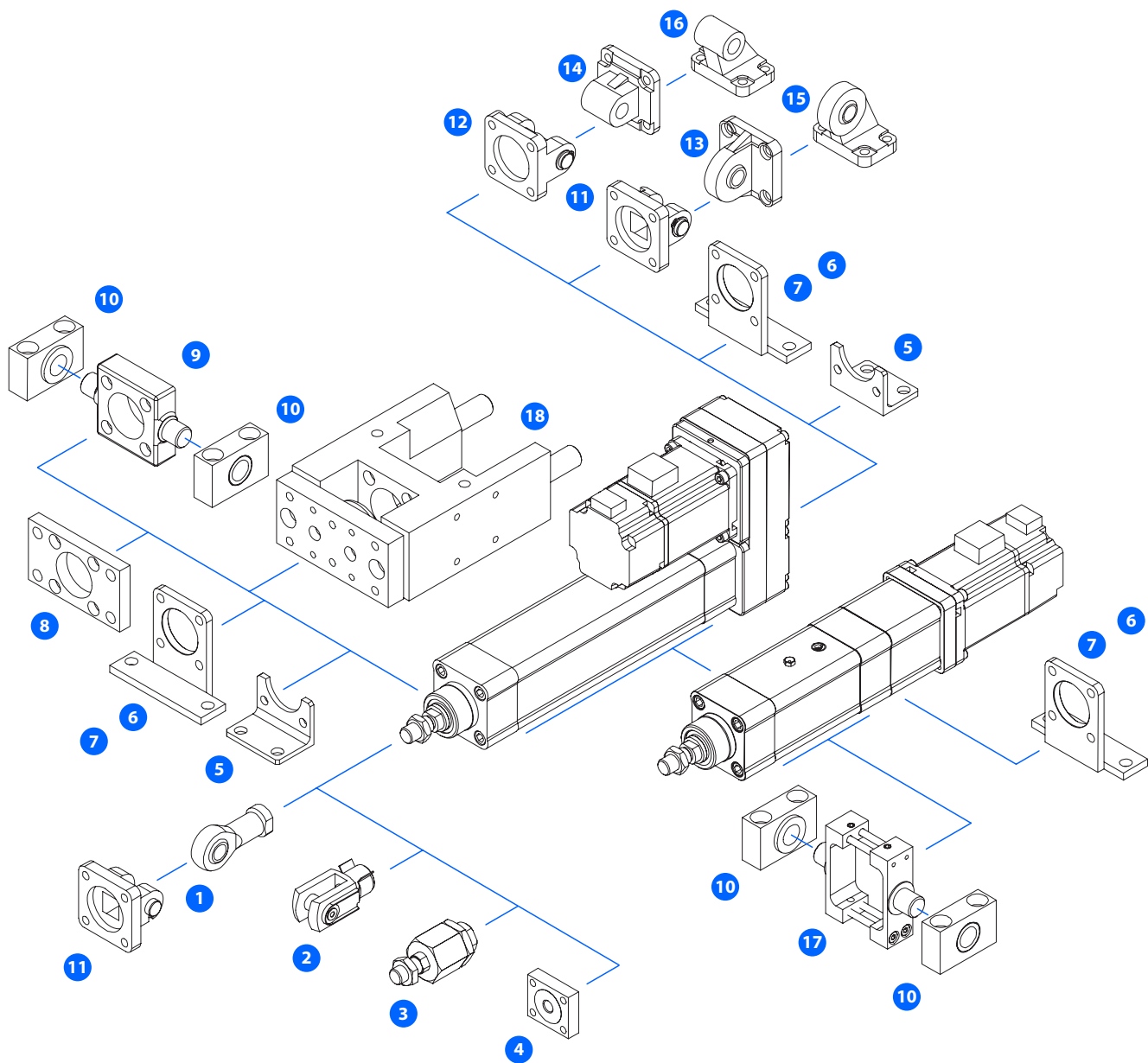


ACCESSORIES

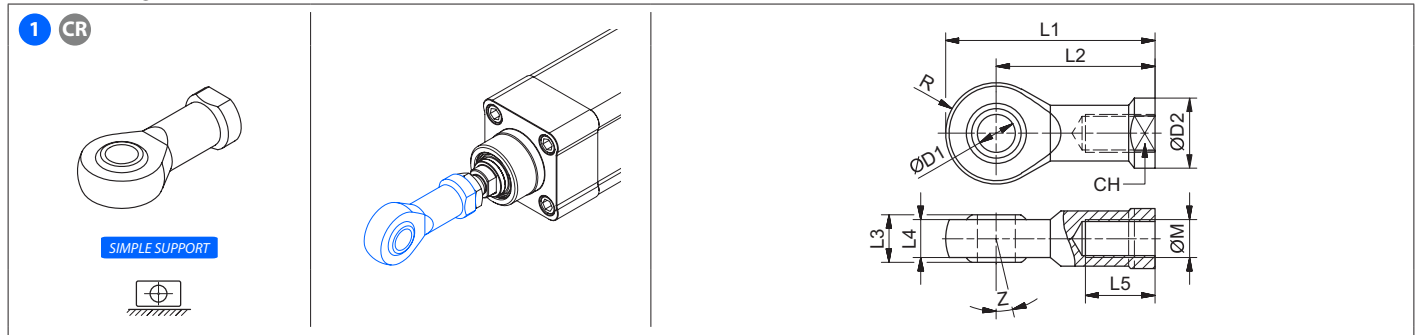


Page	19		20		21		22		23		24		25		26		27	28
Piston rod accessories	1	2	3	4														
Mounting attachment accessories					5	6	7	8	9	10	11	12	13	14	15	16	17	
Guiding unit																	18	18

CR This sign applies to corrosion resistant products

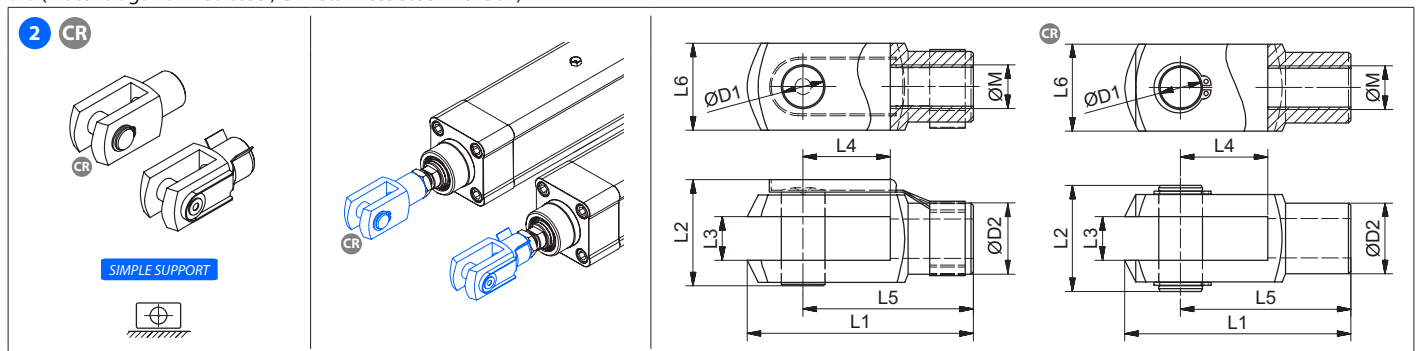
Piston rod accessories

SGS (Material: galvanized steel, CR - stainless steel AISI 304)



