UNIVER®
Industrial Automation

PM/PK/PRM

Stainless steel
cylinders

Ø 16 ÷ 125 mm

UNIVER
Industrial Automation

PM/PK/PRM

Stainless Steel Cylinders

Ø 16 ÷ 125 mm

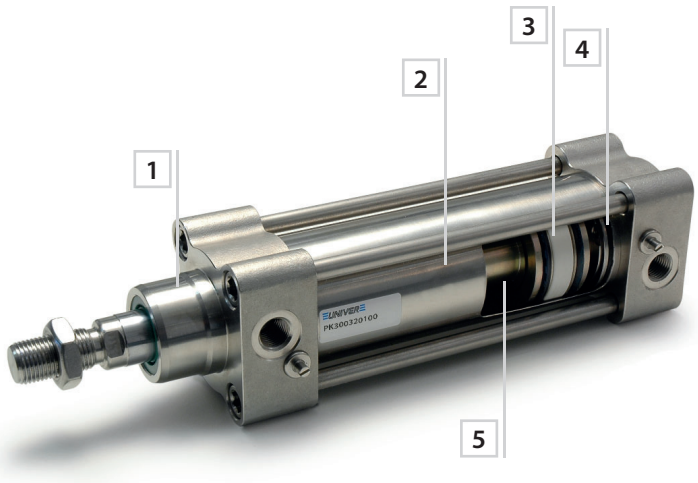
PK series
Ø 32 ÷ 125 mm
ISO 15552

The UNIVER **PM/PK/PRM** cylinders, in **AISI304/316** stainless steel, are suitable for high corrosion environments, such as in food, chemical, shipbuilding and pharmaceutical industries.

Dimensions complying with international standards **ISO 6432, 15552** and **21287** for a full interchangeability.

PM series
Ø 32 ÷ 63 mm

Construction characteristics



1. Stainless steel end-caps

2. Metal piston

3. Guide slide

4. Shock-absorber seals

5. Piston seals and cushions

PRM series
Ø 20 ÷ 100 mm
ISO 21287

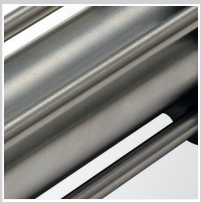
PM series
Ø 16 ÷ 25 mm
ISO 6432

Application sectors

- FOOD & BEVERAGE
- WET AREAS
- CHEMICAL
- PHARMA
- MARINE

ATEX CE, II 2GDc T4 CERTIFICATION (upon request)

PK/PRM FDA APPROVED PISTON SEALS (STANDARD SUPPLIED)



STAINLESS STEEL AISI 304/316

STAINLESS STEEL PROTRUDING ADJUSTABLE CUSHIONING SCREW

ASSEMBLING OF IP69K SENSORS BY MEANS OF STAINLESS STEEL BRACKETS AND ADAPTERS

STAINLESS STEEL FIXING ELEMENTS

PM

ISO 6432 Stainless steel cylinders - Ø 16 ÷ 25 mm

- Stainless steel AISI 304
- Available in double-acting and through-rod versions

Available ATEX version upon request

II 2GDc T4

1

TECHNICAL CHARACTERISTICS

Ambient temperature	0 ÷ 80 °C (-20°C with dry air)
Fluid	compressed air, filtered air, not lubricated
Working pressure	1 ÷10 bar
Bores	Ø 16 - 20 - 25 mm

CONSTRUCTIVE CHARACTERISTICS

End-caps	stainless steel AISI 304
Barrel	stainless steel AISI 304
Piston	brass
Piston rod	stainless steel AISI 304
Piston seal	polyurethane
Guide bush for piston rod	sintered bronze
Shock absorber seals	neoprene
Magnet	plastoferrite
Nut	stainless steel AISI 304
O-Ring	nitrile rubber (NBR)

CODIFICATION KEY

P	M	3	0	0	0	1	6	0	0	1	0	M	
1		2	3		4			5				6	7

1 Series

PM = Pneumatic cylinders ISO 6432 Ø 16 ÷ 25 mm

2 Type

3 = Stainless steel piston rod

3 Version

00 = **D.E.** Standard
01 = **D.E.** Through-rod
50 = **D.E.** With adjustable cushionings (Ø25)
51 = **D.E.** Through-rod with adjustable cushionings (Ø25)

D.E. = Double effect

4 Bore (mm)

016 = Ø16
020 = Ø20
025 = Ø25

5 Stroke (mm)

0010 = 10 **0100** = 100 **0250** = 250
0025 = 25 **0125** = 125 **0320** = 320
0050 = 50 **0160** = 160 **0400** = 400
0080 = 80 **0200** = 200 **0500** = 500

6 Magnetic

M = Magnetic version (standard supplied)

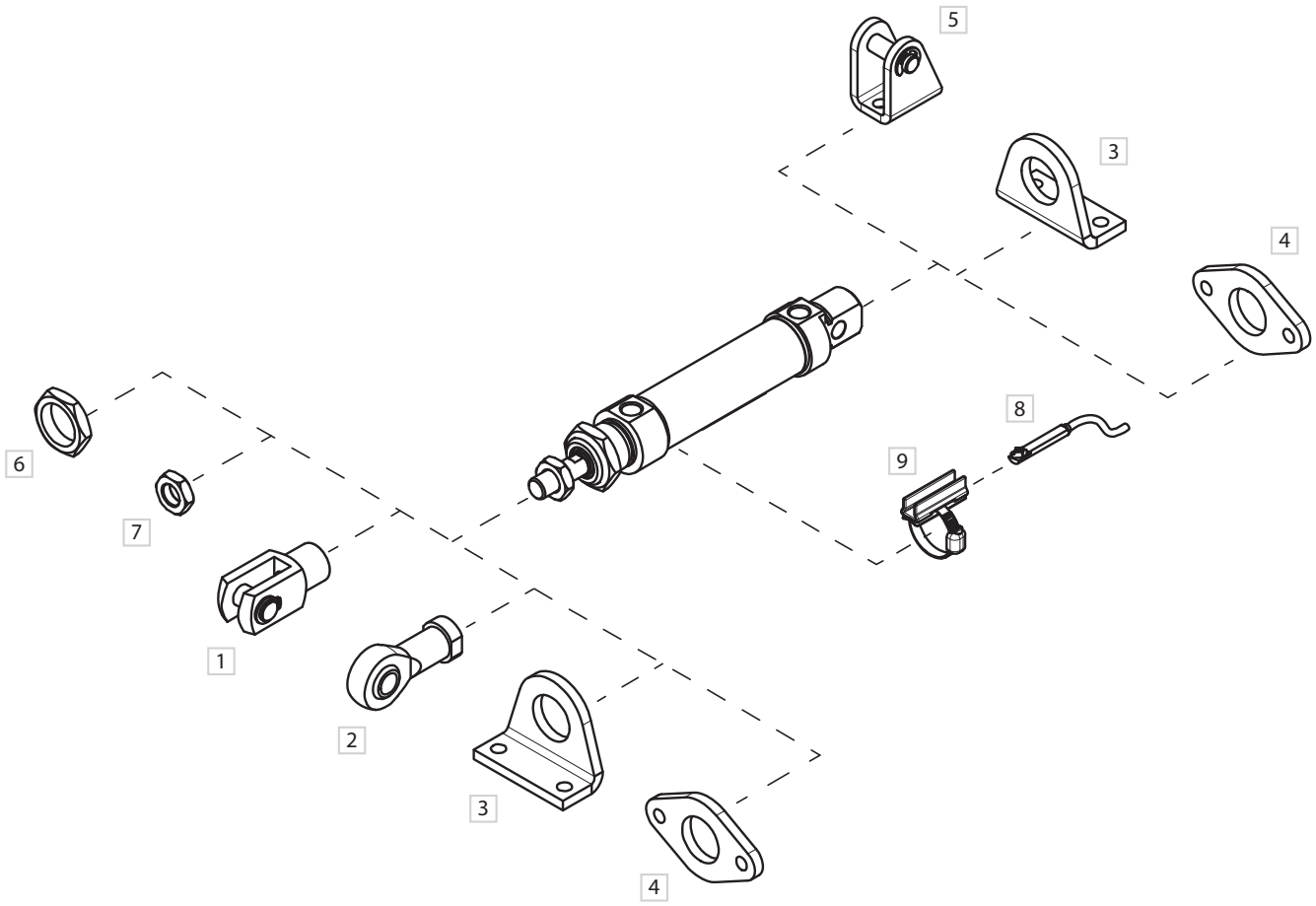
7 ATEX option

X = Atex (upon request)

Version with high temperature seals (Max 150°C) available upon request.

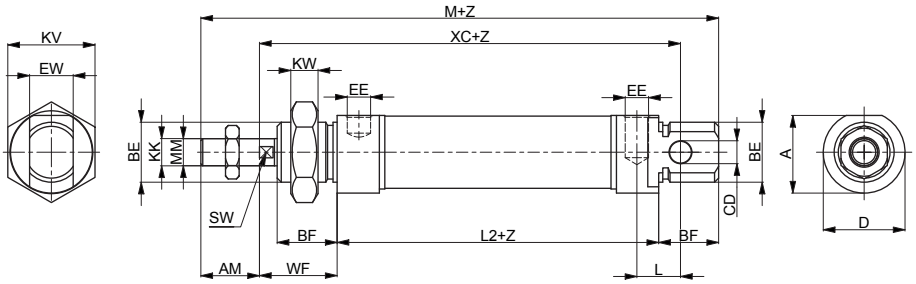
Subject to change

Fixing elements and accessories

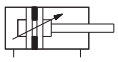


	DESCRIPTION	NOTE	PART NO.
1	Female fork with pin	Stainless steel	**MF/KF-15_ _ _PI**
2	Articulated self-lubricating fork	Stainless steel	**MF/KF-17 _ _ _I**
3	Angle bracket (MS3)	Stainless steel	**MF-13 _ _ _I**
4	Flange (MF8)	Stainless steel	**MF-12 _ _ _I**
5	Rear female hinge	Stainless steel	**MF-21 _ _ _I**
6	End-cap nut	Stainless steel	**MF-20 _ _ _ I**
7	Piston rod nut	Stainless steel	**MF-16 _ _ _I**
8	DF sensor	-	**DF-P700L06**
9	DF bracket and adapter	Stainless steel	**DH-P _ _ _DFI**

Double effect



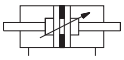
PM300
D.E. Standard



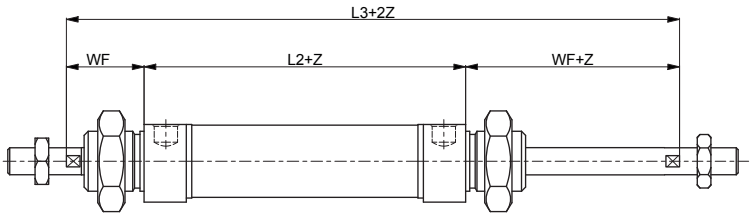
PM350
D.E. with adjusting cushionings

Double effect through piston rod

PM301
D.E. Through piston rod



PM351
D.E. Through piston rod
with adjustable cushionings



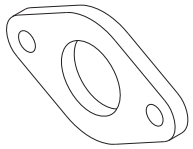
Z= Stroke

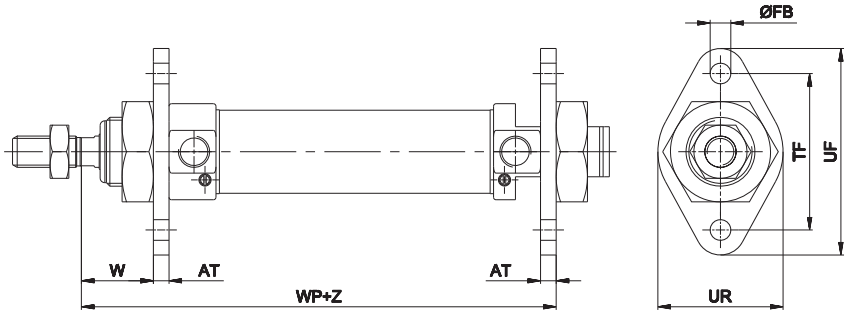
Ø	AM	A	BE	BF	CD	D	EE	EW	KK	KV
					H 9			d 13		
16	16	18	M16x1,5	18	6	19	M5x0,8	12	M6x1	22
20	20	25,5	M22x1,5	20	8	27	G1/8	16	M8x1,25	27
25	22	28,5	M22x1,5	22	8	30	G1/8	16	M10x1,25	27

Ø	KW	L	L2+	L3+	ØMM	M+	SW	WF	XC+
								± 1,2	± 1
16	8	9	53	97	6	109	5	22	82
20	11	12	67	115	8	131	7	24	95
25	11	12	68	124	10	140	9	28	104

Subject to change

Flange (MF8)



