CATALOGUE SPECIAL-PURPOSE ROLLER DESIGNS

LAR
TRANSPORTNI SISTEMI

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

Oblikovanje: KocKa

Special-purpose roller designs

DRIVEN ROLLERS

- *Grooved PULLEY GU360*
- *POLY-V BELT wheel GP370*
- *TIMING BELT wheel GZ370*
- *Roller guide plates*

CONICAL ROLLERS

- *fi 30mm - KP193 platform*
- *fi 50mm - KP395 platform*
- *fi 50mm - KP595 platform driven*

SPECIAL-PUPOSE ROLLERS

- *Split plastic rollers – PE300*
- *Split metal rollers – KE500*
- *Brake rollers and drums*

WHEELS AND TABLES

- *TKP and TKK conveyor wheels*
- *VLN, VLSFN roller tables*
- *VLNR, VLAR roller tables*

ROLLER TRACKS

- *VCTR roller track*
- *VTP pallet roller track*


P365 G2U R5


P370 G1P Z9


P380 G1Z 8M Z20


GUIDE PLATES


KP193 B6


KP395 B10


KP595 G1V B10


KP595 G2V B10


PE342


KE540


ZVP7


ZVB


TKP110


TKK120


VLN


VLSFN


VLNR


VLAR


VTCR


VTP

Driven grooved roller P365

DRIVEN

Type: P365 G2U R5

ROLLER DESCRIPTION

SERIES :	**P**	**-**	Plastic bearing system
CLASS :	**3**	**-**	Medium-duty roller
TYPE :	**60**	**-**	Grooved
DESIGN:	**G2U**	**-**	Driven double grooved
GROOVE DIAMETER :	**R**	**-**	**R5= 5mm**
DRIVE :	**NP**	**-**	**Close-fitting continuous drive**

USABILITY :
- Suitable for medium loads
- Low surface-sensitive roller
- With precision bearings and also suitable for axial loads

APPLICATION :
- In-house transport technology
- Not suitable for Stop&go technology

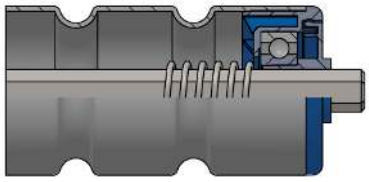
CHARACTERISTICS :
- Quiet roller operation
- Precise and smooth operation of a driven roller
- Smooth running driven roller

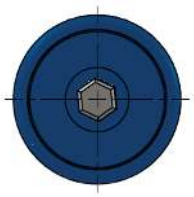
PIPE DESIGNS :
- Galvanised metal pipe
- Inox metal pipe

AXIS DESIGNS :
- spring
- Internal thread
- External thread – a low BM 12 nut is added (DIN 439) for axis (fi12-BM12)

MATERIAL:
- Roller bearing : from thermoplastics with a built-in standard groove ball bearing **6202** that is available in 2RS or ZZ design
- Seal : single labyrinth-type, plastic
- Bushing : plastic

PULLEY:
- Type R5 round, rubber

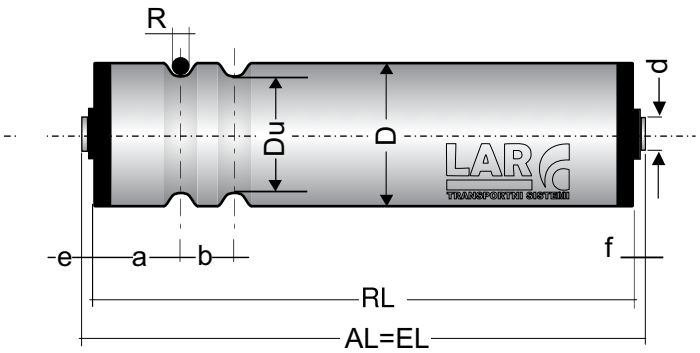




Type: P365 G2U R5

6202 EP-2 0-80 c° 40 daN

Max. roller speed: 0.6m/s

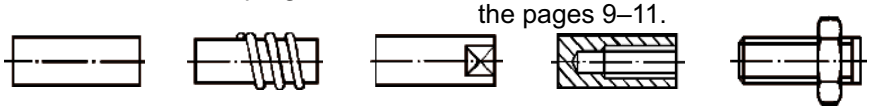


Min a=30 mm, Min b= 30 mm, Max a+b= 130 mm
e=2.5 mm, f=2.5 mm, groove R=5 mm , Du=38 mm,

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									P365	
50 x 1.5	12, 6k11	●	●	○	●	○			40	0.5
50 x 2.0	12, 6k11	●	●	○	●				40	0.5
60 x 2.0	12, 6k11	●	●	○	●	○			40	0.6

○ - design on request
● - standard programme

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



(P342z)

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+				-7 0	-19 30
50,60	6k11	RL=EL- AL=EL+		-5 20			

Other versions on request.

Ordering example: KP365 G2U 50x1.5 6202 R5 NP A12 NN 8x15 EL=550

Driven Poly-V roller P370

DRIVEN

Type: P370 G1P Z9

ROLLER DESCRIPTION

SERIES :	**P**	**-**	Plastic bearing system
CLASS :	**3**	**-**	Medium-duty load capacity roller
TYPE :	**70**	**-**	Poly-V
DESIGN:	**G1P**	**-**	**Driven single wheel**
WHEEL :	**Z9**	**-**	**With 9 teeth**
DRIVE :	**NP**	**-**	**Close-fitting continuous drive**

USABILITY :

- Suitable for medium loads
- Low surface-sensitive roller
- With precision bearings and also suitable for axial loads

APPLICATION :

- In-house transport technology
- Not suitable for Stop&go technology

CHARACTERISTICS :

- Quiet roller operation
- Precise and smooth operation of a driven roller
- Smooth running driven roller

PIPE DESIGNS :

- Plastic tube
- Galvanised metal pipe
- Inox metal pipe
- Aluminium pipe

AXIS DESIGNS :

- spring
- Internal thread
- External thread – a low BM 12 nut is added (DIN 439) for axis (fi12-BM12)

MATERIAL:

- Roller bearing : from thermoplastics with a built-in standard groove ball bearing **6202** that is available in 2RS or ZZ design
- Seal : single, plastic
- Bushing : plastic

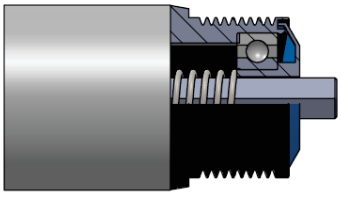
BELT:

