

Compact air cylinder ADN-50- -

Part number: 536309

FESTO



Data sheet

Feature	Value
Stroke	1 mm...400 mm
Piston diameter	50 mm
Cushioning	Elastic cushioning rings/pads at both ends Self-adjusting pneumatic end-position cushioning
Mounting position	Any
Conforms to standard	ISO 21287
Structural design	Piston Piston rod Profile barrel
Position sensing	For proximity sensor
Variants	EX protection approval (ATEX) 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. Improved running performance Extended external thread piston rod Special thread on piston rod Extended piston rod With anti-twist protection High corrosion protection Dust protection Uniform, slow movement Low friction Through piston rod Through, hollow piston rod Heat-resistant seals max. 120°C Laser etched rating plate Temperature range -40 to 80°C Piston rod at one end
Operating pressure	0.06 MPa...1 MPa 0.6 bar...10 bar
Mode of operation	Double-acting
CE marking (see declaration of conformity)	as per EU explosion protection directive (ATEX)
UKCA marking (see declaration of conformity)	acc. to UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)

Feature	Value
Explosion prevention and protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
ATEX category gas	II 2G
ATEX category for dust	II 2D
Type of ignition protection for gas	Ex h IIC T4 Gb
Type of (ignition) protection for dust	Ex h IIIC T120°C Db
Explosive ambient temperature	-20°C ≤ Ta ≤ +60°C
Operating medium	Compressed air as per ISO 8573-1:2010 [7:4:4]
Information on operating and pilot media	Operation with oil lubrication possible (required for further use)
Corrosion resistance class (CRC)	0 - No corrosion stress 2 - Moderate corrosion stress 3 - High corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L VDMA24364 zone III
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition 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, circuit boards, cables, electrical plug connectors and coils
Ambient temperature	-40 °C...120 °C
Theoretical force at 6 bar, retracting	1057 N
Theoretical force at 6 bar, advancing	1057 N...1178 N
Weight surcharge per 10 mm piston rod extension	16 g
Weight surcharge per 10 mm piston rod thread extension	9 g
Type of mounting	With through-hole With internal thread With accessories Optionally:
Pneumatic connection	G1/8
Note on materials	RoHS-compliant
Flange screws material	Steel
Cover material	Wrought aluminum alloy, anodized
Piston rod material	High-alloy steel
Material of cylinder barrel	Wrought aluminum alloy, smooth-anodized