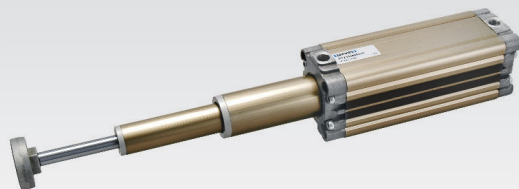


RT

Cilindri pneumatici telescopici a 2/3 stadi Ø 25 ÷ 63 mm

Design e tecnologia originale UNIVER
Componenti industrializzati e tecnologia all'avanguardia
Ingombro ridotto: -60% rispetto ad un cilindro tradizionale
Non rotante di serie
Versione magnetica sul primo stadio standard di serie (sul secondo e terzo stadio a richiesta)
Disponibile unità di guida per versione 2 stadi (J64RT)

Disponibile versione ATEX su richiesta



CARATTERISTICHE TECNICHE

Temperatura ambiente	-20 ÷ 80 °C
Fluido	aria filtrata, con o senza lubrificazione
Pressione di esercizio	1,5 ÷ 10 bar
Alesaggi	2 stadi: Ø 25 - 32 - 40 - 50 - 63 3 stadi: Ø 40 - 50 - 63

CARATTERISTICHE COSTRUTTIVE

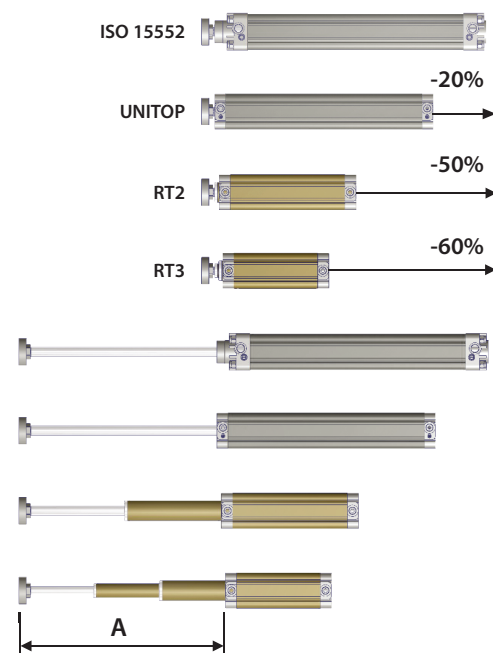
Testate	alluminio pressofuso
Camicia	alluminio anodizzato
Pistone	alluminio
Pattino di guida	resina acetale
Stelo	acciaio cromato non rotante completo di flangia (stelo femmina) acciaio inox su richiesta
Guarnizione pistone	gomma nitrilica
Bussola guida stelo	resina acetale
Paracolpi	gomma nitrilica
Magnete	standard di serie (primo stadio)

CHIAVE DI CODIFICA

R	T	2	2	0	0	3	2	0	6	0	0		
1	2	3	4	5	6	7	8						

Comparazione ingombro cilindri

Corsa 300 mm (A)



2

HIGH-TECH

1 Serie	2 Stelo	3 Stadi	4 Tipologia
RT = Cilindri pneumatici telescopici a 2/3 stadi Ø 25÷63 mm (con stelo non rotante e paracolpi elastici)	1 = Stelo acciaio inox 2 = Stelo acciaio cromato	2 = 2 stadi 3 = 3 stadi	0 = D.E. Stelo femmina 3 = D.E. Stelo maschio D.E. = Doppio effetto

5 Alesaggio (mm)	6 Corsa (mm)	7 Variante	8 Variante ATEX
2 stadi 025 = Ø25 040 = Ø40 032 = Ø32 050 = Ø50 040 = Ø40 063 = Ø63 050 = Ø50 063 = Ø63	2 stadi 0100 - 0120 - 0160 - 0180 - 0200 - 0300 - 0400 - 0500 0600 - 0700 - 0800 - 0900 - 1000 - 1100 - 1200 corsa Max: 0300 (Ø25) 0900 (Ø50) 0400 (Ø32) 1200 (Ø63) 0600 (Ø40)	I = Senza flangia (solo per stelo femmina) L = Stelo libero di ruotare (senza flangia) M = Con asta magnetica telescopica (2°-3° stadio) escluso Ø25 solo per stelo femmina	X = ATEX (su richiesta) Per tipologia e versioni, consultare catalogo ATEX
	3 stadi 0150 - 0180 - 0210 - 0240 - 0270 - 0300 - 0360 - 0450 0600 - 0750 - 900 - 1050 - 1200 - 1500 - 1800 corsa Max: 1200 (Ø40) 1500 (Ø50) 1800 (Ø63)		

Tabella riassuntiva della combinazione alesaggi

Ø	Ø		
	1° stadio	2° stadio	3° stadio
25	25	16	-
32	32	20	-
40	40	25	16
50	50	32	20
63	63	40	25

Tolleranze nominali sulla corsa

Massimo momento torcente (Nm) per stelo non rotante

Ø	Tolleranza nominale		Momento torcente	
	mm		Nm	
	2 stadi	3 stadi	2 stadi	3 stadi
25	+2 - 0	+4 - 0	0,5	-
32	+3,2 - 0	+4 - 0	0,8	-
40	+3,2 - 0	+4 - 0	1	0,5
50	+3,2 - 0	+4 - 0	2	0,8
63	+3,2 - 0	+4 - 0	3	1

Cilindro telescopico 2 stadi

Forze teoriche (N) sviluppate alla pressione d'esercizio (bar)

Ø	Superficie utile		Pressione di esercizio									
	mm ²		bar									
	Spinta	Trazione	Spinta					Trazione				
			2	4	6	8	10	2	4	6	8	10
25	201	111	41	82	123	164	205	22	43	65	87	108
32	314	201	64	128	192	256	320	41	82	123	164	205
40	490	377	100	200	300	400	500	77	154	231	308	384
50	804	603	164	328	492	656	820	123	246	369	492	615
63	1256	1055	256	512	769	1025	1281	215	430	649	861	1076

Cilindro telescopico 3 stadi

Forze teoriche (N) sviluppate alla pressione d'esercizio (bar)

Ø	Superficie utile		Pressione di esercizio									
	mm ²		bar									
	Spinta	Trazione	Spinta					Trazione				
			2	4	6	8	10	2	4	6	8	10
40	201	111	41	82	123	164	205	22	43	65	87	108
50	314	201	64	128	192	256	320	41	82	123	164	205
63	490	377	100	200	300	400	500	77	154	231	308	384

Massa cilindro 2 stadi RT220/RT220I/RT220M/RT223

Ø	Cilindro - corsa 0				Incremento ogni mm di corsa per 1/2 corsa				Equipaggio mobile corsa 0				Incremento ogni mm di corsa per 1/2 corsa			
	g				g				g				g			
	RT220	RT220I	RT220M	RT223	RT220	RT220I	RT220M	RT223	RT220	RT220I	RT220M	RT223	RT220	RT220I	RT220M	RT223
25	232	206	-	230	2,02	2,02	-	2,02	75	68	-	80	1,02	1,02	-	1,02
32	252	228	254	250	3,00	3,00	3,01	3,00	125	100	138	130	1,38	1,38	1,39	1,38
40	377	342	379	364	3,74	3,74	3,75	3,74	182	143	189	173	1,59	1,59	1,60	1,59
50	597	540	599	585	5,20	5,20	5,21	5,20	314	246	318	291	2,52	2,52	2,53	2,52
63	913	819	915	870	6,31	6,31	6,32	6,31	480	385	487	430	2,70	2,70	2,71	2,70

Massa cilindro 3 stadi RT230/RT230I/RT230M/RT233

Ø	Cilindro - corsa 0				Incremento ogni mm di corsa per 1/3 corsa				Equipaggio mobile corsa 0				Incremento ogni mm di corsa per 1/3 corsa			
	g				g				g				g			
	RT230	RT230I	RT230M	RT233	RT230	RT230I	RT230M	RT233	RT230	RT230I	RT230M	RT233	RT230	RT230I	RT230M	RT233
40	367	337	369	362	3,88	3,88	3,90	3,88	162	137	191	168	1,73	1,73	1,75	1,73
50	510	486	512	511	5,00	5,00	5,02	5,00	265	226	307	257	2,32	2,32	2,34	2,32
63	810	775	812	810	6,32	6,32	6,34	6,32	417	349	459	380	2,71	2,71	2,73	2,71

