



Pressures

1,5 bar (0.15 MPa)
10 bar (1 MPa)



Reference Standard

ATEX
2014/34/UE



Temperature

-20 °C
+ 80 °C



Sensors recommended

DF - DT

CHARACTERISTICS

Fluid	filtered air, with or without lubrication
End-caps	pressofuse in zama (Ø 16 ÷ 25 mm) die-cast aluminium (Ø 32 ÷ 100 mm)
Barrel	anodized aluminium
Piston	aluminium
Guide slide	acetalic resin
Piston rod	chromium-plated Steel, stainless Steel on request
Piston seal	NBR
Guide bush for piston rod	acetalic resin
Shock absorber seals	NBR
Cushionings	adjustable on both sides (Original Univer standard)
Magnet	plasto-ferrite (standard)
Other available versions	tandem, two-position tandem, opposed tandem, with common piston rod (On request)



Series	Type	Version	Bore (mm)	Stroke (mm)	Option (mm)
R M	4	0 0	0 3 2	0 0 2 5	
RM Compact Cylinders ISO 21287 Ø 16÷100 mm	4 Chromium-plated Steel male piston rod On request 1 Stainless Steel female piston rod 2 Chromium-plated Steel female piston rod 3 Stainless Steel male piston rod	00 = D.E. Standard version 01 = D.E. Through piston rod 10 = D.E. Anti-rotation guided piston rod Ø16 ÷ 63 (only female piston rod) 11 = D.E. Anti-rotational guided through piston rod Ø16 ÷ 63 (only female piston rod) 60 = S.E. Retracted piston rod 70 = S.E. Extended piston rod Meaning D.E. = Double action S.E. = Single action	016 = Ø16 020 = Ø20 025 = Ø25 032 = Ø32 040 = Ø40 050 = Ø50 063 = Ø63 080 = Ø80 100 = Ø100	Single acting (Ø16 Ø25) 0005 - 0010 (Ø32 Ø100) 0005 - 0010 - 0015 - 0020 - 0025 Double acting 0005 - 0010 0015 - 0020 - 0025 - 0030 - 0040 - 0050 - 0060 - 0080 Max standard stroke (Ø16) 0040 (Ø20 Ø25) 0050 (Ø32 Ø63) 0080	H Hollow piston rod only for through piston rod versions

Stroke tolerances	
Ø	mm
16	+1,5 - 0
20	+1,5 - 0
25	+1,5 - 0
32	+2 - 0
40	+2 - 0
50	+2 - 0
63	+2,5 - 0
80	+4 - 0
100	+4 - 0

Single-acting cylinder -Spring return theoretical forces (N)				
Ø	Max force	Min force	Max stroke	Decrease for mm stroke
	N	N	mm	N/mm
16	14	11,8	10	0,22
20	23,5	20	10	0,35
25	23,5	20	10	0,35
32	40	24	25	0,64
40	50	35	25	0,6
50	90	49	25	1,64
63	90	49	25	1,64
80	120	60	25	2,4
100	160	92,5	25	2,7

Theoretical forces (N) at working pressure (bar)												
Ø	Surface area		Working pressure					Working pressure				
	mm²		bar					bar				
	Thrust	Traction	Thrust					Traction				
			2	4	6	8	10	2	4	6	8	10
16	201	151	40	80	121	161	201	30	60	91	121	151
20	314	236	63	126	188	251	314	47	94	142	189	236
25	491	412	98	196	295	393	491	82	165	247	330	412
32	804	691	161	322	482	643	804	138	276	414	553	691
40	1256	1143	251	502	754	1005	1256	228	457	685	914	1143
50	1962	1762	393	785	1178	1570	1963	352	704	1057	1409	1762
63	3116	2916	623	1246	1869	2493	3116	583	1166	1749	2332	2916
80	5024	4710	1005	2010	3014	4019	5024	942	1884	2826	3768	4710
100	7850	7536	1570	3140	4710	6280	7850	1507	3014	4521	6029	7536

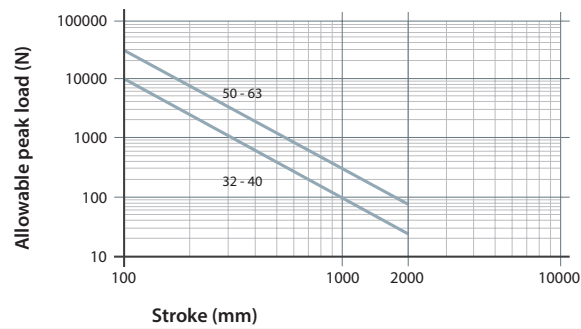
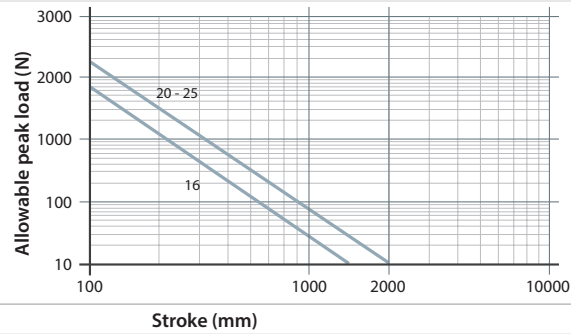
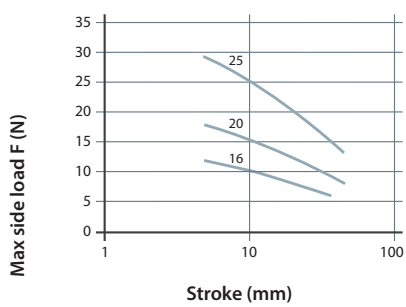
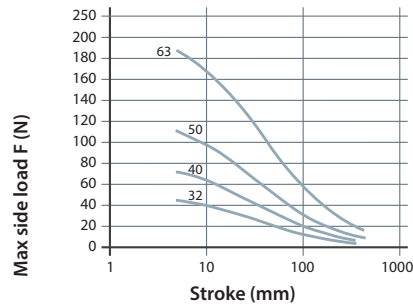
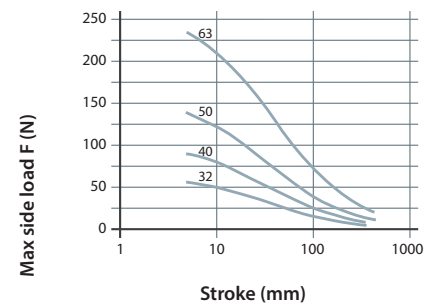
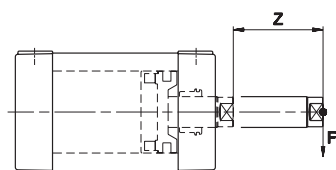
Mass - Standard cylinder and long piston version						
Ø	Cylinder - stroke 0 Standard		Increase for mm stroke	Moving element stroke 0 - Standard		Increase for mm stroke
	g		g	g		g
	RM200	RM400	RM200/220 - RM400/420	RM200	RM400	RM200/220 - RM400/420
16	103	115	1,05	15,5	27,5	0,39
20	135	157	1,45	24,5	46,5	0,62
25	203	225	1,65	34,5	56,5	0,62
32	205	240	2,65	60	95	0,9
40	305	340	3,3	75	110	0,9
50	450	505	4,7	125	180	1,6
63	735	790	5,65	200	255	1,6
80	-	1146	8,95	-	285	2,1
100	-	1966	11,05	-	298	2,3

Mass - Standard cylinder and long piston version						
Ø	Cylinder - stroke 0		Increase for mm stroke	Moving element - stroke 0		Increase for mm stroke
	g		g	g		g
	RM201	RM401	RM201 - RM401	RM201	RM401	RM201 - RM401
16	105	129	1,45	17,5	41,5	0,78
20	138	182	2,07	24,8	68,8	1,24
25	206	250	2,27	34,8	78,8	1,24
32	230	290	3,55	85	125	1,8
40	325	390	4,2	100	140	1,8
50	490	570	6,3	165	225	3,2
63	775	855	7,25	245	300	3,2
80	-	1261	11,4	-	335	3,6
100	-	2128	13,5	-	355	3,9

Mass - Retracted and extended piston rod cylinder								
Ø	Cylinder - stroke 0 Retracted piston rod		Cylinder - stroke 0 Extended piston rod		Increase for mm stroke Retracted/extended piston rod	Moving mass - stroke 0 Retracted/extended piston rod		Increase for mm stroke Retracted/extended piston rod
	g		g		g	g		g
	RM260	RM460	RMP270	RM470	RM260/460 - RM270/470	RM260/270	RM460/470	RM260/460 - RM270/470
16	103	115	103	115	1,05	15,5	27,5	0,39
20	135	157	135	157	1,45	24,5	46,5	0,62
25	203	225	203	225	1,65	34,5	56,5	0,62
32	215	250	203	238	2,65	63	98	0,9
40	315	350	302	337	3,3	81	116	0,9
50	468	523	445	500	4,7	137	192	1,6
63	753	808	730	785	5,65	212	267	1,6
80	-	1182	-	1182	8,95	-	289	1,9
100	-	2002	-	2002	11,05	-	310	2,2

