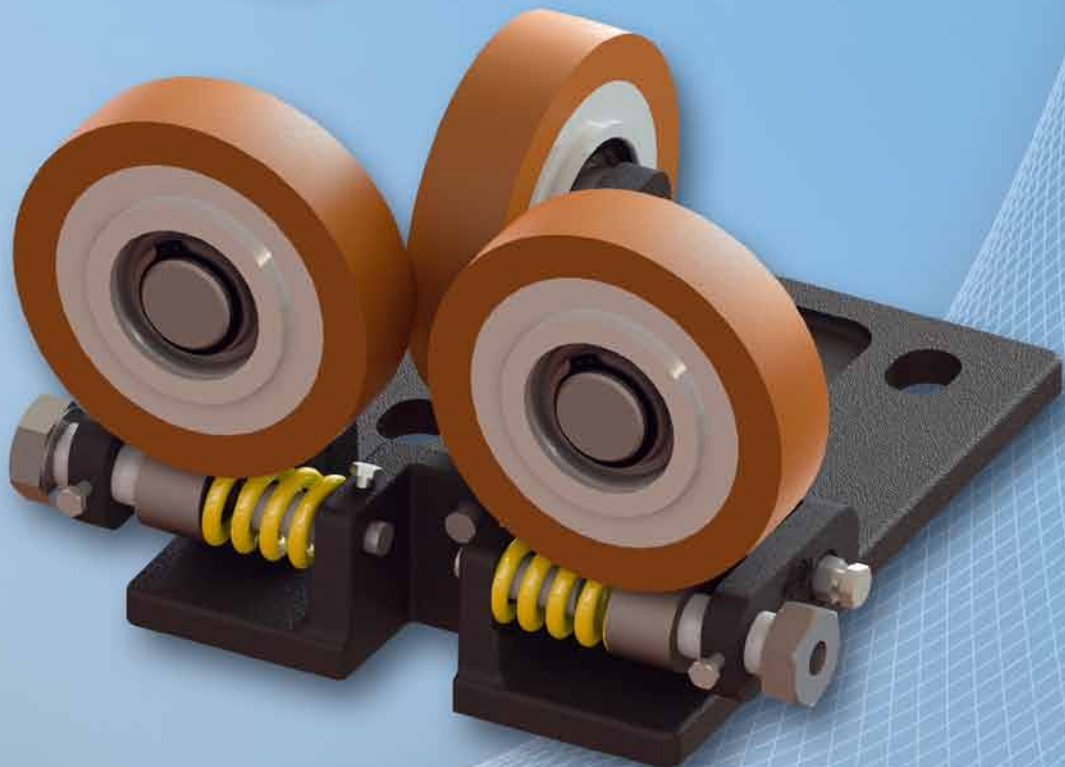
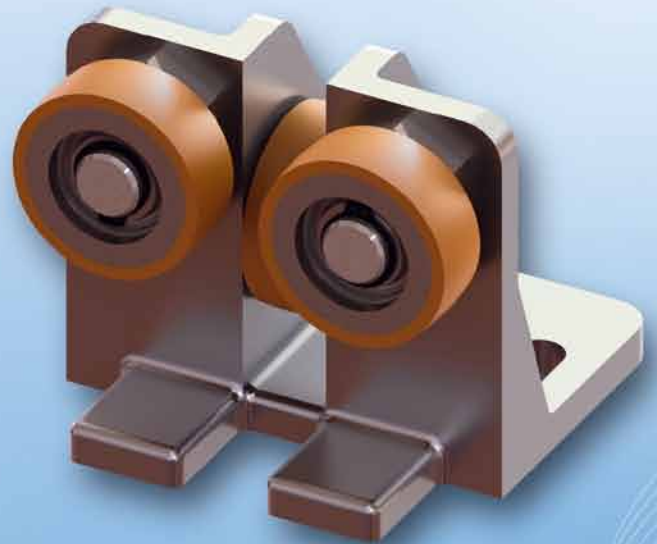
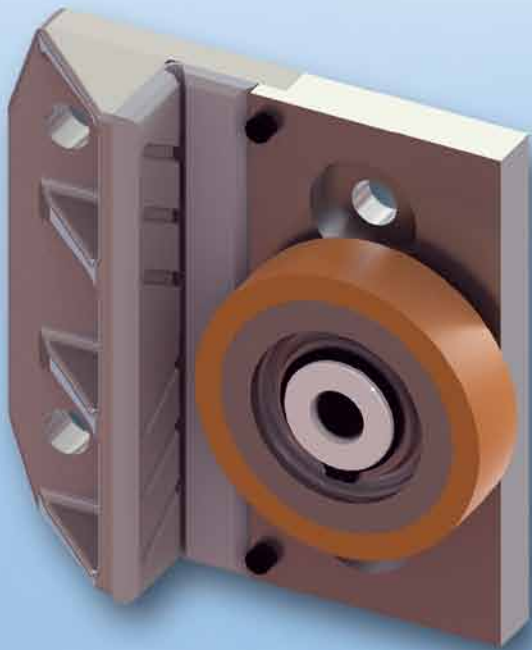


# Roller Guides for Lift Engineering



| Contents                                       |                                           | Page |
|------------------------------------------------|-------------------------------------------|------|
| Practicable Roller Guides for Lift Engineering |                                           | 3    |
| Roller Guide <b>AR 0.1</b>                     | Roller Guide <b>AR 0</b>                  | 4    |
| Roller Guide <b>AR 1</b>                       | Roller Guide <b>AR 1B</b>                 | 5    |
| Roller Guide <b>AR 3</b>                       | Angled Roller Guide <b>ARW 2</b>          | 8    |
| Spring loaded Roller Guide <b>AR 1F</b>        | Spring loaded Roller Guide <b>AR 3F</b>   | 9    |
| Roller Sliding Guide <b>HSM RGW</b> ø 125      | Roller Sliding Guide <b>HSM RGW</b> ø 150 | 10   |
| Roller Sliding Guide <b>HSM RG</b>             | Roller Sliding Guide <b>HSML RG</b>       | 11   |

**ACLA-Roller Guides are distinguished by a thought-out design**

The ACLA-RollerGuide program consisting of many roller guides and roller sliding guides is designed for high-speed electric and hydraulic lifts.

