



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Angle valve with soft-pump function
Series 292, DN 100 (ID 4")
Ordering No. 29240-QA11-0001

Description

Flange		ISO-K 100
Actuator		without solenoid valve without position indicator
	- Main	Pneumatic, single acting with closing spring
	- 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)		440 ls ⁻¹
Actuation time main	- Closing	≤ 1 sec.
	- Opening	≤ 1 sec.
Actuation time softpump	- Closing	≤ 0.2 sec.
	- Opening	≤ 0.2 sec.
Cycles until first service (Tmax 80°C, under clean conditions)	- Main	1 million
	- Softpump	3 million
Temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve body	≤ 150 °C
	- Actuator	≤ 120 °C
Material	- Body main	Aluminum (EN AC-42000)
	- Body softpump	Aluminum (EN AW-6060)
	- Actuator	Aluminum
	- Plate main	Aluminum (EN AW 6082)
	- Plate soft	AISI 316L (1.4404)
	- Feedthrough main	Aluminum (EN AW 6082)
	- Feedthrough soft	AISI 316L (1.4404, 1.4435), AISI 316 Ti (1.4571)
	- Spring	AISI 301 (1.4310)
	- Snap ring for axle	AISI 301 (1.4310)
Seal	- Bonnet O-ring	FKM (Viton®)
	- Plate O-ring	FKM (Viton®)
	- Feedthrough O-ring	FKM (Viton®)
	- Actuator O-ring	FKM (Viton®)
Weight		9.5 kg / 21 lbs
Mounting position		any

Created by: LIN	Release date: 26.06.2014	1/2
Modified by:	Release date:	604134EB



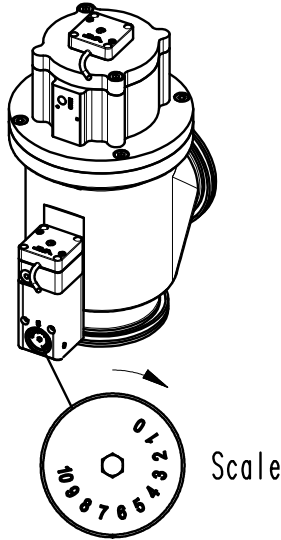
VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

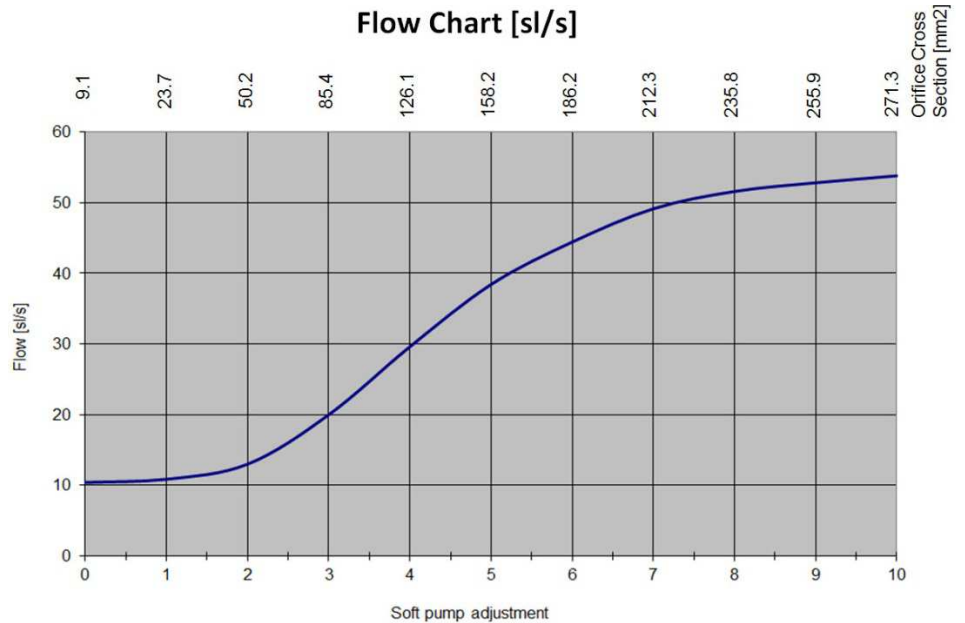
Angle valve with soft-pump function Series 292, DN 100 (ID 4") Ordering No. 29240-QA11-0001

Volume of pneumatic actuator	- Main	0.3 l / 0.01 ft ³
	- Softpump	0.011 l / 0.0004 ft ³
Compressed air	- Main	4.5 – 7 bar / 65 – 102 psi
min. – max. overpressure	- Softpump	4 – 8 bar / 58 – 115 psi
Compressed air connection	- Main	1/8" ISO/NPT female
	- Softpump	M5 (10-32 UNF suitable)
Behavior in case of compressed air pressure drop	- Valve closed	Valve remains closed and leaktight
	- Valve opened	Valve closes leaktight
	- During actuation	Valve closes leaktight
Behavior in case of power failure	- Valve closed	Valve remains closed and leaktight
	- Valve opened	Depending on customer installation
	- During actuation	Depending on customer installation

Conductance diagram



Flow Chart [sl/s]



Created by: LIN	Release date: 26.06.2014	2/2
Modified by:	Release date:	604134EB