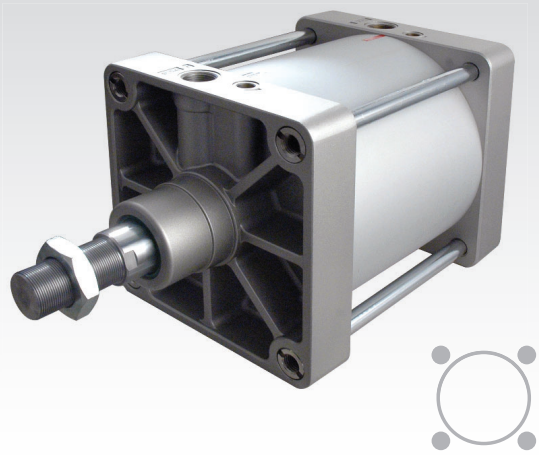
K 250/320

Pneumatic cylinders ISO 15552

- High payload series
- With aluminium tube and tie-rods
- High temperature seals available on request



Available ATEX version upon request

CE Ex II 2Gc IIC T5 II 2Dc T100°C

TECHNICAL CHARACTERISTICS

Working temperature	-20 ÷ 80 °C
Fluid	filtered air, with or without lubrication
Working pressure	1,5 ÷10 bar
Bore size	Ø160 - 200 mm
Cushioning	adjustable in both sides

CONSTRUCTIVE CHARACTERISTICS

End caps	die-cast aluminium (painted)
Barrel	anodized aluminium
Tie rod	zinc-plated steel
Piston	die-cast aluminium
Piston rod guide	acetal resin
Piston rod	chromium -plated steel (standard)
	stainless steel, rolled AISI 303
Piston rod scraper seals	nitrile rubber (NBR)
Piston seal	nitrile rubber (NBR)
Magnet	plasto-ferrite

CODIFICATION KEY

K	2	0	0	2	5	0	0	0	8	0		
1	2	3		4			5				6	7

1 Series

K = Ø 250/320 mm - ISO 15552 Pneumatic Cylinders

2 Type

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

3 Version

00 = **D.A.** Standard version
01 = **D.A.** Through piston rod

D.A. = Double acting

4 Bore (mm)

250 = Ø250
320 = Ø320

5 Stroke (mm)

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

6 Magnetic

M = Magnetic version

7 ATEX version

X = Atex (upon request)

See ATEX Catalogue for types and versions

Versions with high temperature seals (max 120°C) and version with low temperature seals (max -30°C) available upon request.

Stroke tolerances

Ø		
	mm	mm
250	+4 - 0	+5 - 0
320	+4 - 0	+5 - 0

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

Ø	Surface area mm²		Working pressure bar					Working pressure bar				
	Thrust	Traction	Thrust					Traction				
			2	4	6	8	10	2	4	6	8	10
250	49087	43850	9817	19635	29452	39270	49087	9770	17540	26310	34080	43850
320	80425	71144	16085	32170	48255	64340	80425	14029	28058	43066	57115	71144

