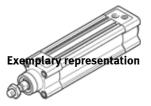
## standards-based cylinder DSBC-...-80Part number: 1463495 ★ Core product range





## **Data sheet**

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Stroke	1 2,800 mm
Piston diameter	80 mm
Piston rod thread	M20x1,5
	M12
Max. angular deflection of piston rod +/-	-0.45 0.45 deg
Based on the standard	ISO 15552
Cushioning	P: Flexible cushioning rings/plates at both ends
	PPS: Self-adjusting pneumatic end-position cushioning
	PPV: Pneumatic cushioning adjustable at both ends
Assembly position	Any
Conforms to standard	ISO 15552
Piston-rod end	Male thread
	Female thread
Design structure	Piston
	Piston rod
	Profile barrel
Position detection	For proximity sensor
Variants	For unlubricated operation
	Clamping unit attached
	End position locking at both ends
	End position locking, rear
	End-position locking, front
	Increased chemical resistance
	Bellows on bearing cap
	Hard wiper seal
	Extended male piston rod thread
	Female thread on piston rod
	Extended piston rod
	Metal wiper seal
	With protection against rotation
	Constant slow movement
	Low-friction
	Through piston rod
	Heat resistant seals, max. 120°C
	Sensor slots on 3 profile sides
	Temperature range 0 - 150 °C
	Temperature range -40 - 80 °C
	Single-ended piston rod
	Low friction for balancer applications
Mode of operation of clamping unit	Retracting
	Advancing
	Static
	Released through compressed air
	Frictional clamping via spring force



Static holding force of clamping unit  Alla backlash of Lamping unit elease prossure  O. 3 MPa  Jana Mode of operation of end-position locking Released through compressed air  Roll of operation of end-position locking Released through compressed air  Static holding force of end-position locking 1.5 mm  Unlocking pressure (MPa) Locking pressur	Feature	Value
Clamping unit release pressure  3 bar  Mode of operation of end position locking  Positive locking by stop cylinder Released through compressed air  Static holding force of end-position locking  1.5 mm  Unlocking pressure (MPA)  1.5 bar  Unlocking pressure (MPA)  1.6 Unlocking pressure (MPA)  1.7 List bar  Unlocking pressure (MPA)  1.8 List bar  1.9 List bar	Static holding force of clamping unit	5,000 N
Same   Made of operation of end-position locking   Positive locking by stop cylinder   Released through compressed air   Scatch holding force of end-position locking   5,000 N   Asia backlash of end-position locking   1.5 mm	Axial backlash of clamping unit	0.8 mm
Mode of operation of end position locking   Positive locking by stop cylinder   Released through compressed air   Static holding force of end position locking   5,000 N   Availa backlash of end-position locking   1.5 mm   Unlocking pressure (MPa)   1-0.15 MPa   Unlocking pressure (MP	Clamping unit release pressure	0.3 MPa
Released through compressed air  Statch holding force of end-position locking  5.000 N  Avail backbash of end position locking  1.5 mm  Unlocking pressure (MPa)  Unlocking pressure  2-0.15 MPa  Unlocking pressure  3-1.5 bar  Locking pressure  4-0.5 bar  Operating pressure MPA  OoS 1.2 MPA  Operating pressure MPA  I DO  EXTR. Category Obst  I DO  ATEX. Category Obst  I DO  ATEX. Category Obst  Exh INCT 1.2 MC Db  Explosion ignition protection type Gas  Exh INCT 1.2 MC Db  Explosion ignition protection type Gas  Exh INCT 1.2 MC Db  Explosion protection type Dust  Exh INCT 1.2 MC Db  Explosion protection of type Dust  Exh INCT 1.2 MC Db  Exh INCT 1.2 MC Db  Operating medium  Compressed air in accordance with ISO8573 1:2010[7:4:4]  Note on operating and pilot medium  Uniforated operating opsible (subsequently required for further operation)  Corrosion resistance classification CRC  2. Mederate corosion stress  3. High corosion stress  3. High corosion stress  VMAA26364 20ne III  Ambient temperature  4-0 150 °C  Impact energy in end positions  Oo 1.4 II  Oo 31 mm  Max. torque for protection against rotation  3 Mm  Theoretical force at O.6 MPa (bas, 87 ps), advance  Operating length  Max. torque for protection against rotation  3 Mm  Theoretical force at O.6 MPa (bas, 87 ps), advance  Operating length  Max. torque for protection against rotation  4 Mounting type  with internal (female) thread  with accessories  Optional  Protection Torce at O.6 MPa (bas, 87 ps), advance  Operating length  Max. torque for protection ag		-   -   -   -   -   -   -   -   -   -
Static holding force of end position locking  1.5 mm  Unlocking pressure (MPa)  Uoking pressure (MPa)  Operating pressure (MPa)  It of UKE Kinstructions  It DE United the explosion protection (ATEX)  It Obligation (ATEX)  It O	Mode of operation of end-position locking	
