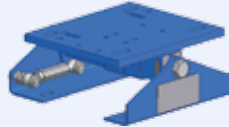
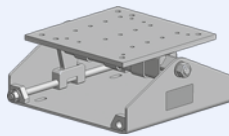
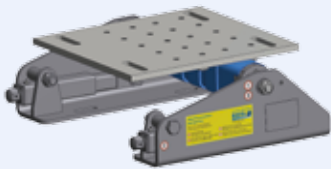
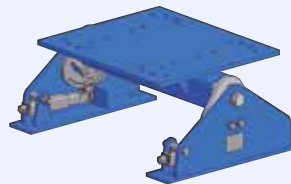
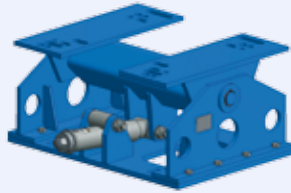
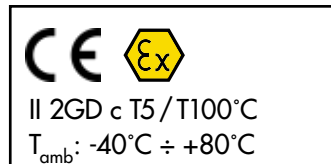


Selection table of ROSTA Motorbases according to the motor frame sizes

IEC			NEMA			Type of Motorbase	Details	Standard Design
Motor Frame Size	P [kW] 1000 min ⁻¹ 6-pole motor	P [kW] 1500 min ⁻¹ 4-pole motor	Motor Frame Size	P [HP] 1200 min ⁻¹ 6-pole motor	P [HP] 1800 min ⁻¹ 4-pole motor			
90S 90L	0.75 1.1	1.1 1.5	143T 145T	0.75 1	1 1.5 / 2	MB 27×120	Pages 5.6– 5.7	MB 27 
100L	1.5	2.2 / 3	182T	1.5	3			
112M	2.2	4	184T	2	5			
132S 132M	3 4 / 5.5	5.5 7.5	213T 215T	3 5	7.5 10	MB 38×300	Pages 5.6– 5.7	MB 38 
160M 160L	7.5 11	11 15	254T 256T	7.5 10	15 20			
160M 160L	7.5 11	11 15	254T 256T	7.5 10	15 20	MB 50×270-1	Pages 5.8– 5.9	MB 50 
180M 180L	– 15	18.5 22	284T 286T	15 20	25 30	MB 50×270-2		
200L	18.5 / 22	30	324T 326T	25 30	40 50	MB 50×400		
225S 225M	– 30	37 45	364T 365T	40 50	60 75	MB 50×500		
250M	37	55	404T	60	100	MB 70×400	Pages 5.10– 5.11	MB 70 
280S 280M	45 55	75 90	405T 444T	75 100	100 / 125 125 / 150	MB 70×550		
315S	75	110	445T	125 / 150	150 / 200	MB 70×650		
315M 315L	90 / 110 110–160	132–160 160–200	447T 449T	150–200 200–300	200–250 250–300	MB 70×800		
315M 315L	90 / 110 110–160	132–160 160–200	447T 449T	150–200 200–300	200–250 250–300	MB 100×750	Pages 5.12– 5.13	MB 100 
355S 355M 355L	132–160 200–250 200–250	200–250 250 250	586/7	250–350	300–350			
various	up to 275	up to 400	various	up to 370	up to 540	MB 100×1000		
various	up to 350	up to 550	various	up to 650	up to 750	MB 100×1500	–	MB 100 special on request

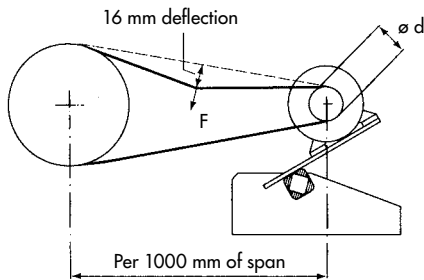
Directions regarding customized designs of motorbases on pages 5.14–5.15.
In case of possibly not mentioned motor frame sizes, please contact **ROSTA**.

Design **ATEX** available with specific Art. No. mentioned on pages 5.6, 5.8, 5.10 and 5.12:



Test forces for ideal belt tensioning

The ROSTA Motorbase is offering with its mechanical pretensioning device the ideal calibration of the relevant belt tension, based on the test force recommendations of the belt suppliers. These recommended test forces for the most common V-belt sizes are mentioned in the test force table on the right.



Exception

For screen applications the belt only tighten enough that they do not slip during start-up and operation.