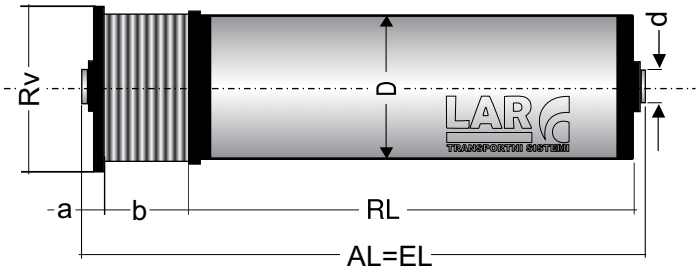
- Type Rb=12mm flat, rubber

Type: P370 G1P Z9

Z 9	6202	EP-2	0-80 c°	40 daN

Max. roller speed: 0.5m/s



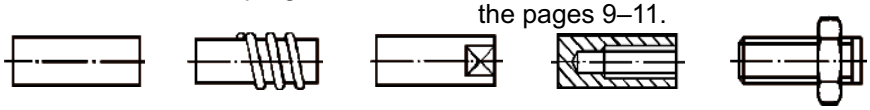


a=12 mm, b= 25 mm, Rv=43.3 mm

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									P370	
50 x 1.5	12, 6k11	●	●	○	●	○			40	0.5
50 x 2.0	12, 6k11	●	●	○	●				40	0.5

○ - design on request
● - standard programme

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



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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 0	-19 30
50	6k11	RL=EL- AL=EL+		-5 20			

Other versions on request.

Ordering example: KP370 G1P 50x1.5 6202 Z9 NP A12 NN 8x15 EL=550

TIMING BELT driven roller P380

DRIVEN

Type: P380 G1Z 8M Z20

ROLLER DESCRIPTION

SERIES :	**P**	**-**	Plastic bearing system
CLASS :	**3**	**-**	Medium-duty roller
TYPE :	**80**	**-**	for timing belt
DESIGN:	**G1Z**	**-**	**Driven timing belt single wheel**
WHEEL :	**8M**	**-**	**Division 8mm**
DRIVE :	**NP**	**-**	**Close-fitting continuous drive**

USABILITY :
- Suitable for medium loads
- Low surface-sensitive roller
- With precision bearings and also suitable for axial loads

APPLICATION :
- In-house transport technology
- Not suitable for Stop&go technology

CHARACTERISTICS :
- Quiet roller operation
- Precise and smooth operation of a driven roller
- Smooth running driven roller

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

AXIS DESIGNS :
- spring
- Internal thread
- External thread – a low BM 12 nut is added (DIN 439) for axis (fi12-BM12)

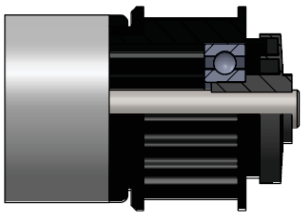
MATERIAL:
- Roller bearing : from thermoplastics with a built-in standard groove ball bearing **6202** that is available in 2RS or ZZ design
- Seal : single, plastic
- Bushing : plastic

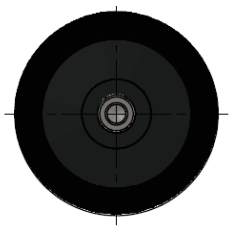
BELT:
- Type 8M timing belt

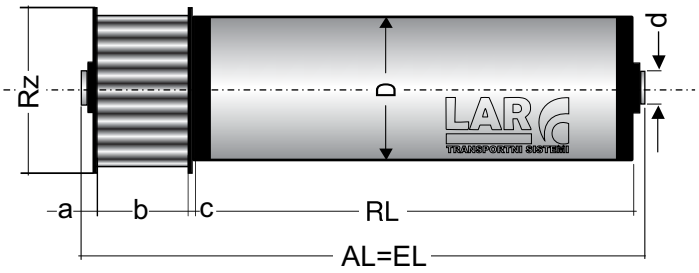
Type: P380 G1Z 8M Z20

Z 20 | 6202 | EP-2 | 0-80 c° | 40 daN

Max. roller speed: 0.5m/s







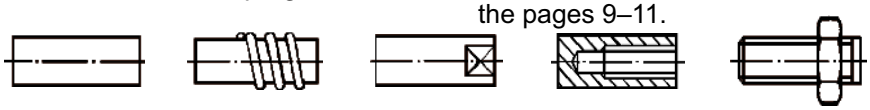
a=10 mm, b= 25.4 mm, c= 4 mm, Rz=55 mm

When using the 8M toothed belt pulley a deviation of the axis distance in the amount of +0/-0,3mm must be taken into account.

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									P380	
50 x 1.5	12, 6k11	●	●	○	●	○			40	0.5
50 x 2.0	12, 6k11	●	●	○	●				40	0.5

○ - design on request
● - standard programme

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



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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 0	-19 30
50	6k11	RL=EL- AL=EL+		-5 20			

Other versions on request.

Ordering example: KP380 G1Z 50x1.5 6202 8M Z20 NP A12 NN 8x15 EL=550

Roller guide plates

Type: **VP**

DESCRIPTION

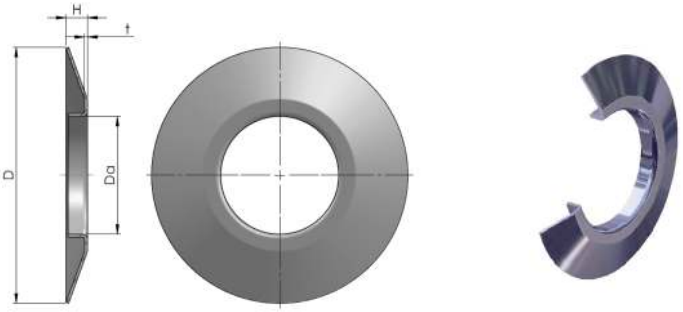
SERIES : **VP** - Guide plate
CLASS :
TYPE : **K** - Galvanised guide plate
J - Steel guide plate

USABILITY:
- Suitable for installation on metal rollers
- Prevents slipping and restricts movement of pallets during transport
- Suitable for gravity- and driven-type applications

CHARACTERISTICS :
- Universal guide plate
- Smooth operation

Basic type	Dimensions Da (mm)	External D (mm)	Plate thickness T (mm)	Tilt H (mm)	Installation Method
VPK 50-130	49.9	130	1.5	10	welding
VPK 60-130	59.9	130	1.5	10	welding
VPK 80-150	79.9	150	2.5	14	welding
VPK 89-150	88.9	150	2.5	14	welding
VPK 108-150	107.9	150	2.5	14	welding

SKETCH:



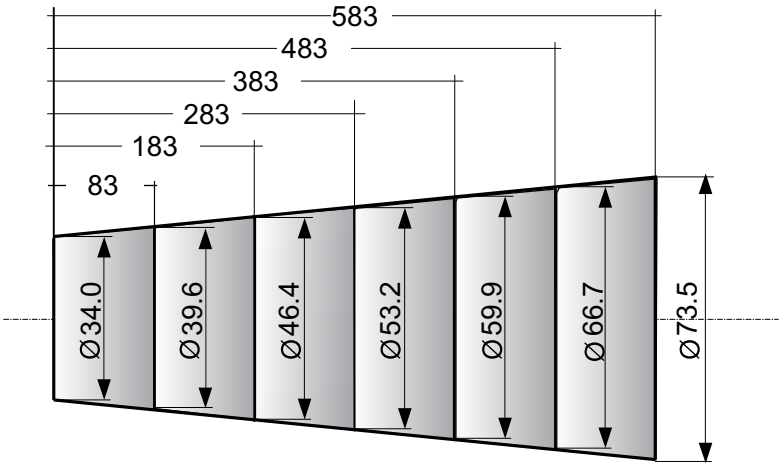
MATERIAL : - Plate : **K** - from galvanised steel sheet, cold rolled
J - from steel sheet, cold rolled

