CATALOGUE
GRAVITY CONVEYOR ROLLERS

LAR
TRANSPORTNI SISTEMI

LAR TRANSPORTNI SISTEMI d.o.o.
SI/07/2017

Oblikovanje: KocKa

LAR
TRANSPORTNI SISTEMI

The company LAR TRANSPORTNI SISTEMI, d.o.o.

LAR TRANSPORTNI SISTEMI d.o.o. is a family-owned company. The company has settled status succession. The company's tradition goes back years and its development through various organisational forms has led to the present structure. From its beginnings in garages and households, the company has developed into a medium-sized enterprise. While conducting field work, technically qualified salespeople are in constant contact with customers and together with the salespeople and other persons working at the company's registered office form a homogeneous unit capable of solving even the most complex requirements of our customers.

We are shaping an entirely new path throughout the Slovenian and other markets, since we successfully connect our customers and suppliers. We provide our customers with assistance of verified and renowned foreign and domestic suppliers, quick response time and a very high level of services. With regard to this we do not rely solely on the superior quality of our product range but we also facilitate active participation in solving your problems and projects, while also providing support to the customer in achieving their goals.

With a clear business vision and aware of our advantages, we are building our path to long-term trust, quality of services, high professional skills and compliance with the agreed obligations.

A high level of organisation and good knowledge of the problems allow us to offer the client a solution to any problem at any time. Even the most complex projects are a welcome challenge that helps our further development providing us with a new motive for the work we are doing.

You can **rest assured** that you can always count on our professional assistance and know-how and that we will always lend an ear and provide proper advice which is priceless.

Continuous care for customer satisfaction which is achieved on a partnership basis and with the help of invaluable personal contact broadens the circle of customers that endorse us.

The **great responsibility** with regards to the trust shown to us is a big challenge for every new day, new project or new problem that we will help you solve.

We **look forward** to cooperating with you. Check the credibility of the introductory statements.

Index

CONVEYOR ROLLERS

LAR TRANSPORTNI SISTEMI

Contents Page

Labelling of conveyor rollers

LABELLING OF GRAVITY ROLLERS

Example: TIP **KK520 60x1.5 A10 NN 6x15 EL=540**
① ② ③ ④ ⑤ ⑥ ⑦

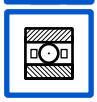
①	**K**	Pipe material – metal galvanised pipe
②	**K520**	Metal bearing system – high capacity class
③	**60**	External roller diameter (mm)
④	**1.5**	Roller wall thickness (mm)
⑤	**A10**	Roller load bearing axis diameter (mm)
⑥	**NN 6x15**	Roller axis design – internal thread
⑦	**EL=540**	Roller installation length (mm)

SYMBOLS


150 (daN)- Informative load capacity value per roller


0 - 80 C^0 - Temperature range


Lubrication


6202 – Type of bearing


No. of teeth (sprocket, Poly V, etc.)

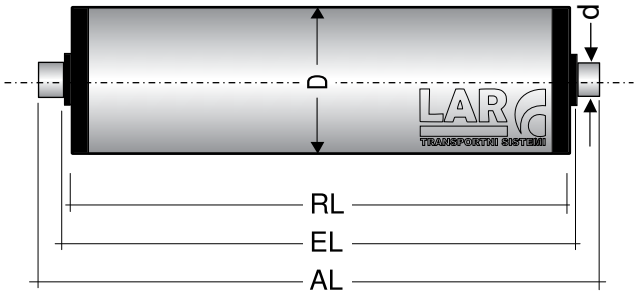
Roller designs and dimensions

DIMENSIONAL MARKINGS:

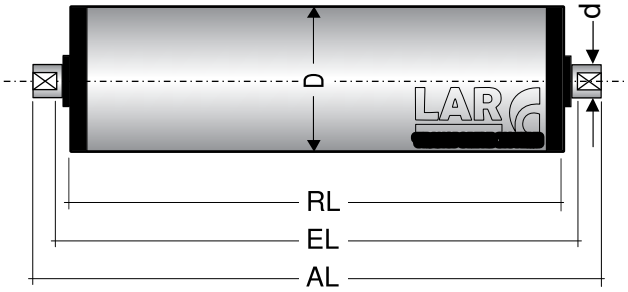
D - external roller diameter (mm)
Ds - roller wall thickness (mm)
d - roller load bearing axis diameter (mm)
RL - roller operational width(mm)
EL - roller installation dimension(mm)
AL - load bearing axis length(mm)

AXIS DESIGNS:

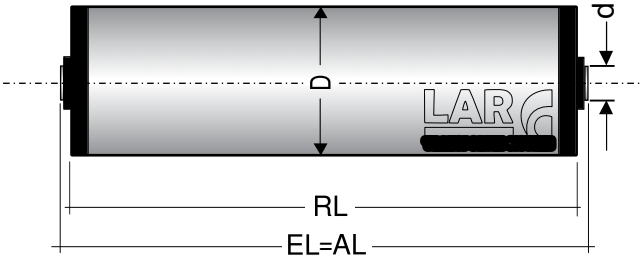
G - even, fixed axis
VZ - spring axis



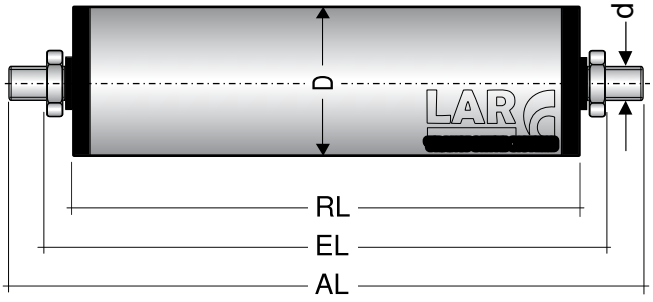
NK - wrench socket



NN - internal thread



ZN - external thread



All figures and drawings in this catalogue are symbolic and do not represent the actual situation, but rather serve a purely illustrative display.

Pipe materials

MATERIALS – DESCRIPTION

J – steel pipe – black

Steel pipes according to the standard EN 10305-3 are welded, cold sized pipes with a circular cross-section for precise application with a specific external diameter. They have precisely defined tolerances for the dimensions and a specific maximum surface roughness.

K – galvanised steel pipe - blank

Steel pipes according to the standard EN 10305-3 are cold sized pipes with a circular cross-section welded from galvanised band for precise application with a specific external diameter. They have precisely defined tolerances for the dimensions and a specific maximum surface roughness.

X – 1.4301 INOX, stainless steel pipe

Steel pipes according to the standard DIN 17455 are welded pipes from stainless steel with a circular cross-section for precise application with a specific external diameter. They have precisely defined tolerances for the dimensions and surface roughness.

Al – AlMgSi 0.5, aluminium pipe

Round aluminium pipes are made of aluminium alloy and meet the material standard according to EN 573-3 and 755-2. The pipes are made according to the extrusion process (T66) with a circular cross-section. Dimensions, diameter, cross-section and mass are within the tolerance range in accordance to EN 755-7.

P – PVC plastics, plastic tube according to EN ISO 1163

Plastic PVC (polyvinyl chloride) tubes are made from non-combustible plastic material with very good chemical resistance and mechanical strength, and they can tolerate constant temperature loads from -15 to +60°C.

O – PVC Baytec lining

The Baytec PVC plastic lining is put onto the surface of the metal rollers. The hardness of the lining is ±63ShA. The lining is available in 2mm thickness and is grey silver in colour.

MATERIALS – TREATMENT

Galvanising : Excellent alkaline (acid) galvanising with blue passivation with a uniform zinc coating according to DIN 50961.

Crimping : It is applied to the pipe surface according to the DIN 82 and DIN 403 procedure.

Filling : It is carried out by filling the polymer onto the roller according to the plan or in agreement with the customer.

Ruber lining : It is carried out by means of rubber (elastomer) application according to the plan or in agreement with the customer.

Painting : It is carried out for the protection of metal surfaces and the extension of the surface stability of metals according to the agreement with the customer.

Other :

– Tempered and/or abraded designs are performed on demand.
– The weight of coated pipes depends on the coating.
– On-demand chromed, nickel-plated and burnished designs.
– We also provide you with operating conditions under the ATEX Directive.

Other versions on request.

Pipe materials

MARKING		MATERIAL
J	-	Steel pipe – black
K	-	Galvanised steel pipe – blank
X	-	Stainless steel pipe – Inox 1.4301
Al	-	Aluminum pipe – AlMgSi 0.5
P	-	PVC plastic tube – grey or blue colour
G	-	Rubberised steel pipe
O	-	PVC Baytec lining ± 63 ShA – silver grey

DIMENSIONS OF PIPES

K – Steel pipe – galvanised

D (mm)		Ds (mm)	Weight (kg/m)
20.0	x	1.5	0.684
30.0	x	1.5	1.054
40.0	x	1.5	1.425
50.0	x	1.5	1.794
50.0	x	2.0	2.368
60.0	x	2.0	2.861
60.0	x	3.0	4.217
63.5	x	2.9	4.334
80.0	x	2.0	3.847
80.0	x	3.0	5.696
89.0	x	3.0	6.151
108.0	x	3.6	9.272
133.0	x	4.0	12.730
159.0	x	4.5	17.153

P – PVC Plastic tube

D (mm)		Ds (mm)	Weight (kg/m)
20.0	x	1.5	0.137
30.0	x	1.8	0.245
40.0	x	2.3	0.419
50.0	x	2.8	0.640
63.0	x	3.0	4.217
90.0	x	7.0	6.151

O – PVC Baytec lining ± 63ShA

D = 30.0, 40.0, 50.0, 60.0, 80.0, 89.0 mm
Ds = 2.0 mm

J – Steel pipe – black

D (mm)		Ds (mm)	Weight (kg/m)
50.0	x	1.5	1.794
50.0	x	2.0	2.368
60.0	x	2.0	2.861
63.5	x	2.9	4.334
80.0	x	2.0	3.847
80.0	x	3.0	5.696
89.0	x	3.0	6.151
108.0	x	3.6	9.272
133.0	x	4.0	12.730
159.0	x	4.5	17.153

X – 1.4301 INOX – stainless

D (mm)		Ds (mm)	Weight (kg/m)
20.0	x	1.5	0.684
30.0	x	1.5	1.054
40.0	x	1.5	1.425
50.0	x	1.5	1.794
60.3	x	1.6	2.385
80.0	x	2.0	3.847
89.0	x	3.0	6.151
108.0	x	3.6	9.272

Al – Aluminium pipe

D (mm)		Ds (mm)	Weight (kg/m)
20.0	x	1.5	0.235
30.0	x	1.5	0.245
40.0	x	1.5	0.500
50.0	x	1.5	0.617

G – Rubberised steel pipe

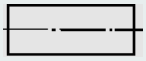
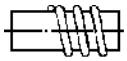
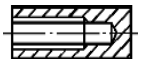
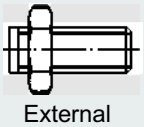
Pipe rubber lining is performed on demand.

Other versions on request.

