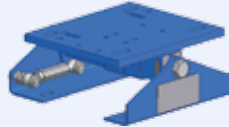
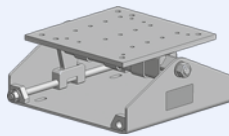
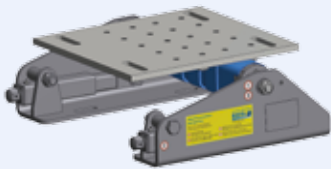
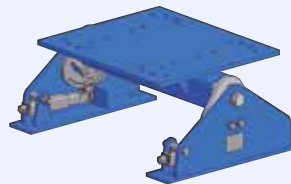
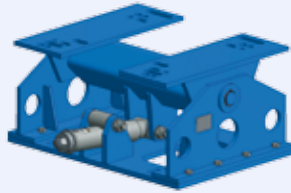
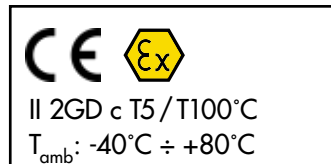


Selection table of ROSTA Motorbases according to the motor frame sizes

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

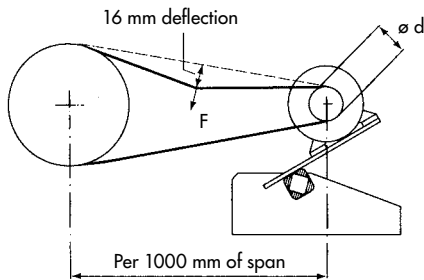
Directions regarding customized designs of motorbases on pages 5.14–5.15.
In case of possibly not mentioned motor frame sizes, please contact **ROSTA**.

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.)

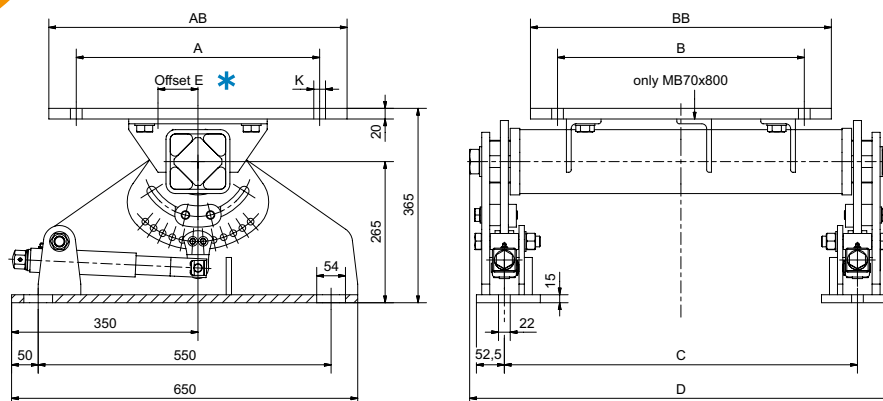
Usual positioning of the ROSTA Motorbase

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

Screen drive applications		
„Overhead“ Configuration 	„Along-Side“ Configuration Motor ca. +15° to +45° Motor ca. -15° to -45°	„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 70



Art. No.	Type	IEC				NEMA									Weight [kg]
		Motor Frame Size	A	B	K	Motor Frame Size	A	B	K	AB	BB	C	D	E	
02 200 710	MB 70×400	250M	406	349	22	404T	406	311	22	510	410	513	643	50	142
02 200 711	MB 70×550	280S	457	368	22	405T	406	349	22	560	565	663	793	50	169
		280M	457	419	22	444T	457	368	22						
02 200 712	MB 70×650	315S	508	406	26	445T	457	419	22	630	660	763	893	70	191
02 200 713	MB 70×800	315M	508	457	28	447T	457	508	22	630	805	913	1043	70	216
		315L	508	508	28	449T	457	635	22						

Details regarding special designs, see pages 5.14–5.15.

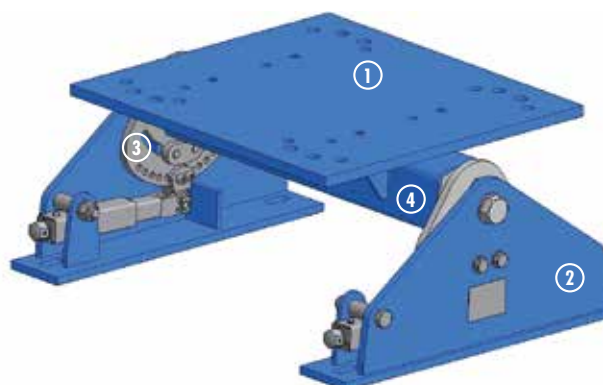
Design **ATEX** with specific Art. No., example MB70 × 400: 02300710. Details ATEX on page 5.4.

We will be glad to calculate your specific system, please ask for our relevant questionnaire.

* All ROSTA Motorbases MB 70 will be supplied with motor plate installed in **"centered"** configuration on top of the element axis. 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 **"off-set"** position. Relevant threaded fixation holes are existent in plate.

For possibly required additional tensioning travel of the motor plate, the fork head of the pretensioning device can be set in one of the eleven hole positions of the friction plate (3).

