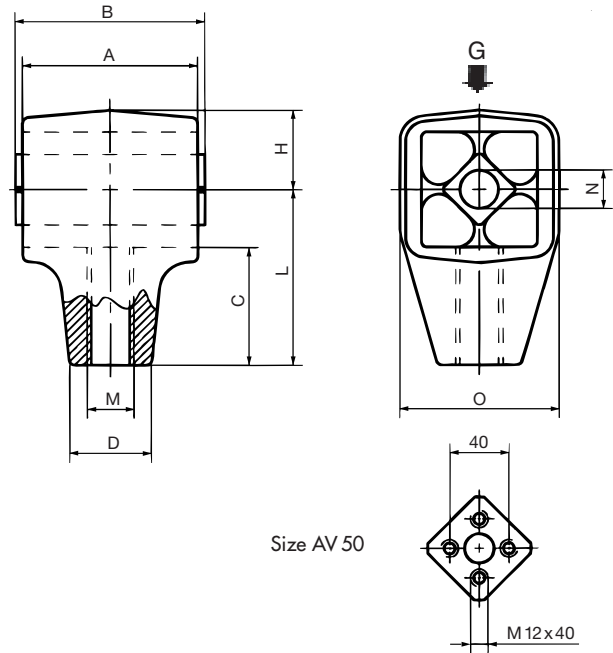




Oscillating Mounting

Type AV



Art. No.	Type	G	Dimensions in mm									Weight in kg
			A	B ^{-0.3}	C	D	H	L	M	N	O	
07 261 001	AV 18	600– 1600	60	65	40.5	28	27	60	M16	13 ^{-0.2}	54	0.38
07 271 001	AV 18L	600– 1600	60	65	40.5	28	27	60	M16L	13 ^{-0.2}	54	0.38
07 261 002	AV 27	1300– 3000	80	90	53	42	37	80	M20	16 ^{+0.5} +0.3	74	0.99
07 271 002	AV 27L	1300– 3000	80	90	53	42	37	80	M20L	16 ^{+0.5} +0.3	74	0.99
07 261 003	AV 38	2600– 5000	100	110	67	48	44	100	M24	20 ^{+0.5} +0.2	89	1.74
07 271 003	AV 38L	2600– 5000	100	110	67	48	44	100	M24L	20 ^{+0.5} +0.2	89	1.74
07 261 004	AV 40	4500– 7500	120	130	69.5	60	48	105	M36	20 ^{+0.5} +0.2	93	4.50
07 271 004	AV 40L	4500– 7500	120	130	69.5	60	48	105	M36L	20 ^{+0.5} +0.2	93	4.50
07 261 005	AV 50	6000– 16000	200	210	85	80	60	130	M42	–	116	12.29
07 271 005	AV 50L	6000– 16000	200	210	85	80	60	130	M42L	–	116	12.29

G = max. load capacity in N per mount or rocker arm

Material Structure

The housings are made out of light metal die cast, housing of type AV 50 in nodular cast. Inner squares are light alloy profiles.

Typical Calculation

Given:

Total weight of oscillating mass m = 800 kg
 Circular oscillating, amplitude sw = 40 mm
 (peak to peak)

Wanted:

Element size, configuration and center distance A

$$\text{Load per arm } G = \frac{m \cdot g}{z} = \frac{800 \cdot 9.81}{4} = 1962 \text{ N}$$

Selected: 8 pcs. AV 27 (4 arms consisting of 2 AV 27, crosswise installed for purely circular motion). Eventually with right- and left-hand threads.

Permissible center distance A by max. oscillation angle of 2° and radius = 20 mm:

$$A = \frac{20}{\text{tg} 2^\circ} = \frac{20}{0.0349} = 572.72 \text{ mm}$$

Selected: Center distance = 600 mm



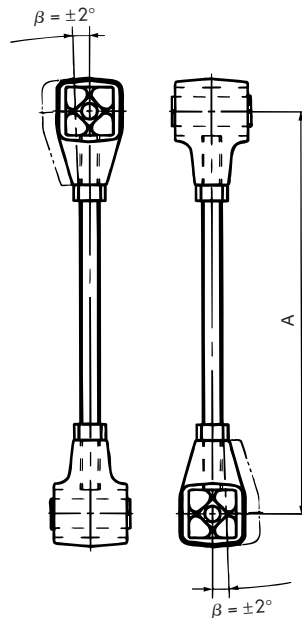
Oscillating Mounting

Type AV

Installation:

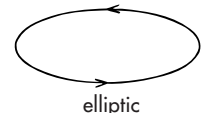
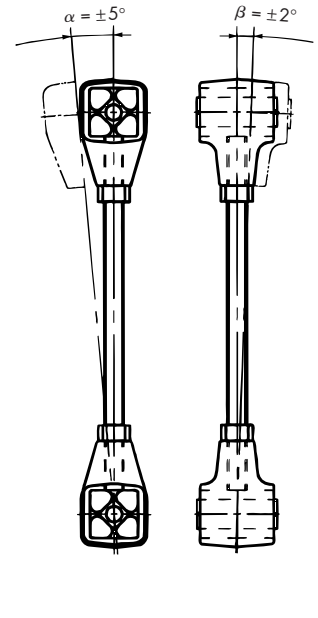


Fig. I



circular

Fig. II



elliptic

Motion:

Fig. I: Element configuration "crosswise" (element axis offset 90°) for guiding *circular motions* of gyratory sifters.
Max. angle $\beta = \pm 2^\circ$

Fig. II: Element configuration "parallel" (e.g. for support of Rotex-type screens) for guiding *elliptic motions*.
Max. angle $\alpha = \pm 5^\circ$
Max. angle $\beta = \pm 2^\circ$

The connection rod with nuts and spring washers has to be supplied by the customer.

Installation

The length of the connection rod and the resulting centrifugal force determine the radius of the circular motion of the hanging gyratory screen or sifter. The rocker on the sifter should be fixed close to the centre of gravity (S) or slightly below the centre of gravity of the oscillating machine part (see sketch).

The standardised right- or left-hand threads of the AV elements allow a very easy adjustment of the four rocker arms (L) and thus of the length (A).

Use central screws (M12, M16, M20, and M24) to connect the rocker arm and the ceiling structure for elements sizes AB 18, 27, 38 and 45. For the AV 50 size use four M12 screws on both ends.

