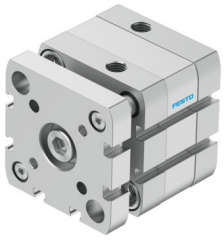
Compact cylinder
ADNGF-50- -

Part number: 537129



Data sheet

Feature	Value
Stroke	5 mm...300 mm
Piston diameter	50 mm
Based on standard	ISO 21287
Cushioning	Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning
Mounting position	Any
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch
Variants	EX protection approval (ATEX) Advancing stroke adjustment Through piston rod Heat-resistant seals max. 120°C Laser etched rating plate
Protection against torque/guide	Guide rod with yoke
Operating pressure	0.1 MPa...1 MPa 1 bar...10 bar
Mode of operation	Double-acting
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion 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 dust	II 2D
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ignition protection type for dust	Ex h IIIC T120°C Db
Explosion ambient temperature	-20°C <= Ta <= +60°C
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]

Feature	Value
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	2 - Moderate corrosion stress
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Ambient temperature	-20 °C...120 °C
Impact energy in end positions	1 J
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	1057 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	1178 N
Pneumatic connection	G1/8
Note on materials	RoHS compliant
Material collar screws	Steel
Material cover	Anodised wrought aluminium alloy
Material seals	TPE-U(PUR)
Material end plate	Anodised wrought aluminium alloy
Material piston rod	High-alloy steel
Material cylinder barrel	Smooth-anodised wrought aluminium alloy