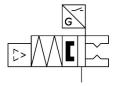
## Parallel gripper HPPH-16-16-NC-P-SR12 Part number: 8205393

**FESTO** 





## **Data sheet**

Feature	Value
Size	16
Total stroke	16 mm
Stroke per gripper jaws	8 mm
Max. angular gripper jaw backlash ax, ay	0 deg
Max. gripper jaw backlash Sz	0 mm
Repetition accuracy, gripper	0.06 mm
Number of gripper jaws	2
Drive system	Pneumatic
Mounting position	optional
Mode of operation	Double-acting
Cushioning	On one side Not adjustable
Gripper function	Parallel
Gripper force back-up	During closing
Design	Connection direction at side Twin piston Flat mounting method for gripper fingers Guidance Rack and pinion With gripper finger Pneumatic gripper Force pilot operated motion sequence
Guide	Ball guide
Position detection	With integrated displacement encoder
Switching status indication	Blue LED, switching status via signal input
Operating pressure	0.25 MPa0.7 MPa 2.5 bar7 bar 36.25 psi101.5 psi
Operating pressure HRC	0.25 MPa0.5 MPa 2.5 bar5 bar 36.25 psi72.5 psi
Max. operating frequency of gripper	1 Hz
Min. opening time at 0.6 MPa (6 bar, 87 psi)	180 ms
Min. closing time at 0.6 MPa (6 bar, 87 psi)	90 ms
Max. mass per external gripper finger	100 g

Max. current consumption  Abordinal operating votage DC  Switching output  Switching input  PMP  Switching input  PMP  Switching input  PMP  Switching input  Extra since we declaration of conformity)  BCM mademark  CE mark (see declaration of conformity)  BCM matring (see declaration of conformity)  BCM matring (see declaration of conformity)  BCM Matring (see declaration of conformity)  BCM Rotal's instructions to EMC  Certificate isouing authority  Compressed air to Sio Spari-12700 (7:4:4)  Note on operating and pilot medium  Compressed air to Sio Spari-12700 (7:4:4)  Note on operating and pilot medium  Compressed air to Sio Spari-12700 (7:4:4)  Note on operating and pilot medium  Compressed air to Sio Spari-12700 (7:4:4)  Note on operating and pilot medium  Compressed air to Sio Spari-12700 (7:4:4)  Note on operating and pilot medium  Compressed air to Sio Spari-12700 (7:4:4)  Lubricated operation possible (fir which case lubricated operation will always be required)  Shock resistance  Shock resista	Feature	Value
Switching jurput Switching input Switching input Switching input Switching input PMP Switching input PMP Remissible vottage fluctuations Approval RCM trademark CE mark (see declaration of conformity) To LEMC Directive In accordance with EU RoHS Directive In accordance with Europe EU RoHS Directive In accordance with Europe EU RoHS Directive In accordance with EU RoHS Directive I	Max. current consumption	0.1 A
Switching input Permissible voltage fluctuations 4/10 % Approval CF mark (see declaration of conformity) CF mark (see declarat	Nominal operating voltage DC	24 V
Permissible voitage fluctuations	Switching output	PNP
Approval  CE mark (See declaration of conformity)  TO EU EM. Directive and Conformity  TO LIX instructions for EMC (Confidence issuing authority  TO LIX instructions for EMC (Confidence issuing authority  TO LIX instructions for EMC (Confidence issuing authority  TO Sud M70132770525.01  Poperating medium  Compressed air to 1508 5875-12010 [74:44]  Note on operating and pilot medium  Lubricated operation possible (in which case lubricated operation will abways be required)  Shock resistance  Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27  Corrosion resistance class CRC  1 - Low corrosion stress  LABS (PWIS conformity)  Vibration resistance  To - 90% Non-condensing  Sound pressure level  7 - 90% Non-condensing  Sound pressure level  Papa  Sound pressure level  5 - 50 °C  Total gripping force, closing, 0.6 MPa (6bar, 87 psi)  Total gripping force, closing, 0.6 MPa (6bar, 87 psi)  Circla gripping force, prespiper jaw, closing, 0.6 MPa (6bar, 87 psi)  Circla gripping force per gripper jaw, closing, 0.6 MPa (6bar, 87 psi)  Circla gripping force (FMC, closing)  223 N34 y N  Note on gripping force  pripper jaw MRC, closing  16 N128 N  Note on gripping force per gripper jaw, closing  Ass. moment My  Max. moment	Switching input	PNP
