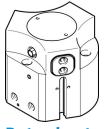
## Three-point gripper HGDD-63-A-G2

Part number: 1163048



## **Data sheet**

| Stroke per gripper jaw10 mmMax. interchangeabilityso.2 mmMax. gripper jaw angular play ax, ayso.1 degMax. gripper jaw backlash Szso.05 mmRotational symmetryso.2 mmPneumatic gripper repetition accuracyso.05 mmNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripping force backupDuring closingStructural designInclined planePosition sensingFor proximity sensorSymbol00991895Operating pressure for sealing airObar o.5 barMax. operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Operating mediumGorpressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaStor of CAmbient temperatureS °C 60 °CAmbient temperatureS °C 60 °CMaximum force on gripper jaw, Mx static70 NmMaximum force on gripper jaw, Mx static50 NmMaximum force on gripper jaw, Mx static50 NmMaximum force on gripper jaw, Mx sta | Feature                                       | Value  |
|---|---|--|
| Max. interchargeability   s0.2 mm     Max. gripper jaw angular play ax, ay   s0.1 deg     Max. gripper jaw backlash Sz   s0.05 mm     Rotational symmetry   s0.2 mm     Pneumatic gripper repetition accuracy   s0.05 mm     Type code   HGDD     Number of gripper rays   3     Mounting position   Any     Mode of operation   Double-acting     Gripper function   3-point     Gripper force backup   During closing     Structural design   Inclined plane     Position sensing   For proximity sensor     Symbol   Ooparating pressure for sealing air     Obar 0.5 bar   Aax. operating frequency of pneumatic gripper     sk4 Hz   Instructural for specific with oil lubrication possible (required for further use)     Operating medium   Coperation with oil lubrication possible (required for further use)     Corrosion resistance class (CRC)   2 - Moderate corrosion stress     Degree of protection   IP65     Amistimum forque on gripper jaw, Mx static   Z00 N     Max.simum for ce on gripper jaw, Mx static   Z00 N     Max intor fuer on gripper jaw, Mx static   S0 Nm     Maxim   | Size  | 63   |
| Max. gripper jaw angular play ax, ays0.1 degMax. gripper jaw backlash Szs0.05 mmRotational symmetrys0.2 mmPneumatic gripper repetition accuracys0.05 mmType codeHGDDNumber of gripper jaws3Mouting positionAnyMode of operationDouble-actingGripper function3-pointGripper function3-pointGripping force backupDuring closingStructural designFor proximity sensorPositively driven motion sequencePosition gressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic grippers4 HzMin. opening time at 6 bar135 msMin. colsing time at 6 barGenzeston with oil lubrication possible (required for further use)Operating pressure for sealing and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRQ)2 - Moderate corrosion stressDegree of protection1P65Amsimum force on gripper jaw, Mx static70 NmMaximum force on gripper jaw, Mx static70 NmMaximum force on gripper jaw, Mx static50 NmMaximum torque on gripper jaw, Mx static50 Nm <td>Stroke per gripper jaw</td> <td>10 mm</td>    | Stroke per gripper jaw                        | 10 mm  |
| Max. gripper jaw backlash Sz   s0.05 mm     Rotational symmetry   s0.2 mm     Pneumatic gripper repetition accuracy   s0.05 mm     Type code   HGDD     Number of gripper jaws   3     Mounting position   Any     Mode of operation   Double-acting     Gripper function   3-point     Gripping force backup   During closing     Structural design   Inclined plane     Position sensing   For proximity sensor     Operating pressure   4 bar 8 bar     Operating pressure   4 bar 8 bar     Operating frequency of pneumatic gripper   s4 Hz     Min. closing time at 6 bar   135 ms     Min. closing time at 6 bar   68 ms     Operating medium   Compressed air as per ISO 8573-1:2010[7:4:4]     Information on operating and pilot media   Operation services     Operation resistance class (CRC)   2 - Moderate corrosion stress     Degree of protection   IP65     Ambient temperature   5 °C 60 °C     Mass moment of inertia   45.05 kgcm²     Maximum force on gripper jaw, Mx static   70 Nm     Maximum torque on gripper jaw, Mx sta  | Max. interchangeability                       | ≤0.2 mm  |
| Rotational symmetrys0.2 mmPneumatic gripper repetition accuracys0.05 mmYipe codeHGDDNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripper function3-pointStructural designInclined planePositively driven motion sequencePositively driven motion sequencePorating pressure4 bar & barOperating pressure for sealing air0 bar o. 5 barMin. opening time at 6 barMin. opening time at 6 barOperation mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation resistance class (CRC)2 · Moderate corrosion stressDegree of protectionAmbient temperatureSort  | Max. gripper jaw angular play ax, ay          | ≤0.1 deg   |
| Pneumatic gripper repetition accuracy   s0.05 mm     Type code   HGDD     Number of gripper jaws   3     Mounting position   Any     Mode of operation   Double-acting     Gripper function   3-point     Gripping force backup   During closing     Structural design   Positively driven motion sequence     Positively driven motion sequence   So more set as as per ISO 8573-1:2010 [7:4:4]     Operating medium   Compressed air as per ISO 8573-1:2010   | Max. gripper jaw backlash Sz                  | ≤0.05 mm   |
| Type codeHGDDNumber of gripper jaws3Mouting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar 8 barOperating frequency of pneumatic gripper54 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation yensesCorrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum torque on gripper jaw, Mx static200 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRedubrication interval for guidance elements5 MioCycMaximus torque on gripper jaw, Mx static50 NmRedubrication interval for guidance elements5 MioCyc   | Rotational symmetry                           | ≤0.2 mm  |
| Number of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbolOoperating pressure for sealing airOperating pressure for sealing airObar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 barOperation goverstoil and polito mediaOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation sersesDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mz static70 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMaximus per external gripper finger440 g   | Pneumatic gripper repetition accuracy         | ≤0.05 mm   |
| Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCyc  | Type code                                     | HGDD   |