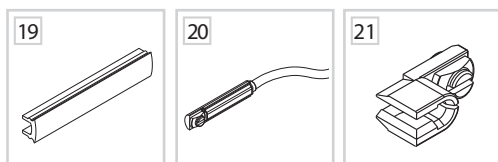
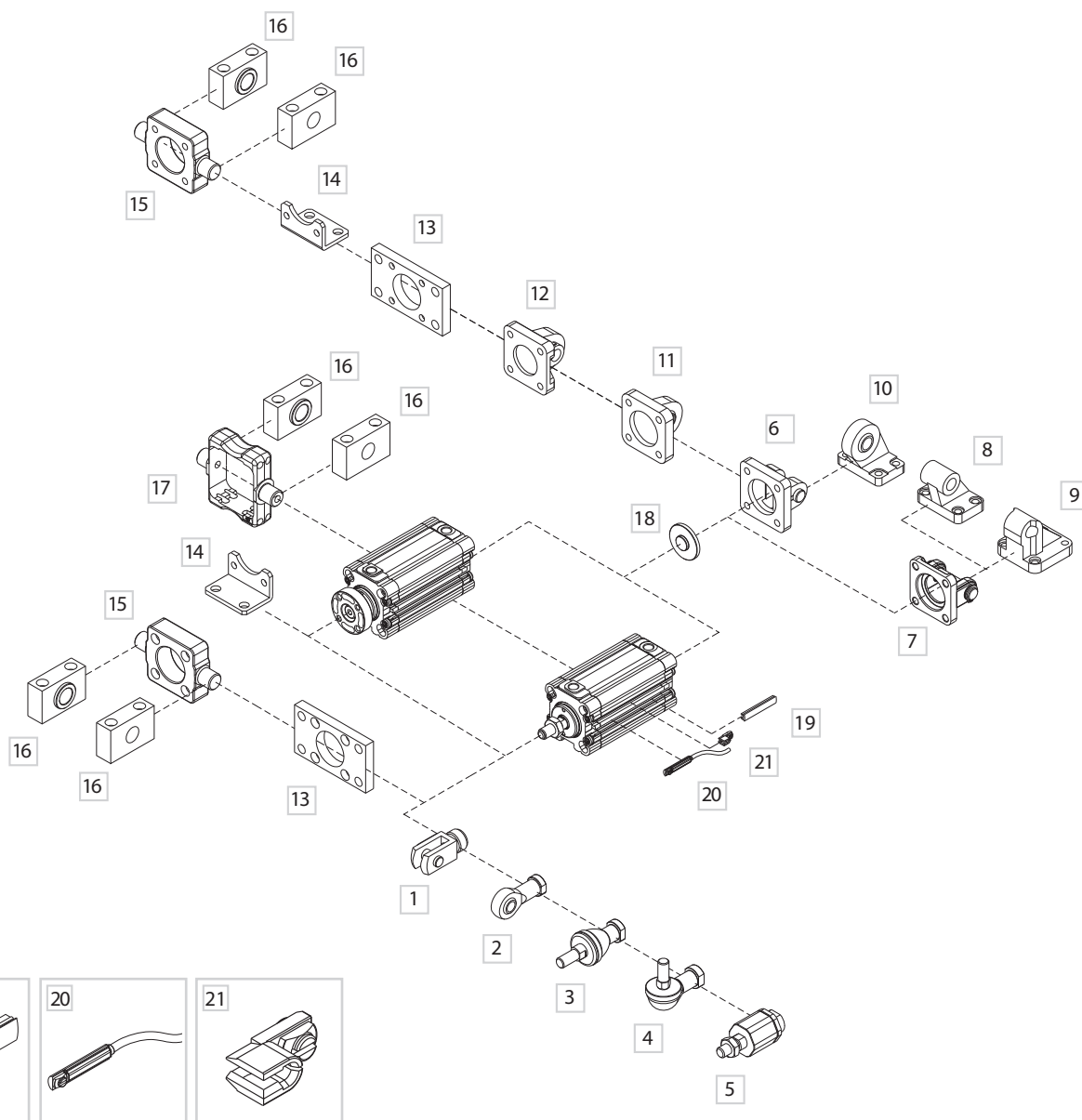
Precauzioni d'uso e di montaggio

Il cilindro telescopico lavora in condizioni ottimali quando il carico è assiale, cioè con il cilindro in verticale, verso l'alto o verso il basso.

Può naturalmente lavorare in orizzontale e a sbalzo; in questo caso però occorre:

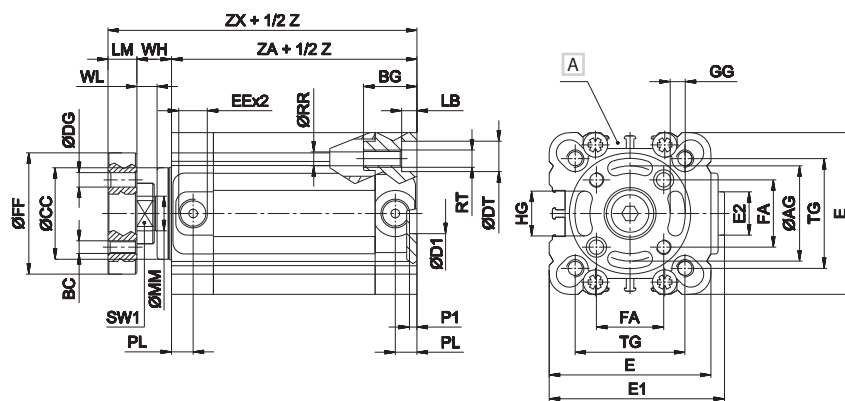
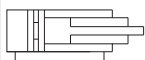
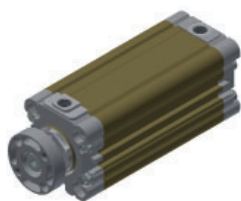
- limitare le corse massime, che devono essere ridotte del 50% rispetto a quelle massime nominali;
- richiedere cilindri con unità di guida;
- supportare il carico radiale con altri sistemi (carrelli, pattini, guide di scorrimento);
- si consiglia velocità massima 0,5 m/sec.

Fissaggi e accessori

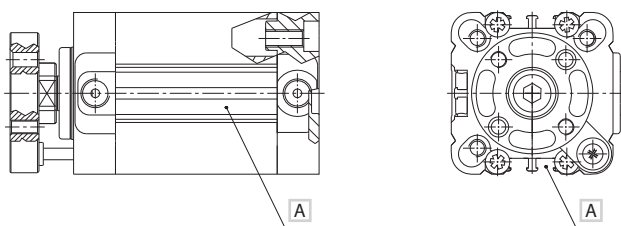
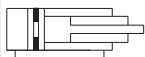
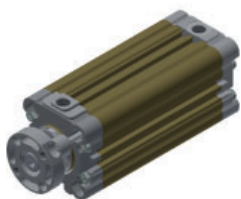


DESCRIZIONE	CODICE
1 Forcella femmina con clips	KF-15__
2 Forcella snodata autolubrificata	KF-17__
3 Forcella con perno snodato in asse	KF-22__
4 Forcella con perno snodato ad angolo	KF-23__
5 Snodo autoallineante	KF-24__
6 Cerniera femmina con perno	KF-10__A
7 Cerniera femmina stretta con perno	KF-10__AS
8 Contro-cerniera a 90° (AB7)	KF-19__CTA
9 Contro-cerniera a 90°	KF-19__
10 Contro-cerniera a squadra snodata	KF-19__SC
11 Cerniera maschio con testina snodata	KF-11__S
12 Cerniera post. maschio	KF-11__/_RPF-11__
13 Flangia ant./post.	KF-12__/_RTF-12__
14 Piedino ad angolo	KF-13__/_RTF-13__
15 Cerniera ant./post. oscillante	KF-14__AP
16 Supporto per cerniera	KF-41__
17 Cerniera intermedia ISO	KDF-14__/_RPF-14__
18 Adattatore per centraggio	RSF-09__
19 Bandella coprifilo DHF	DHF-0020100
20 Sensore DF	DF-__
21 Bloccacavo guida filo sensore DF	DF-001

2 stadi con flangia RT220...

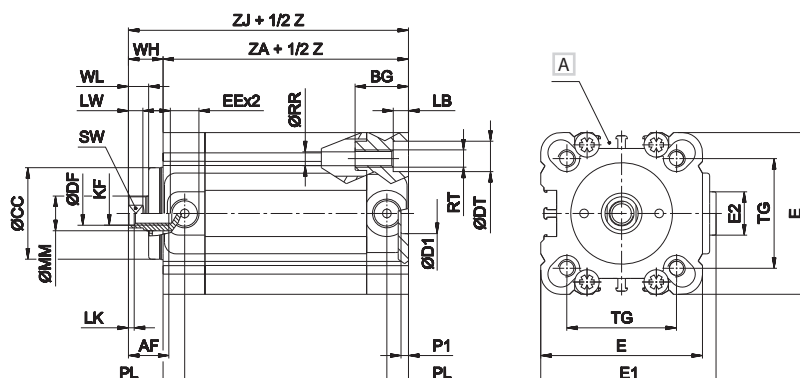
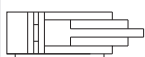
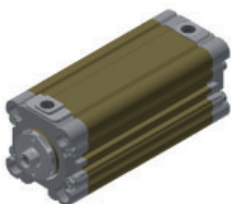


2 stadi con flangia magnetico RT220...M

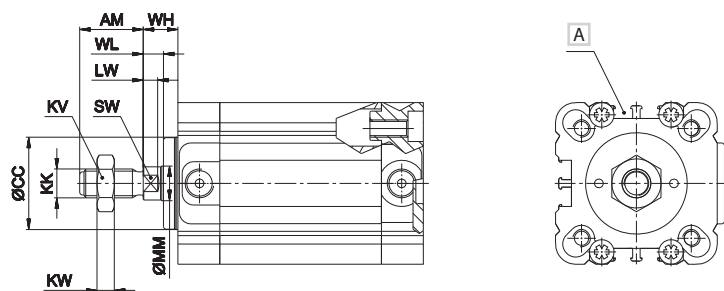
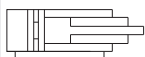
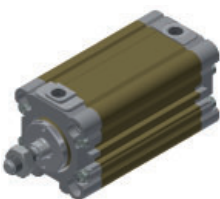


A = per la versione magnetica i sensori DF... possono essere posizionati solo in prossimità dell'astina telescopica porta magnete indicata.

2 stadi stelo femmina RT220...I



2 stadi stelo maschio RT223...



