



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	die-cast aluminium
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 S	2	0 0	0 3 2	0 0 2 5	
RS Compact Cylinders STRONG Ø 32÷100 mm	2 Stainless steel female piston rod On request 1 Chromium-plated steel female piston rod 3 Stainless steel male piston rod 4 Chromium-plated steel male piston rod	Type 1-2 00 = D.E. Version standard 01 = D.E. Through piston rod 10 = D.E. Anti-rotation guided piston rod Ø 32 ÷ 63 (only female piston rod) 11 = D.E. Anti-rotational guided through piston rod Ø 32 ÷ 63 (only female piston rod) 20 = D.E. Long piston (Ø32÷63) 60 = S.E. Retracted piston rod 70 = S.E. Extended piston rod Type 3-4 00 = D.E. Version standard 01 = D.E. Through piston rod 20 = D.E. Long piston (Ø32÷63) 60 = S.E. Retracted piston rod 70 = S.E. Extended piston rod Meaning D.E. = Double action S.E. = Single action	032 = Ø32 040 = Ø40 050 = Ø50 063 = Ø63 080 = Ø80 100 = Ø100	Single acting 0005 - 0010 - 0015 - 0020 - 0025 Double acting 0005 - 0010 0015 - 0020 - 0025 - 0030 - 0040 - 0050 - 0060 - 0080 Max standard stroke (Ø32 Ø100) 0080 Corsa Max Piston allungato (On request) (Ø32 Ø40) 0800 (Ø50 Ø63) 1000 Max stroke with non-rotating guided piston rod (on request) (Ø32 Ø40) 0400 (Ø50) 0500 (Ø63) 0800	H Perforated lock cylinder only for versions with through lock cylinder without flanges G Prepared for lock cylinder, excluding CYLINDERS S.E. and only with chrome lock cylinder C With flange version: 100-101-120-160-170 200-201-220-260-270 L Piston Rod Lock L1-N

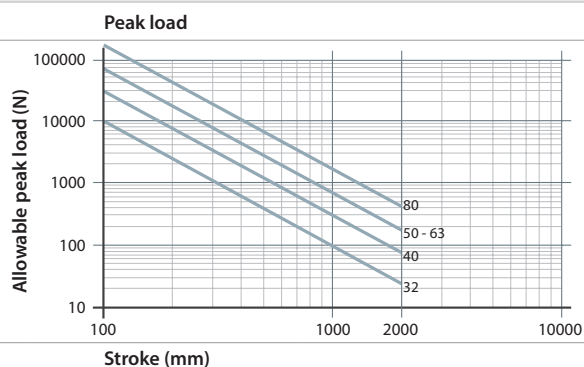
Stroke tolerances

	Ø	mm ²	Nm
	32	+ 2-0	2
	40	+ 2-0	3
	50	+ 2-0	5
	63	+ 2,5-0	8
	80	+ 4-0	-
	100	+ 4-0	-

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

Ø	Surface area		Working pressure					Working pressure				
	mm ²		bar					bar				
	Thrust	Traction	Thrust					Traction				
			2	4	6	8	10	2	4	6	8	10
32	804	691	161	322	482	643	804	138	276	414	553	691
40	1256	1056	251	502	754	1005	1256	211	422	633	844	1055
50	1962	1649	393	785	1178	1570	1963	330	660	990	1320	1650
63	3116	2802	623	1246	1869	2493	3116	560	1120	1680	2240	2800
80	5024	4533	1005	2010	3014	4019	5024	907	1814	2722	3629	4536
100	7850	7359	1570	3114	4710	6280	7850	1472	2944	4416	5888	7360

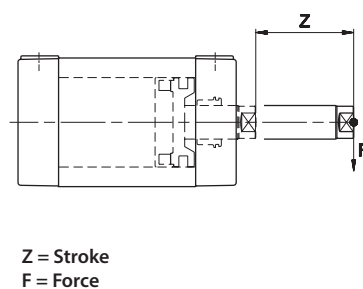
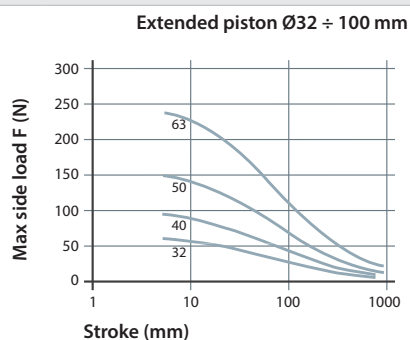
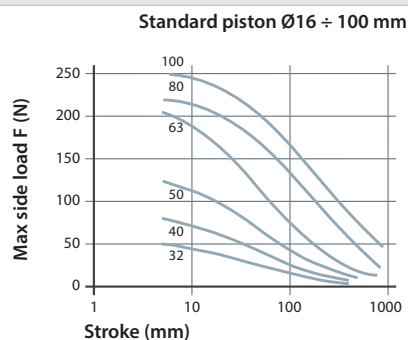
Graph of the theoretical thrust forces based on pressure and allowable strokes depending on maximum peak load



Theoretical forces of spring traction for single-acting cylinder

Ø	Max force	Min. force	Max stroke	Decrease per mm stroke
	N	N	mm	N/mm
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	2,4

Graph side load on piston rod



Mass - standard cylinder RS200/RS400 Mass - long piston cylinder RS220/RS420

Ø	Cylinder stroke 0 Standard		Cylinder stroke 0 Long piston		Increase per mm stroke	Moving element stroke 0 Standard		Moving element stroke 0 Long piston		Increase per mm stroke
	g		g		g	g		g		g
	RS200	RS400	RS220	RS420	RS200/220 - RS400/420	RS200	RS400	RS220	RS420	RS200/220 - RS400/420
32	215	245	301,5	331,5	2,65	70	100	12,5	151,5	0,9
40	347	392	482	527	4	110	155	197	242	1,6
50	520	600	769	849	5,6	180	260	327	407	2,5
63	800	880	1151,5	1231,5	6,55	260	340	485	565	2,5
80	1204	1362	-	-	10,5	320	375	-	-	3,9
100	2079	2249	-	-	12,5	445	500	-	-	3,9

Mass - through piston rod cylinder RS201/RS401

Ø	Cylinder stroke 0		Increase per mm stroke	Moving element stroke 0		Increase per mm stroke
	g		g	g		g
	RS201	RS401	RS201 - RS401	RS201	RS401	RS201 - RS401
32	245	305	3,55	96	156	1,8
40	392	482	5,6	151	241	3,2
50	596	756	8,1	250	410	5
63	875	1035	9,05	330	490	5
80	1427	1747	14,5	350	430	7
100	2450	2761	16,5	405	470	9

