

# Standards-based cylinder DSNU-20- -F1A-

Part number: 8149446

**FESTO**



## Data sheet

Feature	Value
Stroke	1 mm...320 mm
Piston diameter	20 mm
Piston rod thread	M8
Cushioning	Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning Pneumatic cushioning, adjustable at both ends
Mounting position	optional
Conforms to standard	CETOP RP 52 P ISO 6432
Design	Piston Piston rod Cylinder barrel
Position detection	Via proximity switch
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. Extended male piston rod thread Piston rod with female thread Piston rod with male thread shortened at one end Extended piston rod Axial supply port Lateral supply port Through piston rod
Operating pressure	0.1 MPa...1 MPa 1 bar...10 bar
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	Product corresponds to the internal product definition from Festo for use in battery production:Metals with more than 1% by mass of copper, zinc or nickel are excluded from use.The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils

Feature	Value
Cleanroom class	Class 6 according to ISO 14644-1
Ambient temperature	-20 °C...80 °C
Cushioning length	15 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	158.3 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	188.5 N
Moving mass for 0 mm stroke	44 g
Additional moving mass per 10 mm stroke	4 g
Basic weight for 0 mm stroke	186.8 g
Additional weight per 10 mm stroke	7.2 g
Type of mounting	With accessories
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Material cover	Anodised wrought aluminium alloy
Material seals	TPE-U(PU)
Material piston rod	High-alloy stainless steel
Material cylinder barrel	High-alloy stainless steel