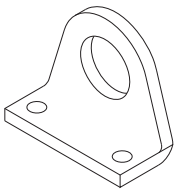


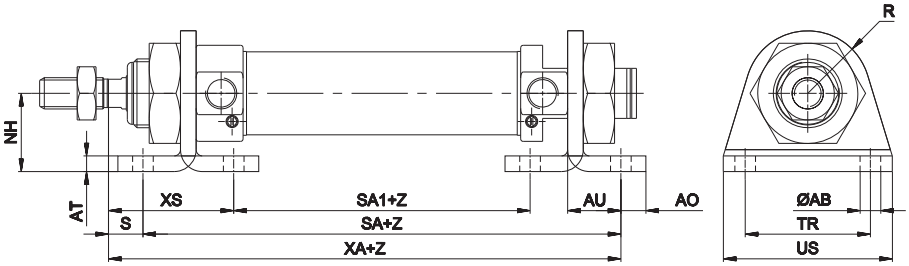
Material: Stainless steel AISI 304

Z = Stroke

Ø	AT	ØFB	TF	UF	UR	W	WP+	Part no.
		H13	Js14			± 1,4		
16	4	5,5	40	53	30	18	79	MF-12012I
20	5	6,6	50	66	40	19	96	MF-12020I
25	5	6,6	50	66	40	23	101	

Angle bracket (MS3)



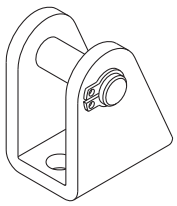


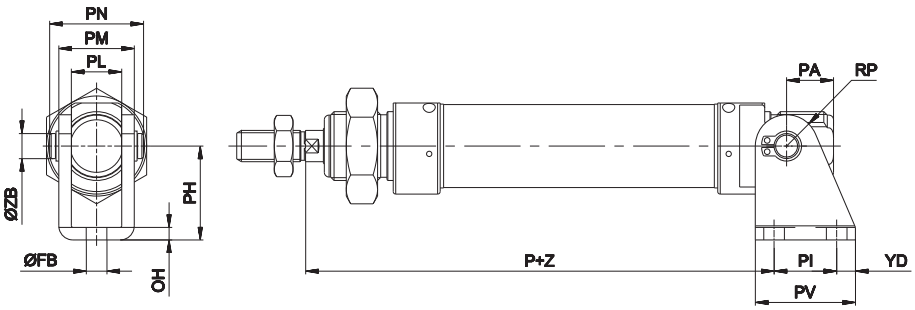
Material: Stainless steel AISI 304

Z = Stroke

Ø	AB	AO	AT	AU	NH	R	S	SA+	SA1+	TR	US	XA+	XS	Part no.
	H13			+0,3 0	±0,3					Js14			±1,4	
16	5,5	6	4	14	20	13	8	81	33	32	42	89	32	MF-13012I
20	6,6	8	5	17	25	20	7	101	43	40	54	108	36	MF-13020I
25	6,6	8	5	17	25	20	11	102	44	40	54	113	40	

Rear female hinge





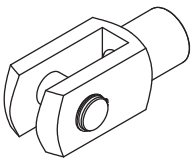
Including bolt and 2 circlips

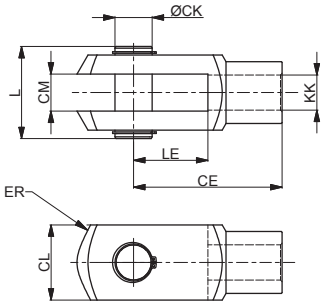
Material: Stainless steel AISI 304

Z = Stroke

Ø	FB	OH	P+	PA	PH	PI	PL	PM	PN	PV	RP	YD	ZB	Part no.
	H13						E9						f8	
16	5,5	3	80	13	27	15	12,1	18,1	23	25	7	5	6	MF-21012I
20	6,6	4	91	16	30	20	16,1	24,1	30	32	10	6	8	MF-21020I
25	6,6	4	100	16	30	20	16,1	24,1	30	32	10	6	8	

Female fork with pin

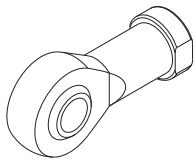


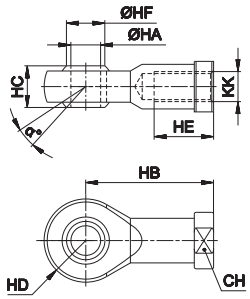


Material: Stainless steel AISI 303 (Ø16-20) 304 (Ø25)

Ø	CE	CK	CL	CM	ER	KK	L	LE	Part no.
				B12					
16	24	6	12	6	7	M6x1	16	12	**MF-15012PI**
20	32	8	16	8	10	M8x1,25	22	16	**MF-15020PI**
25	40	10	20	10	16	M10x1,25	26	20	**KF-15032PI**

Articulated self-lubricating fork

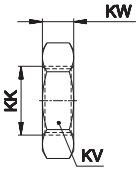




Material: Stainless steel AISI 303 (Ø16-20) 304 (Ø25)

Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Part no.
				H7			0 -0,12			
16	13°	11	M6x1	6	30	9	10	12	9	**MF-17012I**
20	14°	14	M8x1,25	8	36	12	12	16	10,4	**MF-17020I**
25	13°	17	M10 x 1,25	10	43	14	14	20	12,9	**KF-17032I**

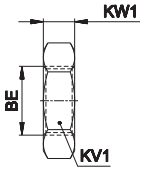
Piston rod nut



Material: Stainless steel AISI 304

Ø	KK	KV	KW	Part no.
16	M6x1	10	4	**MF-16012I**
20	M8x1,25	13	5	**MF-16020I**
25	M10x1,25	17	6	**KF-16032I**

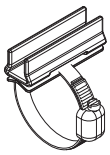
End-cap nut

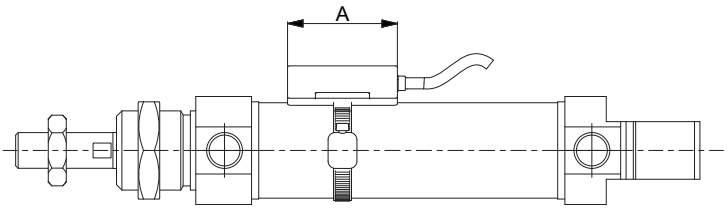


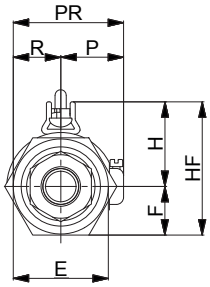
Material: Stainless steel AISI 303

Ø	BE	KV1	KW1	Part no.
16	M16x1,5	24	8	**MF-20012I**
20	M22x1,5	32	10	**MF-20020I**
25				

DF bracket





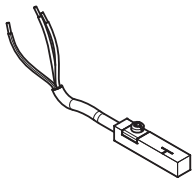


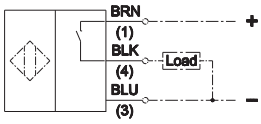
Material: Stainless steel AISI 303

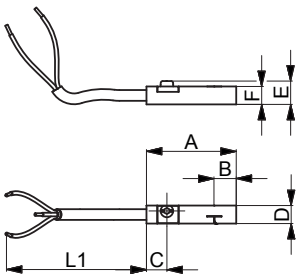
Ø	A	E	F	H	HF	P	R	PR	Part no.
16	34	22	11	18	29	17	11	28	**DH-P016020DFI**
20	34	24	12	20	32	17	12	29	
25	34	32	16	23	39	19	16	35	**DH-P025032DFI**

For DF sensors see accessories section

DF sensor







A	B	C	D	E	F	L1	Part no.
25,3	6,2	5,7	5	6,5	5,1	6000 mm	**DF-P700L06**

Subject to change

PM

Stainless steel cylinders - Ø 32 ÷ 63 mm

- Stainless steel AISI 304
- Available in double-acting and through-rod versions

TECHNICAL CHARACTERISTICS

Ambient temperature	0 ÷ 80 °C (-20°C with dry air)
Fluid	compressed air, filtered air, not lubricated
Working pressure	1÷10 bar
Bores	Ø 32 - 40 - 50 - 63 mm

CONSTRUCTIVE CHARACTERISTICS

End-caps	stainless steel AISI 304
Barrel	stainless steel AISI 304
Piston	aluminium
Guide slide	PBT+PTFE
Piston rod	stainless steel AISI 316
Piston seal	polyurethane
Guide bush for piston rod	sintered bronze
Shock absorber seals	neoprene
Magnet	plastoferrite
Nut	stainless steel AISI 304
O-Ring	nitrile rubber (NBR)

CODIFICATION KEY

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

1 Series

PM = Pneumatic cylinders Ø 32 ÷ 63 mm

2 Type

3 = Stainless steel piston rod

3 Version

00 = **D.E.** Standard
01 = **D.E.** Through-rod

D.E. = Double effect

4 Bore (mm)

032 = Ø32
040 = Ø40
050 = Ø50
063 = Ø63

5 Stroke (mm)

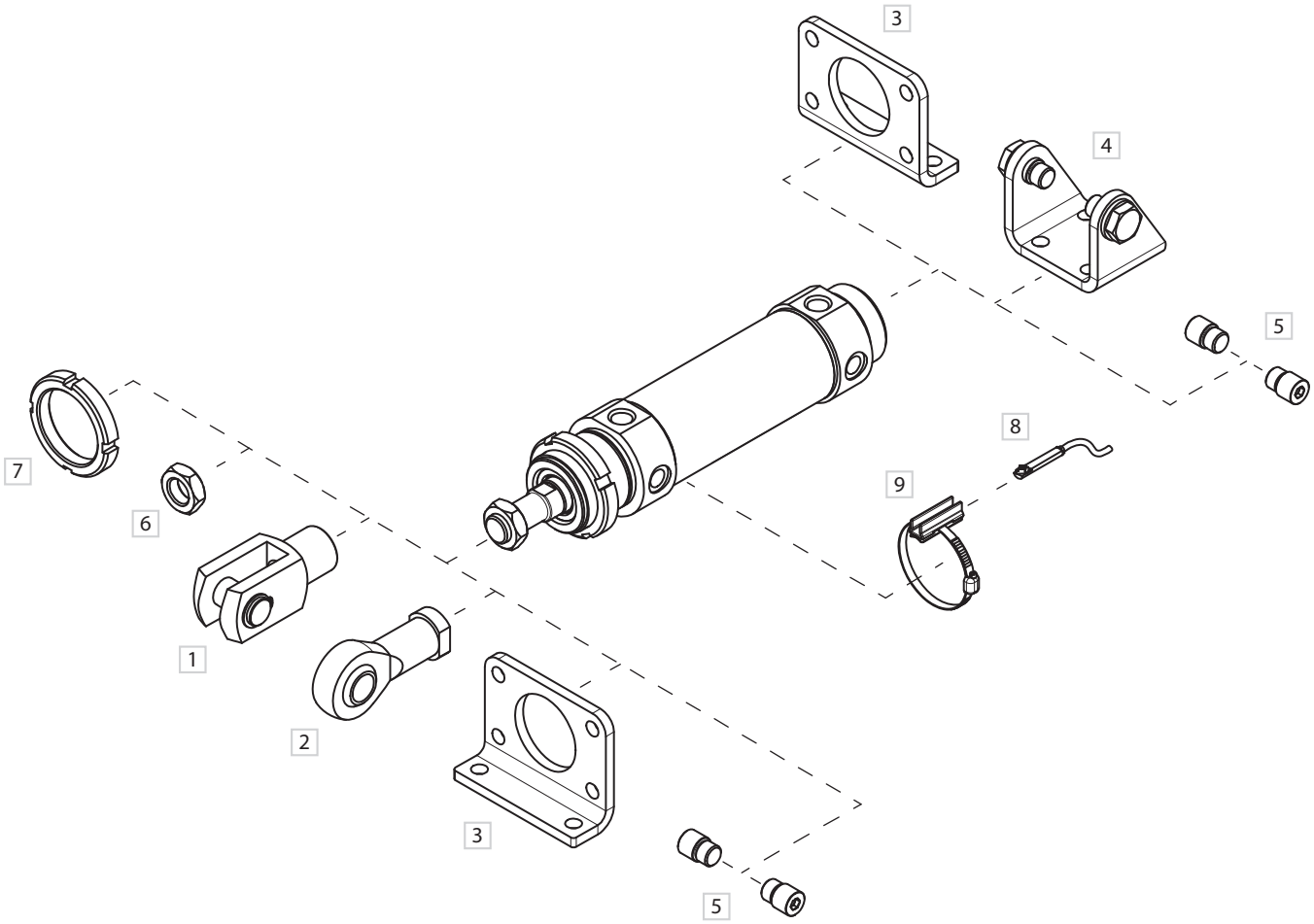
0010 = 10 **0100** = 100 **0250** = 250
0025 = 25 **0125** = 125 **0320** = 320
0050 = 50 **0160** = 160 **0400** = 400
0080 = 80 **0200** = 200 **0500** = 500

6 Magnetic

M = Magnetic version (standard supplied)

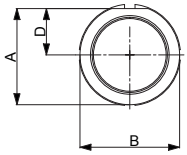
Version with high temperature seals (Max 150°C) available upon request.

