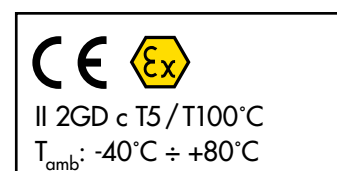


Selection table of ROSTA Motorbases according to the motor frame sizes

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			
various	up to 350	up to 550	various	up to 650	up to 750	MB 100 × 1500	–	MB 100 special on request

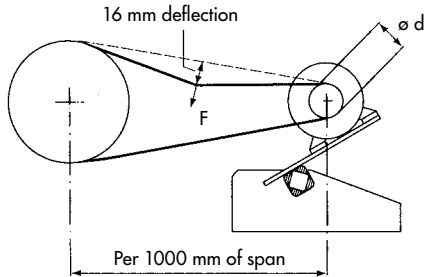
Customized designs of motorbases on pages 5.14–5.15.
For not mentioned motor frame sizes, please contact **ROSTA**.

ATEX certified designs for category 2 (zone 1/21) 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_{T1}^* [N]	Operational 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.

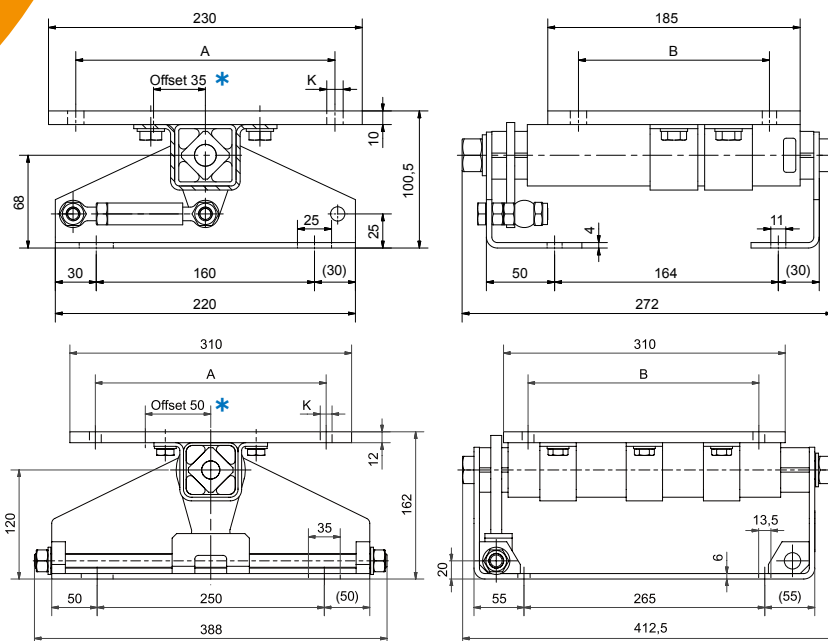
Screen drive applications		
<p>„Overhead“ Configuration</p>	<p>„Along-Side“ Configuration</p> <p>Motor ca. +15° to +45° Motor ca. -15° to -45°</p>	<p>„Foot-Mounting“ Configuration, Feeder</p> <p>Extended “off-set” and larger Motorbase size recommended.</p>
Pump drive applications		
<p>„Overhead“ Configuration</p> <p>Motor plate „off-set“, towards the pretensioning device.</p>	<p>„Along-Side“ Configuration</p>	<p>Crusher applications</p> <p>Variable Loads</p> <p>Motor plate „off-set“, towards the pretensioning device.</p>

Motorbases Type MB 27 Type MB 38



MB 27 × 120

MB 38 × 300



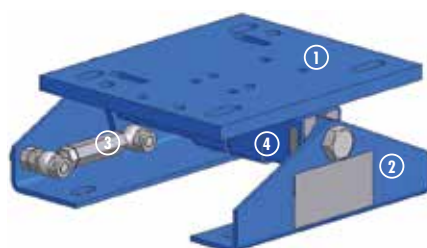
Art. No.	Type	IEC			NEMA			Weight [kg]		
		Motor Frame Size	A	B	K	Motor Frame Size	A		B	K
02200201	MB27 × 120	90S	140	100	10.5	143T	140	102	10.5	8
		90L	140	125	10.5	145T	140	127	10.5	
		100L	160	140	10.5	182T	190	114	10.5	
		112M	190	140	10.5	184T	190	140	10.5	
02000301	MB38 × 300	132S	216	140	M10	213T	216	140	M10	26
		132M	216	178	M10	215T	216	178	M10	
		160M	254	210	13	254T	254	210	13	
		160L	254	254	13	256T	254	254	13	

Details regarding special designs, see pages 5.14–5.15.

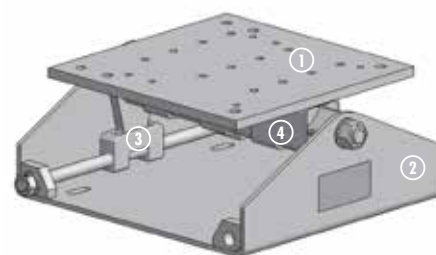
Design **ATEX** with specific Art. No., example MB27 × 120: 02300201. Details ATEX on page 5.4.

* Is the resulting tension-travel of the motorbase not effectual, we recommend to position the motor plate in "off-set" configuration, offering enlarged compensation travel.

- 1 Motor plate
- 2 Side supports
- 3 Pretensioning device
- 4 Rubber suspension element with brackets
(MB 27: 2 brackets / MB 38: 3 brackets)



MB 27 × 120
Steel parts blue painted



MB 38 × 300
Steel parts galvanized

Mounting instructions for MB 27 and MB 38

1 Determine of the ideal motorbase position

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

ROSTA

MB 27

MB 38

2 Support fixations

MB 27:
4 slotted holes 11 x 25 mm

MB 38:
4 slotted holes 13.5 x 35 mm

3 Alignment of pulleys and motor fixation

4 bolts according to relevant motor size

4 Loosen of the shaft bolt (element axis)

MB 27: 24 mm wrench (M16) and
MB 38: 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 (table on page 5.5).

MB 27: by means of threaded bushing with 16 mm wrench (M10)

MB 38: by means of threaded shaft with 24 mm wrench (M16 x 1.5)

6 Tighten of the shaft bolt (element axis), start of operation

MB 27: 24 mm wrench (M16), locking torque 210 Nm and
MB 38: 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.