Test force table by initial V-belt installation

(standard values for the most common types of V-belts)

V-belt type	Width [mm]	Height [mm]	Diam. of smaller pulley [mm]	Initial operation test-force F_i^* [N]	Operational test-force F_o^* [N]
XPZ, SPZ	10	8	56–71	20	16
			75–90	22	18
			95–125	25	20
			≥ 125	28	22
XPA, SPA	13	10	80–100	28	22
			106–140	38	30
			150–200	45	36
			≥ 200	50	40
XPB, SPB	16	13	112–160	50	40
			170–224	62	50
			236–355	77	62
			≥ 355	81	65
XPC, SPC	22	18	224–250	87	70
			265–355	115	92
			≥ 375	144	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	

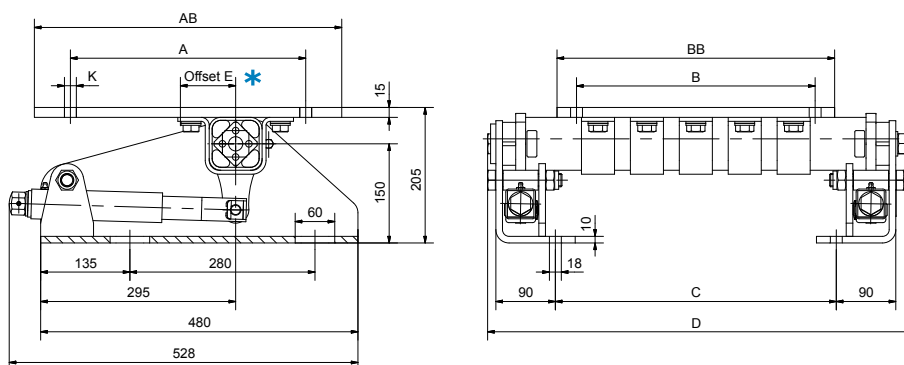
* Test force for V-belts. By ideal belt tensioning a deflection of 16 mm per 1000 mm pulley center distance shall occur. (By shorter or longer span, the value 16 mm has to be interpolated.)

Usual positioning of the ROSTA Motorbase

These recommendations are based on practical experience, a test run will show the ideal adjustment.

Screen drive applications		
„Overhead“ Configuration 	„Along-Side“ Configuration 	„Foot-Mounting“ Configuration, Feeder Extended “off-set” and larger Motorbase size recommended.
Pump drive applications		Crusher applications
„Overhead“ Configuration Motor plate „off-set“, towards the pretensioning device. 	„Along-Side“ Configuration 	Variable Loads Motor plate „off-set“, towards the pretensioning device.

Motorbases Type MB 50



Art. No.	Type	IEC			NEMA			AB	BB	C	D	E	Weight (kg)
		Motor Frame Size	A	B	K	Motor Frame Size	A	B	K				
02 200 526	MB 50×270-1	160M 160L	254 254	210 254	14 14	254T 256T	254 254	210 254	14 14	320	315	245	44
02 200 527	MB 50×270-2	180M 180L	279 279	241 279	14 14	284T 286T	279 279	241 279	14 14	350	350	245	46
02 200 528	MB 50×400	200L	318	305	18	324T 326T	318 318	267 305	18 18	405	390	345	58
02 200 529	MB 50×500	225S 225M	356 356	286 311	18 18	364T 365T	356 356	286 311	18 18	465	420	425	64

Details regarding special designs, see pages 5.14–5.15.

Design **ATEX** with specific Art. No., example MB50×270-1: 02300526. Details ATEX on page 5.4.

* All ROSTA Motorbases MB 50 will be supplied with motor plate installed in **"off-set"** configuration. According to the final positioning of the base, the operating angle of the belts and the required tensioning travel, the motor plate can be altered in **"centered"** position on top of the element axis. Relevant threaded fixation holes are existent in plate.

For possibly required higher inclination of the motorplate, the rotary plate(s) can be removed and remounted 45° rotated.



- 1 Motor plate galvanized
- 2 Side supports galvanized
- 3 Pretensioning device galvanized (MB 50×270-1 and MB 50×270-2: 1 device / MB 50×400 and MB 50×500: 2 devices)
- 4 Rubber suspension element with cardanic bushings and brackets blue painted (depending on size = 3–5 brackets)