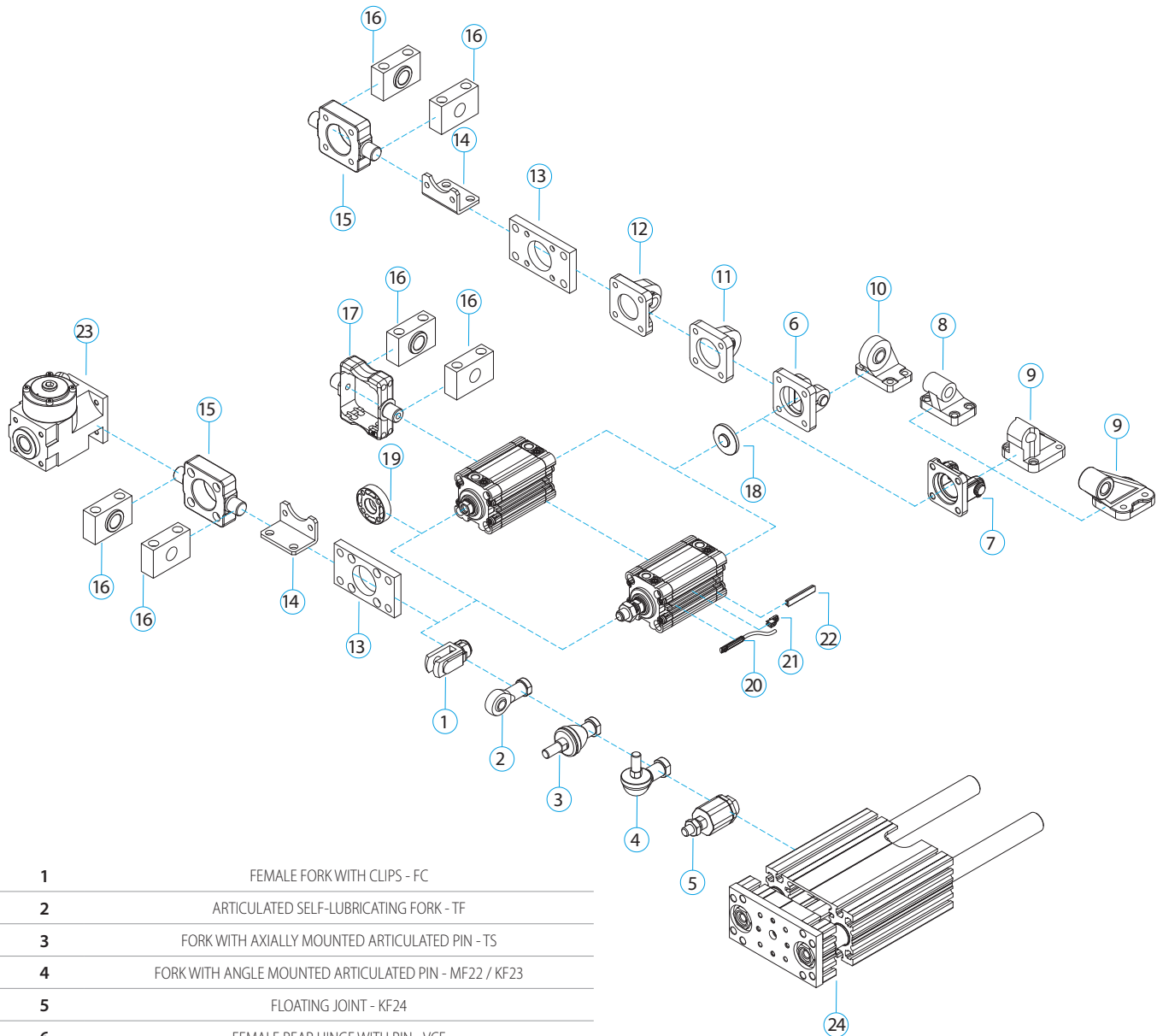
Mass - retracted piston rod cylinder RS260/RS460 Mass - extended piston rod cylinder RS270/RS470

Ø	Cylinder stroke 0 Retracted piston rod		Cylinder stroke 0 Extended piston rod		Increase per mm stroke Retracted/ Extended piston rod	Moving element - stroke 0 Retracted/ Extended piston rod		Increase per mm stroke Retracted/ Extended piston rod
	g		g		g	g		g
	RS260	RS460	RS270	RS470	RS260/RS460 - RS270/RS470	RS260/RS270	RS460/RS470	RS260/RS460 - RS270/RS470
32	217	247	213	243	2,65	73	103	0,9
40	350	395	344	398	4	116	161	1,6
50	525	605	515	595	5,6	192	272	2,5
63	805	885	795	875	6,55	272	352	2,5
80	1105	1261	1100	1102	10,5	350	430	3,9
100	2082	2128	1900	2002	12,5	420	480	3,9

Mass - non-rotating guided piston rod cylinder RS210 Mass - non-rotating guided through piston rod cylinder RS211

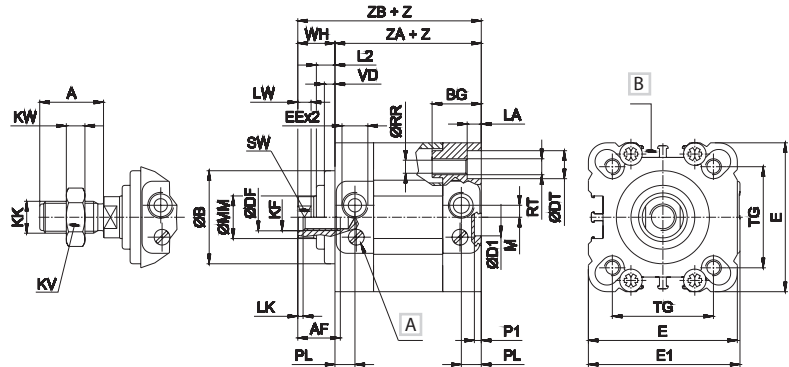
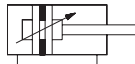
Ø	Cylinder stroke 0		Increase per mm stroke		Moving element stroke 0		Increase per mm stroke	
	g		g		g		g	
	RS201	RS211	RS201	RS211	RS201	RS211	RS201	RS211
32	255	285	3,09	3,99	110	136	1,34	2,24
40	414	459	4,8	6,4	177	218	2,4	4
50	622	698	6,4	8,9	282	352	3,3	5,8
63	952	1025	7,79	10,29	412	482	3,7	6,24

