

# ISO cylinder DNCI-50- -

Part number: 535413

FESTO



## Data sheet

Feature	Value
Stroke	10 mm...2000 mm
Stroke Servopneumatic positioning	100 mm...500 mm
Stroke Smart Softstop	100 mm...500 mm
Stroke reduction at end positions	$\geq 15$ mm
Smallest positioning stroke	3% of max. stroke Max. 20 mm
Piston diameter	50 mm
Based on standard	ISO 15552 (previously also VDMA 24562, ISO 6431, NF E49 003.1, UNI 10290)
Cushioning	Elastic cushioning rings/plates at both ends
Positioning installation position	optional
Soft Stop installation position	Optional
Functional principle of measuring system	Digital
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch With integrated displacement encoder
Variants	Clamping unit attached Extended piston rod Piston rod at one end
Protection against torque/guide	Dual flat piston rod
Operating pressure	1.2 MPa 12 bar 174 psi
Operating pressure 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 mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive

Feature	Value
CE marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Operating medium	Compressed air to ISO 8573-1:2010 [6:4:4]
Note on operating and pilot medium	Dew point at least 10 °C below the ambient temperature and temperature of the medium
Continuous shock resistance to DIN/IEC 68 Part 2-82	Tested to 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 To IEC 60529
Vibration resistance to DIN/IEC 68 Part 2-6	Tested to severity level 2
Ambient temperature	-20 °C...80 °C
Impact energy in end positions	1 Nm
Max. torque for protection against torsion	0.05 Nm
Max. working load, horizontal	120 kg
Max. working load, vertical	40 kg
Min. working load, horizontal	8 kg
Min. working load, vertical	8 kg
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	990 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	990 N...1178 N
Moving mass for 0 mm stroke	316 g
Additional moving mass per 10 mm stroke	23 g
Basic weight for 0 mm stroke	1319 g
Additional weight per 10 mm stroke	62 g
Output signal	Analogue
Repetition accuracy in ± mm	0.5 mm
Max. controllable force during advance stroke	1060 N
Max. controllable force during return stroke	891 N
Typical friction force	70 N
Repetition accuracy Soft Stop intermediate position	+/-2 mm
Electrical connection encoder	8-pin
Cable length	1.5 m
Type of mounting	With accessories
Pneumatic connection	G1/4
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy
Material seals	NBR TPE-U(PU)
Material cable sheath	TPE-U(PUR)
Material piston rod	High-alloy steel
Material screws	Steel
Material sensor cover	Aluminium
Material sensor head	POM
Material connector housing	PBT
Material cylinder barrel	Wrought aluminium alloy