## **Compact cylinder ADNGF-20- -**Part number: 537125



## **Data sheet**

Piston diameter 20 mm   Based on standard ISO 21287   Cushioning Elastic cushioning rings/plates at both ends   Self-adjusting pneumatic end-position cushioning optional   Design Piston   Position detection Via proximity switch   Variants EX protection approval (ATEX)   Through piston rod Heat-resistant seals max. 120°C   Laser etched rating plate Guide rod with yoke   Opperating pressure 0.15 MPa1 MPa   Mode of operation Double-acting   CE mark (see declaration of conformity) To EU Explosion Protection Directive (ATEX)   Through piston rod Heat-resistant seals max. 120°C   Laser etched rating plate Guide rod with yoke   Operating pressure 0.15 MPa1 MPa   1.5 bar10 bar Double-acting   CE mark (see declaration of conformity) To EU Explosion Protection Directive (ATEX)   UKCA marking (see declaration of conformity) To EU Explosion Protection Directive (ATEX)   Zone 1 (ATEX) Zone 1 (ATEX)   Zone 2 (ATEX) Zone 2 (ATEX)   Zone 2 (ATEX) Zone 2 (ATEX)   Zone 2 (ATEX) Zone 2 (ATEX)	Feature	Value
Based on standard ISO 21287   Cushioning Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning   Mounting position optional   Design Piston Piston rod Profile barrel   Position detection Via proximity switch   Variants EX protection approval (ATEX) Through piston rod Heat-resistant seals max. 120°C Laser etched rating plate   Operating pressure 0.15 MPa1 MPa 1.5 bar10 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 Directive (ATEX) Cone 1 (UKEX) Zone 1 (UKEX) Zone 2 (ATEX)   Zone 1 (ATEX) Zone 2 (ATEX) Zone 1 (ATEX) Zone 2 (ATEX)   Zone 2 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX)   ATEX category gas II 20 Explosion ignition protection type for gas   Explosion ignition protection type for dust Exh IIIC T4 Gb Explosion ambient temperature	Stroke	3 mm200 mm
Cushioning   Elastic cushioning rings/plates at both ends Self-adjusting pneumatic end-position cushioning     Mounting position   optional     Design   Piston Piston rod Profile barrel     Position detection   Via proximity switch     Variants   EX protection approval (ATEX) Through piston rod Heat-resistant seals max. 120°C Laser etched rating plate     Protection against torque/guide   Guide rod with yoke     Operating pressure   0.15 MPa1 MPa 1.5 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   Zone 1 (ATEX) Zone 2 (ATEX	Piston diameter	20 mm
Self-adjusting pneumatic end-position cushioning     Mounting position   optional     Design   Piston Profile barrel     Position detection   Via proximity switch     Variants   EX protection approval (ATEX) Through piston rod Heat-resistant seals max. 120°C Laser etched rating plate     Protection against torque/guide   Guide rod with yoke     Operating pressure   0.15 MPa1 MPa 1.5 bar10 bar     Mode of operation   Double-acting     CE mark (see declaration of conformity)   To EU Explosion Protection Directive (ATEX)     UXCA 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 2 (ATEX) Zone 2 (ATEX)     ATEX category gas   II 2G     ATEX category dust   II 2G     ATEX category dust   II 2D     Explosion ignition protection type for dust   Exh IIIC T120°C Db     Explosion ambient temperature   -20°C <= Ta <= +60°C	Based on standard	ISO 21287
Design Piston   Position detection Via proximity switch   Variants EX protection approval (ATEX)   Through piston rod Heat-resistant seals max. 120°C   Laser etched rating plate Guide rod with yoke   Operating pressure 0.15 MPa1 MPa   1.5 bar10 bar Double-acting   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 Zone 1 (ATEX)   Zone 2 (ATEX) Zone 2 (ATEX)   Zone 2 (UKEX) Zone 2 (UKEX)   Zone 2 (UKEX) Zone 2 (UKEX)   Zone 2 (UKEX) Zone 2 (WEX)   Zone 2 (UKEX) Zone 2 (WEX)   Zone 2 (WEX)	Cushioning	
Piston rod Profile barrelPosition detectionVia proximity switchVariantsEX protection approval (ATEX) Through piston rod Heat-resistant seals max. 120°C Laser etched rating plateProtection against torque/guideGuide rod with yokeOperating pressure0.15 MPa1 MPa 1.5 bar10 barMode of operationDouble-actingCE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL 0b (GB) EPL 6b (GB)Explosion protectionZone 1 (ATEX) Zone 2 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 20 (ATEX) Zone 20 (ATEX) ZO	Mounting position	optional
VariantsEX protection approval (ATEX) Through piston rod Heat-resistant seals max. 120°C Laser etched rating plateProtection against torque/guideGuide rod with yokeOperating pressure0.15 MPa1 MPa 1.5 bar10 barMode of operationDouble-actingCE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Db (GB) EPL Db (GB)Explosion protectionZone 1 (ATEX) Zone 2 (ATEX) Zone 2 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) 	Design	Piston rod
Through piston rod Heat-resistant seals max. 120°C Laser etched rating plateProtection against torque/guideGuide rod with yokeOperating pressure0.15 MPa1 MPa 1.5 bar10 barMode of operationDouble-actingCE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Db (GB)Explosion protectionZone 1 (ATEX) Zone 2 (ATEX)Zone 1 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	Position detection	Via proximity switch
Operating pressure0.15 MPa1 MPa 1.5 bar10 barMode of operationDouble-actingCE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) ZON	Variants	Through piston rod Heat-resistant seals max. 120°C
1.5 bar10 barMode of operationDouble-actingCE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) 	Protection against torque/guide	Guide rod with yoke
CE mark (see declaration of conformity)To EU Explosion Protection Directive (ATEX)UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T4 GbExplosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	Operating pressure	
UKCA marking (see declaration of conformity)To UK EX instructionsExplosion protection certification outside the EUEPL Db (GB) EPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX)Zone 1 (UKEX) Zone 2 (ATEX)Zone 2 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T4 GbExplosion ambient temperature-20°C <= Ta <= +60°C	Mode of operation	Double-acting
Explosion protection certification outside the EUEPL Db (GB) EPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T4 GbExplosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
Explosion protectionEPL Gb (GB)Explosion protectionZone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T4 GbExplosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	UKCA marking (see declaration of conformity)	To UK EX instructions
Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)ATEX category gasII 2GATEX category dustII 2DExplosion ignition protection type for gasEx h IIC T4 GbExplosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	Explosion protection certification outside the EU	
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	Explosion protection	Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX)
Explosion ignition protection type for gasEx h IIC T4 GbExplosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	ATEX category gas	ll 2G
Explosion ignition protection type for dustEx h IIIC T120°C DbExplosion ambient temperature-20°C <= Ta <= +60°C	ATEX category dust	II 2D
Explosion ambient temperature-20°C <= Ta <= +60°C	Explosion ignition protection type for gas	Ex h IIC T4 Gb
	Explosion ignition protection type for dust	Ex h IIIC T120°C Db
Operating medium Compressed air to ISO 8573-1:2010 [7:4:4]	Explosion ambient temperature	-20°C <= Ta <= +60°C
	Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]

## **FESTO**

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 °C120 °C
Impact energy in end positions	0.2 J
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	141 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	188 N
Pneumatic connection	M5
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