



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Angle valve with soft-pump function
Series 292, DN 160 (ID 6")
Ordering No. 29244-QE34-0001

Description

Flange		ISO-K 160
Actuator		with solenoid valve without position indicator
	– Main	Pneumatic, double acting
	– Softpump	Pneumatic, single acting with closing spring
Feedthrough	– Main	Shaft feedthrough
	– Softpump	Bellows

Technical data

Leak rate (static)	– Valve body	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-7}$ mbar to 2 bar (abs)
Differential pressure on the plate	– In opening direction	≤ 1.2 bar
	– In closing direction	≤ 2 bar
Differential pressure at opening		≤ 1 bar [1 bar with reduced number of cycles]
Conductance (molecular flow)		1000 ls ⁻¹
Actuation time main	– Closing	≤ 1.5 sec.
	– Opening	≤ 1.5 sec.
Actuation time softpump	– Closing	≤ 0.2 sec.
	– Opening	≤ 0.2 sec.
Cycles until first service (T _{max} 80°C, under clean conditions)	– Main	2 million
	– Softpump	3 million
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body	≤ 150 °C
	– Actuator	≤ 120 °C
	– Solenoid valve	≤ 50 °C
Material	– Body main	AISI 316L (1.4404)
	– Body softpump	AISI 316L (1.4404)
	– Actuator	Aluminum
	– Plate main	AISI 316L (1.4404)
	– Plate soft	AISI 316L (1.4404)
	– Feedthrough main	AISI 304 (1.4301)
	– Feedthrough soft	AISI 316L (1.4404, 1.4435), AISI 316 Ti (1.4571)
Seal	– Bonnet O-ring	FKM (Viton®)
	– Plate O-ring	FKM (Viton®)
	– Feedthrough O-ring	FKM (Viton®)
	– Actuator O-ring	FKM (Viton®)
Weight		16 kg / 35 lbs
Mounting position		any
Volume of pneumatic actuator	– Main	0.35 l / 0.012 ft ³
	– Softpump	0.011 l / 0.0004 ft ³

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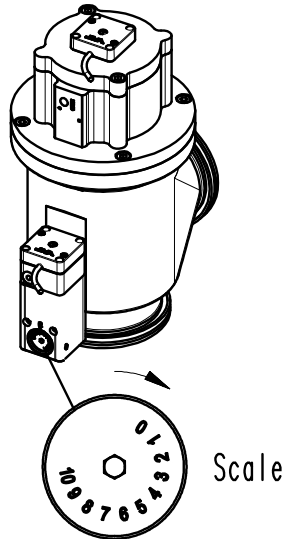
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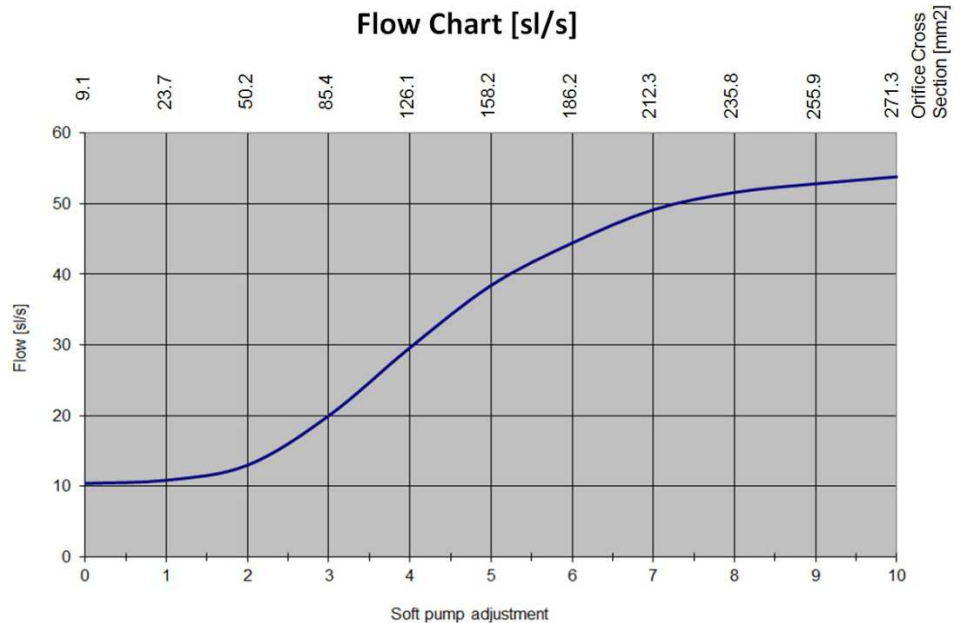
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Compressed air min. – max. overpressure	– Main – Softpump	4.5 – 7 bar / 65 – 102 psi 4 – 8 bar / 58 – 115 psi
Compressed air connection	– Main – Softpump	G $\frac{1}{8}$ " female M5 (10-32 UNF suitable)
Behavior in case of compressed air pressure drop	– Valve closed – Valve opened – During actuation	depending on customer installation depending on customer installation depending on customer installation
Behavior in case of power failure	– Valve closed – Valve opened – During actuation	valve remains closed and leaktight valve closes leaktight valve closes leaktight

Conductance diagram



Flow Chart [sl/s]



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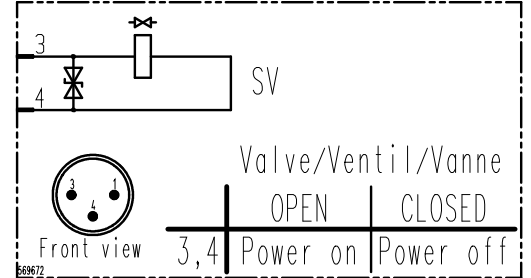
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Electrical connection

Solenoid valve Main

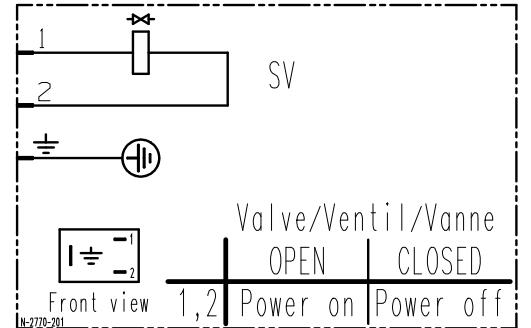
Type 5/2 way
Voltage See label on solenoid
Connection type plug, male M8x1
Additional feature LED orange; overvoltage protection; adjustable emergency operation; silencer



Wiring diagram

Solenoid valve Soft

Type 3/2-way
Voltage See label on solenoid
Connector Rectangle plug, Type B (DIN standard)
Cable Ø6 – 8 mm



Wiring diagram

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