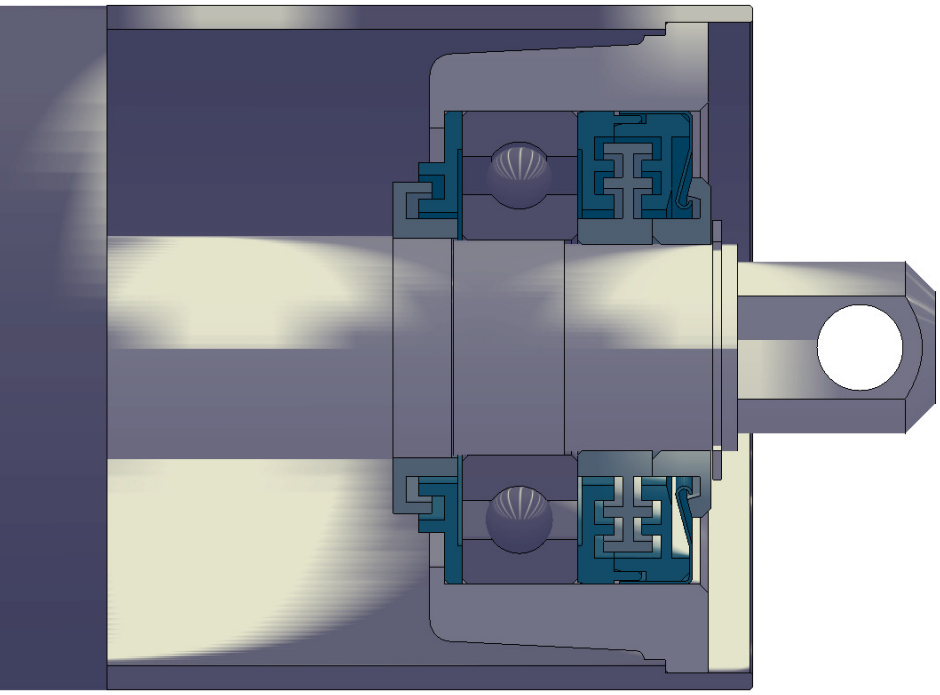
PRIM

Kostolac



# Catalog

## Of rollers

## for rubber belt

## conveyors

## 2013

TUV ICB The Ultimate Value International Certification Body
ISO 9001:2008
SYSTEM CERTIFICATION

INTERNATIONAL CERTIFICATION GROUP
ISO 9001:2008
SYSTEM CERTIFICATION

**Company for production, repair and assembly of machinery and equipment "PRIM" Ltd.**

Tradition, quality and reliability are the best describing words for the Company for production, repair and assembly of machinery and equipment "PRIM". "PRIM", as it as today, was created as a workshop for maintenance in 1946 by the decision of the management of the Mine and Power Plant "Kostolac" of that time, as an organizational part providing maintenance services for the equipment of Kostolac mines and thermal power plants, later mines.

Until May 1, 2005, "PRIM" operated as a part of the electric power industry, when it restructured and became a separate company but it still was a company whose main focus is on the production, repair and assembly of equipment for mining systems on surface coal pits and mechanical circuits in thermal power plants.

From the wide range of production program of PRIM, the central products of this catalog are rollers. "PRIM" began the production of rollers in 1972, and throughout all these years it has been working on the improvement of the rollers in order to become the leader in the production of rollers in the domestic market, and the goal is to expand to foreign markets, too.

"PRIM's" business policy is based on quality, deadlines and the acquisition of new programs from the mechanical and metal profession.

This catalog contains a selection of the most commonly used standard rollers for rubber belt conveyors designed for bulk materials. Other roller sizes are available on request.

Standard rollers of "PRIM" are designed and manufactured in accordance with ISO 9001 standards.

If you are interested in special roller designs or want it to be manufactured according to your specifications, please contact our technical department.

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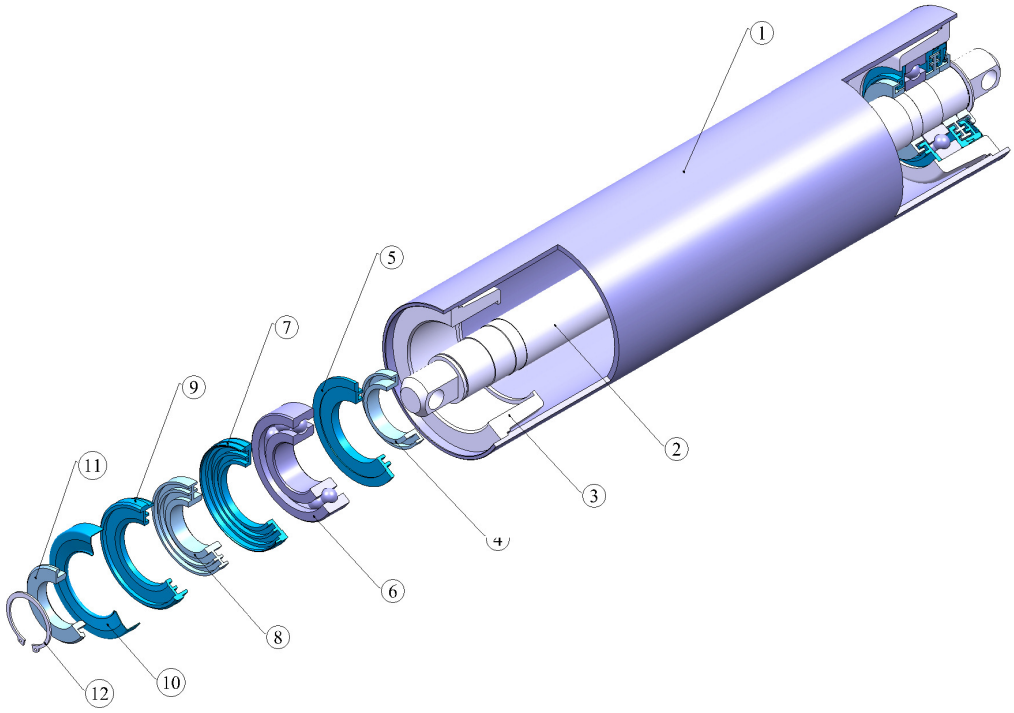
## Appearance of rollers




1) **Roller tube**

■ Made of seamless or welded pipes in accordance with the ISO 4200 standard.

■ The thickness of the wall corresponds to the operating conditions of the roll and is calculated according to FEA method.

2) **Axle**

■ Round rods according to ISO 1035-1, ISO 1035-4 standard.

■ Axle end is processed on CNC machine.

3) **Bearing housings**

■ Welded housings for high-loaded rollers.

■ Deep-drawn housing made of steel tin.

**4 and 5) Sealing - the final one**

■ Made of special materials based on polyethylene-coated material.

■ Consisting of two labyrinth seals that prevent the entry of grease into the roll.

**6) Bearing**

■ One row globulous or barrel double row bearings are used, with dimensions in accordance with ISO 15.

■ C3 radial bearing clearance ensures optimal roller operation.

■ Bearings are filled with lubricant based on water resistant lithium.

■ Bearings are filled with lubricant up to 70% which ensures operation without the need for further lubrication during its service life.

**7, 8, 9, 10 and 11) External maze sealing**

■ The system consists of several sealing elements that prevent the impurities from entering the bearing.
■ The individual elements of the system have circular shape with the inner parts forming the maze.
■ The shape of the parts is designed to prevent impurities from entering the bearing, while the friction resistance does not increase.
■ The system has a double maze seal, which is additionally protected by a metal lid.
■ The space between the maze parts is filled with lubricant that collects fine particles of dust. The grease is the same as the grease of the bearing.
■ The elements of the maze sealing system are made of polyethylene-coated material.

**12) Snap ring**

■ Made of hardened steel according to DIN 471.
■ Prevent axial movement of the axle.

Rubber coating of rubber-coated rollers and rubber rings of shock absorbing and return rollers are made of rubber with the following characteristics:

| Abrasion [$mm^3$] | Hardness ° [Sh] | Breaking strength [Mpa] | Extension [%] | Specific weight [$g/cm^3$] |
|---|---|---|---|---|
| 100 | 70 | 15 | 400 | 1,12 |

**Roller working conditions**

Material for transport:
Unsorted loose material with a maximum density of 2t/m3 with pieces not exceeding 5% of the total transported material.

Approximate size of pieces:

| Belt width [mm] | 400 | 500 | 650 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum size of pieces [mm] | 100 | 150 | 250 | 300 | 400 | 500 | 600 | 675 | 750 | 800 |

**Transport speed**

- Max 3, 5 m/s for belt width 400-1400 mm and rollers with bearing type 6204
- Max 5, 5 m/s for belt width 1200-1400 mm and rollers with bearing type 6305
- Max 7, 5 m/s for belt width 1200-2000 mm and rollers with bearing type 6306, 6308, 6310 i 6312

**Working conditions**

Chemical and mechanical contamination, IE41, operating temperature -20 ° C to + 45 ° C (for temperatures below -20 ° C, special lubrication must be applied)

**Storage**

Rollers must be stored on a pallet, on a stabilized and firm ground under the roof. Storage is recommended at temperatures ranging from -25 ° C to + 45 ° C. Storage for more than 6 months is not recommended.

**Assembly and maintenance**

The installation of rollers on the transport system can be carried out by a qualified worker and a company engaged in the assembly of machine equipment. The installed roller should be rotated manually to check if it is properly installed.

During the service, it is necessary to check that the roller is working properly. A roller that does not function properly (e.g. it does not turn, whistles when turning, overheats, axial and radial clearance increased, deformed) must be replaced.
On request, PRIM Ltd. can provide assembly and maintenance of the rollers by implementing all the described procedures necessary for proper installation and maintenance.

## Service life

The average service life of the roller is 30,000 operating hours within 5 years from the production date. This service life is valid if all operating conditions are met and the rollers are installed within 6 months from the production date. This service life does not apply to rubber rings of return and shock absorbing rollers in the transport of extremely abrasive bulk materials, for example, ash or slag.

