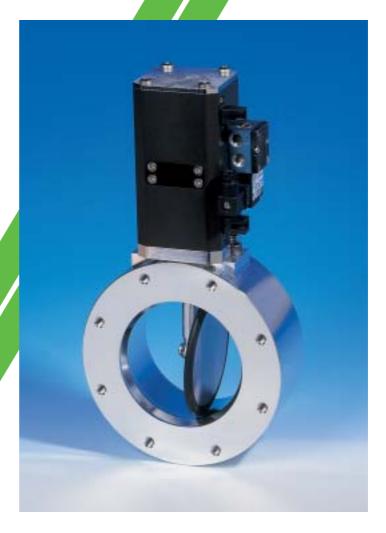
New

Vatterfly Valve

Series 20.3 with standard body Series 20.4 with extended body



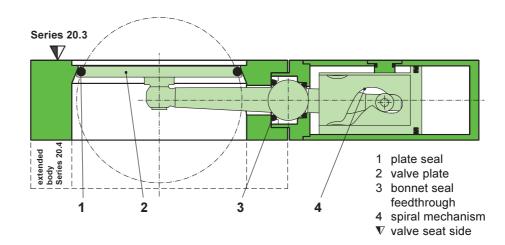
- Compact design
- Two-step-motion mechanism: virtually particle-free
- Easy maintenance

Sealing materials

Plate: VITON
Bonnet: VITON

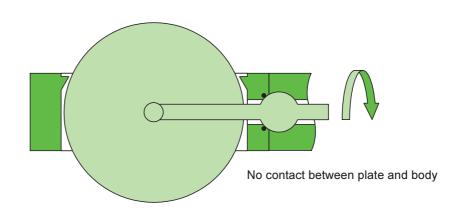
Feedthrough

VITON / rotary feedthrough

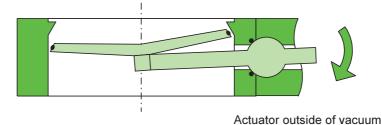


Function

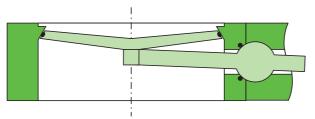
Motion step 1: Rotation



Motion step 2: Tilting



Valve closed



No metal-to-metal contact in vacuum, meaning virtually particle-free operation

VITON® is a registered trademark of DuPont Dow Elastomers



for valves with double acting pneumatic actuator with position indicator and solenoid (specify control voltage)

| DN | | standard body | y: series 20.3 | extended body: series 20.4 | | |
|-----|------|-------------------|--------------------------|----------------------------|--------------------------|--|
| mm | inch | aluminum ISO-F | stainless steel ISO-F | aluminum ISO-F | stainless steel ISO-F | |
| 63 | 21/2 | 20336-PA44 | 20336-PE44 | 20436-PA44 | 20436-PE44 | |
| 80 | 3 | 20338-PA44 | 20338-PE44 | 20438-PA44 | 20438-PE44 | |
| 100 | 4 | 20340-PA44 | 20340-PE44 | 20440-PA44 | 20440-PE44 | |
| 160 | 6 | 20344-PA44 | 20344-PE44 | 20444-PA44 | 20444-PE44 | |
| 200 | 8 | 20346-PA44 | 20346-PE44 | 20446-PA44 | 20446-PE44 | |

without solenoid, without position indicator: $20 \dots -P \cdot \underline{14}$ without solenoid, with position indicator: $20 \dots -P \cdot \underline{24}$ with solenoid, without position indicator: $20 \dots -P \cdot \underline{34}$

Technical data

Leak rate: body, valve seat < 1 · 10⁻⁹ mbar Is⁻¹

Pressure range 1 · 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 ≤ 500 mbar

Cycles until first service 100,000 at T_{max} 80°C

Cycle life 500,000

Temperature

Material

- Aluminum version: body AlMgSi1

plate AlMgSi1 mechanism AlSI 316l

mechanism AISI 316L (1.4435)
- Stainless steel version: body AISI 304 (1.4301)

plate AISI 316L (1.4435)

mechanism AISI 316L (1.4435)