SGS			ØM	L1	L2	L3	L4	L5	ØD1 (H7)	ØD2	R	CH	Z	m	F _{max}	
Size	Code	Code CR	[mm]											[°]	[kg]	[N]
32	9206	69550	M10x1,25	57	43	14	10,5	20	10	19	14	17	13	0,08	F _{PNCE}	
40	9208	69551	M12x1,25	66	50	16	12	22	12	22	16	19	13	0,11	F _{PNCE}	
50	9210	50691	M16x1,5	85	64	21	15	28	16	27	21	22	15	0,22	F _{PNCE}	
63	9210	50691	M16x1,5	85	64	21	15	28	16	27	21	22	15	0,22	F _{PNCE}	
80	9211	49572	M20x1,5	102	77	25	18	33	20	34	25	30	14	0,41	F _{PNCE}	
100	9211	49572	M20x1,5	102	77	25	18	33	20	34	25	30	14	0,41	F _{PNCE}	

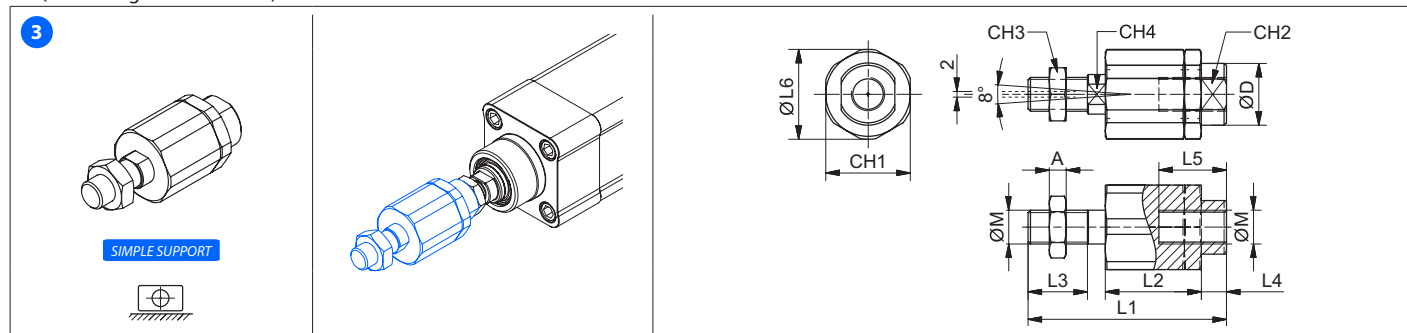
SG (Material: galvanized steel, CR - stainless steel AISI 304)



SG			ØM	L1 (±0,5)	L2	L3 (B13)	L4 (±0,5)	L5	L6	ØD1 (h11)	ØD2	m	F _{max}
Size	Code	Code CR	[mm]									[kg]	[N]
32	9186	69547	M10×1,25	52	26 [25]	10	20	40	20	10	18	0,09	F _{PNCE}
40	9189	69548	M12×1,25	62	32 [30]	12	24	48	24	12	20	0,15	F _{PNCE}
50	9191	69549	M16×1,5	83	40 [39]	16	32	64	32	16	26	0,33	F _{PNCE}
63	9191	69549	M16×1,5	83	40 [39]	16	32	64	32	16	26	0,33	F _{PNCE}
80	9192	70248	M20×1,5	105	48	20	40	80	40	20	34	0,68	F _{PNCE}
100	9192	70248	M20×1,5	105	48	20	40	80	40	20	34	0,68	F _{PNCE}

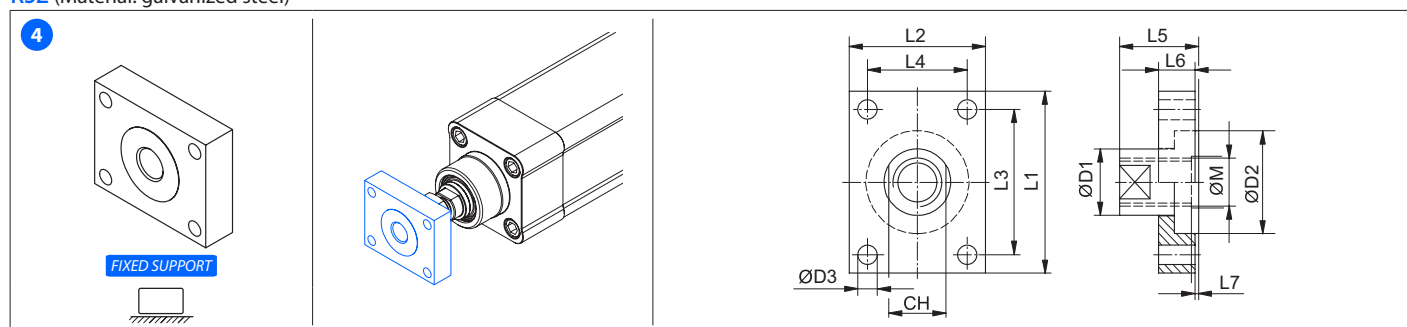
Bracketed values for type CR

FK (Material: galvanized steel)



FK		ØM	L1	L2	L3	L4	L5	ØL6	A	ØD	CH1	CH2	CH3	CH4	m	F _{max}
Size	Code	[mm]													[kg]	[N]
32	5466	M10x1,25	71	35	20	11	23	32	6	22	30	19	17	12	0,22	F _{PNCE}
40	5468	M12x1,25	75	35	24	11	23	32	7	22	30	19	19	12	0,23	5000
50	5470	M16x1,5	103	54	32	9	32	45	8	32	41	27	24	20	0,66	10000
63	5470	M16x1,5	103	54	32	9	32	45	8	32	41	27	24	20	0,66	10000
80	5471	M20x1,5	119	54	40	17	39	45	9	32	41	27	30	20	0,70	10000
100	5471	M20x1,5	119	54	40	17	39	45	9	32	41	27	30	20	0,70	10000

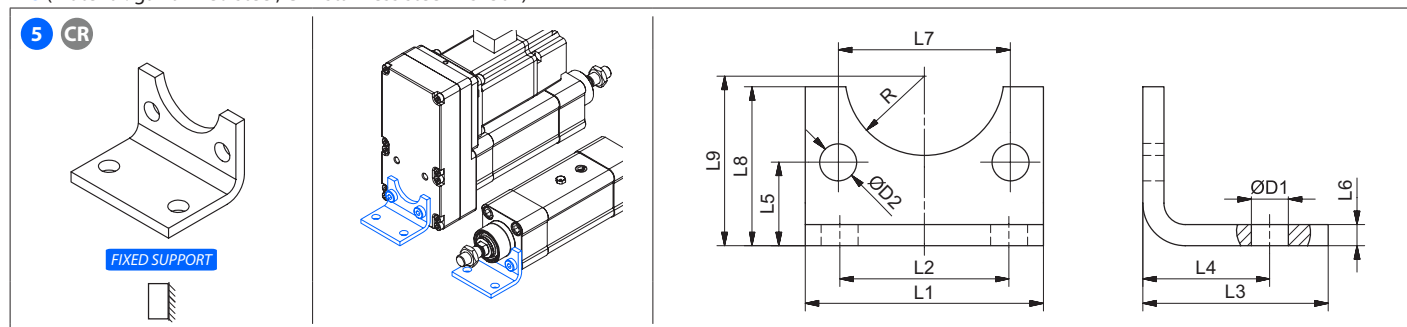
KSZ (Material: galvanized steel)



KSZ		ØM	L1	L2	L3	L4	L5	L6	L7	ØD1 (-0,2)	ØD2	ØD3 (H13)	CH	m	F _{max}
Size	Code	[mm]												[kg]	[N]
32	5229	M10×1,25	40	35	30	25	20	10	0,1	17	26	5,5	15	0,11	F _{PNCE}
40	5230	M12×1,25	50	40	40	30	22	12	0,1	17	26	5,5	15	0,18	F _{PNCE}
50	5231	M16×1,5	60	45	48	33	25	12	0,1	22	34	6,6	19	0,25	F _{PNCE}
63	5231	M16×1,5	60	45	48	33	25	12	0,1	22	34	6,6	19	0,25	F _{PNCE}
80	5232	M20×1,5	72	50	57	35	32	15	0,1	30	44	9	27	0,42	24800
100	5232	M20×1,5	72	50	57	35	32	15	0,1	30	44	9	27	0,42	24800