Axis materials

MATERIAL		STANDARD	SPECIFICATION
J	-	EN 10278	Steel axis – black
K	-	EN 12329	Galvanised steel axis – blank
X	-	DIN10088	1.4305 INOX, stainless steel axis

AXIS DESIGNS

Axis diameter d (mm):	**6.0**	**8.0**	**10.0**	**6k11**	**12.0**	**14.0**	**6k14**	**15.0**	**17.0**	**20.0**	**25.0**
Weight (kg/m):	(0.222)	(0.395)	(0.617)	(0.823)	(0.888)	(1.208)	(1.300)	(1.387)	(1.782)	(2.466)	(3,853)
G  Even axis	10	10	10	10	10	10	10	10	15	15	15
VZ  Spring axis	10	10	10	10	10	10	10	10	15	15	15
NK  Wrench socket		5x10	8x10		10x10	12x10		12x10	14x10	14x10 14x15 15x10 15x15	18x10 18x15
NN  Internal thread		5x10	6x10		8x15	8x15 10x15		8x15 10x15	10x15 12x18	10x15 12x18	12x18 16x20
ZN  External thread	6x15	8x15	10x15		12x15	14x20				20x25	

- All thread values are metric.
- All processed (J), galvanic zinc plated (K) or Inox (X) 1.4305 axes are available.
- With the ZN external thread, 1 low nut is always for each side of the roller.
- M6/M8 nuts are in accordance with DIN 934, while M10/M12/M14/M16/M20 nuts are in accordance with DIN 439B.

Other versions on request.

Table of load capacities of pipes and axes

T1 – Table of load capacities of steel pipes by length (informative)

STEEL PIPE

L - length (mm)

D - diameter (mm) / L	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
20	48	25	20	10	10	10	10	10						
30	90	60	40	30	20	15	15	15						
40		230	170	120	80	60	40	30						
50				330	190	140	100	80	60	50	40	35		
60						330	200	120	110	90	70	55	40	35
63.5								500	390	300	240	190	160	140
80							470	380	260	200	160	140	120	110
89									470	380	310	250	210	180
108										520	430	350	290	260
133											600	510	460	430

Load capacity (kg)

T2 – Table of load capacities of plastic tubes by length (informative)

PLASTIC TUBE

L - length (mm)

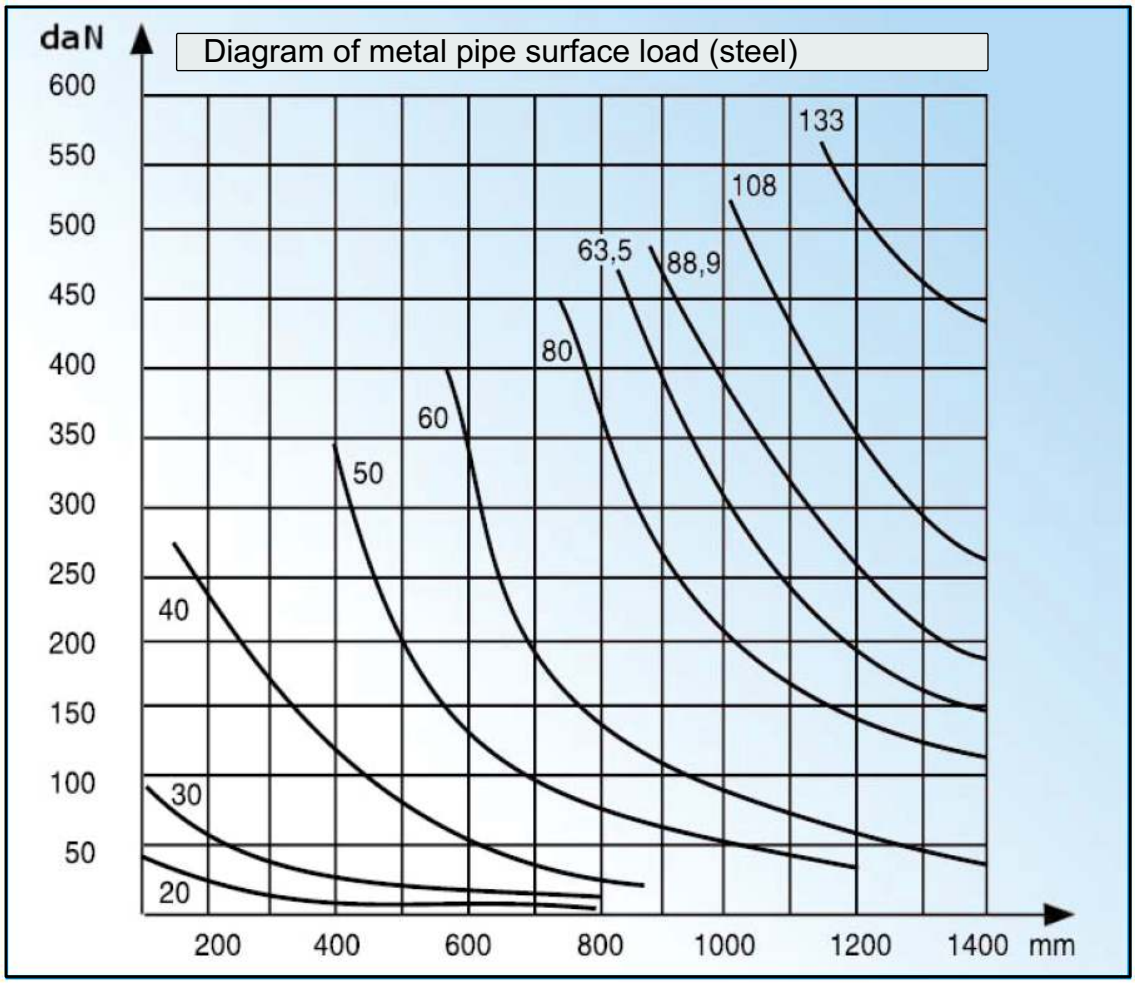
D - diameter (mm) / L	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
20	100	40	12,5											
30	130	100	65	45										
40	170	165	155	130										
50	230	220	200	170	100	40								
63				640	300	170	120	75	45					
90				700	430	230	150	120	90	60	50	35		

Load capacity (kg)

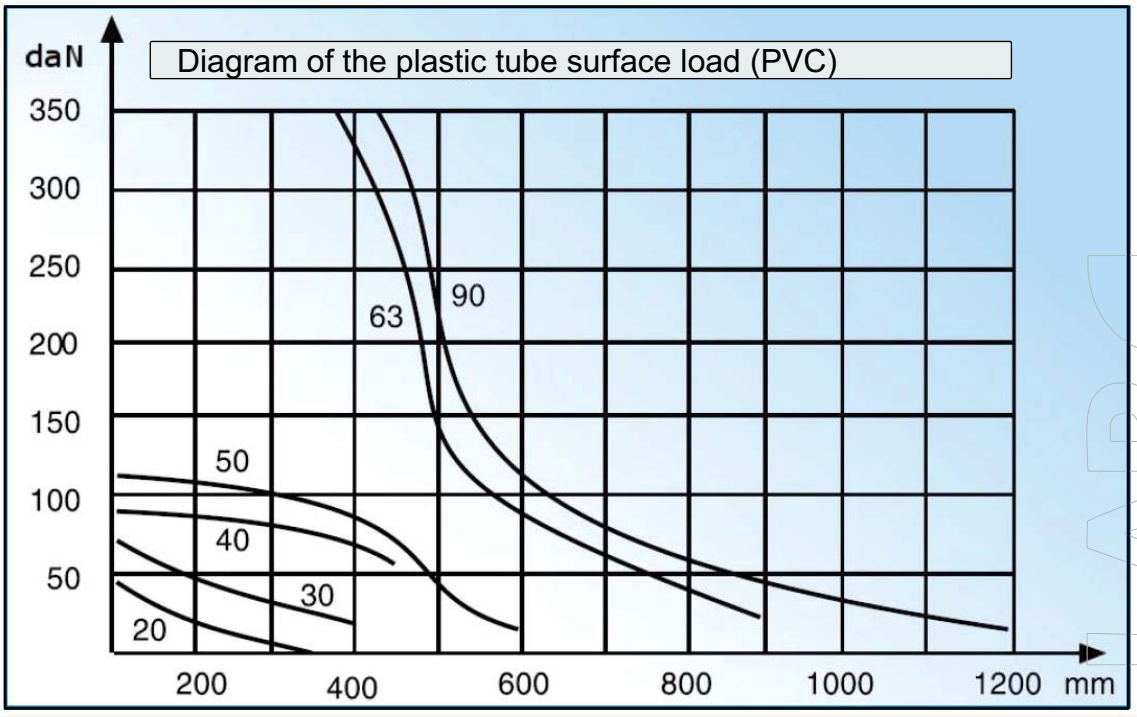
IMPORTANT!
Values in TABLES (T1, T2) and DIAGRAMS (D1, D2, D3, D4) are informative and do not represent the actual load capacity values of the pipe and axis. Tables and diagrams are used for illustrative purposes.