With the roller guides the construction principle of the excentrically or by oblong holes adjustable king pins enable a correct adaption to the existing rail. Depending on type of roller guide an infinitely variable adjustment to rail widths from 4 to 36 mm is possible in an easy way by means of a fixed spanner or socket wrench.

The base supports of special alloy and steel used assure an excellent stability of the complete roller guide units.

**Exact dimensioning of the rollers used**

The experience of ACLA-WERKE in lift engineering for many years and the know-how as manufacturer of high-quality polyurethane elastomers enable our technicians to achieve an exact dimensioning of the rollers used for the individual application.

In combination with the choice of the appropriate polyurethane elastomer the ACLA rollers proved successful in roller guide units with excellent load values on a worldwide scale.

**Rollers of ACLATHAN®**

The premounted rollers of the high-quality polyurethane elastomer ACLATHAN for the lift industry offer the following advantages for the application:

- low rolling resistance
- high loading capacity
- excellent abrasion and wear resistance
- low oscillation on account of high concentricity
- silent running
- maintenance-free
- oil-resistant
- minimum compression set (flattening) after temporary standstill



type: AR 0.1

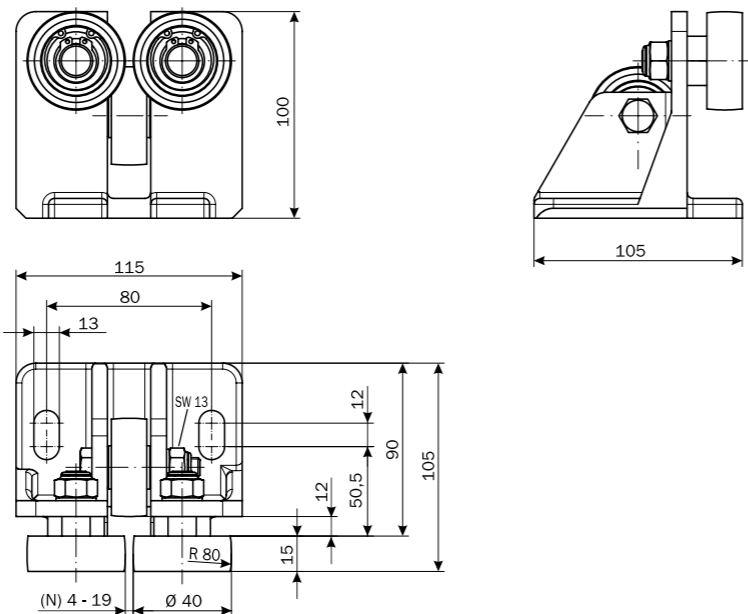
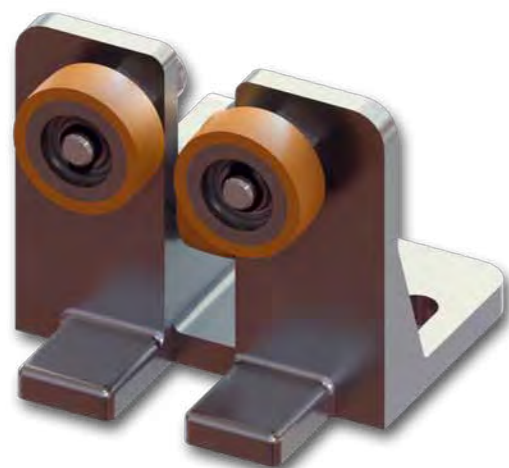
**ACLA-Roller Guides are deliverable with roller dias. from 40 to 200 mm**



type: AR 3

## Roller Guide AR 0.1

ø 40 x 15



### Design Details

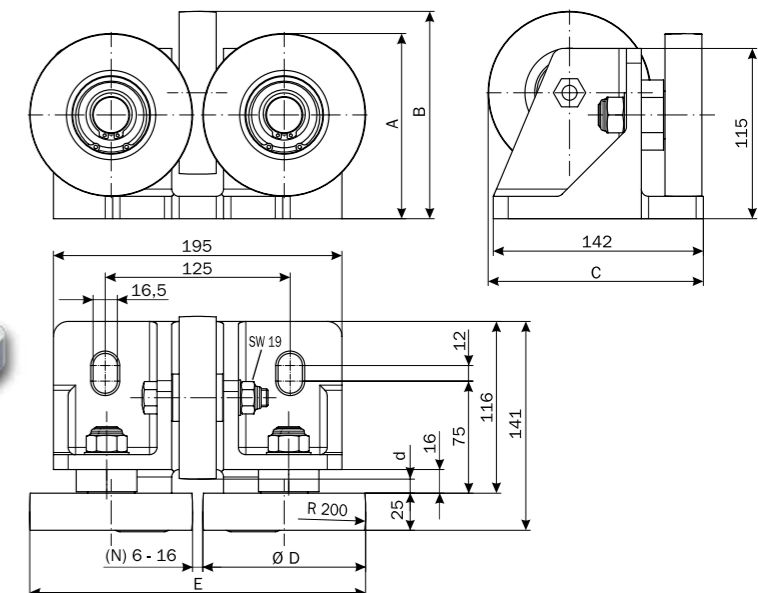
- Infinitely adjustable to rail width from **4 to 19 mm** in no time. A gap between roller and rail of 0,1 to 0,5 mm has to be considered
- King pins adjustable in the oblong holes, SW 19
- The breaking limit of the base support is ca. 10 kN

| art. no.  | rollers<br>ø D x b | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |     |     |
|-----------|--------------------|---------------------------|------------------------------------------------|-----|-----|
|           |                    |                           | 0,63                                           | 1,0 | 2,5 |
| 142294.04 | 40 x 15            | 1,15                      | 630                                            | 600 | 570 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