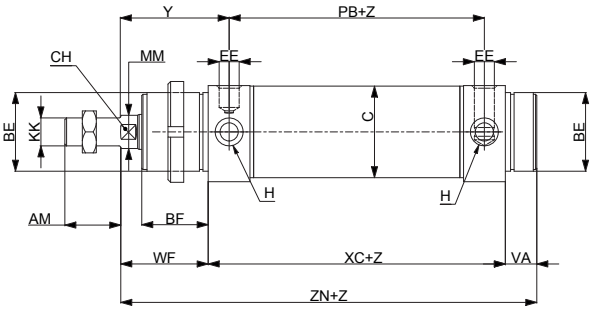
Fixing elements and accessories



	DESCRIPTION	NOTE	PART NO.
1	Female fork with pin	Stainless steel	**MF/KF-15 _ _ _PI**
2	Articulated self-lubricating fork	Stainless steel	**MF/KF-17 _ _ _I**
3	Angle bracket/Flange	Stainless steel	**MF-13 _ _ _I**
4	Female hinge with screws	Stainless steel	**MF-21 _ _ _I**
5	Pins (pair)	Stainless steel	**MF-18 _ _ _I**
6	Piston rod nut	Stainless steel	**MF-16 _ _ _I**
7	Nut	Stainless steel	**MF-20 _ _ _I**
8	DF sensor	-	**DF-P700L06**
9	DF bracket and adapter	Stainless steel	**DH-P_ _ _DFI**

Double effect

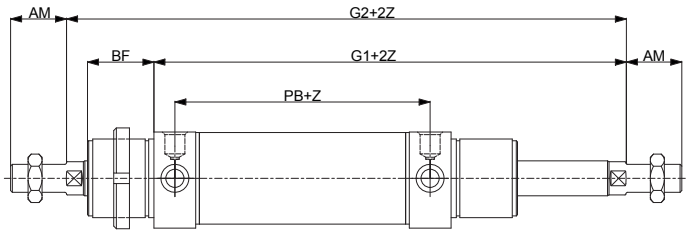




PM300
D.E. Standard

Double effect through-rod

PM301
D.E. Through
piston rod

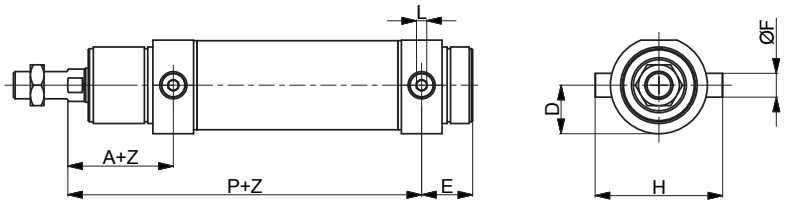


Z= Stroke

Ø	A	AM	ØB	BE	BF	C	CH	D	EE	H
32	36,5	20	38	M30x1,5	30	33,6	10	17,5	1/8 G	M30x1,5
40	44	24	46	M38x1,5	35	41,6	13	21	1/4 G	M38x1,5
50	55	32	57	M45x1,5	38	52,4	17	26,5	1/4 G	M45x1,5
63	67,5	32	70	M45x1,5	38	65,4	17	32,5	3/8 G	M45x1,5

Ø	KK	ØMM	PB+	VA	WF	XC+	Y	ZN+	G1+	G2+
32	M10x1,25	12	78	14	38	96	47	148	134	172
40	M12x1,25	16	89	16	45	113	57	174	158	203
50	M16x1,5	20	96	18	50	120	62	188	170	220
63	M16x1,5	20	98	18	50	124	63	192	174	224

Pins

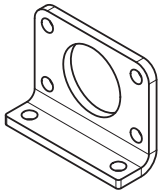


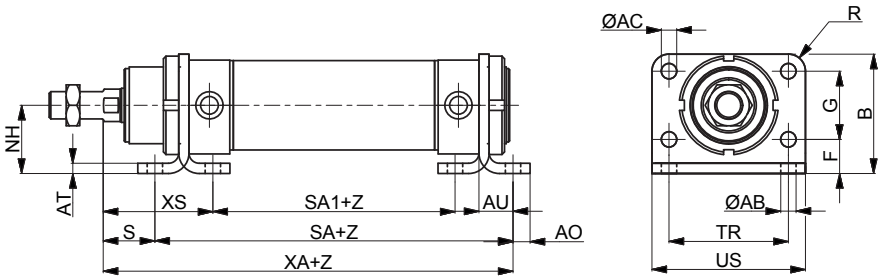
Material: Stainless steel AISI 304

Z = Stroke

Ø	A+	P+	E	L	D	H	ØF	Part no.
32	47	125	23	5	19	51	10	**MF-18032I**
40	57	146	28	6	23	61	12	**MF-18040I**
50	62	158	30	6	28,5	75	14	**MF-18050I**
63	63	161	31	8	35	92	16	**MF-18063I**

Angle bracket/Flange



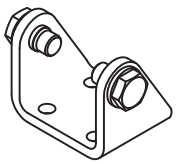


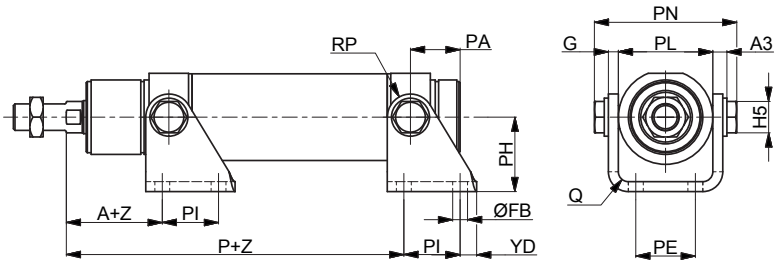
Material: Stainless steel AISI 304

Z = Stroke

Ø	NH	AT	XS	S	SA+	SA1+	XA+	AU	AO	ØAC	R	US	TR	ØAB	F	G	B	Part no.
32	28	4	52	24	124	68	148	14	7	7	7	66	52	7	14	28	49	**MF-13032I**
40	33	5	65	25	153	73	178	20	10	9	10	80	60	9	18	30	58	**MF-13040I**
50	40	6	70	30	160	80	190	20	10	9	10	90	70	9	20	40	70	**MF-13050I**
63	45	6	70	30	164	84	194	20	10	9	10	96	76	9	20	50	80	**MF-13063I**

Female hinge with screws





Including bolt and 2 circlips

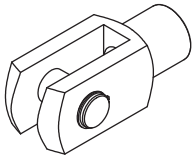
Material: Stainless steel AISI 304

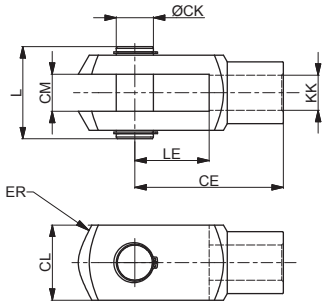
Z = Stroke

Ø	A+	P+	PI	ØFB	YD	PH	RP	PA	G	PN	PL	A3	H5	PE	Q	Part no.
32	45	120	24	7	8	35	12	20	4	54,1	38,1	6	13	20	4	**MF-21032I**
40	55	141	30	9	10	40	13	27	5	65,1	46,1	7	17	28	5	**MF-21040I**
50	59	152	34	9	10	45	14	30	6	80,1	57,1	8,5	19	36	6	**MF-21050I**
63	60	155	35	9	15	50	16	34	6	93,1	70,1	8,5	19	42	6	**MF-21063I**

Subject to change

Female fork with pin

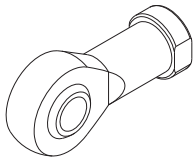


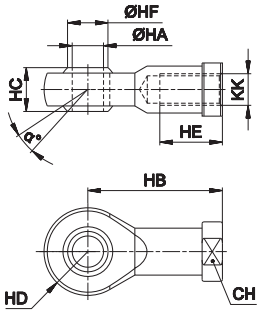


Material: Stainless steel AISI 304

Ø	CE	CK	CL	CM	ER	KK	L	LE	Part no.
				B12					
32	40	10	20	10	16	M10x1,25	26	20	**KF-15032PI**
40	48	12	24	12	19	M12x1,25	32	24	**KF-15040PI**
50 63	64	16	32	16	25	M16x1,5	40	32	**KF-15050PI**

Articulated self-lubricating fork

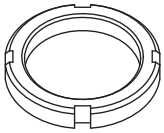


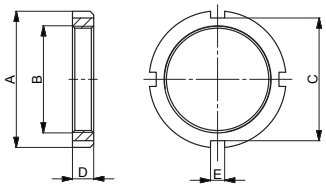


Material: Stainless steel AISI 304

Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Part no.
				H7			0 -0,12			
32	13	17	M10x1,25	10	43	14	14	20	12,9	**KF-17032I**
40	13	19	M12x1,25	12	50	16	16	22	15,4	**KF-17040I**
50 63	15	22	M16x1,5	16	64	21	21	28	19,3	**KF-17050I**

Nut for end-cap

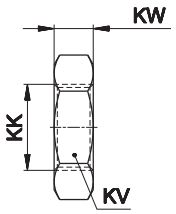




Material: Stainless steel AISI 304

Ø	A	B	C	D	E	Part no.
32	45	M30x1,5	40	7	5	**MF-20032I**
40	50	M38x1,5	46	8	5	**MF-20040I**
50	58	M45x1,5	52	9	6	**MF-20050I**
63	58	M45x1,5	52	9	6	**MF-20063I**

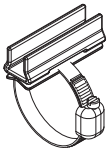
Piston rod nut

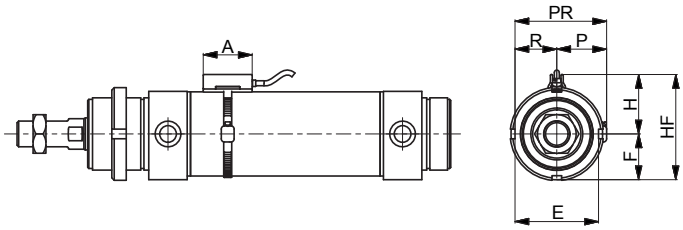


Material: Stainless steel AISI 304

Ø	KK	KV	KW	Part no.
32	M10x1,25	17	6	**KF-16032I**
40	M12x1,25	19	7	**KF-16040I**
50 63	M16x1,5	24	8	**KF-16050I**

DF bracket



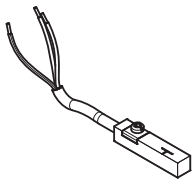


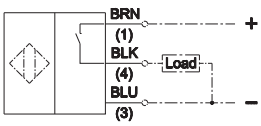
Material: Stainless steel AISI 303

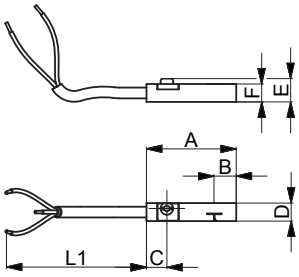
Ø	A	E	F	H	HF	P	R	PR	Part no.
32	34	33,5	16,75	45	78,5	39	33,5	72,5	**DH-P025032DFI**
40	34	41,5	20,75	53	94,5	47	41,5	88,5	**DH-P040DFI**
50	34	51,5	25,75	63	114,5	57	51,5	108,5	**DH-P050DFI**
63	34	64,5	32,25	76	140,5	70	64,5	134,5	**DH-P063DFI**

For DF sensors see accessories section

DF sensor







A	B	C	D	E	F	L1	Part no.
25,3	6,2	5,7	5	6,5	5,1	6000 mm	**DF-P700L06**

PK

ISO 15552 Stainless steel cylinders - Ø 32 ÷ 125 mm

- Stainless steel AISI 316
- Available in double-acting and through-rod versions
- FDA approved piston seals

Available ATEX version upon request

II 2GDc T4

1

TECHNICAL CHARACTERISTICS

Ambient temperature	0 ÷ 80 °C (-20°C with dry air)
	0 ÷ 150 °C (with high temperature seals)
Fluid	compressed air, filtered air, not lubricated
Working pressure	1 ÷10 bar
Bores	Ø 32 - 40 - 50 - 63 - 80 - 100 - 125 mm
Cushionings	adjustable on both sides

CONSTRUCTIVE CHARACTERISTICS

End-caps	stainless steel AISI 316
Barrel	stainless steel AISI 316
Piston	die-cast aluminium
Guide slide	PBT+PTFE
Piston rod	stainless steel AISI 316
Piston seal	polyurethane
Guide bush for piston rod	sintered bronze
Magnet	plastoferrite
O-Ring	nitrile rubber (NBR)
Tie-rods	stainless steel AISI 316