SPECIAL-PURPOSE DESIGN. :
- Two-part screw-fitted guide plate
- Plastic guide plates for smaller cross-sections
- Additional small materials and finishes on request

Conical rollers – elements

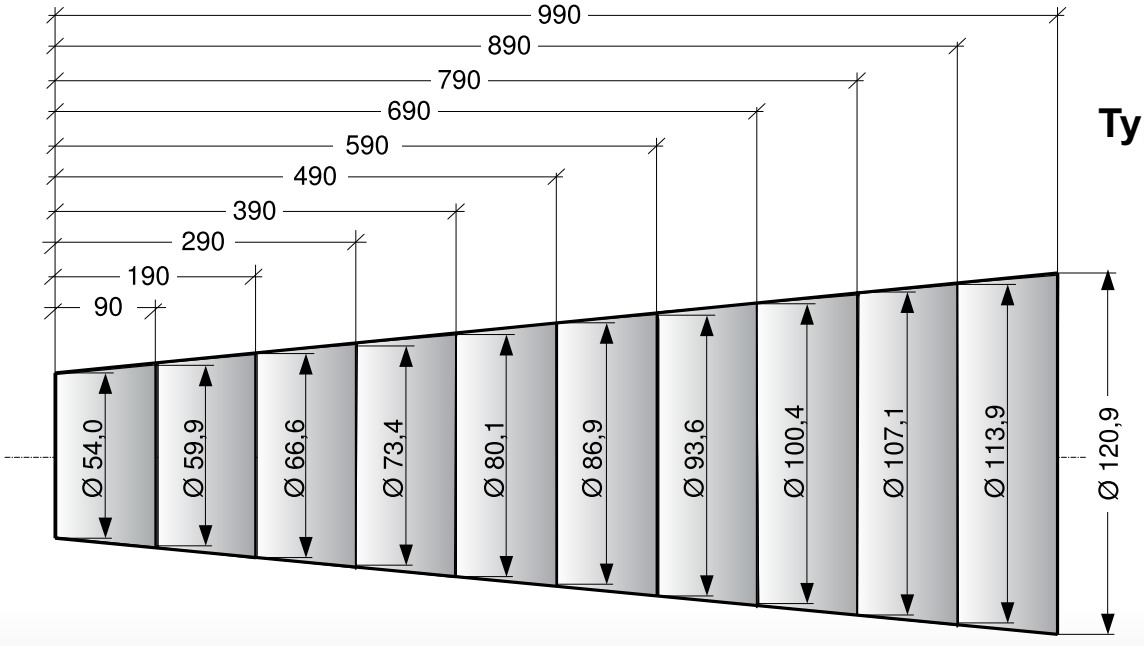
Various types of conical load capacity rollers are available. The conical conveyor elements are made of thermoplastics and are mounted on conveyor rollers with a diameter of 30mm and 50mm. The inner radius of the conveyor radius is 500 or 800mm.

Conical conveyor elements for internal radius of 500mm and pipe diameter of 30mm.



Type: P190 B6

Conical conveyor elements for internal radius of 800mm and pipe diameter of 50mm.



Type: P590 B10

Other versions on request.

Conical roller KP193

GRAVITY

Type: KP193 B6

ROLLER DESCRIPTION

SERIES :	**K**	**-**	Metal bearing system
CLASS :	**1**	**-**	Light-duty roller
TYPE :	**90**	**-**	**Conical roller**
CONE:	**3**	**-**	**Basic platform roller with fi 30 (K116)**

USABILITY :
- Suitable for light-duty loads
- A lightweight cost-effective conical roller
- Internal curve radius min. Rk = 500mm

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

CHARACTERISTICS :
- Precise and smooth operation of the roller because of a special ball bearing and thermoplastics pipe
- Quiet roller operation
- Smooth running conical 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)

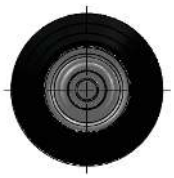
MATERIAL:
- Roller bearing : from galvanised steel sheet with a cone ball bearing RL-16
- Bearing housing : steel, hardened
- Internal ring : steel, hardened, galvanised
- Bearing cage : plastic
- Seal :
- Bushing : steel
- The balls are made : from steel (K116)

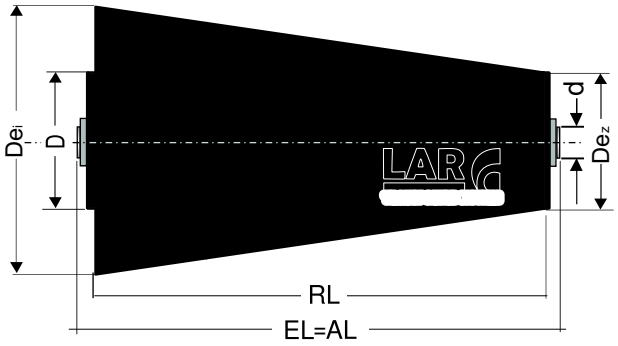
CONE:
- The conical conveyor elements are made of thermoplastics
- Dimensions of the individual conical elements P193 B6 from the figure on page 107

Type: KP193 B6

RL-16 | Vactra 2 | 0-100 c° | 30 daN

Max. roller speed: 0.3m/s



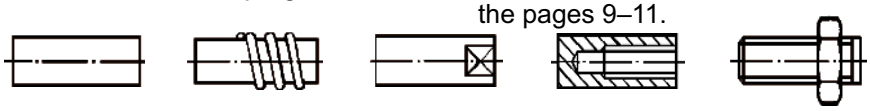


De_z = 34 mm, De_i (mm) are shown on the figure on the page 107

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									KP193	
30 x 1.5	8,10,12	●	●	○	○	○		○	30	0.3

○ - design on request
● - standard programme

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



(K116)

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+	-11 20	-11 20	-13 20	-13 0	-21 30
30	10	RL=EL- AL=EL+	-11 20	-11 20	-13 20	-13 0	-23 30
30	12	RL=EL- AL=EL+	-11 20	-11 20	-13 20	-13 0	-25 30

Other versions on request.