## Roller Guide AR 1

ø 80 x 25 to ø 125 x 25



### Design Details

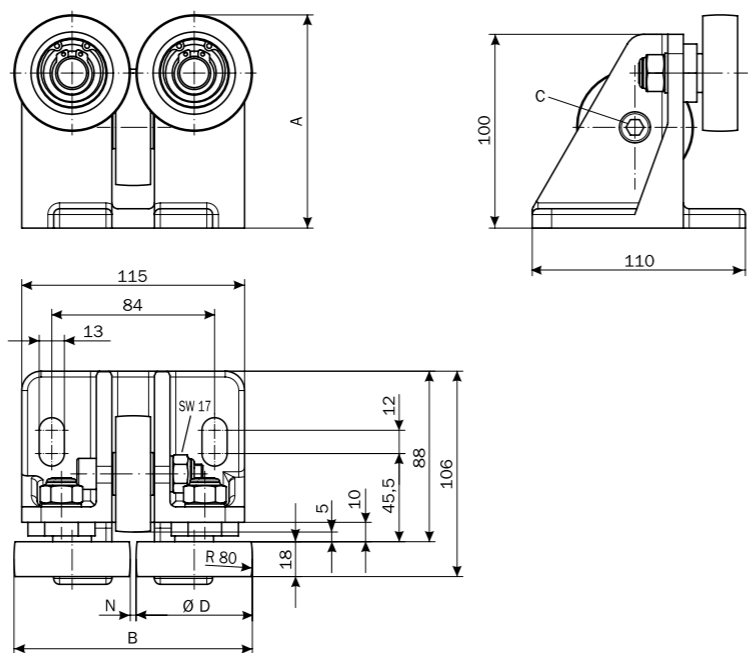
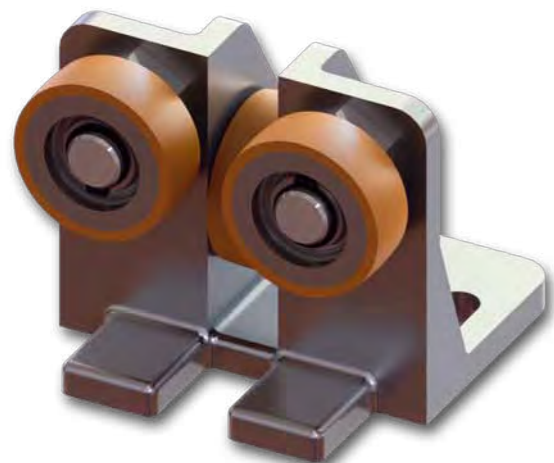
- Infinitely adjustable to rail width from **6 to 16 mm** in no time. A gap between roller and rail of 0,1 to 0,5 mm has to be considered
- Excentrically adjustable king pins, SW 41
- The breaking limit of the base support is ca. 40 kN

| art. no.  | rollers<br>ø D x b | no. of ball bearings | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |       |       | mounting dimensions |     |     |   |          |
|-----------|--------------------|----------------------|---------------------------|------------------------------------------------|-------|-------|---------------------|-----|-----|---|----------|
|           |                    |                      |                           | 0,63                                           | 1,0   | 2,5   | A                   | B   | C   | d | E        |
| 141895.04 | 80 x 25            | 1                    | 3,6                       | 1.830                                          | 1.790 | 1.480 | max. 103            | 130 | 110 | 4 | max. 177 |
| 141896.04 | 100 x 25           | 2                    | 5,1                       | 2.360                                          | 2.310 | 1.910 | max. 123            | 135 | 130 | 4 | max. 217 |
| 141897.04 | 125 x 25           | 2                    | 7,1                       | 3.120                                          | 2.980 | 2.570 | max. 149            | 146 | 153 | 2 | max. 267 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

## Roller Guide AR 0

ø 50 x 18 to ø 70 x 18



### Design Details

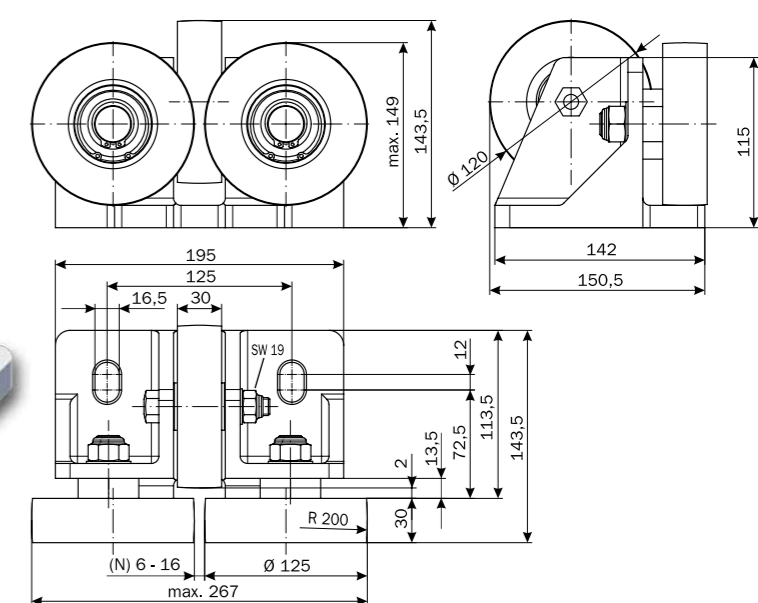
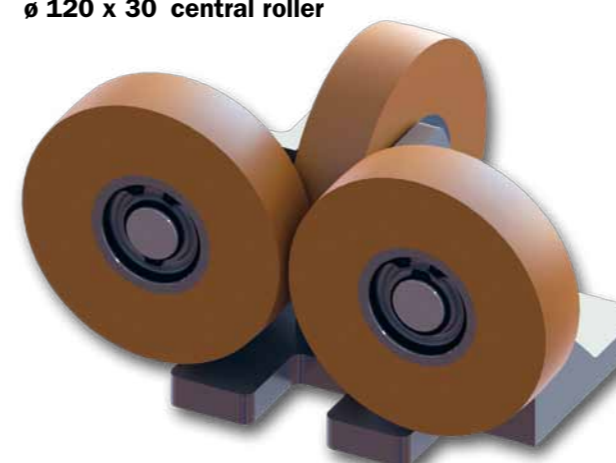
- Infinitely adjustable to rail width from **5 to 25 mm** in no time. A gap between roller and rail of 0,1 to 0,5 mm has to be considered
- Excentrically adjustable king pins, SW 30
- The breaking limit of the base support is ca. 30 kN

| art. no.  | rollers<br>ø D x b | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |       |       | mounting dimensions |          |        |                             |
|-----------|--------------------|---------------------------|------------------------------------------------|-------|-------|---------------------|----------|--------|-----------------------------|
|           |                    |                           | 0,63                                           | 1,0   | 2,5   | A                   | B        | N      | C                           |
| 142042.04 | 50 x 18            | 1,3                       | 1.000                                          | 960   | 900   | max. 110,5          | max. 126 | 5 - 25 | socket head cap screw, SW 8 |
| 142043.04 | 60 x 18            | 1,35                      | 1.200                                          | 1.100 | 1.050 | max. 115,5          | max. 141 | 5 - 20 | socket head cap screw, SW 8 |
| 142044.04 | 70 x 18            | 1,42                      | 1.300                                          | 1.250 | 1.200 | max. 120,5          | max. 161 | 5 - 20 | hexagon head screw, SW 17   |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

