



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

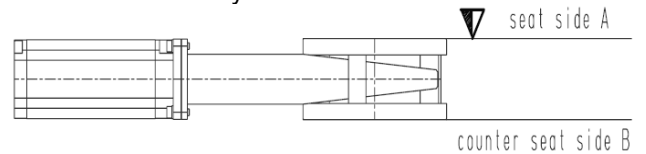
Basement Gate Valve, Series 091, DN 100 (ID 4'')
Ordering No. 09144-CE14-

Description

Flange	CF-F
Actuator	pneumatic, double acting [with closing spring]
Feedthrough	Bellows feedthrough

Technical data

Leak rate	- Valve body	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
	- Valve seat	$< 1 \cdot 10^{-7}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)
Differential pressure on the plate	- in opening direction	≤ 1.2 bar
	- in closing direction	≤ 1.2 bar
Differential pressure at opening	Higher pressure on seat side A, the differential pressure acts in opening direction	≤ 1.0 bar with full cycle life
	Higher pressure on counter seat side B, the differential pressure acts in closing direction	≤ 30 mbar with full cycle life
	Higher pressure on counter seat side B, the differential pressure acts in closing direction	≤ 1.0 bar with reduced cycle life
Conductance (molecular flow)		5000 ls ⁻¹
Cycles until first service		5'000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	- Valve Body	≤ 120 °C (bake-out max. 24h)
	- Actuator	≤ 80 °C
Heating and cooling rate		50 °C h ⁻¹
Material	- Valve Body/Bonnet	1.4301, AISI 304/ Aluminium
	- Gate	1.4308
	- Bellows	AM350, AISI 633
Seal	- Bonnet	FKM (Viton®)
	- Gate	FKM (Viton®)
	- Actuator	FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		0.53 l / 0.017 ft ³



Created by: HDE	Release date: 2014-01-23	1 of 2
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Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		2 x M5
Actuation time	– closing	3.0 s
	– opening	3.0 s
Weight		15.1 kg / 33.3 lbs
Behavior in case of compressed air pressure drop	– Valve closed	Valve remains closed (≥ 24h)
	– Valve open	undefined
	– During actuation	undefined
Behavior in case of power failure	– Valve closed	valve remains closed
	– Valve open	valve closes
	– During actuation	undefined

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