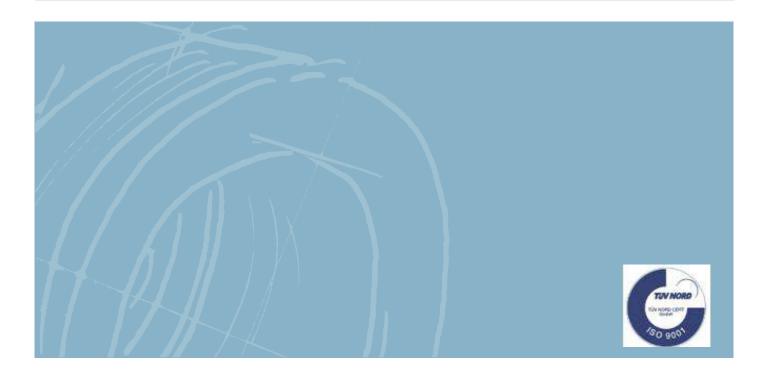


Markes GmbH & Co. KG Metallwarenfabrik

An der Susannenhöhe 2 58553 Halver, Germany Phone: + 49 (0) 2353 66985-0

Fax: +49 (0) 2353 66985-98 info@markes.de · www.markes.de





Load capacity:

The load capacity of the ball bearing is specified as load rating C in daN and tested under following conditions:

- 200mm roller length (short roller)
- · axis fixed restrained
- rotarional speed 100min⁻¹ 200min⁻¹
- 1.000.000 revolutions (load change)

Service life:

From the load capacity the service life of the ball bearing could be calculated with following formula:

$$Lh = \frac{1000000}{60 \times n} \left(\frac{C}{P}\right)^p$$

Herein are:

Lh: nominal service life [h]
C: dynamic load rating [N]
n: revolutions [min-1]
P: dynamic bearing load [N]

p: (P = C in case of radial load only) exponent of service life equation (for ball bearing is considered p=3)

Plastics:

Polypropylen (PP)

- · good mechanical characteristic
- · excellent shock resistance

Polyacetal (POM)

- · high hardness and stiffness
- · low absorbtion of humidity
- · good friction and abrasion characteristic

Polyamid (PA)

- · tenacious/rigid
- · very good mechanical characteristic and abrasion resistance

Antistatic Plastics

- PP
- POM

The use of antistatic plastics is only premissible in the provided temperature range. We can not give any guarantee for the conductivity.

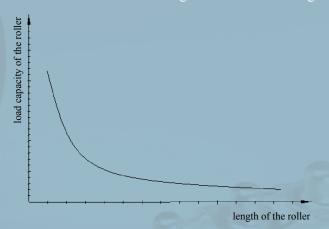
Attention: Do not use in explosion-proofed areas !!!

Affecting conditions:

Under different conditions the roller manufacturer has to determine the real new load capacity of the roller by himself. Kindly note that the service life and the load capacity of your roller will be determined by:

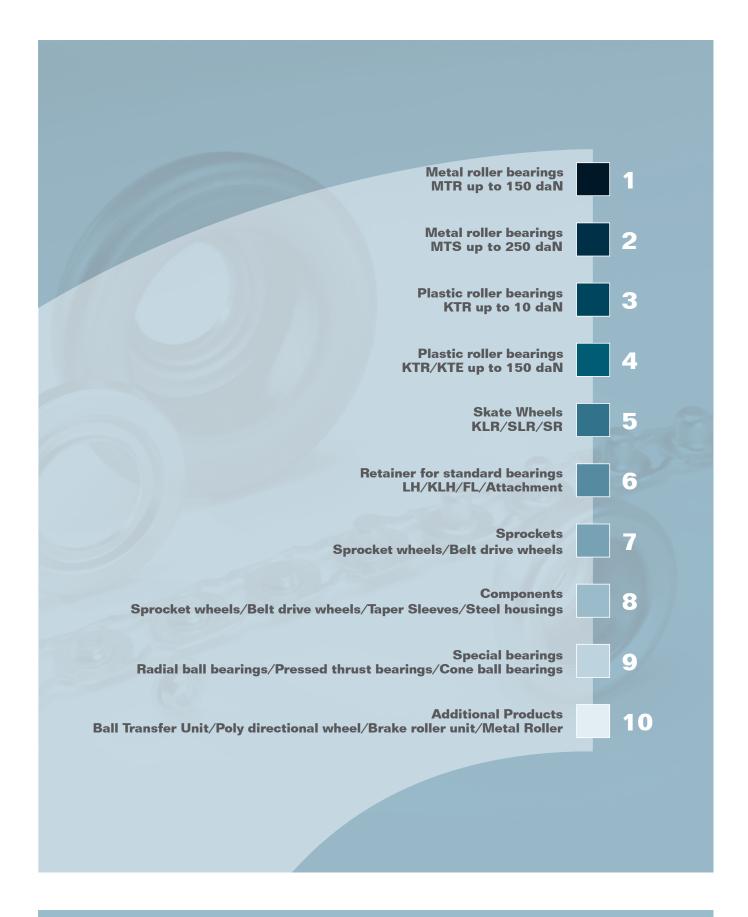
- roller length
- axis diameter
- style of the axis
- environment influences

Influence of the roller length for the load rating



Lubricants:

Our ball bearings are equipped with high quality lubricants. Furthermore our special greases and oils can reach a temperature range from -35°C to +180°C. Our tested lubricants are best prooved for many years under every conditions. In a given case please ask for the optimal lubricants recommended by MARKES..



Content

MTR-16



D [mm]

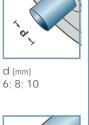






T [°C] -50° - 100°



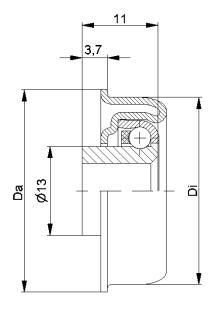


C [daN]





50/500

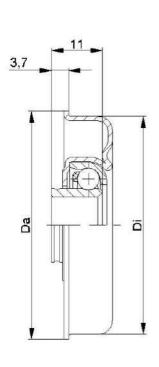


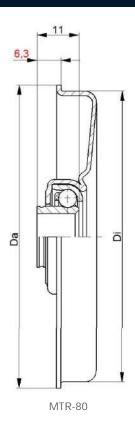


MTR-16					
Type Di ±0.1 Da ±0.2 Load Ratin C [daN]					
MTR-30x1,2.16	27,6	29,6	30		
MTR-30x1,5.16 27,3 29,6 30					
Other dimensions on request!					

- G Housing: Steel, Zinc plated
- **G** Bearing RL-16
 - **G** Bearing Shell: Steel, Hardened
 - **♥** Inner Race: Steel, Hardened, Zinc plated
 - **G** Ball Cage: Plastic
 - **G** Ball: Steel









MTR-20



D [mm] 40 - 80



d [mm] 8; 10; 12; SW11



C [daN]



T [°C] -50° - 100°



MTR-20			
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]
MTR-40x1,5.20	37,3	39,5	80
MTR-40x2,0.20	36,3	39,5	80
MTR-48x1,5.20	45,3	47,5	80
MTR-50x1,5.20	47,3	49,5	80
MTR-50x2,0.20	46,3	49,5	80
MTR-60x1,5.20	57,3	59,5	80
MTR-60x2,0.20	56,3	59,5	80
MTR-80x2,0.20	76,4	79,5	80

4 Housing: Steel, Zinc plated

G Bearing RL-20

& Bearing Shell: Steel, Hardened

Other dimensions on request!

G Inner Race: Steel, Hardened, Zinc plated

G Ball Cage: Plastic

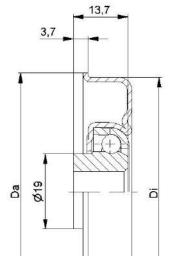
C Ball: Steel

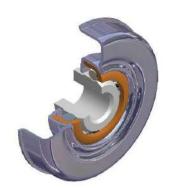




Carton [pcs.]