Seal: bonnet, feedthrough, plate VITON

Mounting position any

Solenoid 24 V DC, \leq 7.6 W

Position indicator: contact rating 0.5 A/50 VAC, 0.5 A/75 VDC, max. 10 W

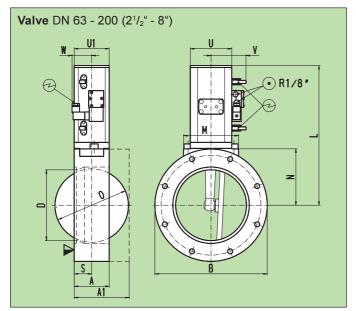
| DN (nom. I.D.) | | molecular flow conductance | compressed air pressure | min max. overpressure | volume of air cylinder | | closing or opening time | stainless steel body | | aluminum body | |
|-------------------|------|----------------------------------|----------------------------|--------------------------|---------------------------|-------|----------------------------|----------------------------|------|------------------|------|
| mm | inch | ls ⁻¹ | bar | psi | I | ft³ | s | kg | Ibs | kg | lbs |
| Series 20.3 | | | | | | | | | | | |
| 63 | 21/2 | | | | | | | | | | |
| 80 | 3 | 700 | 4—7 | 60—100 | 0.2 | .0018 | 0.5 | 7.4 | 13.2 | 3.8 | 7.9 |
| 100 | 4 | 1400 | 4—7 | 60—100 | 0.2 | .0018 | 0.5 | 8 | 13.2 | 4 | 7.9 |
| 160 | 6 | 4000 | 4—7 | 60—100 | 0.3 | .0028 | 1 | 16.1 | 29.4 | 8.7 | 15.5 |
| 200 | 8 | 7500 | 4—7 | 60—100 | 0.8 | .006 | 1.5 | 32.6 | 68.5 | 16.2 | 36.4 |
| Series 20.4 | | | | | | | | | | | |
| 63 | 21/2 | | | | | | | | | | |
| 80 | 3 | 600 | 4—7 | 60—100 | 0.2 | .0018 | 0.5 | 8.4 | 20.7 | 4.2 | 10.8 |
| 100 | 4 | 1050 | 4—7 | 60—100 | 0.2 | .0018 | 0.5 | 10.1 | 20.7 | 4.7 | 10.8 |
| 160 | 6 | 2550 | 4—7 | 60—100 | 0.3 | .0028 | 1 | 22.9 | 46.2 | 11 | 20.9 |
| 200 | 8 | 4700 | 4—7 | 60—100 | 0.8 | .006 | 1.5 | 36.7 | 77.9 | 21.5 | 50.2 |

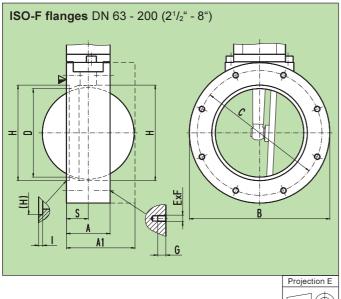
V

Dimensions

- A for standard body series 20.3
- A1 for extended body series 20.4

- $oldsymbol{
 abla}$ valve seat side
- compressed air connection
- electrical connection





| DN mm inch | 63 2 ¹ / ₂ | 80 3 | 100 4 | 160 6 | 200 8 |
|---------------|-------------------------------------|--------------|--------------|--------------|---------------|
| A mm inch | | 60 2.36 | 60 2.36 | 70 2.76 | 90 3.54 |
| A1 mm inch | | 70 2.76 | 80 3.15 | 110 4.33 | 145 5.71 |
| B mm inch | | 145 5.71 | 165 6.5 | 225 8.86 | 300 11.81 |
| D mm inch | | 76 2.99 | 95 3.74 | 142 5.59 | 192 7.56 |
| L mm inch | | 228 8.98 | 228 8.98 | 285 11.22 | 371 14.61 |
| M mm | | 86 3.39 | 86 3.39 | 110 4.33 | 140 5.51 |
| N mm inch | | 82.5 3.25 | 82.5 3.25 | 113 4.45 | 147.5 5.81 |
| O mm inch | | 80 3.15 | 100 3.94 | 147 5.79 | 199 7.83 |
| S mm inch | | 30 1.18 | 30 1.18 | 35 1.38 | 45 1.77 |
| U mm inch | | 70 2.76 | 70 2.76 | 83 3.27 | 103 4.06 |
| U1 mm inch | | 60 2.36 | 60 2.36 | 70 2.76 | 90 3.54 |
| V mm inch | | 65 2.56 | 65 2.56 | 70 2.76 | 80 3.15 |
| W mm inch | | 40 1.57 | 40 1.57 | 40 1.57 | 30 1.18 |
| DN mm | 63 | 80 | 100 | 160 | 200 |

| DN mm | 63 | 80 | 100 | 160 | 200 | |
|-----------|-------------------------------|-------------|-------------|-------------|--------------|--|
| inch | 2 ¹ / ₂ | 3 | 4 | 6 | 8 | |
| A mm | | 60 | 60 | 70 | 90 | |
| inch | | 2.36 | 2.36 | 2.76 | 3.54 | |
| A1 mm | | 70 | 80 | 110 | 145 | |
| inch | | 2.76 | 3.15 | 4.33 | 5.71 | |
| B mm inch | | 145 5.71 | 165 6.5 | 225 8.86 | 300 11.81 | |
| C mm | | 125 | 145 | 200 | 260 | |
| inch | | 4.92 | 5.71 | 7.87 | 10.24 | |
| D mm | | 76 | 95 | 142 | 192 | |
| inch | | 2.99 | 3.74 | 5.59 | 7.56 | |
| ExF | | 8 x M8 | 8 x M8 | 8 x M10 | 12 x M10 | |
| G mm | | 12 | 12 | 15 | 15 | |
| inch | | .47 | .47 | .59 | .59 | |
| H mm | | 83 3.27 | 102 4.02 | 153 6.02 | 213 8.39 | |
| I mm | | 2.5 | 2.5 | 4.5 | 4.5 | |
| inch | | .1 | .1 | .18 | .18 | |
| S mm | | 30 | 30 | 35 | 45 | |
| inch | | 1.18 | 1.18 | 1.38 | 1.77 | |

Please contact your local VAT representative for more detailed information on these or other VAT products.

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