

# Guide cylinder

## DFM-16-20-P-A-KF-F1A

Part number: 8118831

FESTO

The proximity switch, type SMTSO-8E, can be used with this product with stroke lengths of 20 to 40 mm only when the corresponding mounting kit, type SMB-8E, is mounted outwardly.



## Data sheet

Feature	Value
Centre of gravity distance from working load to yoke plate	50 mm
Stroke	20 mm
Piston diameter	16 mm
Operating mode of drive unit	Yoke
Cushioning	P: Flexible cushioning rings/plates at both ends
Assembly position	Any
Guide	Recirculating ball bearing guide
Design structure	Guide
Position detection	For proximity sensor
Variants	Recommended for production facilities for the manufacture of lithium-ion batteries
Operating pressure MPa	0.2 ... 1 MPa
Working pressure	2 ... 10 bar
Max. speed	0.8 m/s
Mode of operation	double-acting
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)
Corrosion resistance classification CRC	0 - No corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
RSBP classification to CD-0033	F1a
Cleanroom class	ISO class 5
Ambient temperature	-5 ... 60 °C
Impact energy in end positions	0.15 Nm
Max. force Fy	389 N
Max. force Fy static	415 N
Max. force Fz	389 N
Max. force Fz static	415 N
Max. torque Mx	8.95 Nm
Max. torque Mx static	9.55 Nm
Max. torque My	3.89 Nm
Max. torque My static	4.15 Nm
Max. torque Mz	3.89 Nm
Max. torque Mz static	4.15 Nm
Max. permissible torque load Mx as a function of the stroke	1.79 Nm
Max. useful load as a function of the stroke at defined distance xs	41 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	90 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance	121 N
Moving mass	229 g
Product weight	484 g
Centre of gravity of the moving mass as a function of the stroke	16.5 mm
alternative connections	See product drawing
Pneumatic connection	M5

<b>Feature</b>	<b>Value</b>
Materials note	Conforms to RoHS
Material cover	Wrought Aluminum alloy
Material seals	NBR
Material housing	Wrought Aluminum alloy
Material piston rod	High alloy steel, non-corrosive