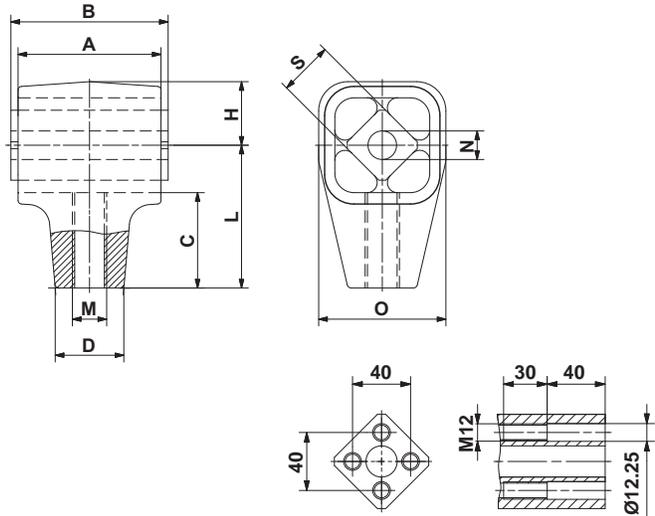


# Oscillating Mountings for hanging Gyrotary Sifters

## Type AV



Inner square AV 50 and AV 50L

Oscillating Mountings

| Art. No.   | Type          | G [N] per suspension | Dimensions |             |      |    |    |     |        |                     |     |    |  |
|------------|---------------|----------------------|------------|-------------|------|----|----|-----|--------|---------------------|-----|----|--|
|            |               |                      | A          | B $\pm 0.2$ | C    | □D | H  | L   | M      | ∅N                  | O   | □S |  |
| 07 261 001 | <b>AV 18</b>  | 600 – 1'600          | 60         | 65          | 40.5 | 28 | 27 | 60  | M16    | 13 $_{-0.2}^{0}$    | 54  | 18 |  |
| 07 271 001 | <b>AV 18L</b> |                      |            |             |      |    |    |     | M16-LH |                     |     |    |  |
| 07 261 002 | <b>AV 27</b>  | 1'300 – 3'000        | 80         | 90          | 53   | 42 | 37 | 80  | M20    | 16 $_{+0.3}^{+0.5}$ | 74  | 27 |  |
| 07 271 002 | <b>AV 27L</b> |                      |            |             |      |    |    |     | M20-LH |                     |     |    |  |
| 07 261 003 | <b>AV 38</b>  | 2'600 – 5'000        | 100        | 110         | 67   | 48 | 44 | 100 | M24    | 20 $_{+0.2}^{+0.5}$ | 89  | 38 |  |
| 07 271 003 | <b>AV 38L</b> |                      |            |             |      |    |    |     | M24-LH |                     |     |    |  |
| 07 261 014 | <b>AV 40</b>  | 4'500 – 7'500        | 120        | 130         | 69.5 | 60 | 47 | 105 | M36    | 20 $_{+0.2}^{+0.5}$ | 93  | 40 |  |
| 07 271 014 | <b>AV 40L</b> |                      |            |             |      |    |    |     | M36-LH |                     |     |    |  |
| 07 261 005 | <b>AV 50</b>  | 6'000 – 16'000       | 200        | 210         | 85   | 80 | 59 | 130 | M42    | -                   | 116 | 50 |  |
| 07 271 005 | <b>AV 50L</b> |                      |            |             |      |    |    |     | M42-LH |                     |     |    |  |