## Roller Guide AR 1B

ø 125 x 30 side rollers  
ø 120 x 30 central roller



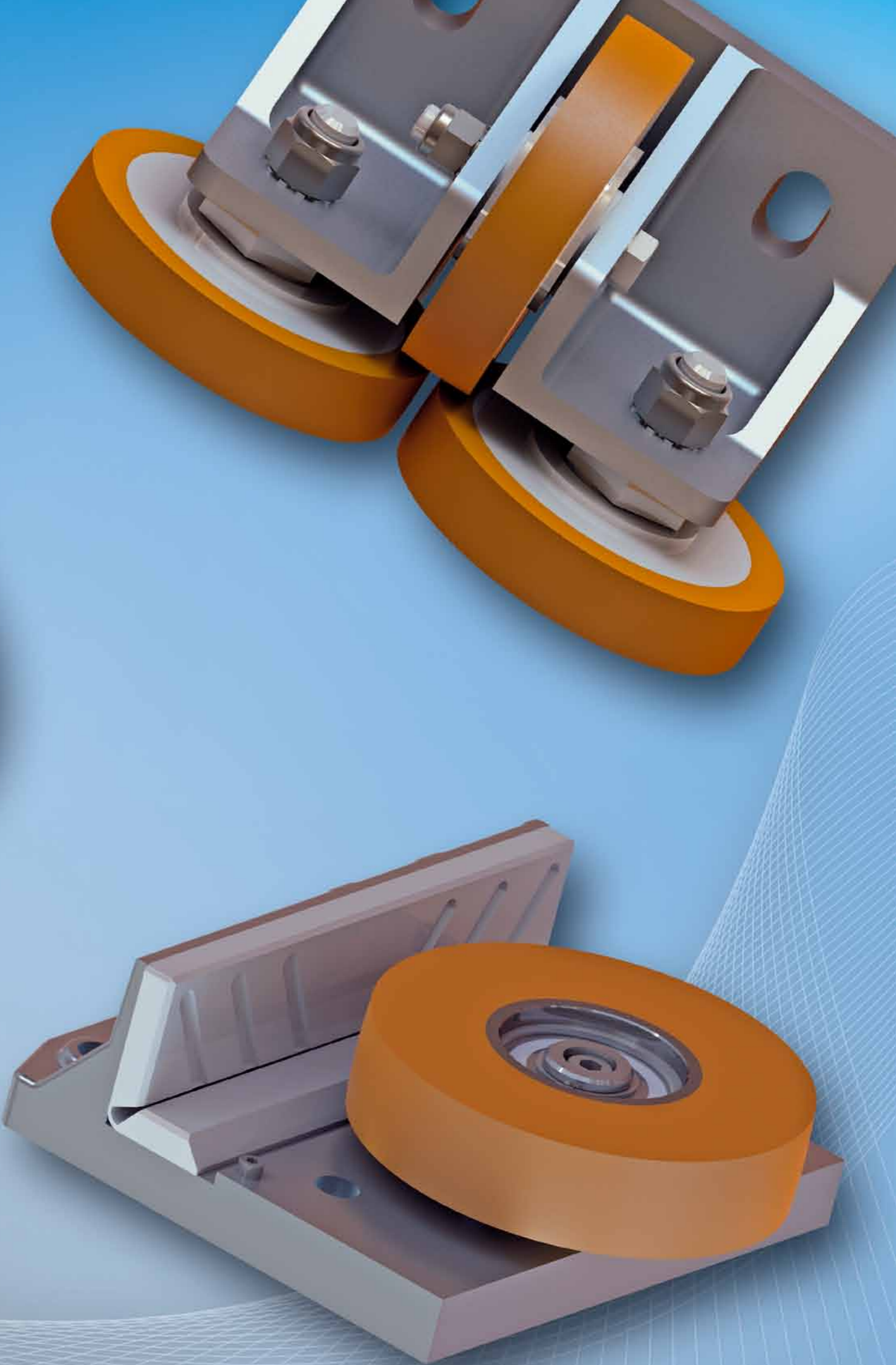
### Design Details

- Infinitely adjustable to rail width from **6 to 16 mm** in no time. A gap between roller and rail of 0,1 to 0,5 mm has to be considered
- Excentrically adjustable king pins, SW 41
- The breaking limit of the base support is ca. 40 kN

| art. no.  | rollers<br>ø D x b            | no. of ball bearings | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |       |       |
|-----------|-------------------------------|----------------------|---------------------------|------------------------------------------------|-------|-------|
|           |                               |                      |                           | 0,63                                           | 1,0   | 2,5   |
| 142621.04 | 125 x 30 (2 x side roller)    | 1                    | 4,5                       | 3.300                                          | 3.100 | 2.800 |
|           | 120 x 30 (1 x central roller) | 1                    |                           | 2.790                                          | 2.730 | 2.330 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

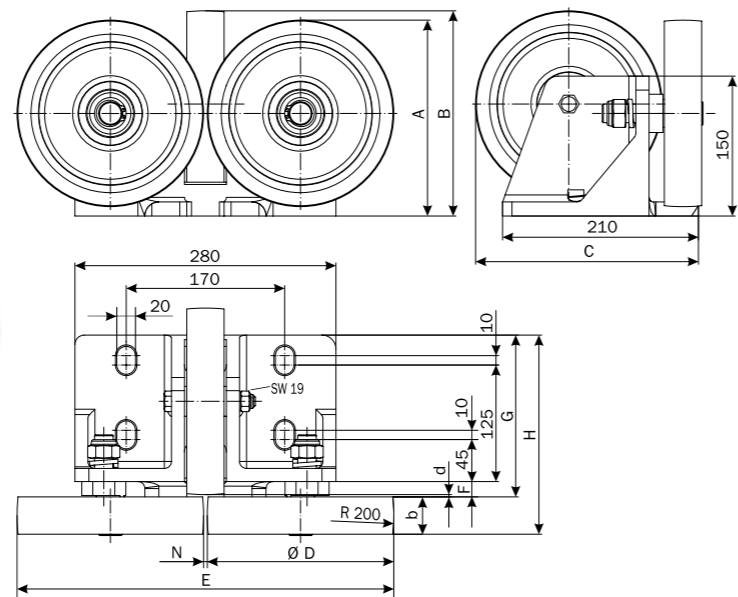
**ACLA roller guides:  
well conceived construction to the detail**



## Roller Guide AR 3

Ø 150 x 40 to Ø 200 x 40

Also available as „special execution“ with particularly high-quality installation components.