Ordering example: KKP193 30x1.5 B6 1608 A8 NN 5x10 EL=590

Conical roller KP395

GRAVITY

Type: KP395 B10

ROLLER DESCRIPTION

SERIES :	**K**	**-**	Metal bearing system
CLASS :	**3**	**-**	Medium-duty roller
TYPE :	**90**	**-**	**Conical roller**
CONE:	**5**	**-**	**Basic platform roller with fi 50 (K320)**

USABILITY :
- Suitable for medium-duty loads
- A lightweight cost-effective conical roller
- Internal curve radius min. Rk = 800mm

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

CHARACTERISTICS :
- Precise and smooth operation of the roller because of a special ball bearing and thermoplastics pipe
- Quiet roller operation
- Smooth running conical 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)

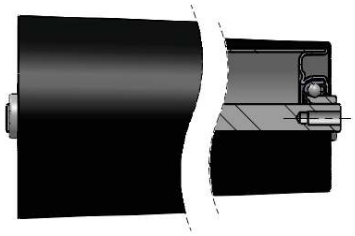
MATERIAL:
- Roller bearing : from galvanised steel sheet with a cone ball bearing RL-20
- Bearing housing : steel, hardened
- Internal ring : steel, hardened, galvanised
- Bearing cage : plastic
- Seal :
- Bushing : steel
- The balls are made : from steel (K320)

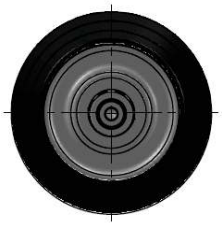
CONE:
- The conical conveyor elements are made of thermoplastics
- Dimensions of the individual conical elements P395 B10 from the figure on page 107

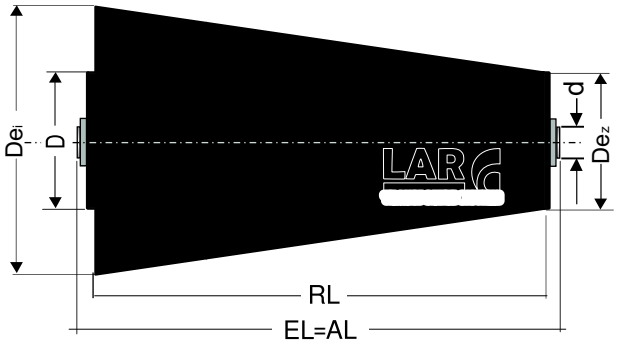
Type: KP395 B10

RL-20 | Vactra 2 | 0-100 C° | 80 daN

Max. roller speed: 0.5m/s





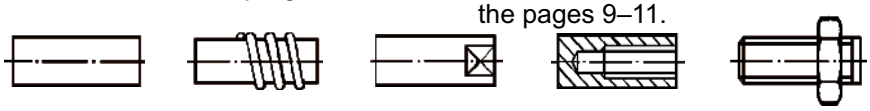


De_z = 54 mm, De_i (mm) can be found in the figure on page 107

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									KP395	
50 x 1.5	8,10,12	●	●	○	○	○		○	80	0.5

○ - design on request
● - standard programme

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



(K320)

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+	-10 20	-10 20	-12 20	-12 0	-20 30
30	10	RL=EL- AL=EL+	-10 20	-10 20	-12 20	-12 0	-22 30
30	12	RL=EL- AL=EL+	-10 20	-10 20	-12 20	-12 0	-24 30

Other versions on request.

Ordering example: KKP395 50x1.5 B10 2010 A10 NN 5x10 EL=996

Conical sprocket roller KP595

DRIVEN 1/2”x5/16”

Type:KP595 G1V Z14 B10

ROLLER DESCRIPTION

SERIES :	**K**	**-**	Metal bearing system
CLASS :	**5**	**-**	**High-duty roller**
TYPE :	**90**	**-**	**Conical roller**
DESIGN:	**G1V**	**-**	**driven single-sprocket roller**
SPROCKET:	**Z14**	**-**	**14 sprocket teeth, division 1/2”x5/16”**
DRIVE:	**NP**	**-**	**continuous drive – welded**
CONE:	**5**	**-**	**Basic platform roller with fi 50 (K554var)**

USABILITY :
- Suitable for higher loads
- With precision bearings and also suitable for axial loads

APPLICATION :
- In-house transport technology
- Not suitable for Stop&go technology

CHARACTERISTICS :
- Durable metal sprocket
- Precise and smooth operation of the roller
- It ensures stable guidance for continuous conical roller drive
- Smooth running conical roller

PIPE DESIGNS :
- Galvanised metal pipe
- Inox metal pipe

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

MATERIAL:
- Sprocket : made of steel, **1/2”×5/16” Z 14**, with a built-in standard groove ball bearing **6202** that is available in 2RS or ZZ design.
- Seal : simple, plastic
- Bushing : plastic

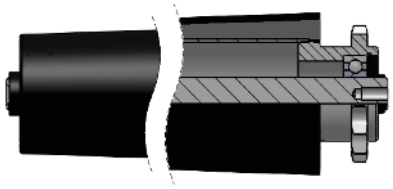
CHAIN: - type 08B-1, single-row (DIN 8187)

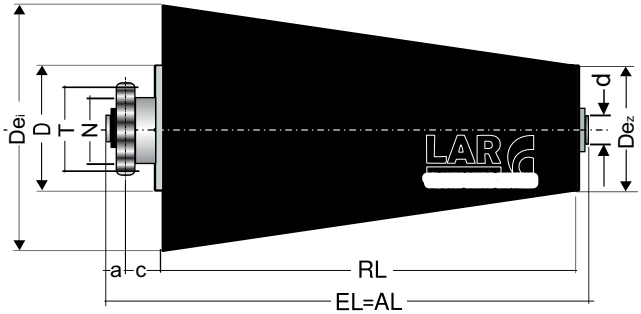
CONE:
- The conical conveyor elements are made of thermoplastics
- Dimensions of individual conical elements P590 B10 from the figure on page 107

Type:KP595 G1V Z14 B10

Z 14	6202	EP-2	0-80 c°	80 daN

Max. roller speed: 0.5m/s





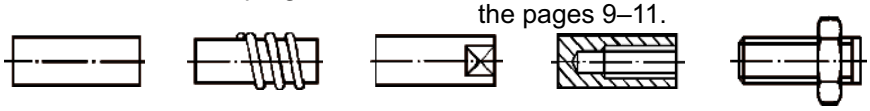
a=13 mm, c=18 mm, N=43 mm
sprocket 1/2”x5/16”, T=57,07 mm,

De_z = 54 mm, De_i (mm) are shown in the figure on the page 107

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									KP595	
50 x 1.5	10,12,14,15	●	●	○	●	○		○	80	0.5
50 x 2.0	10,12,14,15	●	●	○	●				80	0.5

○ - design on request
● - standard programme

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



(K540)

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+				-41 0	-51 30
50	12	RL=EL- AL=EL+				-41 0	-53 30
50	14	RL=EL- AL=EL+				-41 0	-55 40
50	15	RL=EL- AL=EL+				-41 0	

Other versions on request.

