

# ISO cylinder DNCI-32- -

Part number: 535411

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
Stroke Smart Softstop	100 mm ... 500 mm
Stroke reduction at end positions	$\geq 10$ mm
Smallest positioning stroke	3% of max. stroke But max. 20 mm
Piston diameter	32 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	Any
Soft Stop installation position	Any
Functional principle of measuring system	Digital
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch Via integrated displacement encoder
Variants	Extended piston rod Piston rod at one end With two measuring heads
Protection against torque/guide	Dual flat piston rod
Operating pressure	$\leq 1.2$ MPa
Operating pressure	$\leq 12$ bar
Operating pressure	$\leq 174$ 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	0.35/0.55 s
Typical positioning time long stroke, horizontal	0.45/0.7 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
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Operating medium	Compressed air to ISO 8573-1:2010 [6:4:4]

Feature	Value
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	0.1 J
Max. torque for protection against torsion	≤0.05 Nm
Max. working load, horizontal	45 kg
Max. working load, vertical	15 kg
Min. working load, horizontal	3 kg
Min. working load, vertical	3 kg
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	415 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	415 N ... 483 N
Moving mass for 0 mm stroke	95 g
Additional moving mass per 10 mm stroke	8 g
Basic weight for 0 mm stroke	521 g
Additional weight per 10 mm stroke	30 g
Output signal	Analogue
Repetition accuracy in ± mm	0.5 mm
Max. controllable force during advance stroke	435 N
Max. controllable force during return stroke	374 N
Typical friction force	35 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	G1/8
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
Mean time to failure (MTTF), subcomponent	4761 years, sensor