Cushion

Length	Max kinetic energy absorption
mm	Nm
45	56
45	98

Mass - Standard cylinder

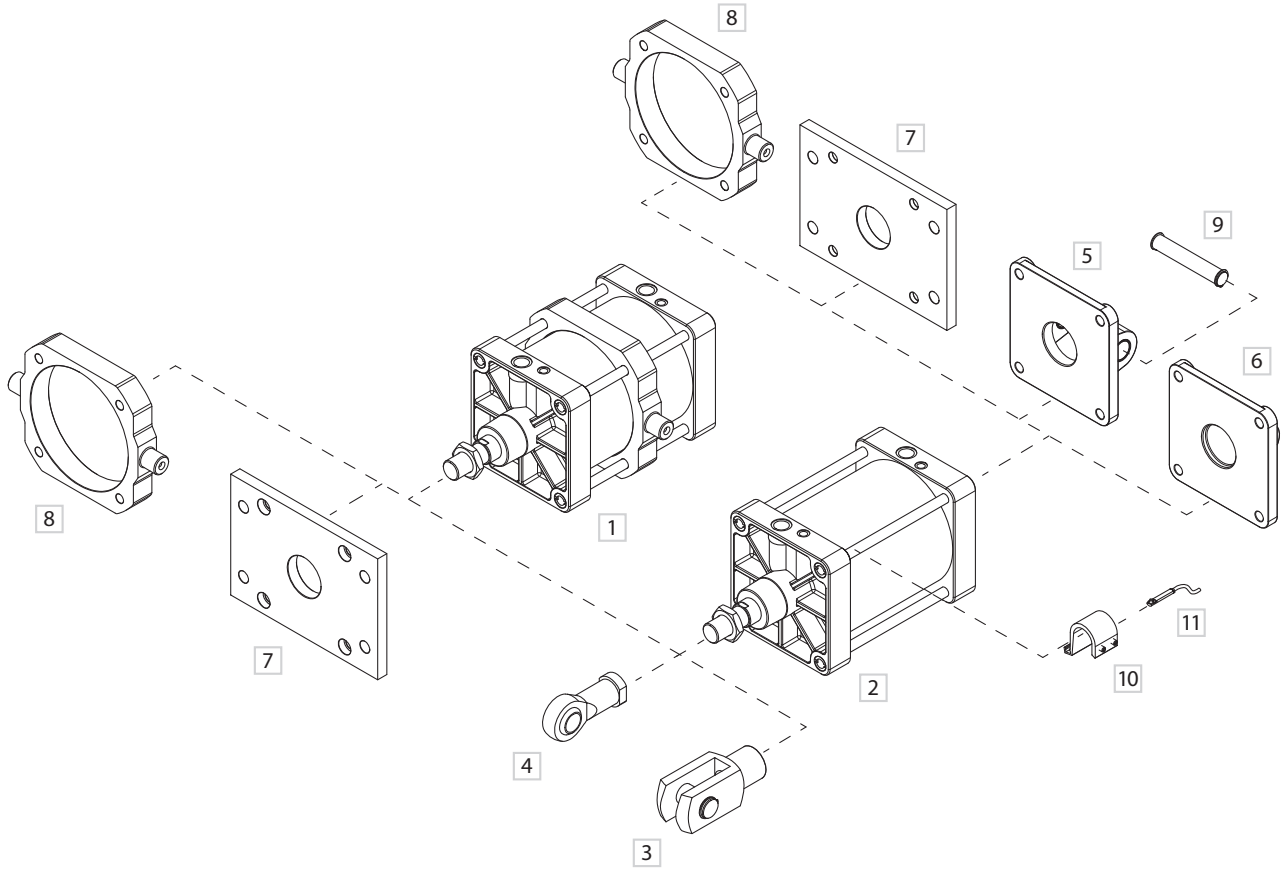
Ø	Cylinder - stroke 0	Increase per mm stroke	Moving element - stroke 0	Increase per mm stroke
	g	g	g	g
250	25830	65	6320	15
320	39100	226	7100	24

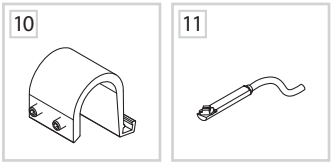
1

Mass - Through piston rod cylinder

Ø	Cylinder - stroke 0	Increase per mm stroke	Moving element - stroke 0	Increase per mm stroke
	g	g	g	g
250	28180	116	7300	15
320	40570	297	8200	24

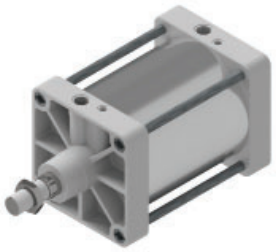
Fixing elements and accessories

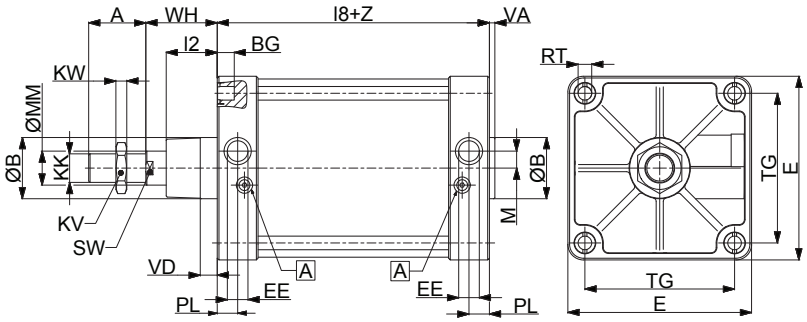




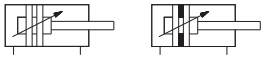
	DESCRIPTION	PART NO.
1	ISO cylinder with intermediate hinge	-
2	ISO cylinder	-
3	Female fork with pin	**KF-15_ _ _**
4	Articulated self-lubricating fork	**KF-17_ _ _**
5	Female rear hinge (ISO MP2)	**KF-10_ _ _ A**
6	Male rear hinge (ISO MP4)	**KF-11_ _ _**
7	Front- rear flange (ISO MF1-MF2)	**KF-12_ _ _**
8	ISO intermediate hinge (ISO MT4)	**KF-14_ _ _**
9	Pin for hinge (ISO MP2)	**KF-18_ _ _**
10	Sensor bracket	**DH-K_ _ _**
11	DF sensor	**DF-_ _ _**

