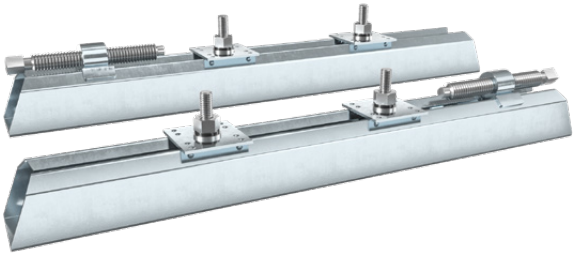
Product overview



Motor mounting systems

FLOHR

INDUSTRIETECHNIK GMBH
INGENIEURBÜRO UND MASCHINENBAU

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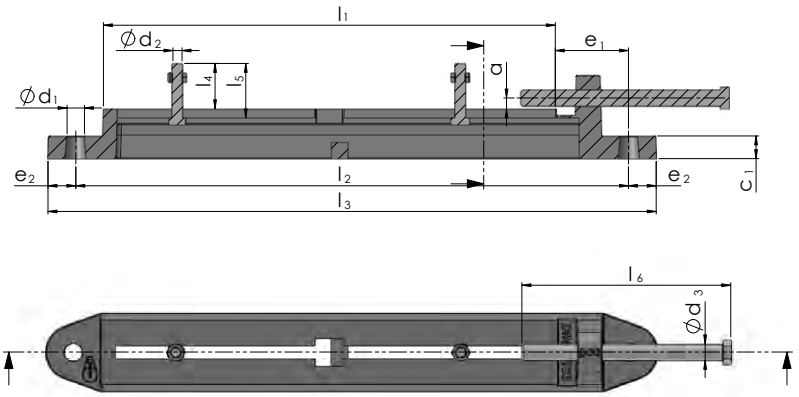
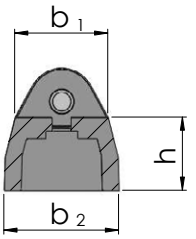
MOTOR CLAMPING RAILS

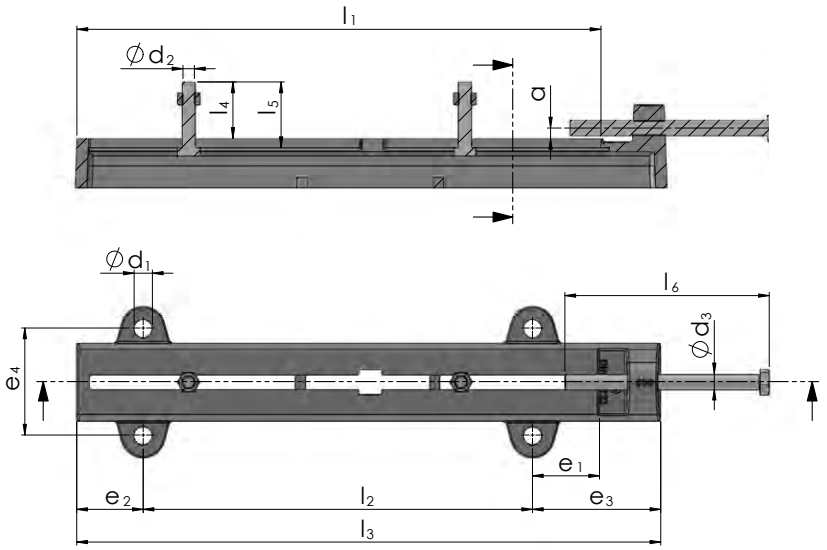
DIN 42923

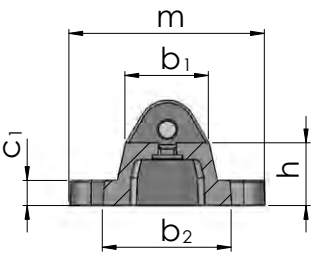
Sliding length from 265 to 500 mm



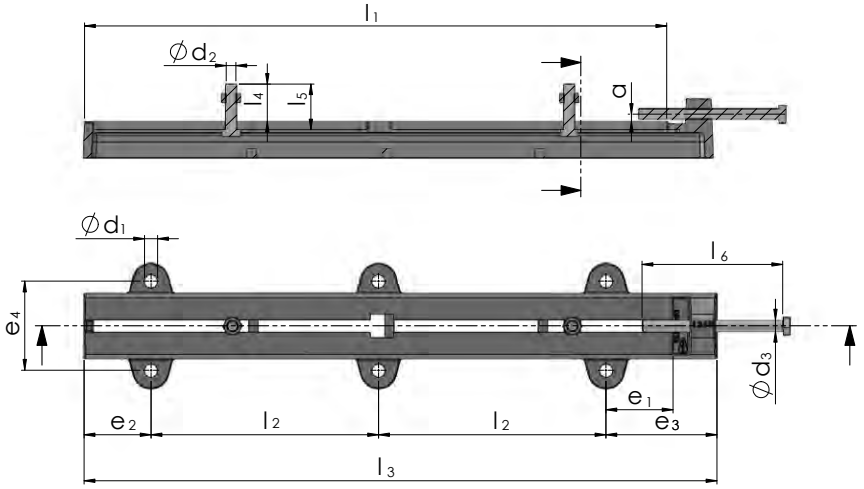


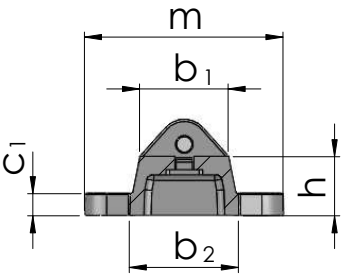
Sliding length from 630 to 1.000 mm





Sliding length 1.250 mm



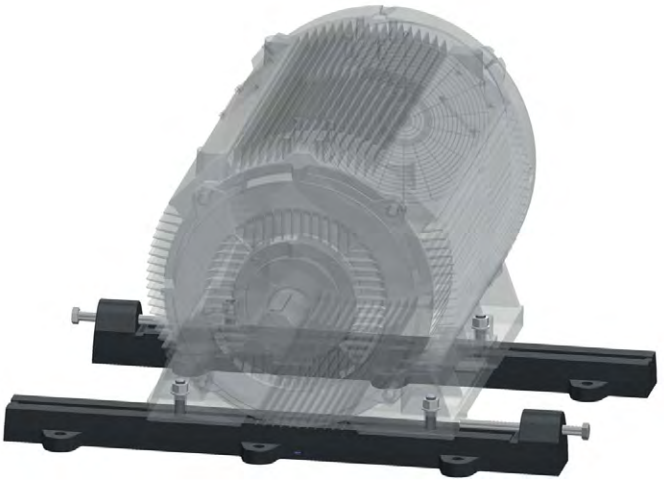


MOTOR CLAMPING RAILS

DIN 42923

motor size	sliding length [mm]	dimensions [mm]														motor fixing bolts [mm]	clamping bolts [mm]	weight per set [kg]
	l_1	a	b_1	b_2	c_1	d_1	e_1	e_2	e_3	e_4	h	l_2	l_3	l_4	m	d_2 x l_5	d_3 x l_6	
80 | 90	265	6	40	50	18	10	45	15	-	-	35	325	355	28	-	M 8 x 35	M 10 x 120	3,0
	315	8	45	55	18	12	55	20	-	-	35	390	430	28	-	M 8 x 35	M 12 x 160	5,0
100	355	8	50	65	23	12	55	20	-	-	40	430	470	37	-	M 10 x 45	M 12 x 160	8,0
112 | 132	400	8	55	70	25	15	65	25	-	-	45	480	530	37	-	M 10 x 45	M 12 x 160	10,5
160 | 180	500	12	70	85	30	19	80	30	-	-	55	610	670	50	-	M 12 x 60	M 20 x 240	19,5
200 | 225	630	12	85	100	35	19	80	80	160	130	65	470	710	58	182	M 16 x 70	M 20 x 240	26,0
250 | 280	800	16	100	120	35	28	100	100	200	165	75	600	900	76	225	M 20 x 90	M 24 x 300	49,5
315	1000	16	120	140	40	28	140	140	240	190	80	720	1100	82	250	M 24 x 100	M 24 x 300	72,0
355	1250	16	120	140	30	28	140	140	240	190	80	485	1350	82	250	M 24 x 100	M 24 x 300	85,0

Example of use

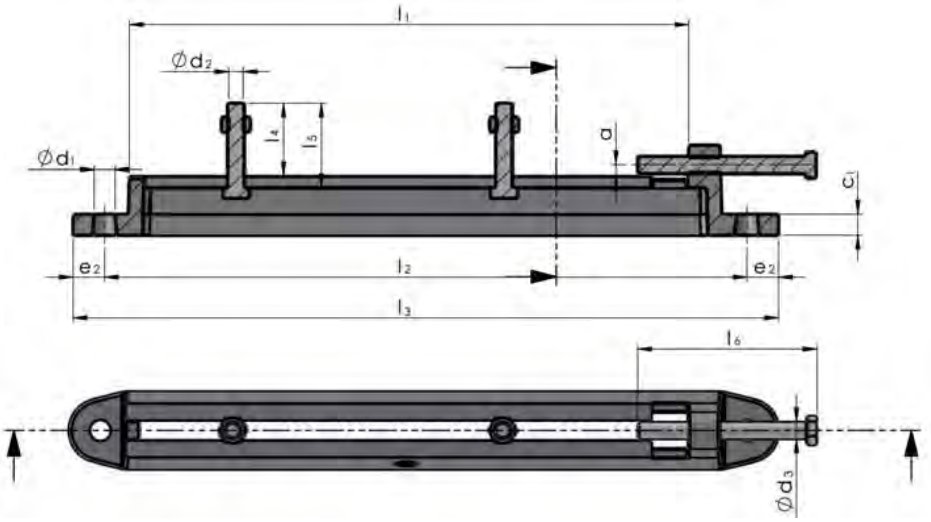


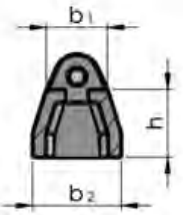
- Good damping characteristics due to material cast iron EN-GJL 200 according to DIN EN 1561
- Optimal adjustability
- Quick availability due to stock
- Delivery includes adjustment and fixing screws
- Delivery with galvanized screws possible
- Other dimensions on request

