



Data sheet

Feature	Value
Stroke	1 mm2800 mm
Piston diameter	125 mm
Piston rod thread	M27x2 M16
Based on standard	ISO 15552
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	ISO 15552
Piston-rod end	Male thread Female thread
Design	Piston Piston rod Profile barrel
Position detection	Via proximity switch
Variants	For unlubricated operation Clamping unit attached End-position locking at both ends End-position locking with piston rod in retracted position End-position locking with piston rod in advanced position Increased chemical resistance Bellows on bearing cap Hard scraper Extended male piston rod thread Piston rod with female thread Extended piston rod Low friction for balancer applications Metal scraper With protection against rotation Uniform, slow movement Low friction Through piston rod Heat-resistant seals max. 120°C Sensor slots on 3 profile sides Temperature range 0 to 150°C Temperature range -40 to 80°C Piston rod at one end

Mode of operation clamping unit Advancing Static Released through compressed air Frictional clamping with spring force Static holding force of clamping unit Asial backlash clamping unit Lismm Clamping unit release pressure 0.3 MPa 3.00 N Adial backlash clamping unit 1.8 mm Clomping pressure 0.005 MPa1 MPa 0.005 ba1.0 bar Mode of operation Double-acting Cemark (see declaration of conformity) IDEC Bark (see declaration of conformity)	Feature	Value
Axial backlash clamping unit Clamping unit release pressure 0,3 MPa 3 bar Operating pressure 0,005 MPa1 MPa 0,005 bar10 bar Mode of operation CE mark (see declaration of conformity) To EU Explosion Protection Directive (ATEX) USKC marking (see declaration of conformity) Explosion protection Zone 1 (ATEX) Zone 1 (MEX) Zone 1 (MEX) Zone 2 (ATEX)	Mode of operation clamping unit	Advancing Static Released through compressed air
Clamping unit release pressure 0.3 MPa 3 bar Operating pressure 0.005 MPa1 MPa 0.05 bar10 bar Mode of operation CE mark (see declaration of conformity) To EU Explosion Protection Directive (ATEX) UKCA marking (see declaration of conformity) To UK EX instructions Explosion protection Explosion protection Explosion protection certification outside the EU Explosion protection protection possible (in which case lubricated operation will always be required) Operating medium Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) Labs (PWIS) conformity VDMA24364-81/82-1 VDMA24364-81/82-1 VDMA24364-0 and III Ambient temperature 4.00 *C150 *C Limpact energy in end positions 1.651,3.3 Cushioning length 0. omm45 mm Max. torque for protection against torsion Theoretical force at 0.6 MPa (6 bar, 87 ps), return stroke 6881 N. Theoretical force at 0.6 MPa (6 bar, 87 ps), advance stroke 6881 N. Theoretical force at 0.6 MPa (6 bar, 87 ps), advance stroke 6881 N7363 N Additional weight per piston rod extension of 10 mm 41 g Type of mounting Via female thread With accessories Ethier: Preumatic connection G1/2 Note on materials Material piston seel Material piston seel Material piston rod Material	Static holding force of clamping unit	7500 N
Operating pressure 0.005 MPa1 MPa 0.05 bar1 Dear 0.05 bar	Axial backlash clamping unit	1.8 mm
Mode of operation Double-acting	Clamping unit release pressure	
EE mark (see declaration of conformity) UKCA marking (see declaration of conformity) Explosion protection Explosion protection Zone 1 (MEX) Zone 1 (MEX) Zone 2 (MEX) Zone	Operating pressure	
UKCA marking (see declaration of conformity) Explosion protection Zone 1 (ATEX) Zone 2 (ATEX) Zone	Mode of operation	Double-acting Double-acting
Explosion protection Zone 1 (ATEX) Zone 1 (JUKEX) Zone 2 (ATEX) Explosion protection certification outside the EU Explosion protection possible (in which case lubricated operation will always be required) Corrosion resistance class CRC 2 - Moderate corrosion stress LABS (PWIS) conformity VDMA24 364 81/82-L VDMA24 364 20ne III Ambient temperature 4 o °C150 °C Impact energy in end positions 1.65 J3.3 J Cushioning length O mm45 mm Max. torque for protection against torsion Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N	CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
Zone 1 (UKEX) Zone 21 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 22 (ATEX) Zone 23 (ATEX) Zone 23 (ATEX) Zone 24 (ATEX) Zone 26 (ATEX) Zone 26 (ATEX) Zone 27 (ATEX) Zone 27 (ATEX) Zone 27 (ATEX) Zone 28 (ATEX) Zone 28 (ATEX) Zone 29 (ATEX) Zone 20 (ATEX) Zone 21 (ATEX) Zone	UKCA marking (see declaration of conformity)	To UK EX instructions
EPL 6b (GB) 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 2 - Moderate corrosion stress 3 - high corrosion stress LABS (PWIS) conformity VDMA24364-81/B2-L VDMA24364-8		Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (ATEX) Zone 21 (UKEX) Zone 22 (ATEX)