Emark (see declaration of conformity)  Emark (see declaration of conformity)  To UK CAM marking (see declaration of conformity)  To UK Sams (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instructions for EMC To UK Ranks (instructions for EMC To UK Ranks) instruction (instructions for EMC To UK Ranks) instruction (instructions for EMC To UK Sams (instructions) instructions instructions for EMC To UK Sams (instructions) instructions instructio	Permissible voltage fluctuations	+/- 10 %
UNCA marking (see declaration of conformity)  IN UN isinstructions for EMC TO UN KROM Sinstructions Certificate issuing authority Operating medium Compressed air to 150 8573-1:2010 [7:44] Note on operating and pilot medium Unbricated operation possible (in which case lubricated operation will always be required) Shock resistance Shock test with sewerity level 2 to FN 942017-5 and EN 60068-2-27 Corrosion resistance class CRC 1-Low corrosion stress LABS (9W15) conformity Vibration resistance Relative air humidity Non-condensing Sound pressure level Operating medium Note on prince per gripper law, closing, 0.6 MPa (6 bar, 87 ps) Total gripping force, closing, 0.6MPa (6 bar, 87 ps) Sorphing force per gripper jaw, closing, 0.6 MPa (6 bar, 87 ps) Sorphing force per gripper jaw, closing Origing Origing force per gripper jaw, closing Origing force per gripper jaw first static  Original prince per gripper jaw first static  Original prin	Approval	RCM trademark
To UK ROSIS instructions	CE mark (see declaration of conformity)	
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)           Shock resistance         Shock test with severity level 2 to FN 94/2017-5 and EN 60068-2-27           Corosion resistance class CRC         1 - Low corosion stress           LABS (PWIS) conformity         VDMA243 64 zone III           Vibration resistance         Transport application test with severity level 2 to FN 94/2017-4 and EN 60068-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-06 oposes-2-07	UKCA marking (see declaration of conformity)	
Rote on operating and pilot medium  Shock resistance  Shock resistance  Shock resistance (asc SCE)  1-Low corrosion stress  LABS (PWIS) conformity  Vibration resistance characteristic (asc SCE)  LaBS (PWIS) conformity  Vibration resistance  Transport application test with severity level 2 to FN 942017-5 and EN 60068-2-27  Relative air humidity  Degree of protection  Pla0  Ambient temperature  Food (asc SCE)  Total gripping force, closing, 0.6MPa (6bar, 87 ps))  Total gripping force, closing, 0.6MPa (6bar, 87 ps))  Total gripping force PRC, closing  Gripping force per gripper jaw HC, closing  Total gripping force per gripper jaw, closing, 0.6 MPa (6 bar, 87 ps))  Total gripping force per gripper jaw, closing, 0.6 MPa (6 bar, 87 ps))  Total gripping force per gripper jaw, closing, 0.6 MPa (6 bar, 87 ps))  Total gripping force per gripper jaw, closing  All shamilton (asc scenarios)  Total gripping force per gripper jaw, closing  Total gripping force per	Certificate issuing authority	TÜV Süd M70132770525.01
always be required)   Shock resistance   Shock resistance   Corrosion resistance class CRC   1 - Low corrosion stress     LABS (PMIS) conformity   VOMA24364 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-2 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-2 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-2 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-2 zone III     Voltration resistance   Tansport application test with severity level 2 to FN 942017-4 and EN 60068-2-zezone III     Voltration per proper per per per per per per per per per	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Corrosion resistance class CRC LABS (PWIS) conformity Vibration resistance Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 Relative air humidity O-90% Non-condensing Sound pressure level 75 dB(A) Degree of protection Pl40 Robient emperatur -5 ° C 50 ° C Total gripping force, closing, 0.6MPa (6bar, 87 psi) Total gripping force, closing, 0.6MPa (6bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6bar, 87 psi) Total gripping force pHKC, closing Gripper force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force per gripper jaw, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, closing, 0.6MPa (6 bar, 87 psi) Total gripping force, c	Note on operating and pilot medium	