CODIFICATION KEY

P	K	3	0	0	0	3	2	0	0	2	5	M	
1		2	3		4			5				6	7

1 Series

PK = Pneumatic cylinders ISO 15552 Ø 32 ÷ 125 mm

2 Type

3 = Staindelss steel piston rod

3 Version

00 = **D.E.** Standard
01 = **D.E.** Through-rod

D.E. = Double effect

4 Bore (mm)

032 = Ø32 **080** = Ø80
040 = Ø40 **100** = Ø100
050 = Ø50 **125** = Ø125
063 = Ø63

5 Stroke (mm)

0025 = 25	**0150** = 150	**0320** = 320	**0600** = 600	**0850** = 850
0050 = 50	**0160** = 160	**0400** = 400	**0650** = 650	**0900** = 900
0080 = 80	**0200** = 200	**0450** = 450	**0700** = 700	**0950** = 950
0100 = 100	**0250** = 250	**0500** = 500	**0750** = 750	**1000** = 1000
0125 = 125	**0300** = 300	**0550** = 550	**0800** = 800	

6 Magnetic

M = Magnetic version (standard supplied)

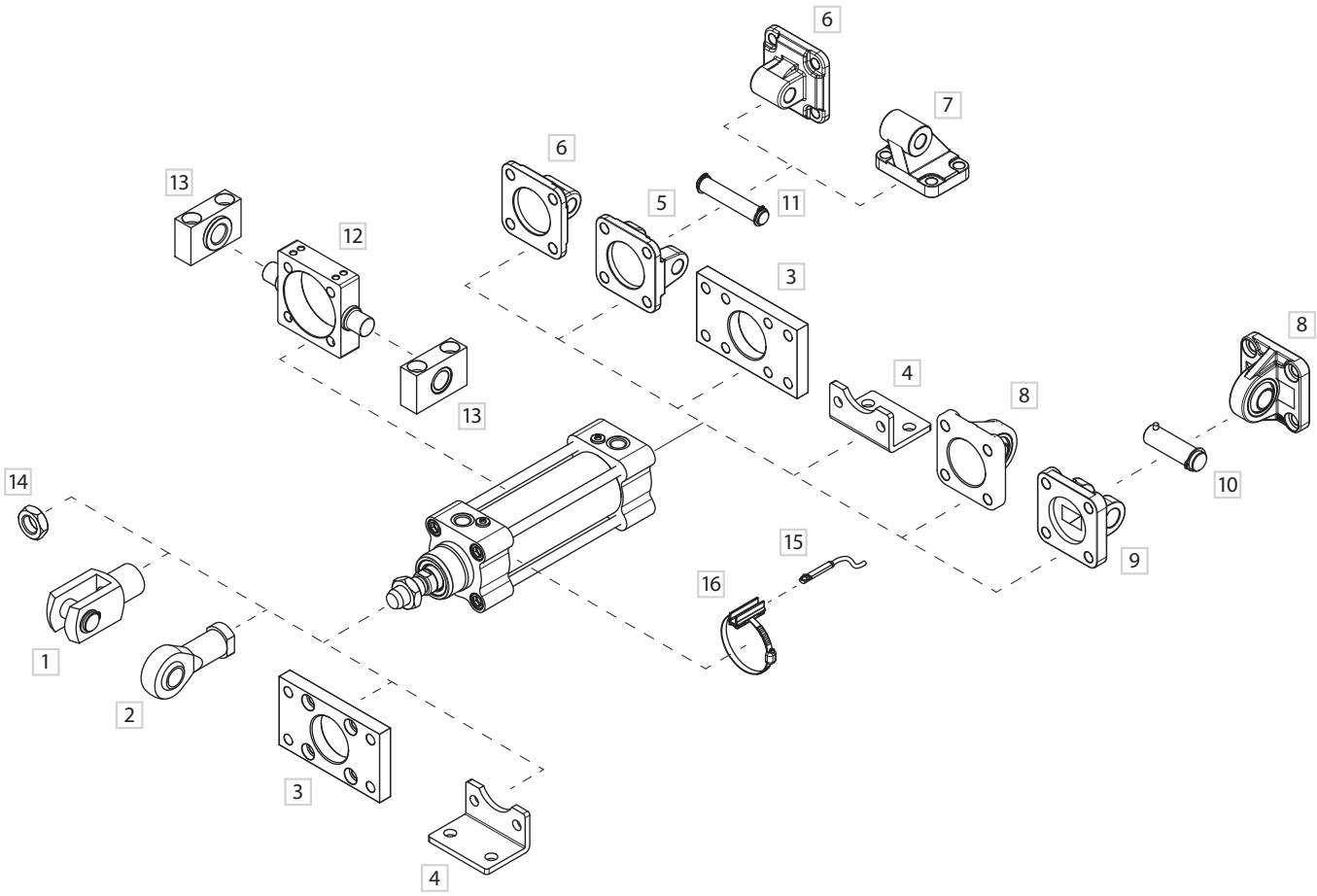
7 ATEX option

X = Atex (upon request)

Version with high temperature seals (Max 150°C) available upon request.

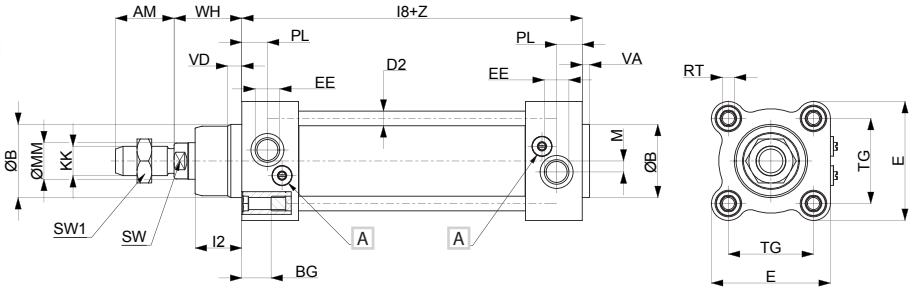
Subject to change

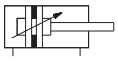
Fixing elements and accessories



	DESCRIPTION	NOTE	PART NO.
1	Female fork with pin	Stainless steel	**KF-15 _ _ _PI**
2	Articulated self-lubricating fork	Stainless steel	**KF-17 _ _ _I**
3	Front/rear flange (ISO MF1-MF2)	Stainless steel	**KF-12 _ _ _I**
4	Angle bracket (ISO MS1)	Stainless steel	**KF-13 _ _ _I**
5	Female hinge (ISO MP2)	Stainless steel	**KF-10 _ _ _AI**
6	Rear male hinge (ISO MP4)	Stainless steel	**KF-11 _ _ _I**
7	Counter hinge 90° (CETOP RP107P)	Stainless steel	**KF-19 _ _ _CTAI**
8	Articulated rear male hinge (ISO MP6)	Stainless steel	**KF-11 _ _ _SI**
9	Narrow female hinge with pin (DIN648K)	Stainless steel	**KF-10 _ _ _ASI/**
10	Narrow hinge pin (DIN648K)	Stainless steel	**KF-18S I**
11	Female hinge pin (ISO MS1)	Stainless steel	**KF-18 _ I**
12	Intermediate hinge for tie-rods	Stainless steel	**KF-14_ _ _TI**
13	Hinge support	Stainless steel	**KF-41 _ _ _I**
14	Piston rod nut	Stainless steel	**KF-16 _ _ _I**
15	DF sensor	-	**DF-P700L06**
16	DF bracket and adapter	Stainless steel	**DH-P _ _ _DFI**

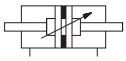
Double effect



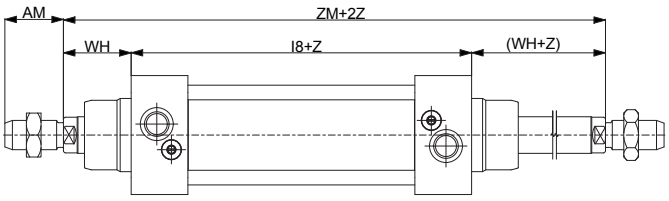


PK300
D.E. Standard

Double effect through-rod



PK301
D.E. Through-rod

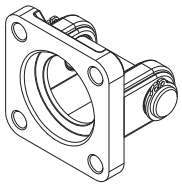


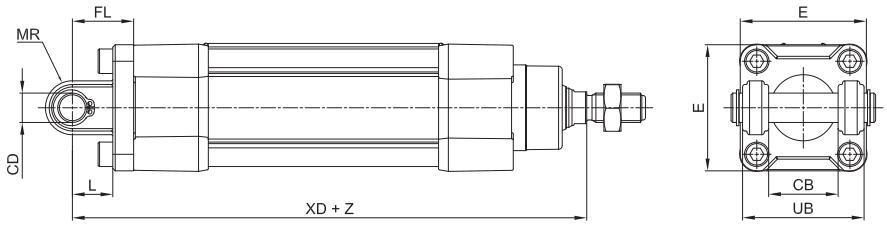
Z= Stroke

Ø	AM	ØB	BG	E	KK	I2	I8+		PL	RT	SW	TG		VA	VD	WH	ØMM	EE	M	SW1	D2	ZM+	
32	22	30	16	48	M10x1,25	18	94	±0,4	13	M6	10	32,5	±0,5	4	5	26	12	G1/8	5,3	17	6	146	
40	24	35	16	52	M12x1,25	22	105	±0,7	14	M6	13	38	±0,5	4	5	30	16	G1/4	5	19	6	165	+3,0 -1,5
50	32	40	16	65	M16x1,5	25,5	106	±0,7	14	M8	17	46,5	±0,6	4	6	37	20	G1/4	6	24	8	180	
63	32	45	16	75	M16x1,5	26	121	±0,8	16	M8	17	56,5	±0,7	4	6	37	20	G3/8	6,5	24	8	195	
80	40	45	18	95	M20x1,5	32	128	±0,8	16	M10	22	72	±0,7	4	7	46	25	G3/8	8	30	10	220	
100	40	55	18	115	M20x1,5	38	138	±1	18	M10	22	89	±0,7	4	7	51	25	G1/2	7	30	10	240	+3,5 -2,0
125	54	60	20	140	M27x2	46	160	±1	18	M12	27	110	±1,1	6	10	65	32	G1/2	7	41	12	290	

A Adjusting screw for pneumatic cushioning

Female hinge (ISO MP2) with pin



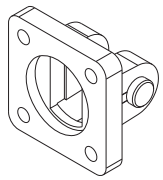


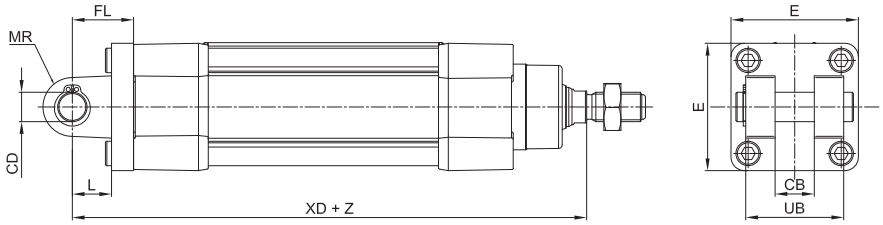
Material: Stainless steel AISI 304

Z = Stroke

Ø	CB	CD	E	FL	L	MR	UB	XD+		Part no.
	H14	H9		± 0,2	min	Max	h14			
32	26	10	48	22	12	11	45	142	±1,25	KF-10032AI
40	28	12	54	25	15	13	52	160	±1,25	KF-10040AI
50	32	12	65	27	15	13	60	170	±1,25	KF-10050AI
63	40	16	75	32	20	17	70	190	±1,6	KF-10063AI
80	50	16	95	36	20	17	90	210	±1,6	KF-10080AI
100	60	20	115	41	25	21	110	230	±1,6	KF-10100AI
125	70	25	140	50	30	26	130	275	±2	KF-10125AI

Narrow female hinge with pin (DIN648K)



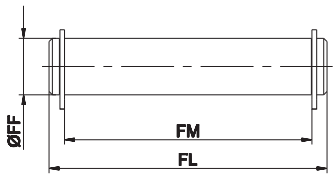


Material: Stainless steel AISI 316

Z = Stroke

Ø	CB	CD	E	FL	L	MR	UB	XD+		Part no.
	H14	H9		± 0,2	min	Max	h14			
32	14	10	45	22	10	10	34	142	±1,25	KF-10032ASI
40	16	12	52	25	16	12	40	160	±1,25	KF-10040ASI
50	21	16	65	27	16	14	45	170	±1,5	KF-10050ASI
63	21	16	75	32	21	18	51	190	±1,6	KF-10063ASI
80	25	20	95	36	22	20	65	210	±1,6	KF-10080ASI
100	25	20	115	41	27	22	75	230	±1,6	KF-10100ASI
125	37	30	140	50	30	25	97	275	±2	KF-10125ASI

Female hinge pin

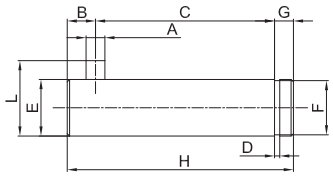


Including 2 circlips

Material: Stainless steel AISI 304

Ø	FF	FL	FM	Part no.
	f8			
32	10	53	46	KF-18032I
40	12	61,3	53	KF-18040I
50	12	69	61	KF-18050I
63	16	80,5	71	KF-18063I
80	16	100,5	91	KF-18080I
100	20	122,5	111	KF-18100I
125	25	140	131	KF-18125I

