



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Fast Closing Shutter, Series 77.3, DN 160 (ID 6")

Ordering No. 77344-CE44-0006

Description

| | |
|-------------|---|
| Flange | DN 160 CF-F, slit 35 x 130 |
| 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 | 830 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 | ≤ 100 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 |

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| Created by: Martin Greuter | Release date: 05. July 2012 | Page 1 of 2 |
| Modified by: René Brulc | Release date: 08. November 2012 | 296215EB |



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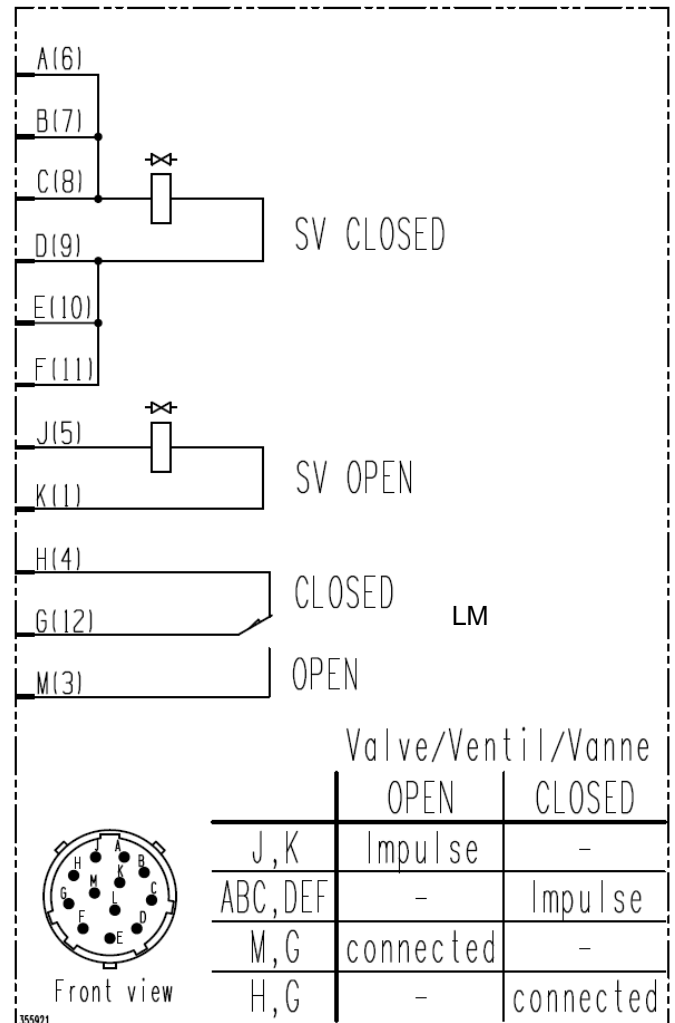
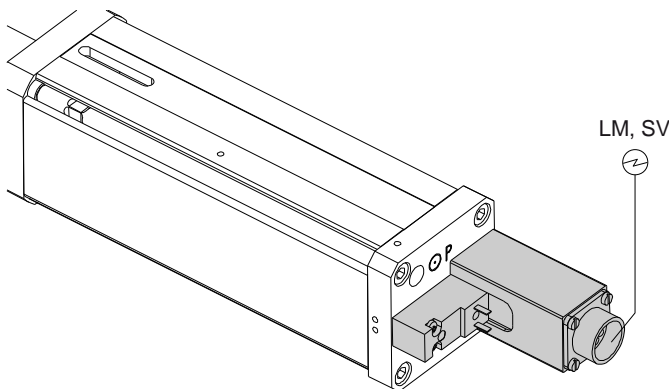
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| | |
|----------------------------------|--------------------------------|
| Volume of air cylinder | 0.36 l / 0.013 ft ³ |
| Compressed air connection | R 1/8" (1/8" NPT) |
| Action at power failure | no change |
| - Valve closed | valve closes |
| - Valve open | |
| Action at compressed air failure | undefined |
| - Valve closed | no change |
| - Valve open | |
| Closing time | ≤ 10 ms |
| Opening time | 9 s |
| Weight | appr. 20 kg / 44 lbs |

Dimensions

Dimensional drawing No. 545712

Wiring Diagram



| | | |
|----------------------------|---------------------------------|-----------------|
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