### Design Details

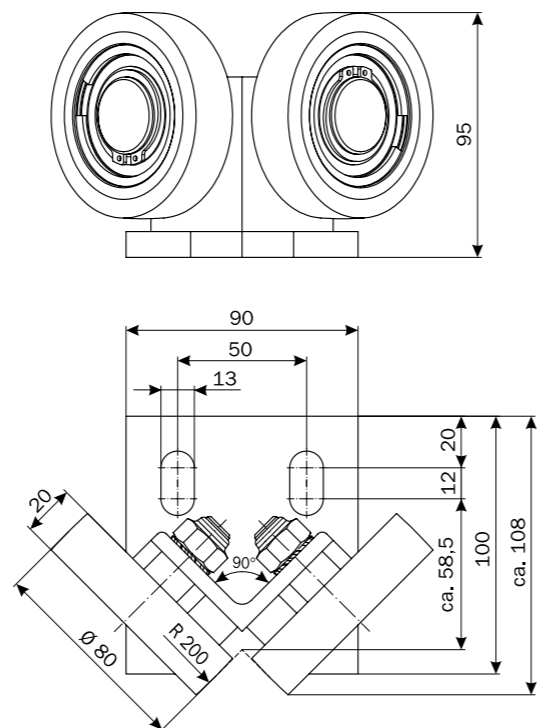
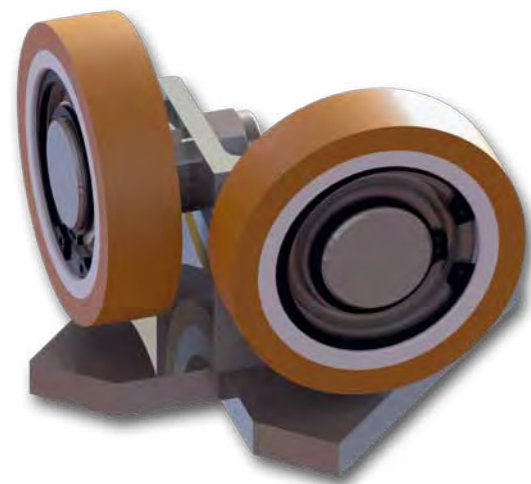
- Infinitely adjustable to rail width from **9 to 36 mm** in no time. A gap between roller and rail of 0,1 to 0,5 mm has to be considered
- Excentrically adjustable king pins, SW 41
- The breaking limit of the base support is ca. 40 kN

| art. no.   | rollers<br>Ø D x b | complete weight<br>ca. kg | no. of ball bearings | *max. load [N] per roller with v nominal [m/s] |       |       |       | mounting dimensions |     |     |     |          |         |      |       |       |
|------------|--------------------|---------------------------|----------------------|------------------------------------------------|-------|-------|-------|---------------------|-----|-----|-----|----------|---------|------|-------|-------|
|            |                    |                           |                      | 0,63                                           | 1,0   | 2,5   | 4     | A                   | B   | C   | d   | E        | N       | F    | G     | H     |
| 142 836.04 | 150 x 40           | 12                        | 2                    | 5.460                                          | 5.140 | 3.990 | 2.900 | max. 176            | 169 | 188 | 4,5 | max. 330 | 9 - 33  | 17,5 | 179,5 | 212,5 |
| 142 380.04 | 180 x 35           | 13                        | 2                    | 5.150                                          | 4.990 | 4.310 | 3.000 | max. 207            | 200 | 219 | 4,5 | max. 396 | 10 - 36 | 18,5 | 175,5 | 210,5 |
| 142 389.04 | 200 x 40           | 16                        | 2                    | 6.300                                          | 6.090 | 5.250 | 3.700 | max. 217            | 220 | 239 | 2,5 | max. 432 | 9 - 31  | 16,5 | 173,5 | 213,5 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

## Angled Roller Guide ARW 2

Ø 80 x 20



### Design Details

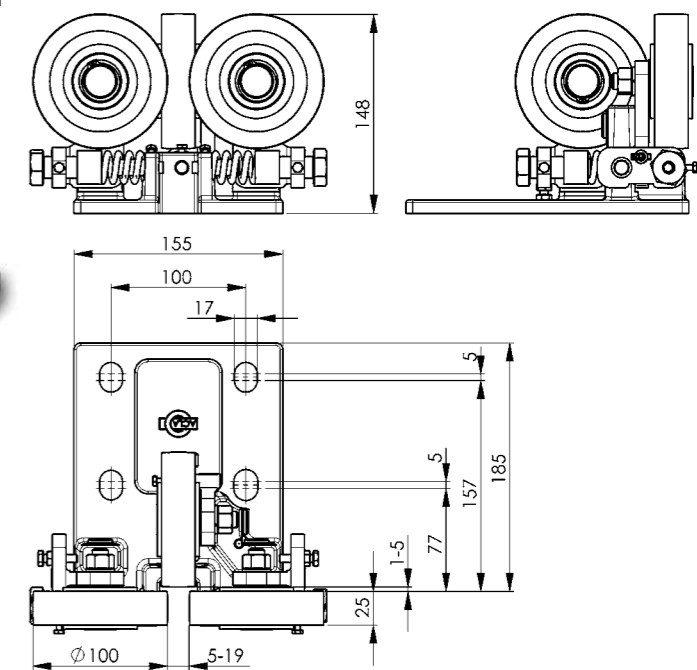
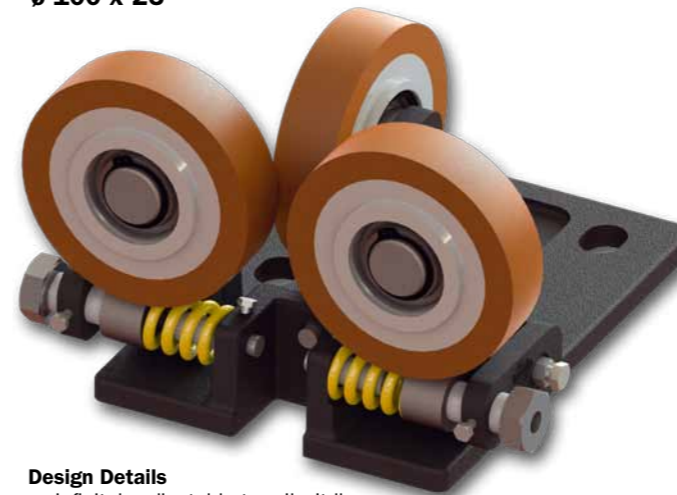
- for angled rails and rondles

