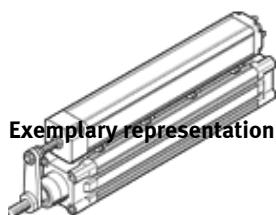


Positioning drive DNM-50- -

Part number: 528941

FESTO

With attached displacement encoder.



Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	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	Horizontal
Measuring method: displacement encoder	Analogue
Design structure	Piston Piston rod Profile barrel
Position detection	For proximity sensor With attached displacement encoder
Variants	Through piston rod through, hollow piston rod
Protection against torque/guide	Guide rod with yoke
Operating pressure	4 ... 8 bar
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	0,45/0,60 s
Typical long stroke positioning time, horizontal	0,65/0,8 s
Recommended wiper current	< 1 µA
Mode of operation	double-acting
Max. operating voltage, DC	42 V
Max. intermittent wiper current	10 mA
Max. current consumption	4 mA
Nominal operating voltage DC	10 V
Connection resistance tolerance	20 %
Permissible voltage fluctuation	< 1 %
Operating medium	Compressed air in accordance with ISO8573-1:2010 [6:4:4]
Note on operating and pilot medium	Lubricated operation not possible
CE mark (see declaration of conformity)	to EU directive for EMC
Corrosion resistance classification CRC	1
Protection class	IP54
Ambient temperature	-10 ... 80 °C
Impact energy in end positions	0.2 Nm
Max. load, horizontal	120 kg
Max. load, vertical	40 kg

Feature	Value
Min. load, horizontal	8 kg
Min. load, vertical	8 kg
Theoretical force at 6 bar, return stroke	990 N
Theoretical force at 6 bar, advance stroke	1,178 N
Moving mass with 0 mm stroke	580 g
Additional weight per 10 mm stroke	79 g
Basic weight for 0 mm stroke	1,480 g
Additional mass factor per 10 mm of stroke	27 g
Travel resolution	≤ 0.01 mm
Output signal	Analogue
Temperature coefficient	≤ 5 ppm/K
Repetition accuracy, soft stop end-position	$< 0,1$ mm
Repetition accuracy, soft stop intermediate position	± 2 mm
Electrical connection, displacement encoder	4-pin
Mounting type	with accessories
Pneumatic connection	G1/4
Materials information for cover	Wrought Aluminium alloy
Materials information for seals	NBR TPE-U(PU)
Materials information for piston rod	High alloy steel
Material information, plug housing	PPE reinforced
Materials information for cylinder barrel	Wrought Aluminium alloy