FIXING ELEMENTS AND ACCESSORIES - SERIES RS

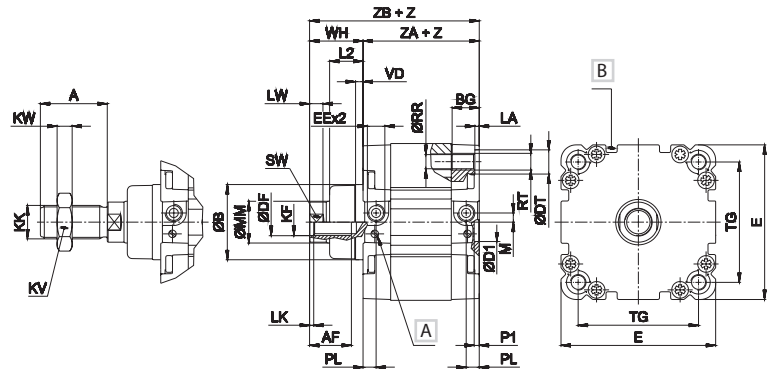
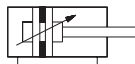


1	FEMALE FORK WITH CLIPS - FC
2	ARTICULATED SELF-LUBRICATING FORK - TF
3	FORK WITH AXIALLY MOUNTED ARTICULATED PIN - TS
4	FORK WITH ANGLE MOUNTED ARTICULATED PIN - MF22 / KF23
5	FLOATING JOINT - KF24
6	FEMALE REAR HINGE WITH PIN - VCF
7	NARROW FEMALE HINGE WITH PIN - VCH
8	COUNTER HINGE 90° (CETOP) - VAS
9	COUNTER HINGE 90° / COUNTER HINGE 90° (CROMO) - KF19
10	ARTICULATED COUNTER HINGE - VADZ
11	ARTICULATED REAR MALE HINGE - QCM
12	REAR MALE HINGE - VCM
13	FRONT/REAR FLANGE - VFC / QFC
14	ANGLE BRACKET - QCP / VCP
15	FRONT/REAR HINGE WITH FLOATING PIN - VCNL
16	HINGE SUPPORT - VSI
17	ISO INTERMEDIATE HINGE - KDF14 / RPF14
18	CENTERING ADAPTOR RING - RSF28
19	FLANGE FOR FEMALE PISTON ROD - RPF28
20	DF - DT SENSOR
21	CABLE CLAMPING FOR DF SENSOR
22	DHF COVERING STRIP
23	LOCKING UNIT - L1-N
24	SLIDE UNITS FOR PNEUMATIC CYLINDERS - J11

Double acting standard RS Ø 32 ÷ 63



Double acting standard RS Ø 80 - 100



Ø	A	AF	B	BG	DF	DT	D1 H11	E	EE	E1	KF	KK	KV	KW	LA
32	22	12	30	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	24	16	35	18	10,2	9	14	56	G1/8	57	M10	M12x1,25	19	6	5,3
50	32	20	40	24	12,2	11	18	66	G1/8	67	M12	M16x1,5	24	7	6,5
63	32	20	45	24	12,2	11	18	79	G1/8	80	M12	M16x1,5	24	7	6,5
80	40	25	45	16,5	16,2	14	23	93,5	G1/8	-	M16	M20x1,5	30	9	2,6
100	40	25	55	21,5	16,2	14	28	112	G1/8	-	M16	M20x1,5	30	9	2,6

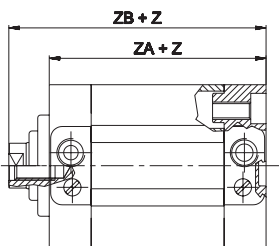
Ø	LK	LW	L2	M	MM	PL	P1	RR	RT	SW	TG	VD	WH	ZA	ZB
32	2	5	7	4,5	12	7,5	2,5	5,2	M6	10	32,5	4	14	44	58
40	2	5	7	4,5	16	7,5	2,5	5,2	M6	13	38	4	14	45	59
50	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	46,5	5	18	45	63
63	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	56,5	5	18	50	68
80	2,5	8	20	5,5	25	8	3	8,4	M10	22	72	4	32	54	86
100	2,5	8	20	8	25	10,5	3	8,4	M10	22	89	4	32	67	99

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

Long piston RS Ø 32 ÷ 63

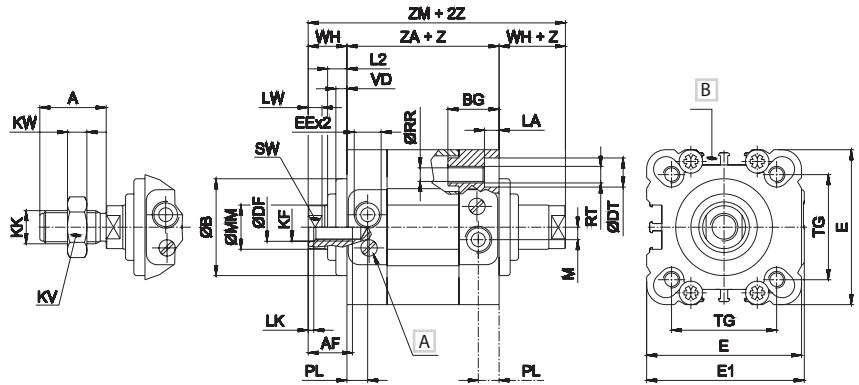


Ø	ZA	ZB
32	64	78
40	65	79
50	70	88
63	75	93

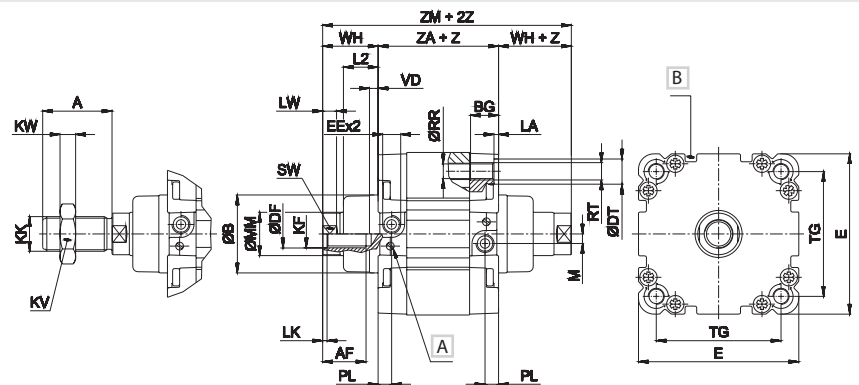
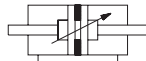
Z = Stroke

For cylinder types with long piston, dimensions ZA and ZB will be increased by 20 mm (Ø32 - Ø40 mm) and by 25 mm (Ø50 - Ø63 mm)

