

ISO cylinder DNCI-50- -

Part number: 535413

FESTO



 General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	10 mm ... 2000 mm
Stroke, servopneumatic positioning	100 mm ... 500 mm
Soft Stop stroke	100 mm ... 500 mm
Stroke reduction in the end positions	≥ 15 mm
Shortest positioning stroke	3% of max. stroke Maximum 20 mm, however
Piston diameter	50 mm
Based on norm	ISO 15552 (previously also VDMA 24562, ISO 6431, NF E49 003.1, UNI 10290)
Cushioning	Elastic cushioning rings/pads at both ends
Mounting position, positioning	Any
Mounting position, Soft Stop	Any
Measuring principle of linear potentiometer	Digital
Structural design	Piston Piston rod Profile barrel
Position sensing	For proximity sensor With integrated linear potentiometer
Variants	Extended piston rod Piston rod at one end
Protection against torsion/guide	Dual flat piston rod
Operating pressure	≤ 1.2 MPa
Operating pressure	≤ 12 bar
Operating pressure	≤ 174 psi
Operating pressure for positioning/soft stop	4 bar ... 8 bar
Max. travel speed	≥ 1.5 m/s
Min. travel speed	0.05 m/s
Typical positioning time, short-stroke, horizontal	0.45/0.6 s
Typical positioning time, long stroke, horizontal	0.65/0.8 s
Mode of operation	Double-acting
Nominal operating voltage DC	5 V
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Operating medium	Compressed air as per ISO 8573-1:2010 [6:4:4]

Feature	Value
Information on operating and pilot media	Dew point min. 10 °C below the ambient temperature and temperature of medium
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested as per severity level 2
Corrosion resistance class (CRC)	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Max. magnetic interference field	10 kA/m at a distance of 100 mm
Degree of protection	IP65 as per IEC 60529
Vibration resistance to DIN/IEC 68 Part 2-6	Tested as per severity level 2
Ambient temperature	-20 °C ... 80 °C
Impact energy in the end positions	1 J
Max. torque for protection against rotation	≤0.05 Nm
Max. load, horizontal	120 kg
Max. load, vertical	40 kg
Min. load, horizontal	8 kg
Min. load, vertical	8 kg
Theoretical force at 6 bar, retracting	990 N
Theoretical force at 6 bar, advancing	990 N ... 1178 N
Moving mass at 0 mm stroke	316 g
Additional moving mass per 10 mm stroke	23 g
Basic weight with 0 mm stroke	1319 g
Additional weight per 10 mm stroke	62 g
Output signal	Analog
Repetition accuracy in ± mm	0.5 mm
Max. controllable force, advancing	1060 N
Max. controllable force, retracting	891 N
Typical friction force	70 N
Repetition accuracy, Soft Stop intermediate position	+/- 2 mm
Linear potentiometer electrical connection	8-pin
Cable length	1.5 m
Type of mounting	With accessories
Pneumatic connection	G1/4
Note on materials	RoHS-compliant
Cover material	Wrought aluminum alloy
Seals material	NBR TPE-U(PU)
Material of cable sheath	TPE-U(PUR)
Piston rod material	High-alloy steel
Material of screws	Steel
Sensor cover material	Aluminum
Sensor head material	POM
Material of plug housing	PBT
Material of cylinder barrel	Wrought aluminum alloy