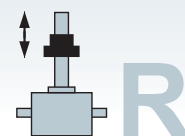


## Abbreviations:

Tr	Trapezoidal screw
KGT	Ball screw
KAR	Pivot bearing plate



## Length Calculation – screw, rotating version R

(The length calculation is identical for Z and GSZ)

GSZ-2 to Z-150:	GSZ-2		Z-5		Z-10		Z-25		Z-35		Z-50		Z-100		Z-150	
Tr basic length without journal	78		86		102		114		132		148		222		250	
Tr basic length with journal (= standard for opposed bearing plate GLP)	90		101		122		139		162		178		267		305	
Tr basic length increased screw with journal <sup>1)</sup>	93		106		127		144		177		193		277		325	
KGT basic length with journal <sup>2)</sup>	16x05	100	16x05	111	25x05	132	32x05	149	40x05	172	40x05	188	50x10	267	63x10	305
	16x10	120	16x10	131	25x10	152	32x10	159	40x10	172	40x10	188	50x20	307	63x20	345
					25x25	222	32x20	189	40x20	202	40x20	218	50x40	387	63x40	425
					25x50	352	32x40	259	40x40	262	40x40	278	50x50	427	63x60	505
KGT basic length increased screw with journal <sup>1)2)</sup>			25x05	116	32x05	137	40x05	154	50x10	197	50x10	213	63x10	277	80x10	325
			25x10	136	32x10	147	40x10	154	50x20	237	50x20	253	63x20	317	80x20	365
			25x25	206	32x20	177	40x20	184	50x40	317	50x40	333	63x40	397	80x40	445
			25x50	336	32x40	247	40x40	244	50x50	357	50x50	373	63x60	477	80x60	525
KGT basic length without journal <sup>2)</sup>	16x05	88	16x05	96	25x05	112	32x05	124	40x05	142	40x05	158	50x10	222	63x10	250
	16x10	108	16x10	116	25x10	132	32x10	134	40x10	142	40x10	158	50x20	262	63x20	290
					25x25	202	32x20	164	40x20	172	40x20	188	50x40	342	63x40	370
					25x50	332	32x40	234	40x40	232	40x40	248	50x50	382	63x60	450
KGT basic length increased screw without journal <sup>1)2)</sup>			25x05	96	32x05	112	40x05	124	50x10	152	50x10	168	63x10	222	80x10	250
			25x10	116	32x10	122	40x10	124	50x20	192	50x20	208	63x20	262	80x20	290
			25x25	186	32x20	152	40x20	154	50x40	272	50x40	288	63x40	342	80x40	370
			25x50	316	32x40	222	40x40	214	50x50	312	50x50	328	63x60	422	80x60	450
Flange nut FM	35		35		44		46		66		66		-		90	
Duplex nut DM	45		45		45		50		70		70		90		115	
Self-aligning nut PM	-		78		83		95		129		129		190		210	
Greaseless duplex nut FFDMM	-		53		53		59		85		85		-		-	
DM + safety nut SIFA	70		70		84		95		133		133		173		211	
PM + safety nut SIFA	-		123		128		158		212		212		298		330	
1. Bellows <sup>3)</sup>	ZD-10		ZD-12		ZD-12		ZD-10		ZD-12		ZD-12		ZD-22		ZD-22	
2. Bellows <sup>3)</sup>	ZD-10		ZD-10		ZD-14		ZD-15		ZD-15		ZD-15		ZD-20		ZD-30	
KAR screw face and 1st bellows <sup>3)</sup>	ZD+23		ZD+21		ZD+15		ZD+31		-		-		-		-	
KGT flange nut KGF	add the respective nut length															

Z-250 to Z-1000:	Z-250		Z-350		Z-500		Z-750		Z-1000	
Tr basic length without journal	265		288		366		417		438	
Tr basic length with journal (= standard for opposed bearing plate GLP)	340		388		486		537		613	
Tr basic length increased screw with journal <sup>1)</sup>	365		408		486		592		-	
KGT basic length with journal <sup>2)</sup>	80x10	340	100x20	428	125x25	506	140x25	557	160x25	633
	80x20	380	100x40	508	125x40	566	140x40	617	160x40	693
	80x40	460	100x60	588	125x60	646	140x60	697	160x60	773
	80x60	540	100x80	668	125x80	726	140x80	777	160x80	853
KGT basic length without journal <sup>2)</sup>	80x10	265	100x20	328	125x25	386	140x25	437	160x25	458
	80x20	305	100x40	408	125x40	446	140x40	497	160x40	518
	80x40	385	100x60	488	125x60	526	140x60	577	160x60	598
	80x60	465	100x80	568	125x80	606	140x80	657	160x80	678
Duplex nut DM	140		160		180		220		320	
Self-aligning nut PM	224		275		-		-		-	
DM + safety nut SIFA	250		270		303		365		500	
PM + safety nut SIFA	369		455		-		-		-	
1. Bellows <sup>3)</sup>	ZD-22		ZD-22		-		-		-	
2. Bellows <sup>3)</sup>	ZD-40		ZD-60		-		-		-	
KGT flange nut KGF	add the respective nut length									

Safety distances are already included in the basic lengths (2x: 1x above and 1x underneath)!  
(Tr screws: 10 mm up to Z-50, 20 mm for Z-100 to Z-500, 40 mm for Z-750 and Z-1000)

- When using a larger diameter screw, select the components for the next size gearbox (Z-10 increased screw has a screw Tr 30x6 which means component Z-25 - this is then the calculated screw extension for size 25).
- The basic length for KGT screws includes the safety clearance L3 shown on the gearbox dimension sheet. The nut length must then be added to this.

- The value will be added to or subtracted from the ZD (compression) dimension of the bellows depending on the sign and the result then added to the screw length. Applicable only to Tr single-pitch screws, not to double-pitch and ball screws.

**Screw extension for spiral spring cover SF:**  
Since the extension for spiral spring covers varies according to the fitting, this variant must be determined from a drawing. We would be pleased to prepare this drawing for you.