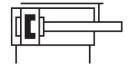
## **Guided drive** DGRC-GF-20-40-PA Part number: 8218201

**FESTO** 





## **Data sheet**

| Feature                                                  | Value                                                                                                                                                    |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Distance from centre of gravity of load to yoke plate xs | 50 mm                                                                                                                                                    |
| Stroke                                                   | 40 mm                                                                                                                                                    |
| Piston diameter                                          | 20 mm                                                                                                                                                    |
| Operating mode, drive unit                               | Yoke                                                                                                                                                     |
| Cushioning                                               | Elastic cushioning rings/plates at both ends                                                                                                             |
| Mounting position                                        | optional                                                                                                                                                 |
| Guide                                                    | Plain-bearing guide                                                                                                                                      |
| Design                                                   | Guidance                                                                                                                                                 |
| Position detection                                       | Via proximity switch                                                                                                                                     |
| Protection against torque/guide                          | Guide rod with yoke                                                                                                                                      |
| Operating pressure                                       | 0.2 MPa1 MPa<br>2 bar10 bar                                                                                                                              |
| Max. speed                                               | 0.8 m/s                                                                                                                                                  |
| Mode of operation                                        | Double-acting                                                                                                                                            |
| Operating medium                                         | Compressed air to ISO 8573-1:2010 [7:4:4]                                                                                                                |
| Note on operating and pilot medium                       | Lubricated operation possible (in which case lubricated operation will always be required)                                                               |
| Corrosion resistance class CRC                           | 0 - No corrosion stress                                                                                                                                  |
| LABS (PWIS) conformity                                   | VDMA24364-B1/B2-L                                                                                                                                        |
| Suitability for the production of Li-ion batteries       | Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni |
| Ambient temperature                                      | -10 °C60 °C                                                                                                                                              |
| Impact energy in end positions                           | 0.2 Nm                                                                                                                                                   |
| Max. force Fy                                            | 487.2 N                                                                                                                                                  |
| Max. force Fy static                                     | 487.2 N                                                                                                                                                  |
| Max. force Fz                                            | 487.2 N                                                                                                                                                  |
| Max. force Fz static                                     | 487.2 N                                                                                                                                                  |
| Max. moment Mx                                           | 13.15 Nm                                                                                                                                                 |
| Max. torque Mx static                                    | 13.15 Nm                                                                                                                                                 |
| Max. moment My                                           | 6.82 Nm                                                                                                                                                  |
| Max. torque My static                                    | 6.82 Nm                                                                                                                                                  |

| Feature                                                          | Value                            |
|------------------------------------------------------------------|----------------------------------|
| Max. moment Mz                                                   | 6.82 Nm                          |
| Max. torque Mz static                                            | 6.82 Nm                          |
| Max. permissible torque load Mx as a function of stroke          | 2.21 Nm                          |
| Max. effective load dependent upon stroke at defined distance xs | 50.8 N                           |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke      | 141 N                            |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke     | 188 N                            |
| Torsional backlash                                               | 0.055 deg                        |
| Moving mass                                                      | 230.7 g                          |
| Product weight                                                   | 478.8 g                          |
| Basic weight for 0 mm stroke                                     | 248.1 g                          |
| Centre of gravity of moving mass as a function of stroke         | 33.6 mm                          |
| Pneumatic connection                                             | M5                               |
| Note on materials                                                | RoHS-compliant                   |
| Material cover                                                   | Wrought aluminium alloy          |
| Material seals                                                   | NBR                              |
| Material dynamic seals                                           | TPE-U(PU)                        |
| Material end plate                                               | Anodised wrought aluminium alloy |
| Material guide rod                                               | High-alloy steel                 |
| Material housing                                                 | Anodised wrought aluminium alloy |
| Material piston rod                                              | High-alloy steel                 |