ø40: 250 ø48: 100/350 ø50: 100/350 ø60: 200 ø80: 100





MTR-30-2



D [mm] 50 - 80



d [mm] 10;12; 14; 15; SW11



C [daN]



T [°C] 0° - 100°



MTR-30-2			
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]
MTR-50x1,5.30-2	47,3	49,5	120
MTR-50x2,0.30-2	46,3	49,5	120
MTR-60x1,5.30-2	57,3	59,5	120
MTR-60x2,0.30-2	56,3	59,5	120
MTR-80x2,0.30-2	76,4	79,5	120
Other dimensions on request!			

G Housing: Steel, Zinc plated

G Bearing RL-30-2

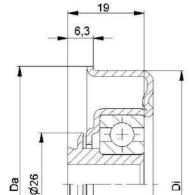
C Bearing Shell: Steel, Hardened

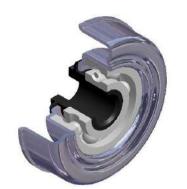
G Ball: Steel





ø50: 300 200 100 ø60: ø80:





MTR-40



D [mm] 50 - 80



d [mm] 10; 12; SW11



C [daN] 120 - 150



T [°C]



MTR-40				
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]	
MTR-50x1,5.40	47,3	49,5	120	
MTR-50x2,0.40	46,3	49,5	120	
MTR-60x1,5.40	57,3	59,5	150	
MTR-60x2,0.40	56,3	59,5	150	
MTR-60x3,0.40	54,3	59,5	150	
MTR-80x2,0.40	76,5	79,5	150	

C Housing: Steel, Zinc plated

Other dimensions on request!

C Reducing Bush: Plastic







ø50: 100 ø60: 150 ø80: 100

MTR-40.15







C [daN] 120 - 150







14,
d [mm]

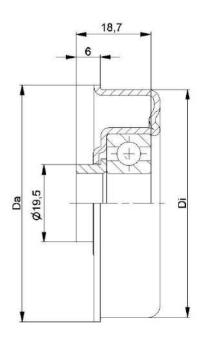
15



T [°C]



ø50:	100
ø60:	150
ø80:	100





MTR-40.15				
Type Di ± 0.1 Da ± 0.2 Load Rating C [daN]				
MTR-50x1,5.40.15	47,3	49,5	120	
MTR-50x2,0.40.15	46,3	49,5	120	
MTR-60x1,5.40.15	57,3	59,5	150	
MTR-60x2,0.40.15	56,3	59,5	150	
MTR-60x3,0.40.15	54,3	59,5	150	
MTR-80x2,0.40.15	76,5	79,5	150	
Other dimensions on request				

C Housing: Steel, Zinc plated

C Distance Bush: Plastic

G Bearing 6202



MTR-45.17



50, 80







T [°C] 0° - 80°





	1
(d [mm]



C [daN] 120 - 150

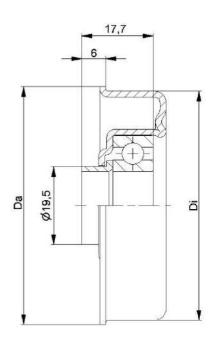


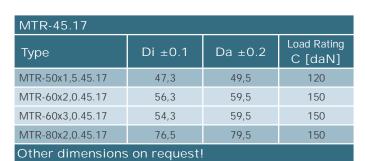
Carton [pcs.]

ø50:

ø60:







G Housing: Steel, Zinc plated

C Distance Bush: Plastic

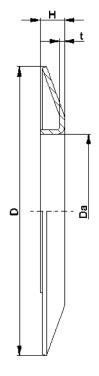
G Bearing 6003



100 150

100

BS-









D [mm] 50 - 108



d [mm]



C [daN]



T [°C]







BS-				
Туре	Da ±0.1	D -2	H ±0.5	t
BS-50-130	49,9	130	10	1,5
BS-60-130	59,9	130	10	1,5
BS-80-150	79,9	150	14	2,5
BS-89-150	88,9	150	14	2,5
BS-108-150	107,9	150	14	2,5
Other dimensions on request!				

C Wheel Flange: Steel



DK-MTR-



D [mm]



 $d \; [mm] \;$

-



C [daN]



T [°C] 0° - 80°



-



H



DK-MTR				
Туре	D	н		
DK-MTR-20	34	7		
DK-MTR-30-2 39 7				
Other dimensions on request!				

c Seal Bonnet: Plastic



MTS-46



D [mm] 63,5



d [mm] 20



C [daN] 200



T [°C] 0° - 100°

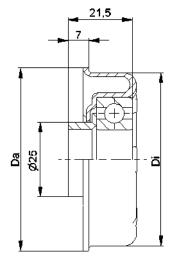


FD 3



Our torr [pcs

50/100





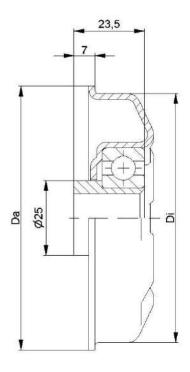
MTS-46					
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]		
MTS-63,5x2,9.46 58,1 61,5 200					
Other dimensions on request!					

G Housing: Steel, Zinc plated

C Distance Bush: Plastic

G Bearing 6004









D [mm] 80 - 108



d [mm] 16; 17; SW14



C [daN] 250



T [°C] 0° - 100°





Load Rating

C [daN]

250

250

250

250

250



Carton [pcs.]

50



MTS-44

MTS-80x2,0.44

MTS-80x3,0.44

MTS-89x3,0.44

MTS-89x3,25.44

MTS-108x3,25.44

G Bearing 6204

Other dimensions on request!

G Housing: Steel, Zinc plated C Reducing Bush: Plastic

Type

Di ±0.1

76,5

74,5

83,5

83,0

102,0

Da ±0.2

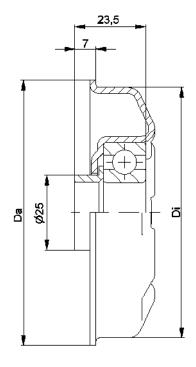
79,5

79,5

88,5

88,5

107,5



Di ±0.1

76,5

74,5

83,5

83,0

102,0





MTS-44



D [mm] 80 - 108



d [mm]



C [daN] 250



T [°C] 0° - 100°





Load Rating

C [daN]

250

250

250

250

250

Da ±0.2

79,5

79,5

88,5

88,5

107,5



50

MTS-44

MTS-80x2,0.44

MTS-80x3,0.44

MTS-89x3,0.44

MTS-89x3,25.44

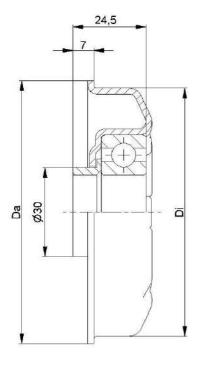
MTS-108x3,25.44

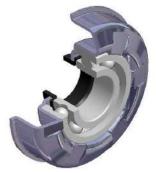
G Bearing 6204

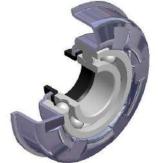
Other dimensions on request!

G Housing: Steel, Zinc plated C Distance Bush: Plastic

Type







MTS-47



D [mm] 89 - 108



d [mm] 25



C [daN] 250



T [°C] 0° - 100°

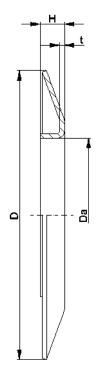




MTS-47				
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]	
MTS-89x3,0.47	83,5	88,5	250	
MTS-108x3,25.47	102,0	107,5	250	
Other dimensions on request!				

- G Housing: Steel, Zinc plated
- C Distance Bush: Plastic
- **G** Bearing 6205













D [mm] 50 - 108



d [mm]



C [daN]





T [°C]













BS-				
Туре	Da ±0.1	D -2	H ±0.5	t
BS-50-130	49,9	130	10	1,5
BS-60-130	59,9	130	10	1,5
BS-80-150	79,9	150	14	2,5
BS-89-150	88,9	150	14	2,5
BS-108-150	107,9	150	14	2,5
Other dimensions	on request!	!		