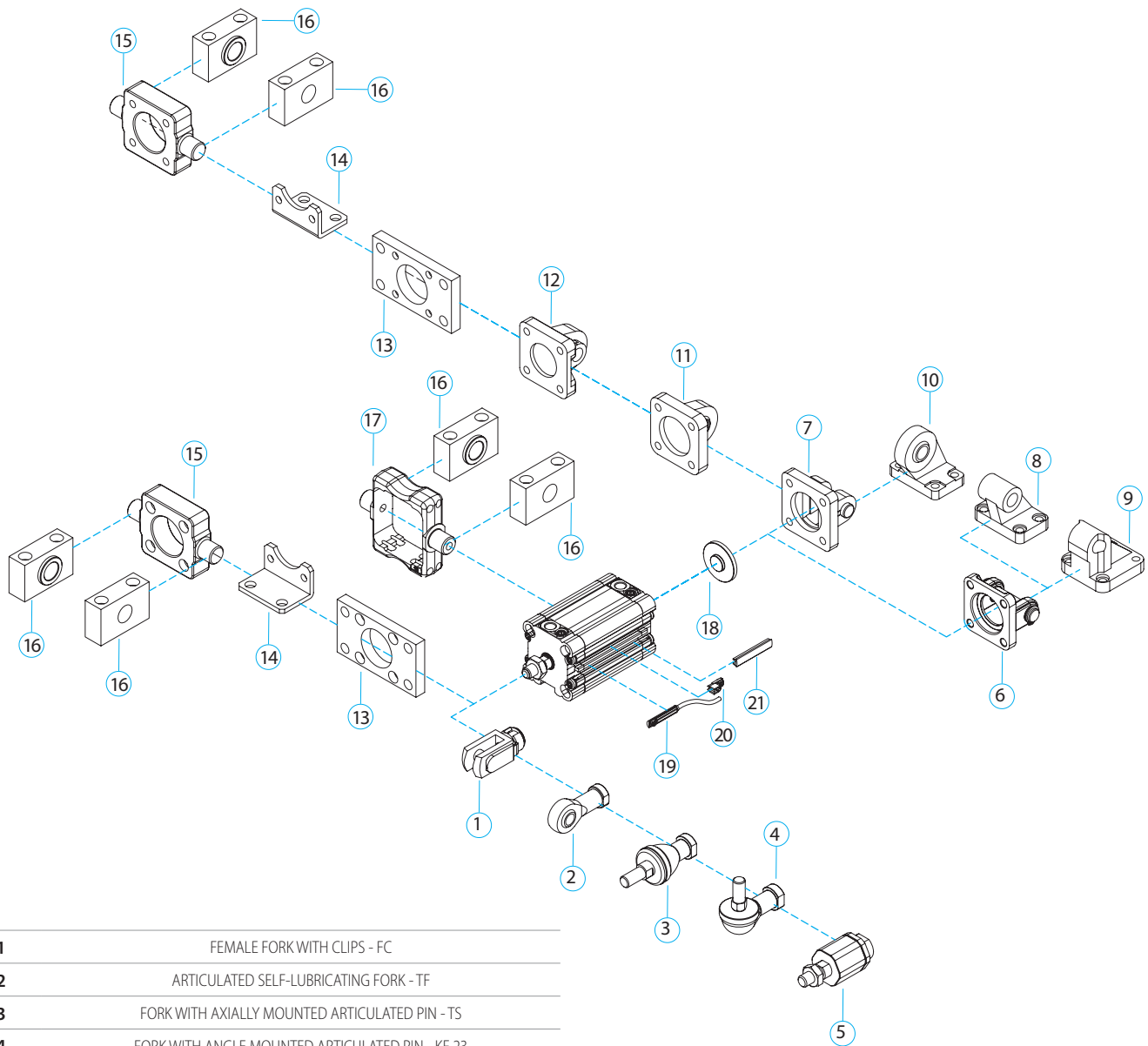
Cylindrical actuator with anti-rotation device and through rod with anti-rotation device

Ø	Cylinder - stroke 0		Increase for mm stroke		Moving mass - stroke 0		Increase for mm stroke	
	g		g		g		g	
	RM210	RM211	RM210	RM211	RM210	RM211	RM210	RM211
16	122	124	1,25	1,64	34,5	36,7	0,59	0,98
20	165	168	1,75	2,37	54,5	57,5	0,93	1,65
25	240	243	1,95	2,57	71,5	74,5	0,93	1,55
32	245	270	3,09	3,99	100	125	1,34	2,24
40	372	392	4,1	5	142	167	1,7	2,6
50	545	585	5,5	7,1	220	260	2,4	4
63	875	915	6,89	8,49	340	385	2,84	4,44

Peak load

Transverse load diagrams on the stem
Standard piston Ø16 ÷ 25 mm

Standard piston Ø32 ÷ 63 mm

Long piston Ø32 ÷ 63 mm

Transverse load diagrams on the stem


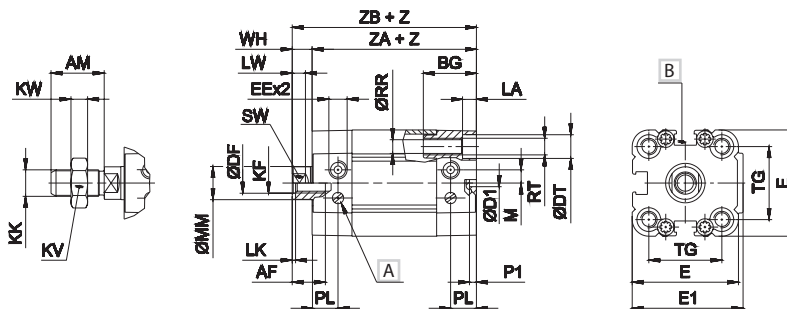
Z = Stroke
F = Force

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

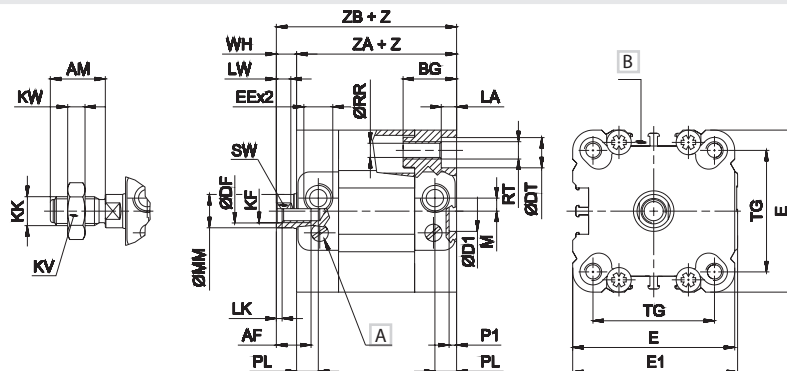


1	FEMALE FORK WITH CLIPS - FC
2	ARTICULATED SELF-LUBRICATING FORK - TF
3	FORK WITH AXIALLY MOUNTED ARTICULATED PIN - TS
4	FORK WITH ANGLE MOUNTED ARTICULATED PIN - KF 23
5	FLOATING JOINT - KF 24
6	FEMALE REAR HINGE WITH PIN - VCF
7	NARROW FEMALE HINGE WITH PIN - VCH
8	COUNTER HINGE 90° (CETOP) - VAS
9	COUNTER HINGE 90° - KF 19
10	ARTICULATED COUNTER HINGE - VADZ
11	ARTICULATED REAR MALE HINGE - QCM
12	REAR MALE HINGE - VCM
13	FRONT/REAR FLANGE - QFL / VFL
14	ANGLE BRACKET - QCP / VCP
15	FRONT/REAR HINGE WITH FLOATING PIN - VCNL
16	HINGE SUPPORT - VSI
17	ISO INTERMEDIATE HINGE - KDF 14 / RPF 14
18	CENTERING ADAPTOR RING - RPF 28
19	DF SENSOR - DT
20	CABLE CLAMPING FOR DF SENSOR - DT
21	DHF COVERING STRIP - DHF

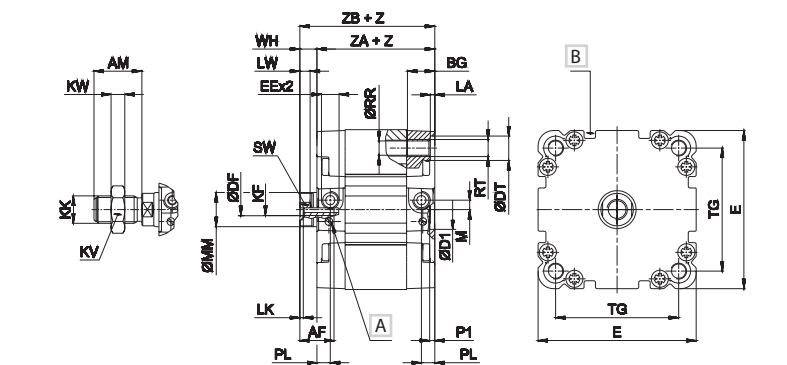
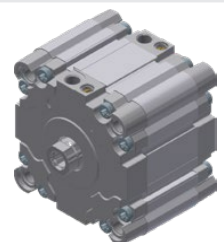
Double acting RM Ø 16 ÷ 25



Double acting RM Ø 32 ÷ 63



Double acting RM Ø 80 ÷ 100



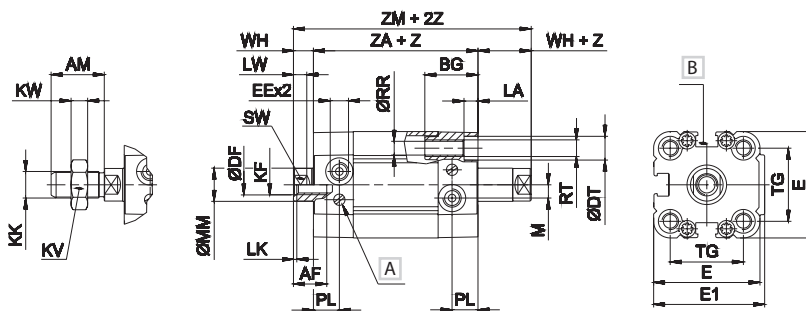
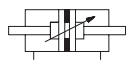
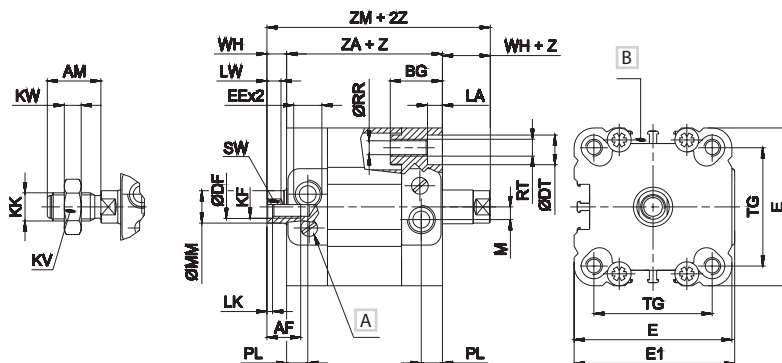
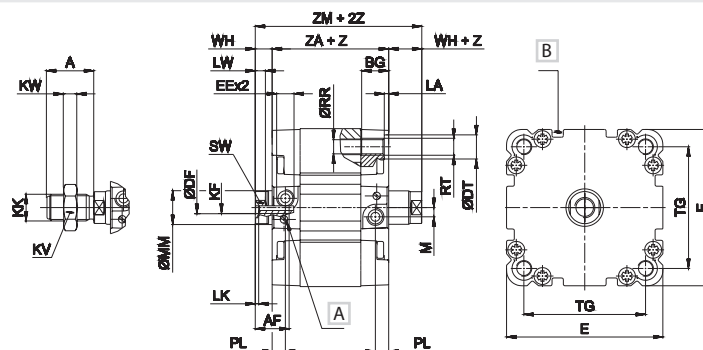
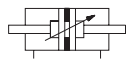
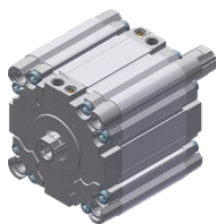
Ø	AM	AF	BG	DF	DT	D1	E	EE H11	E1	KF	KK	KV	KW	LA
16	12	8	16	4,1	5,8	2	28	M5	30	M4	M6x1	10	4	3,2
20	16	10	16	6,1	7,3	2	32	M5	34	M6	M8x1,25	13	5	4,2
25	16	10	16	6,1	8	2	37	M5	39	M6	M8x1,25	13	5	4,5
32	19	12	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	19	12	18	8,2	9	14	56	G1/8	57	M8	M10x1,25	17	6	5,3
50	22	16	24	10,2	11	18	66	G1/8	67	M10	M12x1,25	19	7	6,5
63	22	16	24	10,2	11	18	79	G1/8	80	M10	M12x1,25	19	7	6,5
80	28	20	16,5	12,2	14	23	93,5	G1/8	-	M12	M16x1,5	24	9	2,6
100	28	20	21,5	12,2	14	28	112	G1/8	-	M12	M16x1,5	24	9	2,6