MOTOR CLAMPING RAILS

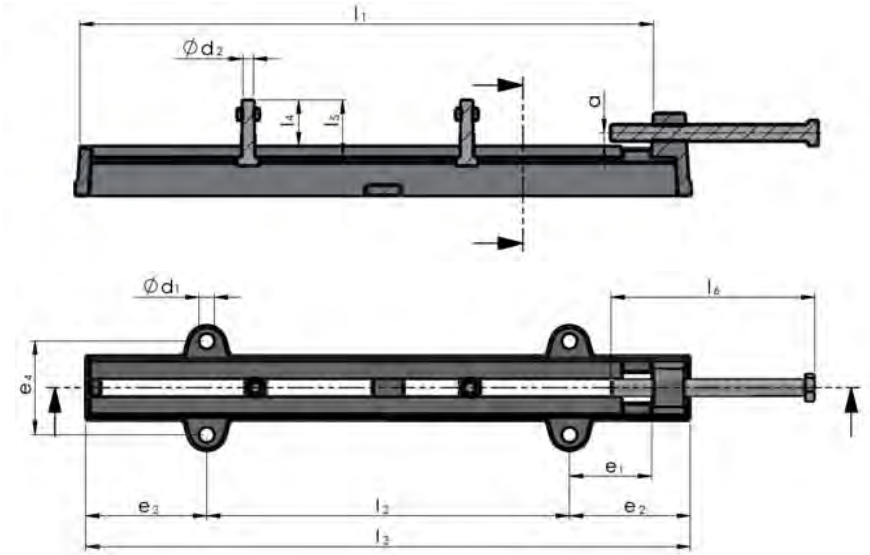
LIGHT DESIGN

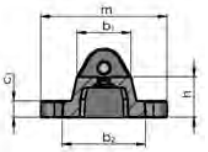
Sliding length from 250 to 650 mm



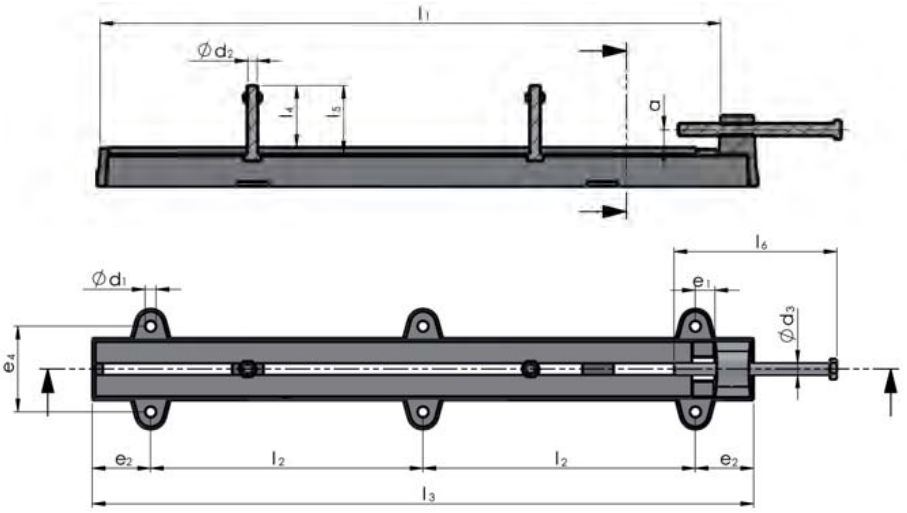


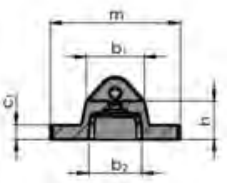
Sliding length from 700 to 1.500 mm





Sliding length from 1.600 to 2.200 mm





MOTOR CLAMPING RAILS

LIGHT DESIGN

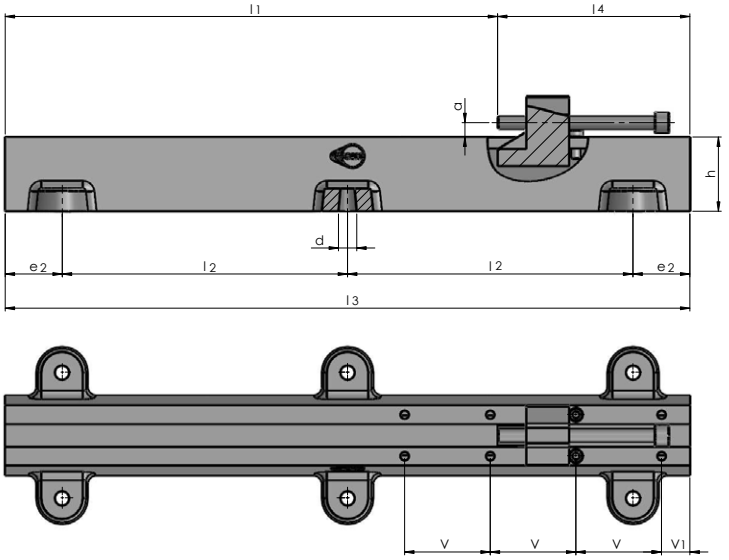
motor size	sliding length [mm]	dimensions [mm]													motor fixing bolts [mm]	clamping bolts [mm]	weight per set [kg]
	l_1	a	b_1	b_2	c_1	d_1	e_1	e_2	e_4	h	l_2	l_3	l_4	m	d_2 x l_5	d_3 x l_6	
80 | 90	250	6	30	42	12	12	46	17,5	-	33	315	350	30	-	M 8 x 40	M 10 x 100	3,0
100 | 110 | 132	330	8	34	50	13	15	43	22,5	-	35	390	435	35	-	M10 x 45	M 12 x 120	4,5
160 | 180	400	8	38	55	15	15	43	22,5	-	42	460	505	48	-	M 12 x 60	M 12 x 120	6,5
160 | 180	450	8	40	60	15	15	55	22,5	-	44	530	575	47	-	M 12 x 60	M 12 x 120	8,0
160 | 180	500	8	45	65	18	15	55	22,5	-	48	580	625	47	-	M 12 x 60	M 12 x 150	12,0
200 | 225	550	12	46	65	18	19	55	22,5	-	53	630	675	60	-	M 16 x 75	M 16 x 150	14,0
200 | 225	600	12	50	70	18	19	55	25	-	55	680	730	59	-	M 16 x 75	M 16 x 150	16,0
200 | 225	650	12	54	75	18	19	53	25	-	55	725	775	59	-	M 16 x 75	M 16 x 150	17,5
250 | 280	700	16	65	80	18	19	105	150	115	60	450	750	86	155	M 20 x 100	M 20 x 200	25,0
250 | 280	800	16	68	88	22	19	105	150	120	60	550	850	82	175	M 20 x 100	M 20 x 200	32,0
250 | 280	900	16	70	92	22	19	100	153	130	68	650	955	80	185	M 20 x 100	M 20 x 200	40,
315	1000	16	75	104	23	24	100	155	140	72	750	1060	100	200	M 24 x 125	M 24 x 300	54,0
315	1100	16	80	105	23	24	120	185	140	74	800	1170	100	200	M 24 x 125	M 24 x 300	60,0
315	1200	16	85	110	25	24	120	190	140	76	900	1280	100	200	M 24 x 125	M 24 x 300	70,0
315 | 355	1300	16	85	115	25	28	120	180	160	78	1010	1370	125	225	M 24 x 150	M 24 x 350	77,0
315 | 355	1400	16	90	120	25	28	145	215	165	80	1050	1480	129	245	M 24 x 150	M 24 x 350	95,0
315 | 355	1500	16	90	120	30	28	145	215	170	90	1150	1580	122	250	M 24 x 150	M 24 x 350	110,0
-	1600	45	140	160	40	28	55	150	220	100	700	1700	152	310	M 27 x 175	M 30 x 400	205,0
-	1700	45	140	160	40	28	55	150	220	100	750	1800	152	310	M 27 x 175	M 30 x 400	215,0
-	1900	45	160	180	45	28	55	150	250	110	850	2000	150	340	M 27 x 175	M 30 x 400	305,0
-	2000	45	180	200	45	35	55	150	280	125	1000	2300	225	370	M 30 x 250	M 30 x 400	410,0

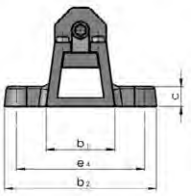
- Good damping properties (cast iron EN-GJL 200 according to DIN EN 1561)
- Optimal adjustability
- Up to sliding length 2.200 mm on request
- Quick availability due to stock
- Delivery includes adjustment and fixing screws
- Delivery with galvanized screws possible
- Stone bolts according to DIN 529 with hexagonal nuts can be provided

MOTOR CLAMPING RAILS

WEN 40.003 | HEAVY DESIGN

Sliding length from 1040 bis 1800 mm





type	motor size	power-range [kW]	sliding length [mm]	total length [mm]	dimensions [mm]											weight per set [kg]
			l_1	l_3	l_2	$l_{4\,min}$	a	b_1	b_2	c	d	h	e_2	e_4	V	V_1	
122	< 355	< 400	1040	1200	500	160	25	140	310	40	25	130	100	220	150	50	150
142	355	400	1240	1400	600	160	25	140	310	40	25	130	100	220	150	50	175
162	405	630	1440	1600	600	160	25	140	310	40	25	130	200	220	150	50	195
183	455	900	1600	1800	775	160	25	180	360	50	40	140	125	270	150	50	300
203	505	1200	1800	2000	775	160	25	180	360	50	40	140	225	270	150	50	360

The WEN clamping rails are a proprietary development of our company. For the selection of the optimum size, we have given the recommended performance data as a guide. However, we will be glad to advise you specifically on the optimum solution for your drive.