### Terms of sale of rollers

General terms of sale**:**

Your order should contain the following:

- roller name
- mark
- measures of axle ends for which it is envisaged to be defined by the customer
- quantity
- other special requirements: surface protection, packaging method, etc.

**Packing:**

- Rollers are delivered on wooden EURO pallets.
- The other type of packing is delivered in agreement with the manufacturer and this is separately stated in the order.
- Each pallet is marked with a declaration containing the following information: type of roller, mark, quantity, number of order.

**Guarantee:**

The guarantee on our rollers is 24 months from the date of installation but no longer than 30 months after delivery.

# Kodovi za naručivanje

| Z-111x2222/BBBB/X/YY.3333/444x55 | |
|---|---|
| Z | Roller type (Table1) |
| 111 | Diameter of the roller shell [mm] |
| 2222 | Length of the roller shell [mm] |
| BBBB | Bearing type according to ISO |
| X | Type of axle ends (Table 2) |
| YY.3333 | Surface protection code according to RAL color coding system |
| 444 | Diameter of the rubber coating/ring [mm] (option only for G, A and P rollers) |
| 55 | Number of rubber rings |

**Example:**

Carrying metal roller, a roller shell diameter of 89 mm, a roller shell length of 600 mm, a bearing type 6206, with a double flat axle end and a yellow polyester shield RAL 1003 would have the following order code:

**N-089x600/6206/A/PP.1003**

Table 1 - Roller types

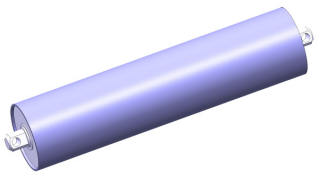
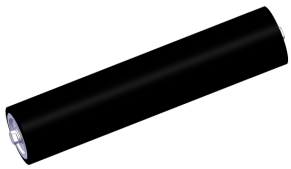
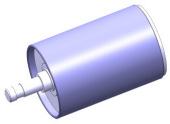
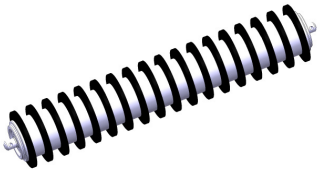
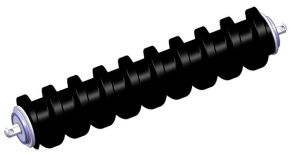
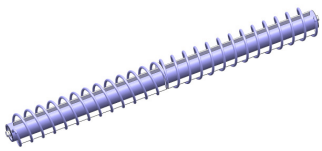
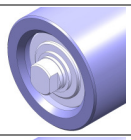
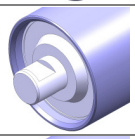
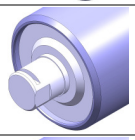
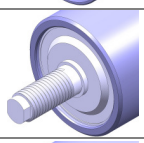
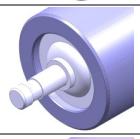
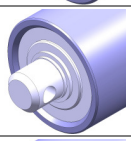
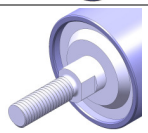
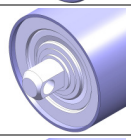
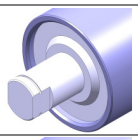
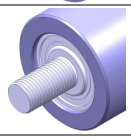
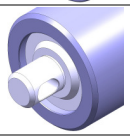
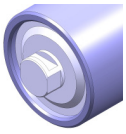
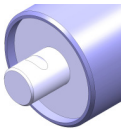
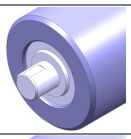
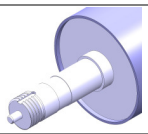
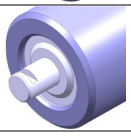
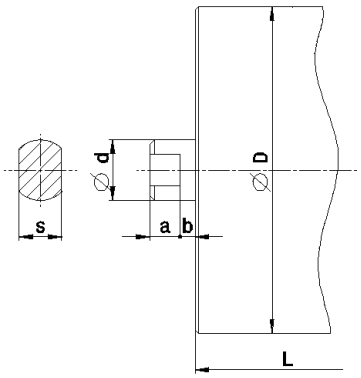
| Type | Name | Appearance |
|---|---|---|
| N | CARRYING METAL ROLLER<br><br>It can be used as a carrying or return roller, it is recommended for conveyor belts up to 2000 mm wide |  |
| G | RUBBER COATED ROLLER<br><br>It is used to reduce the effect of dynamic effects when filling the conveyors |  |
| A | SHOCK ABSORBER ROLLER<br><br>It is used to reduce the effect of dynamic effects when filling the tape |  |
| B | SIDE ROLLER<br><br>Used to align the conveyor belt |  |
| P | RETURN ROLLER<br>It is also used as a conveyor belt cleaner |  |
| SG | SPIRAL RETURN ROLLER WITH RUBBER SPIRAL<br><br>It is used for cleaning exceptionally dirty tape |  |
| SM | SPIRAL RETURN ROLLER WITH METAL SPIRAL<br><br>It is used for cleaning of exceptionally dirty conveyor belt |  |

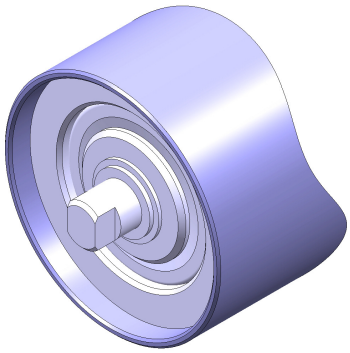
Table 2 - Axle shaft ends types

| Type | Description | Appearance | Type | Description | Appearance |
|---|---|---|---|---|---|
| A | Outer double flat |  | J | Round with a hole |  |
| B | Inner double flat |  | K | Outer double flat + inner double flat |  |
| C | Outer double flat + thread |  | L* | Inner round reduced |  |
| D | Round with a hole for connection in garland |  | M | Outer thread + outer double flat |  |
| E | Outer double flat with a hole |  | N | Outer double flat with a gutter for the socket |  |
| F | With thread |  | O | Round with a slotted hole |  |
| G | Outer double flat + inner single flat |  | P | Round with inner single notch |  |
| H | Outer single flat |  | R* | Outer round extended with thread with socket |  |
| I | Outer single flat |  | | | |

* - only for side rollers

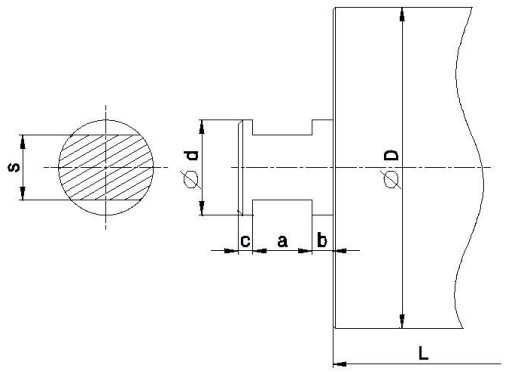
## Standard dimensions of axle shaft ends

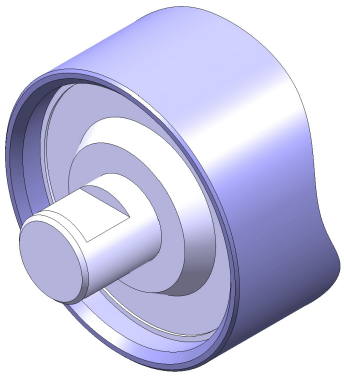


| A – OUTER DOUBLE FLAT | | | | |
|---|---|---|---|---|
| | BEARING | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

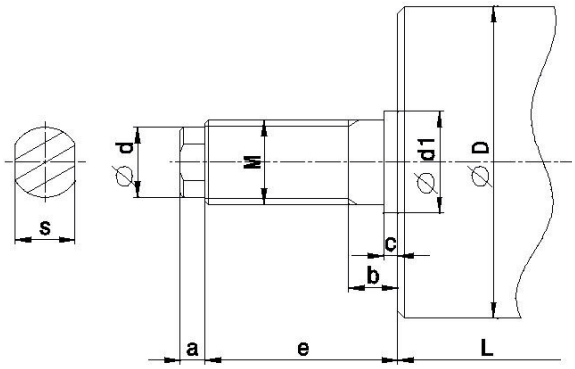
- dimensions s, a and b at the request of the customer

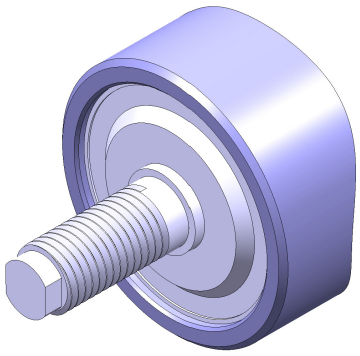


| B – INNER DOUBLE FLAT | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

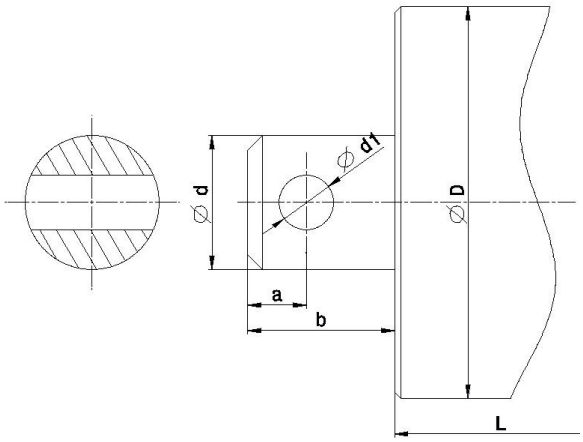
- dimensions s, a, b and c at the request of the customer

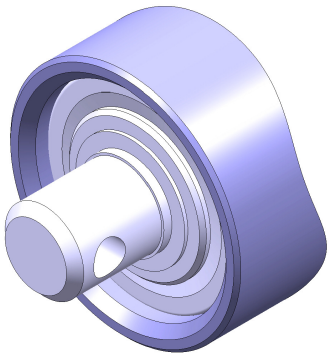


| C – OUTER DOUBLE + THREAD | |
|---|---|
| | Bearing |
| | 6306 |
| Ødmax | 20 |
| Mmax | M24 |
| Ød1max | 28 |
| ØD | 89;108 |