Mounting instructions for MB 50

1 Determine of the ideal motorbase position

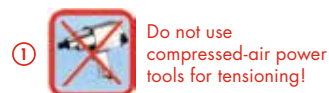
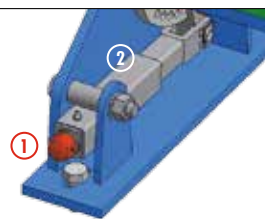
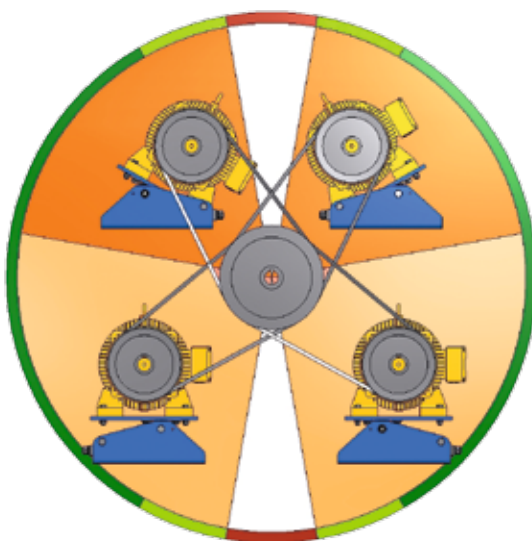
Operation area "above"

Motor plate standing ~ 30° inclined

Operation area "below"

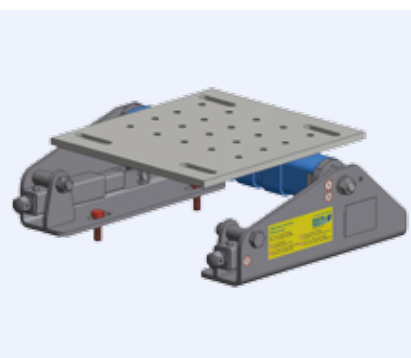
Motor plate standing ~ horizontal

- ideal position of the MB, longest tensioning travel
- sufficient tensioning travel
- contact **ROSTA**



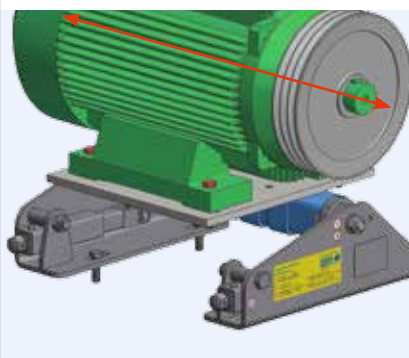
2 Support fixations

4 slotted holes 18 x 60 mm



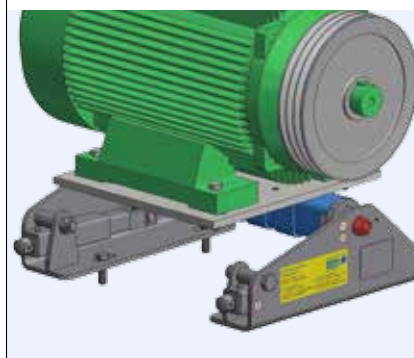
3 Alignment of pulleys and motor fixation

4 bolts according to relevant motor size



4 Loosen of the shaft bolt (element axis)

30 mm wrench (M20)

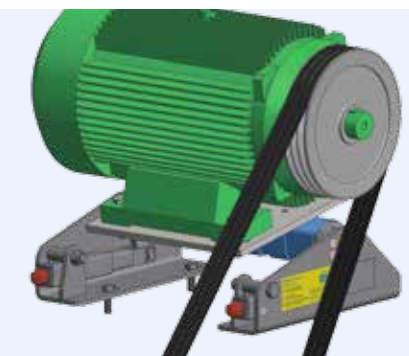
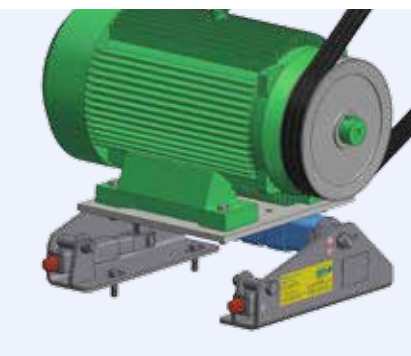


5 Insert and tension the belts, control belt test force

Tensioning of the belts according to belt suppliers recommended test force. Adjust tension with a 30 mm wrench (M20), uniformly if 2 pretensioning devices are supplied. The belt tension can easily be monitored according to the reference mark on the angle scale.

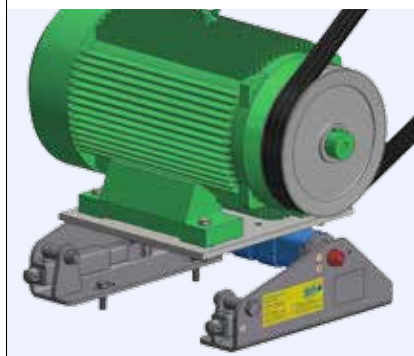
Operation area "below"

Operation area "above"



6 Tighten of the shaft bolt, start of operation

30 mm wrench (M20)
Locking torque 410 Nm



Retension:

Generally retensioning is not necessary, however, we recommend to inspect the belt tension after a few days of operation according to the sticker on the side supports.