Ordering example: KKP595 G1V 50x2.0 6202 B10 Z14var NP A14 NN 8x15 EL=750

Conical sprocket roller KP595

DRIVEN 1/2”x5/16”

Type:KP595 G2V Z14 B10

ROLLER DESCRIPTION

SERIES :	**K**	**-**	Metal bearing system
CLASS :	**5**	**-**	**High-duty roller**
TYPE :	**90**	**-**	**Conical roller**
DESIGN:	**G2V**	**-**	**double-sprocket driven**
SPROCKET:	**Z14**	**-**	**14 sprocket teeth, division 1/2”x5/16”**
DRIVE:	**NP**	**-**	**continuous drive – welded**
CONE:	**5**	**-**	**Basic platform roller with fi 50 (K554var)**

USABILITY :
- Suitable for higher loads
- With precision bearings and also suitable for axial loads

APPLICATION :
- In-house transport technology
- Not suitable for Stop&go technology

CHARACTERISTICS :
- Durable metal sprocket
- Precise and smooth operation of the roller
- It ensures stable guidance for continuous conical roller drive
- Smooth running conical roller

PIPE DESIGNS :
- Galvanised metal pipe
- Inox metal pipe

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

MATERIAL:
- Sprocket : made of steel, **1/2”×5/16” Z 14**, with a built-in standard groove ball bearing **6202** that is available in 2RS or ZZ design
- Seal : simple, plastic
- Bushing : plastic

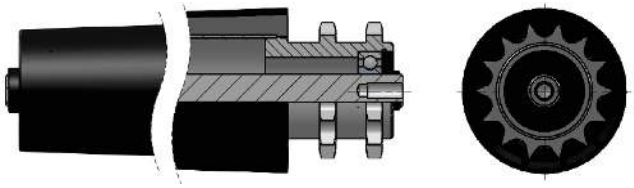
CHAIN: - type 08B-1, single-row (DIN 8187)

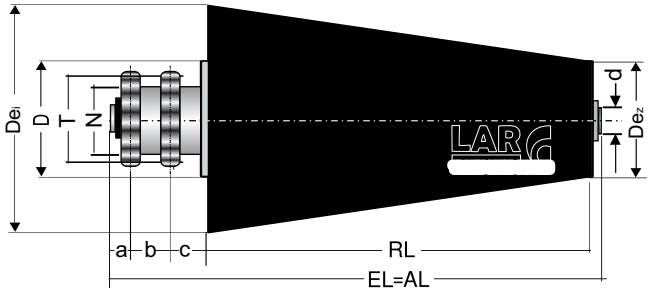
CONE:
- The conical conveyor elements are made of thermoplastics
- Dimensions of individual conical elements P590 B10 from the figure on page 107

Type:KP595 G2V Z14 B10

Z 14	6202	EP-2	0-80 c°	80 daN

Max. roller speed: 0.5m/s



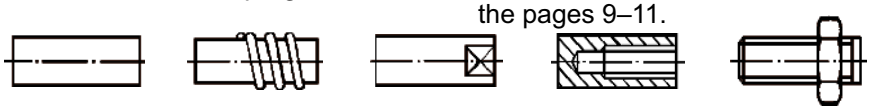


a=13 mm, b=21 mm, c=18 mm, N=43 mm
sprocket 1/2"x5/16", T=57,07 mm,
De_z = 54 mm, De_i (mm) are shown in the figure on the page 107

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									KP595	
50 x 1.5	10,12,14,15	●	●	○	●	○		○	80	0.5
50 x 2.0	10,12,14,15	●	●	○	●				80	0.5

○ - design on request
● - standard programme

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



(K540)

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+				-58 0	-68 30
50	12	RL=EL- AL=EL+				-58 0	-70 30
50	14	RL=EL- AL=EL+				-58 0	-72 40
50	15	RL=EL- AL=EL+				-58 0	

Other versions on request.

Ordering example: KKP595 G2V 50x2.0 6202 B10 Z14var NP A14 NN 8x15 EL=750

Split roller PE342

GRAVITY

Type: PE342

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 (P342z)

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

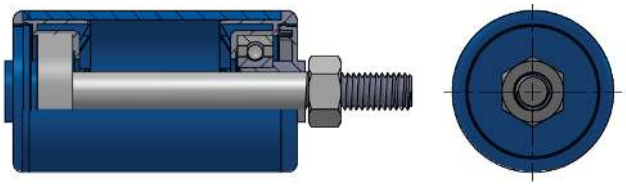
AXIS DESIGNS :
- External thread – a low BM 12 nut is added (DIN 439) for axis (fi12-BM12, fi14-BM14)

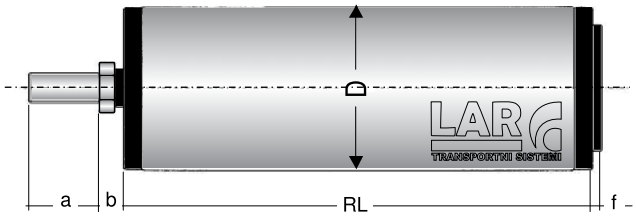
MATERIAL:
- Roller bearing : from thermoplastics with an installed standard groove bearing **6002** which is also available in 2RS or ZZ design
- Seal : single labyrinth-type, plastic
- Bushing : plastic

Type: PE342

6002 | Ep-2 | 0-80 c° | 25 daN

Max. roller speed: 0.6m/s





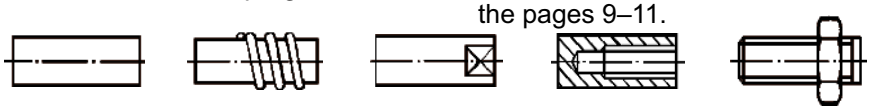
P342z

a = 25mm
b = 10mm
f = 3mm
RL min = 60mm
RL max = 150mm

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									PE342	
50 x 1.5	12,14	●	●	○	●	●		●	25	0.5
50 x 2.0	12,14	●	●	○	●			●	25	0.5
50 x 2.8	12,14						●		25	0.5
60 x 2.0	12,14	●	●	○	●	●		○	25	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+					-19 30
50,60	14	RL=EL- AL=EL+					-21 40

Other versions on request.