C Wheel Flange: Steel



KTR-.00 FA KTR-.01 FA



20, 30, 40, 50



d [mm]



C [daN] 8 - 15



T [°C] 0° - 80°







6; 8; 10



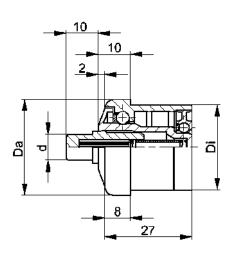






Carton [pcs.]

ø20: 500/1000 250/500 ø30: ø40: 250/500 ø50: 250





KTR00/.01 FA						
Туре	Normal .OO	Stainless .01	Di +0,25	Da	d	Load Rating C [daN]
KTR-20x1,5	Х	Х	17,1	19,9	6	8
KTR-30x1,8	Х	Х	26,5	29,9	8	10
KTR-40x2,3	Х	Х	35,5	39,9	8	10
KTR-50x2,8	Х	Х	44,6	49,9	10	15

Other dimensions on request!

6 Housing: Plastic C Inner Race: Plastic C Ball Cage: Plastic

C Shaft: Plastic

6 Bearing Flange: Plastic **&** Ball, Spring

> C 00: Steel **©** 01: 1.4034





KTR-16.00 KTR-16.01





d [mm] 5;6





T [°C] 0° - 80°



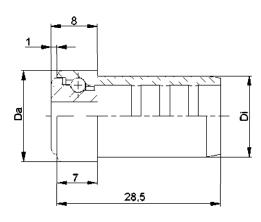








500/2500





KTR-16.00/.01					
Туре	Normal .OO	Stainless .01	Di +0,15	Da	Load Rating C [daN]
KTR-16x1,0	Х	Х	14,1	15,9	3

Other dimensions on request!

C Housing: Plastic G Inner Race: Plastic

C Ball

C 00: Steel **c** 01: 1.4034





KTR-20.00/.01					
Туре	Normal .OO	Stainless .01	Di +0,15	Da	Load Rating C [daN]
KTR-20x1,0	Х	Х	18,1	19,9	5
KTR-20x1,5	Х	Х	17,1	19,9	5
Other dimensions on request!					

c Housing: Plastic

G Inner Race: Plastic

C Ball Cage: Plastic

C Ball

Ö

6 00: Steel

G 01: 1.4034





D [mm]



d [mm] 6; 8



C [daN]



T [°C] 0° - 80°





500/1000

KTR-30.00 KTR-30.01



D [mm]



d [mm] 6; 8; 10

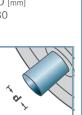


C [daN]



T [°C] 0° - 80°

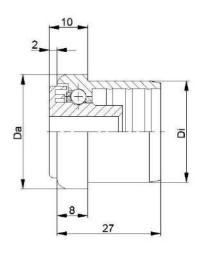








50/250/500





KTR-30.00/.01					
Туре	Normal .00	Stainless .01	Di +0,25	Da	Load Rating C [daN]
KTR-30x1,0	Х	Х	28,1	29,9	7
KTR-30x1,5	Х	Х	27,1	29,9	7
KTR-30x1,8	Х	Х	26,5	29,9	7
KTR-30x2,0	Х	Х	26,35	29,9	7

Other dimensions on request!

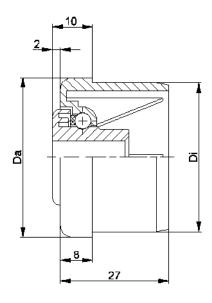
6 Housing: Plastic **G** Inner Race: Plastic **&** Ball Cage: Plastic

C Ball





KTR-40.00 KTR-40.01





D [mm]



d [mm] 6; 8; 10



C [daN]



T [°C] 0° - 80°



KTR-40.00/.01					
Туре	Normal .00	Stainless .01	Di +0,25	Da	Load Rating C [daN]
KTR-40x1,5	Х	Х	37,1	39,9	7
KTR-40x2,3	Х	Х	35,5	39,9	7

Other dimensions on request!

C Housing: Plastic

C Inner Race: Plastic

C Ball Cage: Plastic

C Ball

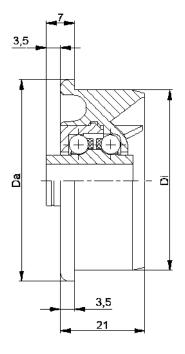
6 00: Steel

G 01: 1.4034





50/250





KTR-02/03										
Туре	Normal .02	Stainless .03	Di +0,2	Da	Load Rating C [daN]					
KTR-50x1,5	Х	Х	47,3	49,9	15					
KTR-50x2,0	Х	Х	46,3	49,9	15					
KTR-50x2,8	Х	Х	44,6	49,9	15					
O t la a maraliana a marailana a										

Other dimensions on request!

Housing: PlasticInner Race: PlasticBearing Cap: PlasticBall Cage: Plastic

C Ball



Replaces all previous issues! Detail provided comply with the state of art. Subject to modification. The user's duty to take good care has not been suspended hereby.





D [mm] 50



d [mm] 8; 10



C [daN] 15



T [°C] 0° - 80°

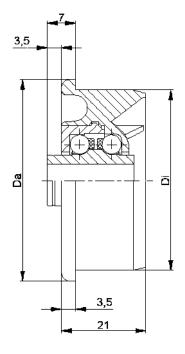


-



Carton [pcs.]

50x1,5: 250 50x2,0: 250 50x2,8: 250





KTR-02/03					
Туре	Normal .02	Stainless .03	Di +0,2	Da	Load Rating C [daN]
KTR-50x1,5	Х	Х	47,3	49,9	10
KTR-50x2,8	Х	Х	44,6	49,9	10
Other dimensions on request!					

c Housing: Plastic

C Inner Race: Plastic

G Bearing Cap: Plastic

6 Ball Cage: Plastic

C Ball

G 02: Steel







D [mm] 50



d [mm] 12; SW11



C [daN]



T [°C] 0° - 80°





Carton [pcs.]

250

DK-KTR-02



D [mm]



d [mm]



C [daN]

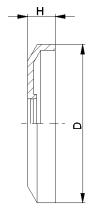


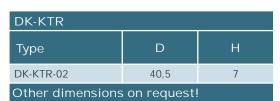
T [°C] 0° - 80°





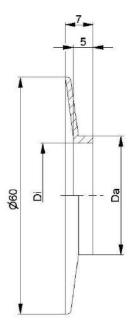






c Seal Bonnet: Plastic













D [mm]



d [mm]



C [daN]



T [°C] 0° - 80°



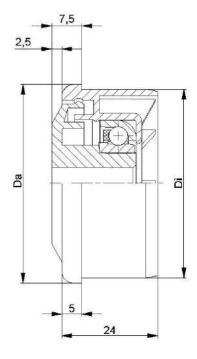


Carton [pcs.]

BS-					
Туре	Di	Da			
BS-30x1,8	26,5	29,9			
BS-40x1,5	37,1	39,9			
BS-40x2,3	35,5	39,9			
Other dimensions on request!					

& Wheel Flange: Plastic







KTR-30				
Туре	Di +0,2	Da	Load Rating C [daN]	
KTR-50x1,5.30	47,3	49,9	80	
KTR-50x2,8.30	44,6	49,9	80	
KTR-60x1,5.30	57,3	59,9	80	
Other dimensions on request!				

c Housing: Plastic

© Single Labyrinth Seal: Plastic

Please note: the single labyrinth seal for axis 15 mm is delivered separately and has to be locked at assembly.

G Bearing RL-30

G Bearing Shell: Steel, Hardened

C Inner Race: Steel, Hardened







D [mm] 50 - 60



d [mm] 10; 12; 15; SW11



C [daN]



T [°C] 0° - 80°

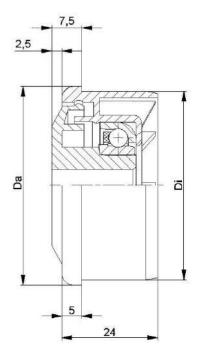


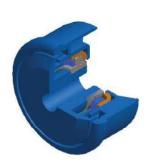
Oil



Carton [pcs.]