A Scanalatura per sensore

Z = Corsa

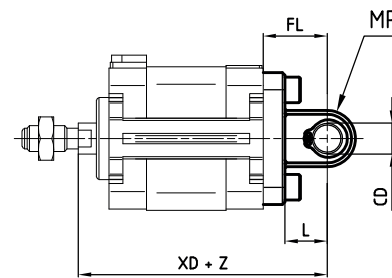
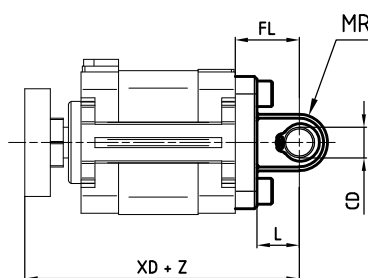
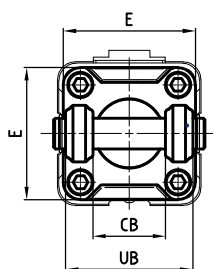
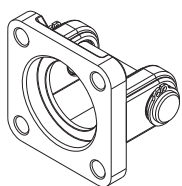
Ø	AF	AG	AM	BC	BG	CC	DF	DG	DT	D1 H11	E	E1	E2	EE	FA	FF	GG	HG	KF	KK
25	10	22	22	M5	16	22	6,1	5	8	2	37	39	18	M5	15,6	30	5	9	M6	M10x1,25
32	12	28	22	M5	18	26	8,2	5	9	14	46	50,5	16	G1/8	19,8	37	5,2	11	M8	M10x1,25
40	12	33	22	M5	18	32	8,2	5	9	14	56	60,5	16	G1/8	23,3	42	5,2	15	M8	M10x1,25
50	16	42	24	M6	24	40	10,2	6	11	18	66	70,5	16	G1/8	29,7	52	6,2	19	M10	M12x1,25
63	16	50	24	M6	24	48	10,2	6	11	18	79	83,5	38	G1/8	35,4	64	6,2	25	M10	M12x1,25

Ø	KV	KW	LB	LK	LM	LW	MM	PL	P1	RR	RT	SW	SW1	TG	WH	WL	ZA	ZJ	ZX
25	17	3	4,5	1	8	4,5	10	8	8	4,2	M5	8	-	26	17	7	48	65	73
32	17	4	5,3	2	10	5	12	7,5	2,5	5,2	M6	10	17	32,5	13	7	58	71	81
40	17	4	5,3	2	10	5	12	7,5	2,5	5,2	M6	10	19	38	12	7	60	72	82
50	19	5	6,5	2	12	6	16	7,5	2,5	6,6	M8	13	24	46,5	15	8	61	76	88
63	19	5	6,5	2	12	6	16	7,5	2,5	6,6	M8	13	24	56,5	15	8	65	80	92

Cerniera femmina con perno (ISO MP2)

> Versione standard (con flangia)

> Versione stelo maschio

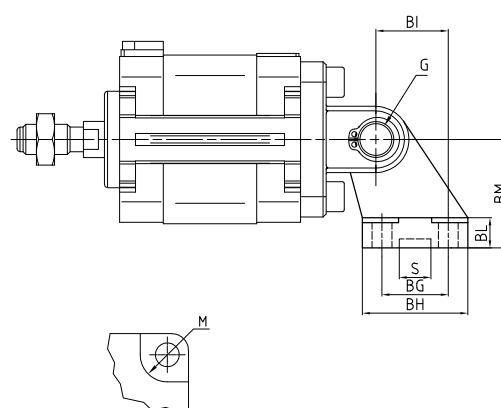
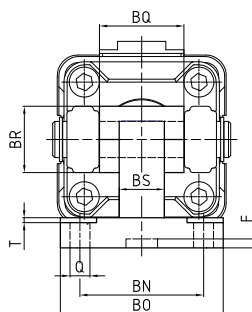
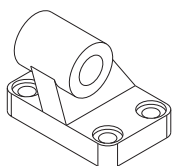


Materiale: Alluminio

Z = Corsa

Ø	CB H14	CD H9	E	FL ± 0,2	L min	MR Max	UB H14	XD (versione standard)		XD (versione stelo maschio)		Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-	-	-
32	26	10	48	22	12	11	45	103	±1,25	93	±1,25	75	KF-10032A
40	28	12	54	25	15	13	52	107	±1,25	97	±1,25	110	KF-10040A
50	32	12	65	27	15	13	60	115	±1,25	103	±1,25	150	KF-10050A
63	40	16	75	32	20	17	70	124	±1,6	112	±1,6	270	KF-10063A

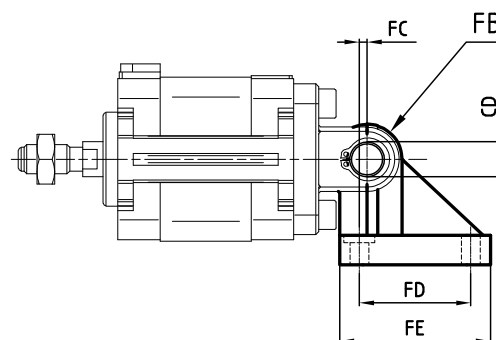
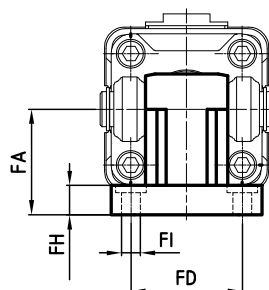
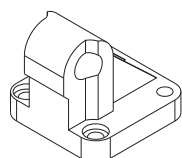
Contro-cerniera a 90° (AB7)



Materiale: Alluminio

Ø	Q H13	M H13	BG JS 14	BH Max	BI JS 14	BL	BM JS 15	BN JS 14	BO Max	BS Max	BR Max	T Max	G H9	S +0,5 0	F +0,5 0	BQ	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	6,6	11	18	31	21	8	32	38	51	10	20	1,6	10	10,5	3	26	56	KF-19032CTA
40	6,6	11	22	35	24	10	36	41	54	15	22	1,6	12	10,5	3	28	139	KF-19040CTA
50	9	15	30	45	33	12	45	50	65	16	26	1,6	12	10,5	3	32	142	KF-19050CTA
63	9	15	35	50	37	14	50	52	67	16	30	1,6	16	10,5	3	40	200	KF-19063CTA

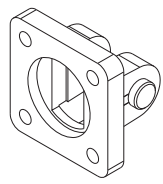
Contro-cerniera a 90°



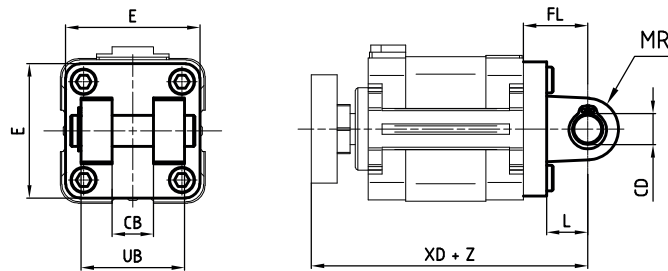
Materiale: Alluminio

Ø	CD H9	FA	FB	FC	FD	FE	FH	FI	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-
32	10	32	10	1,2	32,5	46,5	9	6,5	90	KF-19032
40	12	36	12	2,6	38	51,5	9	6,5	120	KF-19040
50	12	45	12	0,3	46,5	63,5	9	8,5	200	KF-19050
63	16	50	16	3,3	56,5	73	10,5	8,5	320	KF-19063

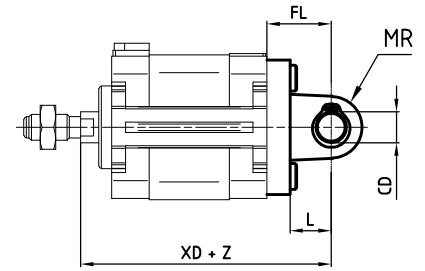
Cerniera femmina stretta con perno (DIN 648K)



> Versione standard (con flangia)



> Versione stelo maschio

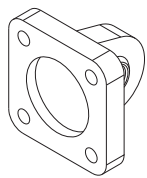


Materiale: Alluminio

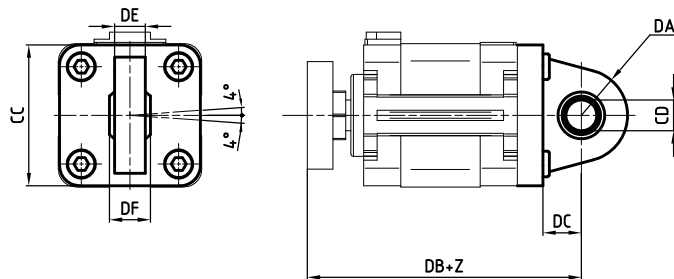
Z = Corsa

Ø	CB H14	CD H9	E	FL ± 0,2	L min	MR Max	UB H14	XD (versione standard)		XD (versione stelo maschio)		Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-	-	-
32	14	10	45	22	13	10	34	103	±1,25	93	±1,25	68	KF-10032AS
40	16	12	52	25	16	12	40	107	±1,25	97	±1,25	112	KF-10040AS
50	21	16	65	27	16	14	45	115	±1,25	113	±1,25	196	KF-10050AS
63	21	16	75	32	21	18	51	124	±1,6	112	±1,6	288	KF-10063AS

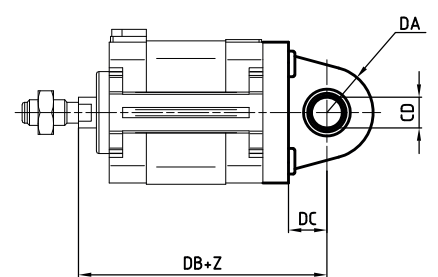
Cerniera posteriore maschio snodata (ISO MP6)



> Versione standard (con flangia)



> Versione stelo maschio

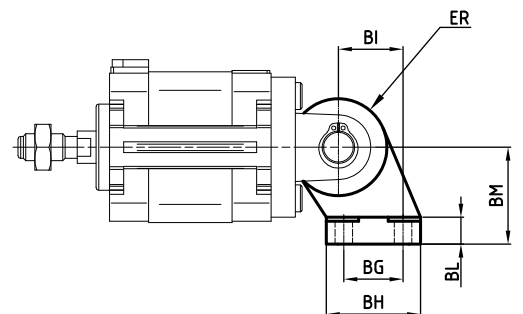
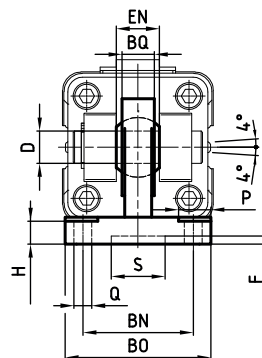
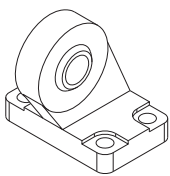