LABS (PWIS) conformity  VDMA2364 zone III  VIbration resistance  Transport application test with severity level 2 to FN 942017-4 and EN 60068-2 co. 60	Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Vibration resistance         Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6           Relative air humidity         0 - 90% Non-condensing           Sound pressure level         75 dB(A)           Degree of protection         IP40           Ambient temperature         -5 °C 50 °C           Total gripping force, closing, 0.6 MPa (6bar, 87 ps)         278 N 302 N           Gripper force per gripper jaw, closing, 0.6 MPa (6bar, 87 ps)         139 N 151 N           Total gripping force HRC, closing         232 N 256 N           Gripping force per gripper jaw, closing, 0.6 MPa (6bar, 87 ps)         116 N 128 N           Note on gripping force         With integrated compression spring           Theoretical spring force per gripper jaw, closing         23.3 N 34.9 N           Mass. moment of inertia         0.6 kg cm²           Max. force on gripper jaw F2 static         176 N           Max. moment Mx         2.8 Mn           Max. moment Mx         1.4 Nm           Max. moment My         1.4 Nm           Bending radius, fixed cable         26 mm           Bending radius, moving cable         32 mm           Bending radius, moving cable         1 kg           Bending radius, moving cable         28 m           Bending radius, moving cable         1	Corrosion resistance class CRC	1 - Low corrosion stress
Relative air humidity         60068-2-6           Relative air humidity         0-90%           Sound pressure level         75 dB(A)           Degree of protection         IP40           Ambient temperature         -5°C50°C           Total gripping force, closing, 0.6MPa (6bar, 87 ps))         278 N302 N           Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 ps))         139 N151 N           Total gripping force, closing         23.2 N256 N           Gripping force per gripper jaw, closing         116 N128 N           Note on gripping force         Dependent on the stroke           With integrated compression spring         With integrated compression spring           Mass. force on gripper jaw, closing         23.3 N34 y N           Max. force on gripper jaw f2 static         176 N           Max. force on gripper jaw f2 static         176 N           Max. moment My         1.4 Mm           Max. moment My         1.4 Nm           Bending radius, fixed cable         25 mm           Bending radius, moving cable         25 mm           Bending radius, moving cable         360 g           Recommended workpiece weight for MRK         1 kg           Electrical connection 1, function         Filed device side           Electrical connection 1	LABS (PWIS) conformity	VDMA24364 zone III
Sound pressure level         Non-condensing           Sound pressure level         75 dB(A)           Degree of protection         IP40           Ambient temperature         .5 °C50 °C           Total gripping force, closing, 0.6MPa (6bar, 87 psi)         278 N302 N           Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)         139 N151 N           Total gripping force PHC, closing         232 N256 N           Gripping force per gripper jaw, closing         116 N128 N           Note on gripping force         With integrated compression spring           Theoretical spring force per gripper jaw, closing         23.3 N34.9 N           Mass moment of inertia         0.6 kgcm²           Max. force on gripper jare F static         176 N           Max. moment Mx         2.8 Mn           Max. moment Mx         1.4 Nm           Max. moment Mz         1.4 Nm           Bending radius, moving cable         25 mm           Bending radius, moving cable         52 m           Recommended workpiece weight for MRK         1 kg           Electrical connection 1, function         Field device side           Electrical connection 1, connection type         Cable with socket           Electrical connection 1, connection system         Max1, A-coded, to EN 61076-2-104 </td <td>Vibration resistance</td> <td></td>	Vibration resistance	