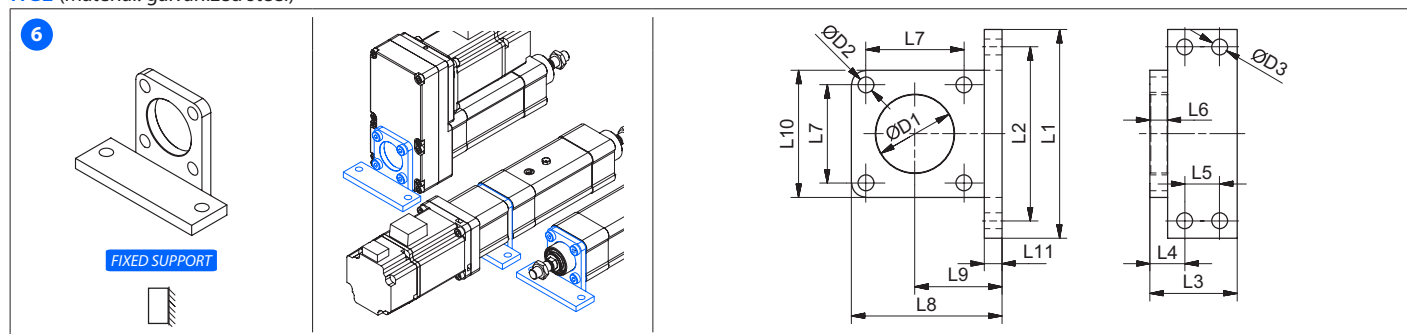
Mounting attachments' accessories

HG (Material: galvanized steel, CR - stainless steel AISI 304)



HG					L1	L2	L3	L4	L5	L6	L7	L8	L9	ØD1	ØD2	R	m	F _{max}	
Size	Code ¹	Code CR ¹	Code MSD ²	Code MSD CR ²	[mm]													[kg]	[N]
32	69601	69605	69597	69609	45	32	35	24	15,75	4	32,5	30	32	7	7	15	0,09	F _{PNCE}	
40	69602	69606	69598	69610	52	36	36	28	17	4	38	30	36	10	7	17,5	0,10	3500	
50	69603	69607	69599	69611	65	45	47	32	21,75	5	46,5	36	45	10	9	20	0,20	5400	
63	69604	69608	69600	69612	75	50	45	32	21,75	5	56,5	35	50	10	9	22,5	0,22	6200	

HGL (Material: galvanized steel)



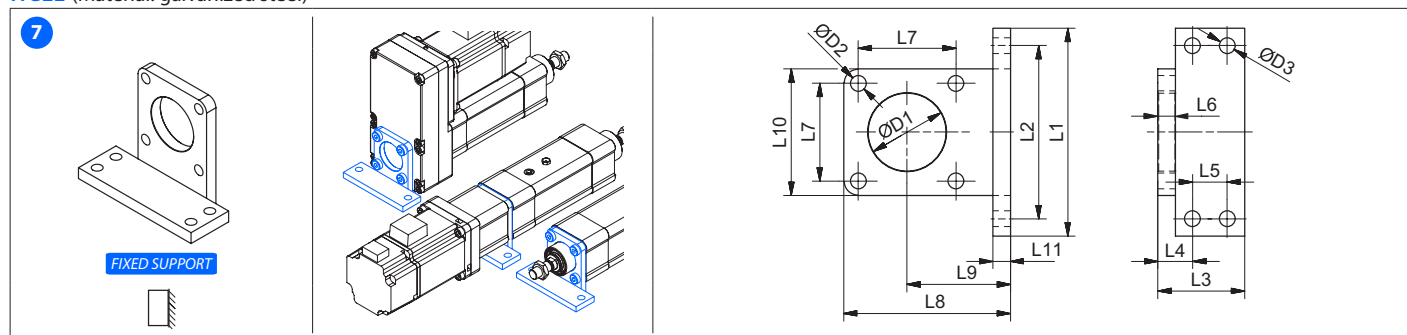
HGL			L1	L2	L3	L4	L5	L6 (±0,5)	L7	L8	L9 (±0,1)	L10	L11 (±0,5)	ØD1 (H11)	ØD2 (H13)	ØD3 (H13)	m	F _{max}
Size	Code ^{1,3}	Code MSD ²	[mm]														[kg]	[N]
32	69162	69613	79	65	30	16	-	6	32,5	55,5	32	47	6	30	7	7	0,20	F _{PNCE}
40	69163	69614	90	75	30	16	-	6	38	63,0	36	54	6	35	7	9	0,24	5100
50	69164	69615	110	90	35	19	-	10	46,5	77,5	45	65	10	40	9	9	0,56	11100
63	69165	69616	120	100	50	20	20	10	56,5	87,5	50	75	10	45	9	9	0,81	11100

¹ Front cap mounting

² Motor side drive mounting

³ Motor adapter mounting

HGLL (Material: galvanized steel)



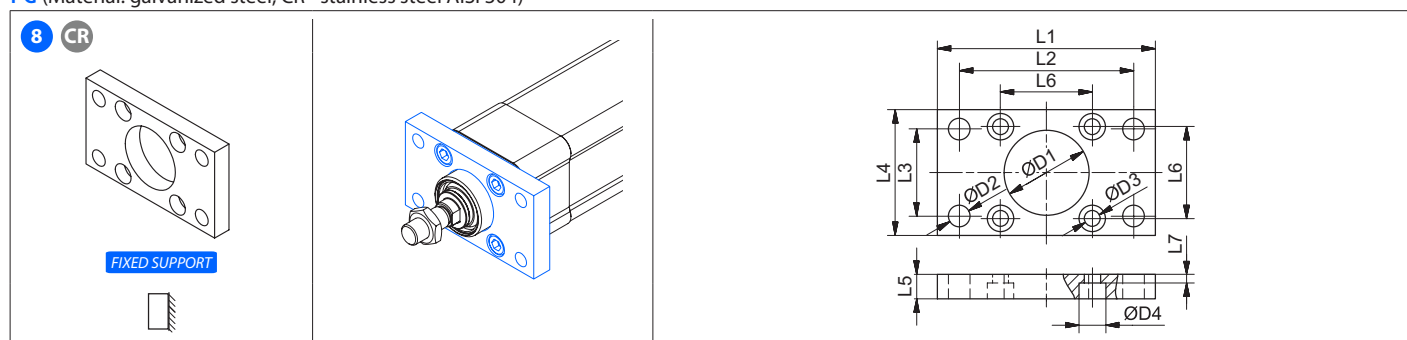
HGLL			L1	L2	L3	L4	L5	L6 (±0,5)	L7	L8	L9 (±0,1)	L10	L11 (±0,5)	ØD1 (H11)	ØD2 (H13)	ØD3 (H13)	m	F _{max}
Size	Code ^{1,3}	Code MSD ²	[mm]														[kg]	[N]
32	69429	69617	79	65	30	16	-	6	32,5	58,5	35	47	6	30	7	7	0,21	F _{PNCE}
40	69166	69618	90	75	30	16	-	6	38	72,0	45	54	6	35	7	9	0,26	2800
50	69167	69619	110	90	35	19	-	10	46,5	92,5	60	65	10	40	9	9	0,64	7100
63	69168	69620	120	100	50	20	20	10	56,5	97,5	60	75	10	45	9	9	0,87	10100
80	77284		153	128	62	27	25	12	72,0	128,5	82	93	13	60	11	11	1,71	13200
100	78955		178	148	72	27	30	15	89	137,0	82	110	15	70	11	11	2,57	F _{PNCE}