| art. no.   | rollers<br>Ø D x b | complete weight<br>ca. kg | max. load [N] per roller with v nominal [m/s] |       |       |
|------------|--------------------|---------------------------|-----------------------------------------------|-------|-------|
|            |                    |                           | 0,63                                          | 1,0   | 2,5   |
| 142 993.04 | 80 x 20            | 2,0                       | 1.580                                         | 1.370 | 1.050 |

Mounting instruction: Between roller and rail a gap of 0,1 to 0,5 mm is to be considered at the oblong hole of the support base.

## Spring loaded Roller Guide AR 1F

Ø 100 x 25



### Design Details

- Infinitely adjustable to rail width from **5 to 19 mm** in no time
- Spring stroke and emergency stops are adjustable
- A wide range of springs is applicable (see table below)
- Due to the execution in steel cast the breaking load of the support is considerably higher than for the Aluminium die casts supports
- Each roller is equipped with two ball bearings

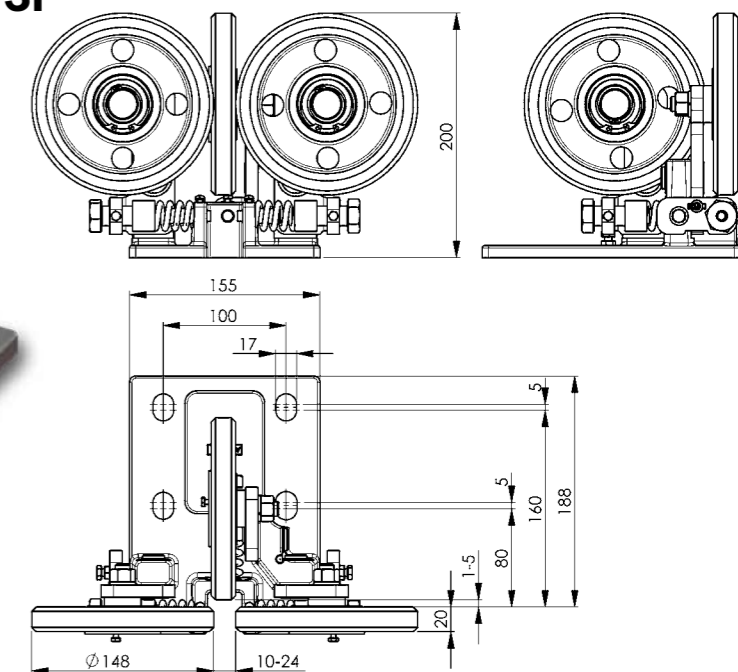
| art. no.                    | rollers<br>Ø D x b | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |       |       |
|-----------------------------|--------------------|---------------------------|------------------------------------------------|-------|-------|
|                             |                    |                           | 0,63                                           | 1,0   | 2,5   |
| pls. see table on the right | 100 x 25           | 8,2                       | 2.260                                          | 2.210 | 1.820 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

| Spring configuration |                       |                       |                       |                      |                      |
|----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|
| spring               | SWB 25-30             | SWH 25-30             | SWM 25-30             | SWL 25-31            | SWF 25-32            |
| hardness             | extremely hard        | hard                  | middle                | soft                 | extremely soft       |
| spring rate          | 400 N/mm <sup>2</sup> | 255 N/mm <sup>2</sup> | 128 N/mm <sup>2</sup> | 69 N/mm <sup>2</sup> | 33 N/mm <sup>2</sup> |
| colour               | brown                 | green                 | red                   | blue                 | yellow               |
| art. no.             | 143 284               | 143 284.02            | 143 284.01            | 143 284.03           | 143 284.04           |

## Spring loaded Roller Guide AR 3F

Ø 148 x 20



### Design Details

- Infinitely adjustable to rail width from **10 to 24 mm** in no time
- Spring stroke and emergency stops are adjustable
- A wide range of springs is applicable (see table below)
- Due to the execution in steel cast the breaking load of the support is considerably higher than for the Aluminium die casts supports
- Each roller is equipped with two ball bearings

| art. no.                    | rollers<br>Ø D x b | complete weight<br>ca. kg | *max. load [N] per roller with v nominal [m/s] |       |       |
|-----------------------------|--------------------|---------------------------|------------------------------------------------|-------|-------|
|                             |                    |                           | 0,63                                           | 1,0   | 2,5   |
| pls. see table on the right | 148 x 20           | 9,9                       | 3.190                                          | 3.000 | 2.330 |

\*Information as to load: The load of the central roller decreases depending on the relation between rails and roller width.

| Spring configuration |                       |                       |                       |                      |                      |
|----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|
| spring               | SWB 25-30             | SWH 25-30             | SWM 25-30             | SWL 25-31            | SWF 25-32            |
| hardness             | extremely hard        | hard                  | middle                | soft                 | extremely soft       |
| spring rate          | 400 N/mm <sup>2</sup> | 255 N/mm <sup>2</sup> | 128 N/mm <sup>2</sup> | 69 N/mm <sup>2</sup> | 33 N/mm <sup>2</sup> |
| colour               | brown                 | green                 | red                   | blue                 | yellow               |
| art. no.             | 143 448               | 143 448.02            | 143 448.03            | 143 448.04           | 143 448.05           |