Ø	LK	LW	M	MM	PL	P1	RR	RT	SW	TG	WH	ZA	ZB
16	1	4,5	3,5	8	8	2	3,2	M4	7	18	5	37	42
20	1	4,5	4	10	8	2	4,2	M5	8	22	6	37	43
25	1	4,5	4	10	8	2	4,2	M5	8	26	6	39	45
32	2	5	4,5	12	7,5	2,5	5,2	M6	10	32,5	7	44	51
40	2	5	4,5	12	7,5	2,5	5,2	M6	10	38	7	45	52
50	2	6	6,5	16	7,5	2,5	6,5	M8	13	46,5	8	45	53
63	2	6	6,5	16	7,5	2,5	6,5	M8	13	56,5	8	50	58
80	2	6	5,5	20	8	3	8,4	M10	17	72	10	54	64
100	2	6	8	20	10,5	3	8,4	M10	17	89	10	67	77

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

Double acting through piston rod RM Ø 16 ÷ 25

Double acting through piston rod RM Ø 32 ÷ 63

Double acting through piston rod RM Ø 80 ÷ 100


Ø	AM	AF	BG	DF	DT	E	EE	E1	KF	KK	KV	KW	LA
16	12	8	16	4,1	5,8	28	M5	30	M4	M6x1	10	4	3,2
20	16	10	16	6,1	7,3	32	M5	34	M6	M8x1,25	13	5	4,2
25	16	10	16	6,1	8	37	M5	39	M6	M8x1,25	13	5	4,5
32	19	12	18	8,2	9	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	19	12	18	8,2	9	56	G1/8	57	M8	M10x1,25	17	6	5,3
50	22	16	24	10,2	11	66	G1/8	67	M10	M12x1,25	19	7	6,5
63	22	16	24	10,2	11	79	G1/8	80	M10	M12x1,25	19	7	6,5
80	28	20	16,5	12,2	14	93,5	G1/8	-	M12	M16x1,5	24	9	2,6
100	28	20	21,5	12,2	14	112	G1/8	-	M12	M16x1,5	24	9	2,6

Ø	LK	LW	M	MM	PL	RR	RT	SW	TG	WH	ZA	ZM
16	1	4,5	3,5	8	8	3,2	M4	7	18	5	37	47
20	1	4,5	4	10	8	4,2	M5	8	22	6	37	49
25	1	4,5	4	10	8	4,2	M5	8	26	6	39	51
32	2	5	4,5	12	7,5	5,2	M6	10	32,5	7	44	58
40	2	5	4,5	12	7,5	5,2	M6	10	38	7	45	59
50	2	6	6,5	16	7,5	6,5	M8	13	46,5	8	45	61
63	2	6	6,5	16	7,5	6,5	M8	13	56,5	8	50	66
80	2	6	5,5	20	8	8,4	M10	17	72	10	54	74
100	2	6	8	20	10,5	8,4	M10	17	89	10	67	87

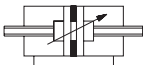
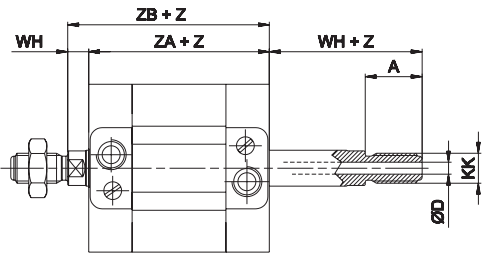
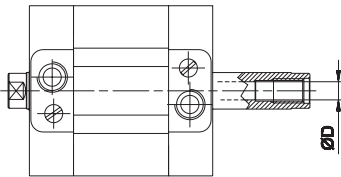
Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

SERIES RM

Double acting female/male hollow through piston rod $\varnothing 16 \div 63$

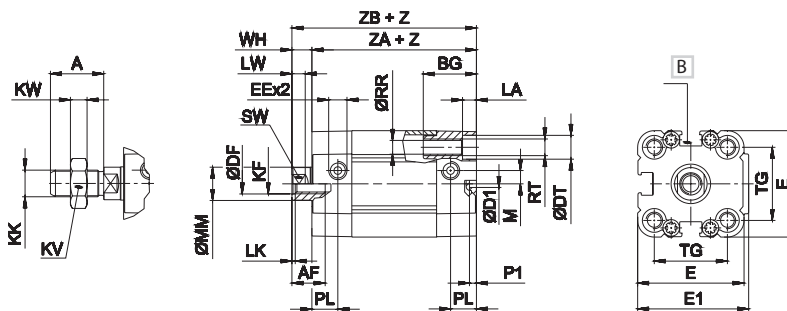


Z = Stroke

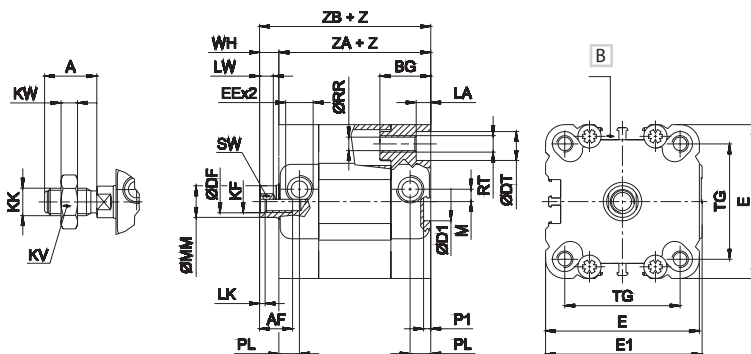
Ø	D
16	2
20	2,5
25	2,5
32	3,5
40	3,5
50	4,5
63	4,5

SERIES RM

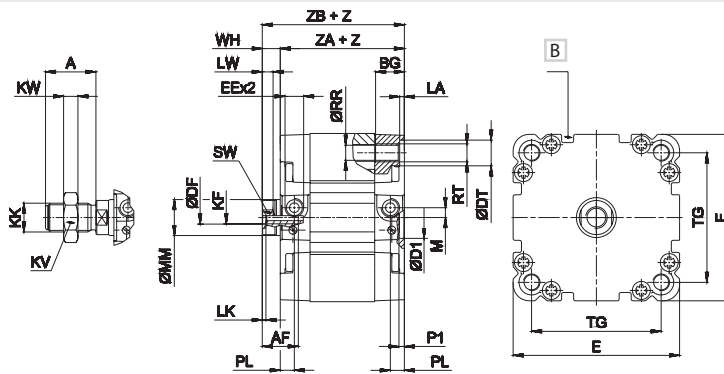
Single acting retracted piston rod RM Ø 16 ÷ 25



Single acting retracted piston rod RM Ø 32 ÷ 63



Single acting retracted piston rod RM Ø 80 ÷ 100

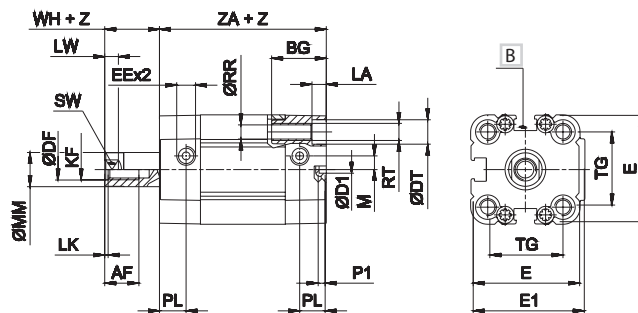
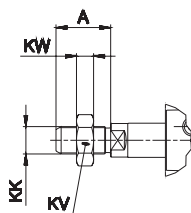
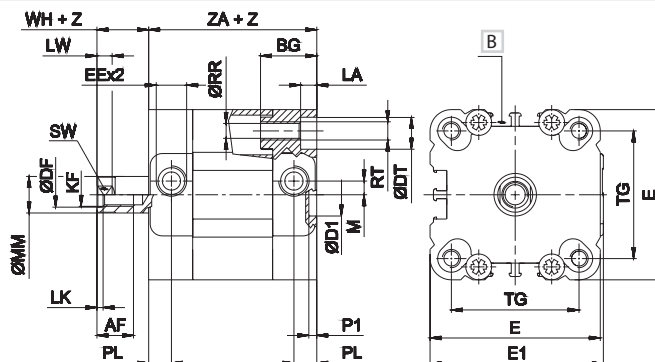
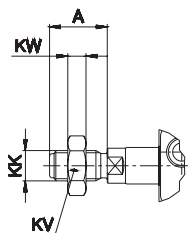
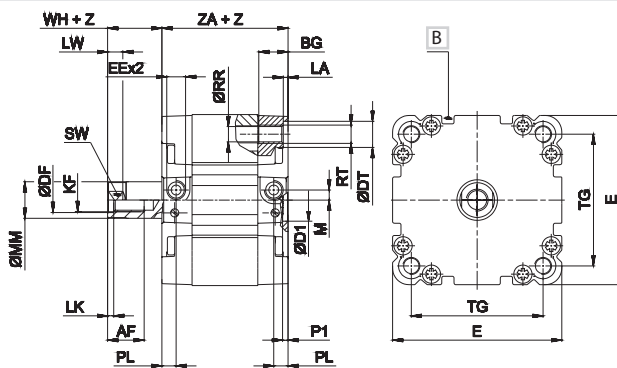
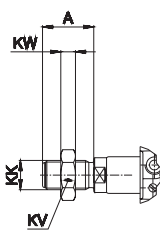