¹ Front cap mounting

² Motor side drive mounting

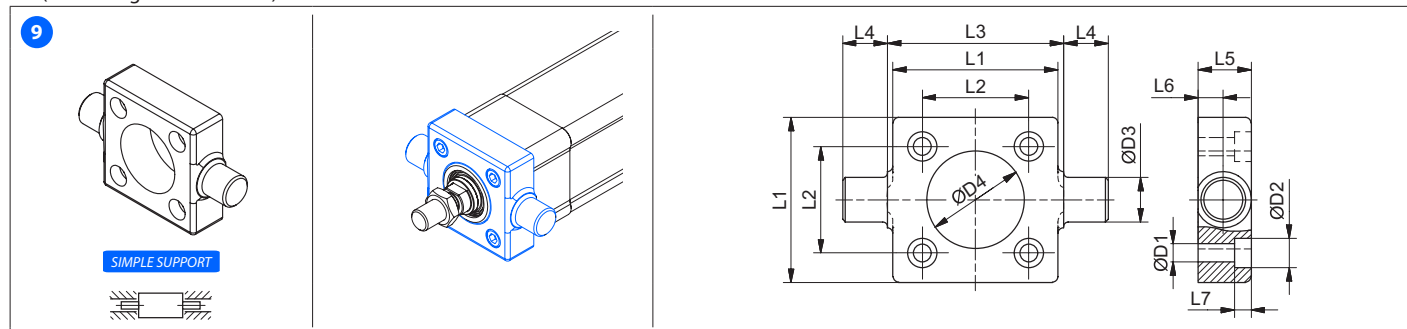
³ Motor adapter mounting

FG (Material: galvanized steel, CR - stainless steel AISI 304)



FG			L1	L2	L3	L4	L5	L6	L7	ØD1 (H11)	ØD2 (H13)	ØD3	ØD4	m	F _{max}	
Size	Code	Code CR	[mm]												[kg]	[N]
32	5485	69495	80	64	32	45	10	32,5	5	30	7	6,5	10,5	0,22	F _{PNCE}	
40	5487	69497	90	72	36	52	10	38	5	35	9	6,5	10,5	0,28	F _{PNCE}	
50	5489	69498	110	90	45	65	12	46,5	6,5	40	9	8,5	13,5	0,53	F _{PNCE}	
63	5491	69499	120	100	50	75	12	56,5	6,5	45	9	8,5	13,5	0,68	F _{PNCE}	
80	83009	83013	150	126	63	95	16	72	9	60	12	10,5	16,5	1,40	F _{PNCE}	
100	83010	83014	170	150	75	115	16	89	9	70	14	10,5	16,5	1,92	F _{PNCF}	

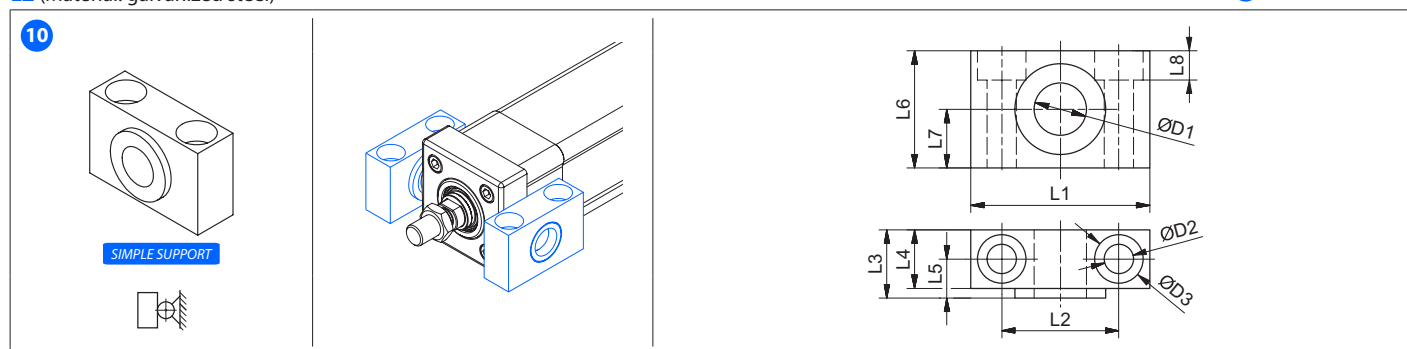
ZK (Material: galvanized steel)



ZK		L1	L2	L3 (h14)	L4 (h14)	L5	L6 (+0,2 / 0)	L7 (+0,5 / 0)	ØD1	ØD2	ØD3 (e9)	ØD4 (H11)	m	F _{max}
Size	Code	[mm]											[kg]	[N]
32	69075	46	32.5	50	12	14	6,5	6	6,5	10,5	12	30	0,17	F _{PNCE}
40	69083	59	38	63	16	19	9	6	6,5	10,5	16	35	0,43	F _{PNCE}
50	69084	69	46.5	75	16	19	9	8	8,5	13,5	16	40	0,58	F _{PNCE}
63	69085	84	56.5	90	20	24	11,5	8	8,5	13,5	20	45	1,12	F _{PNCE}
80	83027	102	72	110	20	24	11,5	10	10,5	16,5	20	60	1,57	F _{PNCE}
100	83028	125	89	132	25	29	14	10	10,5	16,5	25	70	2,93	F _{PNCE}

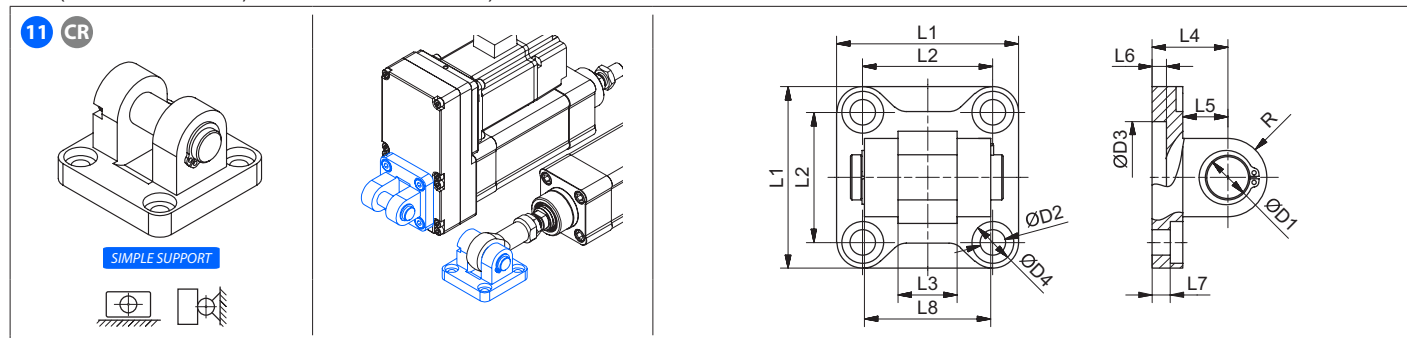
LZ (Material: galvanized steel)

i Set contains 2 pcs



LZ		L1	L2 (±0,2)	L3	L4	L5	L6	L7 (±0,1)	L8 (±0,5)	ØD1 (F7)	ØD2 (H13)	ØD3 (H13)	m	F _{max}
Size	Code	[mm]											[kg]	[N]
32	8139	46	32	18	15	10,5	30	15	7	12	6,6	11	0,10	F _{PNCE}
40	8141	55	36	21	18	12	36	18	9	16	9	15	0,15	F _{PNCE}
50	8141	55	36	21	18	12	36	18	9	16	9	15	0,15	9200
63	8143	65	42	23	20	13	40	20	11	20	11	18	0,25	12800
80	8143	65	42	23	20	13	40	20	11	20	11	18	0,25	12800
100	8135	75	50	28,5	25	16	50	25	13	25	14	20	0,40	20000