Axial backlash of end-position locking		- ,
Unlocking pressure (MPa)  Unlocking pressure (MPa)  Unlocking pressure (MPa)  Uoking pressure (MPa)  Operating pressure (M		•
Unlocking pressure		
Locking pressure (MPa)  Operating pressure MPa  Operating measure  Operating measure  Operating MPa  To UK EX Instructions  ATEX category Gas  Explosion grittion protection type Gas  Explosion protection certification outside the EU  Explosion protection reprotection type Gas  Explosion protection reprotection certification outside the EU  Explosion protection reprotection reprotection type Gas  Explosion protection reprotection reprotection the protection reprotection reprot		
Locking pressure  (a 0.5 bar		-
Operating pressure MPA Operating pressure Operating operation Operating pressure Operating operation Operating operation Operating operation Operating operation Operating medium Operating medium Operating medium Operating and pilot medium Operating and pilot medium Operating operation Operation Operating operation O		
Operating pressure  Mode of operation  CE mark (see declaration of conformity)  TO WEX Instructions  ATEX category Gas  ATEX category Oust  Explosion ignition protection type Gas  Explosion ignition protection type Gas  Explosion ignition protection type Gas  Explosion ignition protection type Dust  Explosion ignition protection type Dust  Explosion ignition protection type Ust  Explosion ignition protection type Ust  Explosion ignition protection certification outside the EU  Explosion protection certification outside the EU  EPL Db (GB)  EPL Db (GB)  EPL Cb (GB)  Operating medium  Compressed air in accordance with ISO8573-1:2010 [7:4:4]  Note on operating and pilot medium  Lubricated operation possible (subsequently required for further operation)  Operating medium  Corrosion resistance classification CRC  2 - Moderate corrosion stress  3 - High corrosion stress  PWIS conformity  VDMA2/364-B1/82-L  VDMA2/364-B		
Mode of operation         double-acting           CE mark (see declaration of conformity)         10 EU directive explosion protection (ATEX)           JRCA category Gas         II 26           ATEX category Dust         II 20           Explosion ignition protection type Gas         Ex h IIC T120° Cb           Explosion ignition protection type Ust         Ex h IIC T120° Cb           Explosion proof ambient temperature         20°C ← Ta ← +60°C           Explosion proof ambient temperature         20°C ← Ta ← +60°C           Explosion protection certification outside the EU         FPL Db GaB           Epcl Lob (GB)         EPL Gb (GB)           Operating medium         Compressed air in accordance with ISO8573-1:2010 [7:4:4]           Note on operating and pilot medium         Lubricated operation possible Gubsequently required for further operation apperation.           Corrosion resistance classification CRC         2 - Moderate corrosion stress           3 - High corrosion stress         3 - High corrosion stress           4 - Ly (MAZA364 20°C)         3 - High corrosion stress           9 - Will Sconformity         VDMAZA364 20°C III           Ambient temperature         40 - 1.50° C           Impact energy in end positions         0.9 · 1.8 I           Cushioning length         0 ·		-
CE mark (see declaration of conformity)		
UKCA marking (See declaration of conformity)  To UK EX instructions  ATEX category Gas  II 20  ATEX category Dust  Explosion ignition protection type Gas  Exh III CT 4 Gb  Explosion ignition protection type Bust  Explosion proof ambient temperature  Explosion protection certification outside the EU  Explosion protection outside the EU  Explosion protection outside the		_
ATEX category Gas ATEX category Dust ATEX category		
ATEX category Dust Explosion ignition protection type Gas Explosion ignition protection type Bust Explosion ignition protection type Dust Explosion proof ambient temperature Explosion proof ambient temperature Explosion protection certification outside the EU Explosion protection protection outside the EU Explosion protection protection outside the EU Explosion protection protection outside the EU Explosion protection possible (subsequently required for further operation) Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Corrosion resistance classification CRC 2. Moderate corrosion stress 3. High corros	, , , , , , , , , , , , , , , , , , ,	