Double acting through piston rod RS Ø 32 ÷ 63



Double acting through piston rod RS Ø 80 - 100



Ø	A	AF	B	BG	DF	DT	E	EE	E1	KF	KK	KV	KW	LA
32	22	12	30	18	8,2	9	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	24	16	35	18	10,2	9	56	G1/8	57	M10	M12x1,25	19	6	5,3
50	32	20	40	24	12,2	11	66	G1/8	67	M12	M16x1,5	24	7	6,5
63	32	20	45	24	12,2	11	79	G1/8	80	M12	M16x1,5	24	7	6,5
80	40	25	45	16,5	16,2	14	93,5	G1/8	-	M16	M20x1,5	30	9	2,6
100	40	25	55	21,5	16,2	14	112	G1/8	-	M16	M20x1,5	30	9	2,6

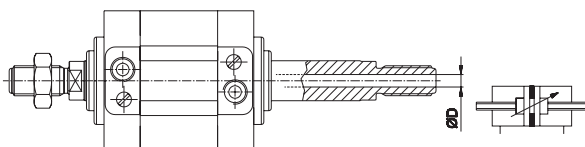
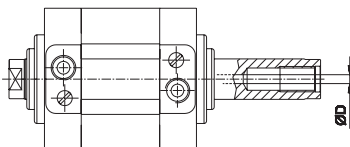
Ø	LK	LW	L2	M	MM	PL	RR	RT	SW	TG	VD	WH	ZA	ZM
32	2	5	7	4,5	12	7,5	5,2	M6	10	32,5	4	14	44	72
40	2	5	7	4,5	16	7,5	5,2	M6	13	38	4	14	45	73
50	2	6	10	6,5	20	7,5	6,5	M8	17	46,5	5	18	45	81
63	2	6	10	6,5	20	7,5	6,5	M8	17	56,5	5	18	50	86
80	2,5	8	20	5,5	25	8	8,4	M10	22	72	4	32	54	118
100	2,5	8	20	8	25	10,5	8,4	M10	22	89	4	32	67	131

Z= Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

Female/male hollow through piston rod RS Ø 32 ÷ 100

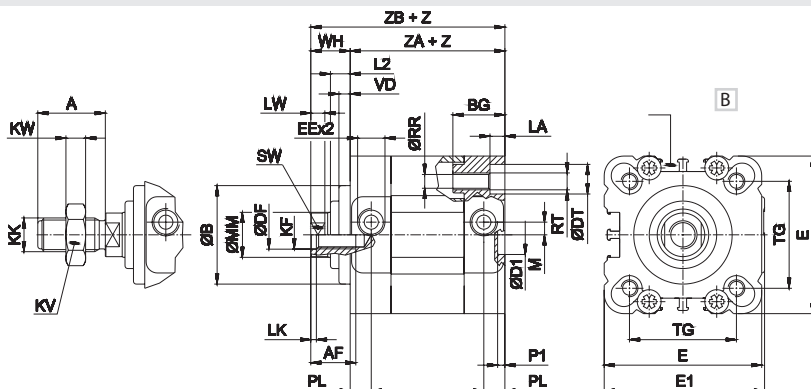


Ø	D
32	4,5
40	4,5
50	6
63	6
80	6
100	8

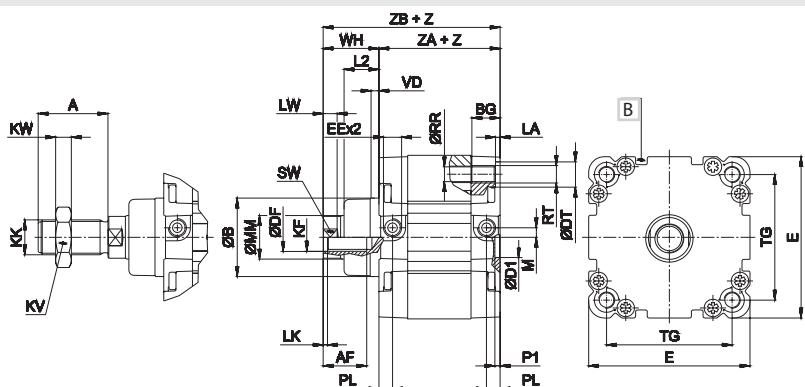
Ø16 ÷ 25 Max stroke 50 mm Ø32 ÷ 63 Max stroke 75 mm Ø80 - 100 Max stroke 100 mm

For all other dimensions please refer to the through piston rod version

Single acting retracted piston rod RS Ø 32 ÷ 63



Single acting retracted piston rod RS Ø 80 - 100



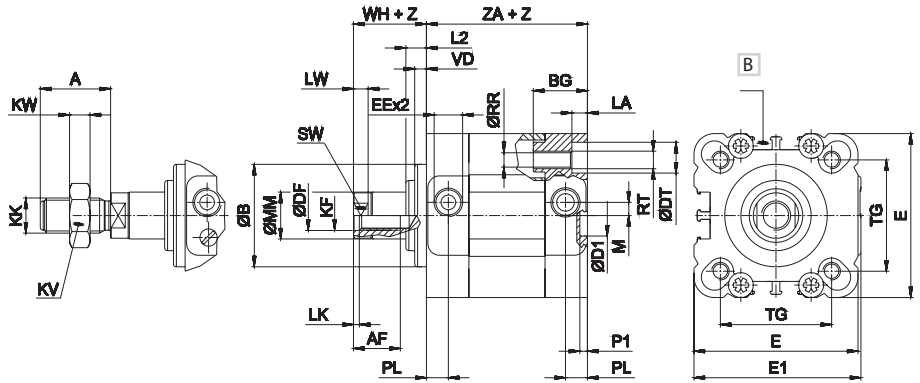
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32	22	12	30	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6	5,3
40	24	16	35	18	10,2	9	14	56	G1/8	57	M10	M12x1,25	19	6	5,3
50	32	20	40	24	12,2	11	18	66	G1/8	67	M12	M16x1,5	24	7	6,5
63	32	20	45	24	12,2	11	18	79	G1/8	80	M12	M16x1,5	24	7	6,5
80	40	25	45	16,5	16,2	14	23	93,5	G1/8	-	M16	M20x1,5	30	9	2,6
100	40	25	55	21,5	16,2	14	28	112	G1/8	-	M16	M20x1,5	30	9	2,6

