



Accessories for vacuum technology

Technical data

Height compensator VAL

-  - Temperature range
-10 ... +60 °C





-  - Note
For suction cup VAS/VASB
→ Internet: vas

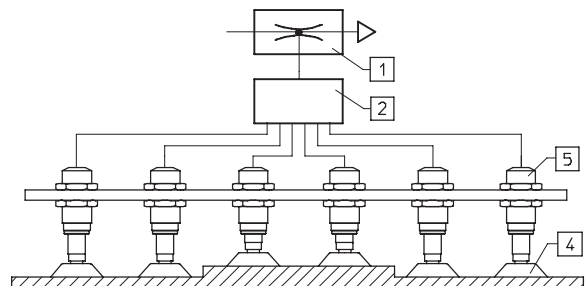


| General technical data | | | |
|--------------------------|--|------|------|
| Size | 5 | 10 | 20 |
| Design | Vacuum port on top | | |
| Operating medium | Atmospheric air | | |
| Mounting position | Any | | |
| Type of mounting | Mounting on the male thread or via the female air connection thread of the housing | | |
| Vacuum port | M5 | G1/8 | G1/4 |
| Operating pressure [bar] | -0.95 ... 8 | | |

| Ambient conditions | | | |
|--------------------------|-----------------------------------|----|----|
| Size | 5 | 10 | 20 |
| Housing | Aluminium | | |
| Seals | Nitrile rubber | | |
| Note on material | Free of copper, PTFE and silicone | | |
| Ambient temperature [°C] | -10 ... +60 | | |

Gentle handling of the workpieces by compensating for any excess stroke of the handling device or tolerance differences in the workpiece thickness.

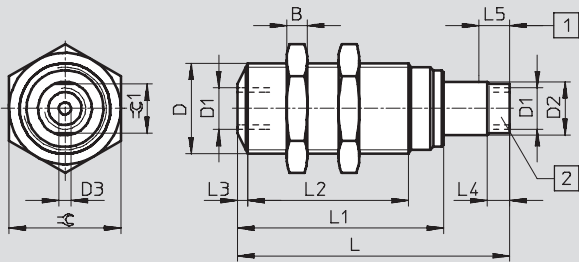
-  Vacuum generator
-  Distributor
-  Suction cup
-  Height compensator



Accessories for vacuum technology

Technical data

Dimensions



1 Spring travel for height compensator

2 Suction cup connector

| Type | B | D | D1 | D2 ∅ | D3 ∅ | L | L1 | L2 | L3 | L4 | L5 | ⌀ | ⌀ 1 |
|------------|---|---------|------|---------|---------|-----|----|------|-----|-----|----|----|--------|
| VAL-M5-5 | 5 | M16x1 | M5 | 8 | 2 | 46 | 35 | 25.5 | 2 | 4.5 | 5 | 19 | 7 |
| VAL-1/8-10 | 6 | M22x1.5 | G1/8 | 13 | 3 | 66 | 50 | 39 | 2.5 | 5.5 | 10 | 27 | 12 |
| VAL-1/4-20 | 8 | M26x1.5 | G1/4 | 17 | 4 | 100 | 73 | 60 | 2.5 | 6.5 | 20 | 32 | 16 |

Ordering data

| Height compensator [mm] | Vacuum port | Part No. | Type |
|-------------------------|-------------|----------|--------------------------|
| 5 | M5 | 151 209 | VAL-M5-5 ¹⁾ |
| 10 | G1/8 | 151 210 | VAL-1/8-10 ¹⁾ |
| 20 | G1/4 | 151 211 | VAL-1/4-20 ¹⁾ |

1) Free of copper, PTFE and silicone

Accessories for vacuum technology

Technical data

Angle compensator ESWA

Temperature range
0 ... +60 °C

Note

For suction gripper ESG, between
suction cup and suction cup holder
→ Internet: esg



| General technical data | | | |
|------------------------|------------------------------------|---|---|
| Holder size | 3 | 4 | 5 |
| Design | Ball joint with ± 15° swivel angle | | |
| Operating medium | Atmospheric air | | |
| Mounting position | Any | | |
| Type of mounting | With threaded connection | | |

| Ambient conditions | | | |
|--|----------------|---|---|
| Holder size | 3 | 4 | 5 |
| Housing | Aluminium | | |
| Seals | Nitrile rubber | | |
| Ambient temperature [°C] | 0 ... +60 | | |
| Corrosion resistance CRC ¹⁾ | 1 | | |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

| Weights [g] | | | |
|-------------|---|----|----|
| Holder size | 3 | 4 | 5 |
| ESWA- ... | 9 | 19 | 57 |

Dimensions

| Type | D1 Ø | D2 | L1 | L2 |
|--------|---------|---------|------|----|
| ESWA-3 | 15 | M4x0.7 | 23 | 4 |
| ESWA-4 | 20 | M6x1 | 28.5 | 6 |
| ESWA-5 | 28 | M10x1.5 | 40.5 | 10 |

| Ordering data | | |
|---------------|----------|--------|
| Holder size | Part No. | Type |
| 3 | 191 205 | ESWA-3 |
| 4 | 191 206 | ESWA-4 |
| 5 | 191 207 | ESWA-5 |