Materiale: Alluminio

Z = Corsa

Ø	CC	CD H9	DA	DB (versione standard)	DB (versione stelo maschio)	DC	DE	DF	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-
32	48	10	15	115	95	14	10,5	14	100	KF-11032S
40	54	12	18	118,5	98,5	16,5	12	16	200	KF-11040S
50	65	12	20	129	105,5	17,5	12	16	300	KF-11050S
63	75	16	21	137,5	113,5	21,5	15	21	350	KF-11063S

Contro-cerniera a squadra snodata (DIN 648K)



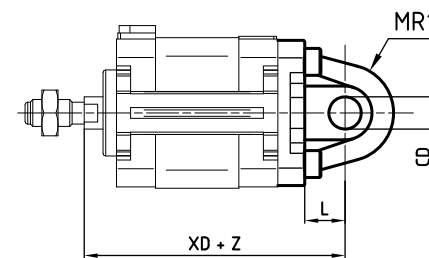
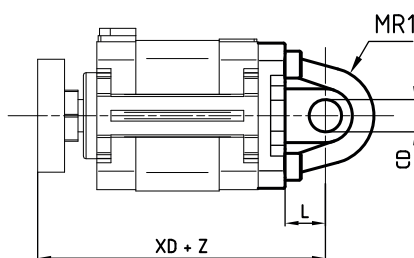
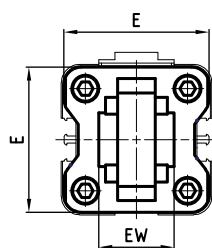
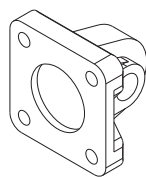
Materiale: Acciaio zincato

Ø	Q H13	P H13	BG JS14	BH Max	BI JS15	BL	BM JS15	BN JS14	BO Max	EN 0 -0,1	ER Max	BQ Max	D H7	H +0,5 0	S H13	F	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	6,6	11	18	31	21	10	32	38	51	14	15	10,5	10	8,5	20	3	178	KF-19032SC
40	6,6	11	22	35	24	10	36	41	54	16	18	12	12	8,5	20	3	268	KF-19040SC
50	9	15	30	45	33	12	45	50	65	21	20	15	16	10,5	20	3	458	KF-19050SC
63	9	15	35	50	37	12	50	52	67	21	23	15	16	10,5	20	3	550	KF-19063SC

Cerniera posteriore maschio (ISO MP4)

> Versione standard (con flangia)

> Versione stelo maschio

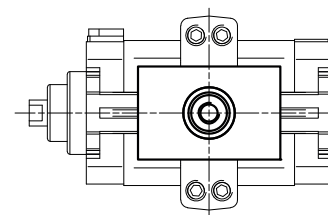
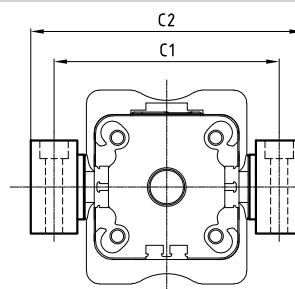
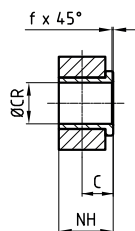
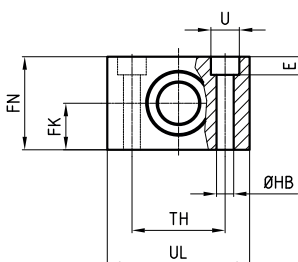
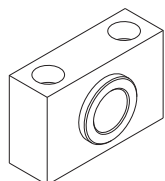


Materiale: Alluminio

Z = Corsa

Ø	CD H9	E	EW	L min	MR1 Max	XD (versione standard)		XD (versione stelo maschio)		Massa g	Codice
25	8	38	16 -0,2/-0,6	14	8	85	±1,25	75	±1,25	43	RPF-11025
32	10	48	26 -0,2/-0,6	12	15	113	±1,25	103	±1,25	80	KF-11032
40	12	54	28 -0,2/-0,6	15	18	117	±1,25	107	±1,25	100	KF-11040
50	12	65	32 -0,2/-0,6	15	20	127	±1,25	125	±1,25	170	KF-11050
63	16	75	40 -0,2/-0,6	20	23	136	±1,6	124	±1,6	250	KF-11063

Supporto per cerniera



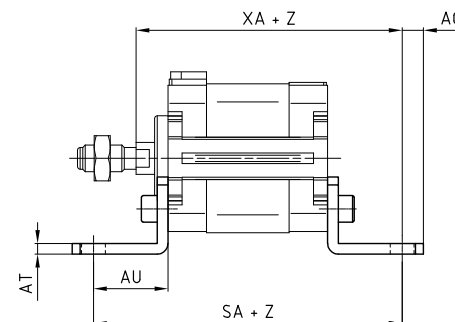
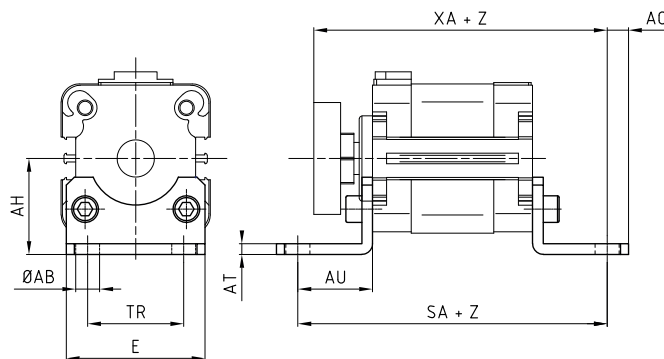
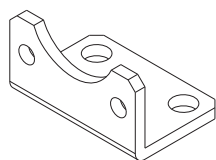
Materiale: Alluminio anodizzato e boccia in ottone

Ø	C	CR F7	FK ± 0,1	FN	HB	NH	TH ± 0,1	UL	U	E ± 0,5	f	C1	C2	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	10,2	12	15	30	6,6	18	32	46	11	7	1	71	86	110	KF-41032
40	12	16	18	36	9	21	36	55	15	9	1,6	87	105	200	KF-41040050
50	12	16	18	36	9	21	36	55	15	9	1,6	99	117	200	KF-41040050
63	13	20	20	40	11	23	42	65	18	11	1,6	116	136	267	KF-41063080

Piedino ad angolo

> Versione standard (con flangia)

> Versione stelo maschio

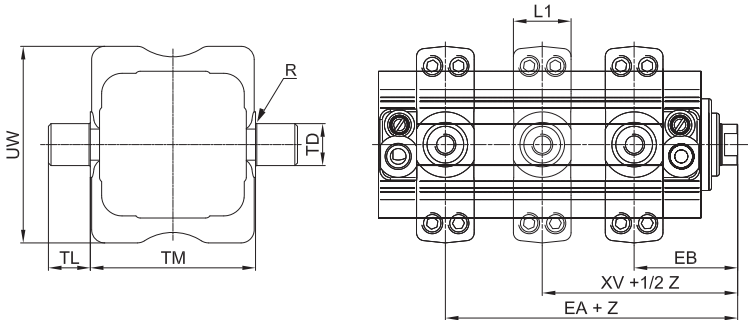
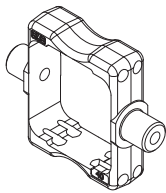


Materiale: Acciaio zincato

Z = Corsa

Ø	Ø AB Ø H13	AH JS15	A0	AT	AU ± 0,2	E Max	SA	TR	XA	Massa g	Codice
25	6,6	30	6	4	16	40	80	26	89	40	RTF-13025
32	7	32	11	4	24	50	106	32	105	70	KF-13032
40	9	36	15	4	28	58	116	36	110	100	KF-13040
50	9	45	15	5	32	70	125	45	120	150	RTF-13050
63	9	50	15	5	32	85	129	50	124	250	RTF-13063

Cerniera intermedia ISO



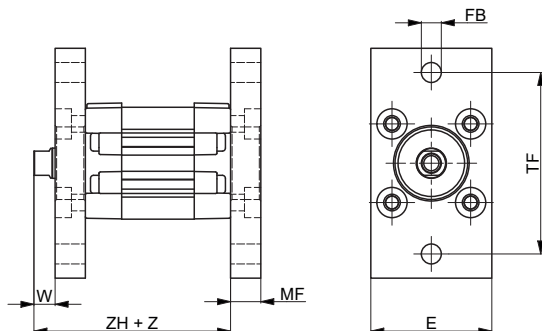
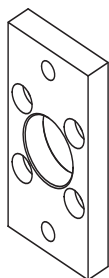
Materiale: Acciaio zincato

Z = Corsa

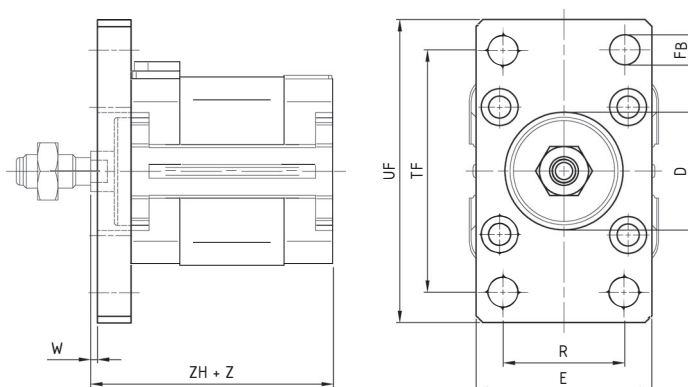
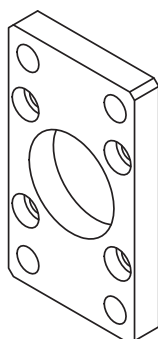
Ø	EA Max	EB min	L1 Max	R Max	TD e9	TL h14	TM h14	UW Max	XV	Massa g	Codice
25	-	-	-	-	-	-	-	-	-	-	-
32	24	34	22	0,5	12	12	50	65	29	130	KDF-14032
40	25	34	22	0,5	16	16	63	75	29,5	240	RPF-14040
50	26	35	22	1	16	16	75	95	30,5	320	RPF-14050
63	27	38	28	1	20	20	90	105	32,5	470	RPF-14063

