

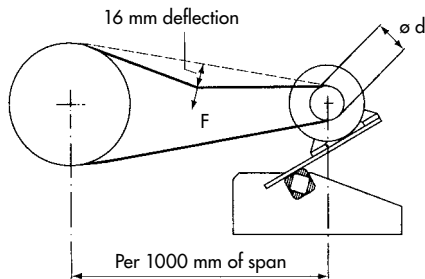
# Selection table of ROSTA-Motorbases according to the motor frame sizes

IEC			NEMA			Type of Motorbase	Details	Standard Design
Motor Frame Size	P [kW] 1000 min <sup>-1</sup> 6-pole motor	P [kW] 1500 min <sup>-1</sup> 4-pole motor	Motor Frame Size	P [HP] 1200 min <sup>-1</sup> 6-pole motor	P [HP] 1800 min <sup>-1</sup> 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 6–7	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 6–7	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 8–9	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 10–11	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 12–13	MB 100 
355S 355M 355L	132–160 200–250 200–250	200–250 250 250	586/7	250–350	300–350			

Directions regarding customized designs of motorbases on pages 14/15.  
In case of possibly not mentioned motor frame sizes, please contact **ROSTA**.

## 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.



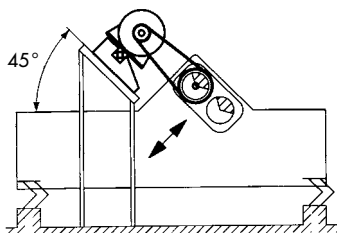
## Test force table by initial V-belt installation

(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
			$\geq 125$	28	22
XPA, SPA	13	10	80–100	28	22
			106–140	38	30
			150–200	45	36
			$\geq 200$	50	40
XPB, SPB	16	13	112–160	50	40
			170–224	62	50
			236–355	77	62
			$\geq 355$	81	65
XPC, SPC	22	18	224–250	87	70
			265–355	115	92
			$\geq 375$	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.)

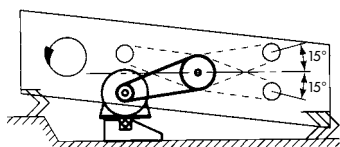
## Usual positioning of the ROSTA Motorbase in screen drive applications



Linear Motion Screen  
"Low-Head" Types

### 1. "Overhead" Configuration

Base plate "center mounted" on ROSTA element. Plate position horizontally on base. Installation of the entire base 45° inclined (aligned to exciter).



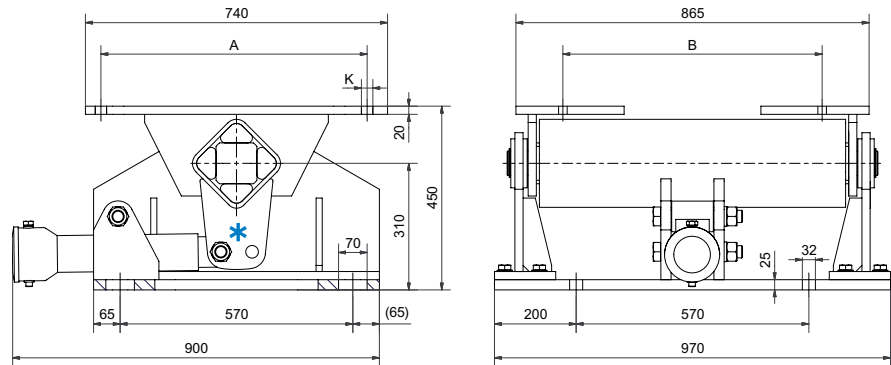
Circular Motion Screen  
"Ripple-Flow" Types

### 2. "Along-Side" Configuration

Base plate "center mounted" on ROSTA element. Plate position horizontally on base. Motor shaft min. 15° above or below the driven eccentric shaft.



## Motorbase Type MB 100

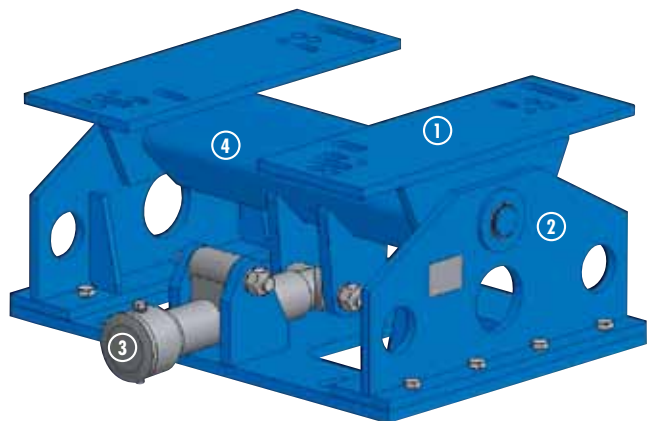


Art.-No.	Type	IEC				NEMA				Weight [kg]
		Motor Frame Size	A	B	K	Motor Frame Size	A	B	K	
02 200 900	MB 100×750	315M	508	457	28	447T	457	508	21	490
		315L	508	508	28	449T	457	635	21	
		355S	610	500	28	586/7	584	560	30	
		355M	610	560	28					
		355L	610	630	28					

Details regarding special designs, see pages 14/15.

\* For possibly required longer tensioning travel of the motor L-supports, the pretensioning device (3) shall be bolted into the front holes of the fork-head on the rubber suspension element.