Ø	A	AF	BG	DF	DT	D1 H11	E	EE	E1	KF	KK	KV	KW	LA
16	12	8	16	4,1	5,8	2	28	M5	30	M4	M6x1	10	4	3,2
20	16	10	16	6,1	7,3	2	32	M5	34	M6	M8x1,25	13	5	4,2
25	16	10	16	6,1	8	2	37	M5	39	M6	M8x1,25	13	5	4,5
32	19	12	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	19	12	18	8,2	9	14	56	G1/8	57	M8	M10x1,25	17	6	5,3
50	22	16	24	10,2	11	18	66	G1/8	67	M10	M12x1,25	19	7	6,5
63	22	16	24	10,2	11	18	79	G1/8	80	M10	M12x1,25	19	7	6,5
80	28	20	16,5	12,2	14	23	93,5	G1/8	-	M12	M16x1,5	24	9	2,6
100	28	20	21,5	12,2	14	28	112	G1/8	-	M12	M16x1,5	24	9	2,6

Ø	LK	LW	M	MM	PL	P1	RR	RT	SW	TG	WH	ZA	ZB
16	1	4,5	3,5	8	8	2	3,2	M4	7	18	5	37	42
20	1	4,5	4	10	8	2	4,2	M5	8	22	6	37	43
25	1	4,5	4	10	8	2	4,2	M5	8	26	6	39	45
32	2	5	4,5	12	7,5	2,5	5,2	M6	10	32,5	7	44	51
40	2	5	4,5	12	7,5	2,5	5,2	M6	10	38	7	45	52
50	2	6	6,5	16	7,5	2,5	6,5	M8	13	46,5	8	45	53
63	2	6	6,5	16	7,5	2,5	6,5	M8	13	56,5	8	50	58
80	2	6	5,5	20	8	3	8,4	M10	17	72	10	54	64
100	2	6	8	20	10,5	3	8,4	M10	17	89	10	67	77

Z = Stroke

B. Groove for sensor

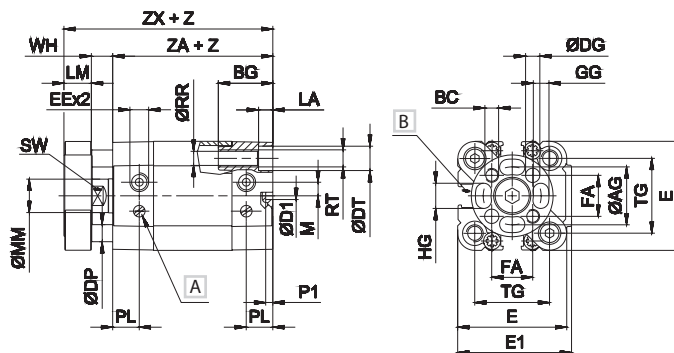
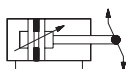
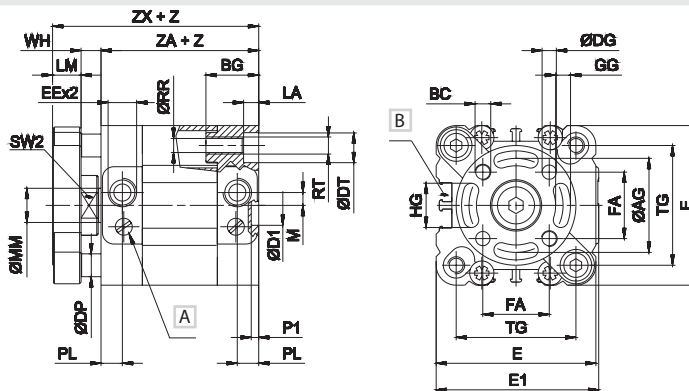
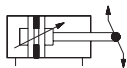
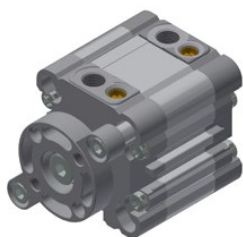
Single acting extended piston rod RM Ø 16 ÷ 25

Single acting extended piston rod RM Ø 32 ÷ 63

Single acting extended piston rod RM Ø 80 ÷ 100


Ø	A	AF	BG	DF	DT	D1 H11	E	EE	E1	KF	KK	KV	KW
16	12	8	16	4,1	5,8	2	28	M5	30	M4	M6x1	10	4
20	16	10	16	6,1	7,3	2	32	M5	34	M6	M8x1,25	13	5
25	16	10	16	6,1	8	2	37	M5	39	M6	M8x1,25	13	5
32	19	12	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6
40	19	12	18	8,2	9	14	56	G1/8	57	M8	M10x1,25	17	6
50	22	16	24	10,2	11	18	66	G1/8	67	M10	M12x1,25	19	7
63	22	16	24	10,2	11	18	79	G1/8	80	M10	M12x1,25	19	7
80	28	20	16,5	12,2	14	23	93,5	G1/8	-	M12	M16x1,5	24	9
100	28	20	21,5	12,2	14	28	112	G1/8	-	M12	M16x1,5	24	9

Ø	LA	LK	LW	M	MM	PL	P1	RR	RT	SW	TG	WH	ZA
16	3,2	1	4,5	3,5	8	8	2	3,2	M4	7	18	5	37
20	4,2	1	4,5	4	10	8	2	4,2	M5	8	22	6	37
25	4,5	1	4,5	4	10	8	2	4,2	M5	8	26	6	39
32	5,3	2	5	4,5	12	7,5	2,5	5,2	M6	10	32,5	7	44
40	5,3	2	5	4,5	12	7,5	2,5	5,2	M6	10	38	7	45
50	6,5	2	6	6,5	16	7,5	2,5	6,5	M8	13	46,5	8	45
63	6,5	2	6	6,5	16	7,5	2,5	6,5	M8	13	56,5	8	50
80	2,6	2	6	5,5	20	8	3	8,4	M10	17	72	10	54
100	2,6	2	6	8	20	10,5	3	8,4	M10	17	89	10	67

Z = Stroke

B. Groove for sensor

Double acting non-rotating guided piston rod RM Ø 16 ÷ 25

Double acting non-rotating guided piston rod RM Ø 32 ÷ 63


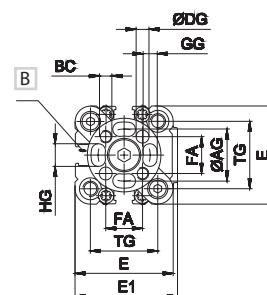
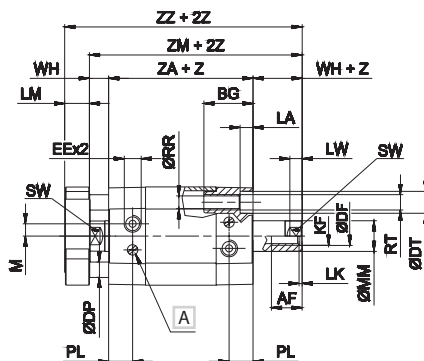
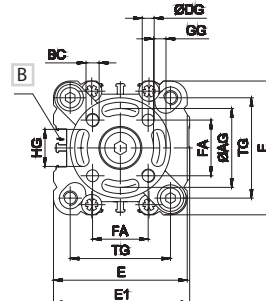
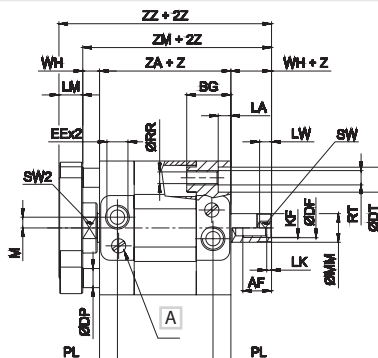
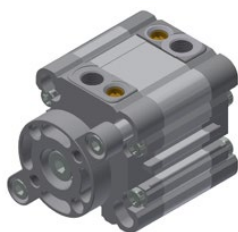
Ø	AG	BC	BG	DG	DP	DT	D1	E	EE	E1	FA	GG	HG	LA
16	14	M3	16	3	4	5,8	2	28	M5	30	9,9	3	5	3,2
20	17	M4	16	4	5	7,3	2	32	M5	34	12	4	7	4,2
25	22	M5	16	5	5	8	2	37	M5	39	15,6	5	9	4,5
32	28	M5	18	5	6	9	14	46	G1/8	47	19,8	5,2	11	5,3
40	33	M5	18	5	8	9	14	56	G1/8	57	23,3	5,2	15	5,3
50	42	M6	24	6	8	11	18	66	G1/8	67	29,7	6,2	19	6,5
63	50	M6	24	6	10	11	18	79	G1/8	80	35,4	6,2	25	6,5

Ø	LM	M	MM	PL	P1	RR	RT	SW	SW2	TG	WH	ZA	ZX
16	6	3,5	8	8	2	3,2	M4	7	-	18	5	37	48
20	8	4	10	8	2	4,2	M5	8	-	22	6	37	51
25	8	4	10	8	2	4,2	M5	8	-	26	6	39	53
32	10	4,5	12	7,5	2,5	5,2	M6	10	17	32,5	7	44	61
40	10	4,5	12	7,5	2,5	5,2	M6	10	19	38	7	45	62
50	12	6,5	16	7,5	2,5	6,5	M8	13	24	46,5	8	45	65
63	12	6,5	16	7,5	2,5	6,5	M8	13	24	56,5	8	50	70