Flangia anteriore/posteriore

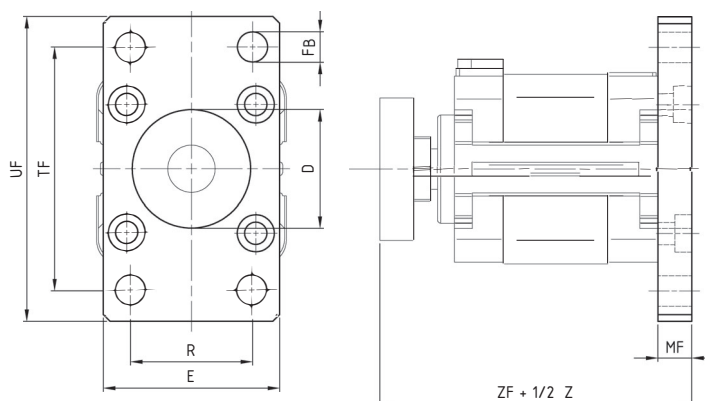
> Montaggio anteriore/posteriore Ø25 mm



> Montaggio anteriore Ø32 ÷ 63 mm



> Montaggio posteriore Ø32 ÷ 63 mm

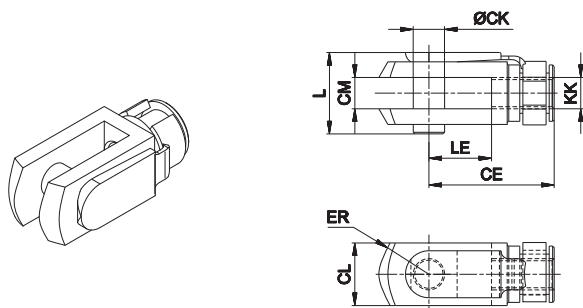


Materiale: Acciaio zincato

Z = Corsa

Ø	ØD H11	E	ØFB H13	MF	R JS14	TF JS14	UF	W	ZF	ZH	Massa g	Codice
25	24	40	6,6	10	-	60	76	7	83	58	180	RTF-12025
32	30	45	7	10	32	64	80	3	91	68	200	KF-12032
40	35	52	9	10	36	72	90	2	92	70	250	KF-12040
50	44	65	9	12	45	90	110	3	100	73	500	RTF-12050
63	52	75	9	12	50	100	120	3	104	77	650	RTF-12063

Forcella femmina con clips

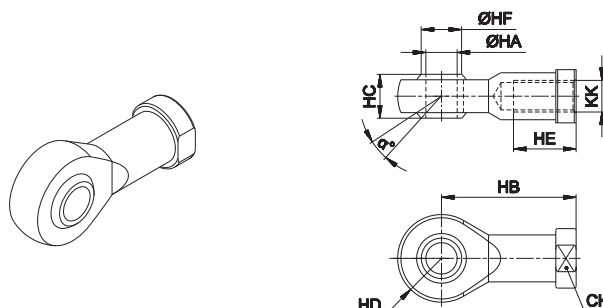


Materiale: Acciaio zincato

Cilindro Ø	CE	CK	CL	CM	ER	KK	L	LE	Massa g	Codice
				B12						
25-32-40	40	10	20	10	16	M10x1,25	26	20	90	KF-15032
50-63	48	12	24	12	19	M12x1,25	32	24	150	KF-15040

Forcella adatta per stelo a norma ISO 8140 completa di perno

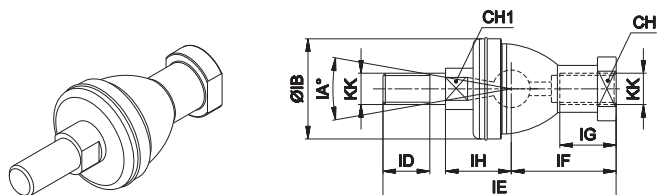
Forcella snodata autolubrificata



Materiale: Acciaio zincato

Cilindro Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Massa g	Codice
				H7			0-0,12				
25-32-40	13	17	M10x1,25	10	43	14	14	20	12,9	76	KF-17032
50-63	13	19	M12x1,25	12	50	16	16	22	15,4	110	KF-17040

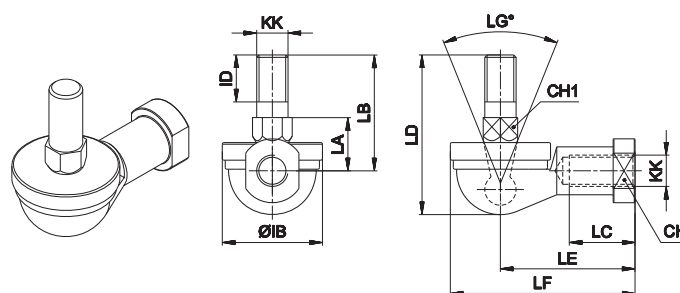
Forcella con perno snodato in asse



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	IA°	KK	IH	IB	ID	IE	IF	IG	Massa g	Codice
					±0,3							
25-32-40	17	11	30	M10x1,25	19,5	32	15	74,5	35	18	120	KF-22025
50-63	19	17	30	M12x1,25	22	36	17	84	40	20	185	KF-22040

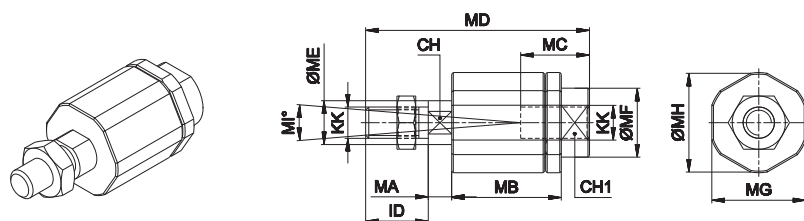
Forcella con perno snodato ad angolo



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	LG°	KK	IB	ID	LA	LB	LC	LD	LE	LF	Massa g	Codice
							±0,3							
25-32-40	17	11	50	M10x1,25	32	15	17	37	21	50,5	43	57	110	KF-23025
50-63	19	17	50	M12x1,25	36	17	19	42	27	57,5	50	66	165	KF-23040

Snodo autoallineante



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	ID	KK	MA	MB	MC	MD	ME	MF	MG	MH	MI°	Massa g	Codice
25-32-40	12	19	71	M10x1,25	5	35	20	71	14	22	30	32	8	220	KF-24032
50-63	12	19	75	M12x1,25	5	35	20	75	14	22	30	32	8	230	KF-24040

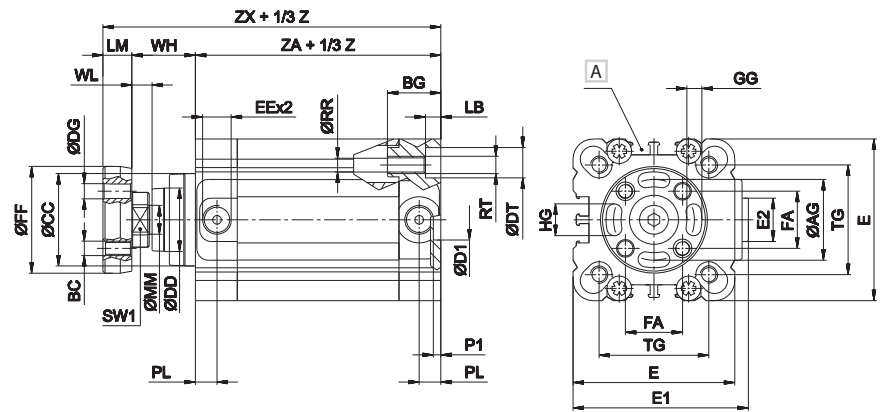
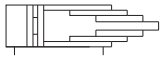
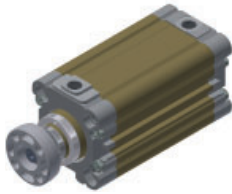
Dado per stelo in acciaio zincato



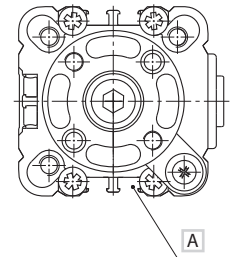
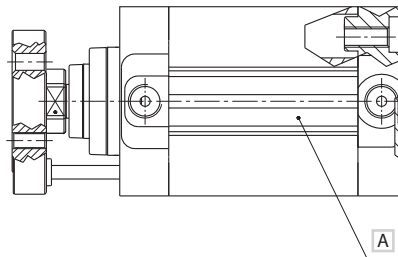
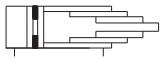
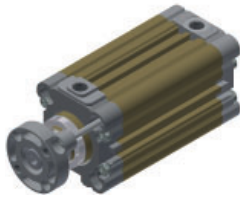
Materiale: Acciaio zincato

Cilindro Ø	KK	KV	KW	Massa g	Codice
25-32-40	M10x1,25	17	6	5	KF-16032
50-63	M12x1,25	19	7	10	KF-16040

3 stadi con flangia RT230...

