

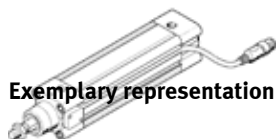
# standards-based cylinder

## DNCI-50- -

Part number: 535413

FESTO

In accordance with ISO 15552, with integrated, incremental displacement encoder.



Exemplary representation

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	10 ... 2,000 mm
Stroke servopneumatic positioning	100 ... 500 mm
Stroke Soft Stop	100 ... 500 mm
Stroke shortening in the end-positions	≥ 15 mm
Smallest positioning stroke	3% of max. stroke However, not more than 20 mm
Piston diameter	50 mm
Based on the standard	ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290)
Cushioning	P: Flexible cushioning rings/plates at both ends
Mounting position, positioning	Any
Mounting position, soft stop	Any
Measuring method: displacement encoder	Digital
Design structure	Piston Piston rod Profile barrel
Position detection	For proximity sensor With integrated displacement encoder
Variants	Clamping unit attached Extended piston rod Single-ended piston rod
Protection against torque/guide	Double piston rod
Operating pressure MPa	≤ 1.2 MPa
Operating pressure	≤ 12 bar ≤ 174 psi
Operating pressure, positioning / soft stop	4 ... 8 bar
Max. travel speed	> 1.5 m/s
Min. travel speed	0.05 m/s
Typical short stroke positioning time, horizontal	0,45/0,6 s
Typical long stroke positioning time, 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 directive for EMC in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Operating medium	Compressed air in accordance with ISO8573-1:2010 [6:4:4]
Note on operating and pilot medium	Pressure dew point 10°C below ambient temperature/temperature of medium
Continuous shock resistance per DIN/IEC 68, parts 2 - 82	Tested in accordance with severity level 2
Corrosion resistance classification CRC	1 - Low corrosion stress

<b>Feature</b>	<b>Value</b>
PWIS conformity	VDMA24364-B1/B2-L
Max. magnetic interference field	10KA/m at a distance of 100 mm
Protection class	IP65 to IEC 60529
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2
Ambient temperature	-20 ... 80 °C
Impact energy in end positions	1 Nm
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 0.6 MPa (6 bar, 87 psi), retracting	990 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	990 ... 1,178 N
Moving mass with 0 mm stroke	316 g
Additional mass factor per 10 mm of stroke	23 g
Basic weight for 0 mm stroke	1,319 g
Additional weight per 10 mm stroke	62 g
Output signal	Analogue
Repetition accuracy in ± mm	0.5 mm
Max. controllable force during advance	1,060 N
Max. controllable force during return	891 N
Typical friction force	70 N
Repetition accuracy, soft stop intermediate position	+/- 2 mm
Electrical connection, displacement encoder	8-pin
Cable length	1.5 m
Mounting type	with accessories
Pneumatic connection	G1/4
Materials note	Conforms to RoHS
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