

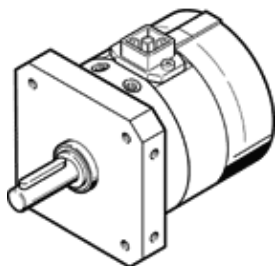
# Swivel module

## DSMI-25-270

Part number: 192270

FESTO

with integrated displacement encoder.



## Data sheet

Feature	Value
Cushioning angle	2.2 deg
Rotation angle adjustment range	0 ... 270 deg
Stroke shortening in the end-positions	5 °
Smallest positioning stroke	5° for positioning 15° with Soft Stop
Piston diameter	25 mm
Swivel angle	272 deg
Cushioning	P: Flexible cushioning rings/plates at both ends
Mounting position, positioning	Any
Mounting position, soft stop	Horizontal
Measuring method: displacement encoder	Analog
Design structure	Drive shaft with ball bearing Rotary vane
Position detection	For proximity sensor With integrated angular displacement encoder
Working pressure, positioning / soft stop	4 ... 8 bar
Max. swivel frequency at 6 bar	2 Hz
Max. travel speed	2,000 deg/s
Min. travel speed	50 deg/s
Typical short stroke positioning time, horizontal	0,15/0,25 s
Typical long stroke positioning time, horizontal	0,35/0,60 s
Connection resistance	5 kOhm
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	Filtered, unlubricated compressed air, 5 µm filtration
CE symbol (see declaration of conformity)	according to EU-EMV guideline
Continuous shock resistance per DIN/IEC 68, parts 2 - 82	Tested in accordance with severity level 2
Corrosion resistance classification CRC	1
Protection class	IP65 to IEC 60529
Vibration resistance per DIN/IEC 68, parts 2 - 6	Tested in accordance with severity level 2
Ambient temperature	-10 ... 60 °C
Impact energy in end positions	0.05 Nm
Torque at 6 bar	5 Nm
Max. axial force	50 N
Max. mass moment of inertia, horizontal	0.03 kgm <sup>2</sup>
Max. mass moment of inertia, vertical	0.03 kgm <sup>2</sup>
Max. radial force	120 N

Feature	Value
Min. mass moment of inertia, horizontal	0.0015 kgm <sup>2</sup>
Min. mass moment of inertia, vertical	0.0015 kgm <sup>2</sup>
Product weight	1,060 g
Angle resolution	≤ 0.1 deg
Output signal	Analog
Independent linearity	0,0025
Repetition accuracy, positioning	+/- 0,3 deg
Repetition accuracy, soft stop end-position	< 0,2 deg
Repetition accuracy, soft stop intermediate position	+/- 2 deg
Electrical connection, displacement encoder	4-pin
Mounting type	with internal (female) thread
Pneumatic connection	M5
Material information, measuring system housing	Wrought Aluminum alloy Anodized
Materials note	Free of copper and PTFE
Material information, stop lever	Wrought Aluminum alloy Anodized
Materials information for drive shaft	Steel Nickel plated
Material information, fixed stop	Steel Galvanized
Materials information, housing	Wrought Aluminum alloy Anodized
Material information, cap	PA-reinforced
Material information, measuring system interface	TPE-U(PU)
Material information, woodruff key	Steel
Material information, rotary vane	PET-reinforced
Material information, plug housing	PA-reinforced
Materials information for cylinder barrel	Wrought Aluminum alloy