Degree of protection PP40 Ambient temperature -5°C50°C Total gripping force, closing, 0.6MPa (6bar, 87 psi) 278 N302 N Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) 139 N151 N Total gripping force HRC, closing 222 N256 N Gripping force per gripper jaw, tlosing 116 N128 N Note on gripping force with integrated compression spring Theoretical spring force per gripper jaw, closing 23.3 N34.9 N Mass moment of inertia 0.6 kgcm² Max. force on gripper jaw Fz static 176 N Max. moment Mx 2.8 Nm Max. moment My 1.4 Nm Max. moment My 1.4 Nm Max. moment My 1.4 Nm Max. moment My 1.5 mm Max. moment My 1.4 Nm Max. moment My 1.4 Nm Max. moment My 1.5 mm Max. moment My 1.4 Nm Ma	Relative air humidity	
Ambient temperature  5 °C50 °C  Total gripping force, closing, 0.6MPa (6bar, 87 psi)  6 ripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)  7 rotal gripping force HRC, closing  6 ripping force per gripper jaw HRC, closing  7 rotal gripping force per gripper jaw HRC, closing  8 ripping force per gripper jaw HRC, closing  116 N128 N  10e pendent on the stroke With integrated compression spring  Theoretical spring force per gripper jaw, closing  23.3 N34,9 N  Mass moment of inertia  0.6 kgcm²  Max. force on gripper jaw Fz static  176 N  Max. moment MX  1.4 Nm  Max. moment My  1.4 Nm  Bending radius, fixed cable  Bending radius, moving cable  8 closing radius, moving cable  16 so g  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, function  Electrical connection 1, design  Recommended in J. design  Reconding connection 1, design  Reconding connection 1, connector system  Mast, A-coded, to EN 61076-2-104  Electrical connection 1, used connections/cores  8 Electrical connection 1, tuned connections/cores  9 Connection 1, tuned connections/cores  10 Connection 1, tuned connections/cores  11 Connection 1, tuned connections/cores  12 Connection 1, tuned connections/cores  13 Connection 1, tuned connections/cores  14 Connection 1, tuned connections/cores  15 Connection 1, tuned connections/cores  16 Connection 1, tuned connections/cores  17 Connection 1, tuned connections/cores  18 Connection 1, tuned connections/cores  18 Connection 1, tuned connections/cores  19 Connection 1, tuned connections/cores  10 Connection 1, tuned connections/c	Sound pressure level	75 dB(A)
Total gripping force, closing, 0.6MPa (6bar, 87 psi) Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) 139 N151 N Total gripping force HKC, closing 232 N256 N Gripping force per gripper jaw HRC, closing 116 N128 N Note on gripping force Per gripper jaw HRC, closing 116 N128 N Dependent on the stroke With integrated compression spring Theoretical spring force per gripper jaw, closing 23.3 N34.9 N Mass moment of inertia 0.6 kgcm² Max. force on gripper jaw Fz static 176 N Max. moment MX 2.8 Nm Max. moment MY 1.4 Nm Max. moment MY 1.4 Nm Max. moment MZ Bending radius, fixed cable Bending radius, moving cable Maintenance interval Life-time lubrication Product weight Recommended workpiece weight for MRK 1 kg Electrical connection 1, function Field device side Electrical connection 1, connection type Electrical connection 1, connection type Electrical connection 1, connection system Max1, A-coded, to EN 61076-2-104 Electrical connection 1, used connections/cores Electrical connection 1, tiphtening torque O.2 Nm Type of mounting Via mounting kit To 150 94.09 Pneumatic connection Note on materials RoHS-compliant Material cover	Degree of protection	IP40
Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi) Total gripping force HRC, closing Gripping force per gripper jaw HRC, closing 116 N128 N Note on gripping force Dependent on the stroke With integrated compression spring Theoretical spring force per gripper jaw, closing 23.3 N34.9 N Mass moment of inertia 0.6 kgcm² Max. force on gripper jaw Fz static Max. moment Mx 2.8 Nm Max. moment Mx 1.4 Nm Max. moment My 1.4 Nm Max. moment My 1.4 Nm Max. moment Mz Bending radius, fixed cable Bending radius, moving cable Maintenance interval Life-time lubrication Product weight Recommended workpiece weight for MRK 1 kg Electrical connection 1, function Electrical connection 1, connector type Electrical connection 1, connector type Electrical connection 1, connector system Max1, A-coded, to EN 61076-2-104 Electrical connection 1, used connections/cores Electrical connection 1, used connections/cores Electrical connection 1, tightening torque Type of mounting Via mounting kit To 150 9409 Pneumatic connector D. A 4 mm Note on materials Material cover	Ambient temperature	-5 °C50 °C