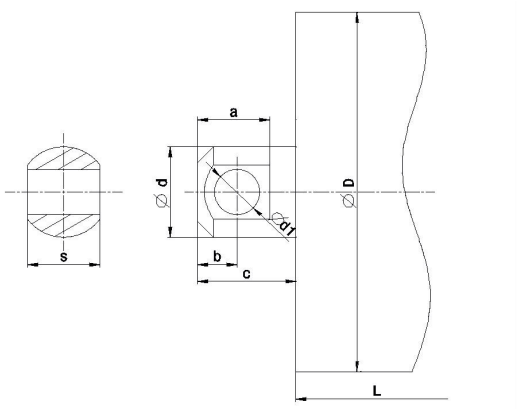
- dimensions **s, a, b, c** and **e** at the request of the customer

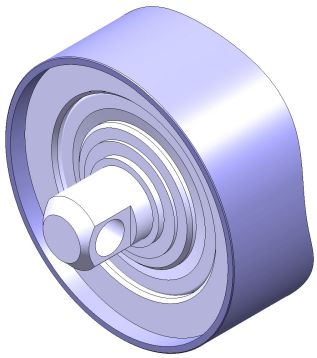


| D – Round with a hole for connection in garland | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

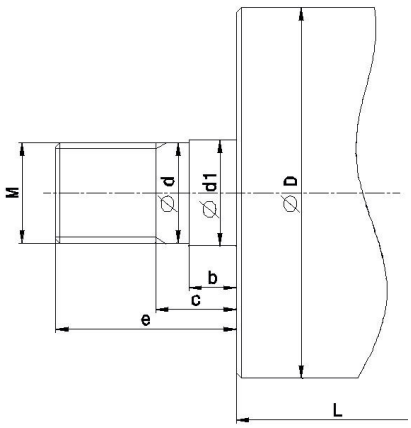
- dimensions **d1, a** and **b** at the request of the customer

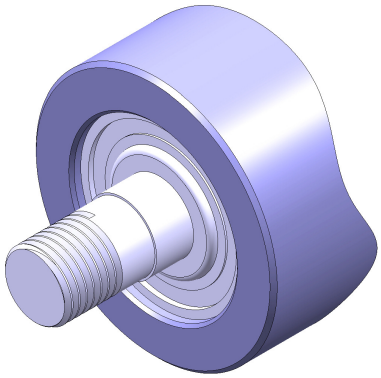


| E – OUTER DOUBLE FLAT WITH A | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

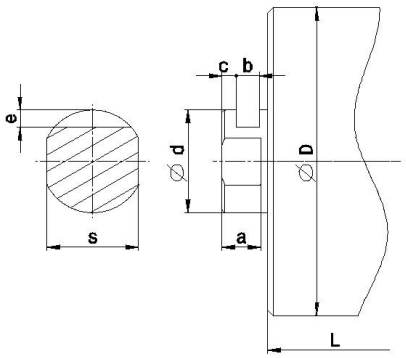
- dimensions d1, s, a, b and c at the request of the customer

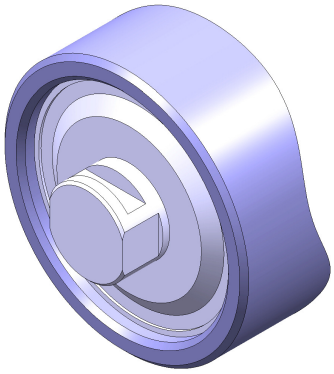


| F – WITH A THREAD | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Mmax | M24 | M36 | M45 | M56 |
| Ødmax | 24 | 36 | 45 | 56 |
| Ød1max | 28 | 48 | 38 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

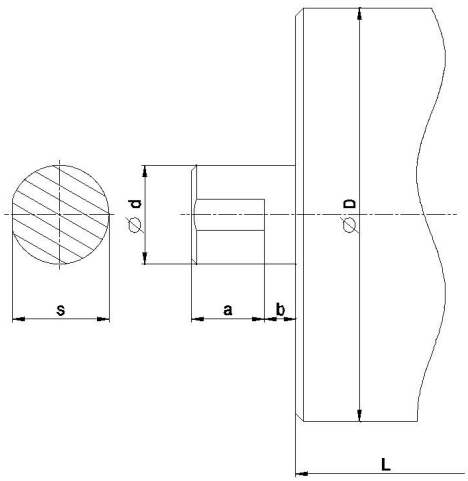
- dimensions b, c and e at the request of the customer

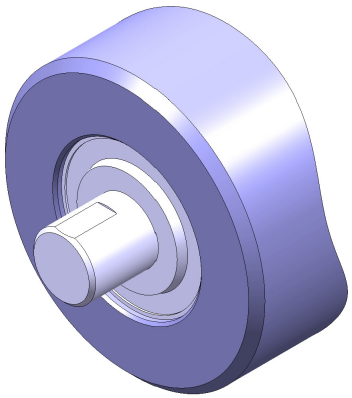


| G – OUTER DOUBLE FLAT + INNER SINGLE FLAT | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

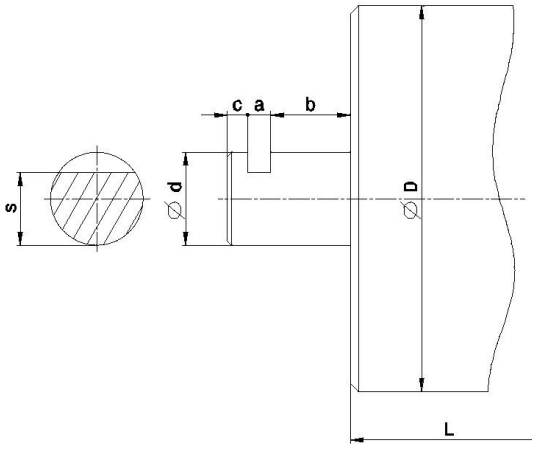
- dimensions a, b, c, e and s at the request of the customer

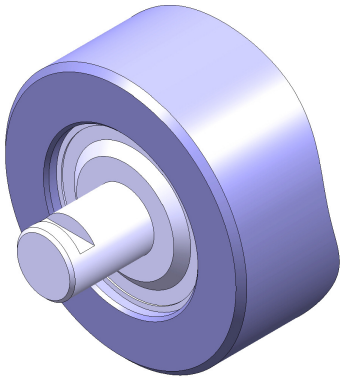


| H – OUTER SINGLE FLAT | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

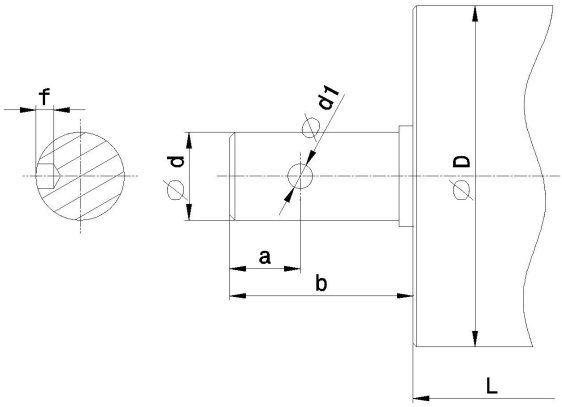
- dimensions a, b and s at the request of the customer

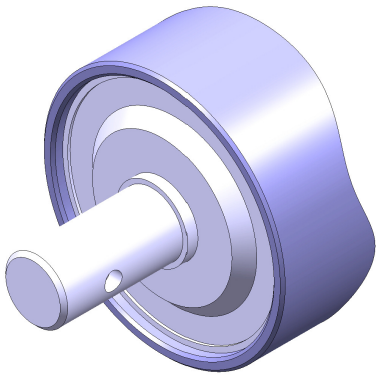


| I - INNER SINGLE FLAT | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

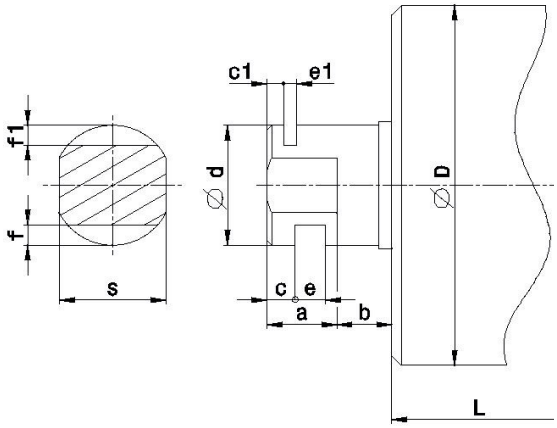
- dimensions a, b, c and s at the request of the customer

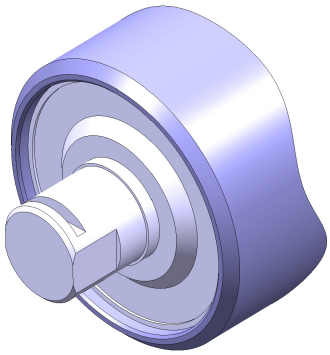


| J – ROUND WITH A HOLE | | |
|---|---|---|
| | Bearing | |
| | 6306 | 6308 |
| Ødmax | 28 | 38 |
| ØD | 89;108;133 | 108;133 |

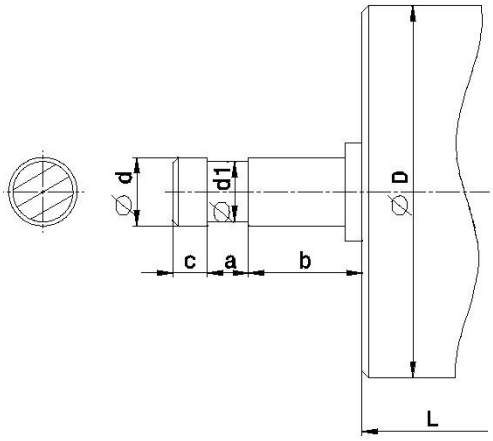
- dimensions Ød1, a, b and f at the request of the customer