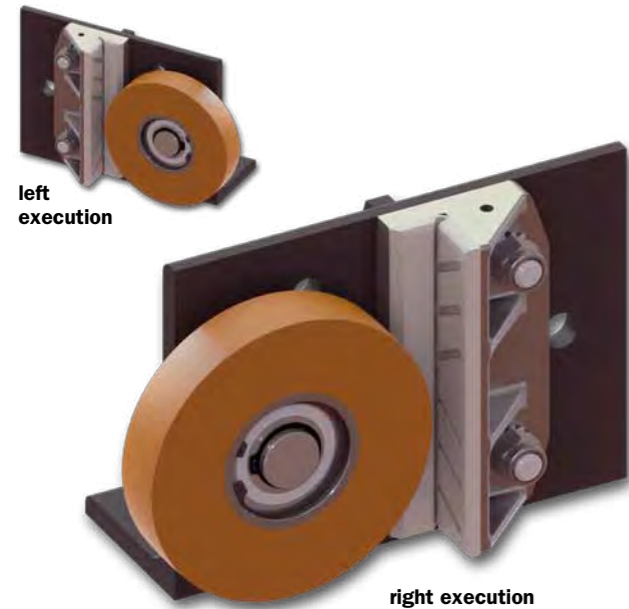
## Roller Sliding Guide HSM RGW

Left and right execution with roller  $\varnothing 125 \times 25$  or  $\varnothing 150 \times 30$

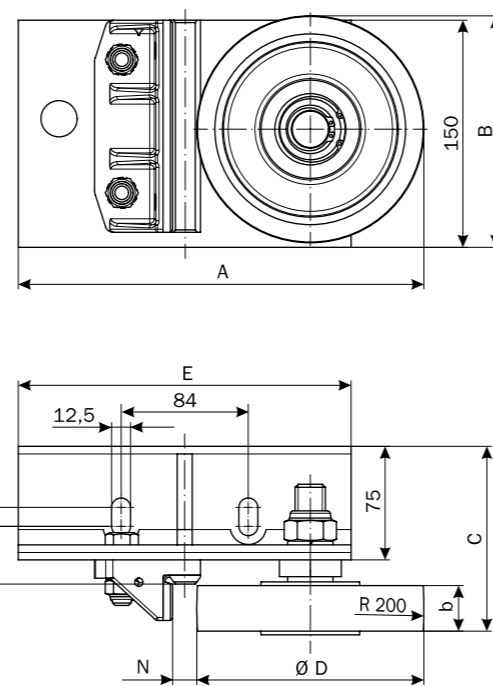
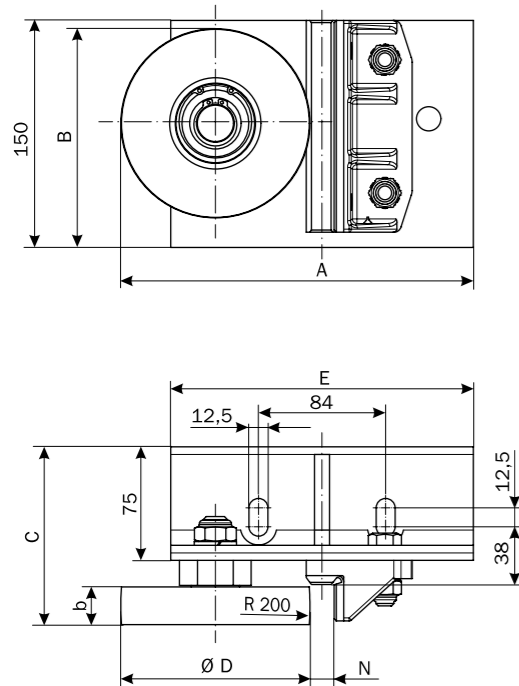
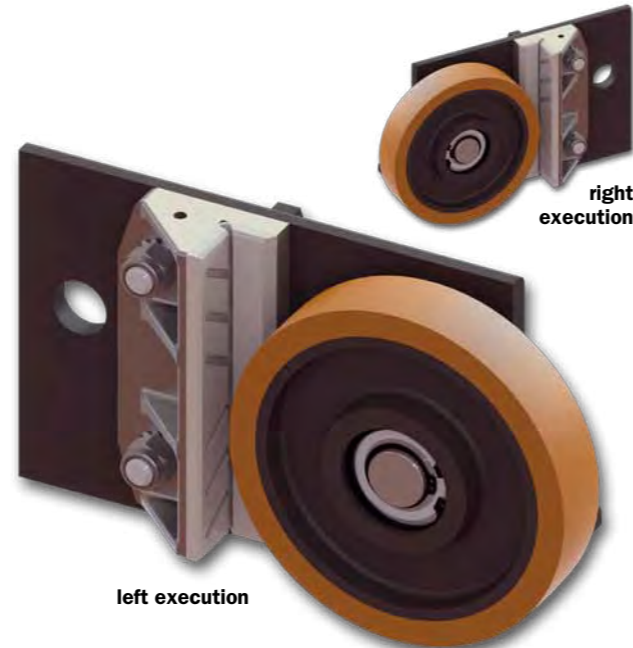
### Design details

- Aluminium guide shoe with half a guide shoe insert of ACLASYN GR as sliding guide
- For rail widths N from 5 to 19 mm

HSM RGW with roller  $\varnothing 125 \times 25$



HSM RGW with roller  $\varnothing 150 \times 30$

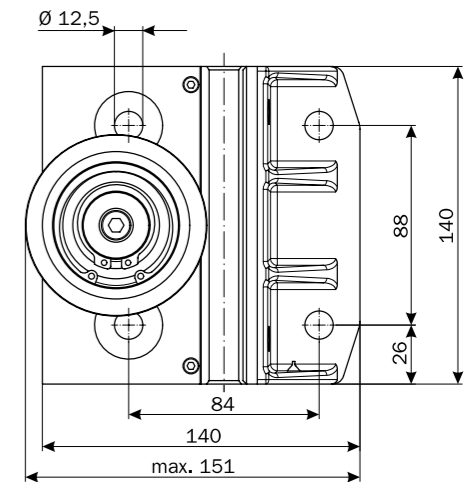
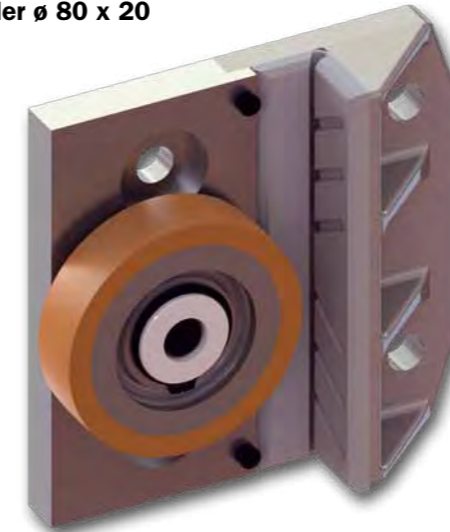


