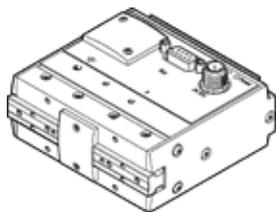


# Parallel gripper HGPI-12-10-PB

Part number: 539054

FESTO

precise and positionable.



## Data sheet

Feature	Value
Size	12
Smallest positioning stroke	0,2 mm
Max. replacement accuracy	≤ 0.2 mm
Max. angular gripper jaw backlash ax,ay	0 deg
Max. gripper jaw backlash Sz	0 mm
Controllable stroke range per gripper jaw	0 ... 10 mm
Number of gripper fingers	2
Assembly position	Any
Controller operating mode	PID position controller with subordinate, non-linear pressure/force regulation
Mode of operation	double-acting
Gripper function	Parallel
Design structure	twin piston Guide With built-in, directly actuated poppet valves With integrated sequence control With integrated displacement encoder With built-in pressure sensors With integrated regulation
Guide	Ball bearing cage guide
Position detection	For Hall sensors
Configuration support	Device database file
Control elements	DIL switch for setting the operating modes and diagnostic scope
Ready status display	Green LED
Bus error display	Red LED
Error status	Red LED
Operating pressure	5 ... 6 bar
Min. positioning speed	1 mm/s
Typical positioning time	150 ... 250 ms
Repetition accuracy	+/-0,1 mm
Bus terminating resistor	120 Ohm, external
Duty cycle	100%
Max. current consumption, load	0.07 A
Max. current consumption, logic	0.2 A
Nominal DC voltage, logic power supply	24 V
Nominal voltage, load supply DC	24 V
Residual ripple	5 %
Permissible range, load supply	± 10 %
Permissible range, logic voltage	± 10 %
Operating medium	Dried compressed air, lubricated or unlubricated
CE mark (see declaration of conformity)	to EU directive for EMC
Corrosion resistance classification CRC	2
Relative air humidity	0 - 95 % non-condensing

<b>Feature</b>	<b>Value</b>
Protection class	IP40
Ambient temperature	5 ... 40 °C
Mass moment of inertia	7.8 kgcm <sup>2</sup>
Max. deviation from the setpoint gripping force for each jaw	-6 N
Max. force on gripper jaw Fz static	70 N
Max. torque at gripper Mx static	3 Nm
Max. torque at gripper My static	3 Nm
Max. torque at gripper Mz static	3 Nm
Open controllable total gripping force range at 6 bar	20 ... 120 N
Close controllable total gripping force range at 6 bar	20 ... 120 N
Open controllable gripping force range at 6 bar for each jaw	10 ... 60 N
Close controllable gripping force range at 6 bar for each jaw	10 ... 60 N
Max. ground per external gripper finger	150 g
Product weight	650 g
Communications profile	Step 7 functional modules
Electrical connection	4-pin M12x1 Plug
Fieldbus interface address range	125
Fieldbus interface design	Electrical isolation RS 485
Electrical connection, fieldbus interface	Plug socket SUB-D 9-pin
Fieldbus coupling	Profibus DP
Mounting type	Optional Internal thread and centring sleeve With dovetail slot
Pneumatic connection	M3
Materials note	Contains PWIS substances
Materials information for cover cap	Wrought Aluminium alloy Anodised
Materials information, housing	Aluminium Smooth anodised
Materials information for gripper jaws	High-strength wrought aluminium alloy Smooth anodised