K Ø160 - 200

Pneumatic cylinders Ø 160-200 mm according to ISO 15552

NEW DESIGN of end caps in die-cast aluminium alloy.

UNIVER pneumatic cylinders which comply with ISO 6431 and VDMA 24562 standards, take advantage of the improvements arising from the research of the last years; infact, they can fully satisfy the most demanding users.
The operation with non-lubricated air is worth mentioning, since it allows their use in many industrial sectors while protecting the environment. The strong construction and the selected components contribute to giving them excellent operating features and a very long life.

TECHNICAL CHARACTERISTICS

Ambient temperature	-20 ÷ 80 °C
Fluid	filtered air with or not lubrication
Working pressure	1,5 ÷10 bar
Bore size	Ø160 - 200 mm
Cushion	adjustable pneumatic cushion in both sides

CONSTRUCTIVE CHARACTERISTICS

End caps	die-cast aluminium alloy
Barrel	aluminium anodized
Tie rod	zinc-plated steel
Piston	die-cast aluminium alloy
Piston rod guide	acetal resin
Piston rod	C43 chromium -plated steel
	upon request stainless steel (AISI 303)
Piston rod seal	NBR
Piston seal	nitrile rubber self lubricating
Magnet ring	plastoferrite

> Upon request non magnetic version with VITON® seal
(Max Temperature 110 °C)

CODIFICATION KEY

K	2	0	0	1	6	0	0	1	0	0	M
1	2	3		4			5				6

1 Series
K = Ø 160 - 200 mm
Magnetic upon request

2 Type
1 = Stainless steel piston rod
2 = Chromium-plated piston rod

3 Version
00 = **D.E.** Standard piston rod
01 = **D.E.** Through piston rod

4 Bore size (mm)
160 = Ø160
200 = Ø200

5 Stroke

0025 = 25 mm	**0125** = 125 mm	**0250** = 250 mm	**0450** = 450 mm	**0900** = 900 mm
0050 = 50 mm	**0150** = 150 mm	**0300** = 300 mm	**0500** = 500 mm	**1000** = 1000 mm
0075 = 75 mm	**0160** = 160 mm	**0320** = 320 mm	**0600** = 600 mm	
0080 = 80 mm	**0175** = 175 mm	**0350** = 350 mm	**0700** = 700 mm	
0100 = 100 mm	**0200** = 200 mm	**0400** = 400 mm	**0800** = 800 mm	

6 Variant
M = Upon request magnetic version

D.E. = double acting

NEW

Stroke tolerances

	Z ≤ 500	501 ≤ Z ≤ 1.250
Ø	mm	mm
160	+4 - 0	+5 - 0
200	+4 - 0	+5 - 0

Theoretical forces **(N)** at different working pressure **(bar)**

Cushion

Ø	Surface area mm²		Working pressure bar					Working pressure bar					Lenght	Max kinetic energy
	Thrust	Traction	Thrust					Traction						
			2	4	6	8	10	2	4	6	8	10	mm	Nm
160	20096	18840	4019	8038	12058	16077	20096	3770	7540	11310	15080	18850	45	52
200	31400	30144	6280	12560	18840	25120	31400	6029	12058	18066	24115	30144	45	95