Narrow female hinge pin

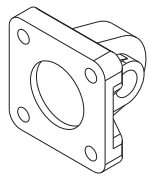


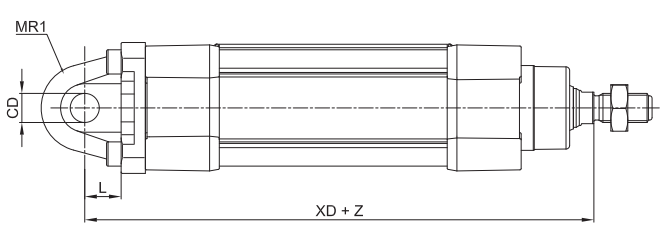
Including 2 circlips

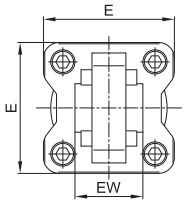
Material: Stainless steel AISI 316

Ø	A	C	D	E	F	G	H	L	B		Part no.
	H12	+0,5 +0,3	h13	f7	h11			0 -0,5			
32	3	32,5	1,1	10	9,6	4	41	14	4,5		KF-18032SI
40	4	38	1,1	12	11,5	4	48	16	6		KF-18040SI
50	4	43	1,1	16	15,2	5	54	20	6	0 -1	KF-18050SI
63	4	49	1,1	16	15,2	5	60	20	6		KF-18063SI
80	4	63	1,3	20	19	6	75	24	6		KF-18080SI
100	4	73	1,3	20	19	6	85	24	6		KF-18100SI
125	6	94	1,6	30	28,6	7	110	36	9	0 -2	KF-18125SI

Rear male hinge (ISO MP4)







Material: Stainless steel AISI 304

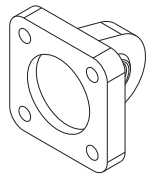
Z = Stroke

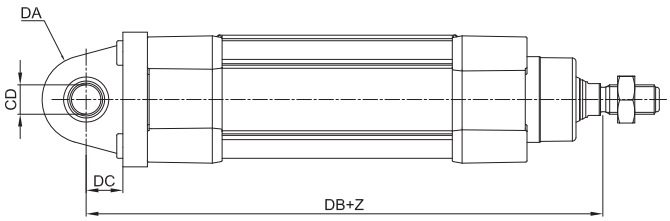
Ø	CD	E	EW		L	MR1	XD+		Part no.
	H9				min				
32	10	48	26	-0,2 / -0,6	12	15*	142	±1,25	KF-11032I
40	12	54	28	-0,2 / -0,6	15	18*	160	±1,25	KF-11040I
50	12	65	32	-0,2 / -0,6	15	20*	170	±1,25	KF-11050I
63	16	75	40	-0,2 / -0,6	20	23*	190	±1,6	KF-11063I
80	16	95	50	-0,2 / -0,6	20	27*	210	±1,6	KF-11080I
100	20	115	60	-0,2 / -0,6	25	29,5*	230	±1,6	KF-11100I
125	25	140	70	-0,5 / -1,2	30	26	275	±2	KF-11125I

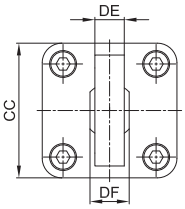
* = Non-standard dimension

Articulated rear male hinge (ISO MP6)

1





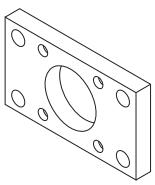


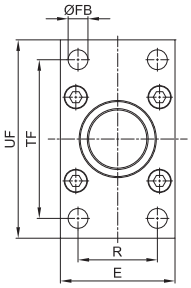
Material: Stainless steel AISI 316

Z = Stroke

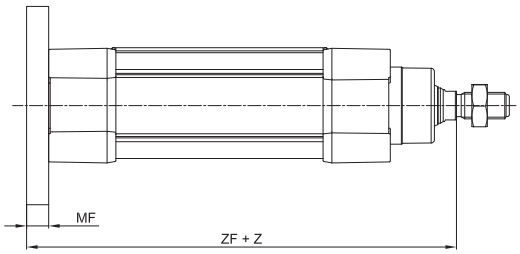
Ø	CC	CD	DA	DB+	DC	DE	DF	Part no.
		H9						
32	48	10	15	142	14	10,5	14	KF-11032SI
40	54	12	18	160	16,5	12	16	KF-11040SI
50	65	12	20	170	17,5	12	16	KF-11050SI
63	75	16	21	190	21,5	15	21	KF-11063SI
80	95	16	27	210	24	15	21	KF-11080SI
100	115	20	29,5	230	28	18	25	KF-11100SI
125	140	30	40	275	30	25	37	KF-11125SI

Front/rear flange (ISO MF1-MF2)

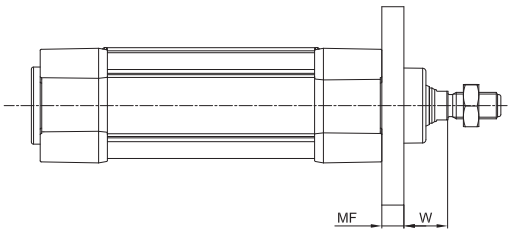




> Rear mounting



> Front mounting

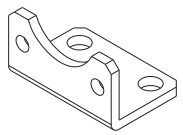


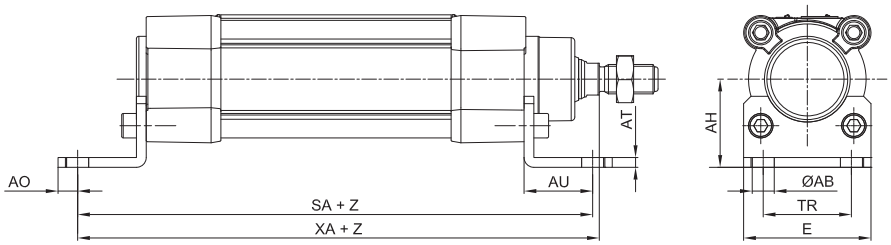
Material: Stainless steel AISI 304

Z = Stroke

Ø	E	FB	MF	R	TF	UF	W		ZF+		Part no.
		H13	± 0,2	JS14	JS14	Max					
32	45	7	10	32	64	80	16	±1,6	130	±1,25	KF-12032I
40	52	9	10	36	72	90	20	±1,6	145	±1,25	KF-12040I
50	65	9	12	45	90	110	25	±2	155	±1,25	KF-12050I
63	75	9	12	50	100	120	25	±2	170	±1,6	KF-12063I
80	95	12	16	63	126	150	30	±2	190	±1,6	KF-12080I
100	115	14	16	75	150	170	35	±2	205	±1,6	KF-12100I
125	140	16	20	90	180	205	45	±2,5	245	±2	KF-12125I

Angle bracket (ISO MS1)



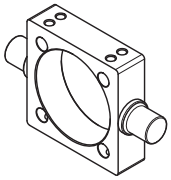


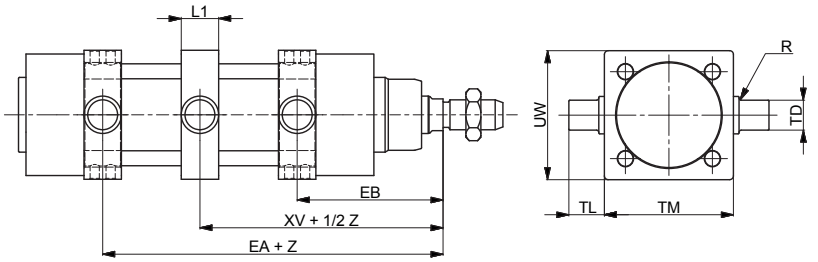
Material: Stainless steel AISI 304

Z = Stroke

Ø	ØAB	AH	AO	AT	AU	E	SA+		TR	XA+		Part no.
	H13	JS15			±0,2				JS14			
32	7	32	6	4	24	45	142	±1,25	32	144	±1,25	KF-13032I
40	9	36	8	4	28	52	161	±1,25	36	163	±1,25	KF-13040I
50	9	45	10	5	32	64	170	±1,25	45	175	±1,25	KF-13050I
63	9	50	12	5	32	74	185	±1,6	50	190	±1,6	KF-13063I
80	12	63	15	6	41	94	210	±1,6	63	215	±1,6	KF-13080I
100	14	71	20	6	41	114	220	±1,6	75	230	±1,6	KF-13100I
125	16	90	15	8	45	140	250	±2	90	270	±2	KF-13125I

Intermediate hinge for tie-rods

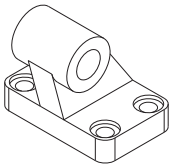


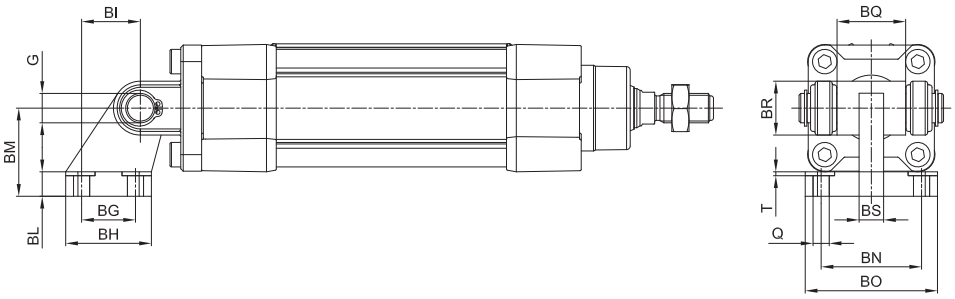


Material: Stainless steel AISI 304

Ø	EA+	EB	L1	R	TD	TL	TM	UW	XV+		Part no.
	Max	min			e9	h14	h14				
32	82	64	22	0,5	12	12	50	65	73	±2	KF-14032TI
40	93	72	22	0,5	16	16	63	75	82,5	±2	KF-14040TI
50	101	79	22	0,5	16	16	75	95	90	±2	KF-14050TI
63	107	88	27,5	1	20	20	90	105	97,5	±2	KF-14063TI
80	123	97	27,5	1,5	20	20	110	130	110	±2	KF-14080TI
100	131	109	33	1	25	25	132	145	120	±2	KF-14100TI
125	164	126	33	1	25	25	160	175	145	±2,5	KF-14125TI

Counter hinge 90° (CETOP RP107P)

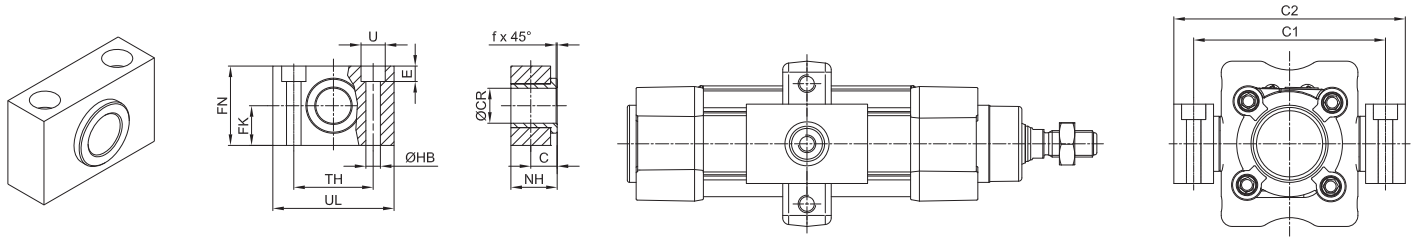




Material: Stainless steel AISI 304

Ø	Q	BG	BH	BI	BL	BM	BN	BO	BS	BR	T	G	Part no.
	H13	JS14	Max	JS14		JS15	JS14	Max	Max	Max	Max	H9	
32	6,6	18	31	21	8	32	38	51	10	20	1,6	10	KF-19032CTAI
40	6,6	22	35	24	10	36	41	54	15	22	1,6	12	KF-19040CTAI
50	9	30	45	33	12	45	50	65	16	26	1,6	12	KF-19050CTAI
63	9	35	50	37	14	50	52	67	16	30	1,6	16	KF-19063CTAI
80	11	40	60	47	14	63	66	86	20	30	2,5	16	KF-19080CTAI
100	11	50	70	55	17	71	76	96	20	38	2,5	20	KF-19100CTAI
125	14	60	90	70	20	90	94	124	30	45	3,2	25	KF-19125CTAI