ø50: 250 ø60: 200





KTR-31				
Туре	Di +0,2	Da	Load Rating C [daN]	
KTR-50x1,5.31	47,3	49,9	25	
KTR-50x2,8.31	44,6	49,9	25	
KTR-60x1,5.31	57,3	59,9	25	
Other dimensions on request!				

C Housing: Plastic

© Single Labyrinth Seal: Plastic

C Bearing RL-31

Bearing Shell: 1.4301Inner Race: 1.4305

Ball Cage: PlasticBall: 1.4301



Please note: the single labyrinth seal for axis 15 mm is delivered separately and has to be locked at assembly.

KTR-31



D [mm] 50 - 60



d [mm] 10; 12; 15; SW11



C [daN] 25



T [°C] 0° - 80°



Oil



Carton [pcs.]

ø50: 250 ø60: 200

KTR-40.M8



D [mm] 50



d [mm] M8



C [daN] 80



T [°C] 0° - 80°

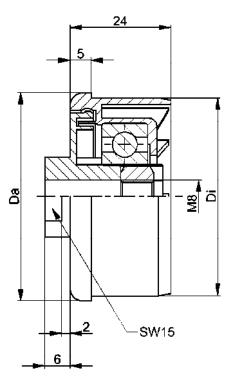


FD 2



Carton [pcs.]

ø50: 250

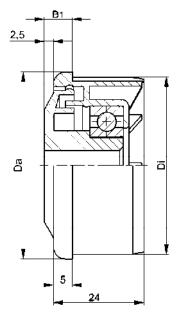




KTR-40.M8				
Туре	Di +0,2	Da	Load Rating C [daN]	
KTR-50x1,5.40	47,3	49,9	80	
Other dimensions on request!				

- C Housing: Plastic
- **c** Single Labyrinth Seal: Plastic
- **G** Bearing 6202
- C Hexagon Nut







KTR-42				
Туре	Di +0,25	Da	B1	Load Rating C [daN]
KTR-40x1,5.42	37,2	39,9	9,0	120
KTR-50x1,5.42	47,3	49,9	7,5	80
KTR-50x2,0.42	46,3	49,9	7,5	80
KTR-50x2,8.42	44,6	49,9	7,5	80
KTR-60x1,5.42	57,3	59,9	7,5	80
KTR-60x2,0.42	56,3	59,9	7,5	80
Other dimensions on request!				

G Housing: Plastic

G Bearing 6002

G Single Labyrinth Seal: Plastic

Please note: the single labyrinth seal for axis 15 mm is delivered separately and has to be locked at assembly.







D [mm] 40 - 60



d [mm] 10; 12; 15; SW11



C [daN] 80; 120



T [°C] 0° - 80°



EP 2

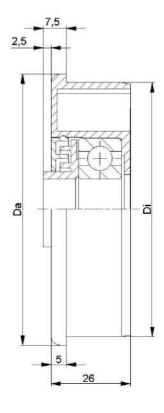


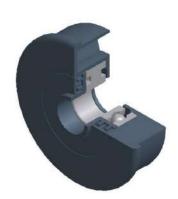
Carton [pcs.]

 Ø40:

 Ø50:
 250

 Ø60:
 200





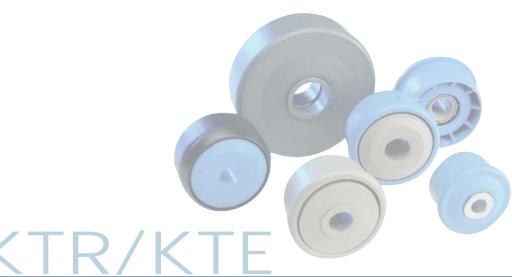
KTR-44			
Туре	Di +0,2	Da	Load Rating C [daN]
KTR-89x3,0.44	83,3	88,9	150
Other dimensions on request!			

G Housing: Plastic

4 Inner Labyrinth Seal: Plastic

C Outer Labyrinth Seal: Plastic

G Bearing 6204







D [mm]



d [mm]



C [daN] 150



T [°C] 0° - 80°





KTR-43/44



D [mm] 63,5 - 80



d [mm] 6303: 17 6204: 20



C [daN] 150



T [°C]

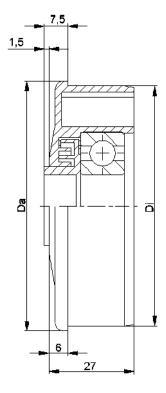


FP 2



Carton [pcs.]

100





KTR-43/44			
Туре	Di +0,2	Da	Load Rating C [daN]
KTR-63,5x2,9.43/.44	58,0	63,4	150
KTR-80x2,0.43/.44	76,4	79,9	150
Other dimensions on request!			

- **c** Housing: Plastic
- **G** Multiple Labyrinth Seal: Plastic
- **c** Bearing 6303/6204



KTR-43/44



D [mm] 63,5 - 80



d [mm] 6303: 12 6204: 15



C [daN] 150



T [°C]

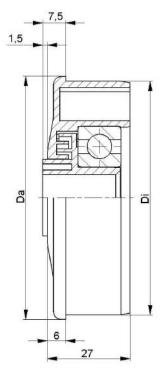


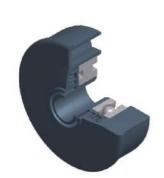
FP 2



Carton [pcs.]

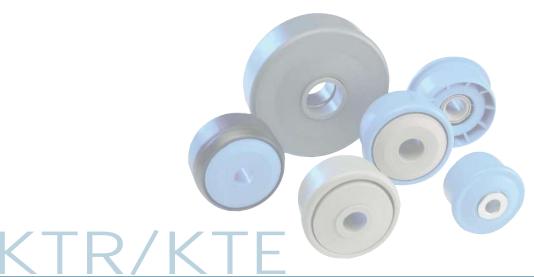
100





KTR-43/44			
Туре	Di +0,2	Da	Load Rating C [daN]
KTR-63,5x2,9.43/.44	58,0	63,4	150
KTR-80x2,0.43/.44	76,4	79,9	150
Other dimensions on request!			

- **G** Housing: Plastic
- **G** Multiple Labyrinth Seal: Plastic
- **c** Bearing 6303/6204



KTE-30



D [mm] 50



d [mm] 10; 12; 15; SW11



C [daN]



T [°C]

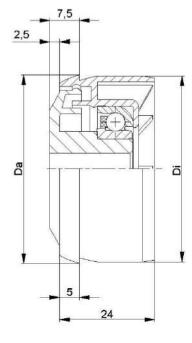


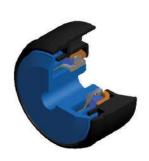
Oil



Carton [pcs.]

250





KTE-30			
Туре	Di +0,3	Da	Load Rating C [daN]
KTE-50x1,5.30	47,1	47,9	80
Other dimensions on request!			

G Housing: Plastic

c Single Labyrinth Seal: Plastic

Please note: the single labyrinth seal for axis 15 mm is delivered separately and has to be locked at assembly.

G Bearing RL-30

G Bearing Shell: Steel, Hardened

C Inner Race: Steel, Hardened

Cage: Plastic
Ball: Steel



KTE-31



D [mm] 50



d [mm] 10; 12; 15; SW11



C [daN] 25



T [°C]

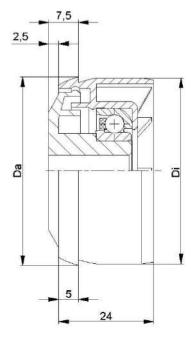


Oil



Carton [pcs.]

250





KTE-31			
Туре	Di +0,3	Da	Load Rating C [daN]
KTE-50x1,5.31	47,1	47,9	25
Other dimensions on request!			