Double acting standard version





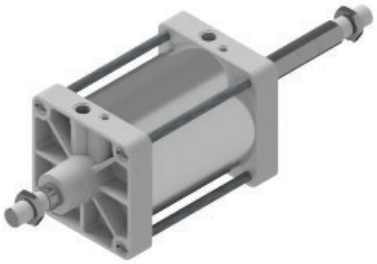
A Pneumatic cushioning adjusting screw

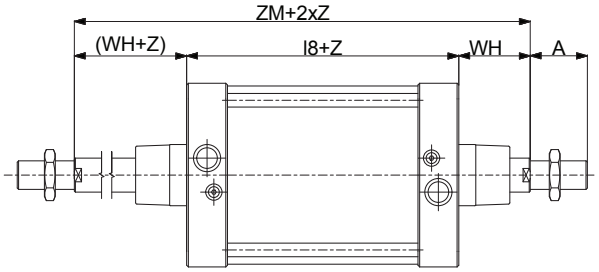


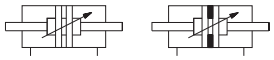
K100/200

For extended rod version add **WH+Z**(stroke) dimensions

Double acting through piston rod







K101/201

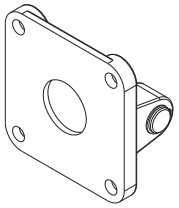
Z = Stroke

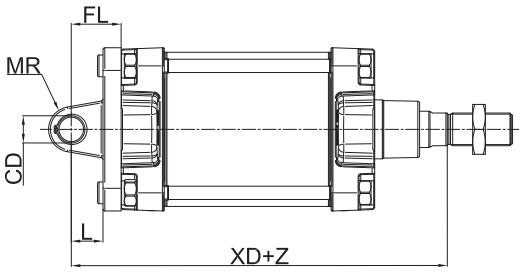
Ø	A(a)	B	BG	E	EE(b)	KK(a)	KV	KW	l2	l8		M	MM	PL	RT	SW	TG		VA	VD	WH		ZM
		e11																					
250	84	90	25	270	G1"	M42x2	65	16	75	200	±1,1	25	50	30	M20	46	220	±1,1	8	25	105	±2,2	410
320	96	100	28	350	G1"	M48x2	75	18	90	220	±1,1	35	63	30	M24	55	270	±1,1	10	25	120	±2,2	460

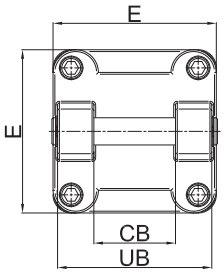
(a) = A and KK dimension according to ISO 4395 b) = EE dimension according to ISO 228/1

For all other dimensions please refer to the standard version
Other versions available on request

Female rear hinge (ISO MP2)





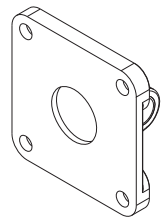


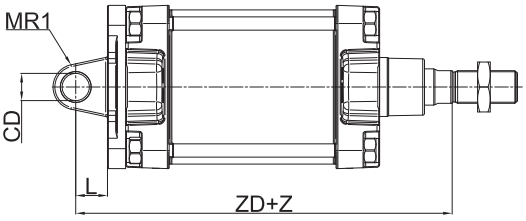
Material: Aluminium body
PTFE and steel bushing

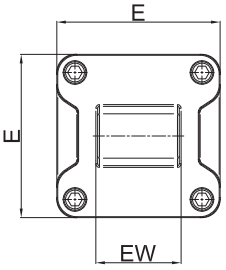
Z = Stroke

Cylinder Ø	CB	CD	E	FL	L	MR	UB	XD		Mass	Part no.
	H14	H9		± 0,2	min.	max	h14			g	
250	110	40	270	70	45	40	200	375	± 2,5	5400	KF-10250A
320	220	45	350	80	50	45	220	420	± 2,5	9950	KF-10320A

Rear male hinge (ISO MP4)







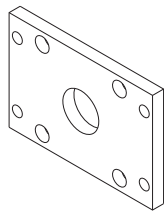
Material: Aluminium body
PTFE and steel bushing

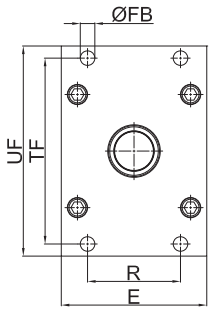
Z = Stroke

Cylinder Ø	CD	E	EW		L	MR1	XD		Mass	Part no.
	H9				min.				g	
250	40	270	110	- 1,2	45	40	375	± 2,5	5800	KF-11250
320	45	350	120	- 1,2	50	45	420	± 2,5	10800	KF-11320