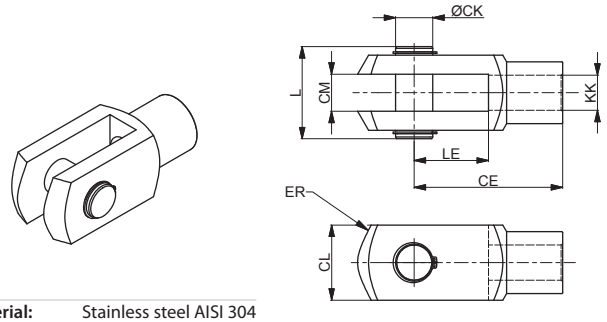
Hinge support



Material: Stainless steel AISI 304

Ø	C	ØCR	FK	FN	ØHB	NH	TH	UL	ØU	E	f	C1	C2	Part no.
	H9	f7	±0,1				±0,1			±0,5				
32	10,5	12	15	30	6,6	18	32	46	11	7	1	71	86	**KF-41032I**
40	12	16	18	36	9	21	36	55	15	9	1,6	87	105	**KF-41040050I**
50	12	16	18	36	9	21	36	55	15	9	1,6	99	117	**KF-41040050I**
63	13	20	20	40	11	23	42	65	18	11	1,6	116	136	**KF-41063080I**
80	13	20	20	40	11	23	42	65	18	11	1,6	136	156	**KF-41063080I**
100	16	25	25	50	14	28,5	50	75	20	13	2	164	189	**KF-41100125I**
125	16	25	25	50	14	28,5	50	75	20	13	2	192	217	**KF-41100125I**

Female fork with pin

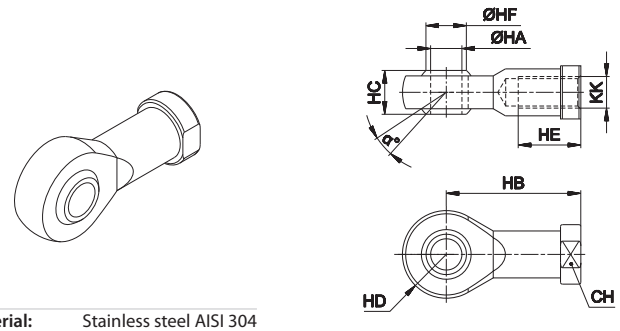


Material: Stainless steel AISI 304

Ø	CE	CK	CL	CM	ER	KK	L	LE	Part no.
				B12					
32	40	10	20	10	16	M10x1,25	26	20	**KF-15032PI**
40	48	12	24	12	19	M12x1,25	32	24	**KF-15040PI**
50 - 63	64	16	32	16	25	M16x1,5	40	32	**KF-15050PI**
80 - 100	80	20	40	20	32	M20x1,5	50	40	**KF-15080PI**
125	110	30	55	30	45	M27x2	65	54	**KF-15125PI**

Fork with clip suitable for piston rod according to ISO 8140

Articulated self-lubricating fork



Material: Stainless steel AISI 304

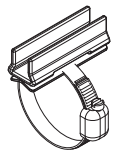
Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Part no.
				H7			0 -0,12			
32	13	17	M10x1,25	10	43	14	14	20	12,9	**KF-17032I**
40	13	19	M12x1,25	12	50	16	16	22	15,4	**KF-17040I**
50 - 63	15	22	M16x1,5	16	64	21	21	28	19,3	**KF-17050I**
80 - 100	14	30	M20 x 1,5	20	77	25	25	33	24,3	**KF-17080I**
125	17	41	M27x2	30	110	37	35	51	34,8	**KF-17125I**

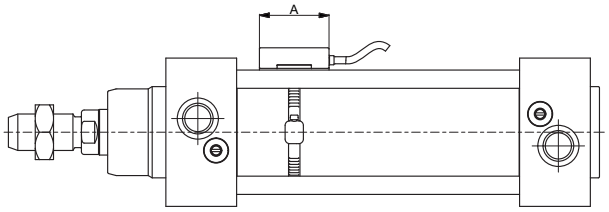
Piston rod nut

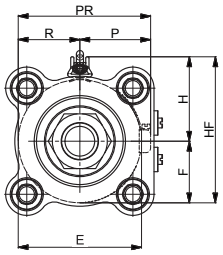
Material: Stainless steel AISI 304

Ø	KK	KV	KW	Part no.
32	M10x1,25	17	6	**KF-16032I**
40	M12x1,25	19	7	**KF-16040I**
50 - 63	M16x1,5	24	8	**KF-16050I**
80 - 100	M20x1,5	30	9	**KF-16080I**
125	M27x2	41	12	**KF-16125I**

DF bracket





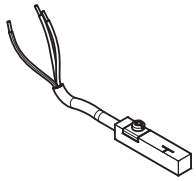


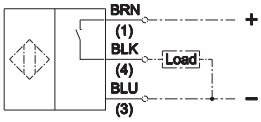
Material: Stainless steel AISI 303

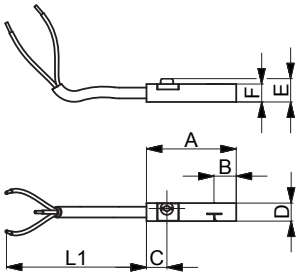
Ø	A	E	H	F	HF	P	R	PR	Part no.
32	34	33,5	45	16,75	78,5	39	33,5	72,5	**DH-P025032DFI**
40	34	41,5	53	20,75	94,5	47	41,5	88,5	**DH-P040DFI**
50	34	51,5	63	25,75	114,5	57	51,5	108,5	**DH-P050DFI**
63	34	64,5	76	32,25	140,5	70	64,5	134,5	**DH-P063DFI**
80	34	81,5	93	40,75	174,5	87	81,5	168,5	**DH-P080DFI**
100	34	101,5	113	50,75	214,5	107	101,5	208,5	**DH-P100DFI**
125	34	126,5	138	63,25	264,5	132	126,5	258,5	**DH-P125DFI**

For DF sensors see accessories section

DF sensor





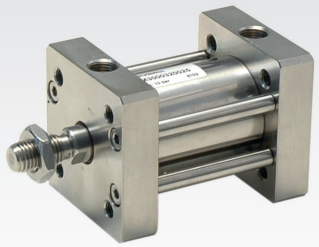


A	B	C	D	E	F	L1	Part no.
25,3	6,2	5,7	5	6,5	5,1	6000 mm	**DF-P700L06**

PRM

ISO 21287 Compact stainless steel cylinders - Ø 20 ÷ 100 mm

- Stainless steel AISI 316
- Available in double-acting and through-rod versions
- FDA approved piston seals



Available ATEX version upon request

II 2GDc T4

1

TECHNICAL CHARACTERISTICS

Ambient temperature	0 ÷ 80 °C (-20°C with dry air)
Fluid	compressed air, filtered air, not lubricated
Working pressure	1 ÷10 bar (double acting) 2 ÷10 bar (simple acting)
Bores	Ø 20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 mm

CONSTRUCTIVE CHARACTERISTICS

End-caps	stainless steel AISI 316
Barrel	Ø20-25 stainless steel AISI 304, Ø32-100 stainless steel AISI 316
Piston	aluminium
Guide slide	PBT+PTFE
Piston rod	stainless steel AISI 316
Piston seal	polyurethane
Guide bush for piston rod	technopolymer
Magnet	Ø20÷50 neodimio, Ø63÷100 plastoferrite
O-Ring	nitrile rubber (NBR)
Tie-rods	stainless steel AISI 316

CODIFICATION KEY

P	R	M	3	0	0	0	3	2	0	0	2	5	M	
1			2	3		4			5				6	7

1 Series

PRM = Pneumatic cylinders ISO 21287 Ø 20 ÷ 100 mm

2 Type

1 = Female piston rod
3 = Male piston rod

3 Version

00 = **D.E.** Standard
01 = **D.E.** Through-rod
16 = **S.E.** Retracted piston rod
17 = **S.E.** Extended piston rod

D.E. = Double effect
S.E. = Single effect

4 Bore (mm)

020 = Ø20 **050** = Ø50
025 = Ø25 **063** = Ø63
032 = Ø32 **080** = Ø80
040 = Ø40 **100** = Ø100

5 Stroke (mm)

0010 = 10
0025 = 25
0050 = 50
0075 = 75
0100 = 100
0125 = 125
0160 = 160
0200 = 200
0250 = 250
0300 = 300
0350 = 350
0400 = 400

6 Magnetic

M = Magnetic version (standard supplied)

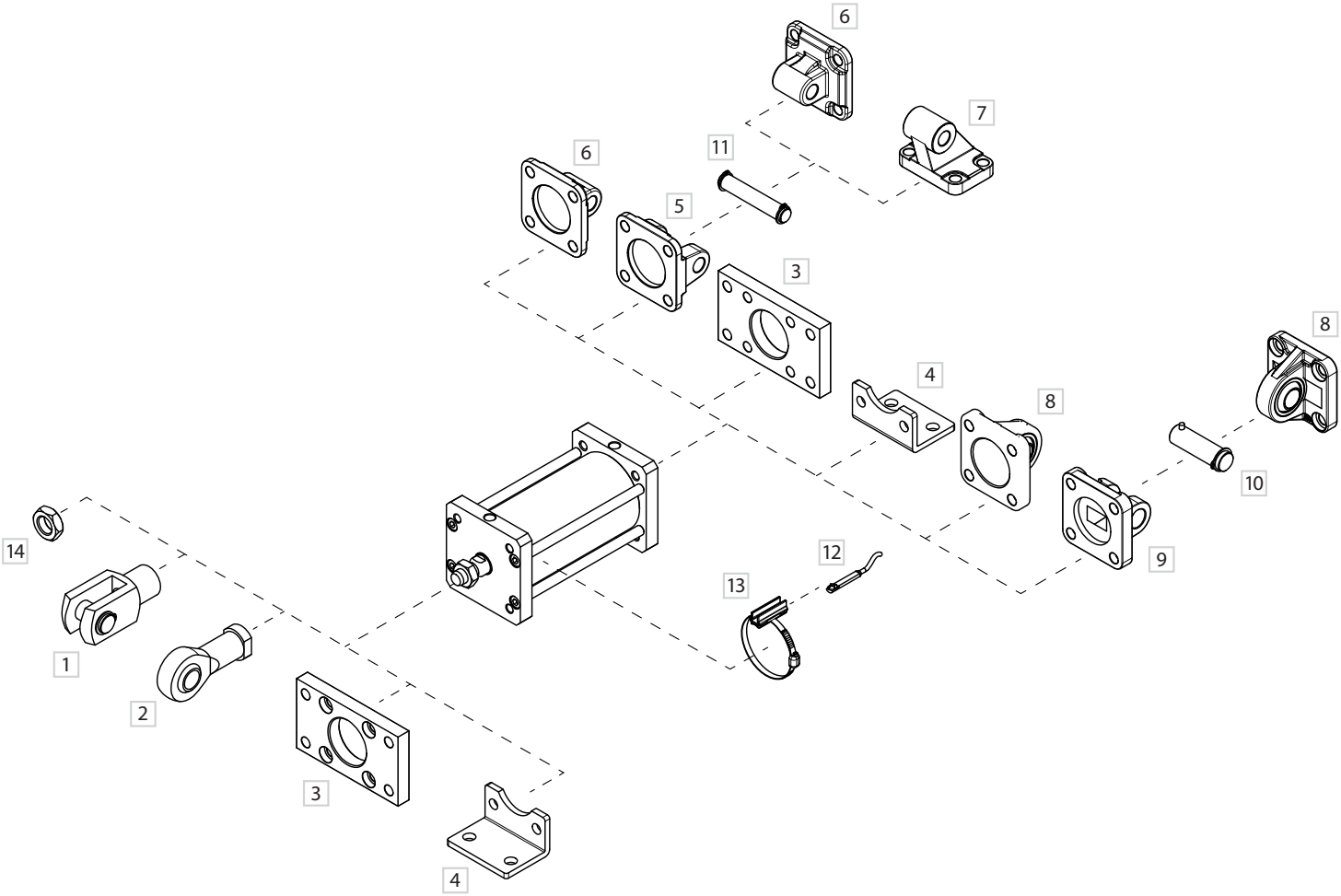
7 ATEX option

X = Atex (upon request)

Version with high temperature seals (Max 150°C) available upon request.