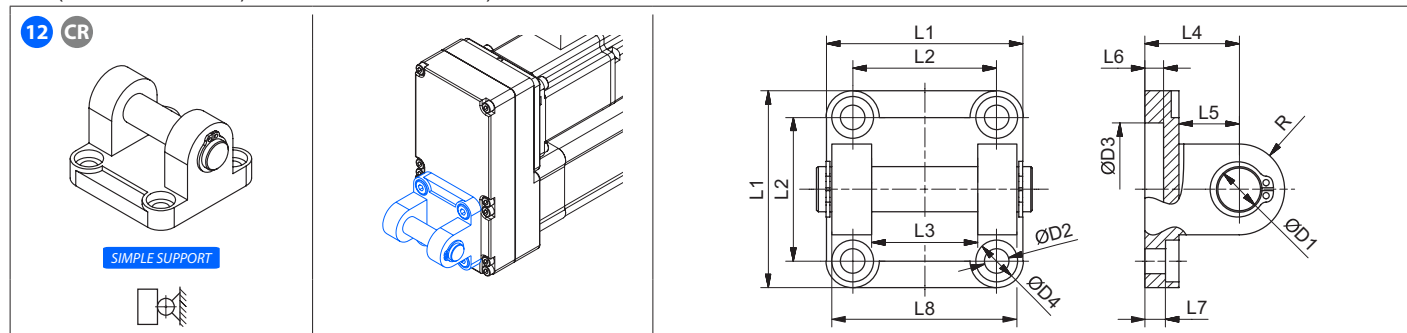
SGN (Material: aluminium, CR - stainless steel AISI 316)



SGN					L1 (±0,5)	L2	L3	L4 (±0,2)	L5	L6	L7	L8	ØD1 (f7)	ØD2 (H13)	ØD3 (H11)	ØD4 (H13)	R	m	F _{max}
Size	Code ¹	Code CR ¹	Code MSD ²	Code MSD CR ²	[mm]													[kg]	[N]
32	9200	69538	69621	69625	45	32,5	14	22	13 [12]	5	5,5	34	10	6,6	30	11	10	0,10 [0,20]	F _{PNCE}
40	9201	69539	69622	69626	52 [55]	38	16	25	16 [15]	5	5,5	40	12	6,6	35	11	12	0,14 [0,30]	5700
50	9202	69540	69623	69627	65	46,5	21	27	16 [17]	5	6,5	45	16	9	40	15	12	0,26 [0,48]	7600
63	9203	69541	69624	69628	75	56,5	21	32	21 [20]	5	6,5	51	16	9	45	15	16	0,35 [0,70]	9600
80	9204	83257	9204	83257	95	72	25	36	22	5	10	65	20	11	45	18	20	0,68 [1,49]	16000
100	9198	83259	9198	83259	115	89	25	41	27 [25]	5	10	75	20	11	55	18	22	0,93 [2,16]	20000

Bracketed values for type CR

SBG (Material: aluminium, CR - stainless steel AISI 304)



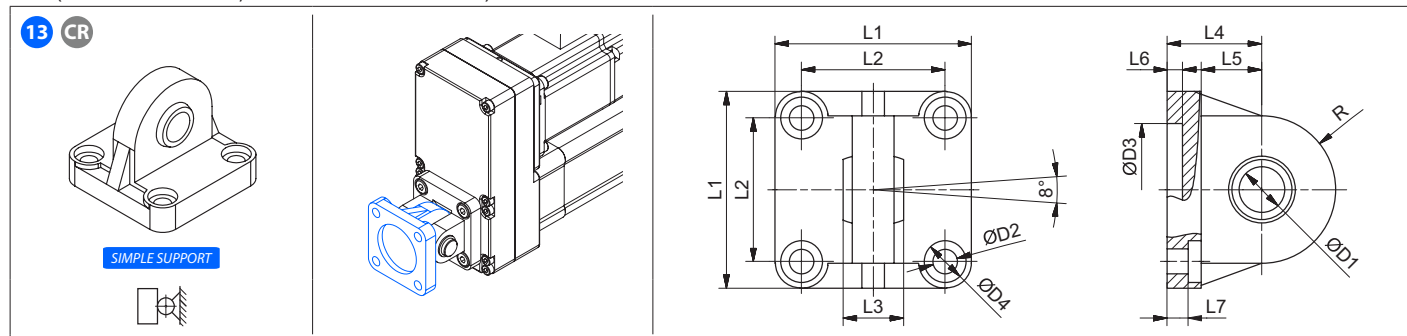
SBG			L1	L2	L3	L4 (±0,2)	L5	L6	L7	L8	ØD1 (e8)	ØD2 (H13)	ØD3 (H11)	ØD4 (H13)	R	m	F _{max}
Size	Code MSD ²	Code MSD CR ²	[mm]													[kg]	[N]
32	69629	69633	45	32,5	26	22	13	5	5,5	45	10	6,6	30	11	10	0,11 [0,20]	F _{PNCE}
40	69630	69634	52	38	28	25	16	5	5,5	52	12	6,6	35	11	12	0,18 [0,31]	F _{PNCE}
50	69631	69635	65	46,5	32	27	16	5	6,5	60	12	9	40	15	12	0,23 [0,45]	8000
63	69632	69636	75	56,5	40	32	21	5	6,5	70	16	9	45	15	16	0,36 [0,70]	11000
80	9252	83251	93	72	50	36	22	5	10	90	16	11	45	18	16	0,61 [1,42]	15360
100	9244	83253	110	89	60	41	27	5	10	110	20	11	55	18	20	0,98 [2,50]	24000

Bracketed values for type CR

¹ Front cap mounting

² Motor side drive mounting

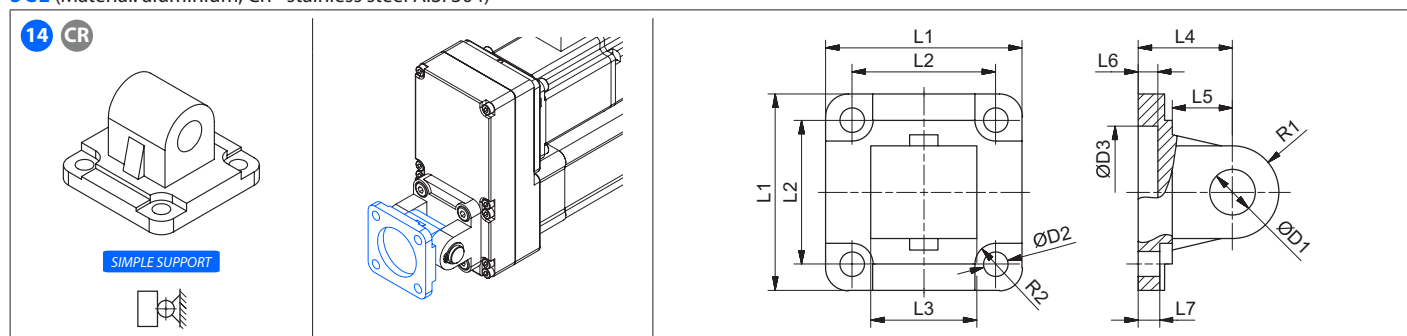
SSG (Material: aluminium, CR - stainless steel AISI 316)