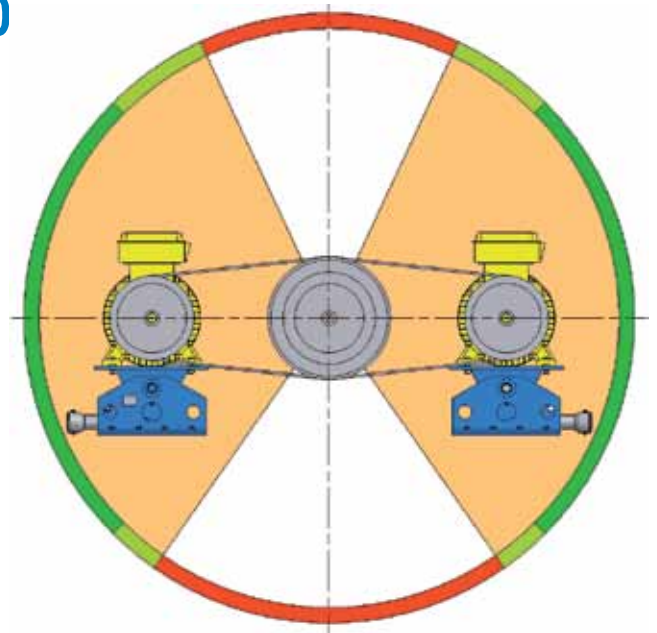
- 1 Motor L-supports
- 2 Side supports
- 3 Pretensioning device
- 4 Rubber suspension element



# Mounting instructions for MB 100

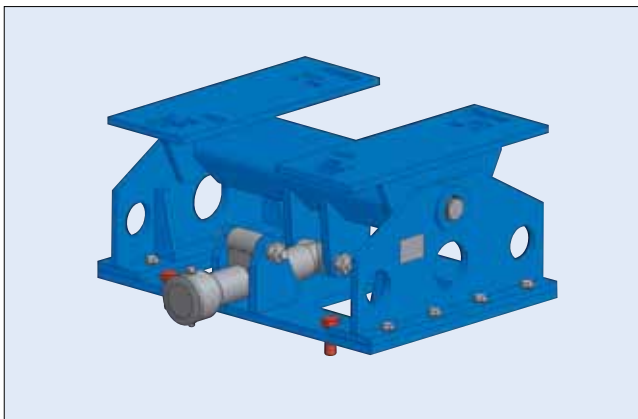
## 1 Ascertainment of the ideal motorbase position

- longest tensioning travel, ideal position of the MB
- sufficient travel of the MB
- in this position, insufficient travel is given (contact **ROSTA**)



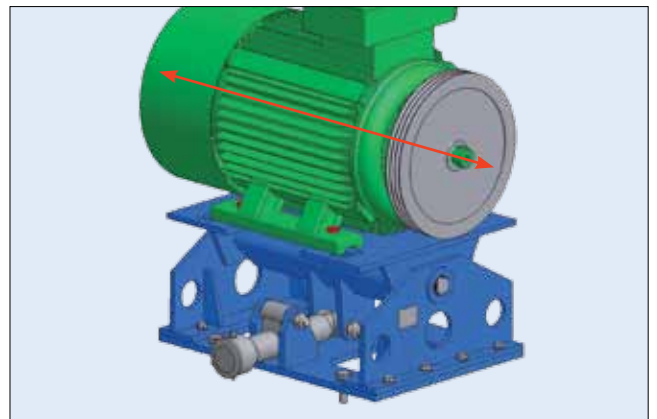
## 2 Support fixation

4 oblong holes 32×70 mm



## 3 Alignment of pulleys and motor fixation

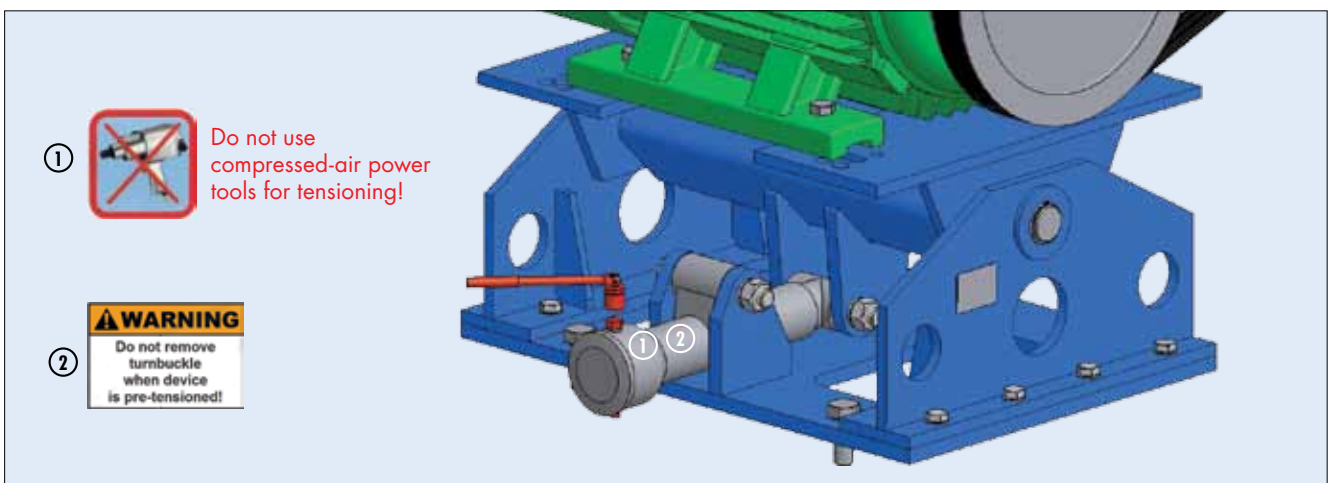
4 screws according relevant motor size



## 4 Insert and tension the belts, control belt test force

Tensioning of the belts according to belt suppliers recommended test force (table on page 5).

Adjust tension with 24 mm hook wrench



### Retension:

Generally retensioning is not necessary, however, we recommend to control the belt tension after a few days of operation (after "running-in" of the belts).