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

SERIES RM
Double acting non-rotating guided through piston rod RM Ø 16 ÷ 25

Double acting non-rotating guided through piston rod RM Ø 32 ÷ 63


Ø	AF	AG	BC	BG	DF	DG	DP	DT	E	EE	E1	FA	GG	HG	KF	LA
16	8	14	M3	16	4,1	3	4	5,8	28	M5	30	9,9	3	5	M4	3,2
20	10	17	M4	16	6,1	4	5	7,3	32	M5	34	12	4	7	M6	4,2
25	10	22	M5	16	6,1	5	5	8	37	M5	39	15,6	5	9	M6	4,5
32	12	28	M5	18	8,2	5	6	9	46	G1/8	47	19,8	5,2	11	M8	5,3
40	12	33	M5	18	8,2	5	8	9	56	G1/8	57	23,3	5,2	15	M8	5,3
50	16	42	M6	24	10,2	6	8	11	66	G1/8	67	29,7	6,2	19	M10	6,5
63	16	50	M6	24	10,2	6	10	11	79	G1/8	80	35,4	6,2	25	M10	6,5

Ø	LK	LM	LW	M	MM	PL	RR	RT	SW	SW2	TG	WH	ZA	ZM	ZZ
16	1	6	4,5	3,5	8	8	3,2	M4	7	-	18	5	37	47	53
20	1	8	4,5	4	10	8	4,2	M5	8	-	22	6	37	49	57
25	1	8	4,5	4	10	8	4,2	M5	8	-	26	6	39	51	59
32	2	10	5	4,5	12	7,5	5,2	M6	10	17	32,5	7	44	58	68
40	2	10	5	4,5	12	7,5	5,2	M6	10	19	38	7	45	59	69
50	2	12	6	6,5	16	7,5	6,5	M8	13	24	46,5	8	45	61	73
63	2	12	6	6,5	16	7,5	6,5	M8	13	24	56,5	8	50	66	78

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

TANDEM VERSION

Series

Type

Bore (mm)

Stroke (mm)

R M

RM Compact Cylinders ISO
21287 Ø 16÷100 mm

1 A

- 1A Double thrust tandem, stainless steel female piston rod
- 2A Double thrust tandem, chromium-plated steel female piston rod
- 3A Double thrust tandem, stainless steel male piston rod
- 4A Double thrust tandem, chromium-plated steel male piston rod

0 2 0

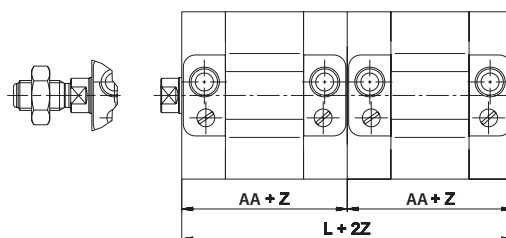
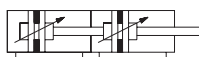
016 = Ø16
020 = Ø20
032 = Ø32
032 = Ø32
040 = Ø40
050 = Ø50
063 = Ø63
080 = Ø80
100 = Ø100

0 4 0

Upon request

Z = Stroke

Ø	L	AA
16	74	37
20	74	37
25	78	39
32	88	44
40	90	45
50	90	45
63	100	50
80	108	54
100	134	67



Tandem cylinders are constructed using two pistons coupled together which double the force in forward movement compared to the traditional cylinders of the same bore size

TWO-POSITION TANDEM VERSION

Series

Type

Bore (mm)

Stroke Z1 (mm)

Stroke Z2 (mm)

R M

RM Compact Cylinders ISO
21287 Ø 16÷100 mm

1 B

- 1B Two-position tandem, stainless steel female piston rod
- 2B Two-position tandem, chromium-plated steel female piston rod
- 3B Two-position tandem, stainless steel male piston rod
- 4B Two-position tandem, chromium-plated steel male piston rod

0 2 0

016 = Ø16
020 = Ø20
032 = Ø32
032 = Ø32
040 = Ø40
050 = Ø50
063 = Ø63
080 = Ø80
100 = Ø100

0 3 0

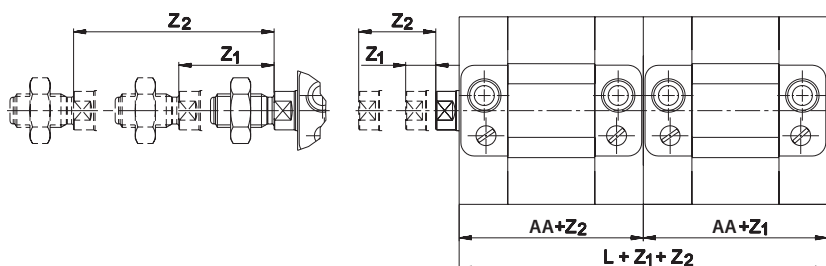
Upon request

0 5 0

Upon request

Z = Stroke

Ø	L	AA
16	74	37
20	74	37
25	78	39
32	88	44
40	90	45
50	90	45
63	100	50
80	108	54
100	134	67



Two-position cylinders with two independent piston-rods which allow to realize a double positioning in which the thrust forces are the same as those of a cylinder of the same bore size

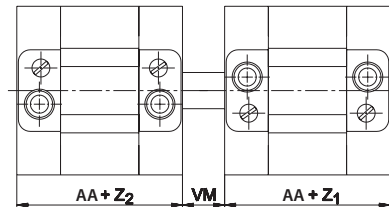
OPPOSED TANDEM VERSION

Series	Type	Bore (mm)	Stroke Z1 (mm)	Stroke Z2 (mm)
R M	1 C	0 2 0	0 2 0	0 4 0
RM Compact Cylinders ISO 21287 Ø 16÷100 mm	1C Opposed tandem, stainless steel female piston rod 2C Opposed tandem, chromium-plated steel female piston rod 3C Opposed tandem, stainless steel male piston rod 4C Opposed tandem, chromium-plated steel male piston rod	016 = Ø16 020 = Ø20 032 = Ø32 032 = Ø32 040 = Ø40 050 = Ø50 063 = Ø63 080 = Ø80 100 = Ø100	Upon request	Upon request

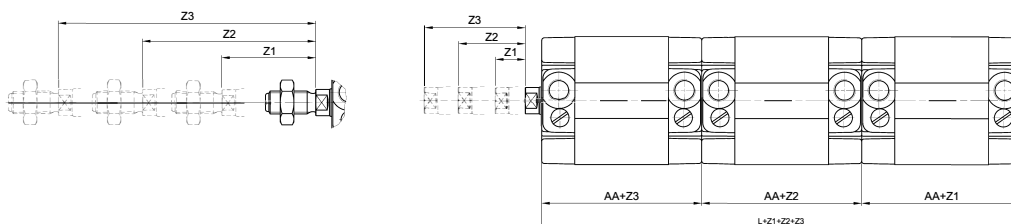
Ø	L	AA
16	74	37
20	74	37
25	78	39
32	88	44
40	90	45
50	90	45
63	100	50
80	108	54
100	134	67

Z = Stroke

Type of cylinder characterized by the coupling of two cylinders and whose piston rods move in opposite directions. The values of the thrust force are the same as those of the traditional cylinders

COMMON PISTON ROD TANDEM VERSION (UPON REQUEST)


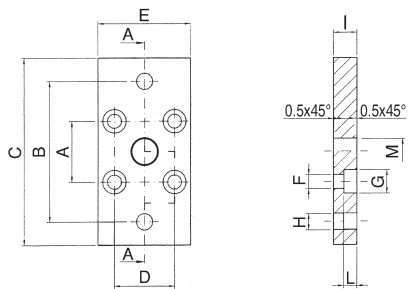
Two coupled cylinders with common piston rod.
The values of the thrust force are the same as those of the traditional cylinders

THREE - POSITION VERSION (UPON REQUEST)


For all other dimensions please refer to the standard version
For other types of cylinders kindly contact our sales office

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

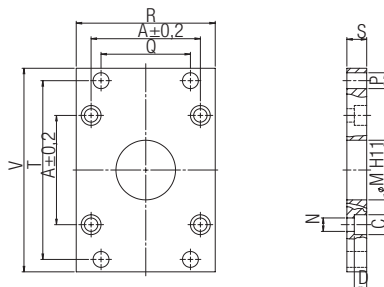
QFL - FLANGE



Code	Ø	A	B	C	D	E	F	G	H	I	L	M	N
QFL 012	12 - 16	18	43	55	18	29	4.5	9	5.5	10	5.4	10	-
QFL 020	20	22	55	70	22	36	5.5	10	6.6	10	5.4	12	-
QFL 025	25	26	60	76	26	40	5.5	10	6.6	10	5.4	12	-

Material: Steel

VFL - FLANGE



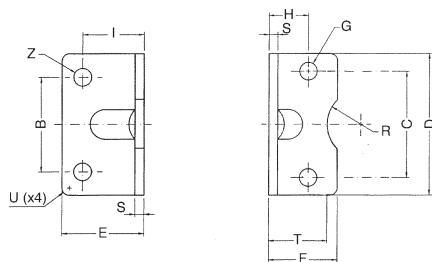
Code ●	Code ■	Ø	Ø M	P	S	D	C	N	A	Q	R	T	V
VFL 032	VFLI 032	32	30	7	10	5	10.5	6.5	32.5	32	45	64	80
VFL 040	VFLI 040	40	35	9	10	5	11	6.5	38	36	52	72	90
VFL 050	VFLI 050	50	40	9	12	5.5	15	8.5	46.5	45	65	90	110
VFL 063	VFLI 063	63	45	9	12	5.5	15	8.5	56.5	50	75	100	120
VFL 080	VFLI 080	80	45	12	16	8	18	10.5	72	63	95	126	150
VFL 100	VFLI 100	100	55	14	16	8	18	10.5	89	75	115	150	170