G Housing: Plastic

c Single Labyrinth Seal: Plastic

G Bearing RL-31

G Bearing Shell: 1.4301 **G** Inner Race: 1.4305

Cage: Plastic

6 Ball: 1.4301



Please note: the single labyrinth seal for axis 15 mm is

delivered separately and has to be locked at assembly.

KTE-42



D [mm] 50



d [mm] 10; 12; 15; SW11



C [daN] 80



T [°C]

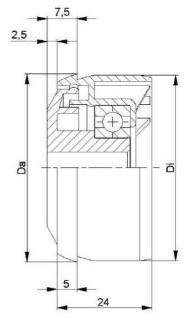


FD 3



Carton [pcs.]

250





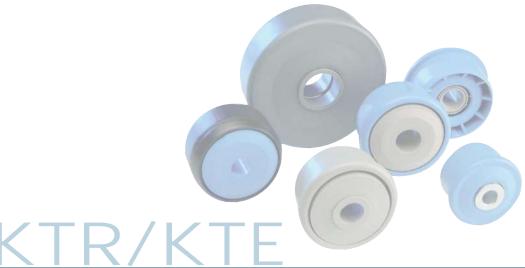
KTE-42			
Туре	Di +0,3	Da	Load Rating C [daN]
KTE-50x1,5.42	47,1	47,9	80
Other dimensions on request!			

G Housing: Plastic

c Single Labyrinth Seal: Plastic

C Bearing 6002

Please note: the single labyrinth seal for axis 15 mm is delivered separately and has to be locked at assembly.



SLR

Туре

SLR-480

c Skate Wheel: Steel

Other dimensions on request!

SLR-





d [mm] 6; 8



C [daN] 20







D [mm]





T [°C] -30° - 140°





Load Rating

C [daN]

20

250

24 16,2



KLR-02/03			
Туре	Normal .02	Stainless .03	Load Rating C [daN]
KLR-480	Х	Х	15

Other dimensions on request!

C Housing: Plastic

G Inner Race: Plastic **G** Bearing Cap: Plastic **C** Ball Cage: Plastic

C Ball

C 02: Steel



KLR-02 KLR-03



D [mm]



d [mm] 6; 8



C [daN] 15



T [°C] 0° - 80°





Carton [pcs.]

SR-02 SR-03





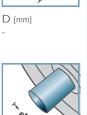
d [mm]



C [daN] 15







6; 8



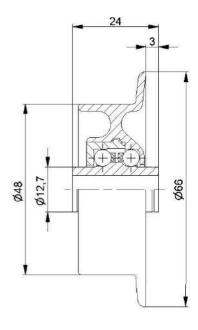
T [°C] 0° - 80°





Carton [pcs.]

250





SR-02/03			
Туре	Normal .02	Stainless .03	Load Rating C [daN]
SR-480	Х	Х	10

Other dimensions on request!

C Housing: Plastic

C Inner Race: Plastic **G** Bearing Cap: Plastic

C Ball Cage: Plastic

C Ball

C 02: Steel



DK-KLR-02



D [mm]



d [mm]



C [daN]



T [°C] 0° - 80°







DK-KLR				
Туре	D	н		
DK-KLR-02	40,5	7		
Other dimensions	on request!	!		

c Seal Bonnet: Plastic



LH-6204



D [mm] 63,5 - 133



d [mm] 20



C [daN]



T [°C]

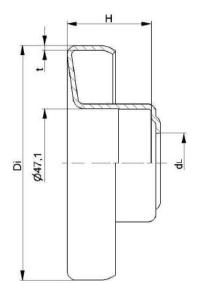


6204: D47, d20, H14



Skeleton Container [pcs.]

Container	[pcs.]
ø63,5:	6000
ø80:	3500
ø89:	3100
ø108:	2000
ø133:	1150





LH-6204				
Туре	Di	н	dL	t
LH-63,5x1,75/6204	60,5	33	26	1,5
LH-63,5x2,9/6204	58,2	33	26	1,5
LH-80x2,0/6204	76,5	36,5	26	2,0
LH-80x3,0/6204	74,5	36,5	26	2,0
LH-89x3,0/6204	83,5	36,5	26	2,0
LH-108x2,5/6204	103,3	36,5	26	2,0
LH-108x2,9/6204	102,8	36,5	26	2,0
LH-108x3,25/6204	102,1	36,5	26	2,0
LH-133x3,6/6204	126,3	36,5	26	2,5

Other dimensions on request!

Creating Retainer for Standard Bearings: Steel





LH-6204 N



D [mm] 63,5 - 108



d [mm] 20



C [daN]



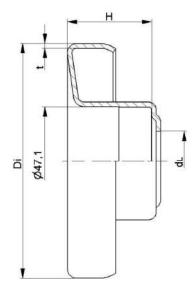
T [°C]



6204: D47, d20, H14



Skeleton Container [pcs.] Ø63,5: 6000 Ø89: 3100/3350 Ø108: 2000





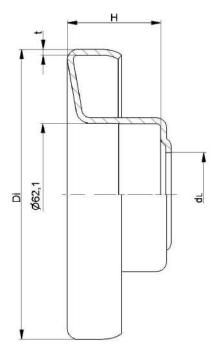
LH-6204 N				
Туре	Di	н	dL	t
LH-63,5x1,75/6204N	60,5	31,8	21	1,5
LH-89x3,0/6204N *	83,7	33,5	21	1,5
LH-108x3,25/6204N	102,1	36,5	21	2,0
Other dimensions	on roquoetl			

C Retainer for Standard Bearings: Steel

C *Alternative: Stainless



LH-6305



LH-6305

LH-89x3,0/6305

LH-108x2,5/6305

LH-108x3,25/6305

LH-127x2,9/6305

LH-133x3,6/6305

LH-159x4,5/6305

Other dimensions on request!

• Retainer for Standard Bearings: Steel

83,5

103,3

102,1

121,7

126,3

150,5

40,5

40,5

40,5

40.5

40.5

40,5

Type







d [mm] 25



C [daN]



T [°C]



6305: D62, d25, H17



dL

36,5

36,5

36,5

36,5

36,5

36,5

2,0

2,0

2,0

2,5

2,5

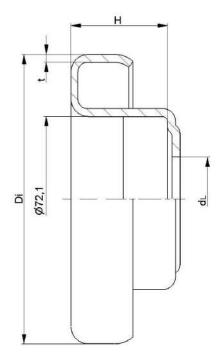
2,5



ø108:

ø133:

1900



LH-6306

LH-108x3,25/6306

LH-133x3,6/6306

LH-159x4,5/6306

Other dimensions on request! **c** Retainer for Standard Bearings: Steel

102,1

126,3

150,5

42

42

42

Туре





LH-6306



D [mm] 108 - 159



d [mm]



C [daN]



T [°C]



6306: D72, d30, H19



dL

36,5

36,5

36,5

3,0

3,5

2,5

LH-6308



D [mm] 133 - 159



d [mm] 40



C [daN]



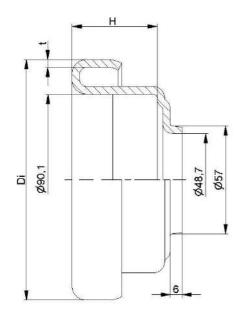
T [°C]



6308: D90, d40, H23



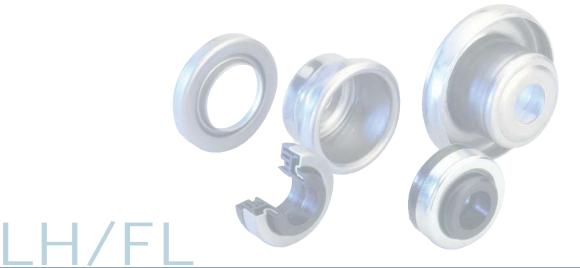
Skeleton Container [pcs.] Ø133: 800 Ø159: 600





LH-6308				
Туре	Di	н	t	
LH-133x3,6/6308	126,3	44,6	4,0	
LH-159x4,5/6308 150,8 44,6 4,0				
Other dimensions on request!				