Pipe load capacity diagram

STEEL PIPE

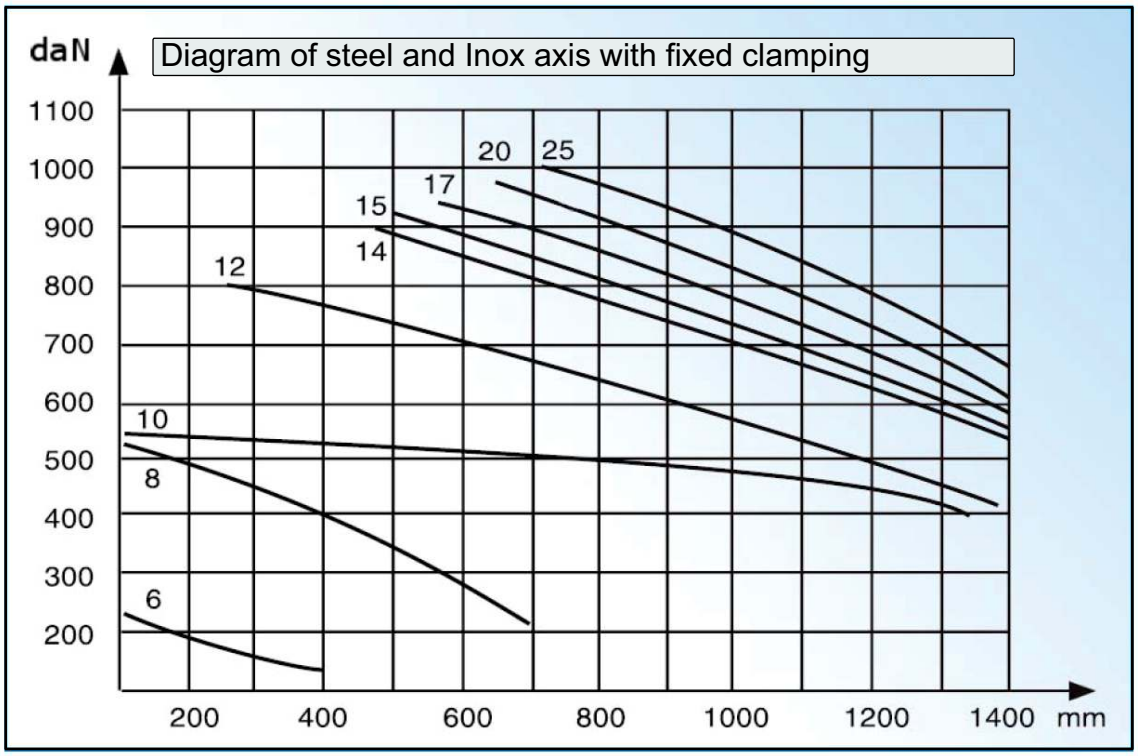


PLASTIC TUBE

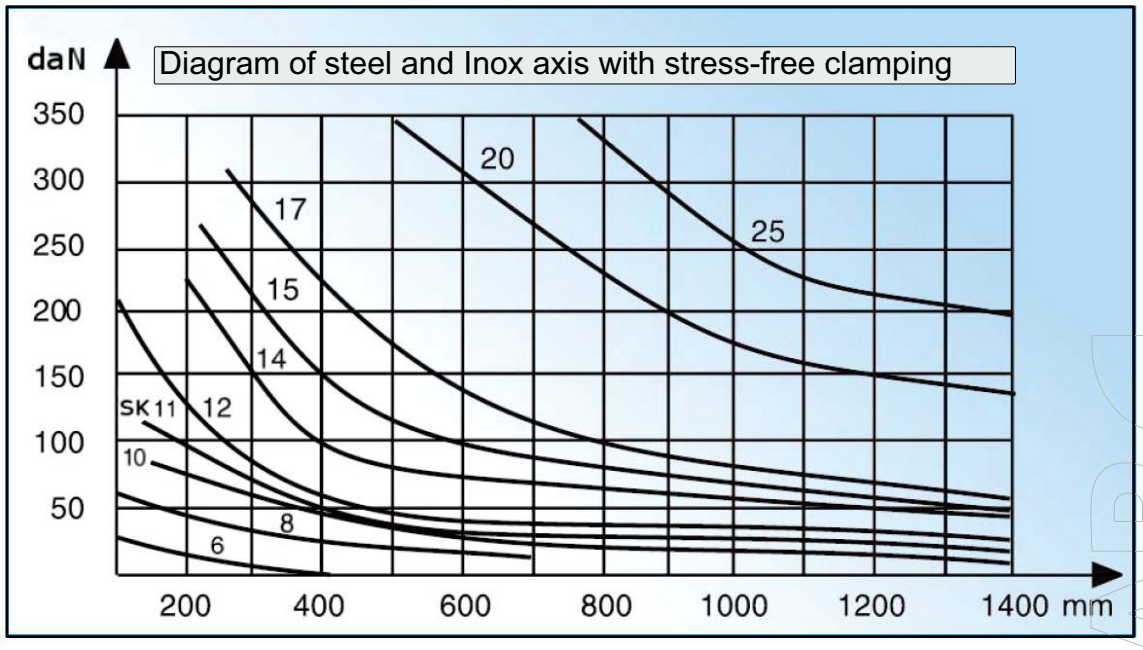


Axis load capacity diagram

WITH FIXED CLAMPING



WITH STRESS-FREE CLAMPING



Lubrication variants and bearings

LUBRICATION

- The bearing does not have special lubrication of the unit

- **EP0**
  The bearing has a lubrication for temperature stability from -30 to +120°C

- **EP2**
  The bearing has a lubrication for temperature stability from -30 to +120°C

- **Vactra 2**
  The bearing has a lubrication for temperature stability from -15 to +60°C

The best quality and tested lubricants and oils are provided for bearings. Other special oils and bearing lubricants are also supplied for the special purposes and requirements of customers in accordance with the agreement, including for high and low temperature conditions and other special conditions.

BEARINGS

Standardised bearings or special bearing systems are used with rollers manufactured by Lar transportni sistemi which are specially designed for installation in conveyor rollers. For smooth and long lasting rollers we provide quality components and standard bearings that meet European standards.

The lifespan of the bearing among other things depends on the roller load and the rotation speed.
For all roller types, the approximate values (maximum recommended speeds and loads) are given, which in no case define a binding service life and are only informative.

The roller load does not imply a direct load on a single roller, but the rule that the informative load is distributed onto three rotating or operating rollers.

The clean working environment and the regular inspection of the roller components are important for the normal operation of the rollers. In the case of damaged components or parts of conveyor rollers, we advise you to continue to operate and recommend the immediate replacement of conveyor rollers.

Special dedicated bearings or bearing systems or by prior enquiry special bearing designs are also delivered for special purposes and requirements of customers.

Roller ordering form

Information – roller

Company :

Contact :

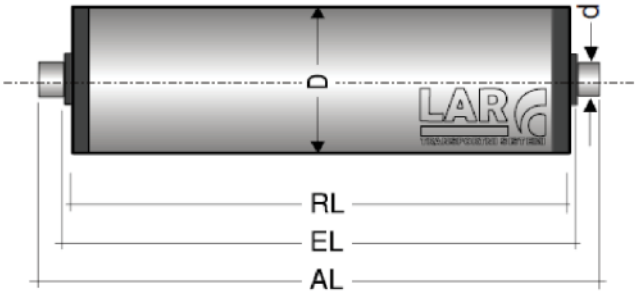
Phone :

Order : Deadline :

Date :		Quantity :	
CONVEYOR ROLLER – GRAVITY		DMA :	

ID _____

PRICE :



ROLLER TYPE				
J metal	K galvanised metal	P plastic (PVC)	X, Al stainless (Inox, aluminium)	O lining roller

DIMENSIONS			
* roller D = roller diameter	D		mm
* roller RL = roller operational width	RL		mm
* roller EL = installation dimension	EL		mm
* roller AL = axis length	AL		mm
* d = axis diameter	d		mm
* roller OB = roller load capacity	OB		DaN

METHOD OF AXIS CLAMPING				
G Even axis (fixed)	VZ Spring axis	NK Wrench socket	NN Internal thread	ZN External thread
		P ____ x ____ mm	M ____ x ____ mm	M ____ x ____ mm

SPECIAL DESIGNS AND REQUIREMENS (DESCRIPTION:)

CODE:		NAME:

GRAVITY - (P,K)

LIGHT-DUTY rollers - load capacity class **100** ●○○○ *(up to 50daN per roller)*

Series: *plastic – type* **P100, P110, P102, P131**

Series: *metal – type* **K116**

MEDIUM-DUTY rollers - load capacity class **300** ●●○○ *(up to 160daN per roller)*

Series: *plastic – type* **P330, P340, P342**

Series: *metal – type* **K320**

HIGH capacity rollers - load capacity class **500** ●●●○ *(up to 300daN per roller)*

Series: *plastic – type* **P543, P544**

Series: *metal – type* **K530, K540**

HEAVY-DUTY load capacity rollers- load capacity class **700** ●●●● *(up to 300daN per roller)*

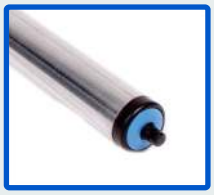
Series: *metal – type* **K744, K747, K748**

ADDITIONAL VARIANTS

- *MADE OF STAINLESS STEEL AND ALUMINIUM*
- *SPECIAL ROLLER SURFACE MACHINING – CRIMPING*
- *WITH GUIDE PLATES*
- *ANTISTATIC VARIANTS*
- *CHROMING, PAINTING, RUBBER LINING, FILLING, ETC.*
- *HIGH TEMPERATURE-RESISTANT ROLLERS WITH SPECIAL LUBRICANTS*
- *LININGS AGAINST DAMAGE, SLIPPING, HIGH TEMPERATURE -RESISTANT*

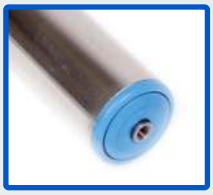
WE PROVIDE ROLLERS FOR MINES AND EX ZONES WHICH FULFILL THE OPERATING CONDITIONS ACCORDING TO THE ***ATEX DIRECTIVE IN ZONE I IM2 AND II M2.***

P100
P101



P110
P111

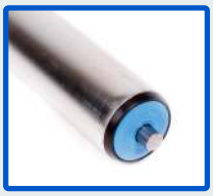
P102
P103



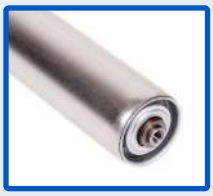
P131

K116

P330

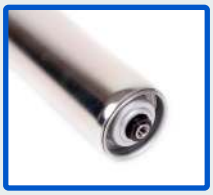


P342



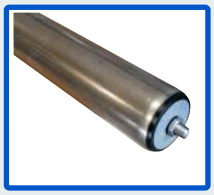
K320

P543



K530

K540

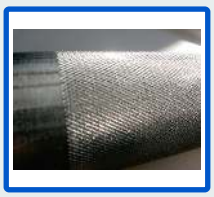


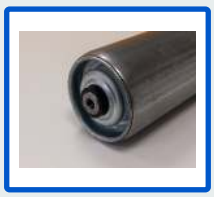
P740

K744

K747

K748





Conveyor rollers 100

GRAVITY

LIGHT-DUTY rollers – load capacity class **100** ***up to 50daN per roller***

Series: *plastic – type* **P100, P110, P102, P131**

Series: *metal – type* **K116**

Light-duty class 100

Rollers and roller tracks of this load capacity class are suitable for conveying lighter and smaller articles and products, since they provide maximum loads of up to 50daN per roller.

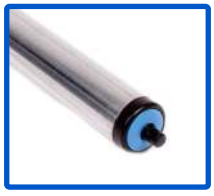
They are suitable for conveying paper or cardboard packaging, smaller packages and containers, plastic packaging products for pharmacies, pharmaceutical and food industries, for conveying lighter aluminium, copper, metal and electronic products, etc. whose mass does not exceed 50kg per roller. **Suitable rotation speed of the rollers of this class equal up to 0.5m/s.**

Usability : - For light-duty gravity conveyor rollers
- With precision rollers and also suitable for axial loads
- Smooth functioning of the motor-driven conveyors
- Special-purpose variants - antistatic
- with special lubricants

P100
P101

0-80 C° 14 daN

Spring P110
Spring P111

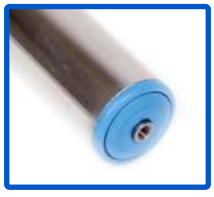


0-80 C° 20 daN

P102
P103

0-80 C° 20 daN

Inox P131



RL-31 Vactra 2 0-80 C° 50 daN

K116

RL-16 Vactra 2 0-100 C° 60 daN

Light-duty rollers P100

Type: **P100**
P101

GRAVITY

ROLLER DESCRIPTION

SERIES : **P** – plastic bearing system
CLASS : **1** – light-duty roller
TYPE : **00 – steel/01 – Inox**

USABILITY:
- A lightweight cost-effective gravity roller
- The Inox variant provides moisture and anti-corrosion resistance
- Suitable for most light – duty loads

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Precise and smooth roller operation because of a special ball bearing and polypropylene base
- Waterproof
- lightweight and smoothly running gravity roller

PIPE DESIGNS :
- Plastic tube
- Metal pipe
- Aluminium pipe

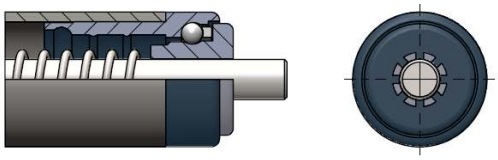
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread -a low BM 8 nut (DIN 439) for axis (fi 6- BM6, fi 8- BM8, fi10- BM10) is added

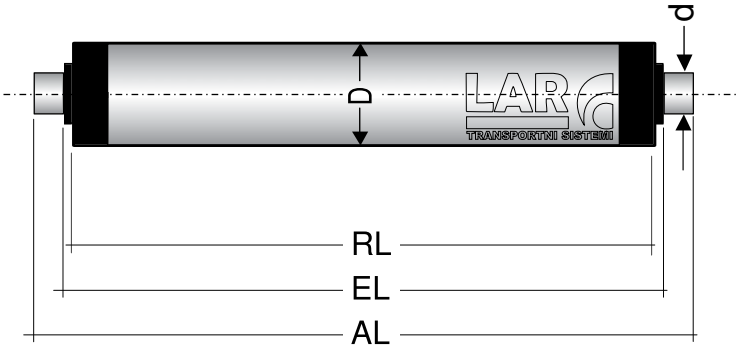
MATERIAL :
- Roller bearing : from thermoplastics with a single ball series.
- Bearing housing : plastic
- Internal ring : plastic
- Bearing cage : plastic
- Seal : plastic
- Bushing :
- The balls are made : - from steel (P100)
  - from Inox 1.4034 (P101)

Type: **P100** **P101**

0-80 C⁰ **14 daN**

Max. roller speed: **0.4 m/s**

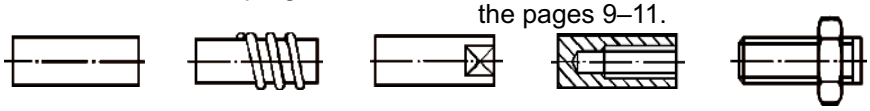




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P100	P101	Recommended approx. max. roller speed m/s
20 x 1.5	6,8	●	●	○		●	●	○	10	10	0.2
30 x 1.5	6,8	●	●	○	●	●		○	14	14	0.3
30 x 1.8	6,8				●		●		14	14	0.3
40 x 1.5	8,10	●	●	○	●	●		○	14	14	0.4
40 x 2.3	8,10				●		●		14	14	0.4

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
20,30	6	**RL**=EL- **AL**=EL+	-4 20	-4 20			-12 30
20,30,40	8	**RL**=EL- **AL**=EL+	-4 20	-4 20	-6 20	-6 0	-14 30
40	10	**RL**=EL- **AL**=EL+	-4 20	-4 20	-6 20	-6 0	-16 30

Other on-demand designs.