Ordering example: PPE3 50x2.8 4212 A12 ZN 12x25 EL=150

Split roller KE540

GRAVITY

Type: KE540

ROLLER DESCRIPTION

SERIES :	**K**	-	Metal bearing system
CLASS :	**5**	-	High-duty load capacity roller
TYPE :	**40**	-	**Steel, bearing 6202 or 6204 with a plastic bushing**

USABILITY :
- Suitable for high-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
- Useful for gravity-type applications

CHARACTERISTICS :
- 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

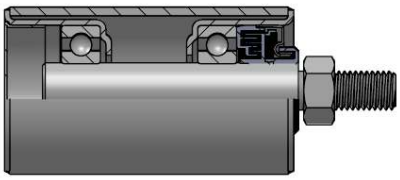
AXIS DESIGNS :
- External thread – a low BM 12 nut is added (DIN 439) for axis (fi10-BM10, fi12-BM12, fi14-BM14)

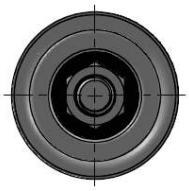
MATERIAL:
- Roller bearing : from galvanised steel sheet with an installed standard groove ball bearing **6202** or **6204** that is available in 2RS or ZZ design
- Seal : single labyrinth-type, plastic
- Bushing : plastic

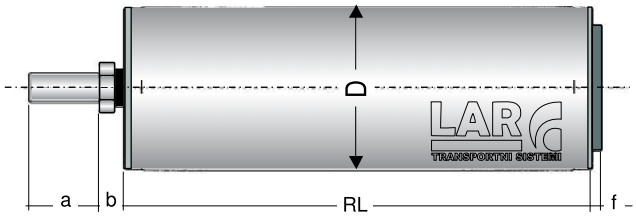
Type: KE540

6204 | 6202 | EP-2 | 0-80 c° | 100 daN

Max. roller speed: 0.9m/s





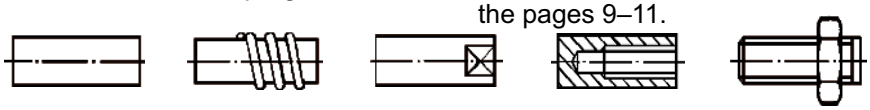


a = 25mm
b = 10mm
f = 3mm
RL min = 60mm
RL max = 150mm

Pipe - D (mm)	Axis- d (mm)	Pipe design J	K	G	O	X	P	A	Max. load capacity daN by roller*	Recommended approx. max. roller speed m/s
									KE540	
50 x 1.5	10,12,14,	●	●	○	●	○		●	25	0.5
50 x 2.0	10,12,14,	●	●	○	●				25	0.5
60 x 2.0	10,12,14,	●	●	○	●	○		○	30	0.6
80 x 2.0	14,20	●	●	○	●	○		○	100	0.8
89 x 3.0	20	●	●	○	●	○			100	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
50,60	10	**RL**=EL- **AL**=EL+					-25 30
50,60,80	12	**RL**=EL- **AL**=EL+					-27 30
50,60,80	14	**RL**=EL- **AL**=EL+					-29 40

Other versions on request.

Ordering example: KKE5 60x2.0 4014 A14 ZN 14x25 EL=150

Brake roller

Type: **PZV7 1200**

DESCRIPTION

SERIES : **PZV** - Metal brake roller with a plastic bearing system
CLASS : **7** - Heavy-duty load capacity roller
TYPE : **1200** - 1,200kg of braking force

USABILITY :
- Controlled palletised load speed of 0.1–0.2m/s
- Use in the temperature range from -30 to +45 °C
- Roller load capacity up to 150kg

CHARACTERISTICS :
- Reaction time of approx. 63mm
- It evenly brakes palletised loads
- Strong and stable brake roller

Basic roller type	Dimensions L x W (mm)	Axis d (mm)	Load Capacity (kg)	Braking effect	Controlled braking speed (m/s)
PZV7 1200	80 x 2.0	20	500	1200	0.1 - 0.2
PZV7 1200	89 x 3.0	20	500	1200	0.1 - 0.2

The brake rollers regulate the speed high-duty roller tracks, while keeping the load at a constant speed. This is done with the aid of a track gear unit, which by means of braking, which is proportional to the braking torque pushes the brake jaw against the body of the roller for each rotation due to the centrifugal force.
A number of factors affect the distance between the brake rollers and the corresponding type of brake roller:

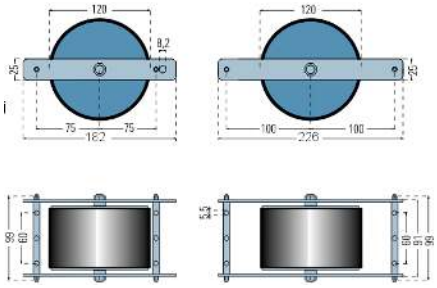
a)Construction and functional performance of the roller track
b)Roller track tilting
c)Load characteristics (size, weight, sensibility, purchased material)
d)Brake roller own resistance
e)Environmental impacts such as wetness, cold or heat

Ideally, one brake roller accommodates one space for the pallet, as this is the only way in which it can achieve controlled speed without acceleration and the formation of higher forces. The speed must never exceed 0.3m/s. With the correct brake roller distribution, it equals 0.1– 0.2m/s

MATERIAL :
- Roller: from galvanised sheet metal with built-in braking system
- Axle : steel, fi 20mm

Other versions on request.

Brake drums



Type: PZB 1200

DESCRIPTION

SERIES : **PZB** - Plastic brake drum
CLASS :
TYPE : **1200** - 1,200kg of braking force

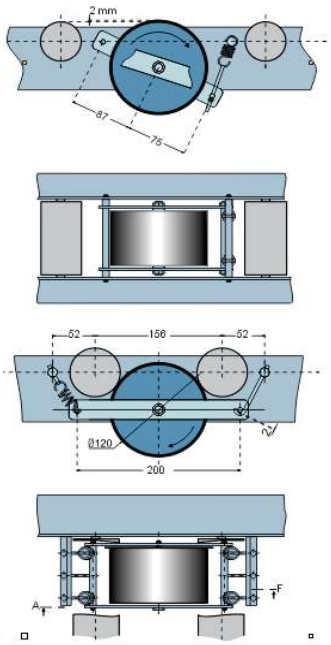
USABILITY :
- Controlled palletised load speed of 0.1–0.2m/s
- Use in the temperature range from -30 to +45 °C
- Direct and indirect braking

CHARACTERISTICS :
- It evenly brakes palletised loads
- Strong and stable brake roller

Basic roller type	Dimensions L x W (mm)	Axis d (mm)	Load Capacity (kg)	Braking effect	Controlled braking speed (m/s)
PZB 800				800	0.1 - 0.2
PZB 1200				1200	0.1 - 0.2

Direct braking:

With direct braking, the brake roller has direct contact with the load. The roller is spring-clamped and must be approximately 2mm above the level.



Indirect braking:

Indirect braking is in many cases more strongly recommended since the contact with the pallet is transferred over 2 load capacity rollers.
4 springs take over the contact, 2 fixing screws which are slightly inserted and secure the brake roller. For better contact between the brake roller, load capacity roller and pallet, the self-adhesive friction lining is provided on the load capacity roller in the area of the brake roller.

Other versions on request.