Explosion ignition protection type Gas Explosion ignition protection type Dust Explosion protection protection type Dust Explosion protection certification outside the EU EPL Db (GB) EPL Cb (GB) Compressed air in accordance with ISO8573-1:2010 [7:4:4] Note on operating and pilot medium Lubricated operation possible (subsequently required for further operation) Corrosion resistance classification CRC 2 - Moderate corrosion stress 3 - High corrosion stress 3 - High corrosion stress 9WIS conformity VDMA24364-B1/82-L VDMA24364	_ ,	
Explosion ignition protection type Dust   Exh IIIIC T120°C Db		
Explosion-proof ambient temperature Explosion protection certification outside the EU Explosion protection certification outside the EU Explosion protection certification outside the EU EPL Db (GB) EPL Cb (GB)		·
EXPLOSION protection certification outside the EU  EPL Db (GB) EPL Cb (GB) EPL		
EPL Gb (GB)   Operating medium		
Lubricated operation possible (subsequently required for further operation)		
Lubricated operation possible (subsequently required for further operation)	Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Corrosion resistance classification CRC  2 - Moderate corrosion stress 3 - High corrosion stress  N DMA24364-81/B2-1  VDMA24364-20ne III  Ambient temperature  4-0 150 °C  Impact energy in end positions  0.9 1.8 J  Cushioning length  0 31 mm  Max. torque for protection against rotation  3 Nm  Theoretical force at 0.6 MPa (6 bar, 87 ps), retracting  2,721 N  Theoretical force at 0.6 MPa (6 bar, 87 ps), advance  2,721 3,016 N  Additional weight per piston rod extension of 10 mm  39 g  Additional weight per piston rod thread extension of 10 mm  22 g  With internal (female) thread with accessories  Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material cover  Die-cast aluminium, coated  Material spring  Spring steel High alloy steel, non-corrosive  HNBR  TPE-U(PU)  Clamping jaws clamping unit material  PROM  Piston end-position locking material  POM  Piston end-position locking material  POM  Piston end-position locking material  Material piston rod  Material piston rod  Material piston rod  Material piston rod  Material piston rod wiper seal  FPM  HNBR  TPE-U(PU)  Material piston rod wiper seal		Lubricated operation possible (subsequently required for further
3 - High corrosion stress  PWIS conformity  VDMA24364-81/82-1,  VDMA24364 zone III  Ambient temperature  40 150 °C  Impact energy in end positions  0.9 1.8 I  Cushioning length  0 31 mm  Max. torque for protection against rotation  Theoretical force at 0.6 MPa (6 bar, 87 ps), retracting  7,721 N  Theoretical force at 0.6 MPa (6 bar, 87 ps), advance  2,721 3,016 N  Additional weight per piston rod extension of 10 mm  39 g  Additional weight per piston rod thread extension of 10 mm  22 g  Mounting type  with internal (female) thread with accessories  Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material sorie  Material spring  Material spring  High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Material piston seal  FPM  HNBR  TPE-U(PU)  Clamping unit piston material  POM  Piston end-position locking material  POM  Piston end-position locking material  Material piston material  POM  Piston end-position locking material  Material piston rod  High-alloy steel, hard-ened  Material piston rod  High-alloy steel, hon-corrosive  High alloy steel, hon-corrosive  Material piston rod  High-alloy steel, hon-corrosive		operation)
PWIS conformity  VDMA24364-B1/B2-L  VDMA24364 zone III  Ambient temperature  40 150 °C  Impact energy in end positions  0.9 1.8    Cushioning length  0 31 mm  Max. torque for protection against rotation  Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting  2,721 N  Theoretical force at 0.6 MPa (6 bar, 87 psi), advance  2,721 3,016 N  Additional weight per piston rod extension of 10 mm  39 g  Additional weight per piston rod thread extension of 10 mm  22 g  Mounting type  with internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material sorie  Material spring  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Material piston seal  FPM HNBR TPE-U(PU)  Clamping unit piston material  POM  Piston end-position locking material  POM  Piston end-position locking material  POM  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel, non-corrosive  Material piston rod wiper seal  FPM HNBR TPE-U(PU)  Material piston rod wiper seal	Corrosion resistance classification CRC	2 - Moderate corrosion stress