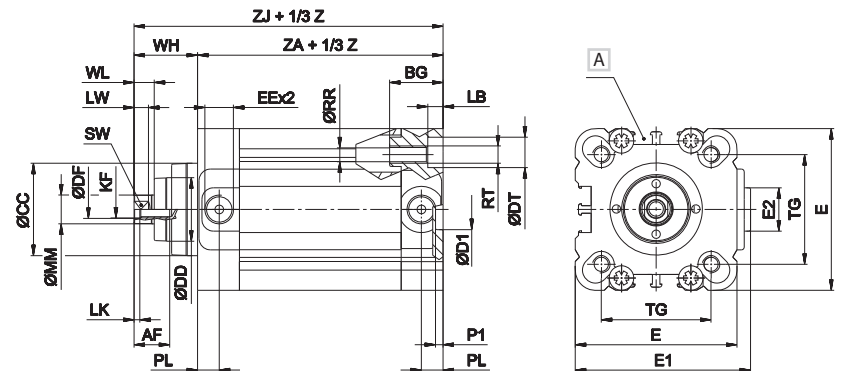
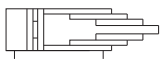
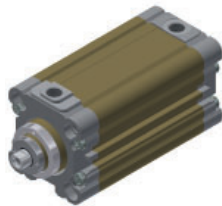


3 stadi magnetico RT230...M

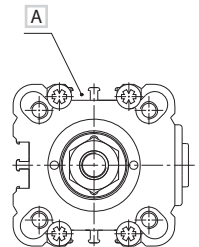
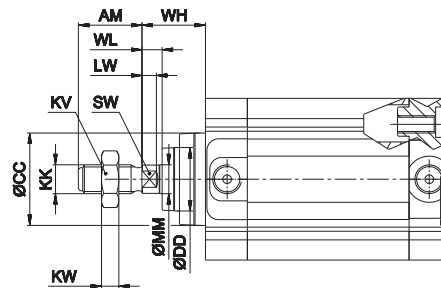
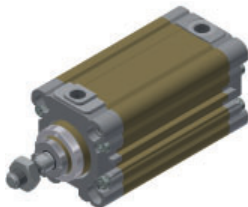


A = per la versione magnetica i sensori DF... possono essere posizionati solo in prossimità dell'astina telescopica porta magnete indicata.

3 stadi stelo femmina RT230...I



3 stadi stelo maschio RT233...



A Scanalatura per sensore

Z = Corsa

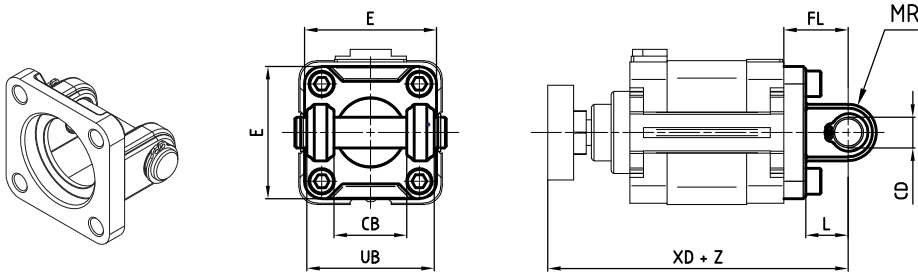
Ø	AF	AG	AM	BC	BG	CC	DF	DG	DT	D1 H11	E	E1	E2	EE	FA	FF	GG	HG	KF	KK	KV	KW	LB	LK	LM
40	12	33	22	M5	18	32	8,2	5	9	14	56	60,5	16	G1/8	19,8	37	5,2	15	M6	M10x1,25	17	4	5,3	2	10
50	16	42	24	M5	24	40	10,2	5	11	18	66	70,5	16	G1/8	19,8	37	6,2	19	M8	M10x1,25	19	5	6,5	2	10
63	16	50	24	M5	24	48	10,2	5	11	18	79	83,5	38	G1/8	23,3	42	6,2	25	M8	M10x1,25	19	5	6,5	2	10

Varianti dimensionali per RT230...M

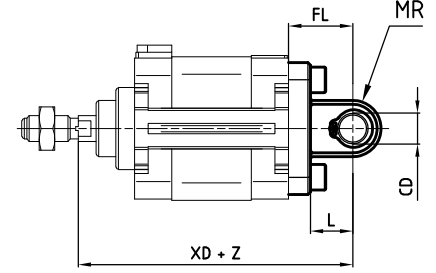
Ø	LW	MM	PL	P1	RR	RT	SW	SW1	TG	WH	WL	ZA	ZJ	ZX	Ø	AG	BC	DG	FA	FF	GG	HG	LM	SW2	ZX
40	5	10	7,5	2,5	5,2	M6	10	17	38	22	7	60	82	92	40	33	M5	5	23,3	42	5,2	15	10	19	92
50	6	12	7,5	2,5	6,6	M8	13	17	46,5	24	7	61	85	95	50	42	M6	6	29,7	52	6,2	19	12	24	97
63	6	12	7,5	2,5	6,6	M8	13	19	56,5	25	7	65	90	100	63	50	M6	6	35,4	64	6,2	25	12	24	102

Cerniera femmina con perno (ISO MP2)

> Versione standard (con flangia)



> Versione stelo maschio

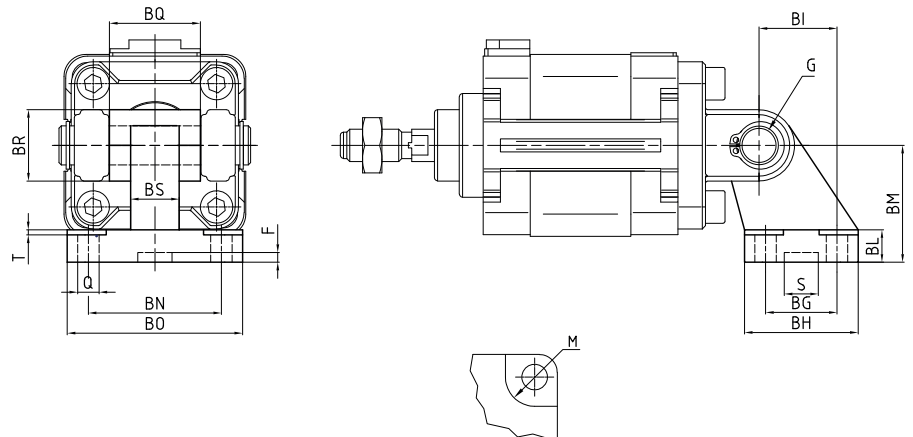
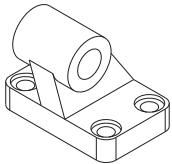


Materiale: Alluminio

Z = Corsa

Ø	CB H14	CD H9	E	FL ± 0,2	L min	MR Max	UB H14	XD (versione standard)	XD (versione stelo maschio)	Massa g	Codice
40	28	12	54	25	15	13	52	107 ±1,25	97 ±1,25	110	KF-10040A
50	32	12	65	27	15	13	60	115 ±1,25	103 ±1,25	150	KF-10050A
63	40	16	75	32	20	17	70	124 ±1,6	112 ±1,6	270	KF-10063A

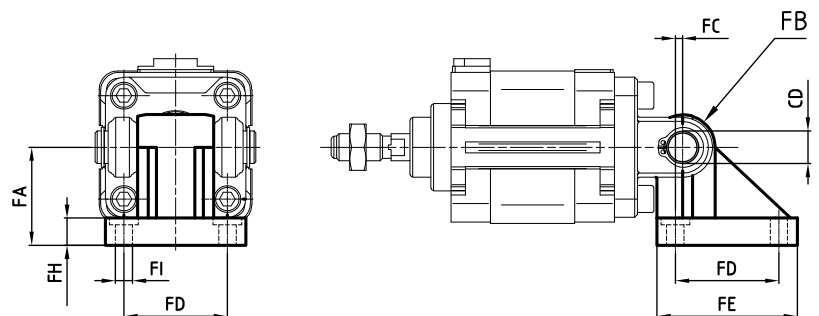
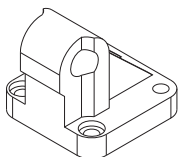
Contro-cerniera a 90° (AB7)



Materiale: Alluminio

Ø	Q H13	M H13	BG JS 14	BH Max	BI JS 14	BL	BM JS 15	BN JS 14	BO Max	BS Max	BR Max	T Max	G H9	S +0,5 0	F +0,5 0	BQ	Massa g	Codice
40	6,6	11	22	35	24	10	36	41	54	15	22	1,6	12	10,5	3	28	139	KF-19040CTA
50	9	15	30	45	33	12	45	50	65	16	26	1,6	12	10,5	3	32	142	KF-19050CTA
63	9	15	35	50	37	14	50	52	67	16	30	1,6	16	10,5	3	40	200	KF-19063CTA

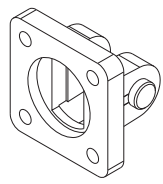
Contro-cerniera a 90°



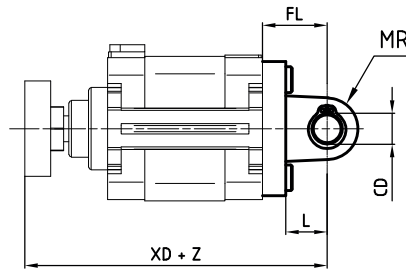
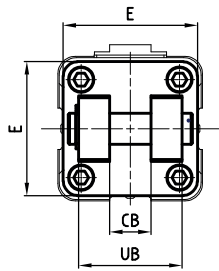
Materiale: Alluminio

Ø	CD H9	FA	FB	FC	FD	FE	FH	FI	Massa g	Codice
40	12	36	12	2,6	38	51,5	9	6,5	120	KF-19040
50	12	45	12	0,3	46,5	63,5	9	8,5	200	KF-19050
63	16	50	16	3,3	56,5	73	10,5	8,5	320	KF-19063

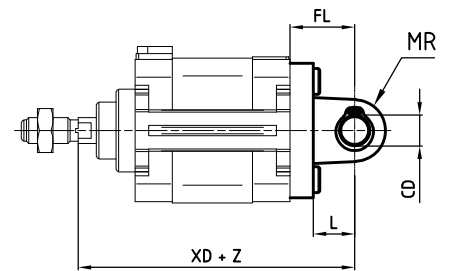
Cerniera femmina stretta con perno (DIN 648K)