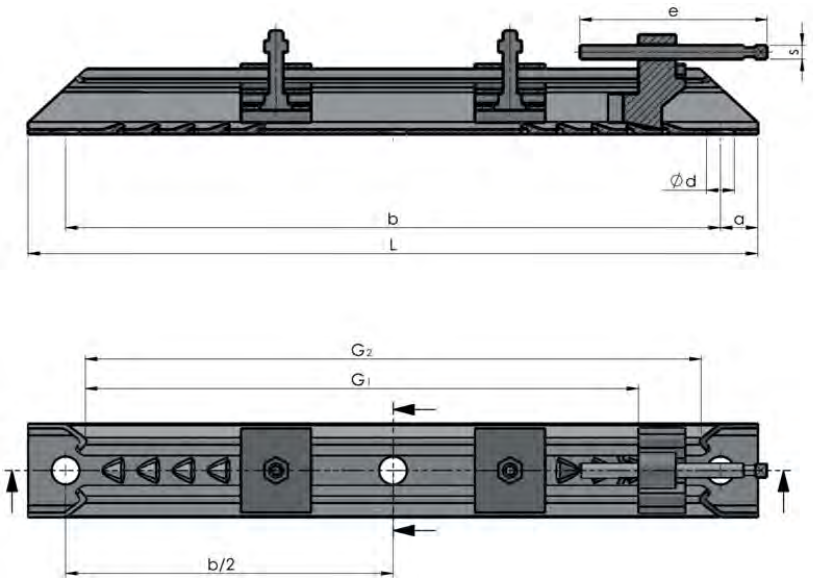
- Company standard design for heavy drives and highest performancee
- Excellent damping characteristics (EN-GJL-200)
- Optimal adjustability with highest stability
- Good thermal conductivity
- Delivery inclusive adjustment screws and fixation screws
- Galvanized screws also available

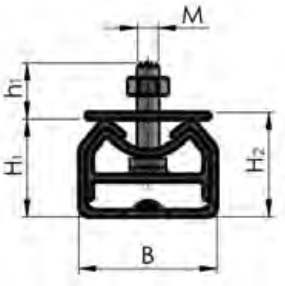
MOTOR CLAMPING RAILS

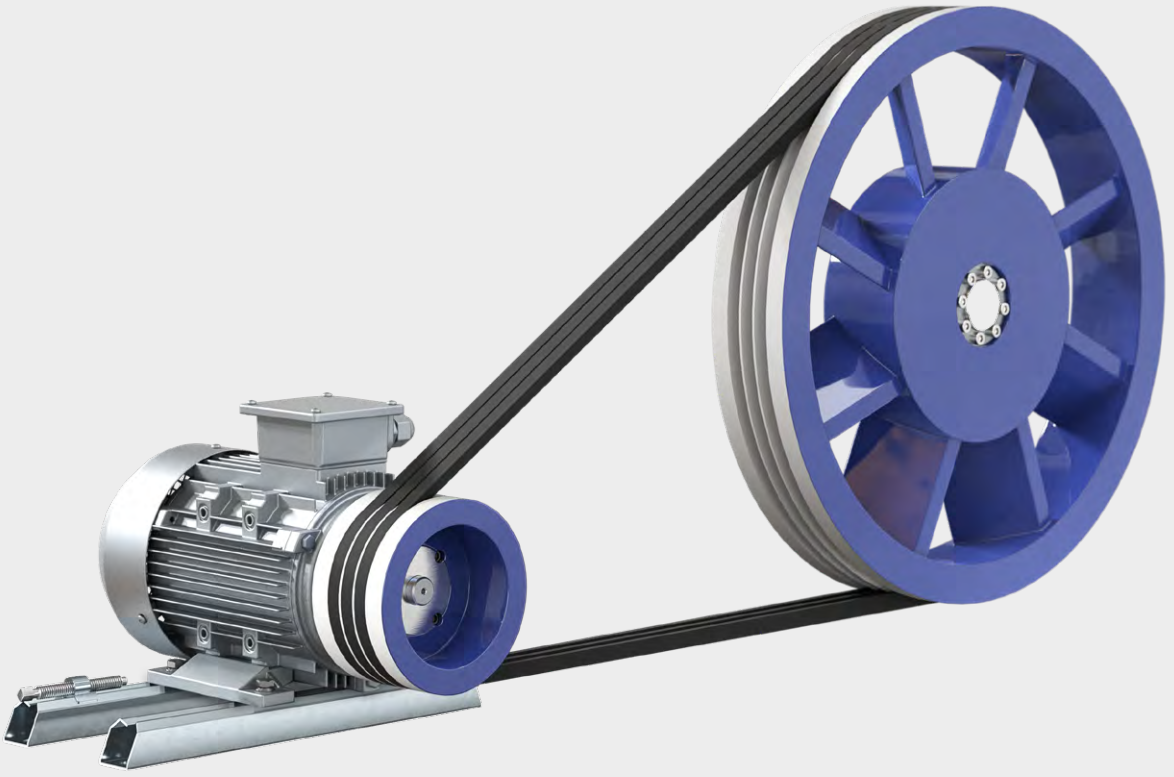
STEEL

Sliding length from 240 to 1065 mm

Version with adjustable clamping piston







MOTOR CLAMPING RAILS

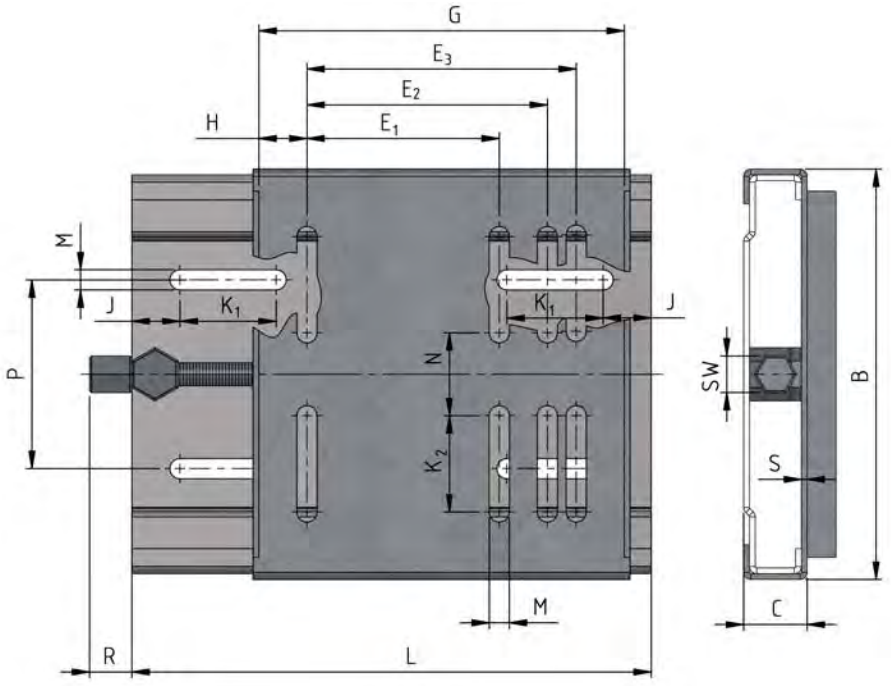
STEEL

motor size	type	sliding length [mm]	total length [mm]	dimensions [Nm]		dimensions [mm]								weight per set [kg]
		G_1	L	M x h1	e x s	G_2	a	b	b/2	Ø d	B	H_1	H_2	
63 | 71	312/6	240	312	M 6 x 19	75 x 6	262	16	280	-	12	40	28	30	1,4
80 | 90	312/8	240	312	M 8 x 27	75 x 6	262	16	280	-	12	40	28	30	1,5
63 | 71	375/6	305	375	M 6 x 19	75 x 6	325	16	343	-	12	40	28	30	1,5
80 | 90	375/8	305	375	M 8 x 27	75 x 6	325	16	343	-	12	40	28	30	1,6
100 | 112	375/10	305	375	M 10 x 35	75 x 6	325	16	343	-	12	40	28	30	1,6
80 | 90	395/8	302	395	M 8 x 28	97 x 8	325	20	355	-	12	50	40	43	3,4
100 | 112	395/10	302	395	M 10 x 32	97 x 8	325	20	355	-	12	50	40	43	3,4
80 | 90	495/8	405	495	M 8 x 29	97 x 8	425	20	455	-	12	50	40	43	4,0
100|112|132	495/10	405	495	M 10 x 35	97 x 8	425	20	455	-	12	50	40	43	4,0
160	495/12	405	495	M 12 x 49	97 x 8	425	20	455	-	12	50	40	43	4,0
132	530/10	413	530	M 10 x 37	119 x 19	442	25	480	-	14	60	50	54	6,4
160	530/12	413	530	M 12 x 49	119 x 19	442	25	480	-	14	60	50	54	6,4
132	630/10	515	630	M 10 x 37	119 x 19	542	25	580	-	14	60	50	54	8,2
160 | 180	630/12	515	630	M 12 x 45	119 x 19	542	25	580	-	14	60	50	54	8,2
160 | 180	686/12	538	686	M 12 x 43	154 x 12	575	28	630	315	18	75	60	64	12,8
200 | 225	686/16	538	686	M 16 x 62	154 x 12	575	28	630	315	18	75	60	64	12,8
200 | 225	864/16	700	864	M 16 x 60	300 x 16	810	32	800	400	24	90	75	-	16,6
250 | 280	864/20	700	864	M 20 x 68	300 x 16	810	32	800	400	24	90	75	-	16,6
250 | 280	1072/20	865	1072	M 20 x 77	360 x 19	995	36	1000	500	30	112	100	-	33,4
315	1072/24	865	1072	M 24 x 88	360 x 19	995	36	1000	500	30	112	100	-	33,4
315 | 355	1330/24	1065	1330	M 24 x 95	430 x 33	1215	40	1250	625	30	130	125	-	56,6

- For all common motor sizes
- Easy to install, time-saving, good value
- Optimal and quick adjustability, flexible use
- Corrosion protection by galvanisation
- Weight-optimised design
- Ideal solution for light drives

MOTOR SLIDES

STEEL | MONOPLATE



motor size	dimensions [mm]																
	L	B	C	E_1	E_2	E_3	G	H	J	K_1	K_2	M	N	P	R	SW	S
63 - 90	270	194	33	100	125	140	190	25	25	50	50	10,5	33	98	200	19	3
90 - 120	307	213	33	140	160	190	255	32,5	28	50	50	10,5	62	108	20	19	3
100 - 132	340	290	40	160	190	216	286	35	28	63	47,5	12,5	120	165	25	22	4
100 - 132	430	290	40	160	190	216	286	35	28	63	47,5	12,5	120	165	25	22	4
160 - 180	430	370	40	-	254	279	379	50	30	62	62	12,5	163	248	25	22	4
160 - 180	490	370	40	-	254	279	379	50	30	62	62	12,5	163	248	25	22	4
180 - 200	490	410	40	-	279	318	420	50	30	60	52	17	225	285	25	22	4
200 - 225	585	450	50	-	318	356	468	56	30	60	52	17	248	300	25	22	5
250	600	470	65	-	-	406	515	54,5	30	60	70	22	229	320	25	28	5
280	735	570	65	-	-	457	585	64	30	70	70	22	320	420	25	28	5

Note: Available with cathodic dip coating (KTL) see image or galvanised.