| art. no.<br>for rail width<br>16 mm | rollers<br>$\varnothing D \times b$ | execution | complete<br>weight<br>ca. kg | max. load [N] per roller<br>with v nominal [m/s] |       |       | mounting dimensions |          |       |     |
|-------------------------------------|-------------------------------------|-----------|------------------------------|--------------------------------------------------|-------|-------|---------------------|----------|-------|-----|
|                                     |                                     |           |                              | 0,63                                             | 1,0   | 2,5   | A                   | B        | C     | E   |
| 142 826.04                          | 125 x 25                            | right     | 6,3                          | 2.730                                            | 2.600 | 2.250 | max. 236            | max. 140 | 117,5 | 200 |
| 142 825.04                          | 125 x 25                            | left      | 6,3                          | 2.730                                            | 2.600 | 2.250 | max. 236            | max. 140 | 117,5 | 200 |
| 142 860.04                          | 150 x 30                            | right     | 6,5                          | 4.350                                            | 4.080 | 3.170 | max. 275            | max. 167 | 122   | 220 |
| 142 859.04                          | 150 x 30                            | left      | 6,5                          | 4.350                                            | 4.080 | 3.170 | max. 275            | max. 167 | 122   | 220 |

Mounting instruction: Between roller/sliding guide and rail a gap of 0,1 to 0,5 mm is to be considered.

## Roller Sliding Guide HSM RG

with roller  $\varnothing 80 \times 20$

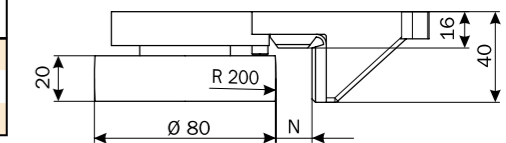


### Design details

- Aluminium guide shoe with half a guide shoe insert of ACLASYN GR as sliding guide
- For rail widths from 5 to 16 mm

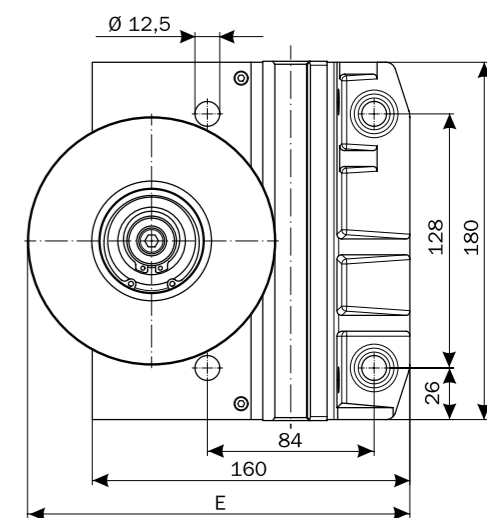
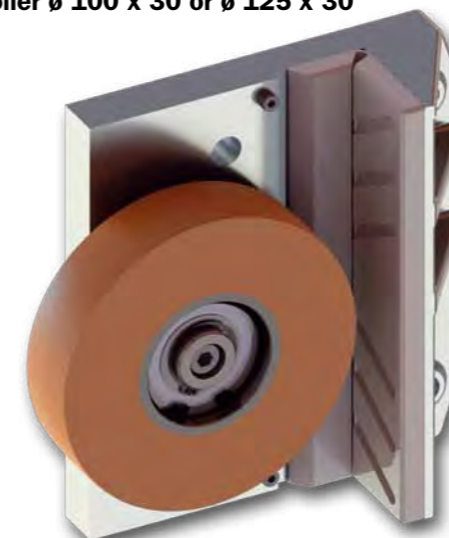
| art. no.   | rail<br>width<br>[mm] | rollers<br>$\varnothing D \times b$ | complete<br>weight<br>ca. kg | max. load [N] per roller<br>with v nominal [m/s] |       |       |
|------------|-----------------------|-------------------------------------|------------------------------|--------------------------------------------------|-------|-------|
|            |                       |                                     |                              | 0,63                                             | 1,0   | 2,5   |
| 142 988.04 | 16                    | 80 x 20                             | 1,1                          | 1.580                                            | 1.370 | 1.050 |
| 142 988.05 | 9                     | 80 x 20                             | 1,1                          | 1.580                                            | 1.370 | 1.050 |
| 142 988.06 | 5                     | 80 x 20                             | 1,1                          | 1.580                                            | 1.370 | 1.050 |

Mounting instruction: Between roller/sliding guide and rail a gap of 0,1 to 0,5 mm is to be considered.



## Roller Sliding Guide HSML RG

with roller  $\varnothing 100 \times 30$  or  $\varnothing 125 \times 30$

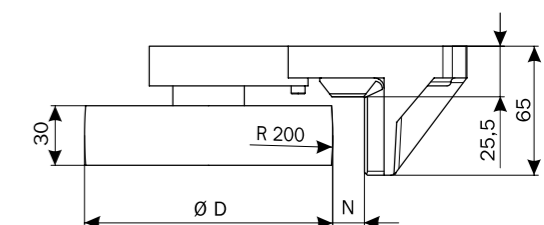


### Design details

- Aluminium guide shoe with half a guide shoe insert of ACLASYN GR as sliding guide
- For rail widths from 5 to 19 mm

| art. no.   | rollers<br>$\varnothing D \times b$ | complete<br>weight<br>ca. kg | max. load [N] per roller<br>with v nominal [m/s] |       |       | mounting<br>dimensions<br>E |
|------------|-------------------------------------|------------------------------|--------------------------------------------------|-------|-------|-----------------------------|
|            |                                     |                              | 0,63                                             | 1,0   | 2,5   |                             |
| 142 987.04 | 100 x 30                            | 2,1                          | 2.730                                            | 2.520 | 2.100 | max. 195                    |
| 142 786.04 | 125 x 30                            | 2,3                          | 3.300                                            | 3.100 | 2.800 | max. 182,5                  |

Mounting instruction: Between roller/sliding guide and rail a gap of 0,1 to 0,5 mm is to be considered.





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e-mail: [andym@aclausa.com](mailto:andym@aclausa.com)

Dimensions in mm. We reserve the right to change sizes. Further dimensions and special types on request.

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