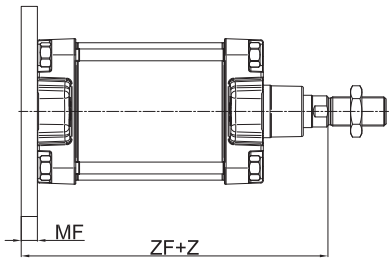
* = Non-standard dimension

Front/rear flange (ISO MF1-MF2)

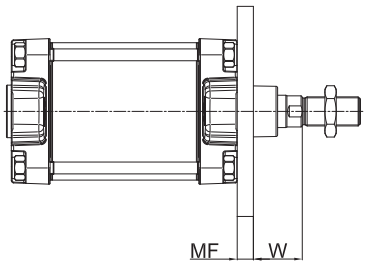




> Rear assembly



> Front assembly



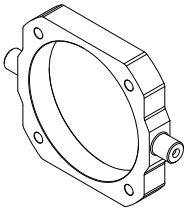
Material: Zinc-plated steel

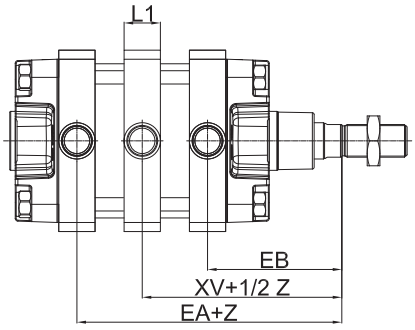
Z = Stroke

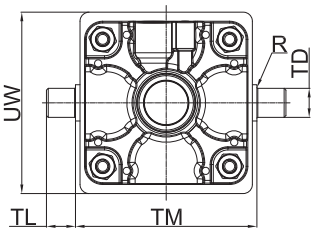
Cylinder Ø	E	FB	MF	R	TF	UF	W		ZF		Mass	Part no.
		H13	± 0,2	JS14	JS14	max					g	
250	285	26	25	165	330	400	80	± 2,5	330	± 2,5	18400	KF-12250
320	350	33	30	200	400	470	90	± 2,5	370	± 2,5	31800	KF-12320

VDMA standard upon request

ISO intermediate hinge (ISO MT4)





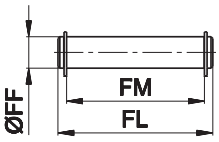


Material: Zinc-plated steel

Z = Stroke

Cylinder Ø	EA Max	EB Max	TD	TL	TM	UW	L1	XV	R	Mass g	Part no.
250	220	105	40	40	320	295	50	205	2	12800	**KF-14250**
320	245	215	50	50	400	370	70	230	2	24600	**KF-14320**

Pin with 2 circlips

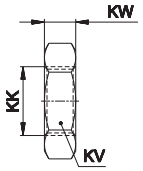


Material: Zinc-plated steel

Cylinder Ø	FF f8	FL	FM	Mass g	Part no.
250	37,5	211	202	1800	**KF-18250**
320	42,5	234	222	2600	**KF-18320**

* = Pin for part no. **KF-10...**

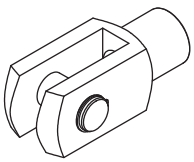
Piston rod locknut

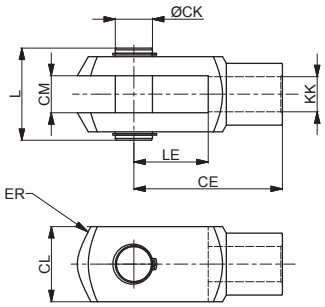


Material: Zinc-plated steel

Cylinder Ø	KK	KV	KW	Mass g	Part no.
250	M42 x 2	65	16	300	**KF-16250**
320	M48 x 2	75	18	450	**KF-16320**

Female fork with clips



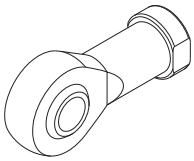


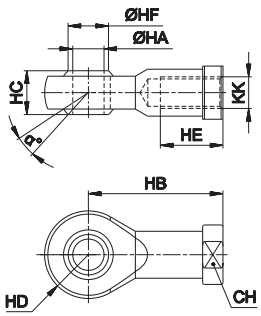
Material: Zinc-plated steel

Cylinder Ø	CE	CK	CL	CM B12	ER	KK	L	LE	Mass g	Part no.
250	168	42	85	40	65	M42 x 2	104	84	6141	**KF-15250**
320	192	50	96	50	81	M48 x 2	117	96	10189	**KF-15320**

Fork with pin suitable for piston rod according to ISO 8140 standard

Articulated self-lubricating fork





Cylinder Ø	α°	CH	KK	HA H7	HB	HC	HD 0 -0,12	HE	HF	Mass g	Part no.
250	16	55	M42 x 2	40	142	49	91	60	45,1	2372	**KF-17250**
320	14	65	M48 x 2	50	162	60	117	65	56,6	5620	**KF-17320**