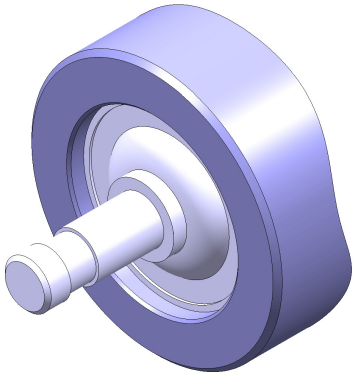


| K – OUTER DOUBLE FLAT + INNER DOUBLE FLAT | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

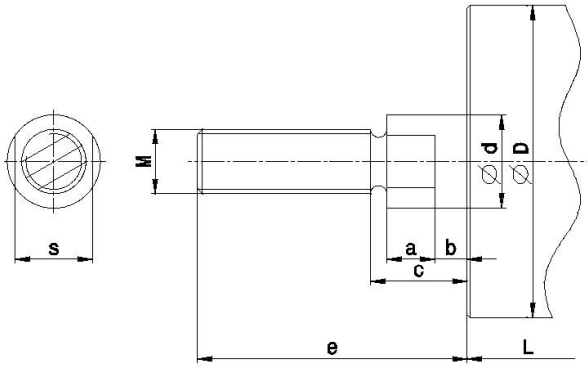
- dimensions a, b, c, e, c1, e1, f and f1 at the request of the customer

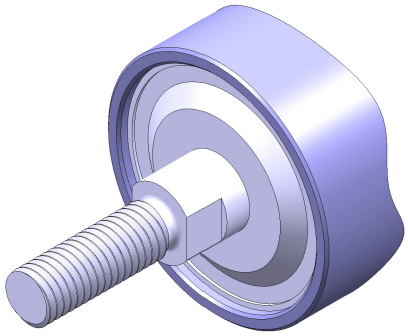


| L - INNER ROUND REDUCED | |
|---|---|
| | Bearing |
| | 6306 |
| Ød | 20 |
| Ød1 | 17,5 |
| ØD | 108 |

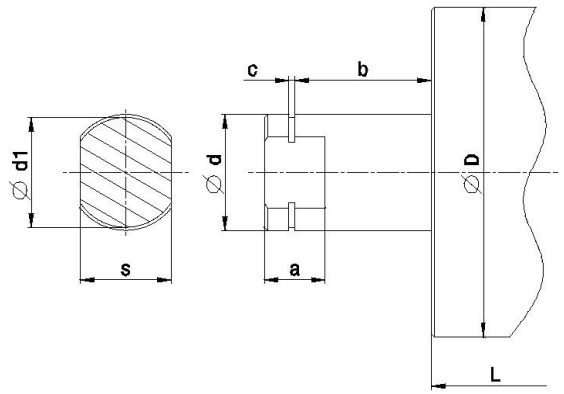
- dimensions a, b, and c at the request of the customer

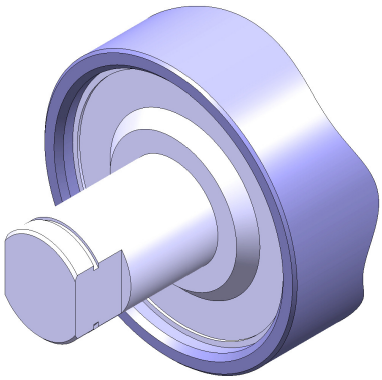


| M – OUTER THREAD + OUTER DOUBLE FLAT | |
|---|---|
| | Bearing |
| | 6306 |
| Ød | 28 |
| M | M20 |
| s | 24 |
| ØD | 89 |

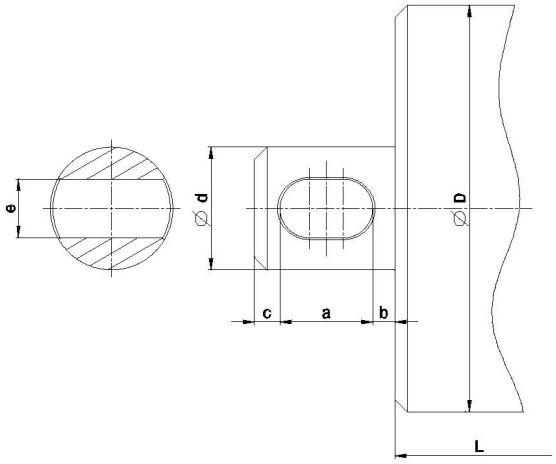
- dimensions a, b, c and e at the request of the customer

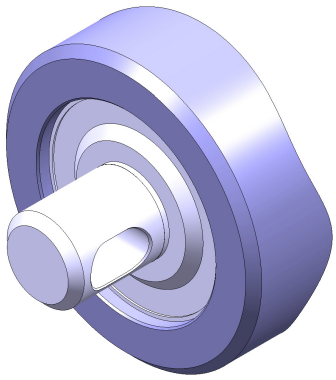


| N – OUTER DOUBLE FLAT WITH A GUTTER FOR THE SOCKET | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

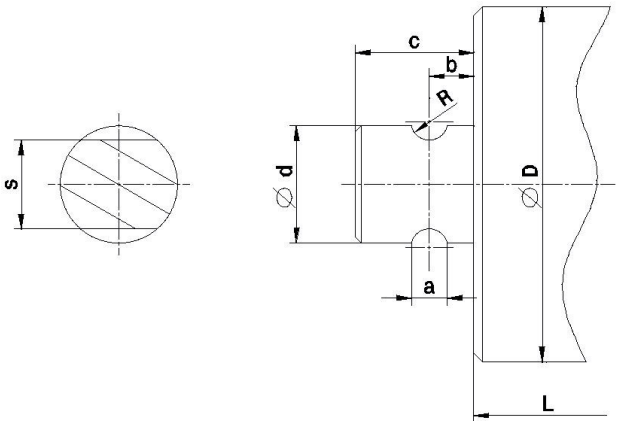
- dimensions a, and b at the request of the customer
- dimensions d1 and c to diameter d to the standard for socket

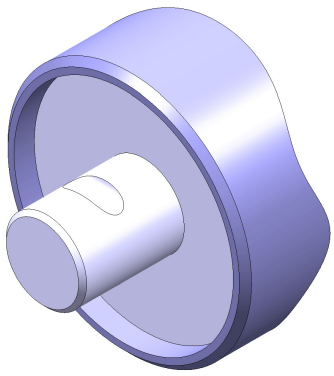


| O – ROUND WITH A SLOTTED HOLE | | | | |
|---|---|---|---|---|
| | Bearing | | | |
| | 6306 | 6308<br>22308 | 6310 | 6312<br>22312 |
| Ødmax | 28 | 38 | 48 | 58 |
| ØD | 89;108;133 | 108;133;159 | 133;159 | 159;194 |

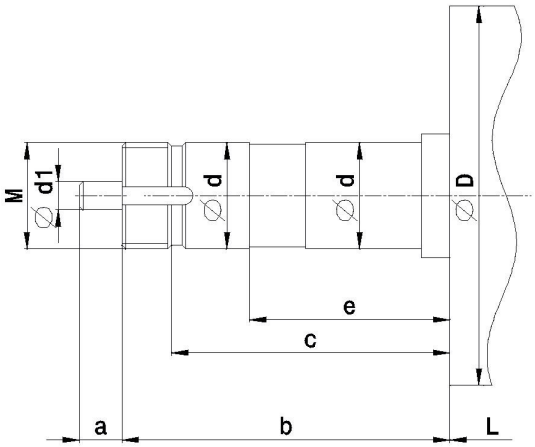
- dimensions a, b, c and e at the request of the customer

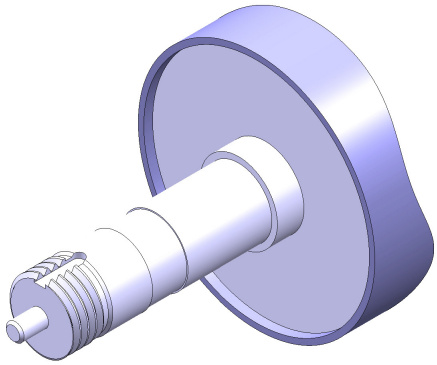


| P – ROUND WITH INNER DOUBLE NOTCH | |
|---|---|
| | Bearing |
| | 6306 |
| Ødmax | 28 |
| ØD | 89;108 |

- dimensions a, b, c, R and s at the request of the customer



| R – OUTER ROUND EXTENDED WITH THREAD WITH SOCKET | |
|---|---|
| | welded construction |
| Ød | 30 |
| Ød1 | 8 |
| M | M30x1,5 |
| ØD | 108 |

– dimensions a, b, c and e at the request of the customer

- Ødmax – the maximum possible diameter of the axle shaft end for a particular bearing
- ØD – appropriate roller tube diameters for a particular bearing
- for each type of the axle shaft end the measures, which should be defined by the customer, are indicated

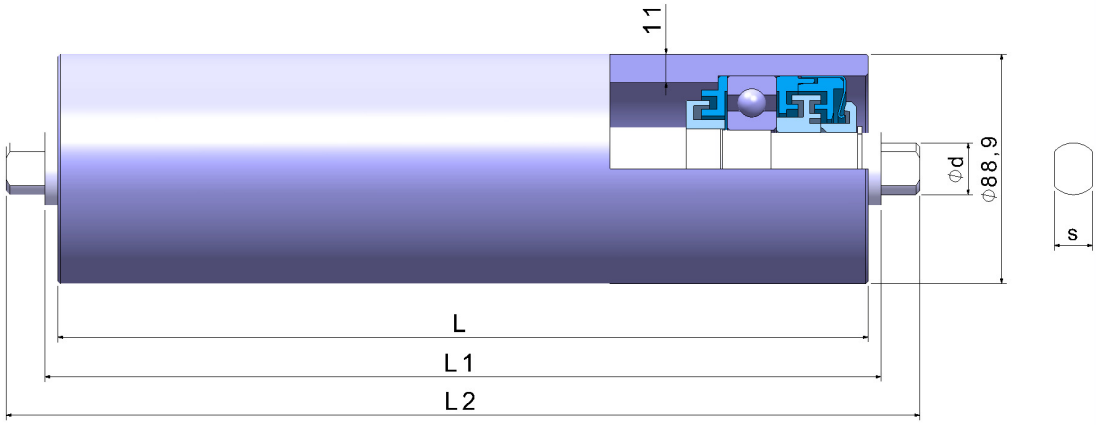
## Ordering of rollers according to your requirements