MOTOR SLIDES

STEEL | MONOPLATE

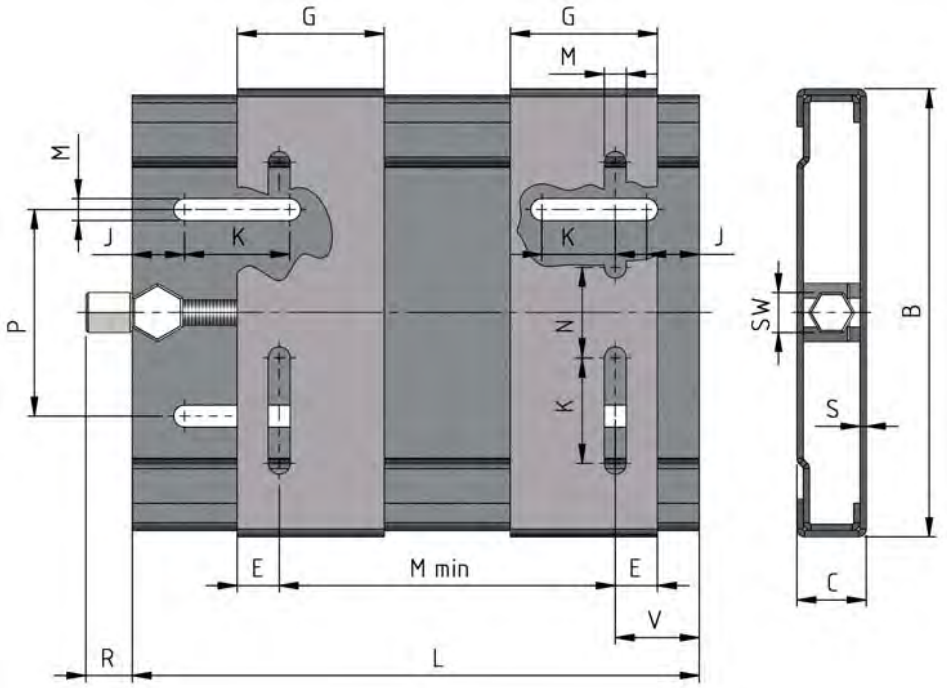
Slideway V_{min}

size	motor size												weight
	63	80	90	100	112	132	160	180	200	225	250	280	kg
270	80	80	80										3,1
307			52	52	52								4,1
340				54	54	54							7,9
430				144	144	144							8,9
430							51	51					12,0
490							111	111					12,7
490								70	70				14,6
585									117	117			23,7
600											85		28,1
735												150	38,2

- For all common motor sizes
- Easy to install, time-saving
- Optimum and quick adjustability, flexible use
- Surface available either galvanised or with cathodic dip coating (KTL)
- Weight-optimised design
- Ideal solution for light drives
- For heavy drives Clamping rails made of EN-GJL 200

MOTOR SLIDES

STEEL | DUOPLATE



motor size	dimensions [mm]													
	L	B	C	M_{min}	G	E	J	K	M	N	R	P	SW	S
63 - 80	210	195	33	100	70	20	25	50	10,5	43	30	98	19	3
63 - 90	270	195	33	100	70	20	25	50	10,5	43	30	98	19	3
90 - 132	340	290	40	140	95	27	29	62,5	12,5	90	30	165	22	4
90 - 160	430	290	40	140	95	27	29	62,5	12,5	90	30	165	22	4
160 - 180	490	410	40	110	95	40	30	60	15	193	30	284	22	4

Slideway V_{min}

size	motor size									weight
	63	71	80	90	100	112	132	160	180	kg
210	70	58	45							2,3
270	130	118	105	90						2,7
340				146	126	96	70			6,3
430				236	216	186	160	122		7,4
490								156	131	11,7

MOTOR BASE MW 8

FOR MOTORS WITH AN OUTPUT OF 7.5 KW TO 45 KW

The RESATEC-MW 8 is the universal motor base for friction belt drives of 7.5 to 45 kW motors. According to the number of belts and belt type, the base can be adjusted in a continuously variable way. It is equipped with two integrated axle stabilizers, robust and maintenance-free pretensioning device and a screw head bracket for simple and safe one-man installation.

The mounting holes for all motor housing sizes (IEC 160M-225M/NEMA of 254T-365T) are already provided. The use of the RESATEC motor base guarantees the optimal belt tension at any time. This means minimum maintenance and maximum efficiency through a perfect traction.

Advantages at a glance

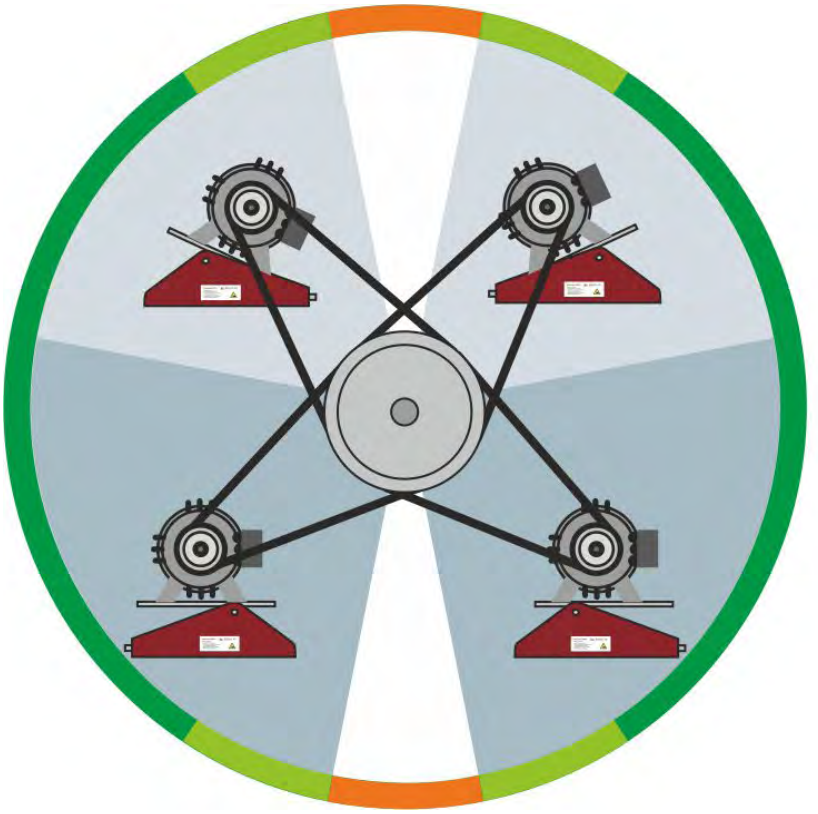
- The time needed to change the V-belt is reduced by 50 %. No re-alignment of the two drive pulleys when changing!
- Up to four times longer belt life due to correct tension.
- Fewer operating interruptions and protection of the pulleys, bearings and motor shafts.
- Less energy consumption due to optimally tensioned V-belts.
- Accident prevention through safe and easy handling.
- All parts galvanised.
- Maintenance-free.

Mounting area

Drive above
Motor plate is inclined 30°

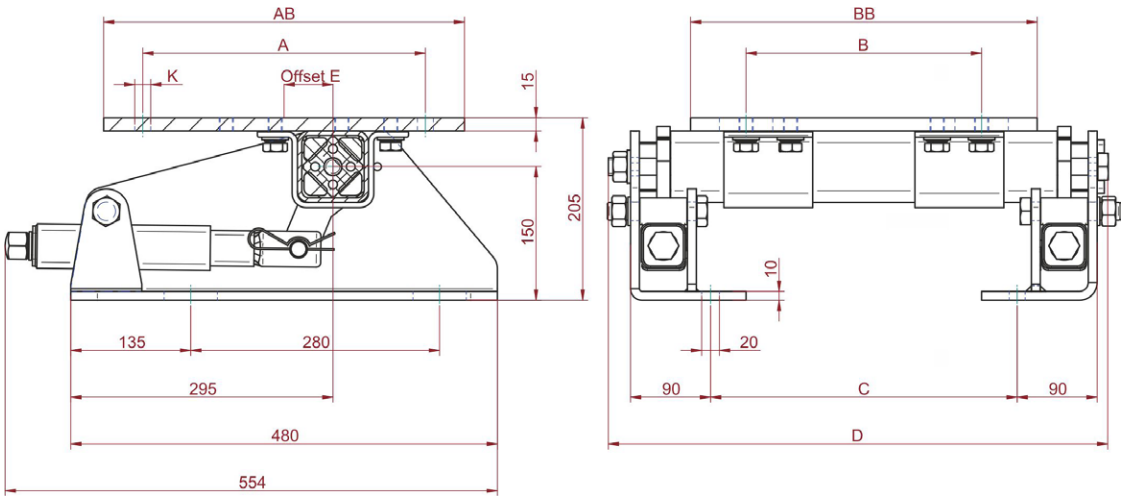
Max. clamping range, opt. positioning
Possible positioning
Clarification necessary

Drive below
Motor plate is horizontal



MOTOR BASE MW 8
DIMENSIONS

The motor plate of the MW 8 motor rocker is supplied „offset“ mounted. Depending on requirements, it can also be mounted „centrically“ above the axle. Corresponding mounting holes are already provided. For an increased angle of attack (drive on top), the pre-tensioning levers can be dismantled and remounted in a 45° offset position.