● Material: Steel

■ Material: Stainless Steel

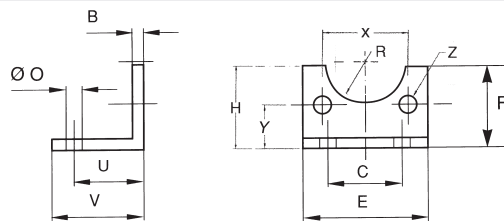
Screw: din6912

QCP - LOW-RISE PEDESTAL



Code	Ø	C	B	D	E	F	G	H	I	S	T	R	U	Z
QCP 012	12 - 16	18	18	30	17.5	17.5	4.4	13	13	3	15	9	2	5.5
QCP 020	20	22	22	36	22	22	5.4	16	16	4	17	10	2	6.6
QCP 025	25	26	26	40	22	23	5.4	17	16	4	19	11	2	6.6

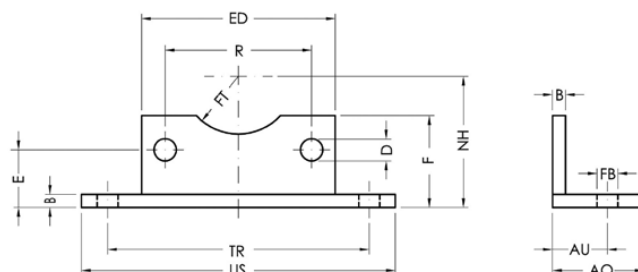
Material: Steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RM
VCP - LOW RISE PEDESTAL


Code ●	Code ■	Ø	B	C	E	F	O	U	V	R	Z	X	Y	H
VCP 032	VCPI 032	32	4	32	45	30	7	24	35	15	7	32.5	15.75	32
VCP 040	VCPI 040	40	4	36	52	30	9	28	36	17.5	7	38	17	36
VCP 050	VCPI 050	50	5	45	65	36	9	32	47	20	9	46.5	21.75	45
VCP 063	VCPI 063	63	5	50	75	35	9	32	45	22.5	9	56.5	21.75	50
VCP 080	VCPI 080	80	6	63	95	47	12	41	55	22.5	11	72	27	63
VCP 100	VCPI 100	100	6	75	115	53	14	41	57	27.5	11	89	26.5	71

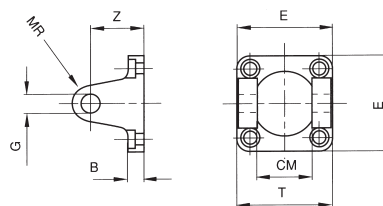
● Material: Steel

■ Material: Stainless Steel

VCB - LARGE LOW-RISE PEDESTAL


Code	Ø	US	ED	F	AO	B	TR	E	D	FT	NH	R	AU	FB
VCB 032 NE	32	79	45	30	30	5	65	15.75	6.5	15	32	32.5	18	6.5
VCB 040 NE	40	90	55	30	30	5	75	17	6.5	17.5	36	38	18	6.5
VCB 050 NE	50	110	65	35	35	5	90	21.75	8.5	20	45	46.5	21	8.5
VCB 063 NE	63	120	75	35	35	5	100	21.75	8.5	22.5	50	56.5	21	8.5
VCB 080 NE	80	153	95	45	45	6	128	27	10.5	22.5	63	72	27	10.5
VCB 100 NE	100	178	115	45	45	6	148	26.5	10.5	27.5	71	89	27	10.5

Material: Steel

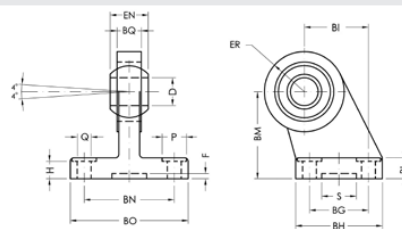
VCF - FEMALE HINGE


Code ●	Code ■	Ø	B	E	G	T	Z	CM	MR
* VCF 032	VCFI 032	32	9	45	10	45	22	26	10
* VCF 040	VCFI 040	40	9	52	12	52	25	28	12
* VCF 050	VCFI 050	50	11	65	12	60	27	32	12
* VCF 063	VCFI 063	63	11	75	16	70	32	40	16
* VCF 080	VCFI 080	80	14	95	16	90	36	50	16
* VCF 100	VCFI 100	100	14	115	20	110	41	60	20

● Material: Aluminium

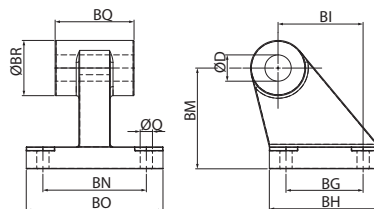
■ Material: Stainless Steel

* With self-lubricating bushes

FIXING ELEMENTS AND ACCESSORIES - SERIES RM
SQUADRE JOINT WITH ARTICULATED HEAD DIN648K


Code	Ø	Q	P	BG	BH	BI	BL	BM	BN	BO	EN	ER	BQ	D	H	S	F
VADZ 032 NE	32	6.6	11	18	31	21	10	32	38	51	14	15	10.5	10	8.5	20	3
VADZ 040 NE	40	6.6	11	22	35	24	10	36	41	54	16	18	12	12	8.5	20	3
VADZ 050 NE	50	9	15	30	45	33	12	45	50	65	21	20	15	16	10.5	20	3
VADZ 063 NE	63	9	15	35	50	37	12	50	52	67	21	23	15	16	10.5	20	3
VADZ 080 NE	80	11	18	40	60	47	14	63	66	86	25	27	18	20	11.5	20	3
VADZ 100 NE	100	11	18	50	70	55	15	71	76	96	25	30	18	20	12.5	20	3

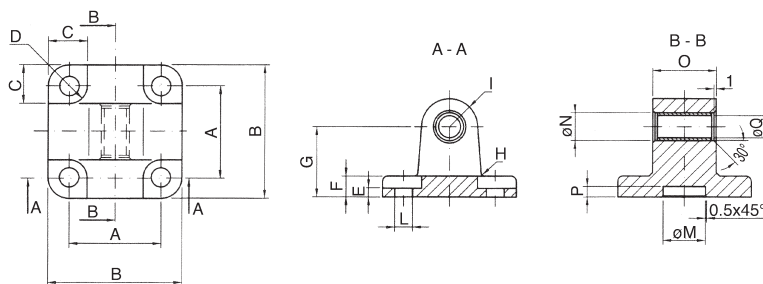
Material: Steel / Treatment: Black Cataphoresis

VAS - SQUARE JOINT


Code ●	Code ■	Ø	Q	BG	BH	BI	BM	BN	BO	BQ	BR	ØD
VAS 032	VASI 032	32	6.6	18	31	21	32	38	51	26	20	10
VAS 040	VASI 040	40	6.6	22	35	24	36	41	54	28	22	12
VAS 050	VASI 050	50	9	30	45	33	45	50	65	32	26	12
VAS 063	VASI 063	63	9	35	50	37	50	52	67	40	30	16
VAS 080	VASI 080	80	11	40	60	47	63	66	86	50	30	16
VAS 100	VASI 100	100	11	50	70	55	71	76	96	60	38	20

● Material: Aluminium

■ Material: Stainless Steel

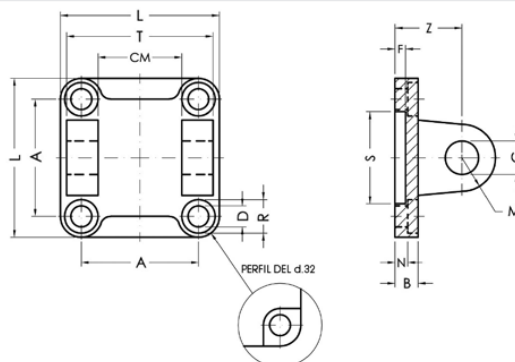
QCM - MALE HINGE WITH SELF-LUBRICATING BUSHES


Code	Ø	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q
QCM 012	12 - 16	18	27	10	4.5	2.6	6	16	2	6	4.5	10	8	12	3	6
QCM 020	20	22	34	11	5	2.6	6	20	2	8	5.5	12	10	16	3	8
QCM 025	25	26	38	11	5	2.6	6	20	2	8	5.5	12	10	16	3	8

Material: Aluminium

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

VCH - FEMALE CLEVIS BRACKET

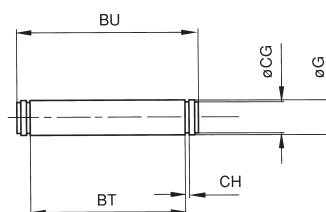


Code	Code ♦	Ø	A	L	D	R	N	B	S	F	Z	G	M	CM	T
VCH 032	VCHZ 032 NE	32	32.5	45	6.6	11	5.5	9	30	5	22	10	10	26	45
VCH 040	VCHZ 040 NE	40	38	52	6.6	11	5.5	9	35	5	25	12	12	28	52
VCH 050	VCHZ 050 NE	50	46.5	65	9	15	6.5	11	40	5	27	12	12	32	60
VCH 063	VCHZ 063 NE	63	56.5	75	9	15	6.5	11	45	5	32	16	16	40	70
VCH 080	VCHZ 080 NE	80	72	95	11	18	10	14	45	5	36	16	16	50	90
VCH 100	VCHZ 100 NE	100	89	115	11	18	10	14	55	5	41	20	20	60	110

● Material: Aluminium

■ Material: Steel

VPE - PIN WITH SEEGER

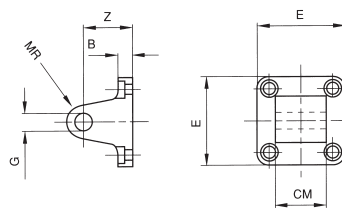


Code ●	Code ■	Ø	G	BT	BU	CG	CH
VPE 032	VPEI 032	32	10	46	53	9.6	1.1
VPE 040	VPEI 040	40	12	53	60	11.5	1.1
VPE 050	VPEI 050	50	12	61	68	11.5	1.1
VPE 063	VPEI 063	63	16	71	78	15.2	1.1
VPE 080	VPEI 080	80	16	91	98	15.2	1.1
VPE 100	VPEI 100	100	20	111	118	19	1.3