If you have specific requirements that are not included in our standard offer, please place your order according to the following codes layout:

- Roller type (N, G, A, B, P, S, SG, SM)
- Diameter of the roller shell [mm]
- Length of the roller shell [mm]
- Standard bearings type– standard by choice!
- The axle shaft end type or your draft of the axle shaft end with the required dimensions
- Surface protection

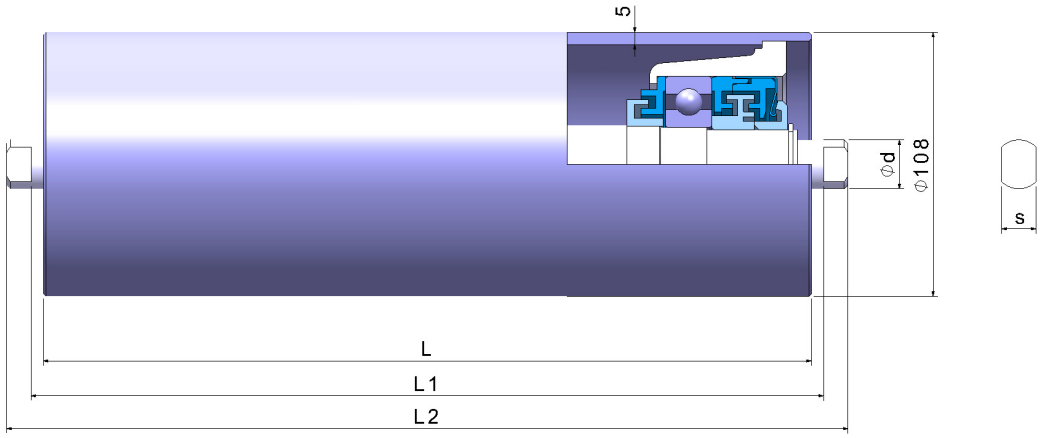
# Carrying rollers

| Carrying metal roller Ø88,9 | N-089xL/6306 | 1 |
|---|---|---|



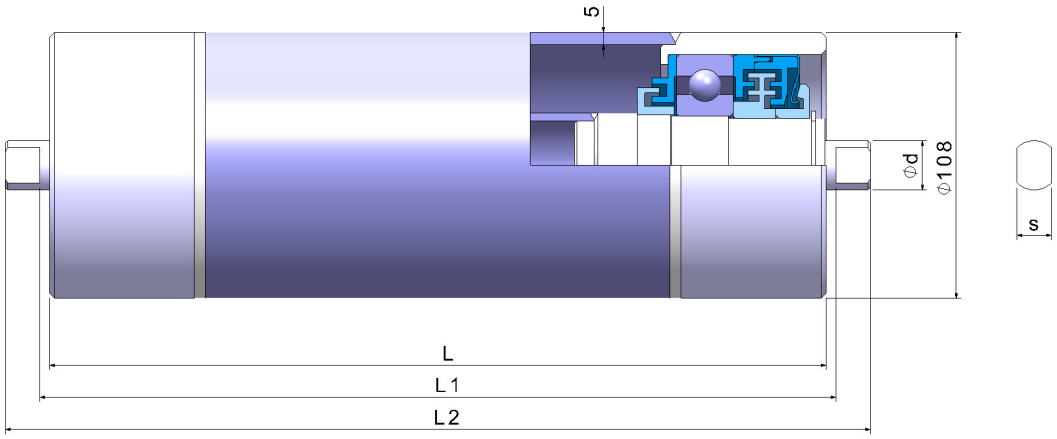

| dimension [mm] | | Installation method |
|---|---|---|
| L | 160-1150 | |
| Ødmax | 28 | |

| Carrying metal roller Ø108 | N-108xL/6306 | 2 |
|---|---|---|



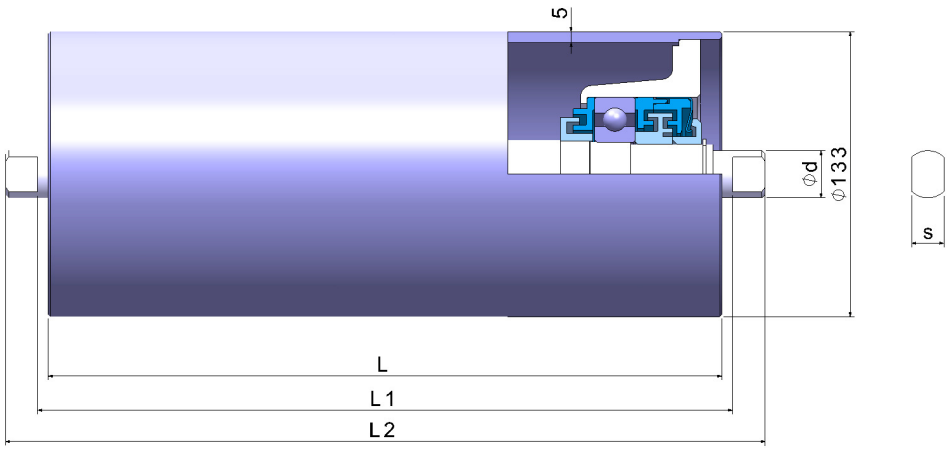

| dimensions [mm] | | Installation method |
|---|---|---|
| L | 200-1150 | |
| Ødmax | 28 | |

| Carrying metal roller Ø108 | N-108xL/6308 | 3 |
|---|---|---|



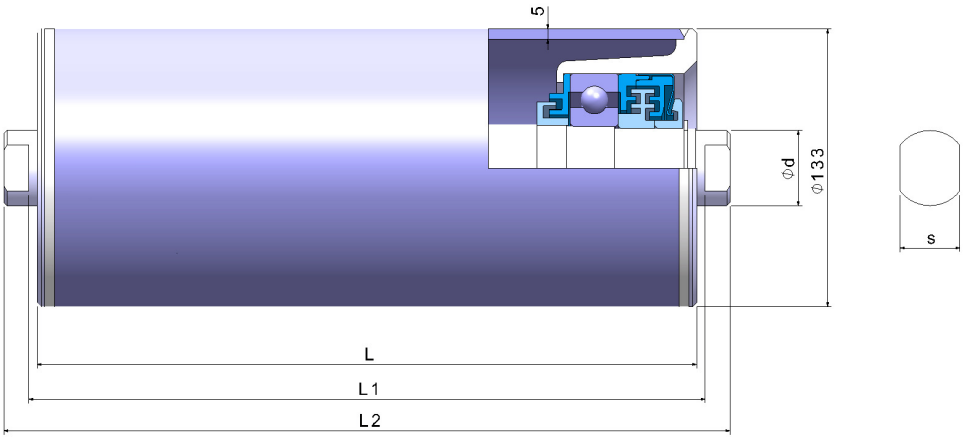

| dimensions [mm] | | Installation method | |
|---|---|---|---|
| L | 950-1390 | | |
| Ødmax | 38 | | |

| Carrying metal roller Ø133 | N-133xL/6306 | 4 |
|---|---|---|



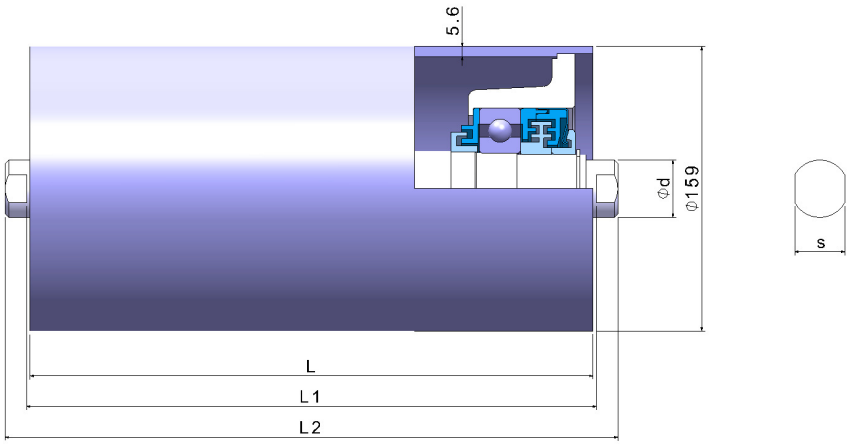

| dimensions [mm] | | Installation method | | |
|---|---|---|---|---|
| L | 250-1600 | | | |
| Ødmax | 28 | | | |

| Carrying metal roller Ø133 | N-133xL/6308 | 5 |
|---|---|---|



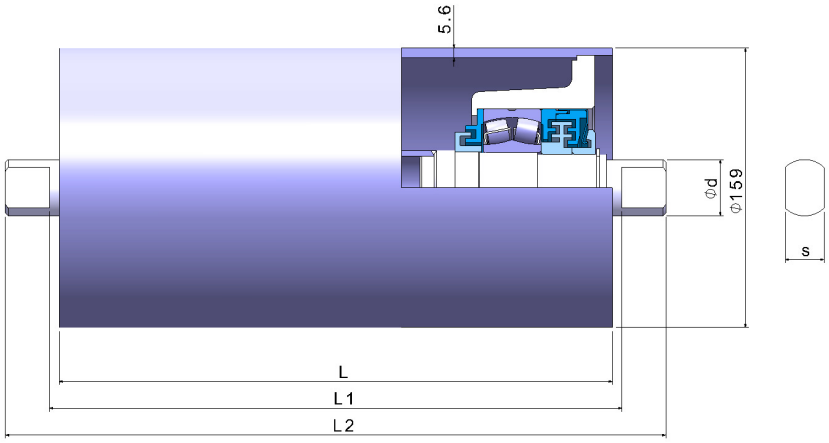

| dimensions [mm] | | Installation method | | |
|---|---|---|---|---|
| L | 425-850 | | | |
| Ødmax | 38 | | | |