SSG			L1	L2	L3	L4 (JS 15)	L5	L6	L7 (±0,5)	ØD1 (H7)	ØD2 (H13)	ØD3 (H11)	ØD4 (H13)	R	m	F _{max}
Size	Code	Code CR	[mm]												[kg]	[N]
32	9292	69542	45	32,5	14	22	12	5	5,5	10	6,6	30	11	16 [15]	0,09 [0,18]	F _{PNCE}
40	9294	69544	52 [55]	38	16	25	15	5	5,5	12	6,6	35	11	18	0,13 [0,29]	F _{PNCE}
50	9296	50709	65	46,5	21	27	15 [17]	5	6,5	16	9	40	15	21	0,24 [0,42]	14400
63	9298	69546	75	56,5	21	32	20	5	6,5	16	9	45	15	23	0,30 [0,66]	14400
80	9300	83249	95	72	25	36	20 [22]	9 [5]	10	20	11	45	18	28 [27]	0,54 [1,24]	22500
100	19731	83250	115	89	25	41	25	9 [5]	10	20	11	55	18	30	0,68 [1,90]	22500

Bracketed values for type CR

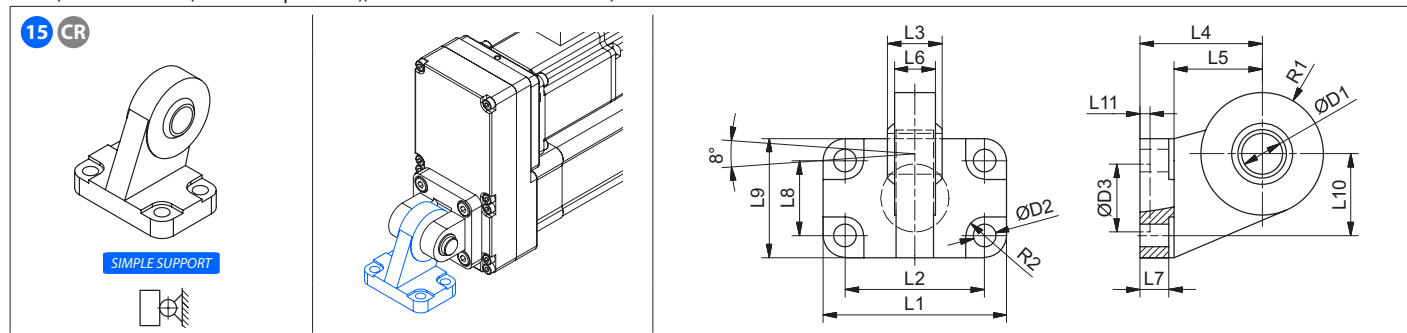
SGL (Material: aluminium, CR - stainless steel AISI 304)



SGL			L1	L2	L3	L4 (±0,2)	L5	L6	L7	ØD1 (H9)	ØD2 (H13)	ØD3 (H11)	R1	R2	m	F _{max}
Size	Code	Code CR	[mm]												[kg]	[N]
32	9176	69500	45	32,5	26	22	13	5	5,5	10	6,6	30	10	5,5	0,08 [0,21]	F _{PNCE}
40	9178	69501	52	38	28	25	16	5	5,5	12	6,6	35	12	5,5	0,11 [0,30]	F _{PNCE}
50	9180	69502	65	46,5	32	27	16	5	6,5	12	9	40	12	7,5	0,18 [0,43]	9200
63	9182	69503	75	56,5	40	32	21	5	6,5	16	9	45	16	7,5	0,27 [0,74]	14300
80	9184	83091	93	72	50	36	22	5	10	16	11	45	16	9	0,47 [1,31]	19200
100	9168	83092	110	89	60	41	27	5	10	20	11	55	20	9	0,79 [2,21]	27100

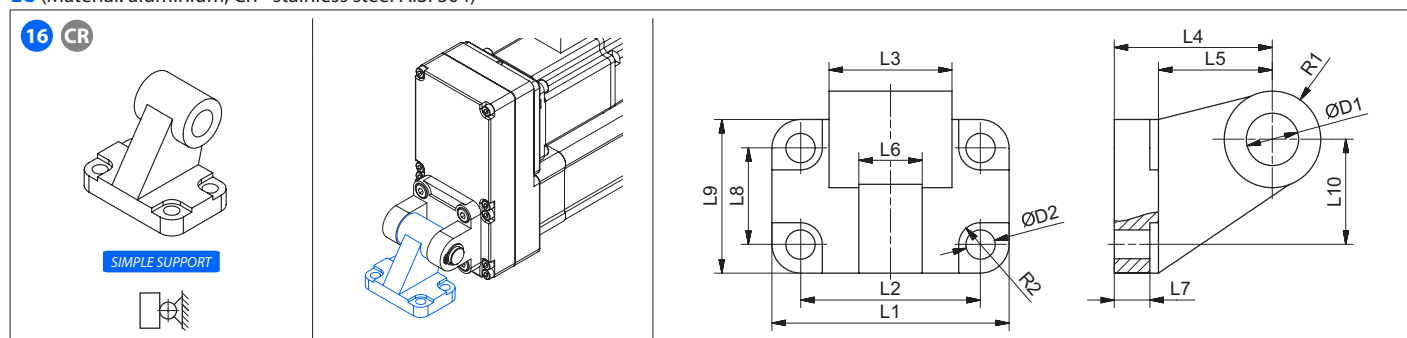
Bracketed values for type CR

LSG (Material: steel (black cataphoresis), CR - stainless steel AISI 316)



LSG			L1	L2	L3	L4 (JS 15)	L5	L6	L7	L8	L9	L10 (JS 15)	L11	ØD1 (H7)	ØD2 (H13)	ØD3 (H13)	R1	R2 (H13)	m	F _{max}
Size	Code	Code CR	[mm]																[kg]	[N]
32	8129	69071	51	38	14	32	22	10,5	8,5	18	31	21	3	10	6,6	20	15	5,5	0,18	F _{PNCE}
40	8130	69072	54	41	16	36	26	12	8,5	22	35	24	3	12	6,6	20	18	5,5	0,27	F _{PNCE}
50	8131	69073	65	50	21	45	33	15	10,5	30	45	33	3	16	9	20	20	7,5	0,46	F _{PNCE}
63	8132	69069	67	52	21	50	38	15	10,5	35	50	37	3	16	9	20	23	7,5	0,55	F _{PNCE}
80	8133	83089	86	66	25	63	49	18	11,5	40	60	47	3	20	11	20	27	9	0,97	F _{PNCE}
100	8127	83090	96	76	25	71	56	18	12,5	50	70	55	3	20	11	20	30	9	1,33	F _{PNCE}

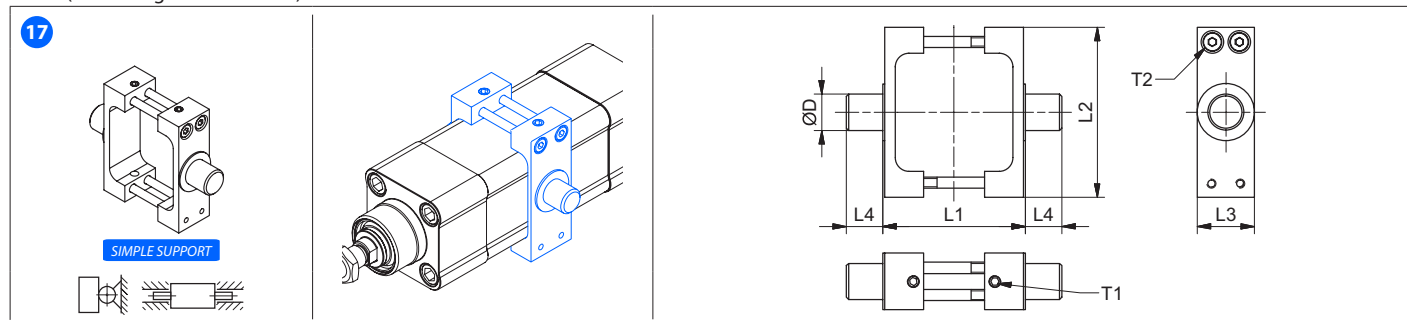
LG (Material: aluminium, CR - stainless steel AISI 304)