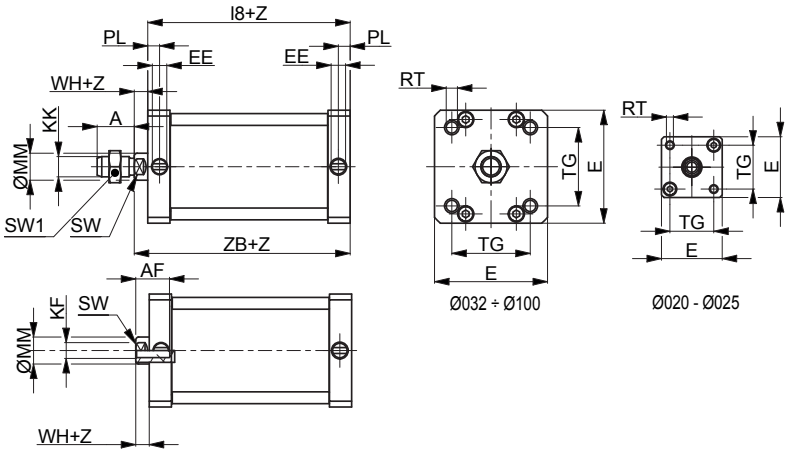
Subject to change

Fixing elements and accessories



	DESCRIPTION	NOTE	PART NO.
1	Female fork with pin	Stainless steel	**KF-15 _ _ _PI**
2	Articulated self-lubricating fork	Stainless steel	**KF-17 _ _ _I**
3	Front/rear flange (ISO MF1-MF2)	Stainless steel	**KF-12 _ _ _I**
4	Angle bracket (ISO MS1)	Stainless steel	**KF-13 _ _ _I**
5	Female hinge (ISO MP2)	Stainless steel	**KF-10 _ _ _AI**
6	Rear male hinge (ISO MP4)	Stainless steel	**KF-11 _ _ _I**
7	Counter hinge 90° (CETOP RP107P)	Stainless steel	**KF-19 _ _ _CTAI**
8	Articulated rear male hinge (ISO MP6)	Stainless steel	**KF-11 _ _ _SI**
9	Narrow female hinge with pin (DIN648K)	Stainless steel	**KF-10 _ _ _ASI/**
10	Narrow hinge pin (DIN648K)	Stainless steel	**KF-18S I**
11	Female hinge pin (ISO MS1)	Stainless steel	**KF-18 _ I**
12	DF sensor	-	**DF-P700L06**
13	DF bracket and adapter	Stainless steel	**DH-P _ _ _DFI**
14	Piston rod nut	Stainless steel	**KF-16 _ _ _I**

Single effect retracted piston rod



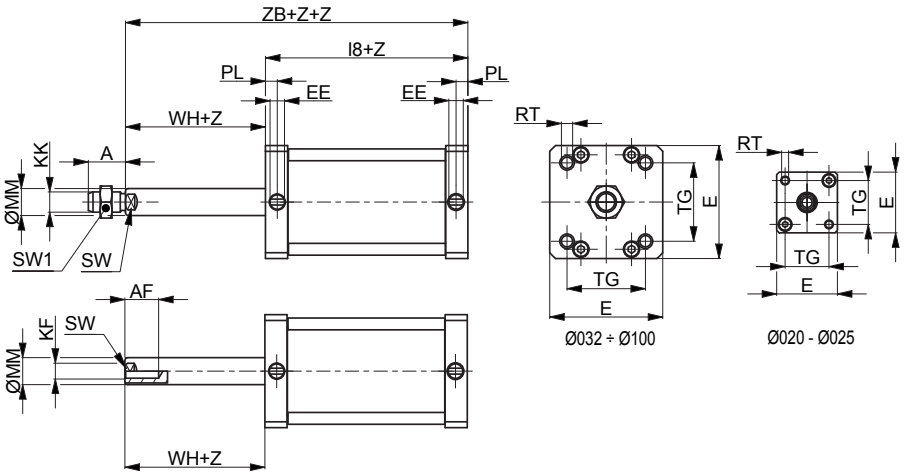
PRM160
S.E. Retracted piston rod

Z= Stroke

Ø	A	AF	KF	E+0,5	KK	l8+		PL	RT	SW	TG		WH	ØMM	EE	SW1	ZB+	
20	16	10	M6	32	M8	47	±0,3	6	M5	8	22	±0,3	6,5	10	M5x0,8	13	53,5	
25	16	10	M6	36	M8	49	±0,3	6	M5	8	26	±0,3	6	10	M5x0,8	13	55	+3,0 -1,5
32	19	12	M8	50	M10x1,25	44	±0,4	7	M6	10	32,5	±0,5	6,5	12	G1/8	17	50,5	
40	19	12	M8	57	M10x1,25	45	±0,7	7	M6	10	38	±0,6	7	12	G1/8	17	52	
50	22	16	M10	67	M12x1,25	45	±0,7	7	M8	13	46,5	±0,7	8	16	G1/8	19	53	
63	22	16	M10	80	M12x1,25	49	±0,8	7	M8	13	56,5	±0,7	8	16	G1/8	19	57	
80	28	20	M12	96	M16x1,5	54	±0,8	7,5	M10	17	72	±0,7	10	20	G1/8	24	64	+3,5
100	28	20	M12	116	M16x1,5	67	±1	7,5	M10	22	89	±1,1	10	25	G1/8	24	77	

1

Single effect extended piston rod



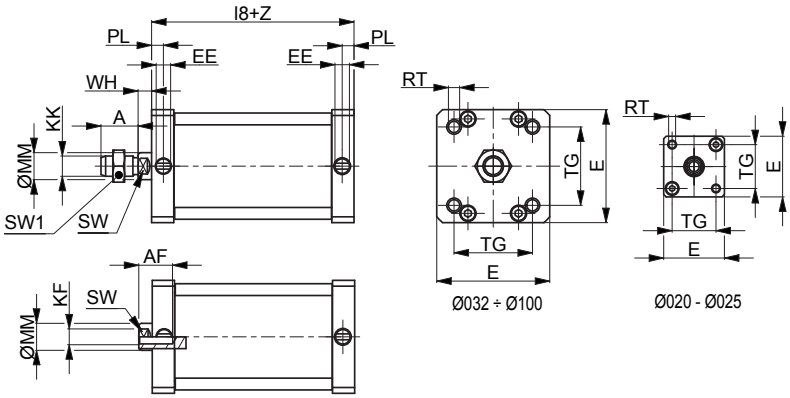
PRM170
S.E. Extended piston rod

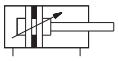
Z= Stroke

Ø	A	AF	KF	E+0,5	KK	l8+		PL	RT	SW	TG		WH	ØMM	EE	SW1	ZB+	
20	16	10	M6	32	M8	47	±0,3	6	M5	8	22	±0,3	6,5	10	M5x0,8	13	53,5	
25	16	10	M6	36	M8	49	±0,3	6	M5	8	26	±0,3	6	10	M5x0,8	13	55	+3,0 -1,5
32	19	12	M8	50	M10x1,25	44	±0,4	7	M6	10	32,5	±0,5	6,5	12	G1/8	17	50,5	
40	19	12	M8	57	M10x1,25	45	±0,7	7	M6	10	38	±0,6	7	12	G1/8	17	52	
50	22	16	M10	67	M12x1,25	45	±0,7	7	M8	13	46,5	±0,7	8	16	G1/8	19	53	
63	22	16	M10	80	M12x1,25	49	±0,8	7	M8	13	56,5	±0,7	8	16	G1/8	19	57	
80	28	20	M12	96	M16x1,5	54	±0,8	7,5	M10	17	72	±0,7	10	20	G1/8	24	64	+3,5
100	28	20	M12	116	M16x1,5	67	±1	7,5	M10	22	89	±1,1	10	25	G1/8	24	77	

Subject to change

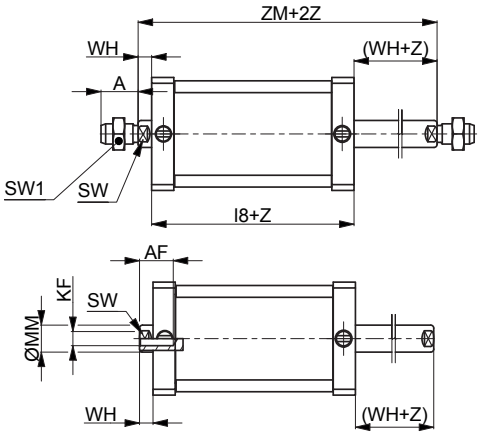
Double effect

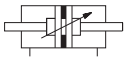




PRM100
D.E. Standard

Double effect through-rod



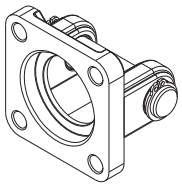


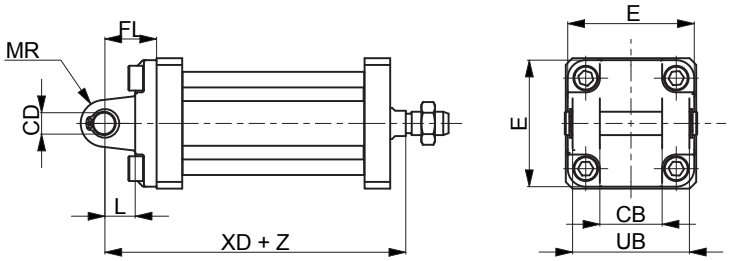
PRM101
D.E. Through-rod

Z= Stroke

Ø	A	AF	KF	E+0,5	KK	I8+		PL	RT	SW	TG		WH	ØMM	EE	SW1	ZM+	
20	16	10	M6	32	M8	37	±0,3	6	M5	8	22	±0,3	6,5	10	M5x0,8	13	43,5	+3,0 -1,5
25	16	10	M6	36	M8	39	±0,3	6	M5	8	26	±0,3	6	10	M5x0,8	13	45	
32	19	12	M8	50	M10x1,25	44	±0,4	7	M6	10	32,5	±0,5	6,5	12	G1/8	17	50,5	
40	19	12	M8	57	M10x1,25	45	±0,7	7	M6	10	38	±0,6	7	12	G1/8	17	52	
50	22	16	M10	67	M12x1,25	45	±0,7	7	M8	13	46,5	±0,7	8	16	G1/8	19	53	
63	22	16	M10	80	M12x1,25	49	±0,8	7	M8	13	56,5	±0,7	8	16	G1/8	19	57	+3,5
80	28	20	M12	96	M16x1,5	54	±0,8	7,5	M10	17	72	±0,7	10	20	G1/8	24	64	
100	28	20	M12	116	M16x1,5	67	±1	7,5	M10	22	89	±1,1	10	25	G1/8	24	77	

Female hinge (ISO MP2) with pin



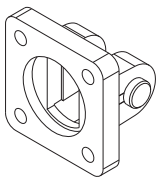


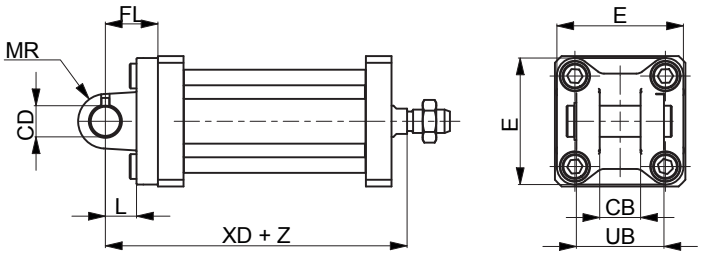
Material: Stainless steel AISI 304

Z = Stroke

Ø	CB	CD	E	FL	L	MR	UB	XD+		Part no.
	H14	H9		± 0,2	min	Max	h14			
20	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-
32	26	10	48	22	12	11	45	62,5	±1,25	**KF-10032AI**
40	28	12	54	25	15	13	52	67	±1,25	**KF-10040AI**
50	32	12	65	27	15	13	60	68	±1,25	**KF-10050AI**
63	40	16	75	32	20	17	70	77	±1,6	**KF-10063AI**
80	50	16	95	36	20	17	90	84	±1,6	**KF-10080AI**
100	60	20	115	41	25	21	110	102	±1,6	**KF-10100AI**

Narrow female hinge with pin (DIN648K)



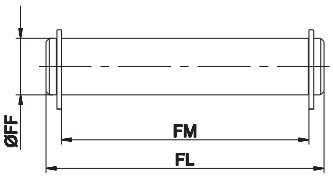


Material: Stainless steel AISI 316

Z = Stroke

Ø	CB	CD	E	FL	L	MR	UB	XD+		Part no.
	H14	H9		± 0,2	min	Max	h14			
20	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-
32	14	10	45	22	10	10	34	60,5	±1,25	**KF-10032ASI**
40	16	12	52	25	16	12	40	68	±1,25	**KF-10040ASI**
50	21	16	65	27	16	14	45	69	±1,5	**KF-10050ASI**
63	21	16	75	32	21	18	51	78	±1,6	**KF-10063ASI**
80	25	20	95	36	22	20	65	86	±1,6	**KF-10080ASI**
100	25	20	115	41	27	22	75	104	±1,6	**KF-10100ASI**

Female hinge pin

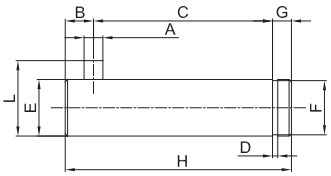


Including 2 circlips

Material: Stainless steel AISI 304

Ø	FF	FL	FM	Part no.
	f8			
20	-	-	-	-
25	-	-	-	-
32	10	53	46	**KF-18032I**
40	12	61,3	53	**KF-18040I**
50	12	69	61	**KF-18050I**
63	16	80,5	71	**KF-18063I**
80	16	100,5	91	**KF-18080I**
100	20	122,5	111	**KF-18100I**