| Carrying metal roller Ø159 | N-159xL/6308 | 6 |
|---|---|---|



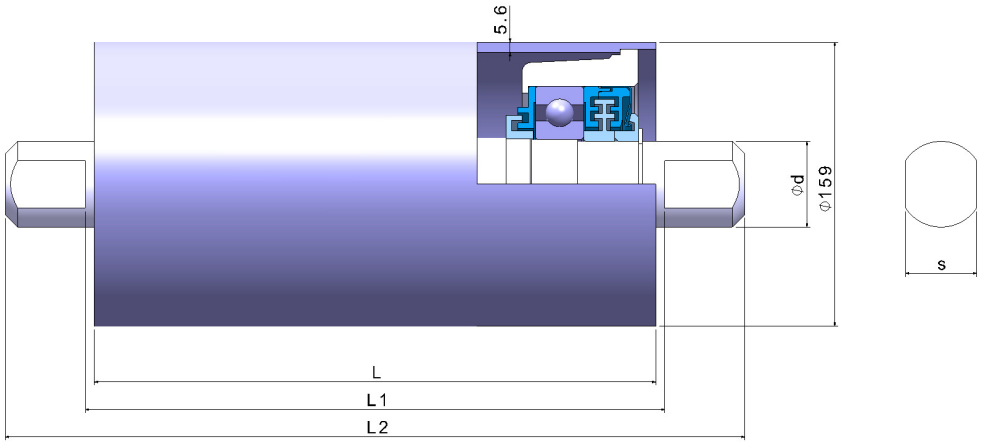

| dimensions [mm] | | Installation method | | |
|---|---|---|---|---|
| L | 430-1800 | | | |
| Ødmax | 38 | | | |

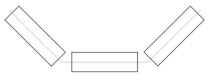
| Carrying metal roller Ø159 | N-159xL/22308 | 7 |
|---|---|---|



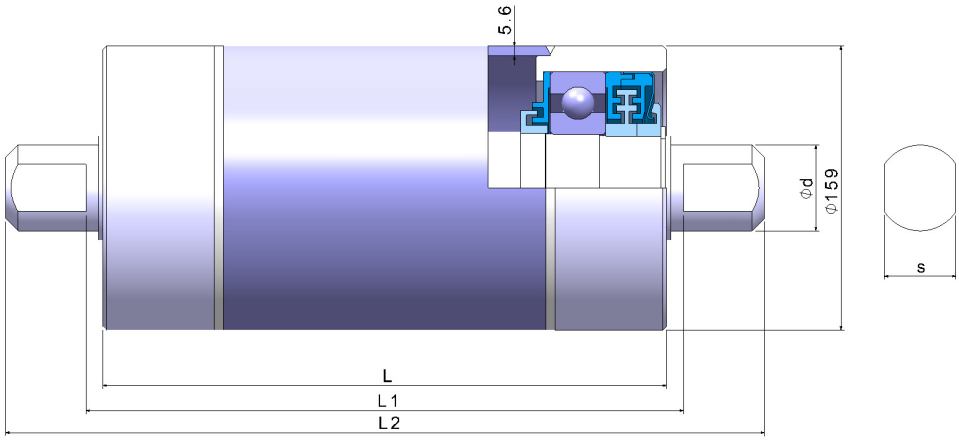

| dimensions [mm] | | Installation method |
|---|---|---|
| L | 1715-2400 |  |
| Ødmax | 38 | |

| Carrying metal roller Ø159 | N-159xL/6310 | 8 |
|---|---|---|



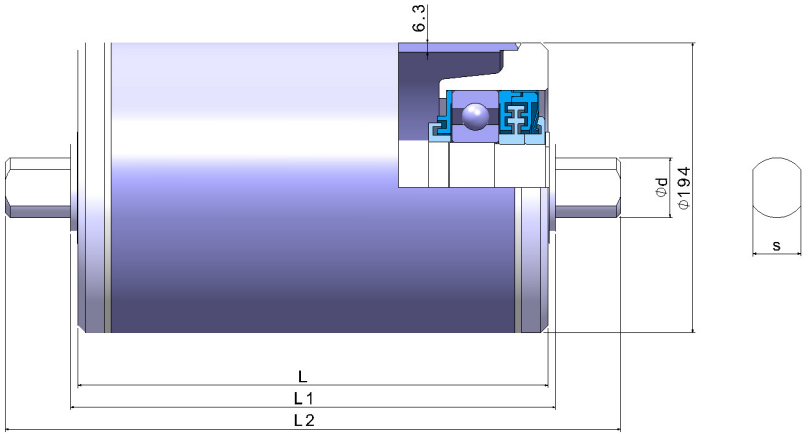

| dimensions [mm] | | Installation method | | |
|---|---|---|---|---|
| L | 230-850 |  |  |  |
| Ødmax | 48 | | | |

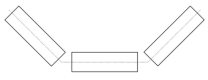
| Carrying metal roller Ø159 | N-159xL/6312 | 9 |
|---|---|---|




| dimensions [mm] | | Installation method |
|---|---|---|
| L | 380-530 |  |
| Ødmax | 48 | |

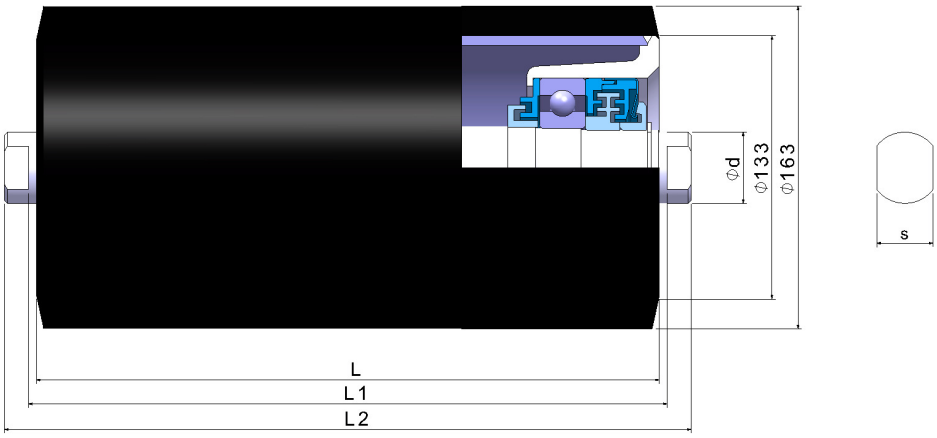
| Carrying metal roller Ø194 | N-194xL/6312 | 10 |
|---|---|---|




| dimensions [mm] | | Installation method | | |
|---|---|---|---|---|
| L | 665-1800 |  |  |  |
| Ødmax | 58 | | | |

## Rubber coated roller

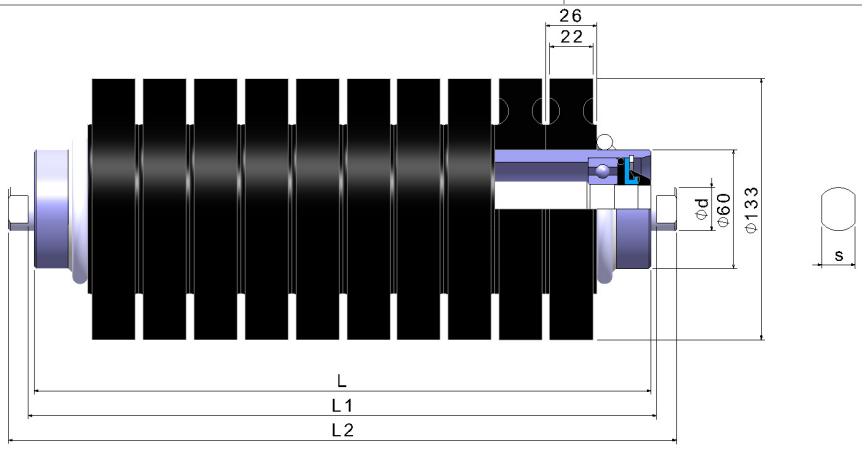
| Rubber coated roller Ø133 | G-133xL/6308/163 | 11 |
|---|---|---|




| dimensions [mm] | | Installation method | |
|---|---|---|---|
| L | 750 |  |  |
| Ødmax | 38 | | |

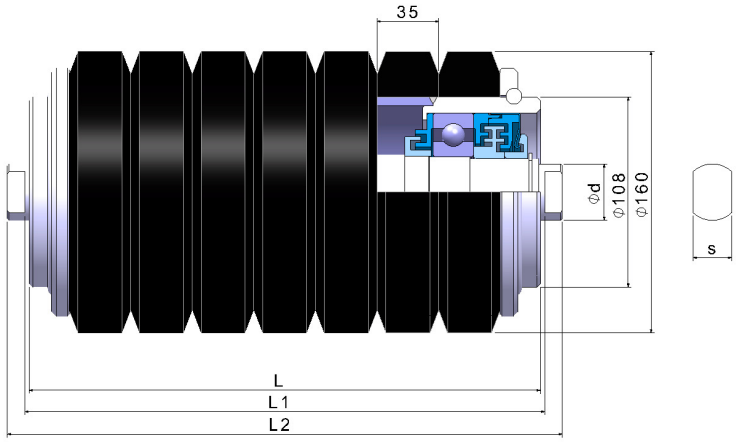
## Shock absorber rollers

| Shock absorber roller Ø60 | A-060xL/6205/133 | 12 |
|---|---|---|



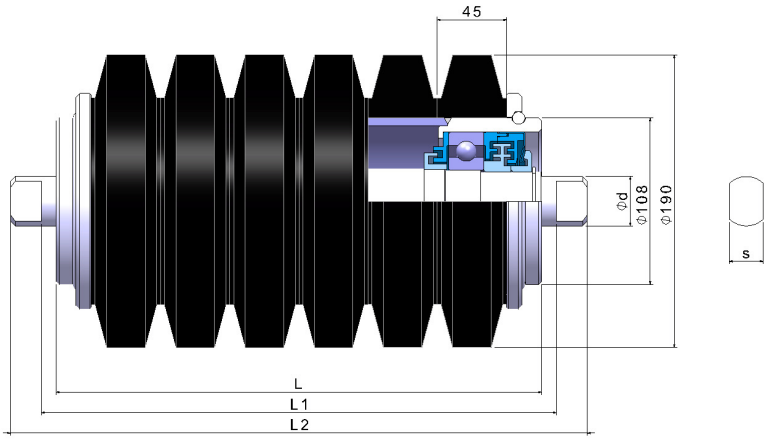

| dimensions [mm] | | number of rubber rings | Installation method | |
|---|---|---|---|---|
| L | 315 | 11 |  |  |
| | 380 | 13 | | |
| Ødmax | 22 | | | |