LG			L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	ØD1 (H9)	ØD2 (H13)	R1	R2	m	F _{max}
Size	Code	Code CR	[mm]														[kg]	[N]
32	8119	69505	51	38	26	32	24	10	6,4	18	31	21	10	6,6	10	5,5	0,06 [0,16]	F _{PNCE}
40	8120	69506	54	41	28	36	26	15	8,4	22	35	24	12	6,6	11	5,5	0,14 [0,24]	F _{PNCE}
50	8121	69507	65	50	32	45	33	16	10,4	30	45	33	12	9	13	7,5	0,14 [0,42]	9200
63	8122	69508	67	52	40	50	36	16	12,4	35	50	37	16	9	15	7,5	0,20 [0,53]	15300
80	8123	83087	86	66	50	63	49	20	11,5	40	60	47	16	11	15	9	0,39 [0,98]	19200
100	8117	83088	96	76	60	71	54	20	14,5	50	70	55	20	11	19	9	0,55 [1,48]	F _{PNCE}

Bracketed values for type CR

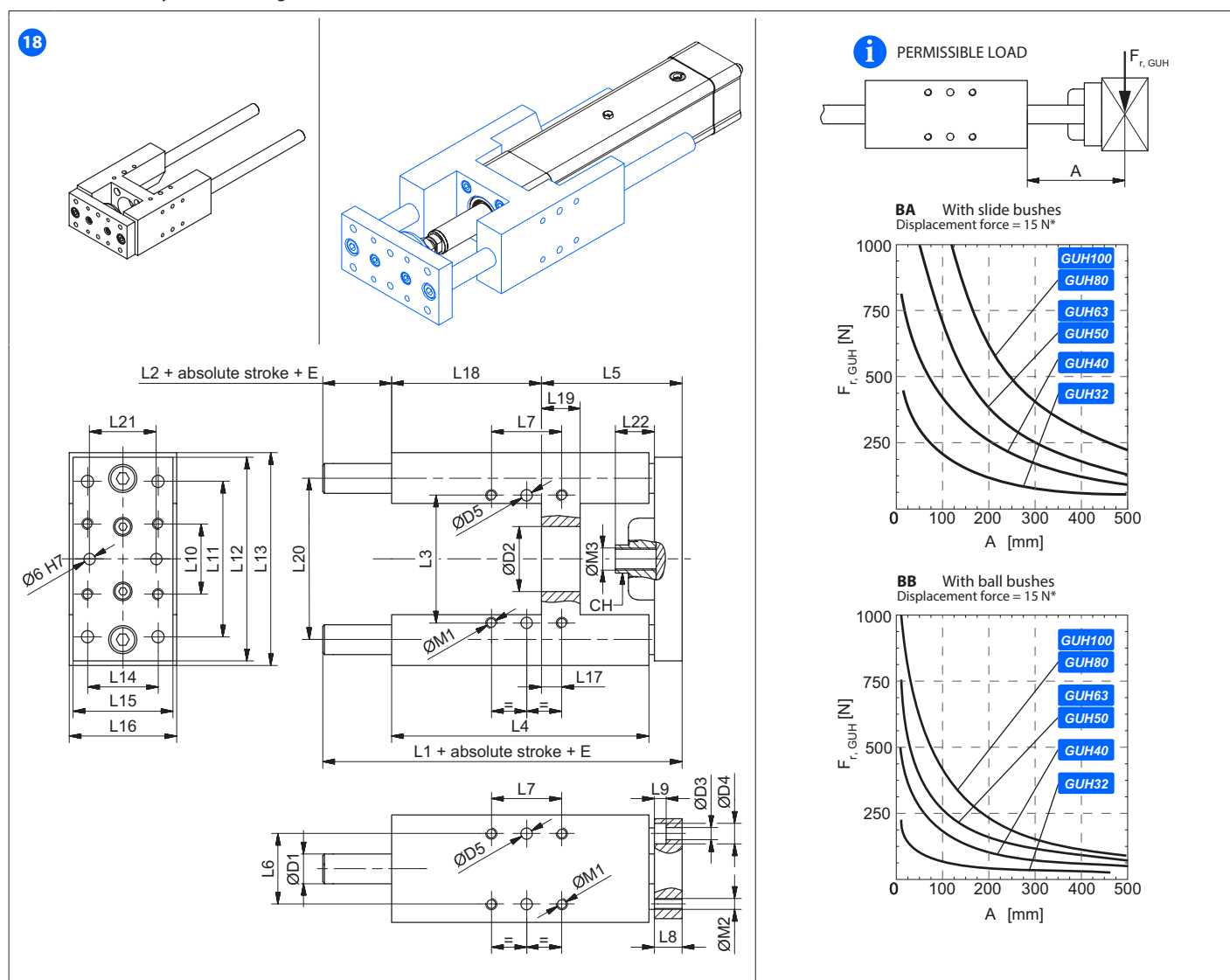
ZKCE (Material: galvanized steel)



ZKCE	L1	L2	L3	L4	ØD	T1	T2	m	F _{max}
Size	Code	[mm]				[Nm]		[kg]	[N]
32	69148	50	65	25	12	5	3	0,15	F _{PNCE}
40	69149	63	75	25	16	7	5	0,30	F _{PNCE}
50	69150	75	95	30	16	7	5	0,52	8500
63	69151	90	105	30	20	7	5	0,64	8500
80	100349	110	130	30	20	11	9	0,89	10000
100	100350	132	145	40	24,5	25	19	1,52	16000

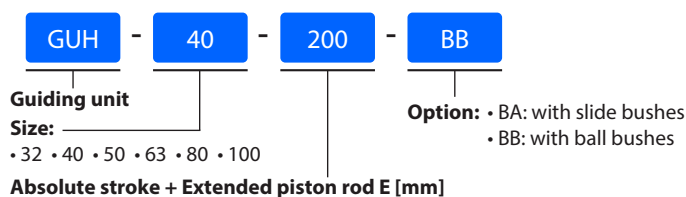
Guiding unit

GUH (Material: body - aluminium, guides - steel)



* For the case of GUH 80/100 displacement force = 40 N

HOW TO ORDER



i Absolute stroke + extended piston rod E = max. 500mm

i For guiding unit stroke over 500 mm please contact us

PNCE	Mass of GUH	Moved mass of GUH*
	m_{GUH} [kg]	$M_{m, GUH}$ [kg]
32	$1,57 + 0,0017 \times (\text{Abs. stroke} + E)$	$0,86 + 0,0017 \times (\text{Abs. stroke} + E)$
40	$2,48 + 0,0031 \times (\text{Abs. stroke} + E)$	$1,32 + 0,0031 \times (\text{Abs. stroke} + E)$
50	$4,18 + 0,0047 \times (\text{Abs. stroke} + E)$	$2,47 + 0,0047 \times (\text{Abs. stroke} + E)$
63	$5,54 + 0,0047 \times (\text{Abs. stroke} + E)$	$2,90 + 0,0047 \times (\text{Abs. stroke} + E)$
80	$10,72 + 0,0070 \times (\text{Abs. stroke} + E)$	$5,66 + 0,0070 \times (\text{Abs. stroke} + E)$
100	$13,42 + 0,0070 \times (\text{Abs. stroke} + E)$	$6,42 + 0,0070 \times (\text{Abs. stroke} + E)$