MW 8-270

Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]								[kg]
IEC 160M	7.5 kW	11 kW	254	210	14	335	350	245	463	38	49
IEC 160L	11 kW	15 kW	254	254	14	335	350	245	463	38	49
NEMA 254T	7.5 hp	15 hp	254	210	14	335	350	245	463	38	49
NEMA 256T	10 hp	20 hp	254	254	14	335	350	245	463	38	49
IEC 180M		18.5 kW	279	241	14	335	350	245	463	38	49
IEC 180L	15 kW	22 kW	279	279	14	335	350	245	463	38	49
NEMA 284T	15 hp	25 hp	279	241	14	335	350	245	463	38	49
NEMA 286T	20 hp	30 hp	279	279	14	335	350	245	463	38	49

MW 8-400

Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]								[kg]
IEC 200L	18.5 / 22 kW	30 kW	318	305	18	406	390	345	554	55	60
NEMA 324T	25 hp	40 hp	318	267	18	406	390	345	554	55	60
NEMA 326T	30 hp	50 hp	318	305	18	406	390	345	554	55	60

MW 8-500

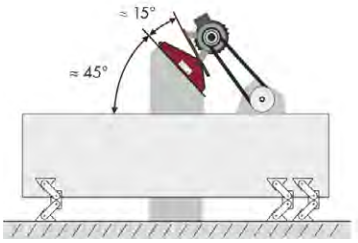
Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]								[kg]
IEC 225S		37 kW	356	286	18	466	420	425	643	72	67
IEC 225M	30 kW	45 kW	356	311	18	466	420	425	643	72	67
NEMA 364T	40 hp	60 hp	356	286	18	466	420	425	643	72	67
NEMA 365T	50 hp	75 hp	356	311	18	466	420	425	643	72	67

MOTOR BASE MW 8
ASSEMBLY

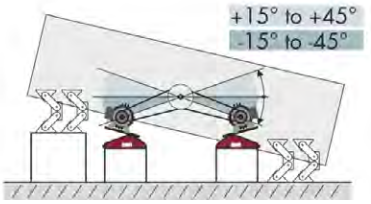
Standard installation positions

These recommendations are based on practical experience. A test run shows the ideal installation position.

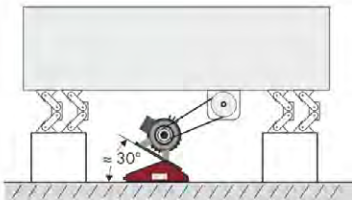
Overhead



Sideways



Below *

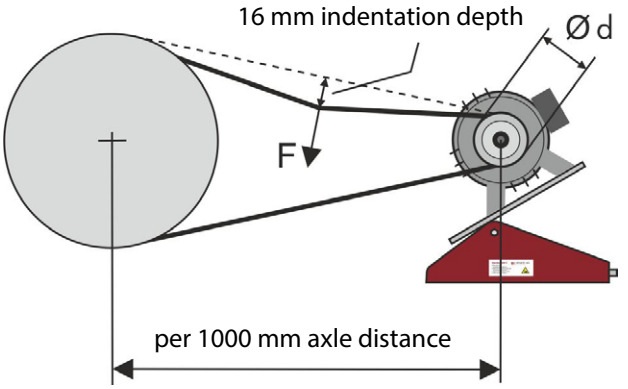


* Extended „offset" and larger Motor base type recommended

Belt tension

The motor base MW 8 should be pre-tensioned by means of the pre-tensioning device, according to the test force prescribed by the belt manufacturer.

For versions with two pre-tensioning units, ensure synchronous adjustment! The guide values for the most common V-belt profiles are listed in the table. These simplified values are sufficient in most cases.



Required indentation depth for intermediate lengths proportionally from 16 mm/m.

Exception vibrating screen

With vibrating screens, the belts should only be tensioned to the extent that friction is guaranteed at all times.

V-belt profile	Width [mm]	Height [mm]	Ø d [mm]	Test force F at Start-up [N]	Test force F at operation [N]
XPZ | SPZ	10	8	56 - 71 75 - 90 95 - 125 ≥ 125	20 22 25 28	16 18 20 22
XPA | SPA	13	10	80 - 100 106 - 140 150 - 200 ≥ 200	28 38 45 50	22 30 36 40
XPB | SPB	16	13	112 - 160 170 - 224 236 - 355 ≥ 355	50 62 77 81	40 50 62 65
XPC | SPC	22	18	224 - 250 265 - 355 ≥ 375	87 115 144	70 92 115
Z	10	6	56 - 100	5 - 7,5	
A	13	8	80 - 140	10 - 15	
B	17	10	125 - 200	20 - 30	
C	22	12	200 - 400	40 - 60	
D	32	19	355 - 600	70 - 105	

MOTOR BASE MW 10

FOR MOTORS WITH AN OUTPUT OF 37 KW TO 200 KW

The MW 10 motor base is suitable for belt drives with motors from 37 kW to 200 kW power. Depending on the specifications of the drive system, the base can be infinitely adjusted via a single, maintenance-free, centralised pretensioning unit equipped with axial ball bearings. The mounting holes of the motor and base plate are identical and suitable for all motor housing sizes (IEC 250S - 315M / NEMA 404T - 447T). This and the compact design allow easy installation even in existing systems with limited space.

The self-regulating MW10 motor base guarantees optimum belt tension at all times. This means minimal maintenance and maximum efficiency thanks to belt-friendly operation with optimum traction.

Advantages at a glance

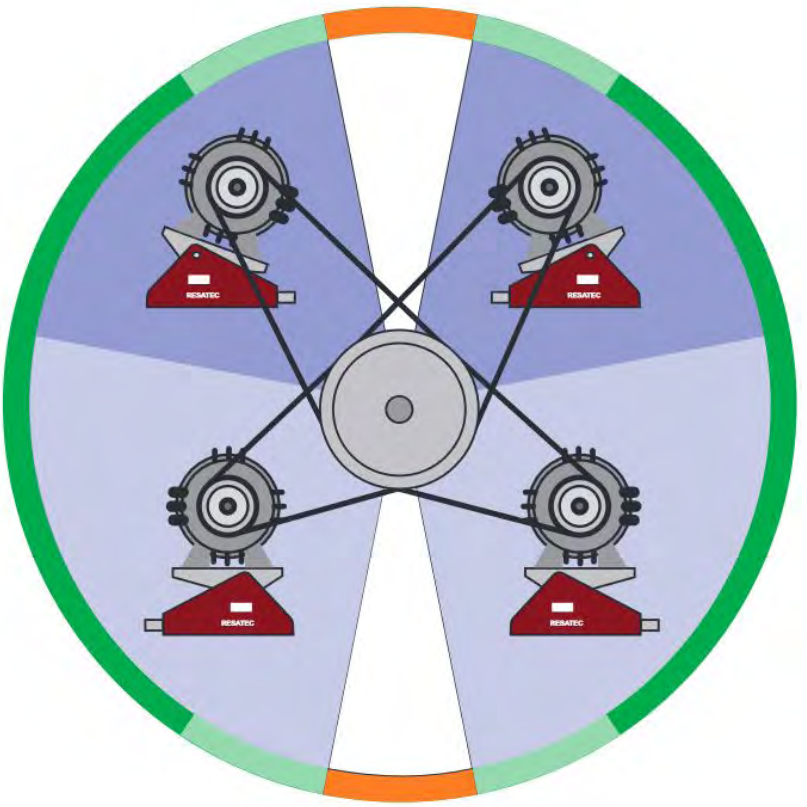
- The time needed to change the V-belt is reduced by 50 %. No re-alignment of the two drive pulleys when changing!
- Up to four times longer belt life due to correct tension.
- Fewer operating interruptions and protection of the pulleys, bearings and motor shafts.
- Less energy consumption due to optimally tensioned V-belts.
- Maintenance-free.

Mounting area

Drive abouve
Motor plate is inclined 20°

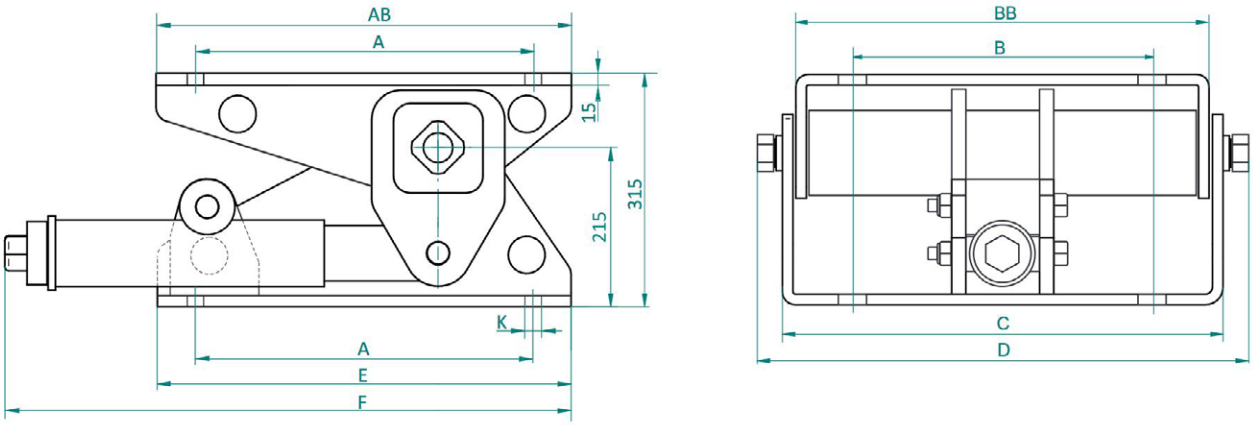
Max. clamping range, opt. positioning
Possible positioning
Clarification necessary

Drive below
Motor plate is horizontal



MOTOR BASE MW 10
DIMENSIONS

All motor plates of the MW 10 motor base have an „offset“ of 100 mm.