| Shock absorber roller Ø108 | A-108xL/6308/160 | 13 |
|---|---|---|



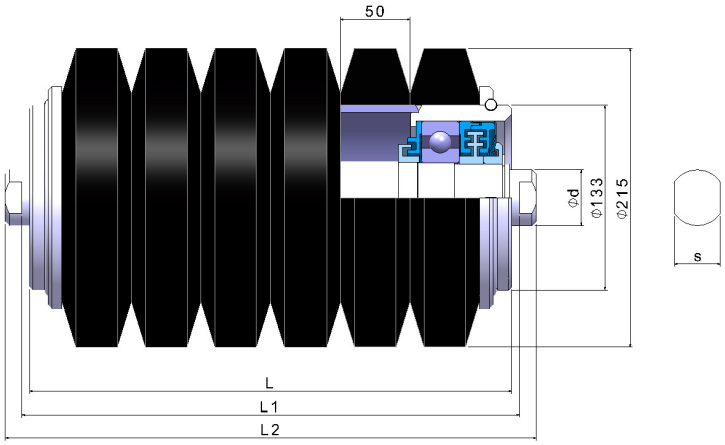

| dimensions [mm] | | number of rubber rings | Installation method | |
|---|---|---|---|---|
| L | 530 | 14 |  |  |
| | 600 | 16 | | |
| | 895 | 24 | | |
| Ødmax | 22 | | | |

| Shock absorber roller Ø108 | A-108xL/6308/190 | 14 |
|---|---|---|




| dimensions [mm] | | number of rubber rings | Installation method |
|---|---|---|---|
| L | 455 | 10 |  |
| Ødmax | 38 | | |

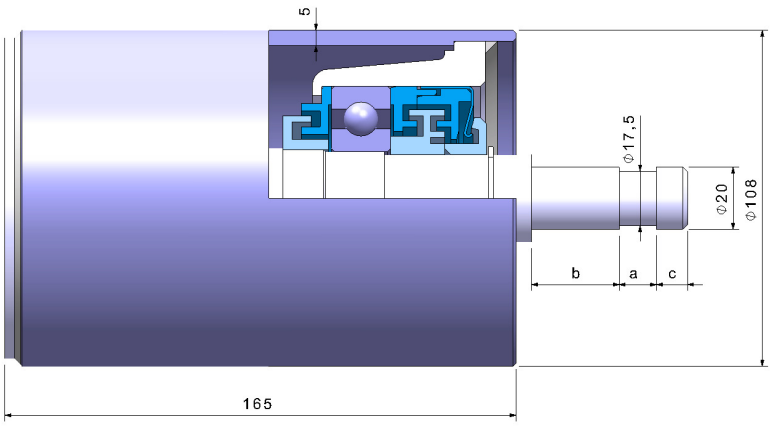
| Shock absorber roller Ø133 | A-108xL/6310/215 | 15 |
|---|---|---|




| dimensions [mm] | | number of rubber rings | Installation method |
|---|---|---|---|
| L | 465 | 9 |  |
| | 530 | 10 | |
| | 590 | 11 | |
| | 750 | 14 | |
| Ødmax | 48 | | |

## Side roller

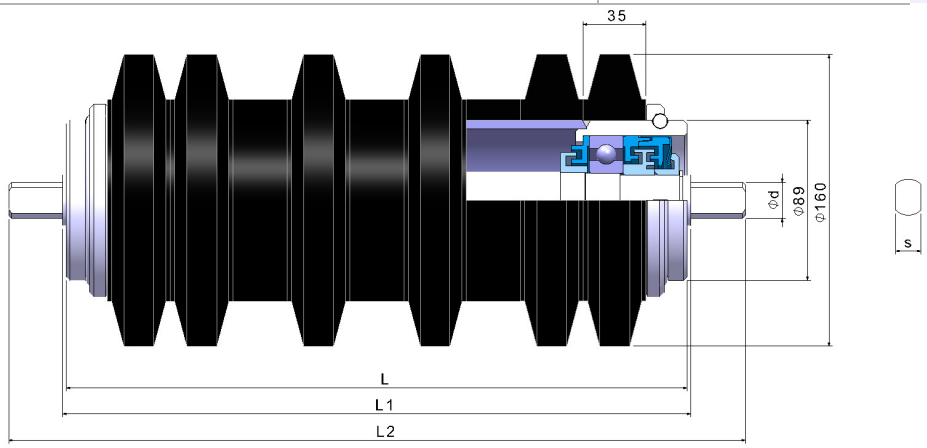
| Side roller Ø108 | B-108xL/6306 | 16 |
|---|---|---|




| ØD | Lmin | Ød | Ød1 | Width of conveyor belt |
|---|---|---|---|---|
| 108 | 165 | 20 | 17,5 | 800-1400 |

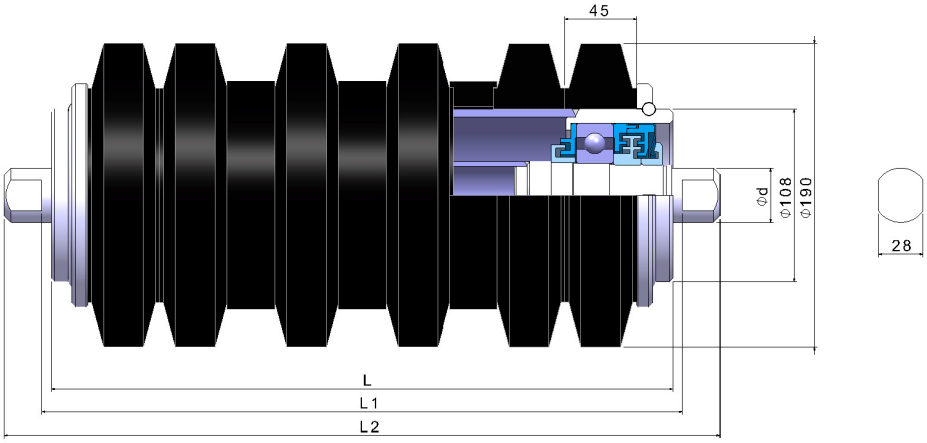
# Return rollers

| Return roller Ø89 | P-089xL/6306/160 | 17 |
|---|---|---|




| dimensions [mm] | | number of rubber rings + number of spacer rings | Installation method | |
|---|---|---|---|---|
| L | 750-1600 | (16+7) – (32+19) |  |  |
| Ødmax | 28 | | | |

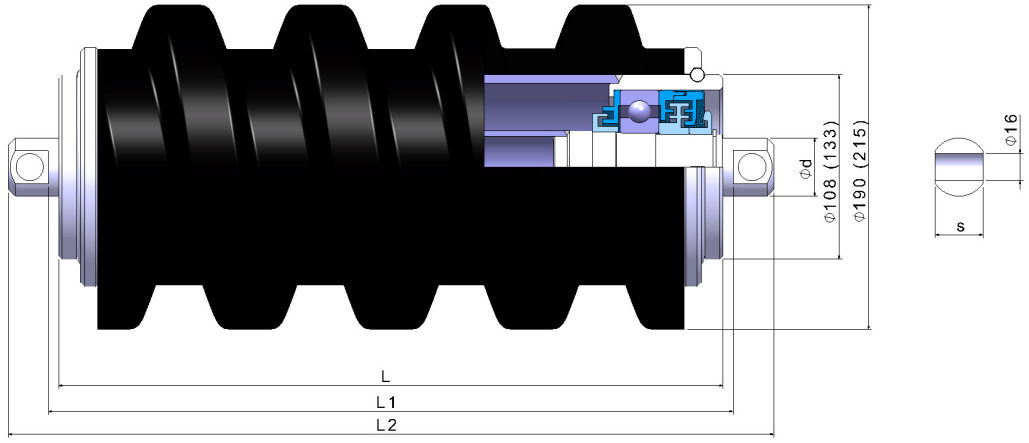
| Return roller Ø108 | P-108xL/6308/190 | 18 |
|---|---|---|




| dimensions [mm] | | number of rubber rings + number of spacer rings | Installation method | |
|---|---|---|---|---|
| L | 745-1000 | (13+6) – (17+9) |  |  |
| Ødmax | 38 | | | |

