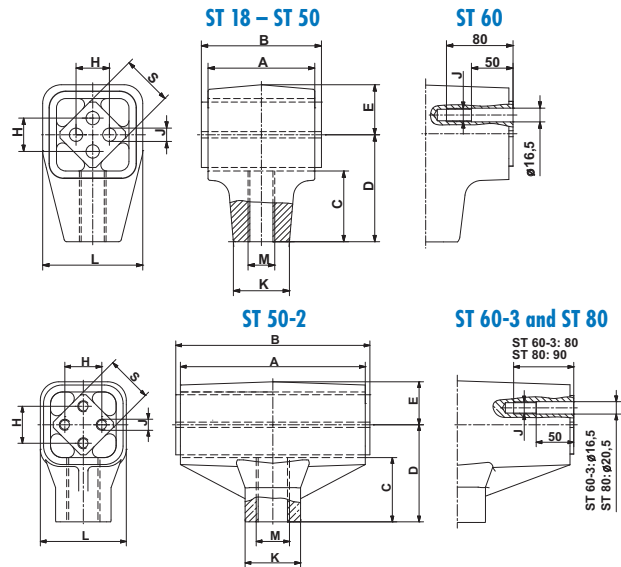


Drive Heads

Type ST



		F max. [N]	n _s [min ⁻¹] max. α _{ST} ± 5°													Weight [kg]	Material structure	Bolting on inner square		
Art. No.	Type			A	B	C	D	E	H	J ^{+0.5} □K	L	M	□S							
07 031 001	ST 18	400	600	50	55 ⁰ _{-0.3}	31.5	45	20	12 ± 0.3	6	22	39	M12 M12-LH	18	0.2	Light metal casting	Light metal profile	End-to-end screw or threaded bar quality 8.8		
07 041 001	ST 18L																			
07 031 002	ST 27	1'000	560	60	65 ⁰ _{-0.3}	40.5	60	27	20 ± 0.4	8	28	54	M16 M16-LH	27	0.4					
07 041 002	ST 27L																			
07 031 003	ST 38	2'000	530	80	90 ⁰ _{-0.3}	53	80	37	25 ± 0.4	10	42	74	M20 M20-LH	38	1.1					
07 041 003	ST 38L																			
07 031 004	ST 45	3'500	500	100	110 ⁰ _{-0.3}	67	100	44	35 ± 0.5	12	48	89	M24 M24-LH	45	1.8					
07 041 004	ST 45L																			
07 031 005	ST 50	6'000	470	120	130 ⁰ _{-0.3}	69.5	105	47	40 ± 0.5	M12 x 40	60	93	M36 M36-LH	50	5.5		Nodular cast iron		Housing ROSTA blue painted	screw quality 8.8
07 041 005	ST 50L																			
07 031 015	ST 50-2	10'000	470	200	210 ⁰ _{-0.3}	69.5	105	47	40 ± 0.5	M12 x 40	60	93	M36 M36-LH	50	6.9					
07 041 015	ST 50-2L																			
07 031 026	ST 60	13'000	440	200	210 ± 0.2	85	130	59	45	M16	80	117	M42 M42-LH	60	15.6					
07 041 026	ST 60L																			
07 031 016	ST 60-3	20'000	440	300	310 ± 0.2	85	130	59	45	M16	75	117	M42 M42-LH	60	20.2	Steel	ROSTA blue painted	Shoulder studs quality 8.8 for optimizing frictional connection		
07 041 016	ST 60-3L																			
07 031 027	ST 80	27'000	380	300	310 ± 0.2	100	160	77	60	M20	90	150	M52 M52-LH	80	36.7					
07 041 027	ST 80L																			

n_s = max. revolutions by oscillation angle ± 5°; if osc. angle is below, higher rpm's are applicable, consult "permissible frequencies" in the Technology part of the ROSTA general catalogue.

F_{max} → Calculation of the acceleration force F on page 2.22.

Length of driving rod A_{ST} and eccentric radius R

To follow the guidelines of the permissible frequencies the angle of oscillation α_{ST} should not exceed ± 5.7°. This angle is corresponding to the ratio R : A_{ST} of 1 : 10.

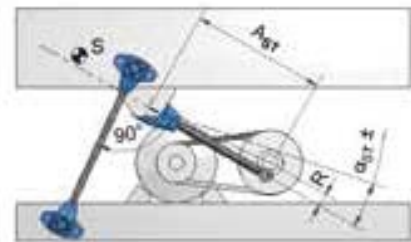
Calculation of the oscillation angle for ST

Eccentric radius R [mm]
Center distance A_{ST} [mm]
Oscillation angle α_{ST} ± [°]

$$\alpha_{ST} = \arcsin\left(\frac{R}{A_{ST}}\right) [^\circ]$$

Installation guidelines

For the installation of the drive heads type ST under the trough-bottom it requires a stiff structure, ideally a heavy and rather long frame construction surrounding the power input from the eccentric drive. Too light and too short mounting structures for the drive heads could be submitted to early material fatigue and generate cracks on the feeding trough. The drive heads have to be installed fully free of play (frictional connection). By multiple power transmission with several drive heads, all driving rods have to be adjusted on exactly the same length. The force transmission from the eccentric drive should stay **right-angled** to the guiding rocker arms. This supports a smooth course of the shaker.



Series connection of 4 pcs. ST 50