| Mode of operationDouble-actingGripper function3-pointGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbolOop91895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 · Moderate corrosion stressDegree of protectionIP65Amsimum force on gripper jaw Fz, static2300 NMaximum forque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMax mass per external gripper finger440 g   | Number of gripper jaws                        | 3  |
| Gripper function3-pointGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 bzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 · Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Mounting position                             | Any  |
| During closingGripping force backupDuring closingStructural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw, Kx static70 NmMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Mode of operation                             | Double-acting  |
| Structural designInclined plane<br>Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper<4 Hz  | Gripper function                              | 3-point  |
| Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic grippers4 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 · Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw, Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g  | Gripping force backup                         | During closing   |
| Symbol00991895Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 · Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCyc  | Structural design                             |  |
| Operating pressure4 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mx static50 NmRelubrication interval for guidance elements5 MioCycMaximum torque on gripper jaw, Mz static50 NmRelubrication interval gripper finger440 g   | Position sensing                              | For proximity sensor   |
| Operating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper44 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g  | Symbol  | 00991895   |
| Max. operating frequency of pneumatic gripper\$4 HzMin. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw, Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Operating pressure                            | 4 bar 8 bar  |
| Min. opening time at 6 bar135 msMin. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Operating pressure for sealing air            | 0 bar 0.5 bar  |
| Min. closing time at 6 bar68 msOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMaximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g  | Max. operating frequency of pneumatic gripper | ≤4 Hz  |
| Operating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMass moment of inertia45.05 kgcm²Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, Mz static50 NmMaximum torque on gripper jaw, Mz static440 g   | Min. opening time at 6 bar                    | 135 ms   |
| Information on operating and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMass moment of inertia45.05 kgcm²Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static50 NmMaximum torque on gripper jaw, Mz static50 NmMax mass per external gripper finger440 g  | Min. closing time at 6 bar                    | 68 ms  |
| Corrosion resistance class (CRC)2 - Moderate corrosion stressDegree of protectionIP65Ambient temperature5 °C 60 °CMass moment of inertia45.05 kgcm²Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static45 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Operating medium                              | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |
| Degree of protectionIP65Ambient temperature5 °C 60 °CMass moment of inertia45.05 kgcm²Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static45 NmMaximum torque on gripper jaw, Mz static50 NmMaximum torque on gripper jaw, Mz static50 NmMaximum torque on gripper jaw, Mz static50 NmMaximum torque on gripper jaw, Mz static440 g   | Information on operating and pilot media      | Operation with oil lubrication possible (required for further use) |
| Ambient temperature5 °C 60 °CMass moment of inertia45.05 kgcm²Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static45 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g  | Corrosion resistance class (CRC)              | 2 - Moderate corrosion stress                                      |
| Mass moment of inertia45.05 kgcm2Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static45 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Degree of protection                          | IP65   |
| Maximum force on gripper jaw Fz, static2300 NMaximum torque on gripper jaw, Mx static70 NmMaximum torque on gripper jaw, My static45 NmMaximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g  | Ambient temperature                           | 5 °C 60 °C   |
| Maximum torque on gripper jaw, Mx static   70 Nm     Maximum torque on gripper jaw, My static   45 Nm     Maximum torque on gripper jaw, Mz static   50 Nm     Relubrication interval for guidance elements   5 MioCyc     Max. mass per external gripper finger   440 g  | Mass moment of inertia                        | 45.05 kgcm <sup>2</sup>  |
| Maximum torque on gripper jaw, My static   45 Nm     Maximum torque on gripper jaw, Mz static   50 Nm     Relubrication interval for guidance elements   5 MioCyc     Max. mass per external gripper finger   440 g   | Maximum force on gripper jaw Fz, static       | 2300 N   |
| Maximum torque on gripper jaw, Mz static50 NmRelubrication interval for guidance elements5 MioCycMax. mass per external gripper finger440 g   | Maximum torque on gripper jaw, Mx static      | 70 Nm  |
| Relubrication interval for guidance elements 5 MioCyc   Max. mass per external gripper finger 440 g   | Maximum torque on gripper jaw, My static      | 45 Nm  |
| Max. mass per external gripper finger 440 g   | Maximum torque on gripper jaw, Mz static      | 50 Nm  |
|   | Relubrication interval for guidance elements  | 5 MioCyc   |
| Product weight 2848 g   | Max. mass per external gripper finger         | 440 g  |
|   | Product weight                                | 2848 g   |

## FESTO

| Feature                          | Value  |
|----------------------------------|--|
| Type of mounting                 | Optionally:<br>With through-hole and dowel pin<br>With internal thread and dowel pin |
| Sealing air pneumatic connection | M5   |
| Pneumatic connection             | G1/8   |
| Note on materials                | RoHS-compliant   |
| Cover cap material               | High-alloy stainless steel   |
| Housing material                 | Wrought aluminum alloy<br>Smooth anodized  |
| Gripper jaw material             | Steel<br>Hardened  |