Ordering example: PP100 20x1.5 A8 VZ EL=370

Light-duty roller P110

GRAVITY

Type: **Spring** **P110**
P111

ROLLER DESCRIPTION

SERIES : **P** - Pastic bearing system
CLASS : **1** - Light-duty roller
TYPE : **10 - steel/11 – Inox**

USABILITY :
- A spring roller suitable for most light-duty load capacities
- A lightweight cost-effective gravity roller
- The Inox variant provides moisture and anti-corrosion resistance

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Precise and smooth roller operation because of a special ball bearing and polypropylene base
- lightweight and smoothly running gravity roller
- Bearing with spring axis

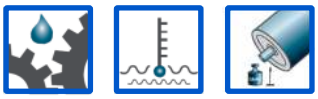
PIPE DESIGNS:
- Plastic tube
- Metal pipe
- Aluminium pipe

AXIS DESIGNS :
- Spring

MATERIAL :
- Roller bearing : from thermoplastics with a double ball series.
- Bearing housing : plastic
- Internal ring : plastic
- Bearing cage : plastic
- Seal : plastic
- Bushing : plastic
- The balls and the spring are made :
  - from steel (P110)
  - from Inox 1.4034 (P111)

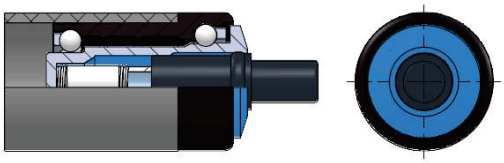
●○○○

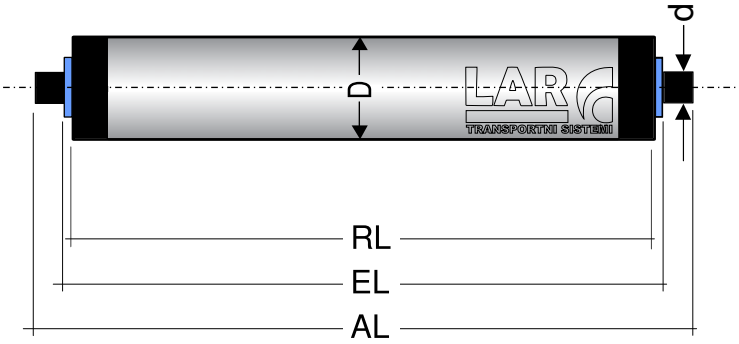
Type: **P110**
P111



0-80 C⁰ **20 daN**

Max. roller speed: **0.5 m/s**

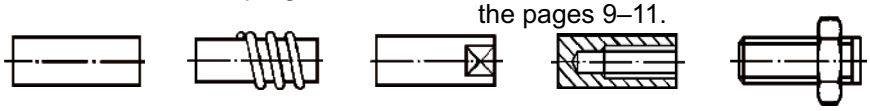




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P110	P111	Recommended approx. max. roller speed m/s
20 x 1.5	6	●	●	○		●	●	○	16	16	0.2
30 x 1.8	8				○		●		20	20	0.3
40 x 2.3	8				○		●		20	20	0.4
50 x 2.8	10				○		●		30	30	0.5

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
20	6	**RL**=EL- **AL**=EL+		-8 16			
30,40	8	**RL**=EL- **AL**=EL+		-8 16			
50	10	**RL**=EL- **AL**=EL+		-4 20			

Other versions on request.

Ordering example: PP110 30x1.8 A8 VZ EL=260

Light-duty load capacity roller P102

GRAVITY

Type: **P102**
P103

ROLLER DESCRIPTION

SERIES : **P** - Pastic bearing system
CLASS : **1** - Light-duty roller
TYPE : **02 - steel/03 – Inox**

USABILITY :
- A lightweight cost-effective gravity roller
- The Inox variant provides moisture and anti-corrosion resistance
- Suitable for light-duty loads

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Smooth and precise roller operation because of a special double ball bearing system and polypropylene base
- Waterproof
- lightweight and smoothly running gravity roller

PIPE DESIGNS:
- Plastic tube
- Metal pipe
- Aluminium pipe

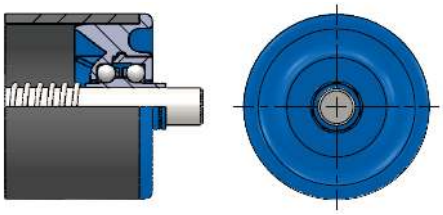
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread
  - a low BM 12 nut is added (DIN 439)

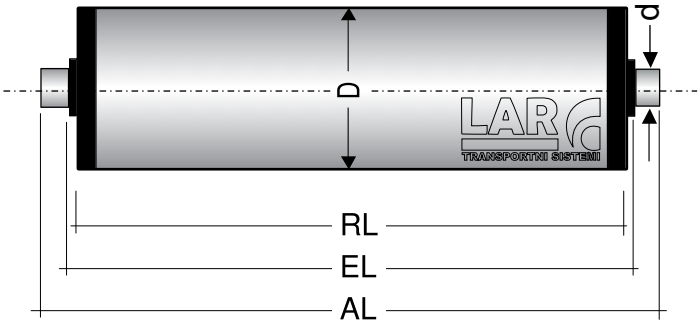
MATERIAL :
- Roller bearing : from thermoplastics with a double ball series.
- Bearing housing : plastic
- Internal ring : plastic
- Bearing cage : plastic
- Seal : plastic
- Bushing : plastic
- The balls are made :
  - from steel (P102)
  - from Inox 1.4034 (P103)

Type: **P102**
P103

0-80 C⁰ **20 daN**

Max. roller speed: **0.5 m/s**

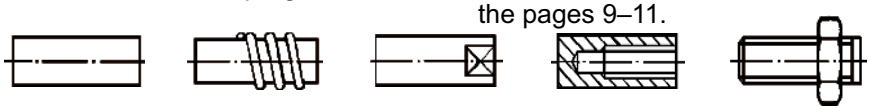




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P102	P103	Recommended approx. max. roller speed m/s
50 x 1.5	12.6k11	●	●	○	●	●		○	20	20	0.5
50 x 2.8	12.6k11						●		20	20	0.5

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.

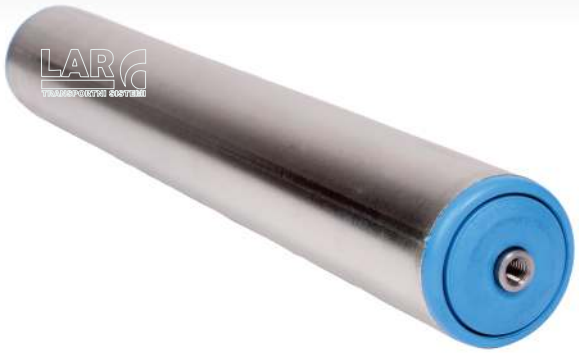


Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50	12	**RL**=EL- **AL**=EL+	-7 20	-7 20	-9 20	-9 0	-21 30
50	6k11	**RL**=EL- **AL**=EL+	-7 20	-7 20			

Other versions on request.

Ordering example: PP102 50x1.5 A12 VZ EL=450

Light-duty load capacity roller P131



GRAVITY

Type: Inox P131

ROLLER DESCRIPTION

SERIES : **P** - Pastic bearing system
CLASS : **1** - Light-duty roller
TYPE : **31 - Inox, 31z – Inox, rounded-off edge**

USABILITY :
- Suitable for light-duty loads in food and pharmaceutical industries or in positions where it is exposed to strong humidity (washing, baths, etc.)
- Moisture and anti-corrosion resistant

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Quiet and precise as well as smooth roller operation because of a special ball bearing
- Waterproof
- Enabled smoother lateral material passage due to a rounded-off roller edge (Inox P131z)

PIPE DESIGNS:
- Plastic tube
- Inox metal pipe
- Aluminium pipe

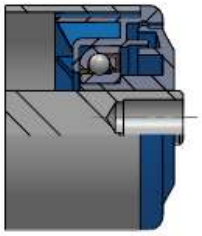
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 10 nut is added (DIN 439) for axis (fi10- BM10, fi12- BM12)

MATERIAL :
- Roller bearing : from thermoplastics with a single ball series RL-31
- Bearing housing : Inox 1.4301
- Internal ring : Inox 1.4301
- Bearing cage : plastic
- Seal : labyrinth-type single, plastic
- Bushing : plastic
- The balls are made : - from Inox 1.4301 (P131)

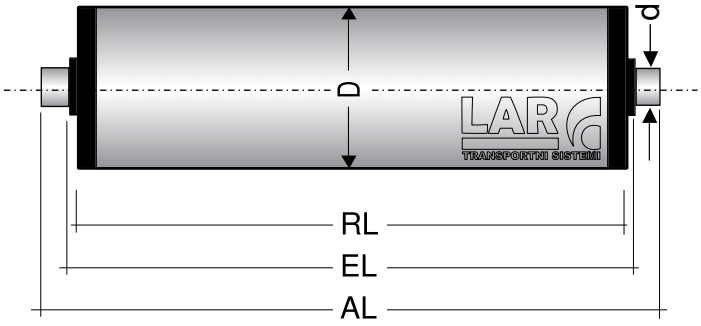
Type: Inox P131

RL-31 | Vactra 2 | 0-80 C° | 50 daN

Max. roller speed : 0.5 m/s
Option P131z



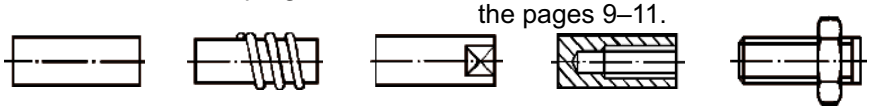
Option P131z



Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P131	Recommended approx. max. roller speed m/s
50 x 1.5	10,12	○	○	○	●	●		●	50	0.5
50 x 2.8	10,12						●		50	0.5

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50	10	RL=EL- AL=EL+	-5 20	-5 20	-7 20	-7 0	-17 30
50	12	RL=EL- AL=EL+	-5 20	-5 20	-7 20	-7 0	-19 30

Other versions on request.