Ambient temperature  Ado 150 °C  Impact energy in end positions  0.9 1.8 J  Cushioning length  0 31 mm  Max. torque for protection against rotation  3 Nm  Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting  2,721 N  Theoretical force at 0.6 MPa (6 bar, 87 psi), advance  Additional weight per piston rod extension of 10 mm  39 g  Additional weight per piston rod thread extension of 10 mm  39 g  Mounting type  with internal (female) thread with accessories Optional  Pneumatic connection  63/8  Materials note  Conforms to ROHS  Material cover  Die-cast aluminium, coated  Material spring  Spring steel High alloy steel, non-corrosive  Anodised wrought aluminium alloy  Material piston seal  FPM  HNRR  TPE-U(PU)  Clamping unit material  POM  Piston end-position locking material  Anderial piston material  POM  Material piston rod  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel, hon-corrosive  High alloy steel, hard chrome plated High alloy steel, hon-corrosive  Material piston rod wiper seal		3 - High corrosion stress
Ambient temperature  40 150 °C Impact energy in end positions  0.9 1.8 J Cushioning length  0 31 mm  Max. torque for protection against rotation  3 Nm Theoretical force at 0.6 MPa (6 bar, 87 ps), retracting 2,721 N. Theoretical force at 0.6 MPa (6 bar, 87 ps), advance Additional weight per piston rod extension of 10 mm 39 g Additional weight per piston rod thread extension of 10 mm 22 g Mounting type  with internal (female) thread with accessories Optional Pneumatic connection  G3/8 Materials note Conforms to RoHS Material cover Die-cast aluminium, coated High alloy steel, non-corrosive Clamping unit housing material Anodised wrought aluminium alloy Material piston seal  FPM HNBR TPE-U(PU)  Clamping unit piston material Poom Material piston material Poom Material piston rod High alloy steel, hardened Material piston rod Wrought Aluminium alloy Material piston rod High alloy steel, hard chrome plated High alloy steel, hon-corrosive FPM Material piston rod wiper seal  FPM Material piston rod wiper seal	PWIS conformity	,
Impact energy in end positions  Cushioning length  O 31 mm  Max. torque for protection against rotation  Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting  2,721 N  Theoretical force at 0.6 MPa (6 bar, 87 psi), advance  2,721 3,016 N  Additional weight per piston rod extension of 10 mm  39 g  Mounting type  With internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material spring  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Material piston seal  FPM  HNBR  TPE-U(PU)  Clamping unit piston material  PoM  Piston end-position locking material  Material piston  Material piston  Wrought Aluminium alloy  Material piston  Material piston rod  Material piston rod  Material piston rod  Material piston rod wiper seal  FPM  Material piston rod wiper seal		
Cushioning length  Max. torque for protection against rotation  Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting  Theoretical force at 0.6 MPa (6 bar, 87 psi), advance  Additional weight per piston rod extension of 10 mm  39 g  Additional weight per piston rod thread extension of 10 mm  22 g  Mounting type  With internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material spring  Spring steel High alloy steel, non-corrosive  Anodised wrought aluminium alloy  Material piston seal  FPM  HNBR  TPE-U(PU)  Clamping unit piston material  Brass  Clamping unit piston material  Material piston rod  Material piston rod wiper seal  FPM  High alloy steel, hardened  Material piston rod wiper seal  FPM  High alloy steel, hon-corrosive		
Max. torque for protection against rotation Theoretical force at 0.6 MPa (6 bar, 87 ps), retracting 2,721 N Theoretical force at 0.6 MPa (6 bar, 87 ps), advance Additional weight per piston rod extension of 10 mm 39 g Additional weight per piston rod thread extension of 10 mm 22 g Mounting type with internal (female) thread with accessories Optional Pneumatic connection G3/8 Materials note Conforms to RoHS Material spring Spring steel High alloy steel, non-corrosive Clamping unit housing material Anodised wrought aluminium alloy Material piston seal FPM HNBR TPE-U(PU) Clamping unit piston material PPM Piston end-position locking material Material piston Material piston Material piston rod Wrought Aluminium alloy Material piston rod Material piston rod Wrought Aluminium alloy Material piston rod FPM High alloy stael, hard chrome plated High alloy steel, hard chrome plated High alloy steel, hard chrome plated High alloy steel, non-corrosive FPM High alloy steel, non-corrosive	, -, -,	· · · · · · · · · · · · · · · · · · ·