Note on operating and pilot medium Lubricated operation possible (in which case lubricated operation will always be required) 2 - Moderate corrosion stress 3 - high corrosion stress 3 - high corrosion stress 3 - high corrosion stress 40 °C150 °C Impact energy in end positions 1.65 3 3 Cushioning length 0 mm45 mm Max. torque for protection against torsion 3 Nm Theoretical force at 0.6 MPa (6 bar, 87 ps), return stroke 40 °C150 °C May additional weight per piston rod extension of 10 mm 41 g Type of mounting Via female thread With accessories Either: Pneumatic connection G1/2 Note on materials Raterial cover Die-cast aluminium, coated Material spring Material piston seal Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy stainless steel Material piston rod	Explosion protection certification outside the EU	` '
always be required) Corrosion resistance class CRC 2 - Moderate corrosion stress 3 - high corrosion stress LABS (PWIS) conformity VDMA24364-B1/B2-L VDMA24364-B1/B2-L VDMA24364 zone III Ambient temperature 40 °C150 °C Impact energy in end positions 1.65 33 Cushioning length 0 mm45 mm Max. torque for protection against torsion 3 Nm Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N7363 N Additional weight per piston rod extension of 10 mm 63 g Additional weight per piston rod extension of 10 mm 41 g Type of mounting Via female thread With accessories Either: Pneumatic connection 61/2 Pneumatic connection 61/2 Material spring AMB-compliant Material spring Spring steel Material piston seal Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy stainless steel Material cylinder barrel Material lourd Material lourd Material bearing Material bearing Material bearing Material bearing Material polymer compound		,
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Impact energy in end positions 1.65 J3.3 J Cushioning length 0 mm45 mm 3 Nm Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke 6881 N. Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke 6881 N7363 N Additional weight per piston rod extension of 10 mm 63 g Additional weight per piston rod thread extension of 10 mm 7 ype of mounting Via female thread With accessories Either: Pneumatic connection 80 H2-compliant Material cover Die-cast aluminium, coated Material piston rod Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy stainless steel Material cylinder barrel Material bearing Material bearing Material bearing Material bearing Material polymer compound	LABS (PWIS) conformity	· · · · · · · · · · · · · · · · · · ·
Cushioning length Max. torque for protection against torsion Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke Additional weight per piston rod extension of 10 mm Additional weight per piston rod thread extension of 10 mm Additional weight per piston rod thread extension of 10 mm Type of mounting Via female thread With accessories Either: Pneumatic connection Atterial cover Die-cast aluminium, coated Material piston seal Material piston rod Material piston rod Material cylinder barrel Material cylinder barrel Material paring Material paring Material piston Material paring Material paring Material piston rod Material cylinder barrel Material paring Material paring Material paring Material paring Material paring Material piston Material paring Material piston rod Material piston Materia	Ambient temperature	-40 °C150 °C
Max. torque for protection against torsion Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke 6881 N Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke Additional weight per piston rod extension of 10 mm Additional weight per piston rod thread extension of 10 mm Type of mounting Via female thread With accessories Either: Pneumatic connection 61/2 Note on materials Material cover Material spring Material piston Material piston rod Material piston rod Material piston rod Material cylinder barrel Material cylinder barrel Material bearing Material bearing Material polymer compound Material polymer compound	Impact energy in end positions	1.65 J3.3 J
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke Additional weight per piston rod extension of 10 mm Additional weight per piston rod thread extension of 10 mm Type of mounting Via female thread With accessories Either: Pneumatic connection G1/2 Note on materials Material cover Material piston seal Material piston rod Material piston rod Material cylinder barrel Material cylinder barrel Material bearing Material bearing Material bearing Material polymer compound Material polymer compound	Cushioning length	0 mm45 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke Additional weight per piston rod extension of 10 mm Additional weight per piston rod thread extension of 10 mm 41 g Type of mounting Via female thread With accessories Either: Pneumatic connection G1/2 Note on materials Material cover Material spring Material piston seal Material piston Material piston Material piston rod Material piston rod Material cylinder barrel Material cylinder barrel Material nut Material bearing Material bearing Bronze Metal polymer compound	Max. torque for protection against torsion	3 Nm