Ordering example: XP131 50x1.5 A12 ZN 12x15 EL=550

Light-duty roller K116

GRAVITY

Type: **K116**

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **1** - Light-duty load capacity roller
TYPE : **16 - Steel**

USABILITY :
- Suitable for light-duty loads in positions where a less surface sensitive roller is provided
- A lightweight cost-effective gravity roller
- Medium-duty precision rollers and also suitable for axial loads

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Precise and smooth roller operation due to a special ball bearing
- Reduced noise during operation
- Surface-resistant and durable roller

PIPE DESIGNS:
- Galvanised metal tube
- Inox metal pipe
- Aluminium pipe

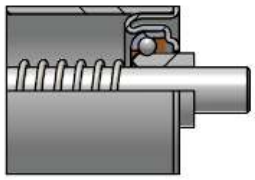
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 10 nut is added (DIN 439) for axis (fi 8-BM8, fi10-Bm10)

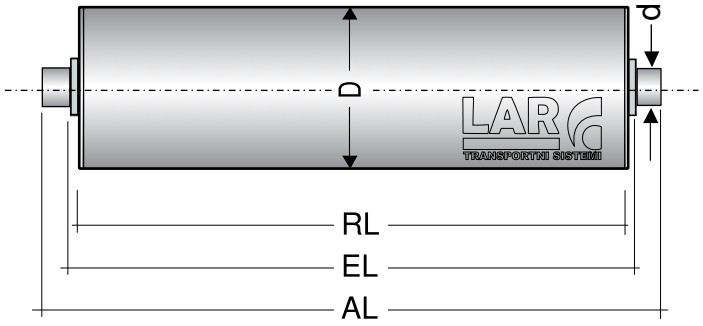
MATERIAL :
- Roller bearing : from galvanised steel sheet with a cone ball bearing RL-16
- Bearing housing : steel, hardened
- Internal ring : steel, hardened, galvanised
- Bearing cage : plastic
- Seal :
- Bushing : steel
- The balls are made :- from steel (K116)

Type: K116

RL-31 | Vactra 2 | 0-100 C° | 60 daN

Max. roller speed : 0.3 m/s

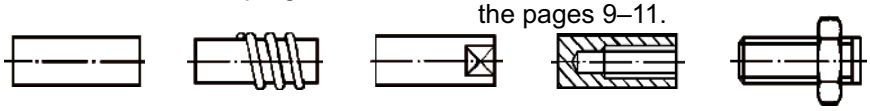




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K116	Recommended approx. max. roller speed m/s
30 x 1.5	8,10	●	●	○	○			○	60	0.3

● - standard programme
○ - design on request

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
30	8	RL=EL- AL=EL+	-7 20	-7 20	-9 20	-9 0	-17 30
30	10	RL=EL- AL=EL+	-7 20	-7 20	-9 20	-9 0	-19 30

Other versions on request.

Ordering example: KK116 30x1.5 A8 NN 5x10 EL=350

Conveyor rollers 300

GRAVITY

MEDIUM-DUTY rollers – load capacity class of* 300 *up to 160daN per roller

Series: *plastic – type* **P330, P342**

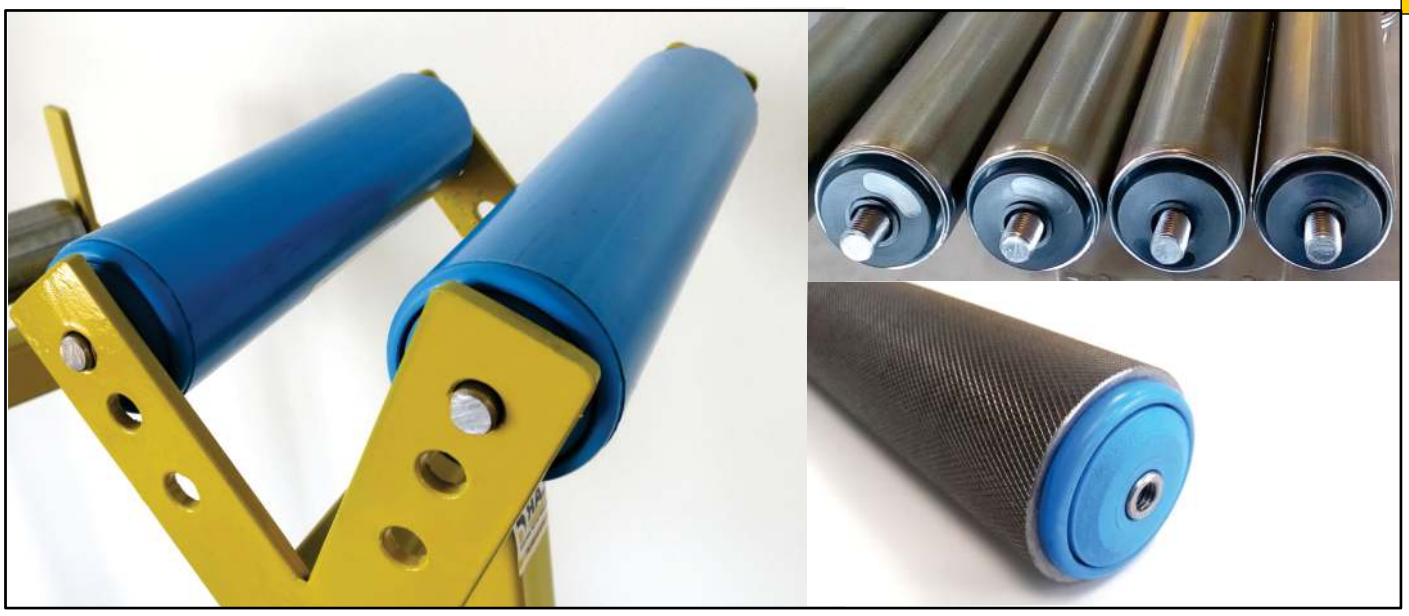
Series: *metal – type* **K320**

Medium-duty class 300

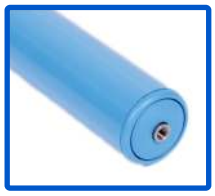
Rollers and roller tracks of this load capacity class are suitable for conveying medium weight and medium-sized articles and products, since they provide **maximum loads of up to 160daN** per roller category.

Suitable for transporting packaged consumer goods and for all types of production from metal, chemical, glass, paper processing, electrical industry etc., for conveying medium weight packages of wood, metal, paper and plastic, etc. whose mass does not exceed 160kg per rollers. **Suitable roller speed of up to 0.5m/s.**

Usability : - For medium-duty gravity conveyor rollers
- With medium precision and also suitable for axial loads
- Smooth functioning of the motor-driven conveyors
- Quiet operation
- Special-purpose designs – antistatic and with special lubricants

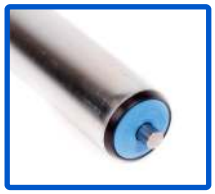


Standard P330



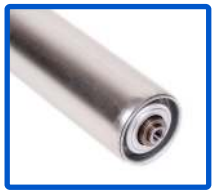
RL-30 | Vactra 2 | 0-80 C° | 160 daN

P342



6002 | Ep-2 | 0-80 C° | 160 daN

Standard K320



RL-20 | Vactra 2 | 0-100 C° | 160 daN

Medium-duty roller P330

GRAVITY

Type: Standard P330

ROLLER DESCRIPTION

SERIES : **P** - Plastic bearing system
CLASS : **3** - Medium-duty roller
TYPE : **30 - Steel, 30z – steel, with a plastic rounded-off edge**

USABILITY :
- A lightweight cost-effective gravity roller
- With medium precision and also suitable for axial loads
- Suitable for medium loads

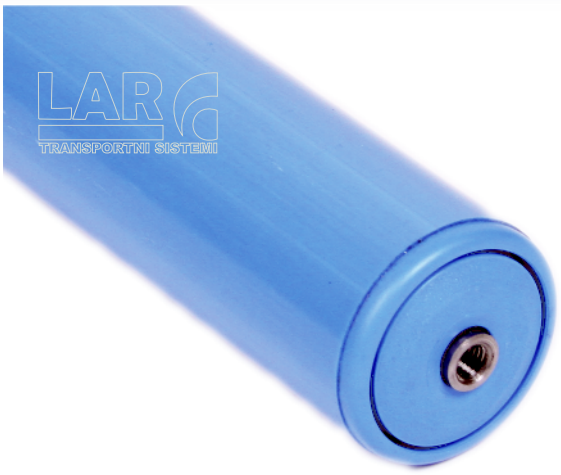
APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Quiet and precise as well as smooth roller operation because of a special ball bearing and polypropylene base
- Standard and smoothly running gravity roller
- Enabled smoother lateral material passage due to a rounded-off roller edge (P330z)

PIPE DESIGNS:
- Plastic tube
- Metal pipe
- Aluminium pipe

AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 10 nut is added (DIN 439) for axis (fi10-BM10, fi12-BM12, fi14-BM14)

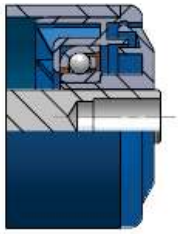
MATERIAL :
- Roller bearing : from thermoplastics with a single ball series and RL-30 bearing.
- Bearing housing : steel, hardened
- Internal ring : steel, hardened
- Bearing cage : plastic
- Seal : single labyrinth-type, plastic
- Bushing : plastic
- The balls are made :- from steel (P330)



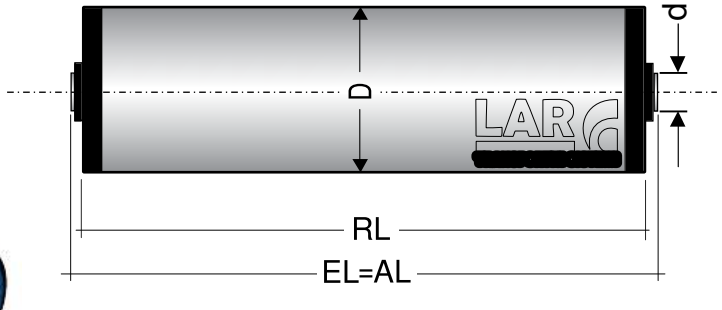
Type: Standard P330

RL-30 | Vactra 2 | 0-80 C° | 160 daN

Max. roller speed : 0.5 m/s



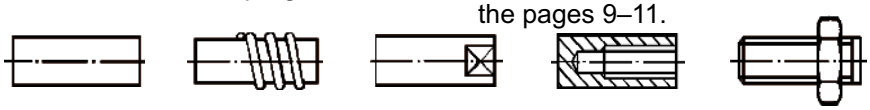
Option P330z



Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P330	Recommended approx. max. roller speed m/s
50 x 1.5	10,12,14	●	●	○	●	●		●	160	0.5
50 x 2.8	10,12,14						●		160	0.5

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50	10	**RL**=EL-	-5	-5	-7	-7	-17
		AL=EL+	20	20	20	0	30
50	12	**RL**=EL-	-5	-5	-7	-7	-19
		AL=EL+	20	20	20	0	30
50	14	**RL**=EL-	-5	-5	-7	-7	-21
		AL=EL+	20	20	20	0	40

Other versions on request.

