

# Guided drive DFM-16-20-P-A-GF-F1A

Part number: 8118823

FESTO



 [General operating condition](#)

## Data sheet

Feature	Value
Distance from centre of gravity of load to yoke plate xs	50 mm
Stroke	20 mm
Piston diameter	16 mm
Operating mode, drive unit	Yoke
Cushioning	Elastic cushioning rings/plates at both ends
Mounting position	optional
Guide	Plain-bearing guide
Design	Guidance
Position detection	Via proximity switch
Symbol	00991737
Variants	Metals with copper, zinc or nickel by mass as main constituent are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.
Operating pressure	0.2 MPa ... 1 MPa
Operating pressure	2 bar ... 10 bar
Max. speed	0.8 m/s
Mode of operation	Double-acting
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Suitability for the production of Li-ion batteries	Suitable for battery production with reduced Cu/Zn/Ni values (F1a)
Cleanroom suitability, measured according to ISO 14644-14	Class 6 according to ISO 14644-1
Ambient temperature	-20 °C ... 80 °C
Impact energy in end positions	0.15 J
Max. force Fy	304 N
Max. force Fy static	304 N
Max. force Fz	304 N
Max. force Fz static	304 N
Max. moment Mx	6.99 Nm
Max. torque Mx static	6.99 Nm
Max. moment My	2.89 Nm
Max. torque My static	2.89 Nm
Max. moment Mz	2.89 Nm
Max. torque Mz static	2.89 Nm

<b>Feature</b>	<b>Value</b>
Max. permissible torque load $M_x$ as a function of stroke	1.17 Nm
Max. effective load dependent upon stroke at defined distance $x_s$	27 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	90 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	121 N
Moving mass	242 g
Product weight	507 g
alternative connections	See product drawing
Pneumatic connection	M5
Note on materials	RoHS-compliant
Material cover	Wrought aluminium alloy
Material seals	NBR
Material housing	Wrought aluminium alloy
Material piston rod	High-alloy stainless steel