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting Theoretical force at 0.6 MPa (6 bar, 87 psi), advance Additional weight per piston rod extension of 10 mm 39 g Additional weight per piston rod thread extension of 10 mm 22 g Mounting type with internal (female) thread with accessories Optional  Pneumatic connection G3/8 Materials note Conforms to RoHS Material spring Spring steel High alloy steel, non-corrosive Anodised wrought aluminium alloy Material piston seal FPM HNBR TPE-U(PU)  Clamping unit housing material POM Piston end-position locking material Material piston Material piston rod Material piston rod Material piston rod Wrought Aluminium alloy Material piston rod Material piston rod wiper seal  Material piston rod wiper seal  FPM HNBR Hrb, and chrome plated High alloy steel, hard chrome plated High alloy steel, non-corrosive		
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance 2,721 3,016 N  Additional weight per piston rod extension of 10 mm 39 g  Additional weight per piston rod thread extension of 10 mm 22 g  Mounting type with internal (female) thread with accessories Optional  Pneumatic connection G3/8  Materials note Conforms to RoHS  Material cover Die-cast aluminium, coated  Material spring Spring steel High alloy steel, non-corrosive  Clamping unit housing material Anodised wrought aluminium alloy  Housing end-position locking material Anodised wrought aluminium alloy  Material piston seal FPM  HNBR  TPE-U(PU)  Clamping jaws clamping unit material Brass  Clamping unit piston material POM  Piston end-position locking material Steel, hardened  Material piston word high-alloy stainless steel, hard chrome plated High alloy steel, non-corrosive		
Additional weight per piston rod extension of 10 mm  Additional weight per piston rod thread extension of 10 mm  Description of thread extension of 10 mm  22 g  Mounting type  with internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material cover  Die-cast aluminium, coated  Material spring  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Housing end-position locking material  Anodised wrought aluminium alloy  Material piston seal  FPM  HNBR  TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM  High alloy steel, non-corrosive		
Additional weight per piston rod thread extension of 10 mm  22 g  Mounting type  with internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material cover  Material spring  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Material piston material  PPM HNBR TPE-U(PU)  Steel, hardened  Material piston rod  Material piston rod wiper seal  Material piston rod wiper seal  Material piston rod wiper seal  FPM HNBR TPE-U(PU)  Steel, hardened  Material piston rod  Material piston rod wiper seal  Material piston rod wiper seal		
Mounting type  with internal (female) thread with accessories Optional  Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material cover  Die-cast aluminium, coated  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Housing end-position locking material  Anodised wrought aluminium alloy  Material piston seal  FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Material piston  Material piston  Material piston  Material piston rod  Material piston rod wiper seal  FPM  Material piston rod wiper seal  FPM  Material piston rod wiper seal		
with accessories Optional  Pneumatic connection G3/8  Materials note Conforms to RoHS  Material cover Die-cast aluminium, coated  Material spring Spring steel High alloy steel, non-corrosive  Clamping unit housing material Anodised wrought aluminium alloy  Housing end-position locking material Anodised wrought aluminium alloy  Material piston seal FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material Brass  Clamping unit piston material POM Piston end-position locking material POM Piston end-position locking material Material piston Material piston Material piston rod FPM HIGH HIGH HIGH HIGH HIGH HIGH HIGH HIG	- ' '	
Pneumatic connection G3/8  Materials note Conforms to RoHS  Material cover Die-cast aluminium, coated  Material spring Spring steel High alloy steel, non-corrosive  Clamping unit housing material Anodised wrought aluminium alloy  Housing end-position locking material Anodised wrought aluminium alloy  Material piston seal FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material Brass Clamping unit piston material POM Piston end-position locking material Material piston Material piston Material piston Material piston rod FPM HNBR TPE-U(PU)  Clamping unit piston material POM Piston end-position locking material Material piston Material piston FPM High alloy steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal FPM	initialiting type	
Pneumatic connection  G3/8  Materials note  Conforms to RoHS  Material cover  Die-cast aluminium, coated  Spring steel High alloy steel, non-corrosive  Clamping unit housing material  Anodised wrought aluminium alloy  Housing end-position locking material  Anodised wrought aluminium alloy  Material piston seal  FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Material piston oking material  Material piston  Migh-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM  Material piston rod wiper seal		