Ordering example: PP50x2.8 A10 NN 10x15 EL=550

Medium-duty roller P342

GRAVITY

Type: P342

ROLLER DESCRIPTION

SERIES : **P** - Plastic bearing system
CLASS : **3** - Medium-duty roller
TYPE : **42 – steel, 42z – steel, with a plastic rounded-off edge**

USABILITY :
- A cost-effective gravity roller
- Precise and suitable also for axial loads
- Suitable for medium loads

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
- Quiet, precise, and smooth roller operation because of the ball bearing and polypropylene base
- Smooth running and durable gravity roller
- Enabled smoother lateral material passage due to a rounded-off roller edge (P330z)

PIPE DESIGNS:
- Plastic tube
- Metal pipe
- Aluminium pipe

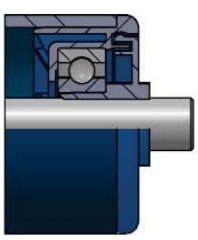
AXIS DESIGNS :
- Even, spring,
- Wrench socket
- Internal thread
- External thread - a low BM 12 nut is added (DIN 439) for axis (fi12-BM12, fi14-BM14)

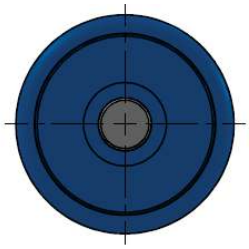
MATERIAL :
- Roller bearing : from thermoplastics with an installed standard 6002 groove bearing which is also available in 2RS or ZZ design.
- Seal : single labyrinth-type, plastic
- Bushing : plastic

Type: P342

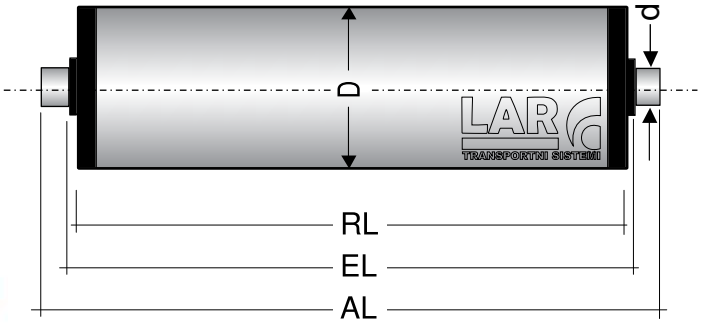
6002	Ep-2	0-80 c°	160 daN

Max. roller speed : 0.5 m/s





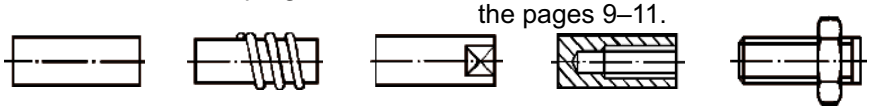
Option P342z



Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P342	Recommended approx. max. roller speed m/s
50 x 1.5	12,14	●	●	○	●	●		●	160	0.5
50 x 2.0	12,14	●	●	○	●			●	160	0.5
50X 2.8	12,14						●		160	0.5
60 x 2.0	12,14	●	●	○	●	●		○	160	0.6

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50,60	12	RL=EL- AL=EL+	-5 20	-5 20	-7 20	-7 0	-19 30
50,60	14	RL=EL- AL=EL+	-5 20	-5 20	-7 20	-7 0	-21 40

Other versions on request.

Ordering example: PP342 50x2.8 A12 VZ EL=550

Medium-duty roller K320

GRAVITY

Type: **Standard K320**

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **3** - Medium-duty roller
TYPE : **20 - Steel**

USABILITY :
- Suitable for medium-duty loads in positions where a low surface-sensitive roller is provided
- A cost-effective gravity roller
- Medium-duty precise and suitable also for axial loads

APPLICATION :
- In-house transport technology
- For gravity-type applications only

CHARACTERISTICS :
– Most universal metal roller
– Precise and smooth roller operation due to a special ball bearing
– Smoothly running, surface-resistant and durable gravity roller

PIPE DESIGNS:
- Galvanised metal pipe
- Inox metal pipe
- Aluminium pipe

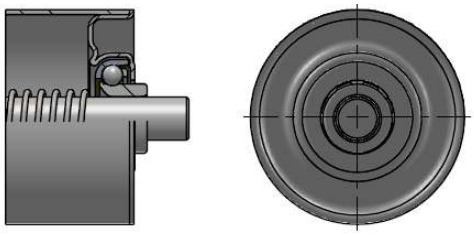
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 10 nut is added (DIN 439) for axis (fi8-BM8, fi10-BM10, fi12-BM12)

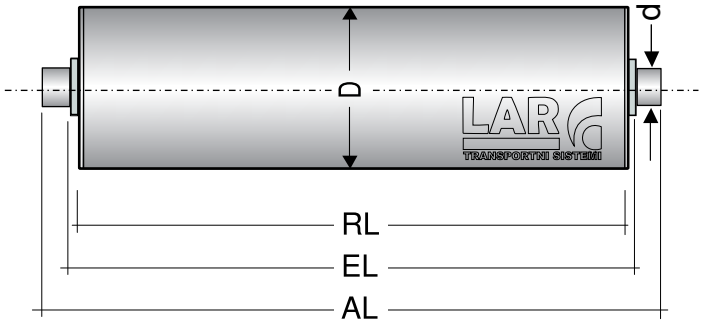
MATERIAL :
- Roller bearing : made of galvanised steel sheet with a cone ball bearing RL-20.
- Bearing housing : steel, hardened
- Internal ring : steel, hardened, galvanised
- Bearing cage : plastic
- Seal :
- Bushing : plastic
- The balls are made : - from steel (K320)

Type: Standard K320

RL-20 Vactra 2 0-100 c° 160 daN

Max. roller speed : 0.6 m/s

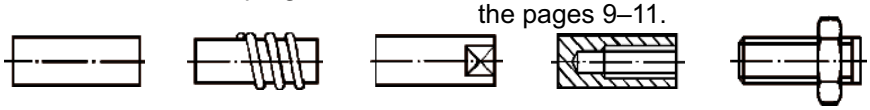




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K320	Recommended approx. max. roller speed m/s
40 x 1.5	8,10,12	●	●	○	●	○		○	160	0.4
50 x 1.5	8,10,12	●	●	○	●	○		○	160	0.5
50 x 2.0	10,12	●	●	○	●				160	0.5
60 x 2.0	10,12	●	●	○	●	○		○	160	0.6

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
40,50	8	RL=EL-	-5	-5	-7	-7	-15
		AL=EL+	20	20	20	0	30
40,50,60	10	RL=EL-	-5	-5	-7	-7	-17
		AL=EL+	20	20	20	0	30
40,50,60	12	RL=EL-	-5	-5	-7	-7	-19
		AL=EL+	20	20	20	0	30

Other versions on request.

Ordering example: KK320 50x1.5 A10 VZ EL=550

Conveyor rollers 500

GRAVITY

HIGH GRAVITY capacity rollers – load capacity class 500 load up to 300daN per roller

Series: *plastic – type* **P544**

Series: *metal – type* **K530, K540**

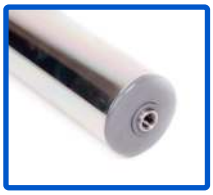
High capacity class 500:

Rollers and roller tracks of this load capacity class are suitable for conveying palleted, large-sized and heavyweight articles and products, since they provide maximum loads **of up to 300daN per roller.**

They are suitable for conveying medium-sized pallets and industrial products in various packaging, plastic, metal and wooden boxes intended for smaller and larger warehouses for the transport of products and semi-finished products of different sizes intended for all branches of industry, whose mass does not exceed 300kg per roller.
Suitable rotation speed of the rollers up to 3.2m/s. and depend on the roller

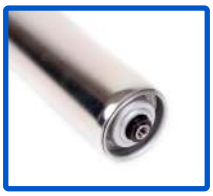
Usability :
- For heavy-duty gravity conveyor rollers
- Medium-duty precision and fitted with ball bearings
- Smooth functioning of the heavy-duty motor-driven conveyors
- Quiet operation
- Special-purpose designs – stainless, temperature-resistant and with special lubricants

P544



6204 Ep-2 0-80 c° 300 daN

K530



RL-30 EP-0 0-100 c° 240daN

Standard K540

6202 EP-2 0-80 c° 300daN

High capacity roller P544

GRAVITY

Type: P544

ROLLER DESCRIPTION

SERIES : **P** - Plastic bearing system
CLASS : **5** - High-duty load capacity roller
TYPE : **44 - Steel, bearing 6204**

USABILITY :
- Gravity roller for high loads
- Precise and suitable also for axial loads
- Suitable for driven and motor-driven systems

APPLICATION :
- In-house transport technology
- Suitable for gravity-type applications

CHARACTERISTICS :
– Quiet, precise, and smooth roller operation because of the ball bearing and polypropylene base
– Smoothly running and durable roller
– Surface-resistant gravity roller

PIPE DESIGNS:
- Plastic tube
- Metal pipe
- Aluminium pipe

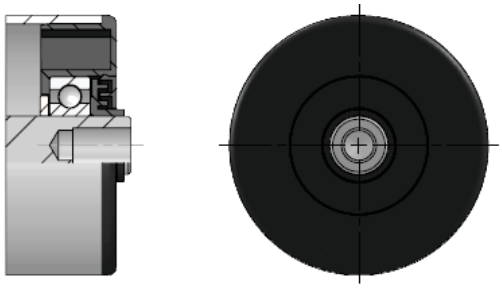
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 12 nut is added (DIN 439) for axis (fi12-BM12, fi20-BM20)

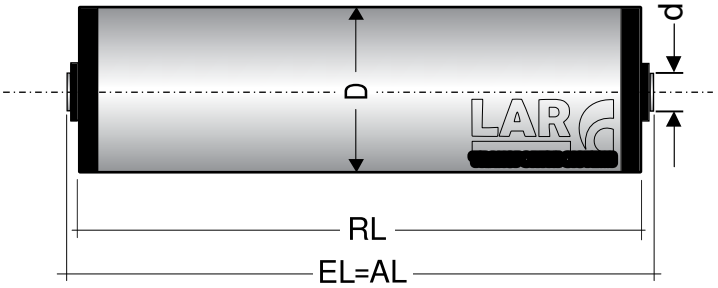
MATERIAL :
- Roller bearing : from thermoplastics with a built-in standard groove ball bearing 6204 that is available in 2RS and ZZ or Inox RSN designs.
- Seal : single labyrinth-type, plastic
- Bushing : plastic

Type: P544

6204	Ep-2	0-80 c°	300 daN

Max. roller speed: 0.9m/s

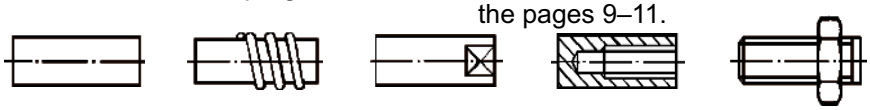




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P544	Recommended approx. max. roller speed m/s
63.5 x 2.9	15	●	●	○			○		300	0.6
80 x 2.0	15	●	●	○	●	●		●	300	0.8
89 x 3.0	20	●	●	○	●	●		●	300	0.9

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
63.5, 80	15	RL=EL- AL=EL+	-5 20	-5 20	-8 20	-8 0	ZZN16 -23 52
89	20	RL=EL- AL=EL+	-5 30	-5 30	-8 30	-8 0	-28 50

Other versions on request.

