



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Fast Closing Shutter, Series 77.3, DN 100 (ID 4")

Ordering No. 77340-CE44-0007

Description

Flange	DN 100 CF-F, slit 35 x 80
Actuator	Pneumatic actuator double acting, electro-magnetically released with position indicator with solenoid valve
Feedthrough	bellows

Technical data

Leak rate	
- To the outside	$\leq 1 \times 10^{-10}$ mbar ls ⁻¹
- Seat	≤ 1 mbar ls ⁻¹ (air, 1 bar)
Molecular flow conductance	450 ls ⁻¹
Pressure range	UHV to 1.2 bar (abs)
Differential pressure on the gate	
- in closing and opening direction	≤ 1.2 bar
Max. differential pressure at opening	
- in closing and opening direction	≤ 150 mbar
Cycles until first service	5000 at 5 bar compressed air pressure
Bake-out temperature	
- Valve	$\leq 300^{\circ}\text{C}$
- Actuator	$\leq 50^{\circ}\text{C}$
- Solenoid	$\leq 50^{\circ}\text{C}$
- Position indicator	$\leq 50^{\circ}\text{C}$
Heating and cooling rate	$\leq 60^{\circ}\text{C h}^{-1}$
Material	
- Body, mechanism (vacuum side)	1.4435, 1.4404; AISI 316L
- Flange	1.4435 ESU; AISI 316L ESR
- Gate	1.4404, silver coated
- Bellows	AM350; AISI 633
Seal	
- Bonnet	metal
- Gate	none
- Actuator	viton [®]
Mounting position	any
Solenoid	
- Supply voltage	24 V DC
Position indicator	
- one switch (change contact) for «open» and «close»	
- Contact rating	≤ 50 V AC/DC; ≤ 1.2 A
Electric connection	
- 12 pole plug	
Radiation resistance	
- Shutter	10^8 Gy (10^{10} rad)
- Actuator	10^4 Gy (10^6 rad)
Compressed air pressure min. - max. (overpressure)	4 - 6 bar / 60 - 90 psig

Created by: Martin Greuter	Release date: 05. July 2012	Page 1 of 2
Modified by: René Brulc	Release date: 08. November 2012	296220EB



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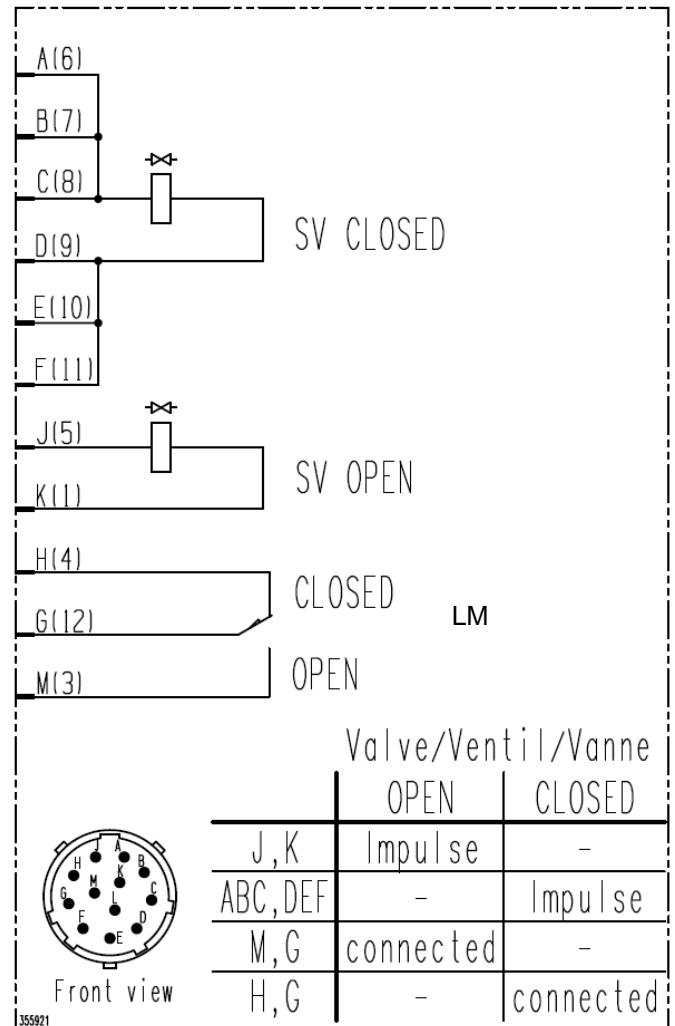
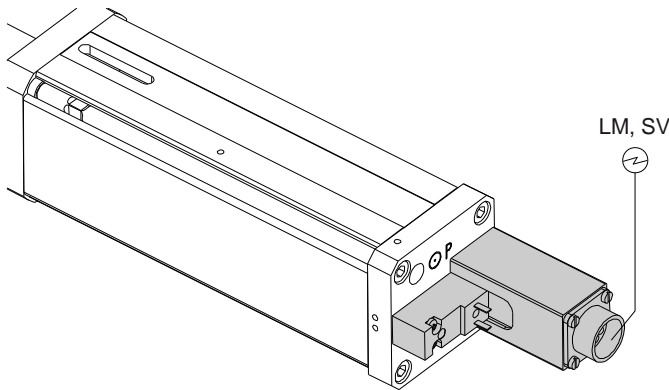
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Volume of air cylinder	0.36 l / 0.013 ft ³
Compressed air connection	R 1/8" (1/8" NPT)
Action at power failure	no change
- Valve closed	valve closes
- Valve open	
Action at compressed air failure	undefined
- Valve closed	no change
- Valve open	
Closing time	≤ 10 ms
Opening time	9 s
Weight	appr. 14 kg / 30 lbs

Dimensions

Dimensional drawing No. 545680

Wiring Diagram



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