C Retainer for Standard Bearings: Steel



FL-6204



D [mm] 60 - 76



d [mm] 20



C [daN]



T [°C

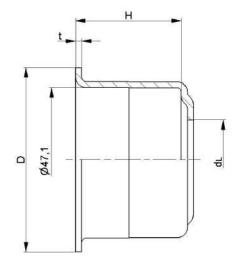


6204: D47, d20, H14



Skeleton Container [pcs.]

	Fle e e · J
ø60:	4000
ø63,5:	4000
ø70:	2000
ø76:	2000





FL-6204				
Туре	D	н	dL	t
FL-60x3,0/6204	58,1	34	26	2,0
FL-63,5x2,9/6204	60,0	34,5	26	2,0
FL-76/6204	73,5	34,5	26	2,0
Other dimensions on request!				

C Retainer for Standard Bearings: Steel



KLH-6204



D [mm] 89 - 108



d [mm] 20



C [daN]

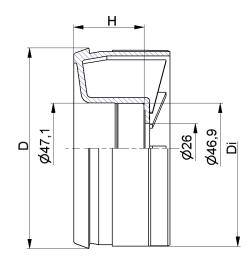


T [°C] 100°



6204: D47, d20, H14

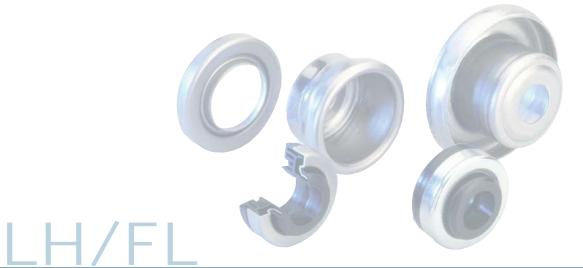






KLH-6204				
Туре	Di	Н	D	
KLH-89x3,0/6204	83,2	36,5	85,3	
KLH-108x3,0/6204 102,2 36,5 104,3				
Other dimensions	Other dimensions on request!			

G Retainer for Standard Bearings: Plastic



KLH-6204



D [mm] 90



d [mm] 20



C [daN]

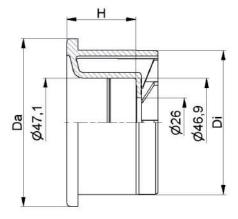


T [°C]



6204: D47, d20, H14

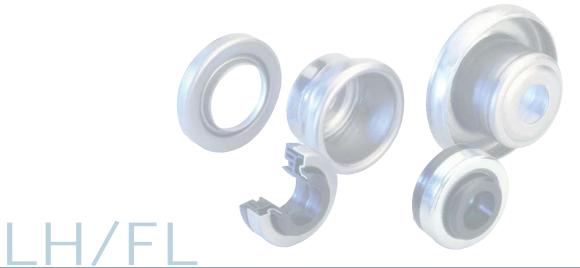






KLH-6204				
Type Da Di H				
KLH-90x7,0/6204	88,8	76,3	36,5	
Other dimensions on request!				

C Retainer for Standard Bearings: Plastic











C [daN]









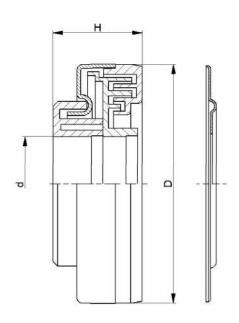
d [mm] 17 - 40



T [°C] 0° - 80°



6204: 500 6305:





LH-						
Туре	D	н	d			
LH-6303	47	22,5	17			
LH-6204	47	22,5	20			
LH-6204 N	47	20,0	20			
LH-6305	62	23,5	25			
LH-6206	62	23,5	30			
LH-6306	72	24,5	30			
LH-6308	90	23,1	40			
Other dimensions	on request!		Other dimensions on request!			

G Seal Bonnet: Steel, Zinc plated

C Rain Cap: Plastic

G Inner Labyrinth Seal: Plastic

C Outer Labyrinth Seal: Plastic

G Sheet Gasket: Steel, Zinc plated (not available with 6306 and 6308)





LH-



D [mm]



d [mm] 17, 20



C [daN]

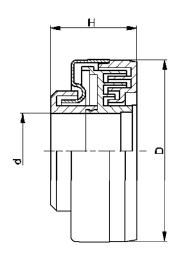


T [°C] 0° - 80°



_







LH- mounted, greased						
Туре	D	н	d			
LH-6303 M	47	22,5	17			
LH-6204 M	47	22,5	20			
LH-6305 M	62	23,5	25			
LH-6308 M	90	23,1	40			

Other dimensions on request!

c Seal Bonnet: Steel, Zinc plated

G Rain Cap: Plastic

Inner Labyrinth Seal: PlasticOuter Labyrinth Seal: Plastic

Grease: EP2



LH-



D [mm]



d [mm] 20



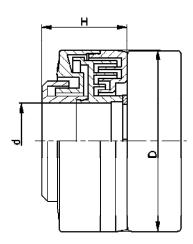
C [daN]



T [°C] 0° - 80°









LH-						
Туре	D	н	d			
LH-6303 KU	47	22,5	17			
LH-6204 KU	47	22,5	20			
Other dimensions	on request!					

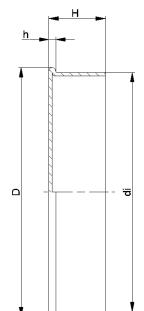
C Seal Bonnet: Plastic

C Rain Cap: Plastic

4 Inner Labyrinth Seal: Plastic **6** Outer Labyrinth Seal: Plastic



Seal Bonnet LH









1,8

14,7

c Seal Bonnet: Steel

Other dimensions on request!

LH- closed

Туре LH-6204



47,4

LH-



D [mm]



d [mm]



C [daN]



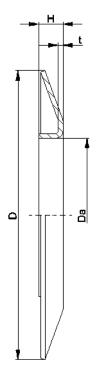


T [°C]





ST-6204	125
ST-6305	100
ST-6306	100





BS-



D [mm]



d [mm]



C [daN]



T [°C]







BS-				
Туре	Da ±0.1	D -2	H ±0.5	t
BS-50-130	49,9	130	10	1,5
BS-60-130	59,9	130	10	1,5
BS-80-150	79,9	150	14	2,5
BS-89-150	88,9	150	14	2,5
BS-108-150	107,9	150	14	2,5
Other dimensions	on request			

C Wheel Flange: Steel



VR-40



D [mm] 50



d [mm] 12; SW11



C [daN]



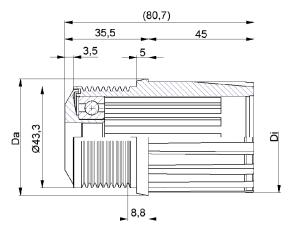
T [°C] 0° - 80°



FD 1



Carton [pcs.]

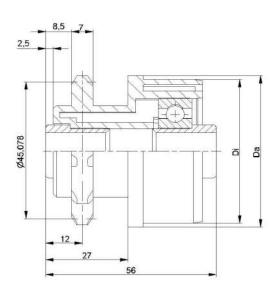




V-Beltdrive PJ VR-					
Туре	Di	Da	Load Rating C [daN]		
50x1,5.40	47,3	49,8	80		
Driving belt availa	able on requ	est!			

- **c** Housing: Plastic
- **G** Single Labyrinth Seal: Plastic
- Bearing 6202 also with two bearings available









KKR-1/2" x5/16" -Z11 for fix driving					
Type Di +0,2 Da					
50x1,5.40	47,3	49,9			
50x2,8.40	44,6	49,9			

c Housing: Plastic

c Reducing Bush: Plastic

Other dimensions on request!

G Bearing 6202



KKR-40



D [mm]



d [mm]



C [daN]



T [°C] 0° - 80°





Carton [pcs.]