G = max. load in N per suspension  
Elements for higher load on request

| Art. No.   | Type          | Weight [kg] | Material structure  |                     |   | Bolting on inner square                       |
|------------|---------------|-------------|---------------------|---------------------|---|---|
|            |               |             | Inner square        | Housing             | Protection                                    |   |
| 07 261 001 | <b>AV 18</b>  | 0.4         | Light metal profile | Light metal casting | ROSTA blue painted                            | End-to-end screw or threaded bar quality 8.8. |
| 07 271 001 | <b>AV 18L</b> |             |                     |                     |   |   |
| 07 261 002 | <b>AV 27</b>  |             |                     |                     |   |   |
| 07 271 002 | <b>AV 27L</b> |             |                     |                     |   |   |
| 07 261 003 | <b>AV 38</b>  | 1.7         |                     | Nodular cast iron   | ROSTA blue painted                            | End-to-end screw or threaded bar quality 8.8. |
| 07 271 003 | <b>AV 38L</b> |             |                     |                     |   |   |
| 07 261 014 | <b>AV 40</b>  | 5.0         |                     | Nodular cast iron   | ROSTA blue painted                            | End-to-end screw or threaded bar quality 8.8. |
| 07 271 014 | <b>AV 40L</b> |             |                     |                     |   |   |
| 07 261 005 | <b>AV 50</b>  | 12.3        | Nodular cast iron   | ROSTA blue painted  | End-to-end screw or threaded bar quality 8.8. |   |
| 07 271 005 | <b>AV 50L</b> |             |                     |                     |   | M12 shoulder studs quality 8.8.               |

### General advises

The operating parameters shall not exceed the guidelines of the "frequency spectrum", see Technology part in the ROSTA general catalogue.

**The threaded connection rod has to be provided by the customer.**

## Calculation Example

| Description   | Symbol      | Example Unit           | Calculation formula   |
|---|-------------|------------------------|---|
| Total oscillating mass (material included)                              | m           | 800 kg                 | <b>Angle of oscillation</b><br>$\beta = \arctan\left(\frac{R}{X}\right) [^\circ]$ |
| Eccentric radius ②  | R           | 20 mm                  |   |
| Length of suspension rod  | X           | 600 mm                 |   |
| Angle of oscillation (out of R and X), shall not exceed $\pm 2^\circ$ ② | $\beta \pm$ | $1.9^\circ$            | <b>Load per suspension rod</b><br>$G = \frac{m \cdot g}{z} [N]$                   |
| Revolutions   | $n_s$       | $230 \text{ min}^{-1}$ |   |
| Quantity of suspension rods   | z           | 4 pcs.                 |   |
| Load per suspension rod   | G           | 1962 N                 |   |
| Max. load capacity per rod with AV 27 mountings                         | $G_{\max}$  | 3000 N                 |   |

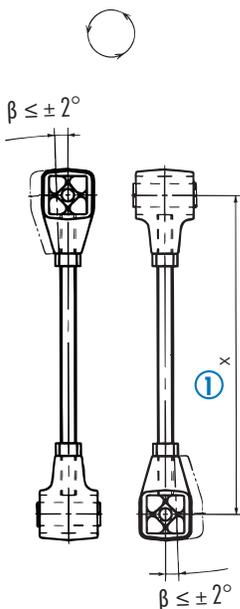
### Element Selection:

**4 pcs. AV 27 and 4 pcs. AV 27 L** (left-hand threaded), the two AV elements per suspension rod have to be installed crosswise ( $90^\circ$  offset).

## Installation guidelines for AV mountings

- ① With the right-hand and left-hand threaded connection in the AV housing the length X of the suspension rod can easily be adjusted, this length has to be identical for all four suspension rods. **The indicated angular oscillating limitations have to be respected!**
- ② Only the **crosswise** ( $90^\circ$  offset) installation of the two AV elements per suspension rod is guaranteeing for a harmonic and circular motion of the screen-box.
- ③ The crosswise installation of the AV elements has to be identical on all four suspension rods, e.g. all upper AV mounts shall stay  $90^\circ$  offset. (For the suspension or support of the discharge-ends of "ROTEX" sifter types the two elements per rod shall stay parallel to each other.)
- ④ To avoid unwanted tilting motions or screen-box distortions (by standstill) we do recommend the installation of the lower AV-brackets on the level of the center of gravity "S" of the screen-box.
- ⑤ Please consult ROSTA by the selection of AV elements for staying, free oscillating gyratory sifters.

② circular oscillation



③ elliptical oscillation

