



VAT Vakuumentile AG
CH-9469 Haag, Schweiz

PRODUCT DATA SHEET No. 233994EF

Vatterfly valve, Series 20, DN 63-200 (ID 2½'' - 8'')

Ordering No: 20 . . . - . . . 34



Description

Flanges and body shape according to dimensional drawing
 Actuator pneumatic, double acting with solenoid
 Feedthrough rotary feedthrough

Technical data

Leak rate:
 - To the outside $< 1 \cdot 10^{-9}$ mbar ls⁻¹
 - Valve seat $< 1 \cdot 10^{-9}$ mbar ls⁻¹
 Pressure range $1 \cdot 10^{-8}$ mbar to 2 bar, abs
 Differential pressure on the plate ≤ 1.2 bar in opening direction
 ≤ 1.6 bar in closing direction
 Differential pressure at opening ≤ 0.5 bar
 Admissible temperature: 0 - 50°C
 Heating and cooling rate: $\leq 40^\circ\text{C h}^{-1}$
 Cycles until first service 100,000
 - under clean vacuum conditions
 Life cycle 500,000

| | | A: Aluminum body | E: Stainless Steel body |
|-----------|-------------------|------------------|-------------------------|
| Material: | - valve body | Al Mg Si 1 | 1.4301 |
| | - actuator | Aluminum | Aluminum |
| | - valve plate | Al Mg Si 1 | 1.4301 |
| Seal | - bonnet seal | VITON® | VITON® |
| | - plate seal | VITON® | VITON® |
| | - pneumatic seals | VITON® | VITON® |

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| Replaced by | Replacement for | 233994EF |
| Modification No. | Modification No. | |



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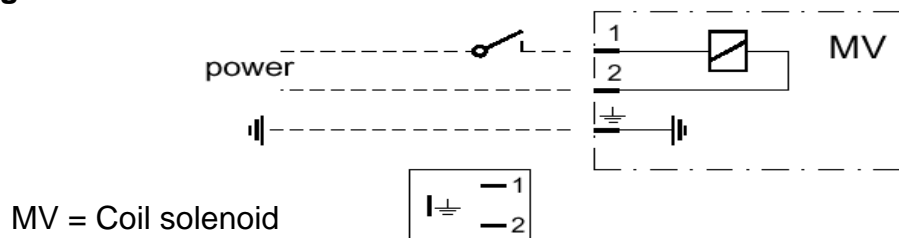
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| | | |
|--|----------------|---|
| Solenoid | supply voltage | according to P. O. (refer to label of solenoid) |
| | required power | ≤ 7.6 W |
| Mounting position | | any |
| Action at power failure | valve closed | no change |
| | valve open | valve closes |
| Action at compressed air failure | | no change |
| Compressed air pressure for pneumatics | | 4 - 7 bar / 60 - 100 psi |
| Compressed air connection | | R ⅛" female |

| Diameter code | 36 | 38 | 40 | 44 | 46 |
|---|----------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------|
| Diameter | 63 mm 2½" | 80 mm 3" | 100 mm 4" | 160 mm 6" | 200 mm 8" |
| Volume of air cylinder | 0.04 l 0.0014 ft ³ | 0.08 l 0.003 ft ³ | 0.08 l 0.003 ft ³ | 0.13 l 0.0045 ft ³ | 0.3 l 0.01 ft ³ |
| Opening / Closing time | 0.4 s | 0.8 s | 0.8 s | 1.4 s | 1.8 s |
| Molecular flow conductance | 550 ls ⁻¹ | 700 ls ⁻¹ | 1400 ls ⁻¹ | 4000 ls ⁻¹ | 7500 ls ⁻¹ |
| Molecular flow conductance (extended body) | 450 ls ⁻¹ | 600 ls ⁻¹ | 1050 ls ⁻¹ | 2550 ls ⁻¹ | 4700 ls ⁻¹ |
| Weight (standard Aluminum body) 203 . . . A . . | 2.3 kg 5.1 lbs | 3.8 kg 8.4 lbs | 4 kg 8.8 lbs | 7.4 kg 16.3 lbs | 16.1 kg 35.5 lbs |
| Weight (standard Stainless Steel body) 203 . . . E . . | 4.6 kg 10.1 lbs | 7.5 kg 16.5 lbs | 8 kg 17.6 lbs | 15.6 kg 34.4 lbs | 34.2 kg 75.4 lbs |
| Weight (extended Aluminum body) 204 . . . A . . | 2.5 kg 5.5 lbs | 4.2 kg 9.3 lbs | 4.7 kg 10.4 lbs | 9.7 kg 21.4 lbs | 21.3 kg 47 lbs |
| Weight (extended Stainless Steel body) 204 . . . E . . | 5.3 kg 11.7 lbs | 8.5 kg 18.7 lbs | 10.1 kg 22.3 lbs | 22.3 kg 49.2 lbs | 20.8 kg 45.9 lbs |

Wiring diagram:



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