MW 10-450

Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	F	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]									[kg]
IEC 250M	37 kW	55 kW	406	349	22	510	525	560	624	560	765	135
NEMA 404T	60 hp	100 hp	406	311	22	510	525	560	624	560	765	135
NEMA 405T	75 hp	125 hp	406	349	22	510	525	560	624	560	765	135

MW 10-550

Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	F	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]									[kg]
IEC 280S	45 kW	75 kW	457	368	22	560	590	626	690	560	765	148
IEC 280M	55 kW	90 kW	457	419	22	560	590	626	690	560	765	148
NEMA 444T	100 hp	125 / 150 hp	457	368	22	560	590	626	690	560	765	148
NEMA 445T	125 / 150 hp	150 / 200 hp	457	419	22	560	590	626	690	560	765	148

MW 10-700

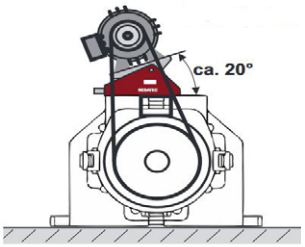
Motor size	Motor power (approx.)		A	B	K	AB	BB	C	D	E	F	Weight
	IEC 1000 min-1 NEMA 1200 min-1	IEC 1500min-1 NEMA 1800 min-1	[mm]									[kg]
IEC 315S	75 kW	110 kW	508	406	26	630	740	776	840	600	800	178
IEC 315M	90 / 110 kW	132 / 160 kW	508	457	26	630	740	776	840	600	800	178
NEMA 447T	150 / 200 hp	200 - 250 hp	457	508	26/22	630	740	776	840	600	800	178

MOTOR BASE MW 10
ASSEMBLY

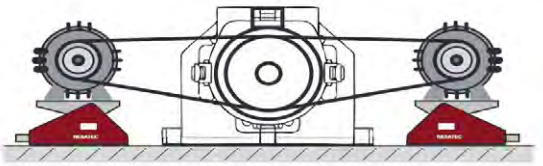
Standard installation positions

These recommendations are based on practical experience. A test run shows the ideal installation position.

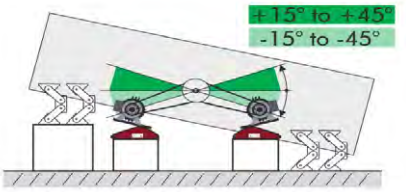
Overhead



Sideways



Vibrating screen



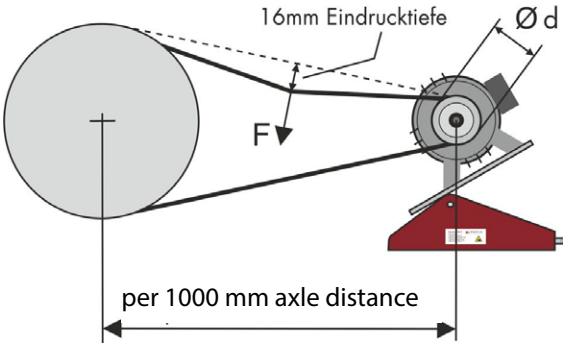
Belt tension

The motor base MW 10 should be pre-tensioned by means of the pre-tensioning device, according to the test force prescribed by the belt manufacturer.

The guide values for the most common V-belt profiles are listed in the table. These simplified values are sufficient in most cases.

Exception vibrating screen

With vibrating screens, the belts should only be tensioned to the extent that friction is guaranteed at all times.



Required indentation depth for intermediate lengths proportionally from 16 mm/m.

V-belt profile	Width [mm]	Height [mm]	Ø d [mm]	Test force F at Start-up [N]	Test force F at operation [N]
XPZ | SPZ	10	8	56 - 71 75 - 90 95 - 125 ≥ 125	20 22 25 28	16 18 20 22
XPA | SPA	13	10	80 - 100 106 - 140 150 - 200 ≥ 200	28 38 45 50	22 30 36 40
XPB | SPB	16	13	112 - 160 170 - 224 236 - 355 ≥ 355	50 62 77 81	40 50 62 65
XPC | SPC	22	18	224 - 250 265 - 355 ≥ 375	87 115 144	70 92 115
Z	10	6	56 - 100	5 - 7,5	
A	13	8	80 - 140	10 - 15	
B	17	10	125 - 200	20 - 30	
C	22	12	200 - 400	40 - 60	
D	32	19	355 - 600	70 - 105	

ACOUSTIC BELT TENSION TESTER

LÜCO TENSIONPRO2©

Precise pre-tensioning extends the service life of your belt drive in the long term and prevents overloading of the drive components. The belt tension calculated by the manufacturer can be set precisely using the LüCo TensionPro 2© belt tension measuring device.

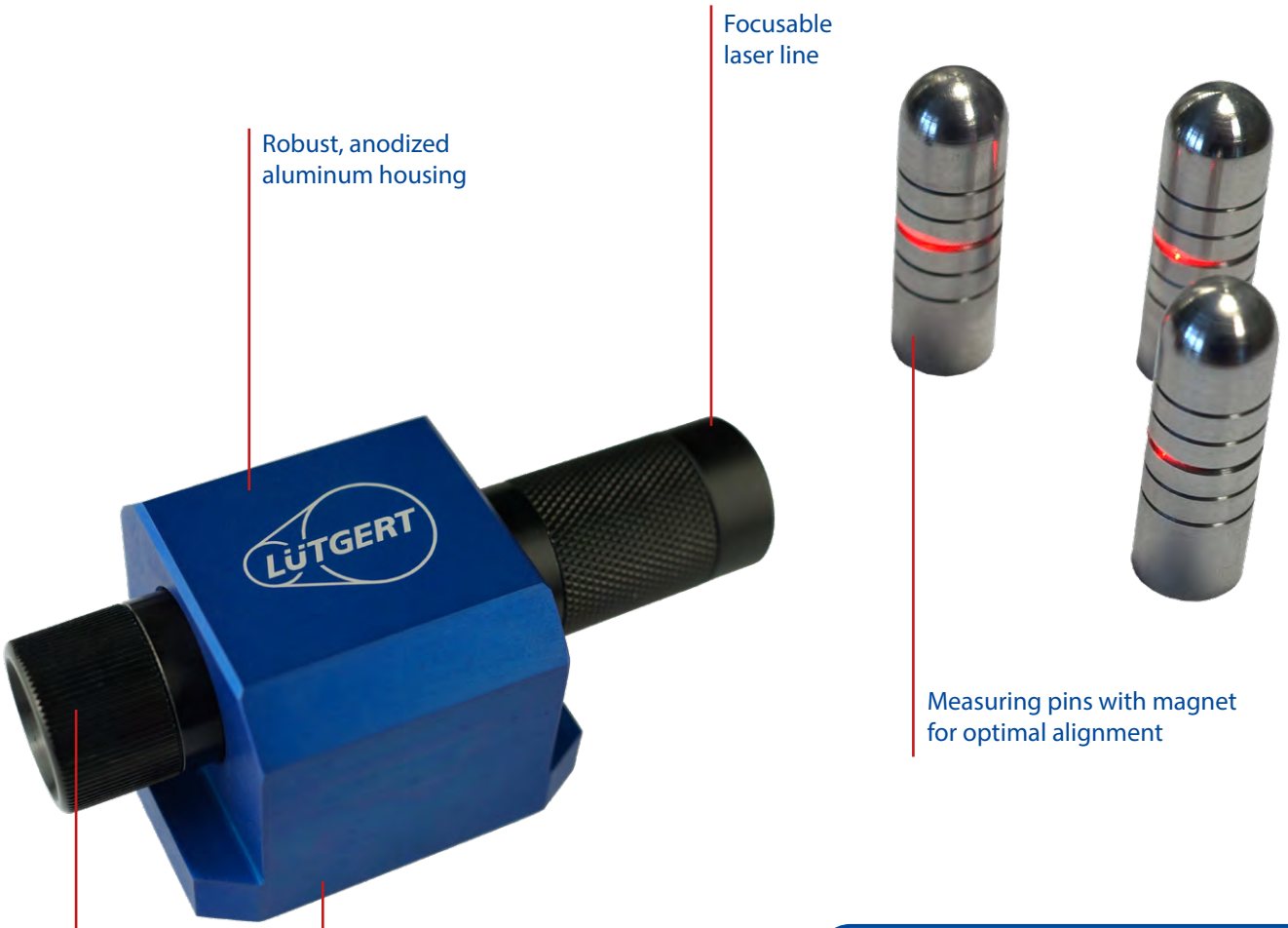
- Non-contact, acoustic measuring technology with highly sensitive sensor for precise measurement of the belt tension
- Suitable for all belt and tension member types
- Small sensor head on the flexible gooseneck for measurements even in hard-to-reach places
- Ergonomic shape for optimum one-handed use
- Integrated, rechargeable lithium polymer battery
- Suitable for V-belt, toothed belt and chain drives

ALIGNMENT LASER FOR PULLEYS

LÜCO LASERPRO©

Optimal alignment of the drive belt can reduce slip and friction losses. In addition, the economic efficiency and service life are increased. The LüCo LaserPro© measuring tool facilitates the installation of the drive belt and is helpful for maintenance documentation.

- Compact and handy design
- Also suitable for large center distances
- Measurement of parallel and angular misalignment
- Can be used on all materials with adhesive pads and magnets
- Can also be used for other drives (e.g. chain drives)



LüCo SERVICE-KIT
consisting of LüCo TensionPro2© and LüCo LaserPro©

ANALOGUE TENSION TESTER

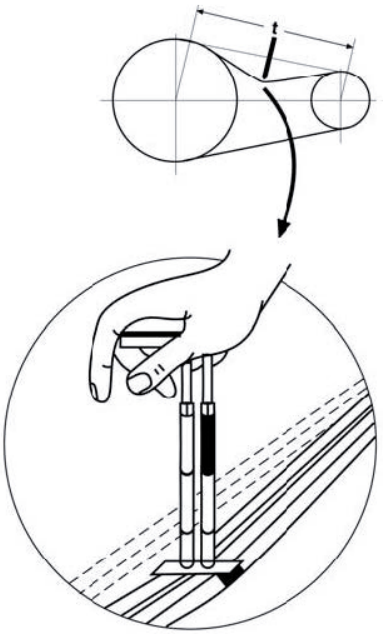
V-BELT TENSION

In the middle of the span length, measure the force needed to deflect the belt or power band 1 mm per 100 mm of span length. With single belts or a power belt, at least one pulley must be able to rotate.

If the measured force is too low, the drive belt must be retightened.