Materials note       Conforms to RoHS         Material cover       Die-cast aluminium, coated         Material spring       Spring steel High alloy steel, non-corrosive         Clamping unit housing material       Anodised wrought aluminium alloy         Housing end-position locking material       Anodised wrought aluminium alloy         Material piston seal       FPM HNBR TPE-U(PU)         Clamping jaws clamping unit material       Brass         Clamping unit piston material       POM         Piston end-position locking material       Steel, hardened         Material piston       Wrought Aluminium alloy         Material piston rod       high-alloy stainless steel, hard chrome plated         High alloy steel       High alloy steel, non-corrosive         Material piston rod wiper seal       FPM	Pneumatic connection	'
Material spring Spring steel High alloy steel, non-corrosive  Clamping unit housing material Anodised wrought aluminium alloy  Housing end-position locking material Anodised wrought aluminium alloy  Material piston seal FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material Brass  Clamping unit piston material POM Piston end-position locking material Material piston Wrought Aluminium alloy  Material piston rod high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM	Materials note	
High alloy steel, non-corrosive  Clamping unit housing material Anodised wrought aluminium alloy  Housing end-position locking material Anodised wrought aluminium alloy  Material piston seal FPM  HNBR  TPE-U(PU)  Clamping jaws clamping unit material Brass  Clamping unit piston material POM  Piston end-position locking material Steel, hardened  Material piston Wrought Aluminium alloy  Material piston rod high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal FPM	Material cover	Die-cast aluminium, coated
Clamping unit housing material  Housing end-position locking material  Anodised wrought aluminium alloy  Anodised wrought aluminium alloy  FPM  HNBR  TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated  High alloy steel  High alloy steel, non-corrosive  Material piston rod wiper seal  FPM	Material spring	Spring steel
Housing end-position locking material  Anodised wrought aluminium alloy  FPM  HNBR  TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated  High alloy steel  High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		
Material piston seal  FPM HNBR TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		
HNBR TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		<u> </u>
TPE-U(PU)  Clamping jaws clamping unit material  Brass  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM	Material piston seal	
Clamping jaws clamping unit material  Clamping unit piston material  POM  Piston end-position locking material  Material piston  Material piston rod  Material piston rod  Material piston rod  Material piston rod  Material piston rod wiper seal  Material piston rod wiper seal  POM  Wrought Aluminium alloy  high-alloy stainless steel, hard chrome plated  High alloy steel  High alloy steel, non-corrosive		
Clamping unit piston material POM Piston end-position locking material Steel, hardened  Material piston Wrought Aluminium alloy Material piston rod high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal FPM		
Piston end-position locking material  Material piston  Material piston rod  Material piston rod  Migh-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		
Material piston  Wrought Aluminium alloy  Material piston rod  high-alloy stainless steel, hard chrome plated  High alloy steel  High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		
Material piston rod high-alloy stainless steel, hard chrome plated High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM		•
High alloy steel High alloy steel, non-corrosive  Material piston rod wiper seal  FPM	·	· · · · · · · · · · · · · · · · · · ·
High alloy steel, non-corrosive  Material piston rod wiper seal FPM	imaterial piston rod	
Material piston rod wiper seal FPM		
	Material nicton rod winer coal	
	material pistori rod wiper seal	HNBR



Feature	Value
	PE
	TPE-U(PU)
Buffer seal material	FPM
	TPE-U(PU)
Cushion piston material	Aluminium
	POM
Material cylinder barrel	Smooth-anodised wrought aluminium alloy
Material nut	steel, galvanized
Rod wiper seal material	Brass
	PTFE reinforced
Material bearing	Bronze
	Metal polymer compound
	POM
Material of flange screw	steel, galvanized
Material bellows	NBR
	PA