Ordering example: KP544 80x2.0 A15 NN 10x15 EL=750

High capacity roller K530

Type: **K530**

GRAVITY

ROLLER DESCRIPTION

SERIES : **K** - Metal system
CLASS : **5** - High-duty load capacity roller
TYPE : **30 - Steel, with a steel bushing**

USABILITY :
- Suitable for high-duty loads in positions where a less surface sensitive roller is provided
- Effective gravity roller
- Precise and suitable also for axial loads

APPLICATION :
- In-house transport technology
- Suitable for gravity- and driven-type applications

CHARACTERISTICS :
– Precise and smooth roller operation due to a special ball bearing
– Smoothly running, surface-resistant
– and durable gravity roller

PIPE DESIGNS:
- Galvanised metal tube
- Inox metal pipe
- Aluminium pipe

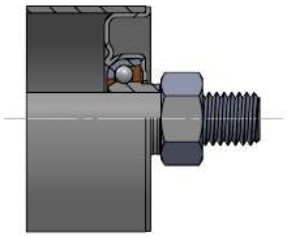
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 10 nut is added (DIN 439) (fi10-BM10, fi12-Bm12)

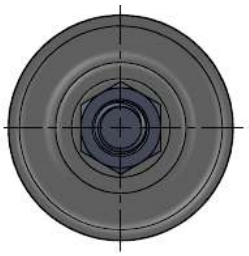
MATERIAL :
- Roller bearing : from galvanised steel sheet with a cone ball bearing RL-30-2.
- Bearing housing : steel, hardened
- Internal ring : steel, hardened
- Bearing cage : plastic
- Seal :
- Bushing : steel (K530)
- The balls are made : - from steel (K530)

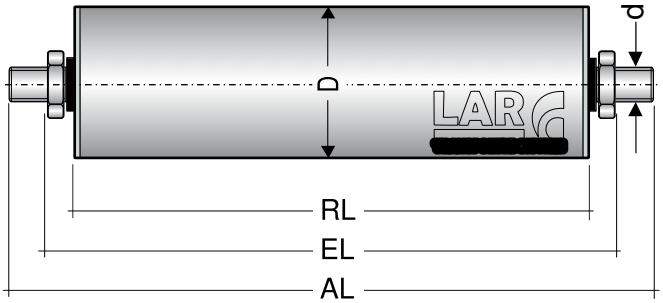
Type: K530

RL-30 EP-0 0-100 c° 240daN

Max. roller speed: 0.8m/s



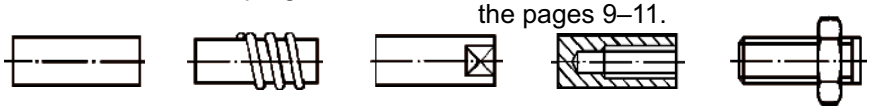




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K530	Recommended approx. max. roller speed m/s
50 x 1.5	10,12	●	●	○	●	○		○	240	0.5
50 x 2.0	10,12	●	●	○	●	○		○	240	0.5
60 x 2.0	10,12	●	●	○	●				240	0.6
80 x 2.0	12	●	●	○	●	○		○	240	0.8

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50,60 (K530)	10	RL=EL- AL=EL+	- 5 20	-5 20	-9 20	-9 0	-19 30
50,60,80 (K530)	12	RL=EL- AL=EL+	- 5 20	-5 20	-9 20	-9 0	-21 30

Other versions on request.

Ordering example: KK530 80x2.0 A12 ZN 12x15 EL=750

High capacity roller K540

GRAVITY

Type: Standard K540

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **5** - High-duty load capacity roller
TYPE : **40 - Steel, bearing 6202 with a plastic bushing**

USABILITY :
- Suitable for high-duty loads in positions where a low surface-sensitive roller is provided
- A cost-effective gravity roller
- Precise and suitable also for axial loads

APPLICATION :
- In-house transport technology
- Useful for gravity- and driven-type applications

CHARACTERISTICS :
– Standard metal roller
– Precise and smooth roller operation due to a standard ball bearing
– Smoothly running, surface-resistant and durable gravity roller

PIPE DESIGNS:
- Galvanised metal tube
- Inox metal pipe
- Aluminium pipe

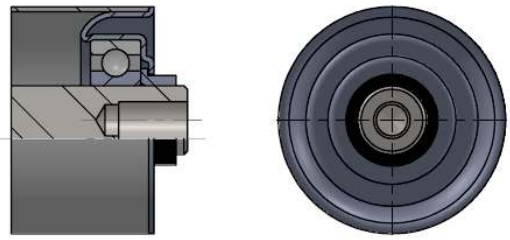
AXIS DESIGNS :
- Even, spring
- Wrench socket
- Internal thread
- External thread - a low BM 12 nut is added (DIN 439) for axis (fi10-BM10, fi12-BM12, fi14-BM14)

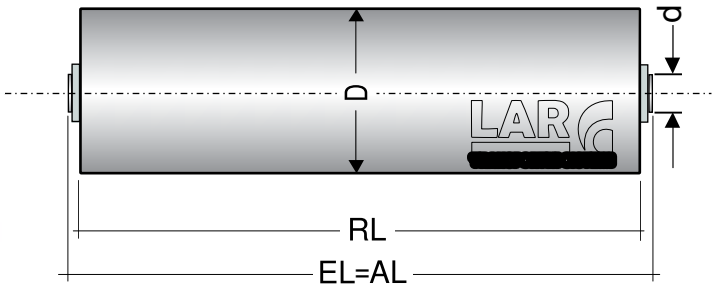
MATERIAL :
- Roller bearing : from galvanised steel sheet with a built-in standard groove ball bearing 6202 that is available in 2RS or ZZ design.
- Seal :
- Bushing : plastic

Type: Standard K540

6202	EP-2	0-80 c°	300daN

Max. roller speed: 3.2m/s

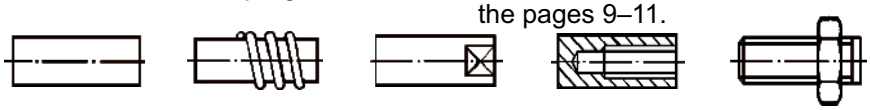




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K540	Recommended approx. max. roller speed m/s
50 x 1.5	10,12,14,15, 6k11	●	●	○	●	○		●	240	2.0
50 x 2.0	10,12,14,15, 6k11	●	●	○	●				240	2.0
60 x 2.0	10,12,14,15, 6k11	●	●	○	●	○		○	300	2.3
80 x 2.0	12,14,15, 6k11	●	●	○	●	○		○	300	3.2

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
50,60	10	RL=EL-	-12	-12	-15	-15	-25
		AL=EL+	20	20	20	0	30
50,60,80	12	RL=EL-	-12	-12	-15	-15	-27
		AL=EL+	20	20	20	0	30
50,60,80	14	RL=EL-	-12	-12	-15	-15	-29
		AL=EL+	20	20	20	0	40
50,60,80	15	RL=EL-	-12	-12	-15	-15	
		AL=EL+	20	20	20	0	

Other versions on request.

Ordering example: KK540 80x2.0 A14 NN 12x10 EL=750

Conveyor rollers 700

HEAVY-DUTY GRAVITY** load capacity rollers – load capacity class* **700** **GRAVITY** ***of load exceeding 300daN per roller

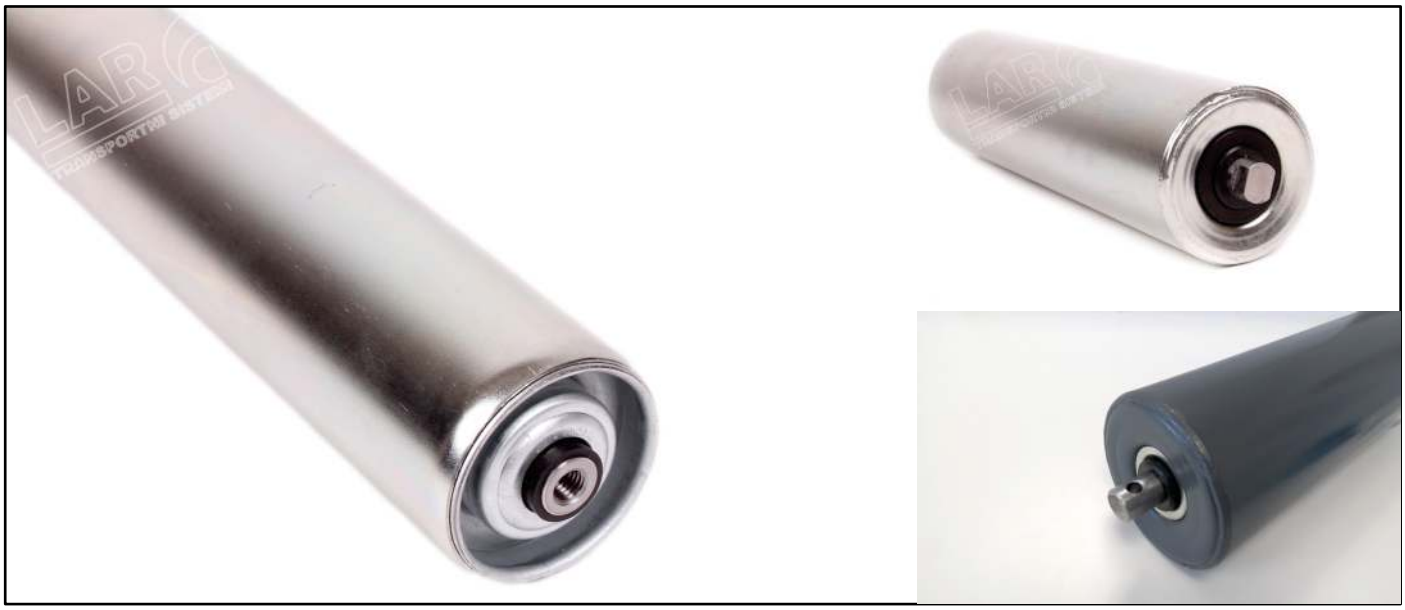
Series: *metal – type* **P740, K744, K747, 748var**

Heavy-duty class 700:

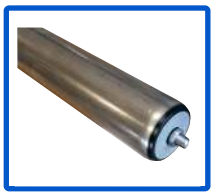
Rollers and roller tracks of this load capacity class are suitable for conveying most complex, heavyweight and large-sized articles and products, since they provide maximum loads **exceeding 300daN per roller.**

They are suitable for transporting pallets, metal boxes and the most heavy industrial products in various plastic and metal containers and wooden boxes. They are intended for conveying products for small and large industrial warehouses and dedicated warehouses of different sizes that are intended forallbranches of industry where the mass exceeds 300kg per roller. **Suitable rotation speed of the rollers up to 3.5m/s**

Usability:
- For maximum heavy-duty gravity conveyor rollers
- Ball bearing rollers
- Smooth functioning of the heavy-duty motor-driven conveyors
- Special-purpose designs – stainless, temperature-resistant and with special lubricants



P740



6204 | Ep-2 | 0-80 c° | 300 daN

Standard K744

6204 | EP-2 | 0-100 c° | 500daN

K747

6205 | EP-2 | 0-100 c° | 500daN

Welded K748

6204 | 6305 | EP-2 | 0-100 c° | 500daN

Heavy-duty roller P740

GRAVITY

Type: P740

ROLLER DESCRIPTION

SERIES : **P** - Plastic bearing system
CLASS : **5** - High-duty roller
TYPE : **40 - Steel, bearing 6204**

USABILITY :
- Gravity roller for high loads
- Precise and suitable also for axial loads
- Suitable for driven and motor-driven systems

APPLICATION :
- For outdoor and in-house conveyor technology
- Suitable for gravity-type applications

CHARACTERISTICS :
– Quiet, precise, and smooth roller operation because of the ball bearing and polypropylene base
– Smoothly running and durable roller
– Surface-resistant gravity roller

PIPE DESIGNS:
- Plastic tube
- Inox metal pipe

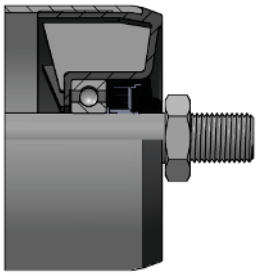
AXIS DESIGNS :
- Even
- Wrench socket
- Internal thread
- External thread - a low BM 20 nut is added (DIN 439) for axis (fi20-BM20)

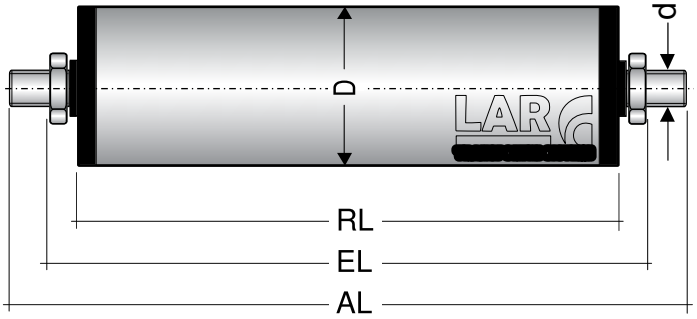
MATERIAL :
- Roller bearing : from thermoplastics with a built-in standard groove ball bearing 6204 that is available in 2RS and ZZ or Inox RSN design.
- Seal : single labyrinth-type, plastic
- Bushing : plastic

Type: P740

6204 Ep-2 0-80 c° 300 daN

Max. roller speed : 0.9 m/s

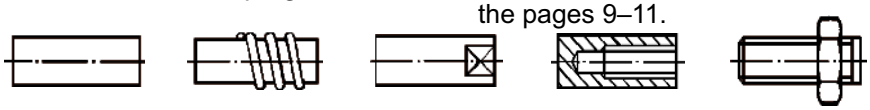




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* P740	Recommended approx. max. roller speed m/s
89 x 3.0	20	○	○	○		●			300	0.9
90 x 7.0	20	○	○	○			●		300	0.9
108 x 3.0	20	○	○	○		●			300	1.1

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
89,90,108	20	RL=EL- AL=EL+	-0 30		-5 30	-5 0	-23 50

Other versions on request.

