Parallel gripper HGPT-16-A-B Part number: 560192



Data sheet

FESTO

General operating condition

Stroke per gripper jaw 3 mm Max. interchangeability s0.2 mm Max. gripper jaw angular play ax, ay s0.1 deg Max. gripper jaw backlash Sz s0.02 mm Rational symmetry s0.2 mm Pneumatic gripper repetition accuracy s0.03 mm Number of gripper jaws 2 Actuator system Pneumatic Mounting position Any Mode of operation Double-acting Gripping force backup Without Structural design Inclined plane Position sensing For proximity sensor Symbol Oo991894 Operating pressure for sealing air Obar 0.5 bar Min. opening time at 6 bar 9 ms Min. closing time at 6 bar 9 ms Min. closing time at 6 bar 11 ms Max. ass per external gripper finger 40 g Operation with oil lubrication possible (required for further use) Corrosion resistance class (CRC) Corrosion resistance class (CRC) 2 - Moderate corrosion stress Corposin resistance class (CRC) 2 - Moderate corrosion stress Corposin resistance class (CRC) 2 - Moderate corrosion stress	Feature	Value
Max. interchangeability s0.2 mm Max. gripper jaw angular play ax, ay s0.1 deg Max. gripper jaw backlash Sz s0.02 mm Rotational symmetry s0.2 mm Pneumatic gripper repetition accuracy s0.03 mm Number of gripper jaws 2 Actuator system Pneumatic gripper repetition accuracy Mounting position Any Mode of operation Double-acting Gripper function Parallel Gripping force backup Without Structural design Inclined plane Positively driven motion sequence Position sensing For proximity sensor Operating pressure for sealing air Obar	Size	16
Max. gripper jaw angular play ax, ay \$0.1 deg Max. gripper jaw backlash Sz \$0.02 mm Rotational symmetry \$0.2 mm Pneumatic gripper repetition accuracy \$0.03 mm Number of gripper jaws 2 Actuator system Pneumatic Mounting position Any Mode of operation Double-acting Gripper function Parallel Gripping force backup Without Structural design Inclined plane Position sensing For proximity sensor Symbol 00991894 Operating pressure for sealing air Obar 0.5 bar Max. aperating frequency of pneumatic gripper 33 Hz Min. opening time at 6 bar 9 ms Min. opening time at 6 bar 11 ms Max. mass per external gripper finger 40 g Operation resistance class (CRC) 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24364.B1/B2-L Degree of protection 1P40 Anbient temperature 5°C 60 °C Gripping force per gripper jaw at 6 bar, opening 120 N Gripping force per gripper jaw at 6 bar, opening </td <td>Stroke per gripper jaw</td> <td>3 mm</td>	Stroke per gripper jaw	3 mm
Max. gripper jaw backlash 5z s0.02 mm Rotational symmetry s0.2 mm Pneumatic gripper repetition accuracy s0.03 mm Number of gripper jaws 2 Actuator system Pneumatic Mounting position Any Mode of operation Double-acting Gripper function Parallel Gripping force backup Without Structural design Inclined plane Positively driven motion sequence Positively driven motion sequence Position sensing For proximity sensor Symbol Operating pressure Operating pressure 3 bar 8 bar Operating frequency of pneumatic gripper s3 Hz Min. opening time at 6 bar 11 ms Max. mass per external gripper finger 40 g Operating medium Compressed air as per ISO 8573·1:2010[7:4:4] Information on operating and pilot media Operation with oil lubrication possible (required for further use) Carrosion resistance class (CRC) 2 · Moderate corosion stress LABS (PWIS) conformity VDMA24364·B1/B2·L Degree of protection 1P40 Ambient temperature 5°C	Max. interchangeability	≤0.2 mm
Rotational symmetry s0.2 mm Pneumatic gripper repetition accuracy s0.03 mm Number of gripper jaws 2 Actuator system Pneumatic Mounting position Any Mode of operation Double-acting Gripping force backup Without Structural design Positively driven motion sequence Positively driven motion sequence Positively driven motion sequence Positively driven motion sequence Symbol Operating pressure 3 bar & bar Operating pressure for sealing air O bar O.5 bar Min. opening time at 6 bar 11 ms Max. mass per external gripper finger 40 g Operating medium Compressed air as per ISO 8573-1:2010[7:4:4] Information on operating and pilot media Operation writh oil lubrication possible (required for further use) Corrosion resistance class (CRC) 2 Moderate corrosion stress LABS (PWIS) conformity VDMA24364-B1/B2-L Degree of protection IP40 Ambient temperature 5°C 60 °C Gripping force per gripper jaw at 6 bar, opening 106 N Gripping force per gripper jaw at 6 bar, opening	Max. gripper jaw angular play ax, ay	≤0.1 deg
Pneumatic gripper repetition accuracy\$0.03 mmNumber of gripper jaws2Actuator systemPneumaticMounting positionAnyMode of operationDouble-actingGripper functionParallelGripping force backupWithoutStructural designInclined plane Positively drive motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper33 HzMin. closing time at 6 bar9 msMin. closing time at 6 bar11 msMax. mass per external gripper finger40 gOperating ressure for sealing and pilot mediaOperation with oil lubrication possible (required for further use)Corrosion resistance class (CRC)2 - Moderate corrosion stressLABS (PWIK) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening53 NMaxien temperature53 °C 60 °CGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening53 NMaxient temperature53 NMaxient temperature53 NMaxient temperature53 NMaxient temperature </td <td>Max. gripper jaw backlash Sz</td> <td>≤0.02 mm</td>	Max. gripper jaw backlash Sz	≤0.02 mm