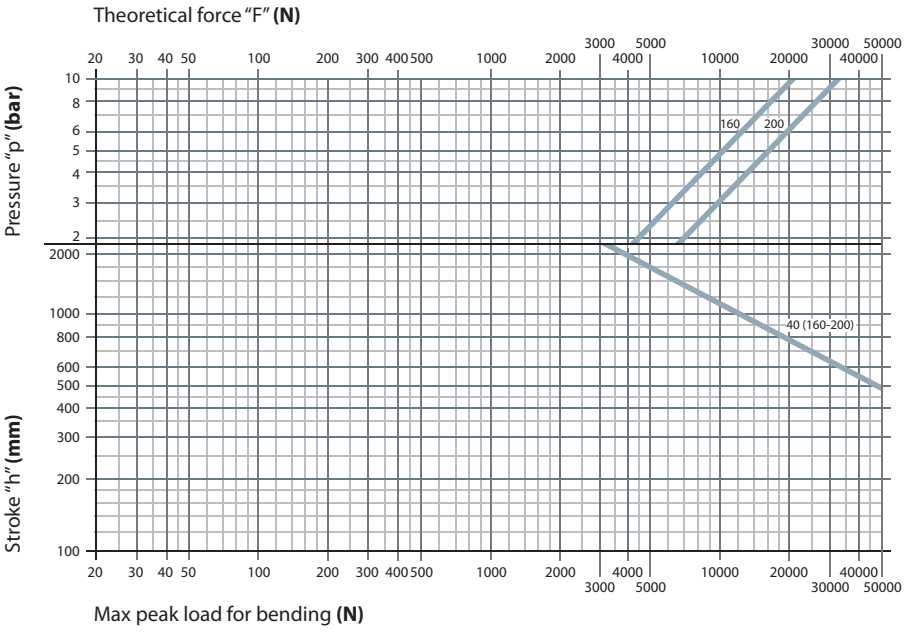
Standard cylinder mass

Ø	Stroke 0	Increase for mm stroke	Moving part-stroke 0	Increase for mm stroke
	g	g	g	g
160	14600	16,9	4020	9,9
200	16500	18,5	4780	9,9

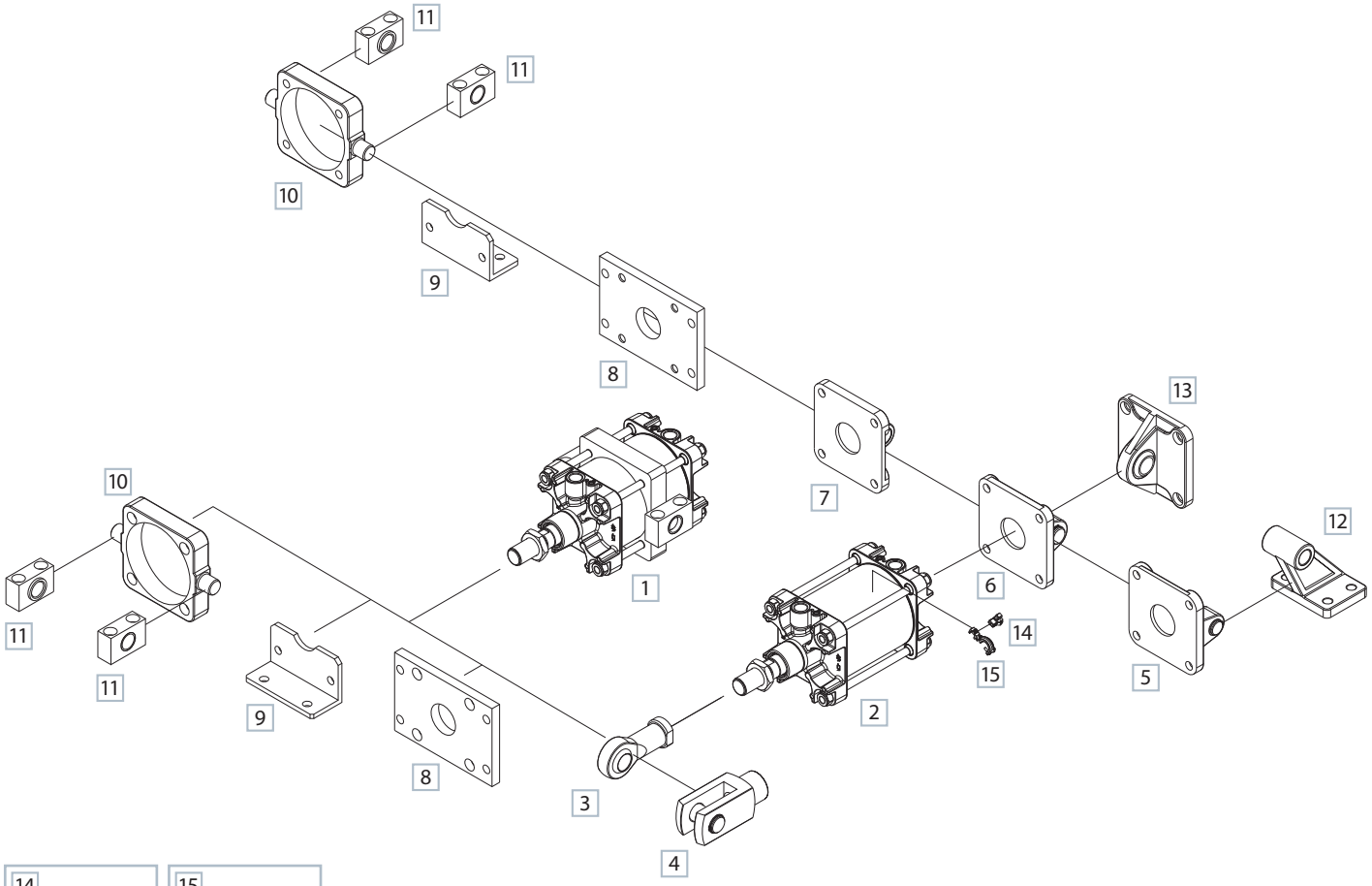
Through piston rod cylinder mass

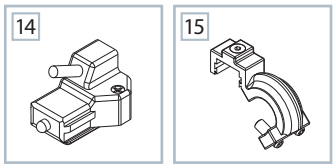
Ø	Stroke 0	Increase for mm stroke	Moving part-stroke 0	Increase for mm stroke
	g	g	g	g
160	16850	26,80	5940	19,8
200	19900	28,40	6800	19,8