Ordering example: XP740 108x3.0 A20 ZN 10x25 EL=750

Heavy-duty roller K744

GRAVITY

Type: Standard K744

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **5** - High-duty roller
TYPE : **44 - Steel, bearing 6204 with a plastic bushing**

USABILITY :
- Suitable for maximum-duty loads in positions where a less surface sensitive roller is provided
- A cost-effective gravity roller
- Precise and suitable also for axial loads

APPLICATION :
- In-house transport technology
- Suitable for gravity- and driven-type applications

CHARACTERISTICS :
– Standard metal roller
– Precise and smooth roller operation due to a standard ball bearing
– Smoothly running, surface-resistant and durable gravity roller

PIPE DESIGNS:
- Galvanised metal pipe
- Inox metal pipe
- Aluminium pipe

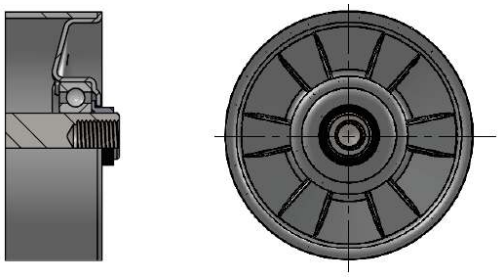
AXIS DESIGNS :
- Even
- Wrench socket
- Internal thread
- External thread - a low BM 20 nut is added (DIN 439) for axis (fi20-BM20)

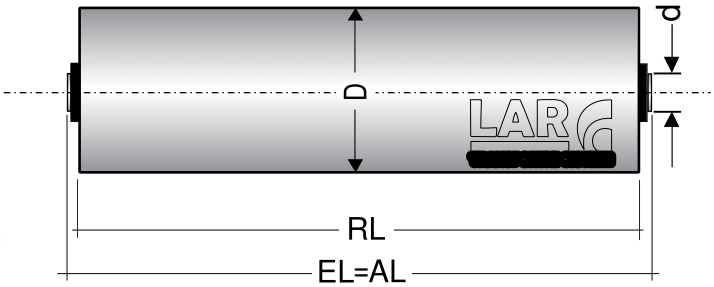
MATERIAL :
- Roller bearing : from galvanised steel sheet with a built-in standard groove ball bearing 6204 that is available in 2RS or ZZ design.
- Seal :
- Bushing : plastic

Type: Standard K744

6204 EP-2 0-100 c° 500daN

Max. roller speed : 4.2 m/s

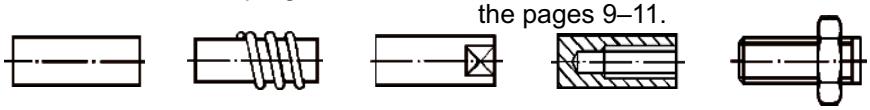




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K744	Recommended approx. max. roller speed m/s
63.5 x 2.9	20	●	●	○	●	○		○	400	2.5
80 x 2.0	17,20, 6k14	●	●	○	●	○			500	3.4
89 x 3.0	17,20, 6k14	●	●	○	●	○			500	3.5
108 x 3.25	17,20, 6k14	●	●	○		○			500	4.2

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
80,89,108	17	**RL**=EL- **AL**=EL+	-10 30		-14 20	-14 0	
80,89,108	20	**RL**=EL- **AL**=EL+	-10 30		-14 30	-14 0	-34 50
80,89,108	6k14	**RL**=EL- **AL**=EL+	-10 20				
63.5x2.9	20	**RL**=EL- **AL**=EL+	-10 30		-14 30	-14 0	-34 50

Other versions on request.

Ordering example: KK744 89x3.0 A20 NN 12x18 EL=950

Heavy-duty roller K747

GRAVITY

Type: K747

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **7** - High-duty roller
TYPE : **47 - Steel, bearing 6205 with a plastic bushing**

USABILITY :
- Suitable for maximum-duty loads in positions where a less surface sensitive roller is provided
- A cost-effective gravity roller
- Precise and suitable also for axial loads

APPLICATION :
- In-house transport technology
- Suitable for gravity- and driven-type applications

CHARACTERISTICS :
– Universal metal roller
– Precise and smooth roller operation due to a standard ball bearing
– Smoothly running, surface-resistant and durable gravity roller

PIPE DESIGNS:
- Galvanised metal pipe
- Inox metal pipe
- Aluminium pipe

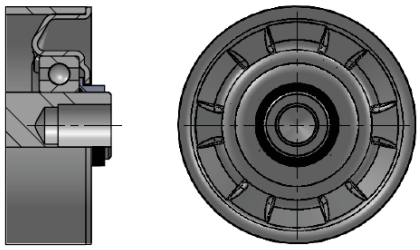
AXIS DESIGNS :
- Even
- Wrench socket
- Internal thread
- External thread - a low BM 20 nut is added (DIN 439) for axis (fi20-BM20)

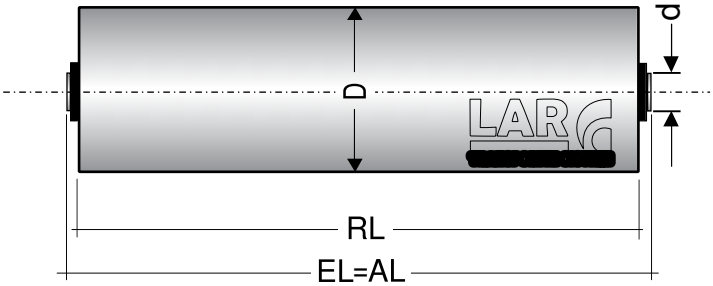
MATERIAL :
- Roller bearing : from galvanised steel sheet with a built-in standard groove ball bearing 6205 that is available in 2RS or ZZ design.
- Seal :
- Bushing : plastic

Type: K747

6205 | EP-2 | 0-100 c° | 500daN

Max. roller speed : 1.1 m/s

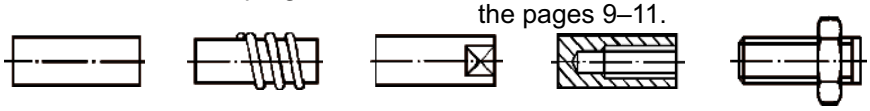




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K747	Recommended approx. max. roller speed m/s
89 x 3.0	25	●	●	○	●	○			500	0.9
108 x 3.25	25	●	●	○		○			500	1.1

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
89,108	25	RL=EL- AL=EL+	-10 30		-14 30	-14 0	

Other versions on request.

Ordering example: KK747 89x3.0 A25 NN 16x20 EL=950

Heavy-duty roller K748var

GRAVITY

Type: Welded K748var

ROLLER DESCRIPTION

SERIES : **K** - Metal bearing system
CLASS : **7** - High-duty roller
TYPE : **47 - Steel, bearing 6204 and 6305 with external seal**

USABILITY :
- Suitable for extreme loads in positions where a less surface sensitive roller is provided
- A cost-effective gravity roller
- Precise and suitable also for axial loads

APPLICATION :
- For outdoor and in-house conveyor technology
- Suitable for gravity- and driven-type applications

CHARACTERISTICS :
– Welded metal roller
– Precise and smooth roller operation due to a standard ball bearing
– Smoothly running, surface-resistant and durable gravity roller, dust- and moisture-resistant

PIPE DESIGNS:
- Galvanised metal pipe
- Inox metal pipe
- Aluminium pipe

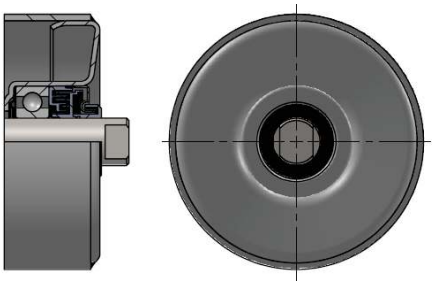
AXIS DESIGNS :
- Even
- Wrench socket
- Internal thread
- External thread - a low BM 20 nut is added (DIN 439) for axis (fi20-BM20)

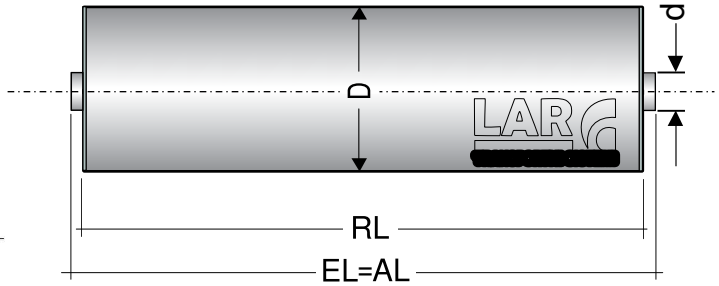
MATERIAL :
- Roller bearing : made of galvanised steel sheet with an installed standard groove ball bearing 6204, 6204 Inox (for axis with a 20mm fi) and bearing 6305 (for a 25mm fi) that are available in 2RS or ZZ .
- Seal : external single labyrinth-type

Type: Welded K748var

6204	6305	EP-2	0-100 c°	500daN

Max. roller speed : 1.6 m/s

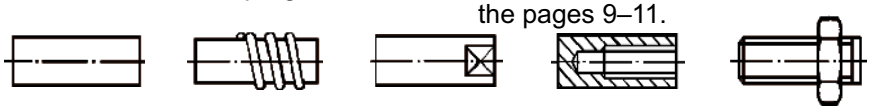




Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN per roller* K748	Recommended approx. max. roller speed m/s
63.5 x 2.9	20	●	●	○	●	●			400	0.6
80 x 2.0	20	●	●	○	●				500	0.8
89 x 3.0	20,25	●	●	○	●	●			500	0.9
108 x 3.25	20,25	●	●	○		●			500	1.1
133 x 3.6	20,25	●	●	○					500	1.4
159 x 4.5	25	●	●	○					500	1.6

○ - design on request
● - standard programme

* - To determine the axis and pipe load capacity use the diagram on the pages 9–11.



Pipe - D (mm)	Axis- d (mm)	DIMENSIONS (mm)	Even G	Spring axis VZ	Wrench socket NK	Internal thread NN	External thread ZN
63.5,80,89, 108,133	20	RL=EL- AL=EL+	-10 30		-14 30	-14 0	-34 50
89,108,133, 159	25	RL=EL- AL=EL+	-10 30		-14 30	-14 0	

Other versions on request.

Ordering example: KK748 89x3.0 A20 NN 12x18 EL=950