Ø	LK	LW	L2	M	MM	PL	P1	RR	RT	SW	TG	VD	WH	ZA	ZB
32	2	5	7	4,5	12	7,5	2,5	5,2	M6	10	32,5	4	14	44	58
40	2	5	7	4,5	16	7,5	2,5	5,2	M6	13	38	4	14	45	59
50	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	46,5	5	18	45	63
63	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	56,5	5	18	50	68
80	2,5	8	20	5,5	25	8	3	8,4	M10	22	72	4	32	54	86
100	2,5	8	20	8	25	10,5	3	8,4	M10	22	89	4	32	67	99

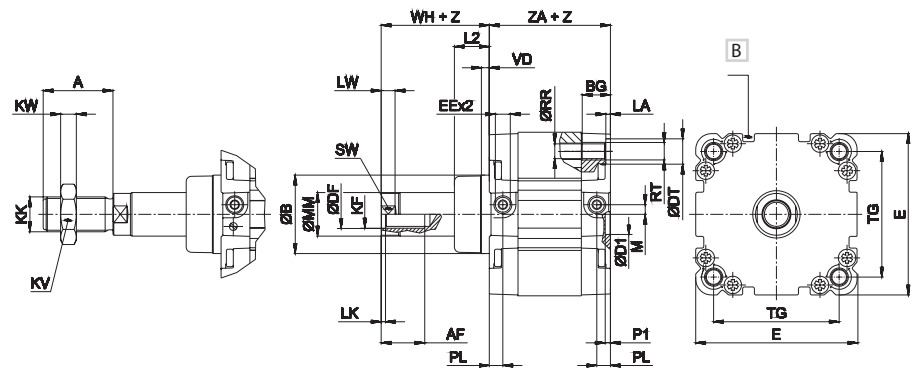
Z= Stroke

B. Groove for sensor

Single acting extended piston rod RS Ø 32 ÷ 63



Single acting extended piston rod RS Ø 80 - 100



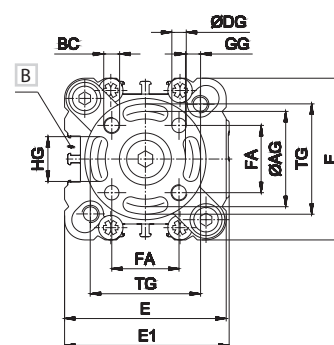
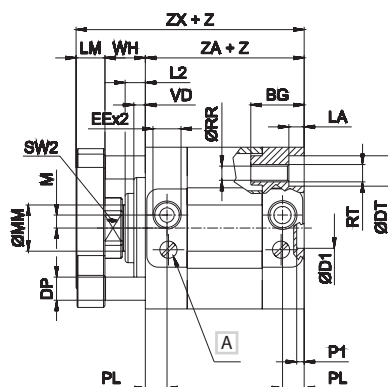
Ø	A	AF	B	BG	DF	DT	D1 H11	E	EE	E1	KF	KK	KV	KW
32	22	12	30	18	8,2	9	14	46	G1/8	47	M8	M10x1,25	17	6
40	24	16	35	18	10,2	9	14	56	G1/8	57	M10	M12x1,25	19	6
50	32	20	40	24	12,2	11	18	66	G1/8	67	M12	M16x1,5	24	7
63	32	20	45	24	12,2	11	18	79	G1/8	80	M12	M16x1,5	24	7
80	40	25	45	16,5	16,2	14	23	93,5	G1/8	-	M16	M20x1,5	30	9
100	40	25	55	21,5	16,2	14	28	112	G1/8	-	M16	M20x1,5	30	9

Ø	LA	LK	LW	L2	M	MM	PL	P1	RR	RT	SW	TG	VD	WH	ZA
32	5,3	2	5	7	4,5	12	7,5	2,5	5,2	M6	10	32,5	4	14	44
40	5,3	2	5	7	4,5	16	7,5	2,5	5,2	M6	13	38	4	14	45
50	6,5	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	46,5	5	18	45
63	6,5	2	6	10	6,5	20	7,5	2,5	6,5	M8	17	56,5	5	18	50
80	2,6	2,5	8	20	5,5	25	8	3	8,4	M10	22	72	4	32	54
100	2,6	2,5	8	20	8	25	10,5	3	8,4	M10	22	89	4	32	67

Z = Stroke

B. Groove for sensor

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



Ø	AG	BC	BG	DG	DP	DT	D1	E	EE	E1	FA	GG	HG	LA
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

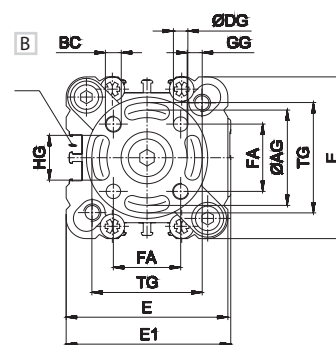
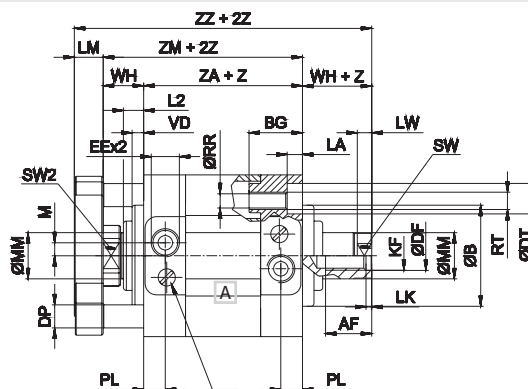
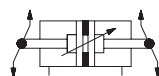
Ø	LM	L2	M	MM	PL	P1	RR	RT	SW2	TG	VD	WH	ZA	ZX
32	10	7	4,5	12	7,5	2,5	5,2	M6	17	32,5	4	14	44	68
40	10	7	4,5	16	7,5	2,5	5,2	M6	19	38	4	14	45	69
50	12	10	6,5	20	7,5	2,5	6,5	M8	24	46,5	5	18	45	75
63	12	10	6,5	20	7,5	2,5	6,5	M8	24	56,5	5	18	50	80

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

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



Ø	AF	AG	B	BC	BG	DF	DG	DP	D1	E	EE	E1	FA	GG	HG	KF	LA
32	12	28	30	M5	18	8,2	5	6	14	46	G1/8	47	19,8	5,2	11	M8	5,3
40	16	33	35	M5	18	10,2	5	8	14	56	G1/8	57	23,3	5,2	15	M10	5,3
50	20	42	40	M6	24	12,2	6	8	18	66	G1/8	67	29,7	6,2	19	M12	6,5
63	20	50	45	M6	24	12,2	6	10	18	79	G1/8	80	35,4	6,2	25	M12	6,5