● Material: Steel

■ Material: Stainless Steel

VCM - MALE CLEVIS

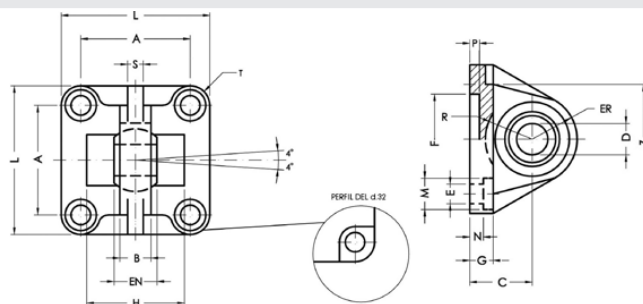


Code ●	Code ■	Code ♦	Ø	B	E	G	Z	CM	MR
VCM 032	VCM I 032	VCMZ 032 NE	32	9	45	10	22	26	10
VCM 040	VCM I 040	VCMZ 040 NE	40	9	52	12	25	28	12
VCM 050	VCM I 050	VCMZ 050 NE	50	11	65	12	27	32	12
VCM 063	VCM I 063	VCMZ 063 NE	63	11	75	16	32	40	16
VCM 080	VCM I 080	VCMZ 080 NE	80	14	95	16	36	50	16
VCM 100	VCM I 100	VCMZ 100 NE	100	14	115	20	41	60	20

● Material: Aluminium with self-lubricating bushes

■ Material: Stainless Steel

♦ Material E: Steel

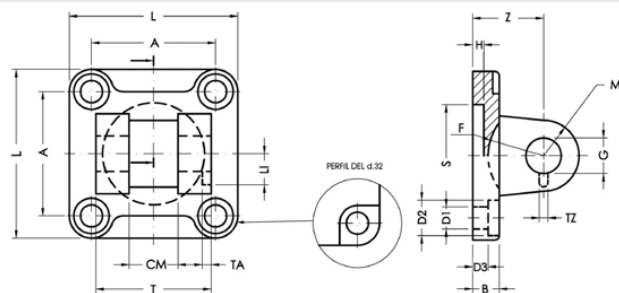
FIXING ELEMENTS AND ACCESSORIES - SERIES RM
VCS - NARROW MALE HINGE WITH ARTICULATED HEAD DIN648K


Code ●	Code ■	Code ◆	Ø	A	B	C	D	EN	ER	F	G	E	L	M	N	P	H	R	S	Z	T
VCS 032	VCSI 032	VCSZ 032 NE	32	32.5	10.5	22	10	14	16	30	9	6.6	45	11	5.5	5	-	-	4	32.5	6.25
VCS 040	VCSI 040	VCSZ 040 NE	40	38	12	25	12	16	19	35	9	6.6	52	11	5.5	5	-	-	6	39	7
VCS 050	VCSI 050	VCSZ 050 NE	50	46.5	15	27	16	21	21	40	11	9	65	15	6.5	5	51	18	8	47	9.25
VCS 063	VCSI 063	VCSZ 063 NE	63	56.5	15	32	16	21	24	45	11	9	75	15	6.5	5	-	-	8	52	9.25
VCS 080	VCSI 080	VCSZ 080 NE	80	72	18	36	20	25	28.5	45	14	11	95	18	10	5	72	24	10	67	11.5
VCS 100	VCSI 100	VCSZ 100 NE	100	89	18	41	20	25	30	55	14	11	115	18	10	8	-	-	10	77	13

● Material: Aluminium

■ Material: Stainless Steel

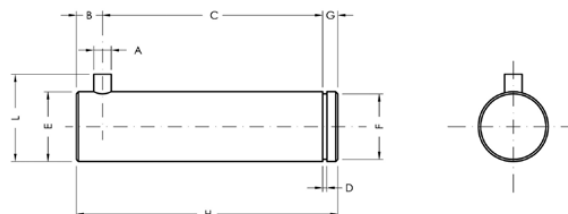
◆ Material: Steel

VCD - NARROW MALE HINGE WITH ARTICULATED HEAD DIN648K


Code ●	Code ◆	Ø	L	T	CM	A	Z	H	B	D3	S	G	MR	D1	D2	TA	TZ	LI	F
VCD 032	VCDZ 032 NE	32	45	34	14	32.5	22	5	9	5.5	30	10	10	6.6	11	3	3.3	11.5	17
VCD 040	VCDZ 040 NE	40	52	40	16	38	25	5	9	5.5	35	12	12	6.6	11	4	4.3	12	20
VCD 050	VCDZ 050 NE	50	65	45	21	46.5	27	5	11	6.5	40	16	14	9	15	4	4.3	14	22
VCD 063	VCDZ 063 NE	63	75	51	21	56.5	32	5	11	6.5	45	16	18	9	15	4	4.3	14	25
VCD 080	VCDZ 080 NE	80	95	65	25	72	36	5	14	10	45	20	20	11	18	4	4.3	16	30
VCD 100	VCDZ 100 NE	100	115	75	25	89	41	5	14	10	55	20	22	11	18	4	6.3	16	32

● Material: Aluminium

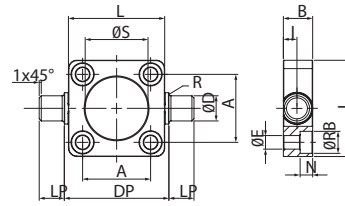
◆ Material: Steel

VPS - PIN ANTI-ROTATION FOR NARROW FEMALE HINGE VCD


Code ●	Code ■	Ø	A	C	D	E	F	G	H	L	B
VPS 032	VPSI 032	32	3	32.5	1.1	10	9.6	4	41	14	4.5
VPS 040	VPSI 040	40	4	38	1.1	12	11.5	4	48	16	6
VPS 050	VPSI 050	50	4	43	1.1	16	15.2	5	54	20	6
VPS 063	VPSI 063	63	4	49	1.1	16	15.2	5	54	20	6
VPS 080	VPSI 080	80	4	63	1.3	20	19	6	75	24	6
VPS 100	VPSI 100	100	4	73	1.3	20	19	6	85	24	6

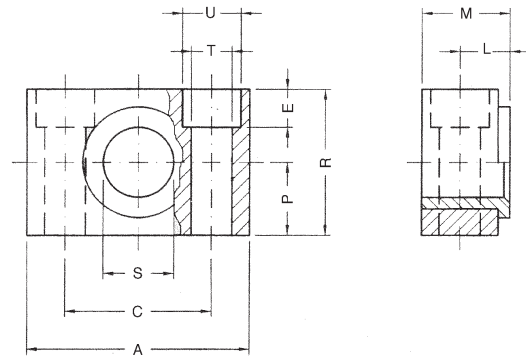
● Material: Steel

■ Material: Stainless Steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RM
VCNL - FRONT - REAR HINGE


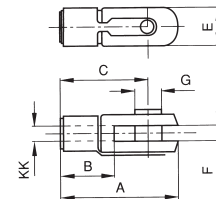
Code	Ø	A	L	DP	LP	D	S	B	R	I	E	RB	N	XV max
VCNF 032	32	32,5	46	50	12	12	30	14	1	6,5	6,5	10,5	6	84,5
VCNF 040	40	38	59	63	16	16	35	19	1,5	9	6,5	10,5	6	93,5
VCNF 050	50	46,5	69	75	16	16	40	19	1,6	9	8,5	13,5	8	101,5
VCNF 063	63	56,5	84	90	20	20	45	24	1,6	11,5	8,5	13,5	8	110,5
VCNF 080	80	72	102	110	20	20	45	24	1,6	11,5	10,5	16,5	10	125,5
VCNF 100	100	89	125	132	25	25	55	29	2	14	10,5	16,5	10	133,5
VCNF 125	125	110	150	160	25	25	60	30	2	15	13,5	20	12	163

Material: Steel

VSI - INTERMEDIATE HINGE SUPPORT


Code	Ø	A	M	R	P	C	S	L	U	T	E
VSI 032	32	46	18	30	15	32	12	10,5	11	6,6	7
VSI 040	40 - 50	55	21	36	18	36	16	12	15	9	9
VSI 063	63 - 80	65	23	40	20	42	20	13	18	11	11
VSI 100	100 - 125	75	28,5	50	25	50	25	16	20	14	13

Material: Steel / Suggested for VCNT - XCN - VCNL - VCNF

FC - YOKE WITH LOCABLE PIN


Code ●	Code ■	KK	A	B	C	E	F	G
FC 012	* FCI 012	M6	31	12	24	12	6	6
FC 020	FC 020	M8X1,25	42	16	32	16	8	8
FC 025	* FCI 025	M10x1.25	52	20	40	20	10	10
FC 040	* FCI 040	M12x1.25	62	24	48	24	12	12
FC 050	* FCI 050	M16x1.5	83	32	64	32	16	16

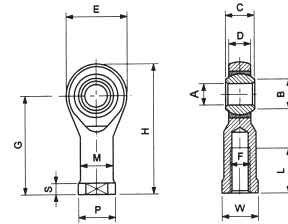
● Material: Steel

■ Material: Stainless Steel

* With pin and seeger

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

TF - ROD ENDS SELF-LUBRICATING



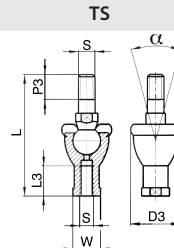
Code	Code	F	A	B	C	Sphere	D	E	G	H	L	M	P	S	W	Radial load		Weight
			0	0	0		±0.13	±0.5	±0.5		±0.7	±0.7	±0.5	±0.7	±0.25	D	S	
			H7		-0.13											kg	kg	g
TF 012	TFI 012	M6X1	6	8,9	9	12,7	6,75	20	30	40	9	10	13	5	11	470	1100	19
TF 020	TFI 020	M8X1,25	8	10,4	12	15,88	9	24	36	48	12	12,5	16	5	14	780	1900	36
TF 025	TFI 025	M10x1,25	10	12,9	14	19,05	11,5	30	43	58	15	15	19	6,5	16	1.200	3.100	88
TF 040	TFI 040	M12x1,25	12	15,4	16	22,23	12,5	34	50	67	18	17,5	22	6,5	18	1.400	3.700	120
TF 050	TFI 050	M16x1,5	16	19,3	21	28,58	15,5	42	64	85	24	22	27	8	24	2.500	6.300	240