Narrow female hinge pin



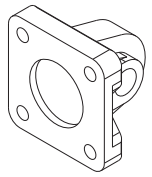
Including 2 circlips

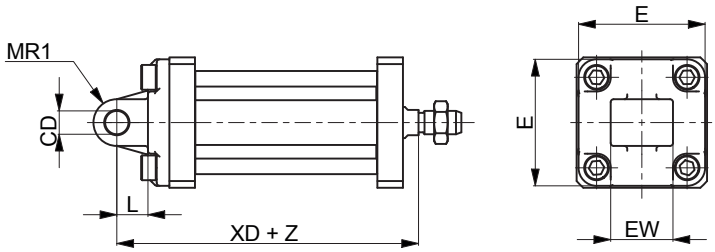
Material: Stainless steel AISI 316

Ø	A	C	D	E	F	G	H	L	B		Part no.
	H12	$^{+0,5}_{+0,3}$	h13	f7	h11			$^{0}_{-0,5}$			
20	-	-	-	-	-	-	-	-	-		-
25	-	-	-	-	-	-	-	-	-		-
32	3	32,5	1,1	10	9,6	4	41	14	4,5		**KF-18032SI**
40	4	38	1,1	12	11,5	4	48	16	6	0	**KF-18040SI**
50	4	43	1,1	16	15,2	5	54	20	6	-1	**KF-18050SI**
63	4	49	1,1	16	15,2	5	60	20	6		**KF-18063SI**
80	4	63	1,3	20	19	6	75	24	6		**KF-18080SI**
100	4	73	1,3	20	19	6	85	24	6		**KF-18100SI**

Subject to change

Rear male hinge (ISO MP4)





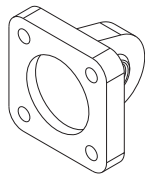
Material: Stainless steel AISI 304

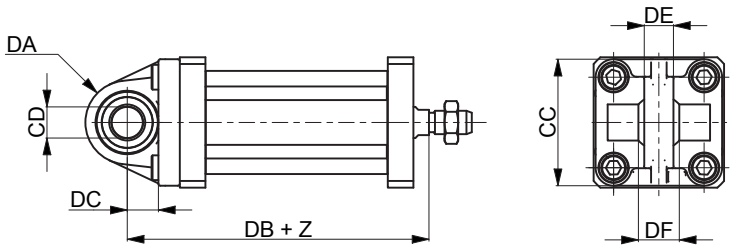
Z = Stroke

Ø	CD	E	EW		L	MR1	XD+		Part no.
	H9				min				
20	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-
32	10	48	26	-0,2/-0,6	12	15*	62,5	±1,25	**KF-11032I**
40	12	54	28	-0,2/-0,6	15	18*	67	±1,25	**KF-11040I**
50	12	65	32	-0,2/-0,6	15	20*	68	±1,25	**KF-11050I**
63	16	75	40	-0,2/-0,6	20	23*	77	±1,6	**KF-11063I**
80	16	95	50	-0,2/-0,6	20	27*	84	±1,6	**KF-11080I**
100	20	115	60	-0,2/-0,6	25	29,5*	102	±1,6	**KF-11100I**

* = Non-standard dimension

Articulated rear male hinge (ISO MP6)



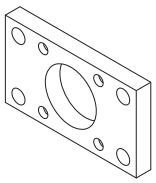


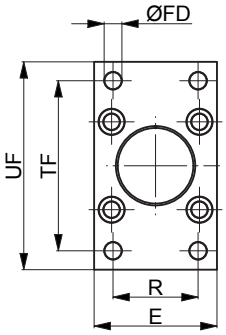
Material: Stainless steel AISI 316

Z = Stroke

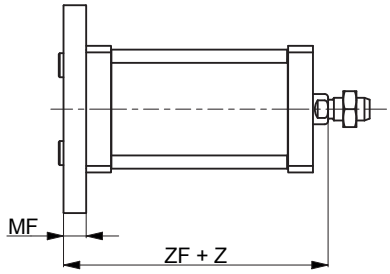
Ø	CC	CD	DA	DB+	DC	DE	DF	Part no.
		H9						
20	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-
32	48	10	15	64	14	10,5	14	**KF-11032SI**
40	54	12	18	68,5	16,5	12	16	**KF-11040SI**
50	65	12	20	70,5	17,5	12	16	**KF-11050SI**
63	75	16	21	78,5	21,5	15	21	**KF-11063SI**
80	95	16	27	88	24	15	21	**KF-11080SI**
100	115	20	29,5	105	28	18	25	**KF-11100SI**

Front/rear flange (ISO MF1-MF2)

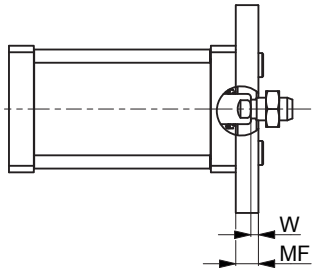




> Rear mounting



> Front mounting

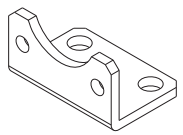


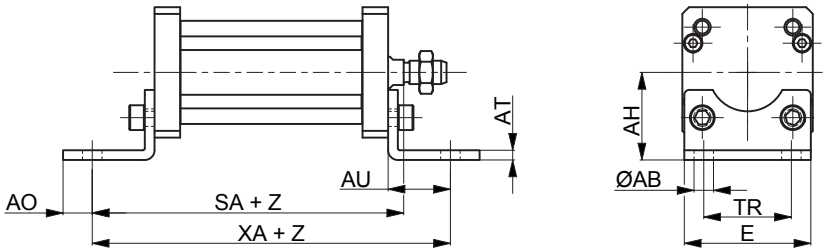
Material: Stainless steel AISI 304

Z = Stroke

Ø	E	FB	MF	R	TF	UF	W		ZF		Part no.
		H13	± 0,2	JS14	JS14	Max					
20	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-
32	45	7	10	32	64	80	3,5	±1,6	54	±1,25	**KF-12032I**
40	52	9	10	36	72	90	3	±1,6	55	±1,25	**KF-12040I**
50	65	9	12	45	90	110	4	±2	57	±1,25	**KF-12050I**
63	75	9	12	50	100	120	4	±2	61	±1,6	**KF-12063I**
80	95	12	16	63	126	150	6	±2	70	±1,6	**KF-12080I**
100	115	14	16	75	150	170	6	±2	83	±1,6	**KF-12100I**

Angle bracket (ISO MS1)





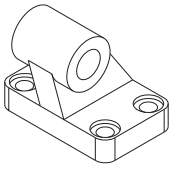
Material: Stainless steel AISI 304

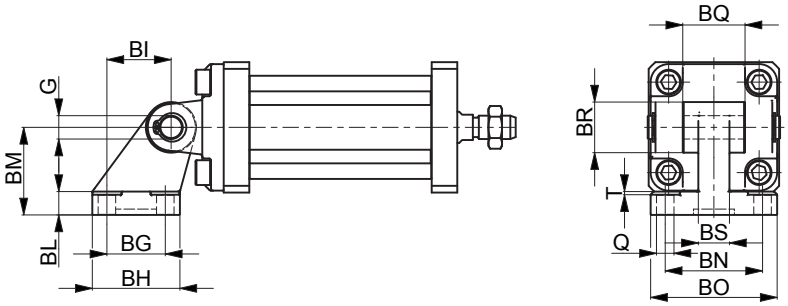
Z = Stroke

Ø	ØAB	AH	AO	AT	AU	E	SA+		TR	XA+		Part no.
	H13	JS15			±0,2				JS14			
20	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
32	7	32	6	4	24	45	74,5	±1,25	32	98,5	±1,25	**KF-13032I**
40	9	36	8	4	28	52	80	±1,25	36	108	±1,25	**KF-13040I**
50	9	45	10	5	32	64	85	±1,25	45	117	±1,25	**KF-13050I**
63	9	50	12	5	32	74	89	±1,6	50	121	±1,6	**KF-13063I**
80	12	63	15	6	41	94	105	±1,6	63	146	±1,6	**KF-13080I**
100	14	71	20	6	41	114	118	±1,6	75	159	±1,6	**KF-13100I**

Counter hinge 90° (CETOP RP107P)

1

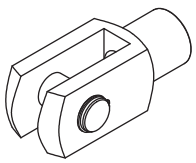


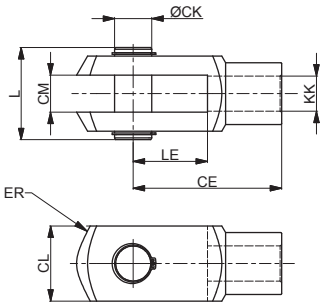


Material: Stainless steel AISI 304

Ø	Q	BG	BH	BI	BL	BM	BN	BO	BS	BR	T	G	Part no.
	H13	JS14	Max	JS14		JS15	JS14	Max	Max	Max	Max	H9	
20	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-
32	6,6	18	31	21	8	32	38	51	10	20	1,6	10	**KF-19032CTAI**
40	6,6	22	35	24	10	36	41	54	15	22	1,6	12	**KF-19040CTAI**
50	9	30	45	33	12	45	50	65	16	26	1,6	12	**KF-19050CTAI**
63	9	35	50	37	14	50	52	67	16	30	1,6	16	**KF-19063CTAI**
80	11	40	60	47	14	63	66	86	20	30	2,5	16	**KF-19080CTAI**
100	11	50	70	55	17	71	76	96	20	38	2,5	20	**KF-19100CTAI**

Female fork with pin



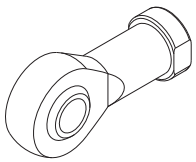


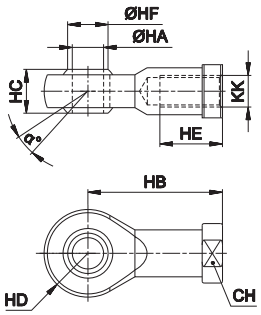
Material: Stainless steel AISI 304

Ø	CE	CK	CL	CM	ER	KK	L	LE	Part no.
				B12					
20 - 25	32	8	16	8	10	M8x1,25	22	16	**MF-15020PI**
32 - 40	40	10	20	10	16	M10x1,25	26	20	**KF-15032PI**
50 - 63	48	12	24	12	19	M12x1,25	32	24	**KF-15040PI**
80 - 100	64	16	32	16	25	M16x1,5	40	32	**KF-15050PI**

Fork with clip suitable for piston rod according to ISO 8140

Articulated self-lubricating fork



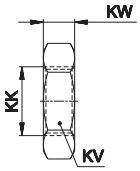


Material: Stainless steel AISI 304

Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Part no.
				H7			0 -0,12			
20 - 25	14	14	M8x1,25	8	36	12	12	16	10,4	**MF-17020I**
32 - 40	13	17	M10x1,25	10	43	14	14	20	12,9	**KF-17032I**
50 - 63	13	19	M12x1,25	12	50	16	16	22	15,4	**KF-17040I**
80 -100	15	22	M16x1,5	16	64	21	21	28	19,3	**KF-17050I**

Subject to change

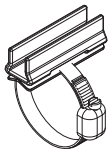
Piston rod nut

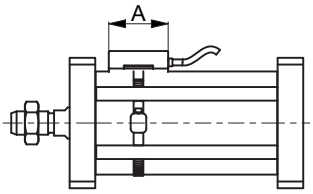


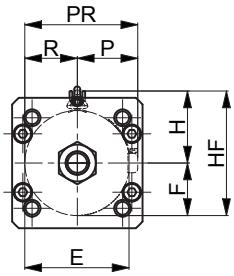
Material: Stainless steel AISI 304

Ø	KK	KV	KW	Part no.
20 - 25	M8x1,25	13	5	MF-16020I
32 - 40	M10x1,25	17	6	KF-16032I
50 - 63	M12x1,25	19	7	KF-16040I
80 - 100	M16x1,5	24	8	KF-16050I

DF bracket





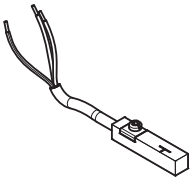


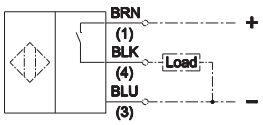
Material: Stainless steel AISI 303

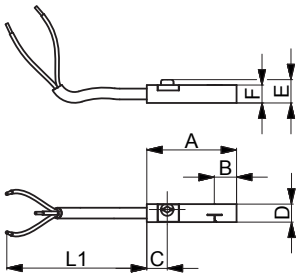
Ø	A	E	H	F	HF	P	R	PR	Part no.
20	34	24	20	12	32	17	12	29	DH-P020DFI
25	34	32	23	16	39	19	16	35	DH-P025032DFI
32	34	41,5	53	16,75	94,5	47	41,5	88,5	DH-P025032DFI
40	34	51,5	63	20,75	114,5	57	51,5	108,5	DH-P040DFI
50	34	64,5	76	25,75	140,5	70	64,5	134,5	DH-P050DFI
63	34	81,5	93	32,25	174,5	87	81,5	168,5	DH-P063DFI
80	34	101,5	113	40,75	214,5	107	101,5	208,5	DH-P080DFI
100	34	126,5	138	50,75	264,5	132	126,5	258,5	DH-P100DFI

For DF sensors see accessories section

DF sensor







A	B	C	D	E	F	L1	Part no.
25,3	6,2	5,7	5	6,5	5,1	6000 mm	DF-P700L06