Ø	LK	LM	LW	L2	M	MM	PL	RR	RT	SW	SW2	TG	VD	WH	ZA	ZM	ZZ
32	2	10	5	7	4,5	12	7,5	5,2	M6	10	17	32,5	4	14	44	72	82
40	2	10	5	7	4,5	16	7,5	5,2	M6	13	19	38	4	14	45	73	83
50	2	12	6	10	6,5	20	7,5	6,5	M8	17	24	46,5	5	18	45	81	93
63	2	12	6	10	6,5	20	7,5	6,5	M8	17	24	56,5	5	18	50	86	98

Z = Stroke

A. Pneumatic cushioning adjusting screw

B. Groove for sensor

CYLINDERS ISO 21287 WITH LOCKING UNIT L1-N



Reference Standard

ATEX
2014/34/UE



Pressures

4 bar (0.4 MPa)
10 bar (1 MPa)



Temperature

-20 °C
+ 80 °C

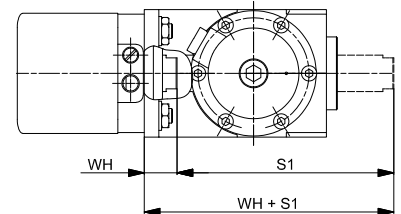
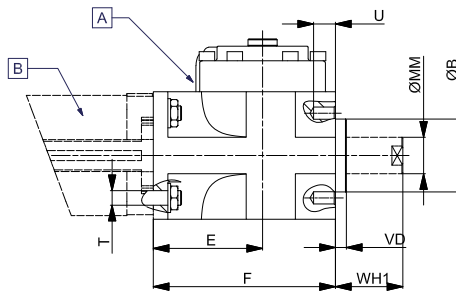
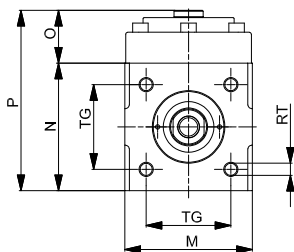
CHARACTERISTICS

Fluid	Filtered air, with or without lubrication
Body	Die-cast aluminum
Cover	Die-cast aluminum
Piston	Aluminum
Seals	NBR
Springs	Special steel



Series	Bore (mm)	Piston rod bore (mm)	Option
L 1 N	0 6 3	2 0	☐
L1-N Locking unit for cylinders and piston rods	032 = Ø032 040 = Ø040 050 = Ø050 063 = Ø063 080 = Ø080 100 = Ø100	Ø12 Ø20 Ø16 Ø25	k Metallic piston rod scraper on request

L1 N - LOCKING BLOCK Ø 32 - Ø 100

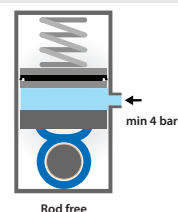


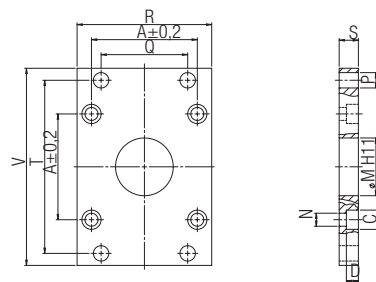
A - G1/8 pneumatic release

B - STRONG cylinder

Ø	Ø Rod (mm)	B	RT	E	F	M	MM	N	O	P	TG	S1	S2	U	T	VD	WH	WH1
32	12	30	M6	54,5	84	50	12	50	29,5	79,5	32,5	82	-	10	6,5	6	14	26
40	16	35	M6	58	90	58	16	58	29,5	87,5	38	90	-	9	6,5	6	14	30
50	20	40	M8	60	100	70	20	70	29	99	46,5	100	-	10	8,5	6	18	37
63	20	45	M8	65	110	85	20	85	37	122	56,5	110	-	13	8,5	6	18	37
80	25	45	M10	75	125	100	25	100	40,5	140,5	72	125	-	16	10,5	8	32	46
100	25	55	M10	90	152	116	25	116	59	179	89	152	-	18	10,5	8	32	51