● Material: Steel

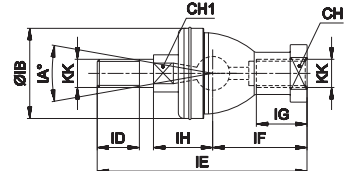
■ Material: Stainless Steel

D Dynamic; S Static

TS - SNODABLE YOKE



MF



Code	S	L	L3	W	P3	D3	α°	Radial load (kN)
								S
TS 020	M8x1.25	65	16	14	12	20	30°	11
TS 025	M10x1.25	74,5	18	17	15	30	30°	16
TS 040	M12x1.25	84	20	19	17	32	30°	22
TS 050	M16x1.5	112	27	22	23	40	22°	33

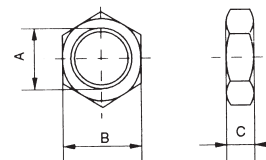
Material: Steel

S Static

Code	Ø	CH	CH1	IA°	KK	IH ±0.13	IB	ID	IE	IF	IG	g
MF-22016	16	11	8	30	M6X1	12,2	22	11	55,2	28	15	40

Material: Steel

DA - NUT FOR RODS

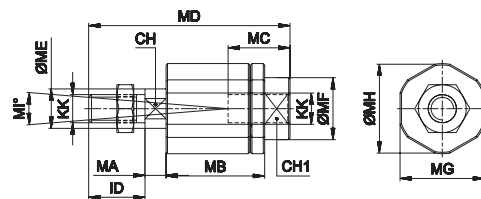
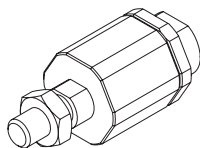


Code	A	B	C
ODA00 00 51 C3 ZI	M8x1.25	13	6,5
ODA00 00 51 C9 ZI	M10x1.25	17	8
ODA00 00 51 D5 ZI	M12x1.25	19	7
ODA00 00 51 E3 ZI	M16x1.5	22	6

Material: Steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

KF-24 - SELF-ALIGNING JOINT



Code	Ø	CH	CH1	ID	KK	MA	MB	MC	MD	ME	MF	MG	MH	MI"	g
MF-24012	12	5	7	11	M6x1	2,5	17,5	12,5	35	6	8,5	13	14,5	6	55
MF-24020	20 - 25	7	11	21	M8x1.25	5	26	16	57	8	12,5	17	19	8	60
KF-24032	32	12	19	71	M10x1.25	5	35	20	71	14	22	30	32	8	220
KF-24040	40	12	19	75	M12x1.25	5	35	20	75	14	22	30	32	8	220
KF-24050	50-63	20	30	103	M16x1.5	8	54	32	103	22	32	41	45	6	660

Material: galvanized Steel

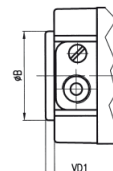
RPF28 - FLANGE FOR FEMALE PISTON ROD



Ø	Code	g
16	RPF-28016	0,007
20	RPF-28020	0,018
25	RPF-28025	0,020
32	RPF-28032	0,024
40	RPF-28040	0,035
50	RPF-28050	0,057
63	RPF-28063	0,094

Material: Aluminium

RSF09 - ADAPTER FOR CENTRING

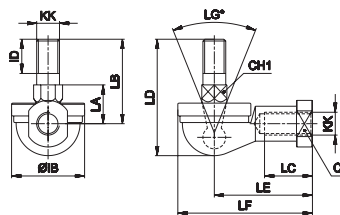
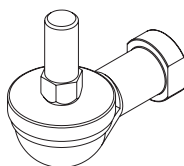


Code	Ø	ØB	VD1
RSF-09032	32	30	3
RSF-09040	40	35	3
RSF-09050	50	40	3
RSF-09063	63	45	3
RSF-09080	80	45	4
RSF-09100	100	55	4

Material: Aluminium

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

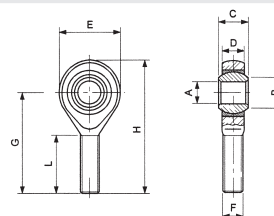
MF23 - FORK WITH ANGLE MOUNTED ARTICULATED PIN



Code	Ø	CH	CH1	LG°	KK	IB	ID	LA ± 0.3	LB	LC	LD	LE	LF	g
MF-32012	16	11	8	50	M6x1	22	11	11	26	14	35,5	30	40	37
MF-32020	20 - 25	14	10	50	M8x1,25	28	12	14	31	17	42,5	36	48	67
KF-23025	32	17	11	50	M10x1.25	32	15	17	37	21	50,5	43	57	110
KF-23040	40	19	17	50	M12x1.25	36	17	19	42	42	57,5	50	66	165
KF-23050	50-63	22	19	40	M16x1.5	47	23	23,5	60	60	79,5	64	84	330
KF-23080	80 - 100	30	24	32	M20x1.5	58	25	27	68	68	90	77	99	540

Material: galvanized Steel

TM - MALE ROD ENDS

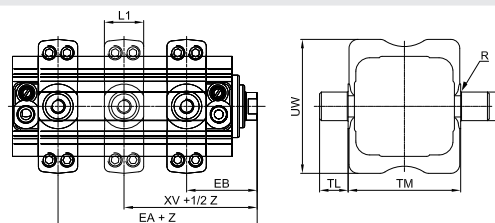
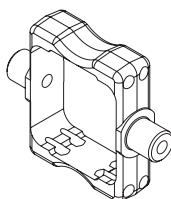


Code	Ø	F	A	B	C	Spera	D	E	G	H	L	Radial load		Weight
			0	0	0		± 0.13	± 0.5	± 0.5		± 0.7	D	S	
			H7		- 0.13							kg	kg	g
TM 032	20 - 25	M6x1	6	8.9	9	12.7	7.5	20	36	46	21	470	1100	15
TM 050	32 - 40	M8x1,25	8	10.4	12	15.88	9.5	24	42	54	25	780	1900	34
TM 080	50 - 63	M10x1,5	10	12.9	14	19.05	11.5	30	48	63	28	1200	3100	70
TM 100	80 - 100	M12x1,75	12	15.4	16	22.23	12.5	34	54	71	32	1400	3700	110

Material: Steel

D Dynamic; S Static

KDF14/RPF14 - ISO INTERMEDIATE HINGE



Code	Ø	EA	EB	L1	R	TD e9	TL h14	TM h14	UW	XV	g
KDF-14032	32	31	41	22	0,5	12	12	50	65	±2	120
RPF-14040	40	32	41	22	0,5	16	16	63	75	±2	240
RPF-14050	50	36	45	22	1	16	16	75	95	±2	320
RPF-14063	63	37	48	28	1	20	20	90	105	±2	470
KDF-14080	80	56,5	62,5	27,5	1	20	20	110	130	±2	800
KDF-14100	100	61	70	33	1	25	25	132	145	±2	1500

Z = Stroke

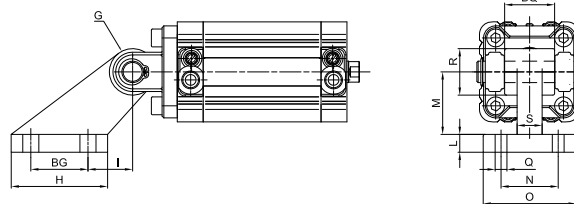
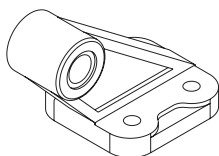
The dimension XV + 1/2 indicates the position of the hinge between the end-caps of the cylinder

Material: Zinc-plated Steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RM

KF19 - COUNTER HINGE 90° (CNOMO)

TO EXHAUSTION



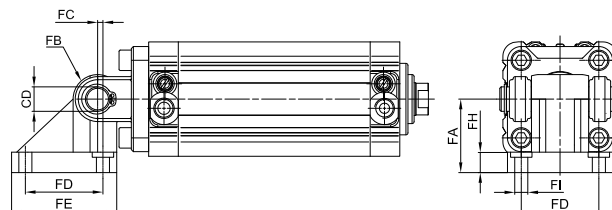
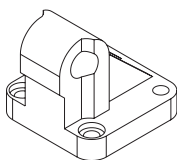
Code	Ø	Q H13	BG ±0,2	H	I ±0,2	L	M ±0,2	N ±0,2	O	S	R Max	BQ ±0,2/ ±0,1	G H9	g
KF-19032CN	32	7	20	37	18	8	24	25	41	9	19,5	25	8	58
KF-19040050CN	40-50	9	32	54	25	10	35	32	52	14	26	32	12	144
KF-19063080CN	63-80	11	50	75	32	13	50	40	63	14	32	46	16	300
KF-19100125CN	100-125	14	70	103	40	17	73	50	80	22	42	56	20	694

Z = Stroke

Material: Aluminium

KF19 - COUNTER HINGE 90°

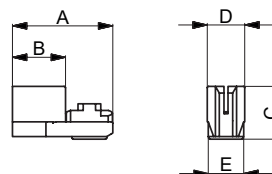
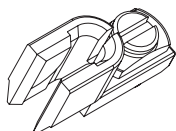
TO EXHAUSTION



Code	Ø	Q H13	BG ±0,2	H	I ±0,2	L	M ±0,2	N ±0,2	O	S	R Max	BQ ±0,2/ ±0,1	G H9	g
KF-19032	32	10	32	10	1,2	32,5	46,5	26	-0,2 / -0,6	9	6,5	5,5	10,5	90
KF-19040	40	12	36	12	2,6	38	51,5	28	-0,2 / -0,6	9	6,5	5,5	10,5	120
KF-19050	50	12	45	12	0,3	46,5	63,5	32	-0,2 / -0,6	9	8,5	5	13,5	200
KF-19063	63	16	50	16	3,3	56,5	73,5	40	-0,2 / -0,6	10,5	8,5	5	13,5	320
KF-19080	80	16	63	16	1,0	72	93	50	-0,2 / -0,6	12	10,5	4,5	16,5	580

Material: Aluminium

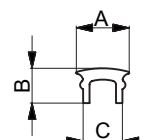
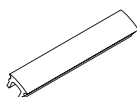
DF - SENSOR WIRE GUIDE CABLE CLAMP



Code	A	B	C	D	E
DF-001	15	7,8	7,9	5,8	5,5

Material: Polycarbonate body - chrome-plated Steel screw

DHF - DF SENSOR WIRE COVER STRIP



Code	A	D	E
DHF-002010	7	4,6	5,2

Material: Pvc