Total gripping force HRC, closing 232 N256 N Gripping force per gripper jaw HRC, closing 116 N128 N Note on gripping force brown and the stroke with integrated compression spring force brown and the stroke with integrated compression spring brown and the stroke pring force per gripper jaw, closing 23.3 N34.9 N  Mass moment of inertia 0.6 kgcm²  Max. force on gripper jaw Fz static 176 N  Max. moment MX 2.8 Nm  Max. moment MY 1.4 Nm  Max. moment MZ 1.4 Nm  Bending radius, fixed cable 26 mm  Bending radius, fixed cable 26 mm  Bending radius, moving cable 11fe-time lubrication  Product weight 680 g  Recommended workpiece weight for MRK 1 kg  Electrical connection 1, function Field device side 18et trical connection 1, connection type 18et device side 18et trical connection 1, connection type 18et trical connection 1, design 18et and 18	Total gripping force, closing, 0.6MPa (6bar, 87 psi)	278 N302 N
Gripping force per gripper jaw HRC, closing  Note on gripping force  Dependent on the stroke With integrated compression spring  Theoretical spring force per gripper jaw, closing  23.3 N34.9 N  Mass moment of inertia  0.6 kgcm²  Max. force on gripper jaw Fz static  176 N  Max. moment MX  2.8 Nm  Max. moment My  1.4 Nm  Max. moment MZ  Bending radius, fixed cable  Bending radius, moving cable  Maintenance interval  Life-time lubrication  Product weight  680 g  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, connector type  Cable with socket  Electrical connection 1, connector system  Electrical connection 1, design  Electrical connection 1, tonnector system  Electrical connection 1, unwher of connections/cores  8  Electrical connection 1, unwher of connections/cores  8  Electrical connection 1, unwher of connections/cores  6  Electrical connection 1, tightening torque  Type of mounting  Via mounting kit To 150 9409  Pneumatic connection  Note on materials  Material cover  PA-reinforced	Gripper force per gripper jaw, closing, 0.6 MPa (6 bar, 87 psi)	139 N151 N
Note on gripping force With integrated compression spring  Theoretical spring force per gripper jaw, closing 23.3 N34.9 N Mass moment of inertia 0.6 kgcm² Max. force on gripper jaw Fz static 176 N Max. moment Mx 2.8 Nm Max. moment My 1.4 Nm Max. moment My 1.4 Nm Max. moment Mz Bending radius, fixed cable 26 mm Bending radius, moving cable With integrated kgcd kgcd kgcd kgcd kgcd kgcd kgcd kgc	Total gripping force HRC, closing	232 N256 N
Theoretical spring force per gripper jaw, closing 23.3 k34.9 N  Mass moment of inertia 0.6 kgcm²  Max. force on gripper jaw Fz static 176 N  Max. moment Mx 2.8 Nm  Max. moment My 1.4 Nm  Max. moment Mz 1.4 Nm  Bending radius, fixed cable 26 mm  Bending radius, moving cable 52 mm  Maintenance interval Life-time lubrication Froduct weight for MRK 1 kg  Electrical connection 1, function Field device side Electrical connection 1, connector system Round Relectrical connection 1, connector system Max1, A-coded, to EN 61076-2-104  Electrical connection 1, used connections/cores 6  Electrical connection 1, tightening torque 0.2 Nm  Type of mounting Theorem 1 for push-in connector O.D. 4 mm  Note on materials Maxer 2 in the Max 1 for compeliance of the mount of the mount of the materials on the mater	Gripping force per gripper jaw HRC, closing	116 N128 N