LOCKING UNIT WITH M8 INDUCTIVE POSITION SENSOR



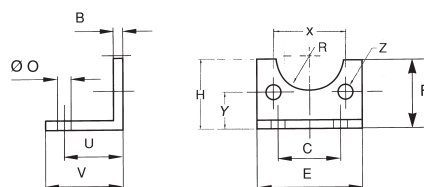
FIXING ELEMENTS AND ACCESSORIES - SERIES RS
VFL - FLANGE


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

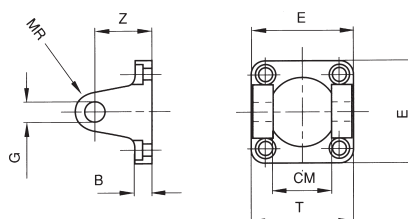
Screw: din6912

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

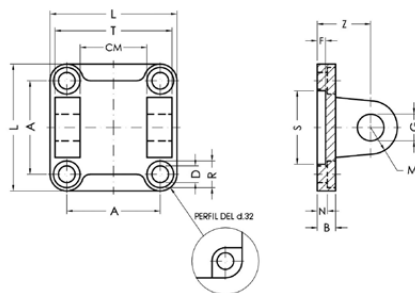
VCF - FEMALE HINGE


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

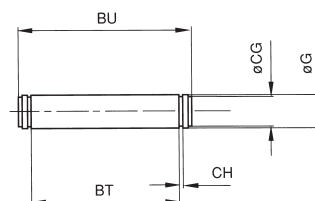
* With self-lubricating bushes

FIXING ELEMENTS AND ACCESSORIES - SERIES RS
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

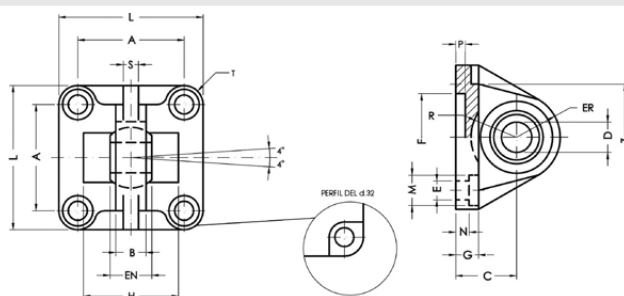
♦ Material: Steel

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

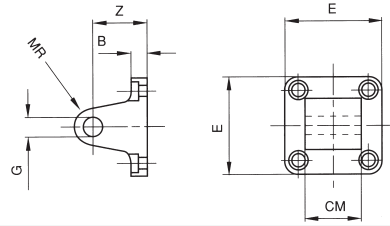
VCS - NARROW MALE HINGE WITH ARTICULATED HEAD DIN648K


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

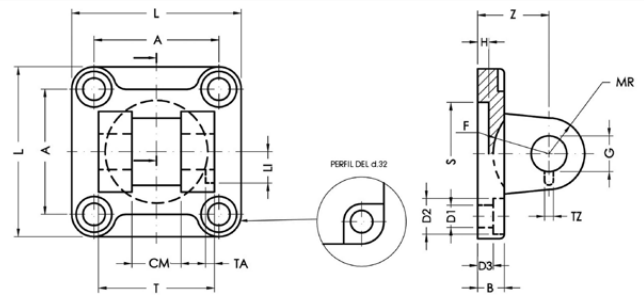
FIXING ELEMENTS AND ACCESSORIES - SERIES RS
VCM - MALE CLEVIS


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

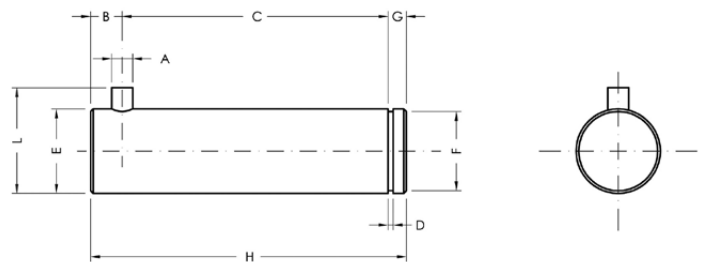
◆ Material: Steel

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

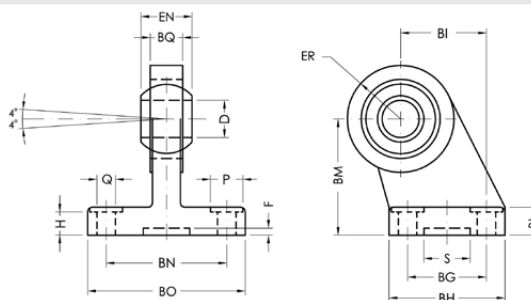
◆ Material: Steel

VPS - PIN ANTI-ROTATION FOR NARROW FEMALE HINGE VCD


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

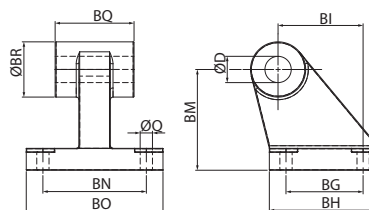
● Material: Steel

● Material: Stainless steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RS
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

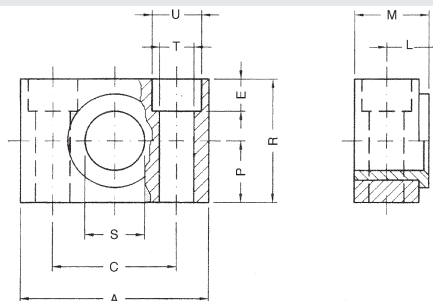
Material: steel / treatment: Black Cataphoresis

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

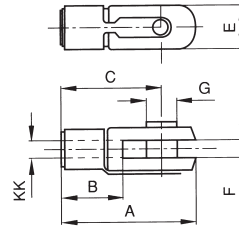
VSI - INTERMEDIATE HINGE SUPPORT


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

FIXING ELEMENTS AND ACCESSORIES - SERIES RS

FC - YOKE WITH LOCABLE PIN



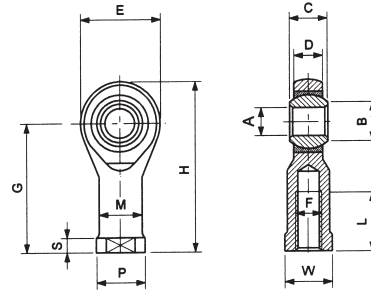
Code ●	Code ■	KK	A	B	C	E	F	G
FC 025	* FCI 025	M10x1.25	52	20	40	20	10	10
FC 040	* FCI 040	M12x1.25	62	24	48	24	12	12
FC 050	* FCI 050	M16x1.5	83	32	64	32	16	16
FC 080	* FCI 080	M20x1.5	105	40	80	40	20	20

● Material: Steel

■ Material: Stainless steel

* With pin and seeger

TF - ROD ENDS SELF-LUBRICATING



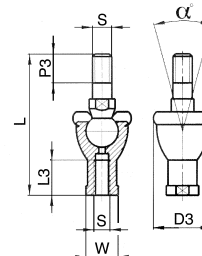
Code ●	Code ■	F	A	B	C	Spera	D	E	G	H	L	M	P	S	W	Radial load		Weight
			0	0	0											D	S	
			H7		-0.13		±0.13	±0.5	±0.5		±0.7	±0.7	±0.5	±0.7	±0.25	kg	kg	g
TF 025	TFI 025	M10x1,25	10	12.9	14	19.05	11.5	30	43	58	15	15	19	6.5	16	1.200	3.100	88
TF 040	TFI 040	M12x1,25	12	15.4	16	22.23	12.5	34	50	67	18	17.5	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
TF 080	TFI 080	M20x1,5	20	24.4	25	34.93	18.5	50	77	102	30	27.5	34	10	30	3.700	8.300	430

● Material: Steel

■ Material: Stainless steel

D Dynamic; S Static

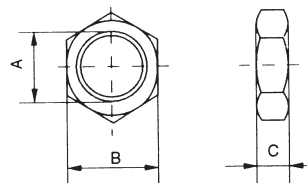
TS - SNODABLE YOKE



Code	S	L	L3	W	P3	D3	α°	Radial load (kN)
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
TS 080	M20x1.5	133	38	30	25	45	15°	37

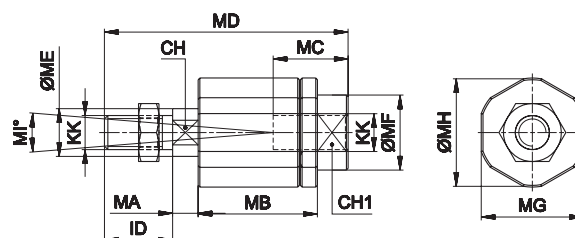
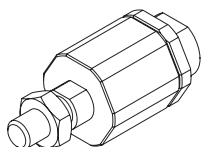
Material: Steel

S Static

FIXING ELEMENTS AND ACCESSORIES - SERIES RS
DA - NUT FOR RODS


Code	A	B	C
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
ODA00 00 51 F2 ZI	M20x1.5	30	9