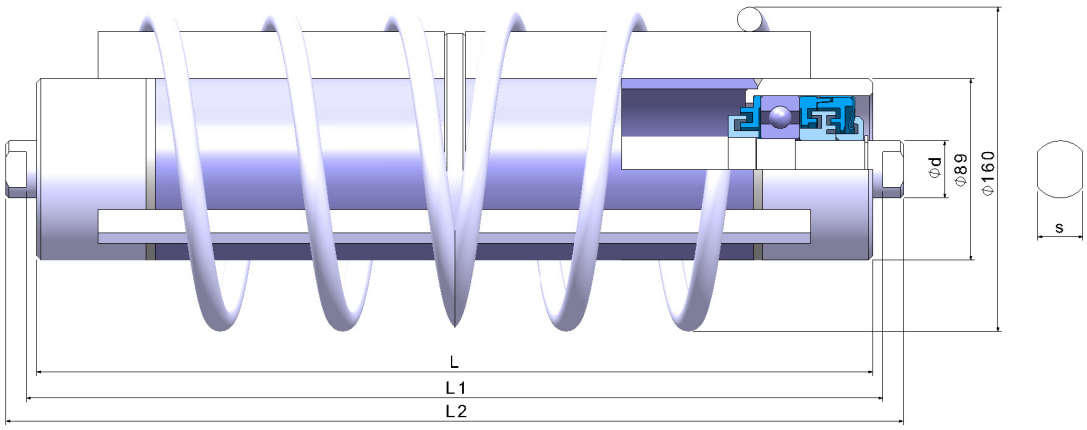
# Spiral return roller

| Spiral return with rubber spiral Ø108 | SG-108xL/6308/190<br>SG-133xL/6308/219 | 19 |
|---|---|---|




| dimensions [mm] | | Installation method | |
|---|---|---|---|
| L | 745-1000 | left + right | left right |
| Ødmax | 38 | | |

| Spiral return with metal spiral Ø89 | SM-089xL/6306/160 | 20 |
|---|---|---|

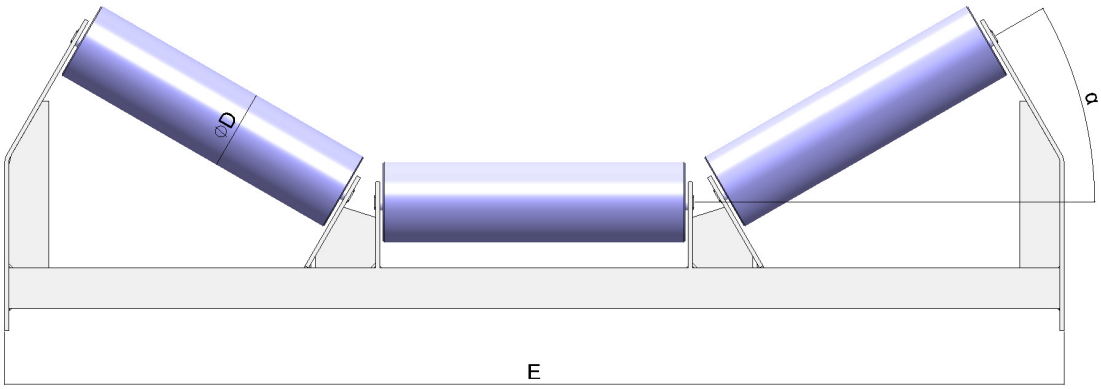



| dimensions [mm] | | Installation method |
|---|---|---|
| L | 950-1600 | |
| Ødmax | 28 | |

# Roller installation

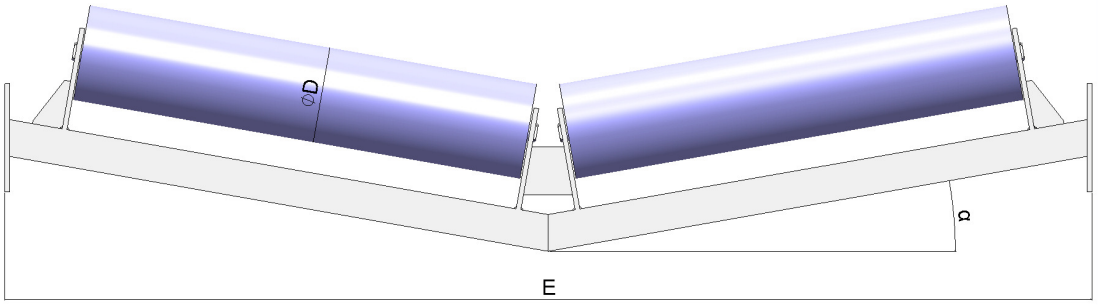
## Carrying impact idlers

### Stable carrying three-piece impact idler



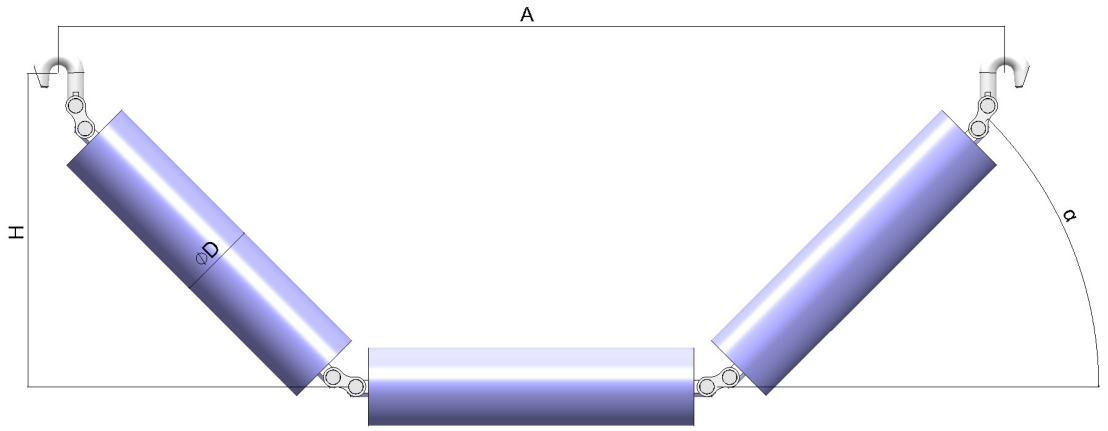

| Width of conveyor belt [mm] | α [◦] | E [mm] | D [mm] |
|---|---|---|---|
| 400-2000 | 20-35 | 800-2600 | 89-194 |

### Stable carrying or return two-piece impact idler




| Width of conveyor belt [mm] | α [◦] | E [mm] | D [mm] |
|---|---|---|---|
| 400-1000 | 20 | 700-1350 | 89-133 |

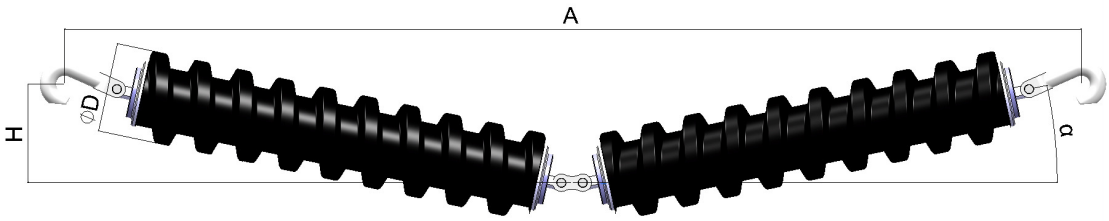
### Three-piece carrying garland




| width of conveyor belt [mm] | α [◦] | A [mm] | H [mm] | D [mm] |
|---|---|---|---|---|
| 650-2000 | 35-45 | 930-2500 | 250-730 | 89-194 |

## Return impact idler

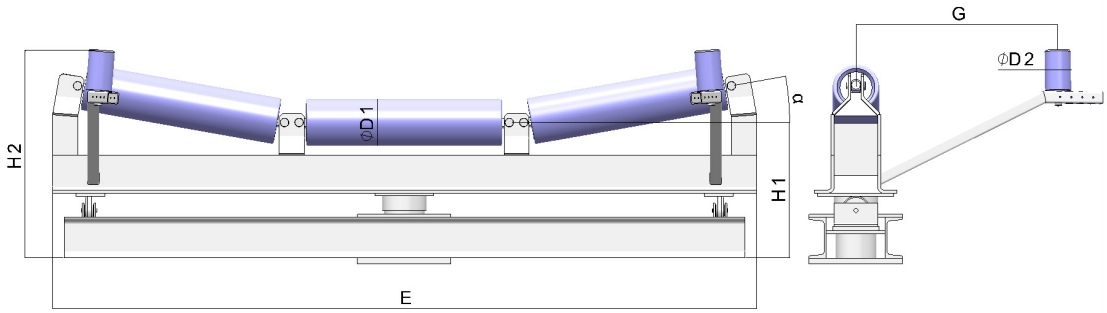
### Two-piece garland of return rollers with rubber spiral or rubber rings




| width of conveyor belt [mm] | α [◦] | A [mm] | H [mm] | D [mm] |
|---|---|---|---|---|
| 650-1800 | 10-15 | 1000-2520 | 90-330 | 160-219 |

## Directing impact idlers

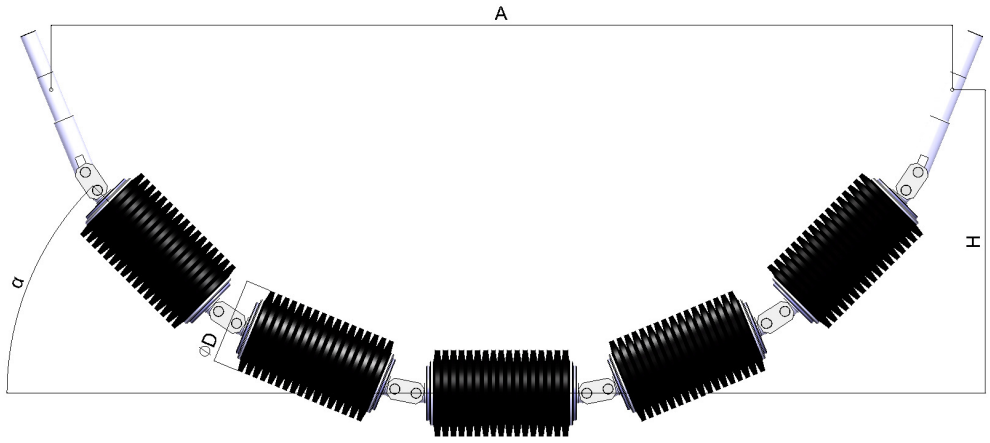
### Directing impact idler




| width of conveyor belt [mm] | α [◦] | E [mm] | $D_1$ [mm] | $D_2$ [mm] | G [mm] | $H_1$ [mm] | $H_2$ [mm] |
|---|---|---|---|---|---|---|---|
| 1000-2000 | 10 | 1350-2600 | 133-194 | 108-133 | 450-700 | 160-460 | 470-740 |

## Shock absorber impact idlers

### Shock absorber five- piece impact idler




| width of conveyor belt [mm] | α [◦] | A [mm] | H [mm] | D [mm] |
|---|---|---|---|---|
| 800-2000 | 30-45 | 1100-2600 | 700-1100 | 133-250 |