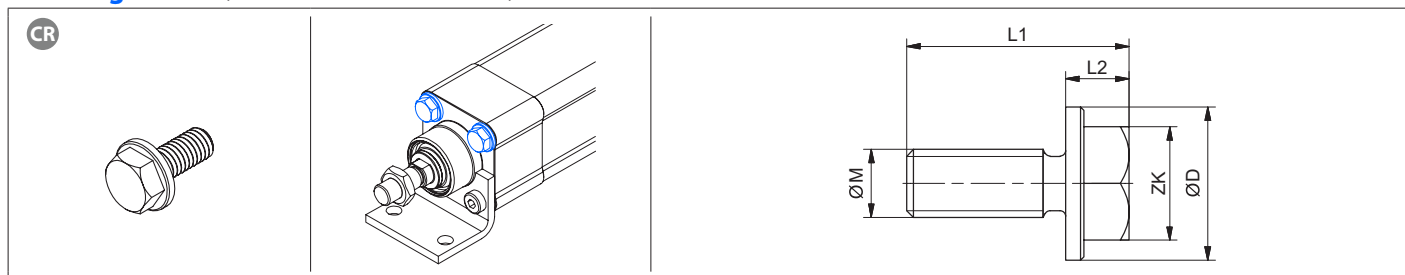
* The moved mass of GUH is already considered in the equation for calculating the mass of GUH m_{GUH}

E	Extended piston rod			[mm]												
PNCE	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16
Size	[mm]															
32	177	37	61	125	64	32,5	32,5	12	6,5	32,5	78	90	97	32,5	45	49
40	192	37	69	139	74	38	38	15	6,5	38	84	110	115	38	54	58
50	205	38	85	148	89	46,5	46,5	15	8,5	46,5	100	130	137	46,5	63	69
63	237	38	100	182	88	56,5	56,5	15	8,5	56,5	105	145	152	56,5	79	85
80	280	42	130	215	110	72	72	20	10,5	72	130	180	189	72	99	105
100	280	37	150	220	115	89	89	20	10,5	89	150	200	213	89	120	129

t	L17	L18	L19	L20	L21	L22	ØD1	ØD2	ØD3	ØD4	ØD5 × l (H7)	ØM1	ØM2	ØM3	CH	
Size	[mm]															
32	4,3	76	17	74	31	18	12	30	6,5	10,5	6×6	M6×12	M6	M10×1,25	15	
40	11	81	21	87	36	21	16	35	6,5	10,5	6×10	M6×12	M6	M12×1,25	15	
50	18,5	78	26	104	45	24	20	40	8,5	13,5	6×10	M8×16	M8	M16×1,5	22	
63	15,3	111	26	119	45	24	20	45	8,5	13,5	6×10	M8×16	M8	M16×1,5	22	
80	21	128	34	148	56	31	25	60	11	17	6×10	M10×18	M10	M20×1,5	27	
100	24,5	128	39	172	56	31	25	70	11	17	6×10	M10×18	M10	M20×1,5	27	

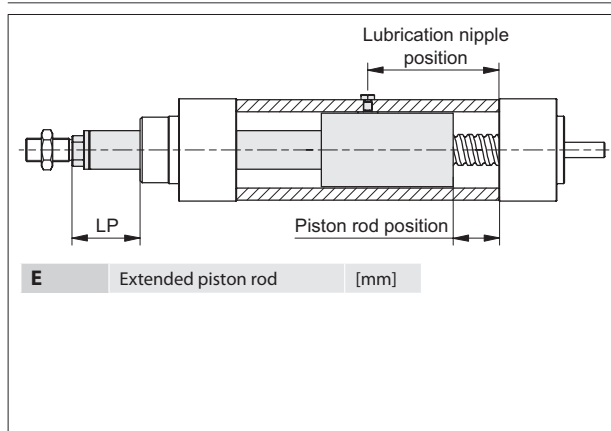
Blanking screws (Material: stainless steel AISI 304)

 Set contains 4 pcs



Blanking screw		ØM	L1	L2	ØD	ZK
Tip / Type	Code	[mm]				
M6	69156	M6	19,5	5,5	12,8	10
M8	69157	M8	24	8	17	13
M10	82901	M10	24,5	8,5	19,3	15

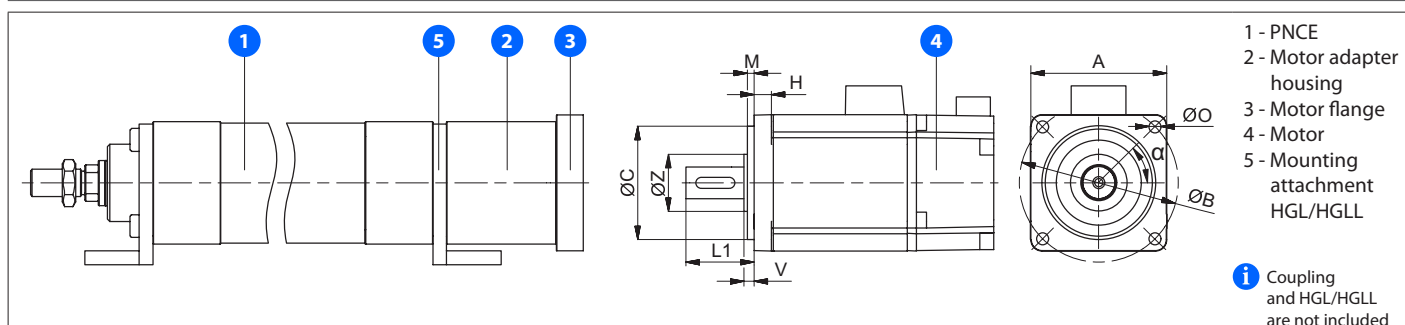
LUBRICATION POSITION



PNCE	Ball screw	Lubrication nipple position ($\pm 0,2$)	Piston rod position ($\pm 0,5$)	LP ($\pm 0,5$)
	d x l [mm]	[mm]	[mm]	[mm]
32	12x5, 12x10	Abs. stroke / 2 + 38,0	Abs. stroke / 2 - 9,0	Abs. stroke / 2 + E - 1,0
40	16x5, 16x10, 16x16	Abs. stroke / 2 + 42,0	Abs. stroke / 2 - 10,5	Abs. stroke / 2 + E - 0,5
50	20x5, 20x10, 20x20	Abs. stroke / 2 + 53,5	Abs. stroke / 2 - 22,0	Abs. stroke / 2 + E - 10,0
	20x50		Abs. stroke / 2 - 5,0	Abs. stroke / 2 + E + 7,0
63	25x5, 25x10	Abs. stroke / 2 + 47,5	Abs. stroke / 2 - 13,5	Abs. stroke / 2 + E - 1,5
	25x25		Abs. stroke / 2 - 4,0	Abs. stroke / 2 + E + 8,0
80	32x5, 32x10, 32x20, 32x32	Abs. stroke / 2 + 62,0	Abs. stroke / 2 - 27,0	Abs. stroke / 2 + E - 12,0
100	40x5, 40x10, 40x20	Abs. stroke / 2 + 70,0	Abs. stroke / 2 - 20,0	Abs. stroke / 2 + E - 3,0
	40x40	Abs. stroke / 2 + 77,5	Abs. stroke / 2 - 27,5	Abs. stroke / 2 + E - 10,5

The lubrication nipple on the aluminum profile of the electric cylinder allows easy re-lubrication of the ball screw. To achieve the lubricating position the piston rod must be moved from the end position into position (Piston rod position) shown in the table above. The same position is achieved when the distance LP is obtained.

MOTOR ADAPTER



HOW TO ORDER

Model code structure:

Blue section (Left):

- VK**: Motor adapter
- PNCE40**: PNCE series
- EKL10**: Coupling type
- 1**: Mounting attachment HGL/HGLL
 - 0: without
 - 1: with

White section (Right):

- 60, 70, 50, 3, 30, 7,5, 5,5, 4,6, 29, 45**: Motor dimensions [mm]
 - 60**: A
 - 70**: ØB
 - 50**: ØC
 - 3**: M
 - 30**: L1
 - 7,5**: H
 - 5,5**: ØO
 - 4,6**: V
 - 29**: ØZ
 - 45**: α
- Versions:**
 - S: Standard
 - IP65CR: IP65CR protection (IP65CR version is also suitable for some applications in the food industry. More information on request.)