Additional weight per piston rod extension of 10 mm Additional weight per piston rod thread extension of 10 mm Yia female thread With accessories Either: Pneumatic connection G1/2 Note on materials RoHS-compliant Material cover Die-cast aluminium, coated Material piston seal Material piston seal Material piston rod Material piston rod Material cover Material cover Material piston rod Material piston piston piston Material piston piston piston Material piston piston piston Material piston piston piston Material piston piston Material piston piston Material piston piston Material pi	Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	6881 N
Additional weight per piston rod thread extension of 10 mm Type of mounting Via female thread With accessories Either: Pneumatic connection G1/2 Note on materials RoHS-compliant Material cover Die-cast aluminium, coated Material spring Spring steel Material piston seal FPM Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy steel High-alloy stainless steel Material nut Material bearing Material bearing Bronze Metal polymer compound	Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	6881 N7363 N
Type of mounting Via female thread With accessories Either: Pneumatic connection G1/2 Note on materials RoHS-compliant Material cover Die-cast aluminium, coated Material spring Spring steel Material piston seal FPM Material piston wought aluminium alloy Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy stainless steel Material rout Material rout Material cylinder barrel Material nut Galvanised steel Material bearing Bronze Metal polymer compound	Additional weight per piston rod extension of 10 mm	63 g
With accessories Either: Pneumatic connection G1/2 Note on materials RoHS-compliant Material cover Die-cast aluminium, coated Material spring Spring steel Material piston seal FPM Material piston Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy stainless steel Material cylinder barrel Material nut Material bearing Bronze Metal polymer compound	Additional weight per piston rod thread extension of 10 mm	41 g
Note on materials Material cover Die-cast aluminium, coated Material spring Spring steel Material piston seal Material piston Material piston rod Material piston rod Material piston rod Material cylinder barrel Material out Material bearing Material bearing RoHS-compliant RoHS-compliant RoHS-compliant RoHS-compliant Mee-cast aluminium, coated FPM Wrought aluminium alloy High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy stainless steel Material cylinder barrel Smooth-anodised wrought aluminium alloy Galvanised steel Material polymer compound	Type of mounting	With accessories
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Material spring Material piston seal Material piston Material piston Material piston rod Material cylinder barrel Material cylinder barrel Material nut Material bearing Bronze Metal polymer compound	Note on materials	RoHS-compliant
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Material piston Material piston rod Material piston rod Material piston rod Material cylinder barrel Material cylinder barrel Material nut Material bearing Material bearing Material piston rod Wrought aluminium alloy High-alloy stainless steel, hard chrome-plated High-alloy stainless steel Material cylinder barrel Smooth-anodised wrought aluminium alloy Galvanised steel Material bearing Bronze Metal polymer compound	Material spring	Spring steel
Material piston rod High-alloy stainless steel, hard chrome-plated High-alloy steel High-alloy stainless steel Material cylinder barrel Smooth-anodised wrought aluminium alloy Material nut Galvanised steel Material bearing Bronze Metal polymer compound	Material piston seal	FPM
High-alloy steel High-alloy stainless steel Material cylinder barrel Material nut Galvanised steel Material bearing Bronze Metal polymer compound	Material piston	Wrought aluminium alloy
Material nut Material bearing Bronze Metal polymer compound	Material piston rod	High-alloy steel
Material bearing Bronze Metal polymer compound	Material cylinder barrel	Smooth-anodised wrought aluminium alloy
Metal polymer compound	Material nut	Galvanised steel
POM	Material bearing	
Material collar screws Galvanised steel	Material collar screws	Galvanised steel