TK conveyor wheels

Type: TKP110

DESCRIPTION

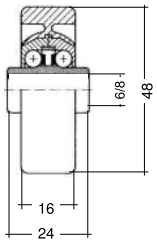
SERIES : **P** - Plastic wheel
CLASS : **1** - Light-duty wheel
TYPE : **1**0 - Load up to 10kg

USABILITY :
- Suitable for installation into metal support system tables
- Use in the temperature range from 0 to +80 °C

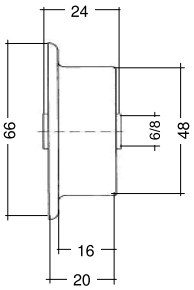
CHARACTERISTICS :
- Universal plastic wheel
- Quiet and smooth roller operation due to a special double ball bearing
- Additional – surface-resistant PUR lining

Type	Diameter **D x EL** (mm)	Width **s** (mm)	**Axis d** (mm)	Max. load capacity **daN**	Purpose
TKP110	48 x 24	16	6.8	10	for standard installation into transport tables
TKP110v	66/48 x 24	16	6.8	10	for standard installation into transport tables

SKETCH : **TKP110**



TKP110v



MATERIAL :
- Wheel : from thermoplastics with a double steel ball series
- Wheel housing : plastic
- Axle bushing : plastic
- Balls : from steel (TKK120 and TKK120v)

Other versions on request.

TK conveyor wheels

Type: TKK120

Wheel DESCRIPTION

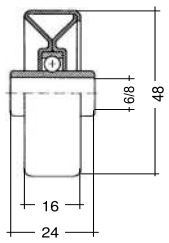
SERIES : **K** - Metal wheel
CLASS : **1** - Lightweight load capacity wheel
TYPE : **20** - Load up to 20kg

USABILITY :
- Suitable for installation into metal support system tables
- Use in the temperature range from -30 to +140 °C

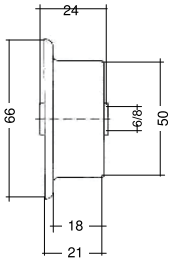
CHARACTERISTICS :
- Universal metal wheel
- Precise and smooth operation due to special ball bearing
- Surface-resistant wheel

Type	Diameter **D x EL** (mm)	Width **s** (mm)	**Axis d** (mm)	Max. load capacity **daN**	Purpose
TKK120	48 x 24	16	6.8	20	for standard installation into transport tables
TKK120v	66/50 x 24	18	6.8	20	for standard installation into transport tables

SKETCH : **TKK120**



TKK120v



MATERIAL :
- Wheel : from galvanised steel sheet with a cone ball bearing
- Wheel housing : steel
- Axle : steel, hardened
- Balls: from steel (TKK120 and TKK120v)

Other versions on request.

VLN roller rail

Type: VLN 33

DESCRIPTION

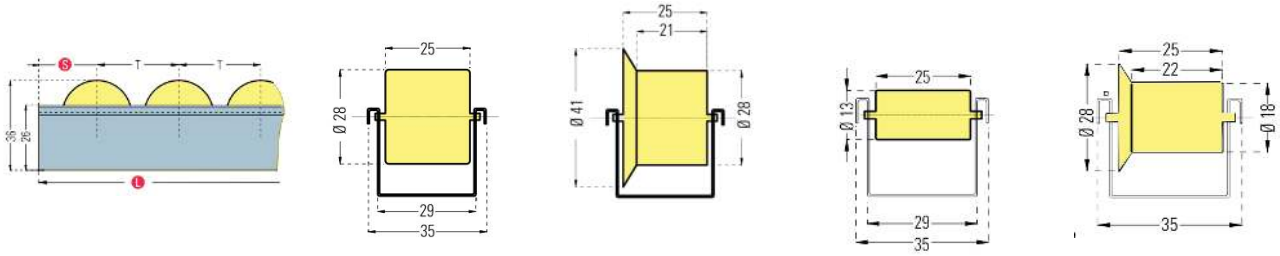
SERIES : **VLN** - Normal plastic roller
DIVISION : **33** - Basic division in mm
TYPE : **v** - Guide roller

USABILITY :
- Suitable for installation into metal tables
- Use in the temperature range from -30 to +100 °C
- Roller load capacity up to 10kg

CHARACTERISTICS :
- Universal plastic roller
- Smooth operation
- Compact and durable roller rail

Epfei	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VLN 33	28 x 25	36		10	33, 50, 66, 83, 100	3000
VLNv50	41/28 x 25	43		10	50, 66, 83, 100	3000
VLNmini16	13 x 25	28		10	16, 33, 50	3000
VLNminiv33	28/18 x 25	36		10	33, 50, 66	3000

SKETCH : **VLN33** **VLNv50** **VLNmini16** **VLNminiv33**



MATERIAL :
- Roller : from thermoplastics (yellow)
- Table : from galvanised steel sheet
- Axle :

SPECIAL-PURPOSE DESIGN. :
- For low temperatures from - 30 °C
- Antistatic design NHL (black)
- Additional small materials and finishes on request

VLSFN roller rail

Type: VLSFN 33

DESCRIPTION

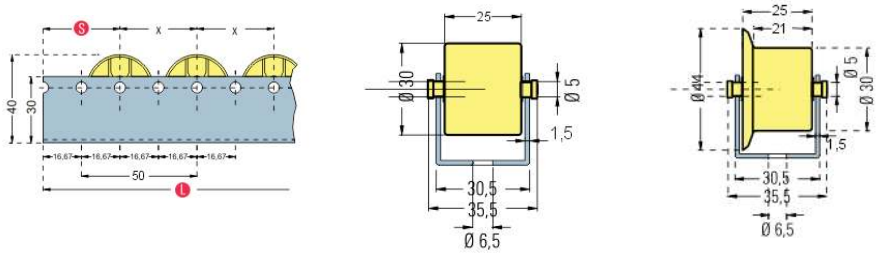
SERIES : **VLSFN** - Stronger plastic roller
DIVISION : **33** - Basic division in mm
TYPE : **v** - Guide roller

USABILITY :
- Suitable for installation into metal push-through rack storage tables
- Use in the temperature range from -30 to +100 °C
- Roller load capacity up to 15kg

CHARACTERISTICS :
- Universal plastic roller resistant to acids and lye
- Smooth operation
- Compact and durable roller table

Basic table type	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VLSFN 33	30 x 25	40	5	15	33, 50, 66, 100	3000
VLSFNv50	44/30 x 25	47	5	15	50, 66, 100	3000

SKICA : **VLSFN33** **VLSFNv50**



MATERIAL :
- Roller : from thermoplastics (yellow)
- Table : from 1.5mm galvanised steel sheet
- Axle : steel, d= 5mm

SPECIAL-PURPOSE DESIGN. :
- For low temperatures from - 30 °C
- Antistatic design NHL (black)
- Additional small materials and finishes on request

VLNR roller rail

Type: VLNR

DESCRIPTION

SERIES : **VLNR** - Regular wheel table

DIVISION : **25** - Basic division in mm

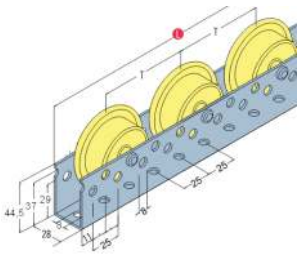
TYPE :
10 - Plastic wheel with up to 10 kg load capacity
20 - Metal wheel with up to 20kg load capacity
v - With guide lining

