

Art.-Nr.: 10.01.17.00424



## Technical data

| Attribute                                    | Value           |
|----------------------------------------------|-----------------|
| Pressure range (operating pressure)<br>[bar] | 2.5 ... 6.0 bar |
| Holding force max. with friction<br>ring     | 19.0 N          |
| Holding force max. without friction          | 28.0 N          |
| Socket                                       | G1/8"-F         |

SGM-HP 20 G1/8-IG

Magnet gripper SGM-HP/-HT is delivered assembled. The assembly consists of:

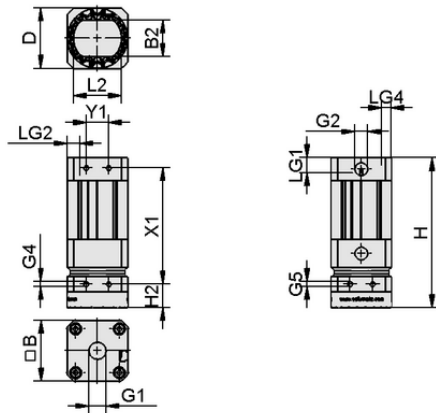
- Gripper SGM-HP with friction ring PU - available in various diameters
- Gripper SGM-HT with steel gripping surface for robust applications - available in various diameters
- Friction ring made of the material PU (only for SGM-HP)
- Optional friction ring HT2 for high-temperature applications (only for SGM-HT)
- Optional proximity switch (only for SGM-HP)

Available spare parts: friction ring PU for SGM-HP

Available accessories: proximity switch, holder system, mounting element (ADP), friction ring HT2, protection element



Art.-Nr.: 10.01.17.00424

**Design data**

| Attribute          | Value    |
|--------------------|----------|
| Length L2          | 12.00 mm |
| Width B2           | 9.10 mm  |
| Width B            | 20.10 mm |
| Height H2          | 13.20 mm |
| Height H           | 78.20 mm |
| Outside diameter D | 20.00 mm |
| Thread G1          | G1/8"-F  |
| Thread length LG1  | 6.0 mm   |
| Thread G2          | M5-F     |
| Thread length LG2  | 5.0 mm   |

Note: Contact surface of grippers without friction ring (stadium-shaped) corresponds to dimension D x B2; with friction ring (round) dimension D

Design data SGM-HP 20 G1/8-IG

**Technical data**

| Attribute                                      | Value           |
|------------------------------------------------|-----------------|
| Weight                                         | 81.0 g          |
| Installation position                          | BEL             |
| Remaining holding force                        | 0.3 N           |
| Pressure range (operating pressure) [bar]      | 2.5 ... 6.0 bar |
| Operating temperature                          | 5 ... 70 °C     |
| Holding force 2 mm sheet with friction ring    | 16.0 N          |
| Holding force 2 mm sheet without friction ring | 25.0 N          |
| Holding force max. with friction ring          | 19.0 N          |
| Holding force max. without friction            | 28.0 N          |
| Sheet thickness optimum for holding force max. | 1.00 mm         |
| Product family                                 | SGM-HP-HT       |
| Control valve                                  | Bistable        |

Note: The specified holding forces are static values under optimal conditions (primarily depending on material and surface characteristics). For system designs, a safety factor of  $S = 3$  must be applied. Holding forces SGM-HT-HP at 20 °C; can be used for workpiece temperatures up to 350 °C (depending on process conditions), the influence of temperature can reduce holding forces by up to 30%

**Further documentation**

CAD data and other documents relating to the article can be found at: [www.schmalz.com/10.01.17.00424](http://www.schmalz.com/10.01.17.00424)



[WWW.SCHMALZ.COM/10.01.17.00424](http://WWW.SCHMALZ.COM/10.01.17.00424)

Art.-Nr.: 10.01.17.00424

**Ordering Data Accessories 10.01.17.00424**

| Typ                  |                             | Item number    |
|----------------------|-----------------------------|----------------|
| Holder system        | HTS-A2 SGM-HP 20 OP         | 10.01.17.00565 |
| Holder system        | HTS-A3 SGM-HP 20 OP         | 10.01.17.00561 |
| Holder system        | HTS-A5 SGM-HP 20 OP         | 10.01.17.00579 |
| Holder system        | HPS-SGM-HP 2M6 20 OP        | 10.01.17.00654 |
| Mounting element SGM | ADP-E-TRI 20 SET            | 10.01.17.00419 |
| Mounting element SGM | ADP-E-UNI 20 SET            | 10.01.17.00420 |
| Sensor module        | MOD-SENS NAEH SGM-HP-20-NPN | 10.01.17.00448 |
| Sensor module        | MOD-SENS NAEH SGM-HP-20-PNP | 10.01.17.00447 |
| Plug union, straight | STV-GE M5-AG 6              | 10.08.02.00201 |
| Plug union, elbow    | STV-W M5-AG 6               | 10.08.02.00235 |
| Plug union, straight | STV-GE G1/8-AG 6            | 10.08.02.00204 |
| Plug union, elbow    | STV-W G1/8-AG 6             | 10.08.02.00158 |
| Vacuum hose (meter)  | VSL 6-4 PU MI-TR            | 10.07.09.00002 |

**Ordering Data Spare Parts 10.01.17.00424**

| Typ              |                              | Item number    |
|------------------|------------------------------|----------------|
| Friction ring    | REIB-RING SGM-HP 20 PU-55    | 10.01.17.00418 |
| Proximity switch | NAEH-SCHA SMAGN-PNP S051 300 | 10.01.17.00199 |
| Proximity switch | NAEH-SCHA SMAGN-NPN S050 300 | 10.01.17.00215 |

