

# Electro-cylinder DNCE-40-400-BS-"12,7" P-Q

Part number: 543133

FESTO

with ball screw actuator and non-rotating piston rod.



## Data sheet

Feature	Value
Working stroke	400 mm
Size	40
Stroke	400 mm
Stroke reserve	0 mm
Piston rod thread	M12x1,25
Reversing backlash	0.05 mm
Spindle diameter	12.7 mm
Spindle pitch	12.7 mm/U
Max. angular deflection of piston rod +/-	0.25 deg
Based on the standard	ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290)
Assembly position	Any
Motor type	Stepper motor Servomotor
Position detection	For proximity sensor
Design structure	Electro-cylinder with ball screw
Spindle type	Ball screw actuator
Variants	Non-rotating piston rod
Protection against torque/guide	with plain-bearing guide
Max. acceleration	6 m/s <sup>2</sup>
Max. speed	0.635 m/s
Repetition accuracy	+/- 0,02 mm
Duty cycle	100%
Corrosion resistance classification CRC	0
Storage temperature	-25 ... 60 °C
Relative air humidity	0 - 95 %
Protection class	IP40
Ambient temperature	0 ... 50 °C
Impact energy in end positions	0.0002 J
Permanent drive torque	1.6 Nm
Permanent feed force	640 N
Max. drive torque	1.9 Nm
Max. torque for protection against rotation	1 Nm
Max. torque Mx	1 Nm
Max. radial force at drive shaft	260 N
Max. static axial force Fx	1,400 N
Max. feed force Fx	800 N
No-load driving torque	0.12 Nm
Reference value for working load, horizontal	80 kg
Reference value for working load, vertical	40 kg
Mass moment of inertia JH per meter of stroke	0.1572 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	0.0409 kgcm <sup>2</sup>
Mass moment of inertia, JO	0.1337 kgcm <sup>2</sup>
Moving mass with 0 mm stroke	380 g

Feature	Value
Additional weight per 10 mm stroke	46.7 g
Basic weight for 0 mm stroke	1,350 g
Additional mass factor per 10 mm of stroke	8.9 g
Mounting type	with internal (female) thread with accessories
Materials note	Contains PWIS substances Conforms to RoHS
Materials information for cover	Aluminum casting Painted
Materials information for seals	NBR
Materials information, housing	Wrought Aluminum alloy Smooth anodized
Materials information for piston rod	High alloy steel, non-corrosive
Material information, spindle nut	Roller bearing steel
Material information, spindle	Roller bearing steel
Materials information for cylinder barrel	Wrought Aluminum alloy Smooth anodized