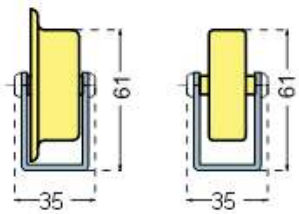
USABILITY :
- Suitable for installation into metal tables for durable support applications
- With precision bearings and also suitable for smaller axial loads

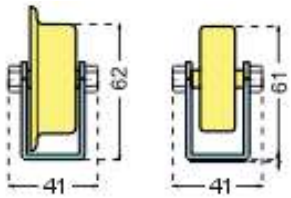
CHARACTERISTICS :
- Universal wheel
- Quiet and smooth roller operation due to a special double ball bearing in the plastic wheel
- Surface-resistant with additional protection

Basic table type	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VLNR 10	48 x 24	61	8	10	25, 50, 75, 100, 125	3000
VLNRv10	66/48 x 24	70	8	10	50, 75, 100, 125	3000
VLNR 20	48 x 24	61	8	20	25, 50, 75, 100, 125	3000
VLNRv21	66/50 x 24	70	8	20	50, 75, 100, 125	3000

SKETCH : **VLNRv10** **VLNR 10** **VLNRv21** **VLNR 20**







MATERIAL :
- Wheel 10 : from thermoplastics (blue)
- Wheel 20 : from galvanised steel sheet
- Table : from 2.2mm galvanised steel sheet
- Axle : steel axis, d= 8mm
- Balls : from steel

SPECIAL-PURPOSE DESIGN:
- With a PUR shock-absorbing ring
- With a slide bearing
- Additional small materials and finishes on request

VLAR roller rail

Type: **VLAR**

DESCRIPTION

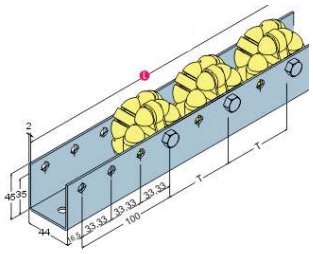
SERIES : **VLAR** - All-direction plastic wheel
DIVISION : **25** - Basic division in mm
TYPE : **10** - Single wheel
40 - Double wheel
50 - Double wheel

USABILITY :
- Suitable for installation into metal tables for transporting load up to max. 100kg, with all-direction movement
- With precision bearings and also suitable for smaller axial loads

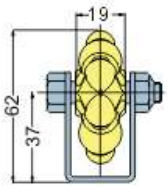
CHARACTERISTICS :
- Multi-directional plastic wheel

Basic table type	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VLAR 10	50 x 19	62	8	5	25, 50, 75, 100, 125	3000
VLASR 40	40 x 29		8	10	25, 50, 75, 100,125	3000
VLASRS 50	50 x 38	60	8	10	66, 100, 133, 166	3000

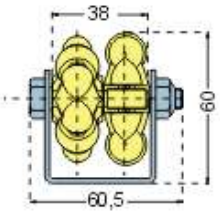
SKETCH :



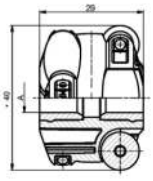
VLAR 10



VLASRS 50



VLASR 40



MATERIAL :
- Wheel : from thermoplastics
- Table : from 2.2mm galvanised steel sheet
- Axle : steel axis, d= 8mm

SPECIAL-PURPOSE DESIGN :
- Single or double table width
- Additional small materials and finishes on request

VCTR roller track

Type: VCTR

DESCRIPTION

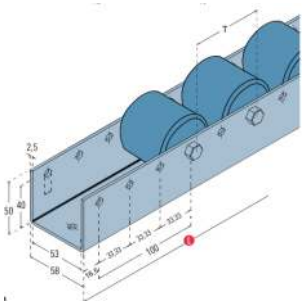
SERIES : **VTCR** - Stronger plastic roller
DIVISION : **33** - Basic division in mm
TYPE : **v** - Guide roller

USABILITY :
- Suitable for installation into metal tracks for various uses in logistics
- Use in the temperature range from -30 to +100°C
- Roller load capacity up to 40kg

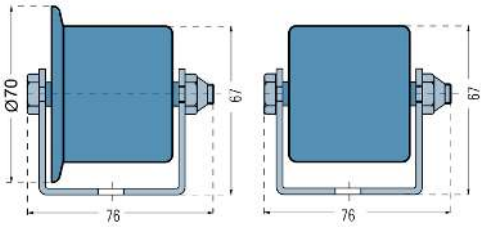
CHARACTERISTICS :
- Universal plastic cover resistant to acids and lye
- Smooth operation
- Compact strong and durable roller track

Basic track type	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VTCR 40	54 x 48	67	8	40	66, 100, 133, 166, 200	3000
VTCRv40	70/54 x 48	75	8	40	100, 133, 166, 200	3000

SKETCH :



VTCRv40 **VTCR 40**



MATERIAL :
- Roller : from thermoplastics
- Table : from 2.5mm galvanised steel sheet
- Axle : steel, d= 8mm

SPECIAL-PURPOSE DESIGN:
- Standard and guiding rollers are exchanged (66mm division)
- Additional small materials and finishes on request

VTP pallet roller track

Type: **VTP**

DESCRIPTION

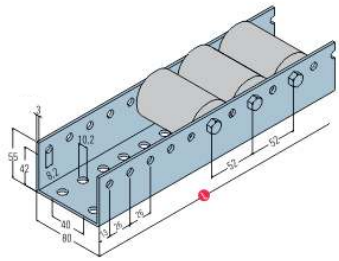
SERIES : **VTP** - Stronger metal roller
DIVISION : **26** - Basic division in mm
TYPE : **v** - Guide roller

USABILITY :
- Suitable for installation into metal tracks for various uses in logistics
- Use in the temperature range from 0 to +80°C
- Roller load capacity up to 150kg

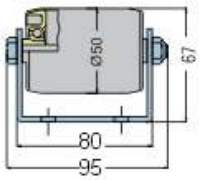
CHARACTERISTICS :
- Standard metal roller
- Smoothly running operation
- Strong and durable roller track

Basic track type	Dimensions L x W (mm)	Height total (mm)	Axis d (mm)	Load capacity (kg)	Division T (mm)	Table length L (mm)
VTP 100	50 x 66	67	8	150	52, 78, 104, 130, 156	3000
VTPv100	72/50 x 66	78	8	150	78, 104, 130, 156	3000

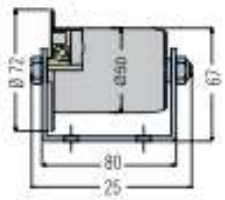
SKETCH :



VTP 100



VTPv100



MATERIAL :
- Roller : from galvanised steel sheet with built-in ball bearing
- Table : from from 3.0mm galvanised steel sheet
- Axle : steel, d= 8mm

SPECIAL-PURPOSE DESIGN:
- Standard and guiding rollers are exchanged (78mm division)
- Additional small materials and finishes on request

LAR

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SI/07/2017

Oblikovanje: KocKa