Graph of theoretical forces/pressure
Graph of acceptable strokes depending on maximum peak load



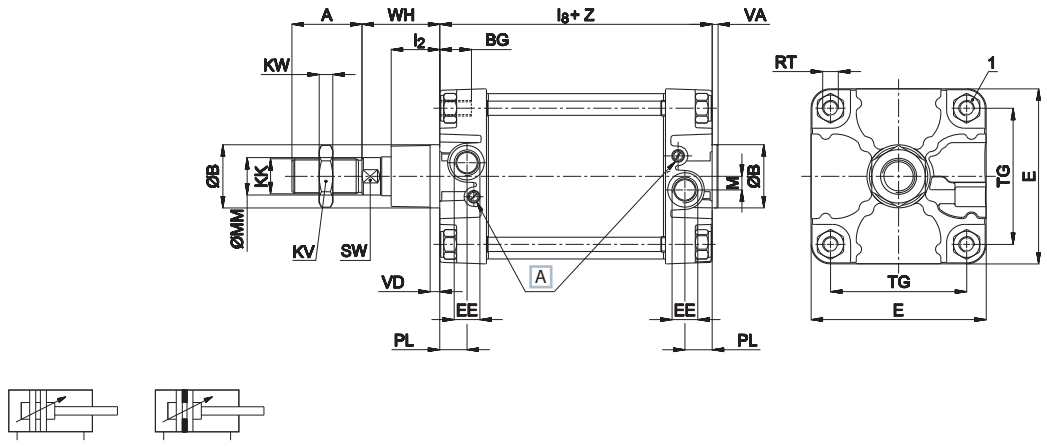
> Fixing



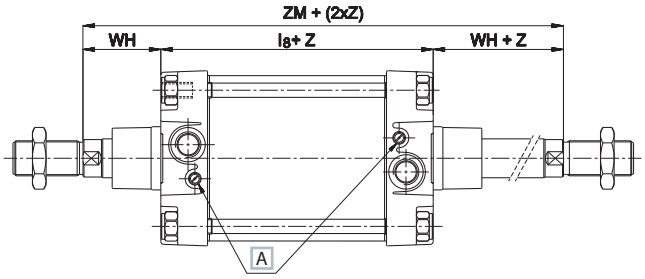


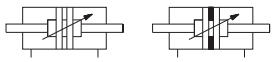
	DESCRIPTION	PART NO.
1	ISO cylinder with intermediate hinge	-
2	ISO cylinder	-
3	Articulated self-lubricating fork	**KF-17_ _ _**
4	Fork with clips DIN 71752	**KF-15_ _ _**
5	Female rear hinge with pin	**KF-10_ _ _A**
6	Narrow female rear hinge with pin	**KF-10_ _ _AS**
7	Male rear hinge	**KF-11_ _ _**
8	Front- rear flange	**KF-12_ _ _**
9	Foot bracket	**KF-13_ _ _**
10	Front-rear hinge	**KF-14_ _ _AP**
11	Support for front-rear-intermediate hinge	**KF-41_ _ _**
12	Counter hinge 90° ISO	**KF-19_ _ _CTA**
13	Articuled narrow counter-hinge	**KF-11_ _ _S**
14	Magnetic sensor	**DH-200**
15	Bracket for magnetic sensor	**DH-K160200**

Standard version



Through piston rod version





A Adjusting cushion screws Z = stroke

Ø	A(a)	B	BG	E	EE(b)	KK(a)	KV	KW	l2	l8		M
		e11								nom.	toll.	
160	72	65	25	180	G3/4	M36x2	55	14	50	180	±1,1	14
200	72	75	25	220	G3/4	M36x2	55	14	60	180	±1,1	14

Ø	MM	PL	RT	SW	TG		VA	VD	WH		ZM	1 (chiave)
					nom.	toll.			nom.	toll.		
160	40	28	M16	36	140	±1,1	6	9	80	±2,2	340	27
200	40	27	M16	36	175	±1,1	6	9	95	±2,2	370	27

(a) = A e KK dimension in according to ISO 4395 (b) = EE in according to ISO 228/1