Number of gripper jaws2Actuator systemPneumaticMounting positionAnyMode of operationDouble-actingGripper functionParallelGripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressureOberating frequency of pneumatic gripperStructural frequency of pneumatic gripper33 bar 8 barOperating frequency of pneumatic gripper53 HzMin. closing time at 6 bar11 msMax. sper external gripper finger40 gOperating mediumCompressed air as per ISO 8573-1:2010[7:4:4]Information on operating and pilot mediaOperation possible (required for further use)Corrosion resistance class (CRC)2 · Moderate corrosion stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening53 NMass moment of inertia0,141 kgcm²	Rotational symmetry	≤0.2 mm
Actuator systemPneumaticMounting positionAnyMode of operationDouble-actingGripper functionParallelGripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbolOoperating pressure for sealing airOperating pressure for sealing airO bar 0.5 barMax. operating frequency of pneumatic grippers3 HzMin. closing time at 6 bar11 msMax. ass per external gripper finger40 gOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperate corrosion stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening53 NMass moment of inertia0.141 kgcm²	Pneumatic gripper repetition accuracy	≤0.03 mm
Mounting positionAnyMode of operationDouble-actingGripper functionParallelGripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic grippers3 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar9 msMin. closing time at 6 bar009eration serverson sourceOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening53 NMaxs moment of inertia0.141 kgcm²	Number of gripper jaws	2
Mode of operationDouble-actingGripper functionParallelGripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper\$3 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar9 gOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening53 NMass moment of inertia0,141 kgcm²	Actuator system	Pneumatic
Gripper functionParallelGripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper\$3 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar9 msMax. mass per external gripper finger40 gOperating 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 stressLABS (PWIS) conformityVDMA24364.B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Mounting position	Any
Gripping force backupWithoutStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper<3 Hz	Mode of operation	Double-acting
Structural designInclined plane Positively driven motion sequenceStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper\$3 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar11 msMax. mass per external gripper finger40 gOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protection1P40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm ²	Gripper function	Parallel
Positively driven motion sequencePosition sensingFor proximity sensorSymbol00991894Operating pressure3 bar 8 barOperating pressure for sealing air0 bar 0.5 barMax. operating frequency of pneumatic gripper43 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar9 msMax. mass per external gripper finger40 gOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening53 NMass moment of inertia0.141 kgcm²	Gripping force backup	Without
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Operating pressure for sealing airO bar 0.5 barMax. operating frequency of pneumatic gripper\$3 HzMin. opening time at 6 bar9 msMin. closing time at 6 bar11 msMax. mass per external gripper finger40 gOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, opening53 NMass moment of inertia0.141 kgcm²	Symbol	00991894
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Max. mass per external gripper finger40 gOperating 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening106 NGripping force per gripper jaw at 6 bar, closing60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Min. opening time at 6 bar	9 ms
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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Min. closing time at 6 bar	11 ms
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LABS (PWIS) conformityVDMA24364-B1/B2-LDegree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Degree of protectionIP40Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Corrosion resistance class (CRC)	2 - Moderate corrosion stress
Ambient temperature5 °C 60 °CGripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	LABS (PWIS) conformity	VDMA24364-B1/B2-L
Gripping force per gripper jaw at 6 bar, opening120 NGripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Degree of protection	IP40
Gripping force per gripper jaw at 6 bar, closing106 NGripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Ambient temperature	5 °C 60 °C
Gripping force per gripper jaw at 6 bar, opening60 NGripping force per gripper jaw at 6 bar, closing53 NMass moment of inertia0.141 kgcm²	Gripping force per gripper jaw at 6 bar, opening	120 N
Gripping force per gripper jaw at 6 bar, closing 53 N Mass moment of inertia 0.141 kgcm ²	Gripping force per gripper jaw at 6 bar, closing	106 N
Mass moment of inertia 0.141 kgcm ²	Gripping force per gripper jaw at 6 bar, opening	60 N
	Gripping force per gripper jaw at 6 bar, closing	53 N
Maximum force on gripper jaw Fz, static 200 N	Mass moment of inertia	0.141 kgcm ²
	Maximum force on gripper jaw Fz, static	200 N

Feature	Value
Maximum torque on gripper jaw, Mx static	10 Nm
Maximum torque on gripper jaw, My static	12 Nm
Maximum torque on gripper jaw, Mz static	6 Nm
Relubrication interval for guidance elements	5 MioCyc
Product weight	85 g
Type of mounting	Optionally: With internal thread and centering sleeve Via through-hole and centering sleeve With through-hole and dowel pin With internal thread and dowel pin
Sealing air pneumatic connection	M3
Pneumatic connection	M5
Note on materials	RoHS-compliant
Cover cap material	High-alloy stainless steel
Housing material	Aluminum, anodized
Gripper jaw material	Hardened steel