Material: Steel

KF-24 - SELF-ALIGNING JOINT


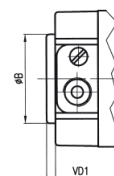
Code	Ø	CH	CH1	ID	KK	MA	MB	MC	MD	ME	MF	MG	MH	MI	g
KF-24032	32	12	19	71	M10x1.25	5	35	20	71	14	22	30	32	8	220
KF-24040	40	12	19	75	M12x1.25	5	35	20	75	14	22	30	32	8	220
KF-24050	50-63	20	30	103	M16x1.5	8	54	32	103	22	32	41	45	6	660
KF-24080	80 - 100	20	30	119	M20x1.5	8	54	40	119	22	32	41	45	6	700

Material: galvanized steel

RPF28 - FLANGE FOR FEMALE PISTON ROD


Code	Ø	g
RPF-28032	32	24
RPF-28040	40	35
RPF-28050	50	57
RPF-28063	63	94

Material: Aluminium

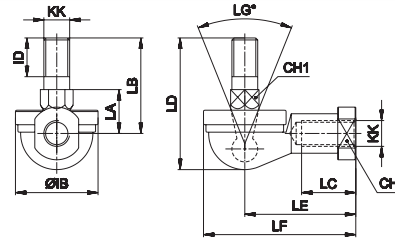
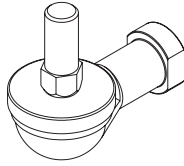
RSF09 - ADAPTER FOR CENTRING


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 RS

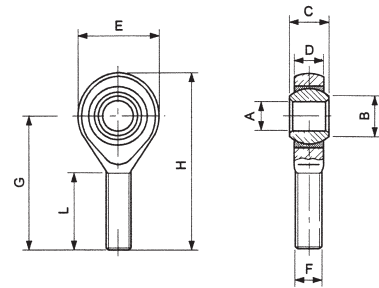
KF-23 - FORK WITH ANGLE MOUNTED ARTICULATED PIN



Code	Ø	CH	CH1	LG°	KK	IB	ID	LA ±0.3	LB	LC	LD	LE	LF	g
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

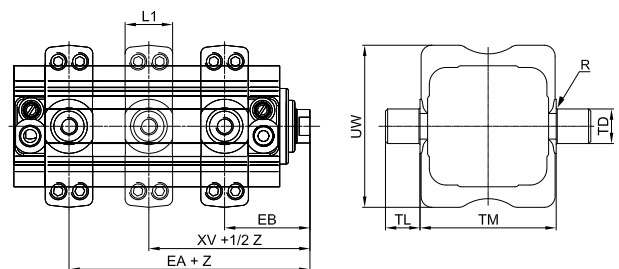
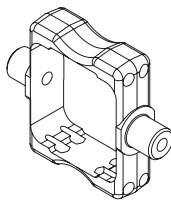


Code	Ø	F	A	B	C	Sphere	D	E	G	H	L	Radial load		Weight
			0	0	0							D	S	
			H7		- 0.13		± 0.13	± 0.5	± 0.5		± 0.7	kg	kg	g
TM 050	32	M8x1,25	8	10.4	12	15.88	9.5	24	42	54	25	780	1900	34
TM 080	40	M10x1,5	10	12.9	14	19.05	11.5	30	48	63	28	1200	3100	70
TM 100	50 - 63	M12x1,75	12	15.4	16	22.23	12.5	34	54	71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

Material: steel

D Dynamic; S Static

KDF14/ RPF14 - ISO INTERMEDIATE HINGE REAR/FRONT

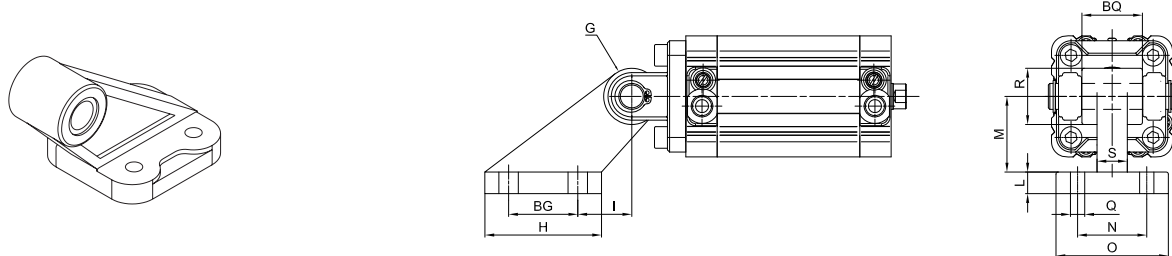


Code	Ø	EA	EB	L1	R	TD e9	TL h14	TM h14	UW	XV	g
KDF-14032	32	31	41	22	0,5	12	12	50	65	36 ±2	120
RPF-14040	40	32	41	22	0,5	16	16	63	75	36,5 ±2	240
RPF-14050	50	36	45	22	1	16	16	75	95	40,5 ±2	320
RPF-14063	63	37	48	28	1	20	20	90	105	43 ±2	470
KDF-14080	80	56,5	62,5	27,5	1	20	20	110	130	59 ±2	800
KDF-14100	100	61	70	33	1	25	25	132	145	65,5 ±2	1500

Z = Stroke

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

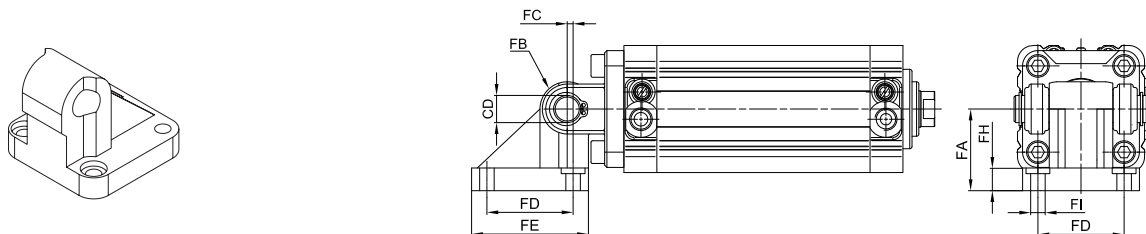
Material: Zinc-plated steel

FIXING ELEMENTS AND ACCESSORIES - SERIES RS
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	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
KF-19100	100	20	73	20	2,5	89	113	60	-0,2 / -0,6	13	10,5	4,5	16,5	910

Material: Aluminium

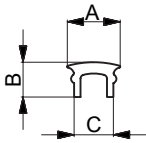
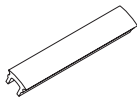
DF - SENSOR WIRE GUIDE CABLE CLAMP


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

Material: Polycarbonate body - chrome-plated steel screw

FIXING ELEMENTS AND ACCESSORIES - SERIES RS

DHF - DF SENSOR WIRE COVER STRIP



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

Material: Pvc