New belts must be tensioned with the maximum deflection force.

profil single belt	M	Y	profil power belt	M
Z	0,005	0,9		
A	0,009	1,3	A	0,011
B	0,014	1,9	B	0,017
C	0,026	3,0	C	0,031
D	0,052	6,3	D	0,059
AX	0,008	1,3		
BX	0,013	1,9		
CX	0,023	3,0		
SPZ | 3V	0,0066	1,5	9J | 3V	0,008
SPA	0,012	2,0		
SPB | 5V	0,017	2,6	15J | 5V	0,021
SPC	0,032	4,1		
8V	0,046	6,0	25J | 8V | 8VK	0,053
XPZ | 3VX	0,006	1,5	3VX	0,007
XPA	0,0104	2,0		
XPB | 5VX	0,013	2,6	5VX	0,016



Factor M and Y in relation to the profile type

Tension Tester

The analogue tension tester consists of a calibrated spring on which one can read the deflection on the one hand and the deflection force on the other. Both measured values are indicated on a scale with the help of a rubber „O-ring".

The lower ring is used to set the calculated deflection (t) on the distance scale. The upper ring is in the zero position on the deflection scale.

The tension tester is placed in the centre of the belt (perpendicular to the span length). Counterpressure is applied to deflect the belt to the dimension set on the lower scale. A steel ruler or tape placed over the belt makes for easier reading.

The upper „O-ring" has now slid down the upper scale and shows the deflection force on the upper ring side. The displayed value is compared with the minimum and maximum formula to compare with the minimum and maximum forces.

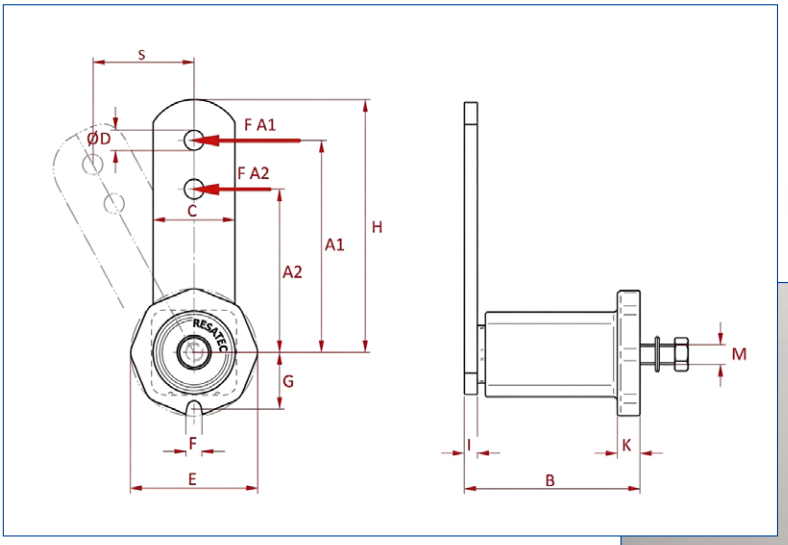
BELT AND CHAIN TENSIONERS

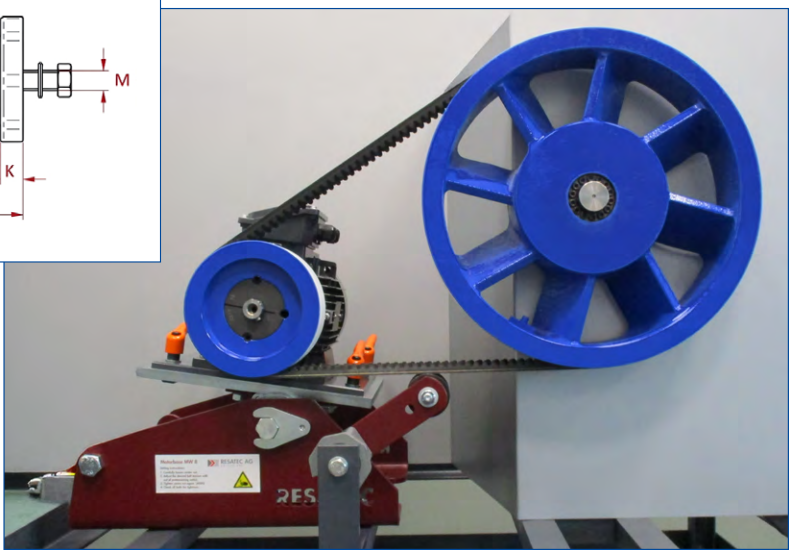
TENSIONER DEVICE TYPE TE / TE-I / TE-G

TYPE TE
The RESATEC tensioning device type TE is an all-rounder that has replaced other tensioning systems in many applications. The tensioning device is fastened to the machine structure with only one screw. The high quality of the materials used ensures a very long service life and consistent performance parameters. And this completely maintenance-free! A very resistant powder coating protects against corrosion.

TYPE TE-I | Stainless steel (INOX) version

TYPE TE-G | Surface protection through galvanization





TENSIONER DEVICE
TYPE TE / TE-I / TE-G

Dimensions / material

type	A1	A2	B	C	øD	E	F	G	H	I	K	M	material				tigh-tening torque	weight
													housing	TE	tension lever	screws	Nm	kg
TE 2	80	60	52 -0.5/+1	20	8.5	37.5	8.0	16.6	90	5	6	M6	SINT-C 00	powder coating	S235JR/S195JR	DIN 933 8.8 ISO 4017 /galvanized	10	0.2
TE 3	100	80	63 -0.5/+1	25	10.5	48	8.5	19.5	115	5	8	M8					25	0.36
TE 3 galv.	100	80	63 -0.5/+1	25	10.5	48	8.5	19.5	115	5	8	M8		galvanized			25	0.36
TE 4	100	80	78 -0.5/+1.5	30	10.5	60	8.5	24.5	115	6	10	M10		powder coating			49	0.64
TE 4 galv.	100	80	78 -0.5/+1.5	30	10.5	60	8.5	24.5	115	6	10	M10		galvanized			49	0.64
TE 5	130	100	110 -0.5/+2	50	12.5	78	10.5	34	155	8	14	M12		powder coating			86	1.72
TE 6	175	140	145 -0.5/+2	60	20.5	100	12.5	42	205	10	15	M16	EN-GJS-400-15				210	3.6
TE 7	220	175	198 -1/+3	70	20.5	114	12.5	50	255	12	18	M20	S235JR				410	5.46
TE 8	250	-	212 -1/+3	80	20.5	ø130	17	55	290	20	20	M24					750	9.16

Tensioning force F

<a	10°		20°		30°		32°	
type	FA1 N	s mm	FA1* N	s mm	FA1* N	s mm	FA1* N	s mm
TE 2/TE-I 2	18	14	43	27	71	40	90	42
TE 3 galv./ TE-I 3	28	17	68	34	117	50	140	53
TE 4 galv./ TE-I 4	70	17	169	34	303	50	320	53
TE 5/ TE-I 5	157	23	380	44	682	65	820	69
TE 6/ TE-I 6	278	30	675	60	1217	88	1500	93
TE 7	468	38	1135	75	2048	110	2500	117
TE 8	750	43	2200	86	4300	125	4500	132

* The tensioning force in pos. FA2 is approx. 25 % higher

Please note the selection aids in the following charts:

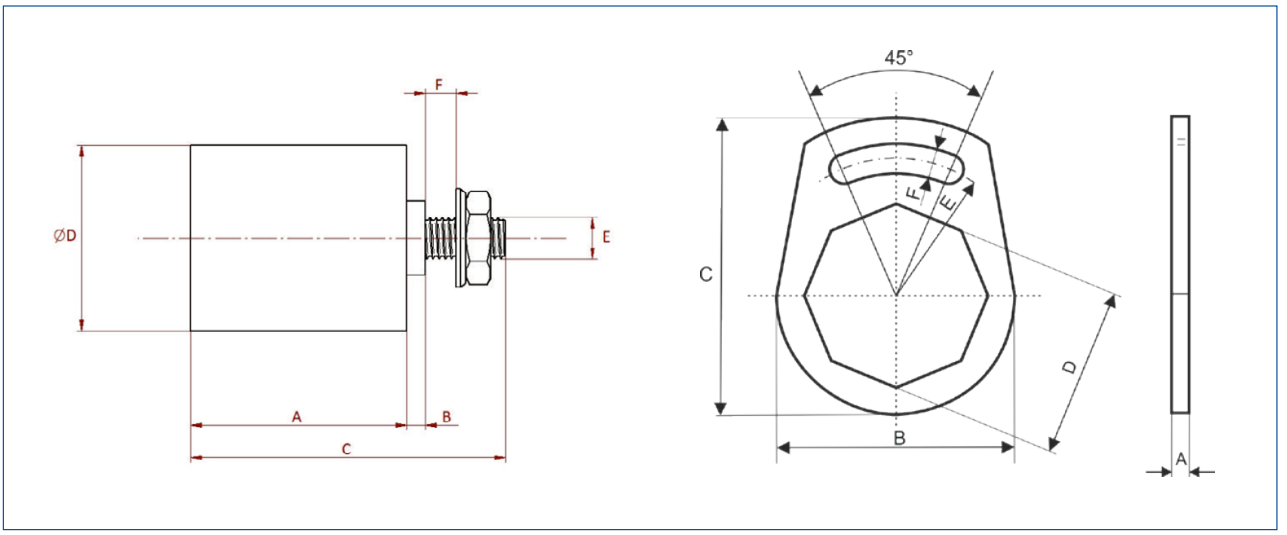
Sprocket Wheel-Set KS-Simplex, Duplex and Triplex
Chain rider CR
Roller RE

type	A1	A2	B	C	øD	E	F	G	H	I	K	M	material				tigh-tening torque	weight
													housing	TE-I	tension lever	screws	Nm	kg
TE-I 2	80	60	52 -0.5/+1	20	8.5	37.5	8.0	16.6	90	5	6	M6	SINT-C 40		1.4301	DIN 933 A2-70 ISO 4017	10	0.21
TE-I 3	100	80	63 -0.5/+1	25	10.5	48	8.5	19.5	115	5	8	M8					25	0.38
TE-I 4	100	80	78 -0.5/+1.5	30	10.5	60	8.5	24.5	115	6	10	M10					48	0.62
TE-I 5	130	10	108 -0.5/+2	50	12.5	78	10.5	34.0	115	8	14	M12					82	1.7
TE-I 6	175	135	130 -0.5/+2	60	20.5	ø~98	12.0	42.0	205	8	15	M16	1.4301				199	2.68

ROLLER
TYPE RE

ROLLER TYPE RE
Initially developed as a rotating pulley for tensioning flat belts and later for tensioning poly and V-belts as well as power belts, the roller type RE is widely used as a universal machine component. Would you like adaptations in material, diameter or shape? Please clarify the possibilities with us.

