options
nominal voltage	U _n DC 24 V	special voltage upon request
	U _n AC 230 V 50 Hz	special voltage upon request
power consumption	DC 4,8 W	2,5 W
	AC pick up 11,0 VA holding 8,5 VA	
protection	IP65 (P54) acc. DIN 40050	
energized duty rating	ED 100%	
connection	plug acc. DIN EN 175301-803 form B, 3 positions x90° / wire diameter 6-8 mm	
optional	M12x1 connector acc. DESINA	connector acc. VDMA
additional equipment	illuminated plug with varistor	
max. temperature	media 60°C	
	ambient 50°C	
explosion proof	E Ex e II T5 nominal voltage U _n	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

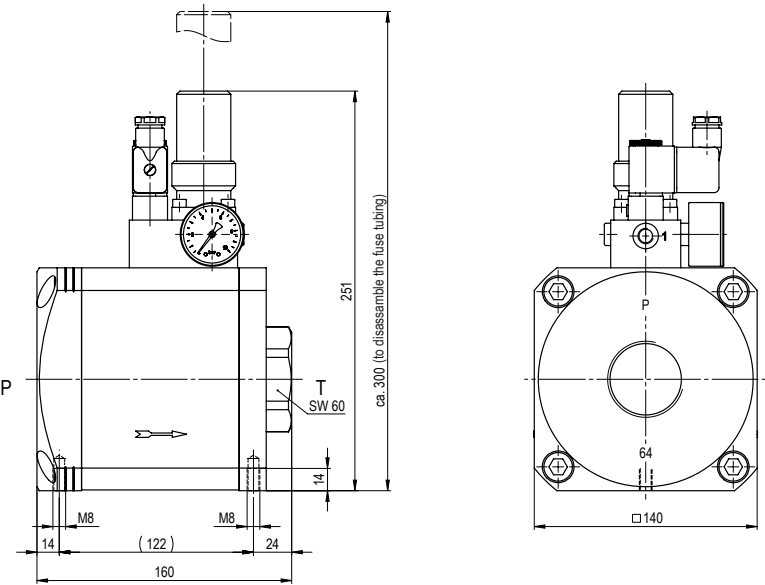
pneumatic specifications		options
actuation pressure range	bar see actuation pressure-diagram	
compressed air	DIN ISO 8573-1 grade of compressed air quality 5/4/3	
control	preferably 3/2 way pilot valve during low pressure circulation mode	
actuator ports	1 G 1/8	

 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.

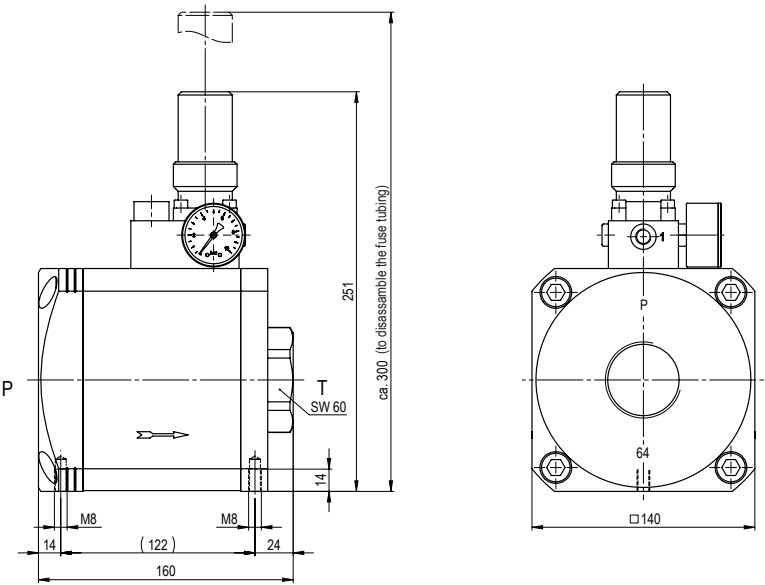
 If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application.

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

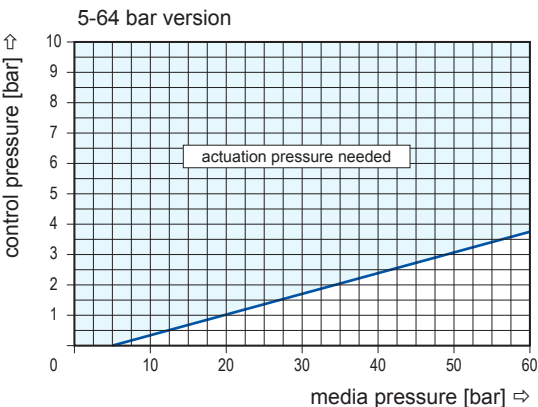
type **3-HPB-S 50**



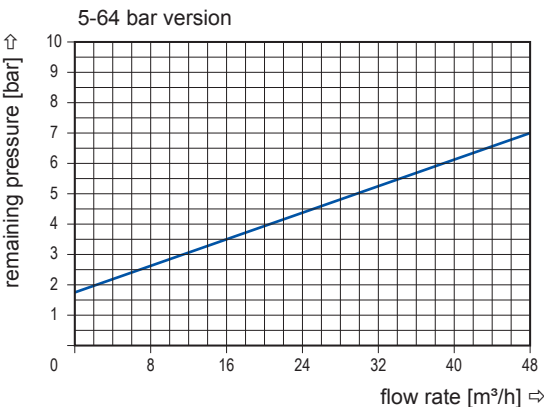
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actuation pressure-diagram



pressureless circulation mode



Sound creation during low pressure circulation mode and flow $Q= 48 \text{ m}^3/\text{h}$ ca. 74 dbA