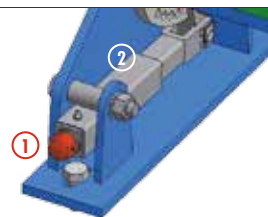
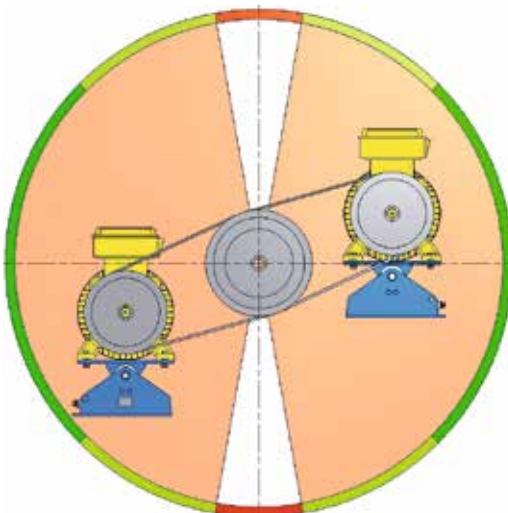
- 1 Motor plate
- 2 Side supports
- 3 Pretensioning devices = 2 devices
- 4 Rubber suspension element with cardanic bushings



Mounting instructions for MB 70

1 Determine of the ideal motorbase position

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

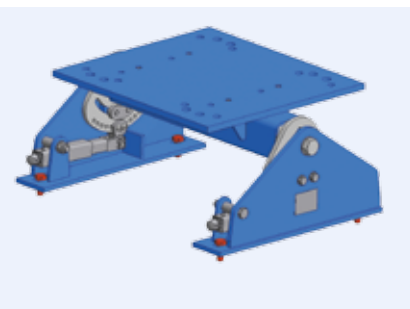


Do not use compressed-air power tools for tensioning!



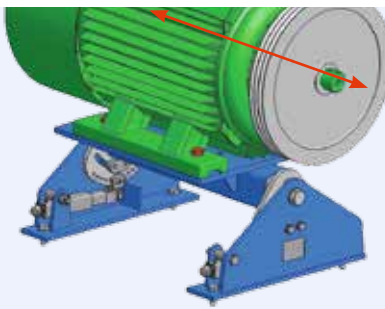
2 Support fixations

4 slotted holes 22x54 mm



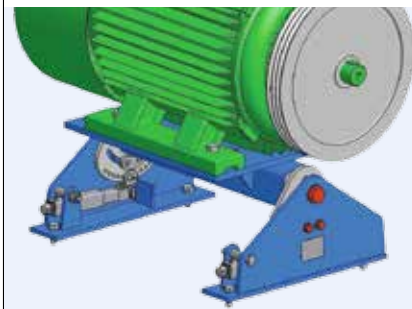
3 Alignment of pulleys and motor fixation

4 bolts according to relevant motor size



4 Loosen of the center bolts (element axis) and of the bolts on friction plates

46 mm wrench (M30) and
24 mm wrench (M16)

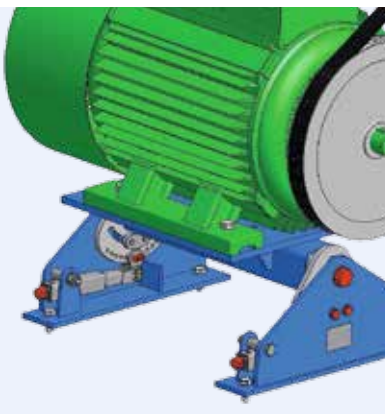


5 Insert and tension the belts, control belt test force

Tensioning of the belts according to belt suppliers recommended test force (table on page 5.5). Adjust uniformly the 2 pretensioning devices with a 30 mm wrench (M20). Its operation area is limited by the vertical plates on the supports.

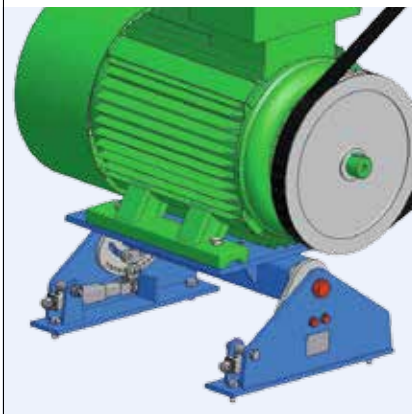
The adjustment yokes must be relocated before they hit the end stops

- 5.1 Tighten center bolts M30 and friction plate bolts M16
- 5.2 Release pretensioning device on one side and remove hex socket bolts M12
- 5.3 Move pretensioning device to line up with desired holes on friction plate
- 5.4 Reinstall hex socket bolts M12 and tighten (86 Nm)
- 5.5 Extend the pretensioning device to remove slack
- 5.6 Go to step 5.2 to 5.5 and proceed with the opposite pretensioning device
- 5.7 After both tensioners are relocated, continue with step 4 to 6



6 Tighten of the center and fixing bolts (friction plates), start of operation

46 mm wrench (M30),
locking torque 1400 Nm and
24 mm wrench (M16),
locking torque 210 Nm.



Retension:

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