TWIST LOCK TYPE TL
If there is a coating or unevenness on the mounting surface that prevents a secure friction locking, it is recommended to use the RESATEC twist lock. Available for all tensioner devices of size 5 and 6.



ROLLER
TYPE RE

Dimensions

type	øD	A	E	6kt hex-nut	tightening torque	B	C	F	ball bearing	min -1 rpm max.	suitable for	weight	max. load
					Nm			max.			Typ	kg	N
RE 2	30	35	M8	M8 - 0.5d	10	3	51	7	608 - 2Z	8000	TE 2	0.08	75
RE3/4	40	45	M10	M10 - 0.5d	20	6	67	9	6200 - 2Z	8000	TE 3 / TE 4	0.17	160
RE 5	60	60	M12	M12 - 0.5d	35	7.5	89	13	6301 - 2Z	6000	TRE 5	0.4	310
RE 6	80	90	M20	M 20 - 0.5d	160	9	127	14	6304 - 2Z	5000	TE6 / TE 7	1.2	610
RE 7	80	135	M20	M 20 - 0.5d	160	7	167	12	6304 - 2Z	4500	TE 7	1.7	1210
TL 5	74.5	8	60		104	130	13				TE 5	0.12	
TL 6	94	10	75		128	160	17				TE 6	0.23	

Material roller

Roller PA6
temperature range – 40 °C until 100 °C
screw DIN 933 ISO 4017 steel 8.8 galvanised
hex-nut DIN 439 B ISO 4035 steel 8.8 galvanised
in Ex-shelters the components have to be to grounded
surface resistance ~1013 ohm, contact resistance ~1015 ohm

Selection schedule for TE + Rollers RE

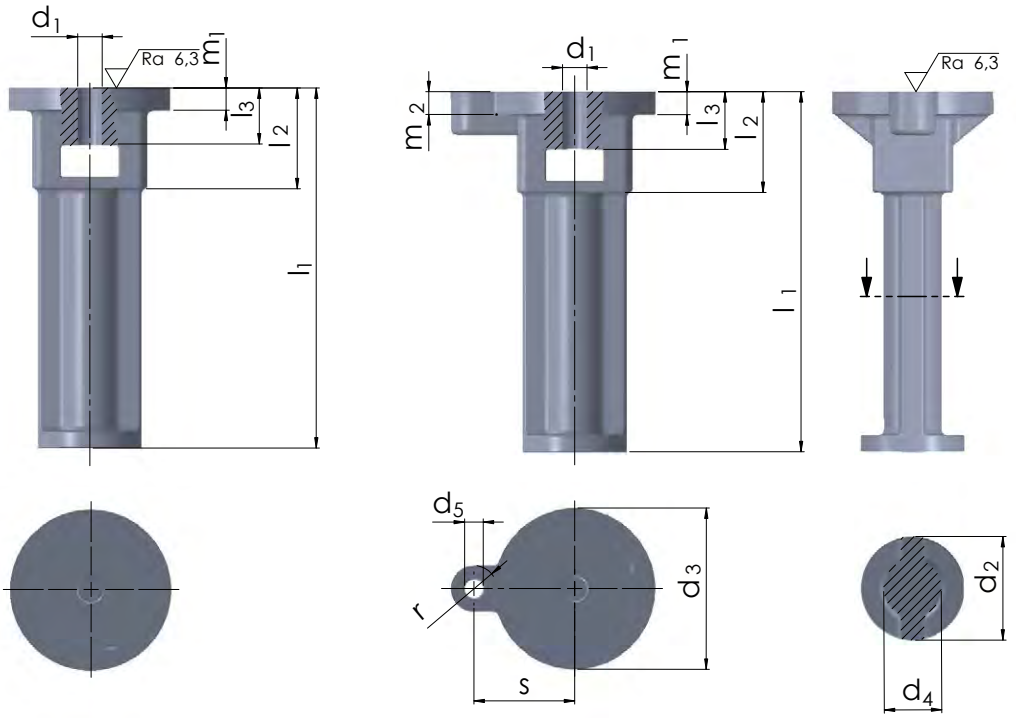
V-belt type	ø smaller pulley	tensioning force [N]	type tensioner device	tensioning force [N]	type tensioner device	tensioning force [N]	type tensioner device	tensioning force [N]	type tensioner device	tensioning force [N]	type tensioner device
		1 belt		2 belt		3 belt		4 belt		5 belt	
XPZ, SPZ	56 – 71	40	TE 2 + RE 2	80	TE 4 + RE 3/4	120	TE 4 + RE 3/4	160	TE 5 + RE 5	200	TE 5 + RE 5
	75 – 90	44		88		132		176		220	
	95 – 125	50	TE 3 + RE 3/4	100		150		200		250	
	> 125	56		112		168		224		280	
XPA, SPA	80 – 100	56	TE 3 + RE 3/4	112	TE 4 + RE 3/4	168	TE 5 + RE 5	224	TE 5 + RE 5	282	TE 6 + RE 6
	106 – 140	76	TE 4 + RE 3/4	152		228		304		380	
	150 – 200	90		180		270		360		450	
	> 200	100		200		300		400	TE 6 + RE 6	500	
XPB, SPB	112 – 160	100	TE 4 + RE 3/4	200	TE 4 + RE 3/4	300	TE 5 + RE 5	400	TE 6 + RE 6	500	TE 7 + RE 7
	170 – 224	124		248	TE 5 + RE 5	372		496		620	
	236 – 355	154		308		462	TE 6 + RE 6	616		770	
	> 355	162		324		486		648		810	
XPC, SPC	224 – 250	174	TE 4 + RE 3/4	348	TE 5 + RE 5	522	TE 6 + RE 6	696	TE 7 + RE 7	870	TE 7 + RE 7
	265 – 355	230	TE 5 + RE 5	460	TE 6 + RE 6	690		920		1150	
	> 375	288		576		864	TE 7 + RE 7	1152		1440	
Z	56 – 100	15	TE 2 + RE 2	30	TE 2 + RE 2	45	TE 2 + RE 2	60	TE 3 + RE 3/4	75	TE 5 + RE 5
A	80 – 140	30	TE 2 + RE 2	60	TE 3 + RE 3/4	90	TE 4 + RE 3/4	120	TE 5 + RE 5	150	TE 6 + RE 6
B	125 – 200	60	TE 3 + RE 3/4	120	TE 4 + RE 3/4	180	TE 5 + RE 5	240	TE 6 + RE 6	300	TE 7 + RE 7
C	200 – 400	120	120 TE 4 + RE 3/4	240	TE 5 + RE 5	360	TE 6 + RE 6	480	TE 7 + RE 7	600	TE 7 + RE 7
D	335 – 600	210	TE 4 + RE 3/4	420	TE 6 + RE 6	630	TE 7 + RE 7	840	TE 7 + RE 7	1050	TE 7

FOUNDATION BLOCKS DIN 799

FIXING MOTOR CLAMPING ELEMENTS TO INDUSTRIAL FLOORS

FORM A | WITHOUT CAM

FORM B | WITH CAM



dimensions [mm]											form A weight/piece	form B weight/piece
d_1	l_1	d_2	d_3	d_4	d_5**	l_2	l_3	m_1	m_2**	s**	[kg]	[kg]
M 10	125	36	56	20	M 8	35	20	8	15	35	0,6	0,75
M 12	150	40	72	22	M 12	40	22	10	20	50	1,0*	1,1
M 16	180	45	85	25	M 12	50	25	12	20	62	1,6	1,7
M 20	200	50	100	28	M 12	56	28	14	20	73	2,4	2,5
M 24	250	64	125	36	M 16	70	36	18	25	80	4,0*	4,5
M 30	280	72	140	40	M 16	79	40	20	25*	100	6,5*	6,5*
M 36	335*	90	180	50	M 20	100	50	25	25*	115	11,0*	12,0*
M 42	425	112	225	60	M 20	120	60	28	30*	140	21	21,5
M 48	475	125	250	64	M 24	129	64	30	32*	150	31,0*	31,0

* Deviating from DIN 799

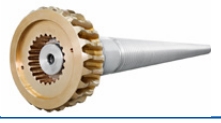
** Form B with cams for adjustement (with grub screw DIN 914)

Excessive length upon request.
Measures of casted, unmachined surfaces acc. to tolerances GTB DIN 1686.
The foundation block can differ from drawing above. Measures are in accordance with DIN (table above).

FLOHR - PRODUCTS OVERVEW

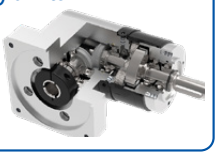
Gears

- *Spiral toothed bevel gears*
- *Bevel gears*
- *Worm gears*
- *Spur gears*
- *Special gears*



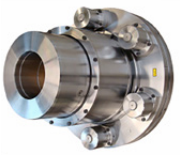
Gear Technology

- *Bevel gearboxes*
- *Angle-planetary gearboxes*
- *Worm gearboxes*
- *Cam drives and indexing units*
- *Cam components*
- *Special gearboxes*



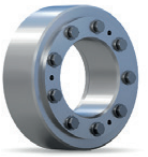
Couplings

- *Rigid and flexible couplings*
- *Frictional connections*
- *Drum-coupling*
- *Gear-couplings*
- *Safety couplings*



Friction connections

- *Shrink discs*
- *Shaft couplings*
- *Flange couplings*
- *Locking units*



Clamping technology

- *Manual and pneumatic clamping solutions*
- *Power clamps*
- *Pivot units*
- *End effector solutions*
- *Linear units*
- *Grippers*

Belt drives

- *V-belt and flat belt pulleys*
- *Flywheels*
- *Special pulleys*
- *Motor mounting systems*
- *Drive belts*
- *Customer designed castings*
- *Accessories*

Sensor systems

- *Incremental encoders*
- *Magnetic encoders*
- *Absolute encoders*
- *Electronic overspeed switches*
- *Electronic position switches*
- *Universal encoder systems*
- *Systems*

Contract manufacturing

- *Turning, milling, grinding*
- *Grooving and broaching*
- *Balancing*
- *Calculation and design*
- *Assembly*
- *Service and repair*

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