150

Plastic Sprocket Wheel

KKR-40



D [mm] 50



d [mm] 12



C [daN]



T [°C] 0° - 80°

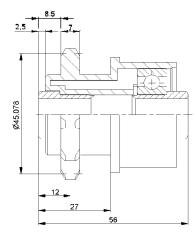


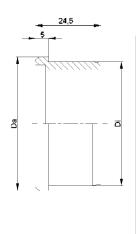
FD 1



Carton [pcs.]

Housing: 150 Sliding Ring: 300







KKR-1/2" x5/16" -Z11 for friction driving						
Type Di +0,2 Da						
50x1,5.40 ST 47,3 49,9						
Other dimensions on request!						

c Housing: Plastic

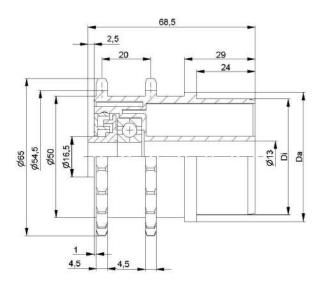
C Reducing Bush: Plastic

c Sliding Ring: Plastic

G Bearing 6202



Plastic Sprocket Wheel





KKR-3/8" x3/16" -Z20					
Туре	Di +0,2	Da			
53x3,0.41 47,6 52,9					
Other dimensions on request!					

c Housing: Plastic

G Inner Labyrinth Seal: Plastic

© Outer Labyrinth Seal: Plastic

G Bearing 6201







D [mm] 53



d [mm]



C [daN]



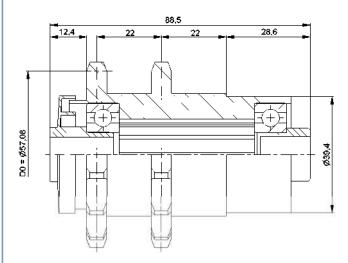
T [°C] 0° - 80°





60

Plastic Sprocket Wheel





KKR-40



D [mm]



d [mm] 12



C [daN]



T [°C]



-



Carton [pcs.]

150

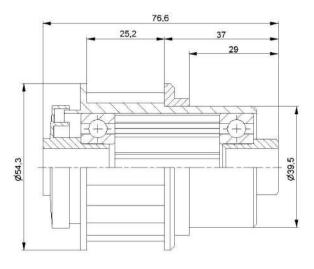
KKR-1/2" x5/16" -Z14

Other dimensions on request!

- **6** Housing: Plastic
- C Labyrinth Seal: Plastic
- C Reducing Bush: Plastic
- **G** Bearing 6202



Plastic Sprocket Wheel





KZA-40



D [mm]



d [mm] 12



C [daN]



T [°C]



-



Carton [pcs.]

100

KZA-Z20.40

Other dimensions on request!

- **G** Housing: Plastic
- C Labyrinth Seal: Plastic
- C Reducing Bush: Plastic
- **G** Bearing 6202



Plastic Synchronous Belt Drive

Components 8

VR-40



D [mm] 50



d [mm]



C [daN]



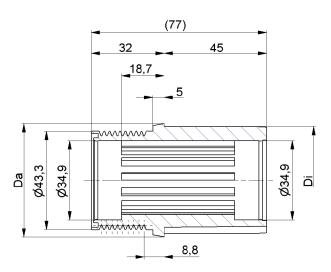
T [°C]



-



Carton [pcs.]





VR-					
Туре	Di	Da			
50x1,5.40 47,3 49,8					
Driving helt available on request!					

c Housing: Plastic



Plastic VR-Belt Drive Wheel

Components 8

KKR-40



D [mm]



d [mm]



C [daN]



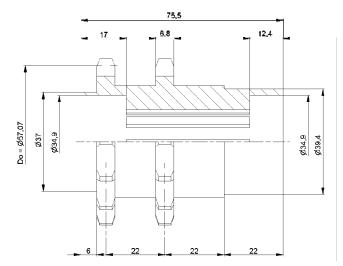
T [°C]





Carton [pcs.]

500





KKR-1/2" x5/16" -Z14

Other dimensions on request!

C Housing: Plastic



Plastic Sprocket Wheel

Ø34,95 Ø34,95 25,2



KZA-40



D [mm]



d [mm]



C [daN]



T [°C]





140

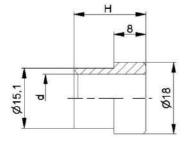
KZA-Z20.40

Other dimensions on request!

G Housing: Plastic



Plastic Synd







KKR-40					
	d	н			
KKR-40	10	19			
KKR-40	12	18			
KKR-40	14	19			
KKR-40	SW11	19			
Other dimensions on request!					

C Reducing Bush: Plastic







D [mm]



d [mm] 10; 12; 14; SW11



C [daN]



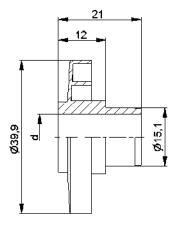
T [°C]



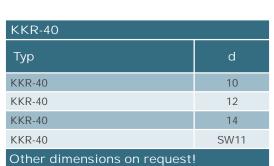


500/8000

Components 8







C Labyrinth Seal: Plastic



KKR-40



D [mm]



d [mm] 10; 12; 14; SW11



C [daN]



T [°C]

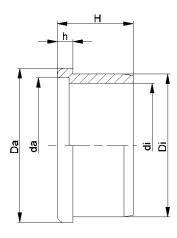


-



Carton [pc:

200/1000











D [mm] 50 - 60



d [mm]



C [daN]



T [°C] 0° - 80°







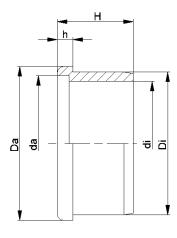
ø50: 400 ø60: 250

KKR-40						
Тур	Di	Da	di	da	Н	h
50x1,5	47,25	50	39,3	42,6	25,2	5
50x2,8	44,7	50	39,3	42,6	25,2	5
60x1,5	57,3	60	47,0	50,7	25,5	5
60x2,0	56,3	60	47,0	50,7	25,5	5
Other dimensions	on reque	est!				

C Distance Ring Fix: Plastic



Distance Ring Fix











D [mm] 50 - 60



d [mm]



C [daN]



T [°C]





Carton [pcs.]

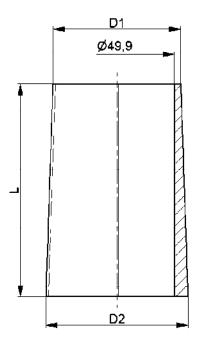
400

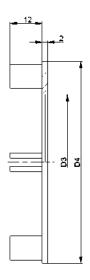
KKR-40 Тур 47,2 25 5 50x1,5 50 40,6 44,6 Other dimensions on request!

C Distance Ring Friction: Plastic



Distance Ring Friction





KF-50					
Туре А	D1	D2	L	D3	D4
KF-50 I-a Type A	53,4	59,7	92,5	-	-
KF-50 I-b Type A	54,0	59,7	95,5	-	-
KF-50 II Type A	60,0	66,5	100,0	-	-
KF-50 III Type A	66,5	73,0	99,0		-
KF-50 IV Type A	73,5	80,0	100,0	50,6	75,5
KF-50 V Type A	80,0	86,5	99,5	50,7	81,7
KF-50 VI Type A	86,5	93,5	100,0	50,6	87,7
KF-50 VII Type A	93,5	100,0	100,0	50,6	94,3
KF-50 VIII Type A	100,0	106,5	95,5	-	-
KF-50 IX Type A	106,5	113,0	95,5	÷	-
KF-50 X Type A	113,0	119,5	95,5		

Other dimensions on request!