> Versione standard (con flangia)



> Versione stelo maschio



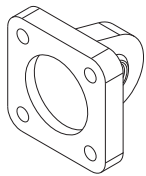
Materiale:

Alluminio

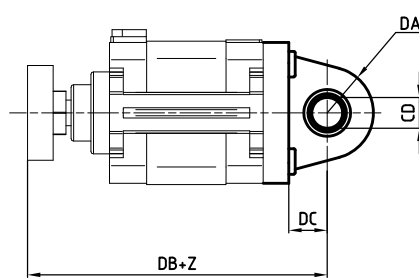
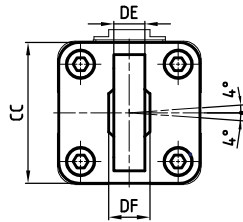
Z = Corsa

Ø	CB H14	CD H9	E	FL ± 0,2	L min	MR Max	UB H14	XD (versione standard)	XD (versione stelo maschio)	Massa g	Codice
40	16	12	52	25	16	12	40	107 ±1,25	97 ±1,25	112	KF-10040AS
50	21	16	65	27	16	14	45	115 ±1,25	103 ±1,25	196	KF-10050AS
63	21	16	75	32	21	18	51	124 ±1,6	112 ±1,6	288	KF-10063AS

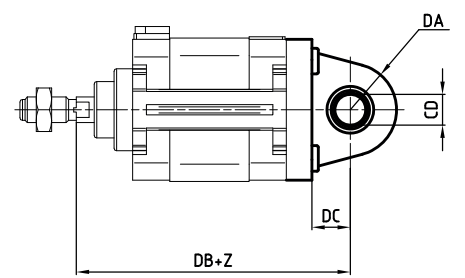
Cerniera posteriore maschio snodata (ISO MP6)



> Versione standard (con flangia)



> Versione stelo maschio



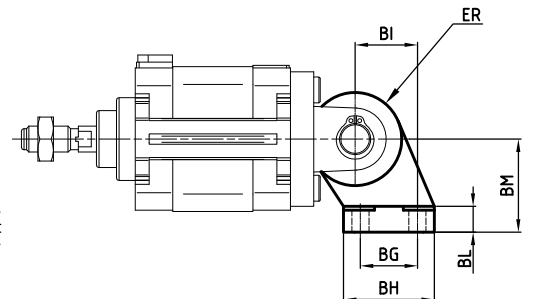
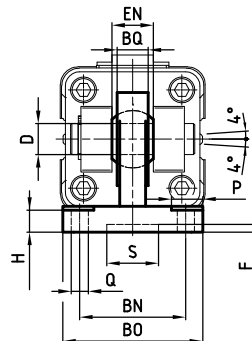
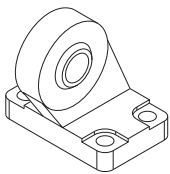
Materiale:

Alluminio

Z = Corsa

Ø	CC	CD H9	DA	DB (versione standard)	DB (versione stelo maschio)	DC	DE	DF	Massa g	Codice
40	54	12	18	107	97	16,5	12	16	200	KF-11040S
50	65	12	20	115	103	17,5	12	16	300	KF-11050S
63	75	16	21	124	112	21,5	15	21	350	KF-11063S

Contro-cerniera a squadra snodata (DIN 648K)



Materiale:

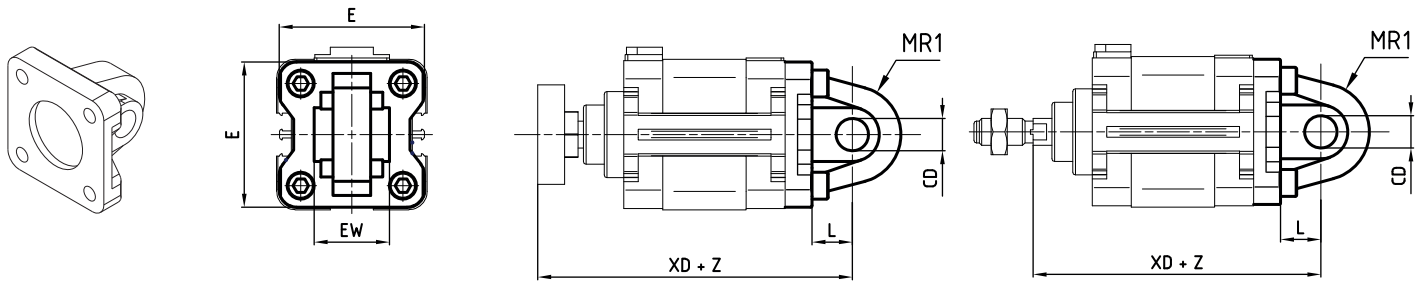
Acciaio zincato

Ø	Q H13	P H13	BG JS14	BH Max	BI JS15	BL	BM JS15	BN JS14	BO Max	EN 0,1	ER Max	BQ Max	D H7	H +0,5	S H13	F	Massa g	Codice
40	6,6	11	22	35	24	10	36	41	54	16	18	12	12	8,5	20	3	268	KF-19040SC
50	9	15	30	45	33	12	45	50	65	21	20	15	16	10,5	20	3	458	KF-19050SC
63	9	15	35	50	37	12	50	52	67	21	23	15	16	10,5	20	3	550	KF-19063SC

Cerniera posteriore maschio (ISO MP4)

> Versione standard (con flangia)

> Versione stelo maschio

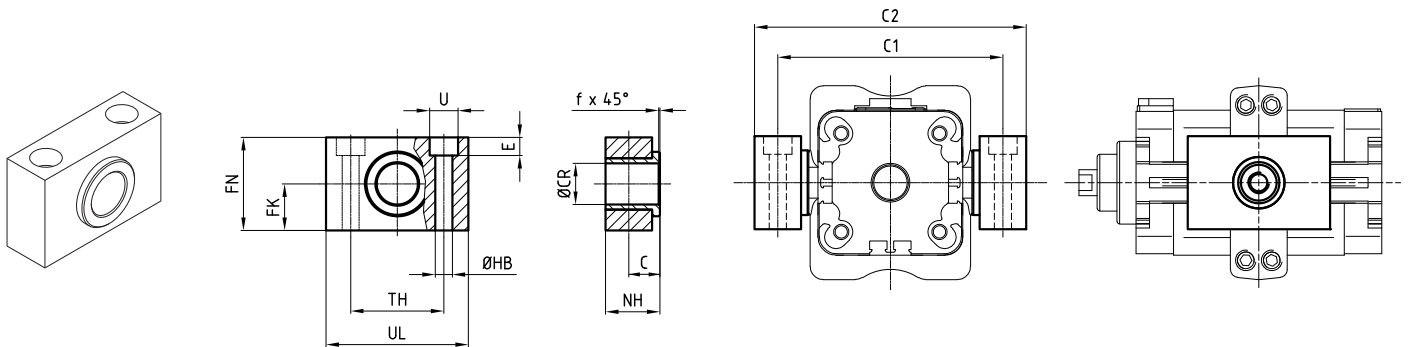


Materiale: Alluminio

Z = Corsa

Ø	CD H9	E	EW	L min	MR1 Max	XD (versione standard)		XD (versione stelo maschio)		Massa g	Codice
40	12	54	28 -0,2/-0,6	15	18	107	±1,25	97	±1,25	100	KF-11040
50	12	65	32 -0,2/-0,6	15	20	115	±1,25	103	±1,25	170	KF-11050
63	16	75	40 -0,2/-0,6	20	23	124	±1,6	112	±1,6	250	KF-11063

Supporto per cerniera



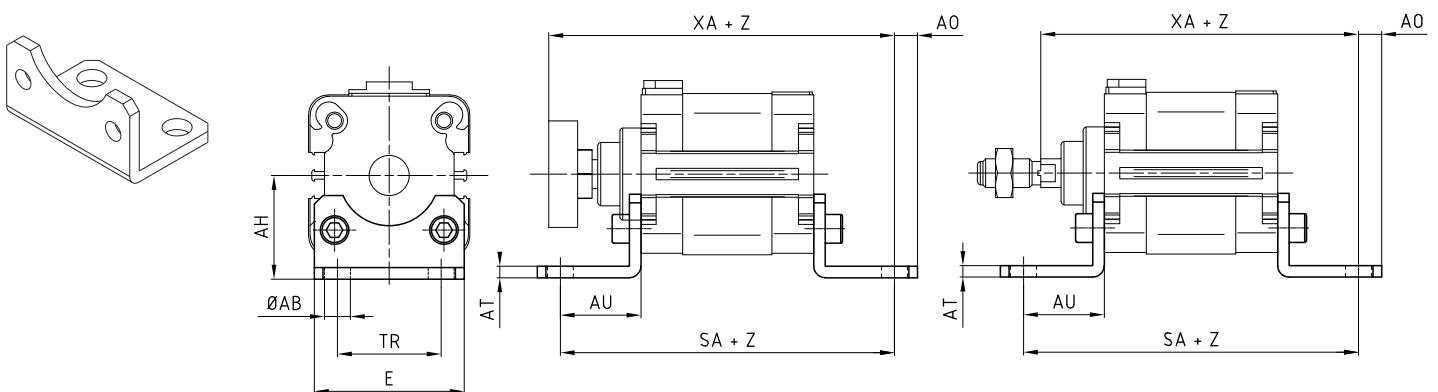
Materiale: Alluminio anodizzato e boccia in ottone

Ø	C	CR F7	FK ±0,1	FN	HB	NH	TH ±0,1	UL	U	E ±0,5	F	C1	C2	Massa g	Codice
40	12	16	18	36	9	21	36	55	15	9	1,6	87	105	200	KF-41040050
50	12	16	18	36	9	21	36	55	15	9	1,6	99	117	200	KF-41040050
63	13	20	20	40	11	23	42	65	18	11	1,6	116	136	267	KF-41063080