Mass moment of inertia       0.6 kgcm²         Max. force on gripper jaw Fz static       176 N         Max. moment Mx       2.8 Nm         Max. moment My       1.4 Nm         Max. moment Mz       1.4 Nm         Bending radius, fixed cable       26 mm         Bending radius, moving cable       52 mm         Maintenance interval       Life-time lubrication         Product weight       680 g         Recommended workpiece weight for MRK       1 kg         Electrical connection 1, function       Field device side         Electrical connection 1, connection type       Cable with socket         Electrical connection 1, cable outlet       Angled         Electrical connection 1, design       Round         Electrical connection 1, connector system       M8x1, A-coded, to EN 61076-2-104         Electrical connection 1, number of connections/cores       8         Electrical connection 1, used connections/cores       8         Electrical connection 1, tightening torque       0.2 Nm         Type of mounting       Via mounting kit To 150 9409         Pneumatic connection       For push-in connector O.D. 4 mm         Note on materials       RoHS-compliant         Material cover       PA-reinforced	Note on gripping force	
Max. force on gripper jaw Fz static  Max. moment Mx  2.8 Nm  Max. moment My  1.4 Nm  Max. moment Mz  1.4 Nm  Bending radius, fixed cable  Bending radius, moving cable  Bending radius, moving cable  Maintenance interval  Product weight  Recommended workpiece weight for MRK  Electrical connection 1, function  Electrical connection 1, connection type  Electrical connection 1, cable outlet  Angled  Electrical connection 1, cable outlet  Angled  Electrical connection 1, connector system  Max1, A-coded, to EN 61076-2-104  Electrical connection 1, used connections/cores  Belectrical connection 1, tightening torque  7ype of mounting  Propush in connector 0.D. 4 mm  Note on materials  Material cover  PA-reinforced	Theoretical spring force per gripper jaw, closing	23.3 N34.9 N
Max. moment Mx  Max. moment My  Max. moment My  Max. moment Mz  Bending radius, fixed cable  Bending radius, moving cable  Bending radius, moving cable  Bending radius, moving cable  Bending radius, moving cable  Life-time lubrication  Product weight  680 g  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  Max1, A-coded, to EN 61076-2-104  Electrical connection 1, unmber of connections/cores  Belectrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  Note on materials  Material cover	Mass moment of inertia	0.6 kgcm²
Max. moment My  Max. moment Mz  Bending radius, fixed cable  Bending radius, moving cable  Bending radius, moving cable  Bending radius, moving cable  Maintenance interval  Product weight  Recommended workpiece weight for MRK  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, connector system  Electrical connection 1, used connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  Material cover  PA-reinforced	Max. force on gripper jaw Fz static	176 N
Max. moment Mz  Bending radius, fixed cable  Bending radius, moving cable  Bending radius, moving cable  Maintenance interval  Product weight  Recommended workpiece weight for MRK  Electrical connection 1, function  Electrical connection 1, connection type  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Electrical connection 1, connector system  Electrical connection 1, number of connections/cores  Electrical connection 1, under one connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  Note on materials  Material cover  1, 4 Nm  And  And  And  And  And  And  And  An	Max. moment Mx	2.8 Nm
Bending radius, fixed cable  Bending radius, moving cable  Sed mm  Maintenance interval  Life-time lubrication  Product weight  Sed og  Recommended workpiece weight for MRK  I kg  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  Max1, A-coded, to EN 61076-2-104  Electrical connection 1, unwher of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To 150 9409  Pneumatic connection  Note on materials  RoHS-compliant  Material cover	Max. moment My	1.4 Nm
Bending radius, moving cable  Maintenance interval  Life-time lubrication  680 g  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, umber of connections/cores  8  Electrical connection 1, used connections/cores  6  Electrical connection 1, tightening torque  7  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  Note on materials  RoHS-compliant  Material cover	Max. moment Mz	1.4 Nm
