## Three-point gripper HGDT-50-A-G1

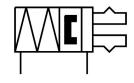
Part number: 540869



## **Data sheet**

Size50Stroke per gripper jaw8 mmMax. interchangeability0.2 mmMax. gripper jaw angular play ax, ay0.1 degMax. gripper jaw backlash Sz0.05 mmRotational symmetry0.2 mmPneumatic gripper repetition accuracy0.03 mmNumber of gripper pays3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	Valu	iture	Value
Max. interchangeability0.2 mmMax. gripper jaw angular play ax, ay0.1 degMax. gripper jaw backlash Sz0.05 mmRotational symmetry0.2 mmPneumatic gripper repetition accuracy0.03 mmNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripper function3-pointGripper function0n openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar32 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	50	e	50
Max. gripper jaw angular play ax, ay0.1 degMax. gripper jaw backlash Sz0.05 mmRotational symmetry0.2 mmPneumatic gripper repetition accuracy0.03 mmNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingObar0.5 barOperating pressure0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 msOperating mediumCompressed air as per ISO 8573-1:2010 [7:4:4]Information on operating and pilot mediaOperation pressureCorrosion resistance class (CRC)2 - Moderate corrosion stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	8 mn	oke per gripper jaw	8 mm
Max. gripper jaw backlash Sz 0.05 mm   Rotational symmetry 0.2 mm   Pneumatic gripper repetition accuracy 0.03 mm   Number of gripper jaws 3   Mounting position Any   Mode of operation Double-acting   Gripper function 3-point   Gripper function 3-point   Gripping force backup On opening   Structural design Inclined plane   Position sensing For proximity sensor   Operating pressure 0 bar0.5 bar   Max. operating frequency of pneumatic gripper 4 Hz   Min. opening time at 6 bar 146 ms   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)   Corrosion resistance class (CRC) 2 · Moderate corrosion stress   LABS (PWIS) conformity VDMA24364-B1/B2-L   Ambient temperature 5 °C60 °C	0.2 r	x. interchangeability	0.2 mm
Rotational symmetry0.2 mmPneumatic gripper repetition accuracy0.03 mmNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	0.1 c	x. gripper jaw angular play ax, ay	0.1 deg
Pneumatic gripper repetition accuracy0.03 mmNumber of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	0.05	x. gripper jaw backlash Sz	0.05 mm
Number of gripper jaws3Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	0.2 r	ational symmetry	0.2 mm
Mounting positionAnyMode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. closing time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	0.03	eumatic gripper repetition accuracy	0.03 mm
Mode of operationDouble-actingGripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	3	mber of gripper jaws	3
Gripper function3-pointGripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	Any	unting position	Any
Gripping force backupOn openingStructural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	Dout	de of operation	Double-acting
Structural designInclined plane Positively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	3-ро	pper function	3-point
Positively driven motion sequencePositively driven motion sequencePosition sensingFor proximity sensorOperating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	On o	pping force backup	On opening
Operating pressure4 bar8 barOperating pressure for sealing air0 bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C		uctural design	
Operating pressure for sealing airO bar0.5 barMax. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	For p	ition sensing	For proximity sensor
Max. operating frequency of pneumatic gripper4 HzMin. opening time at 6 bar32 msMin. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	4 bar	erating pressure	4 bar8 bar
Min. opening time at 6 bar 32 ms   Min. closing time at 6 bar 146 ms   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)   Corrosion resistance class (CRC) 2 - Moderate corrosion stress   LABS (PWIS) conformity VDMA24364-B1/B2-L   Ambient temperature 5 °C60 °C	0 bar	erating pressure for sealing air	0 bar0.5 bar
Min. closing time at 6 bar146 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	4 Hz	x. 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 stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	32 m	1. opening time at 6 bar	32 ms
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-LAmbient temperature5 °C60 °C	146	1. closing time at 6 bar	146 ms
Corrosion resistance class (CRC)2 - Moderate corrosion stressLABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	Com	erating medium	Compressed air as per ISO 8573-1:2010[7:4:4]
LABS (PWIS) conformityVDMA24364-B1/B2-LAmbient temperature5 °C60 °C	Oper	ormation on operating and pilot media	Operation with oil lubrication possible (required for further use)
Ambient temperature 5 °C60 °C	2 - M	rosion resistance class (CRC)	2 - Moderate corrosion stress
	VDM	3S (PWIS) conformity	VDMA24364-B1/B2-L
	5 °C.	bient temperature	5 °C60 °C
Mass moment of inertia 15.33 kgcm <sup>2</sup>	15.3	ss moment of inertia	15.33 kgcm <sup>2</sup>
Maximum force on gripper jaw Fz, static 1500 N	1500	ximum force on gripper jaw Fz, static	1500 N
Maximum torque on gripper jaw, Mx static 50 Nm	50 N	ximum torque on gripper jaw, Mx static	50 Nm
Maximum torque on gripper jaw, My static 30 Nm	30 N	ximum torque on gripper jaw, My static	30 Nm
Maximum torque on gripper jaw, Mz static 40 Nm	40 N	ximum torque on gripper jaw, Mz static	40 Nm
Relubrication interval for guidance elements 5 MioCyc	5 Mie	ubrication interval for guidance elements	5 MioCyc
Max. mass per external gripper finger 160 g	160	x. mass per external gripper finger	160 g

**FESTO** 



Feature	Value
Product weight	1592 g
Type of mounting	With through-hole and dowel pin With internal thread and dowel pin Optionally:
Sealing air pneumatic connection	M5
Pneumatic connection	G1/8
Cover cap material	High-alloy stainless steel
Housing material	Wrought aluminum alloy COMPCOTE-coated
Gripper jaw material	Hardened steel