Piedino ad angolo

> Versione standard (con flangia)

> Versione stelo maschio

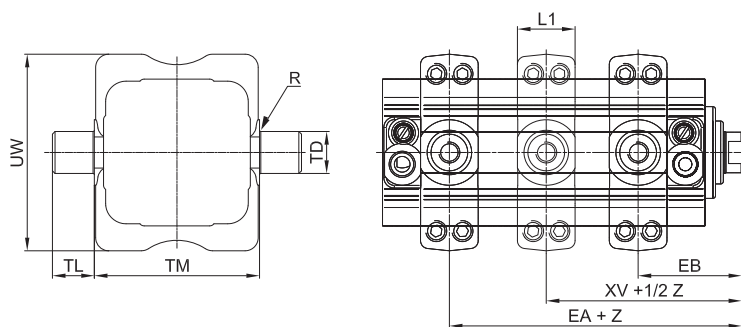
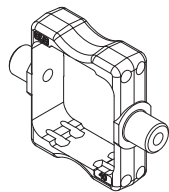


Materiale: Acciaio zincato

Z = Corsa

Ø	Ø AB Ø H13	AH JS15	AO	AT	AU ±0,2	E Max	SA	TR	XA	Massa g	Codice
40	9	36	15	4	28	58	116	36	110	100	KF-13040
50	9	45	15	5	32	70	125	45	120	150	RTF-13050
63	9	50	15	5	32	85	129	50	124	250	RTF-13063

Cerniera intermedia ISO

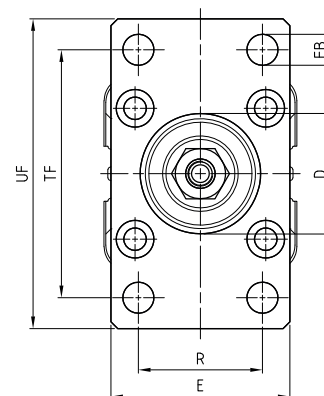
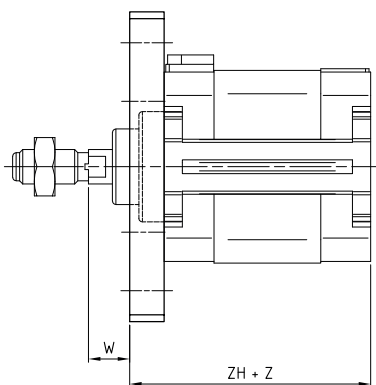
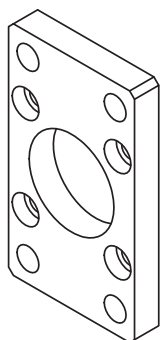


Materiale: Acciaio zincato

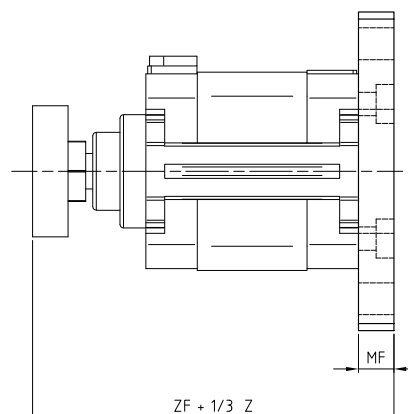
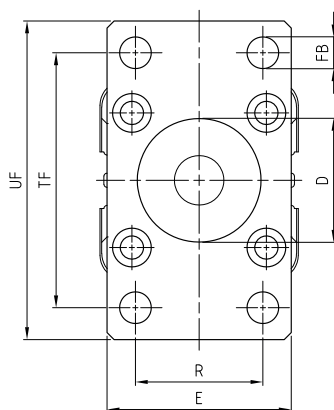
Ø	EA Max	EB min	L1 Max	R Max	TD e9	TL h14	TM h14	UW Max	XV Max	Massa	Codice
40	25	34	22	0,5	16	16	63	75	29,5	268	KF-19040SC
50	26	35	22	1	16	16	75	95	30,5	458	KF-19050SC
63	27	38	28	1	20	20	90	105	32,5	550	KF-19063SC

Flangia anteriore/posteriore

> Montaggio anteriore



> Montaggio posteriore

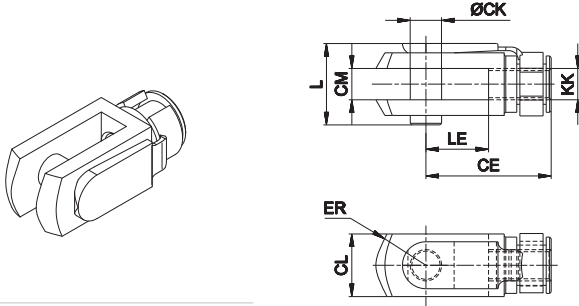


Materiale: Acciaio zincato

Z = Corsa

Ø	ØD H11	E	ØFB H13	MF	R JS14	TF JS14	UF	W	ZF	ZH	Massa	Codice
40	35	52	9	10	36	72	90	2	92	70	250	KF-12040
50	44	65	9	12	45	90	110	3	100	73	500	RTF-12050
63	52	75	9	12	50	100	120	3	104	77	650	RTF-12063

Forcella femmina con clips

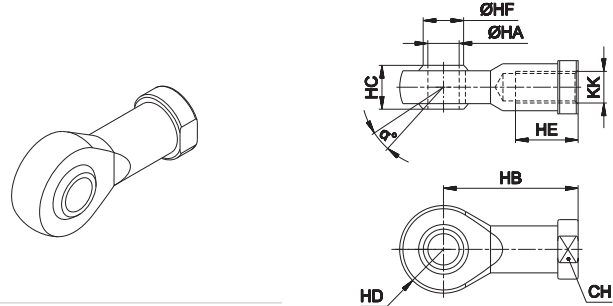


Materiale: Acciaio zincato

Cilindro Ø	CE	CK	CL	CM	ER	KK	L	LE	Massa g	Codice
				B12						
40	40	10	20	10	16	M10x1,25	26	20	90	KF-15032
50 - 63	48	12	24	12	19	M12x1,25	32	24	150	KF-15040

Forcella adatta per stelo a norma ISO 8140 completa di perno

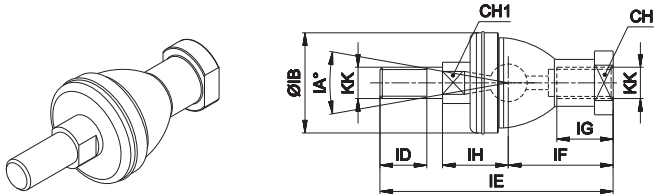
Forcella snodata autolubrificata



Materiale: Acciaio zincato

Cilindro Ø	α°	CH	KK	HA	HB	HC	HD	HE	HF	Massa g	Codice
				H7			0-0,12				
40	13	17	M10x1,25	10	43	14	14	20	12,9	76	KF-17032
50 - 63	13	19	M12x1,25	12	50	16	16	22	15,4	110	KF-17040

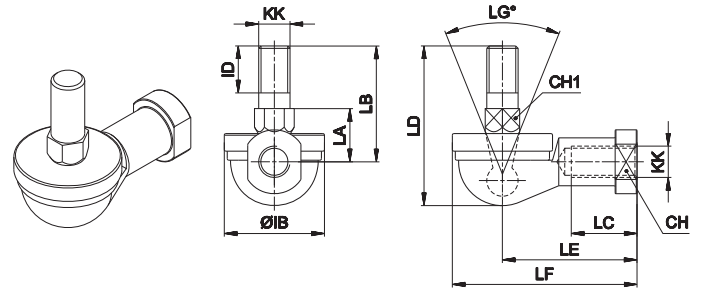
Forcella con perno snodato in asse



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	IA°	KK	IH	IB	ID	IE	IF	IG	Massa g	Codice
					±0,3							
40	17	11	30	M10x1,25	19,5	32	15	74,5	35	18	120	KF-22025
50 - 63	19	17	30	M12x1,25	22	36	17	84	40	20	185	KF-22040

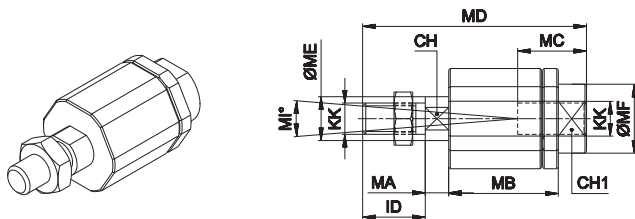
Forcella con perno snodato ad angolo



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	LG°	KK	IB	ID	LA	LB	LC	LD	LE	LF	Massa g	Codice
							±0,3							
40	17	11	50	M10x1,25	32	15	17	37	21	50,5	43	57	110	KF-23025
50 - 63	19	17	50	M12x1,25	36	17	19	42	27	57,5	50	66	165	KF-23040

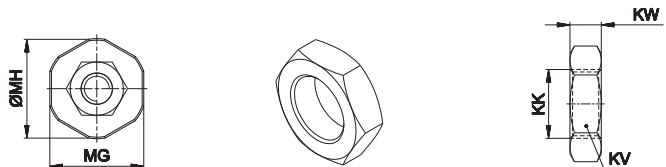
Snodo autoallineante



Materiale: Acciaio zincato

Cilindro Ø	CH	CH1	ID	KK	MA	MB	MC	MD	ME	MF	MG	MH	Mi°	Massa g	Codice
40	12	19	71	M10x1,25	5	35	20	71	14	22	30	32	8	220	KF-24032
50 - 63	12	19	75	M12x1,25	5	35	20	75	14	22	30	32	8	230	KF-24040

Dado per stelo in acciaio zincato



Materiale: Acciaio zincato

Cilindro Ø	KK	KV	KW	Massa g	Codice
40	M10x1,25	17	6	5	KF-16032
50 - 63	M12x1,25	19	7	10	KF-16040