Maintenance interval  Product weight  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, design  Round  Electrical connection 1, connector system  Max1, A-coded, to EN 61076-2-104  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  Type of mounting  Pround tightening torque  Pround materials  RoHS-compliant  Material cover	Bending radius, fixed cable	26 mm
Product weight  Recommended workpiece weight for MRK  1 kg  Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  8  Electrical connection 1, used connections/cores  6  Electrical connection 1, tightening torque  7ype of mounting  Via mounting kit To ISO 9409  Pneumatic connection  Por push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover	Bending radius, moving cable	52 mm
Recommended workpiece weight for MRK  Electrical connection 1, function  Field device side  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  8  Electrical connection 1, used connections/cores  6  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  PA-reinforced	Maintenance interval	Life-time lubrication
Electrical connection 1, function  Electrical connection 1, connection type  Cable with socket  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  PA-reinforced	Product weight	680 g
Electrical connection 1, connection type  Electrical connection 1, cable outlet  Angled  Electrical connection 1, design  Round  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  PA-reinforced	Recommended workpiece weight for MRK	1 kg
Electrical connection 1, cable outlet  Electrical connection 1, design  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  Material cover  PA-reinforced	Electrical connection 1, function	Field device side
Electrical connection 1, design  Electrical connection 1, connector system  M8x1, A-coded, to EN 61076-2-104  Electrical connection 1, number of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  Material cover  PA-reinforced	Electrical connection 1, connection type	Cable with socket
Electrical connection 1, connector system  Electrical connection 1, number of connections/cores  Electrical connection 1, used connections/cores  Electrical connection 1, tightening torque  O.2 Nm  Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  M8x1, A-coded, to EN 61076-2-104  8  RoHS-compliant  Max1, A-coded, to EN 61076-2-104	Electrical connection 1, cable outlet	Angled
Electrical connection 1, number of connections/cores 8  Electrical connection 1, used connections/cores 6  Electrical connection 1, tightening torque 0.2 Nm  Type of mounting Via mounting kit To ISO 9409  Pneumatic connection For push-in connector O.D. 4 mm  Note on materials RoHS-compliant  Material cover PA-reinforced	Electrical connection 1, design	Round
Electrical connection 1, used connections/cores 6  Electrical connection 1, tightening torque 0.2 Nm  Type of mounting Via mounting kit To ISO 9409  Pneumatic connection For push-in connector O.D. 4 mm  Note on materials RoHS-compliant  Material cover PA-reinforced	Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, tightening torque  7 ype of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  PA-reinforced	Electrical connection 1, number of connections/cores	8
Type of mounting  Via mounting kit To ISO 9409  Pneumatic connection  For push-in connector O.D. 4 mm  Note on materials  RoHS-compliant  Material cover  PA-reinforced	Electrical connection 1, used connections/cores	6
To ISO 9409  Pneumatic connection For push-in connector O.D. 4 mm  Note on materials RoHS-compliant  Material cover PA-reinforced	Electrical connection 1, tightening torque	0.2 Nm
Note on materials RoHS-compliant  Material cover PA-reinforced	Type of mounting	
Material cover PA-reinforced	Pneumatic connection	For push-in connector O.D. 4 mm
Material cover PA-reinforced	Note on materials	RoHS-compliant
Material spring High-alloy stainless steel	Material cover	
	Material spring	High-alloy stainless steel

Feature	Value
Material housing	Anodised wrought aluminium alloy
Material gripper jaws	High-alloy steel
Material piston	Wrought aluminium alloy, anodised
Material piston seal	TPE-U(PU)
Material o-ring	HNBR NBR
Material screws	Galvanised steel High-alloy steel
Gear wheel material	High-alloy steel
Gripper finger material	Wrought aluminium alloy, anodised