Conic Roller: Plastic **c** Endcap: Plastic



Taper Sleeves

KF-50



D [mm]



d [mm]



C [daN]

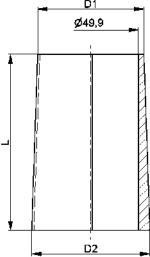


T [°C] 0° - 80°









D	2	<u> </u>

KF-50					
Туре	D1	D2	L		
KF-50 I Type B	54,0	59,9	90,0		
KF-50 II Type B	59,9	66,6	100,0		
KF-50 III Type B	66,6	73,4	100,0		
KF-50 IV Type B	73,4	80,1	100,0		
KF-50 V Type B	80,1	86,9	100,0		
KF-50 VI Type B	86,9	93,6	100,0		
KF-50 VII Type B	93,6	100,4	100,0		
KF-50 VIII Type B	100,4	107,1	100,0		
KF-50 IX Type B	107,1	113,9	100,0		
KF-50 X Type B	113,9	120,9	100,0		

Other dimensions on request!

Conic Roller: Plastic **c** Endcap: not necessary



KF-50



D [mm]



d [mm]



C [daN]



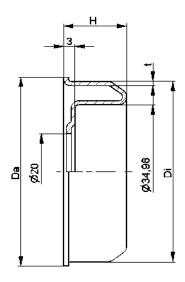
T [°C] 0° - 80°







Components 8





MRK-40					
Туре	Di ±0,1	Da	н	t	
MRK-50x1,5.40	47,3	49,5	16	1,2	
MRK-50x2,0.40	46,3	49,5	16	1,2	
MRK-60x2,0.40	56,3	59,5	16,5	1,5	
MRK-60x3,0.40	54,3	59,5	16,5	1,5	
Other dimensions	Other dimensions on request!				

c Housing: Steel, Zinc plated



Steel Housing

MRK-40



D [mm] 50 - 60



d [mm] 15



C [daN]

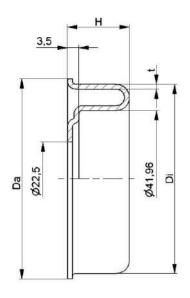


T [°C]



6202: D35; d15; H11









MRK-6004					
Туре	Di ±0,1	Da	н	t	
MRK-63,5x2,9/6004	58,1	61,5	19,0	1,5	
Other dimensions	Other dimensions on request!				

C Housing: Steel, Zinc plated



MRK-6004



D [mm] 63,5



d [mm] 20



C [daN]



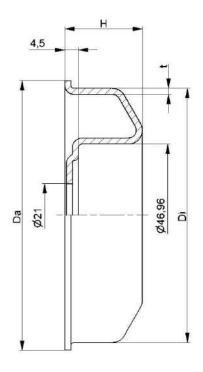
T [°C]



6004: D42; d20; H12









MRK-6204



D [mm] 80 - 108



d [mm] 20



C [daN]



T [°C]



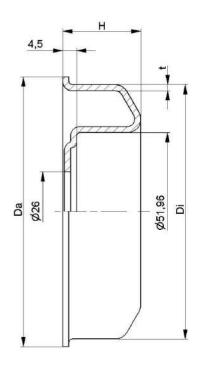
6204: D47; d20; H14



MRK-6204					
Туре	Di ±0,1	Da	н	t	
MRK-80x2,0/6204	76,5	79,5	23,5	2,0	
MRK-80x3,0/6204	74,5	79,5	23,5	2,0	
MRK-89x3,0/6204	83,5	88,5	23,5	2,0	
MRK-89x3,25/6204	83,0	88,5	23,5	2,0	
MRK-108x3,25/6204	102,0	107,5	25,0	2,0	
Other dimensions	Other dimensions on request!				

G Housing: Steel, Zinc plated









MRK-6205					
Туре	Di ±0,1	Da	н	t	
MRK-80x3,0/6205	74,5	79,5	23,5	2,0	
MRK-89x3,0/6205	83,5	88,5	24,5	2,0	
MRK-108x3,25/6205	102,0	107,5	25,5	2,0	
Other dimensions	on request!	!			

C Housing: Steel, Zinc plated



MRK-6205



D [mm] 80 - 108



d [mm] 25



C [daN]



T [°C]



6205: D52; d25; H15



RL-0.280



d [mm] 10; 12; 12,8

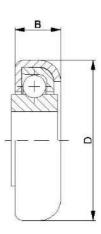


C [daN] 7; 10



T [°C] 0° - 80°







RL-0.280				
Туре	D	В		
RL-0.280	28,0	7,6		
Other dimensions	on request!			

Capsule: Steel, Zinc Plated

G Bearing Shell: Steel

G Ball: Steel

C Inner Race

C Steel: C=10daN

C Plastic: C=7daN; 0° - 80°







RL-0.280



10; 12

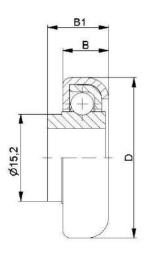


C [daN] 7; 10



T [°C] 0° - 80°







RL-0.280 with collar					
Type D B B1					
RL-0.280 m.B. 28,0 7,6 10,0					
Other dimensions on request!					

Capsule: Steel, Zinc Plated

c Bearing Shell: Steel

C Ball, Steel

c Inner Race

C Steel: C=10daN

C Plastic: C=7daN; 0° - 80°







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Radial Ball Bearings

RL-0.400



d [mm]

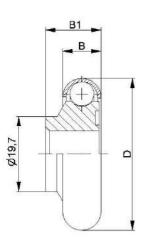


C [daN]



T [°C] 0° - 80°







RL-0.400					
Туре	D	В	B1		
RL-0.400 40,0 10,0 14,5					
Other dimensions	on request!				

Capsule: Steel, Zinc Plated

C Ball: Steel

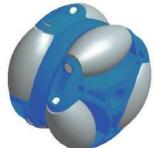
C Inner Race: Plastic











ASR-



d [mm] 8; 12;15; SW14



C [daN]



T [°C] 0° - 80°



ASR-					
Туре	D	В	Load Rating C [daN]		
ASR-80	80	64	40		
Other dimensions	on request!				

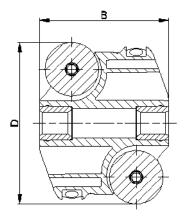
c Housing: Plastic

G Barrel-shaped Roller: Plastic

c Axis: 1.4301











ASR-



d [mm] 8; 10; SW9



C [daN]



T [°C] 0° - 80°



ASR-					
Туре	D	В	Load Rating C [daN]		
ASR-60	60	48	20		
ASR-48	48	39	15		
ASR-40	40	29	10		
Other dimensions on request!					

C Housing: Plastic

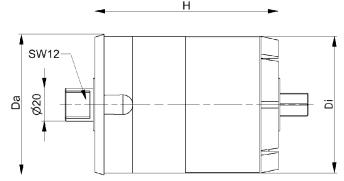
C Barrel-shaped Roller: Plastic

c Axis: 1.4301









BR-89x3,0-				
Туре	Da	Di	Н	Load Rating [kg]
200	88,5	83	115	200
500	88,5	83	115	500
800	88,5	83	115	800
1200	88,5	83	115	1200







D [mm] 89



d [mm] 20



C [daN] 250



T [°C] 0° - 80°





AMR-50.20



D [mm] 50



d [mm] 8; 10; 12; SW11



C [daN] 160



T [°C] 0° - 100°



Oil



Ø50

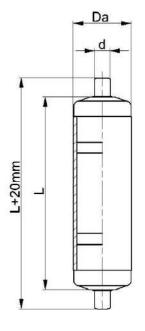


AMR-50x1,5.20					
Туре	L	Load Rating C [daN]			
AMR-50x1,5.20-66	66	160			
AMR-50x1,5.20-73	73	160			
AMR-50x1,5.20-80	80	160			
AMR-50x1,5.20-100	100	160			
Other dimensions on request!					

Tube: Steel, Zinc platedMetal Roller Bearing MTR-20



Metal Roller





AKR-00/01						
Туре	D	d	L max.	Load Rating C [daN]		
AKR-20x1,5.00.L	20	6	300	10		
AKR-30x1,8.00.L	30	8	400	15		
AKR-40x2,3.00.L	40	8	400	15		
Other dimensions on request!						

C Tube: Plastic

c Plastic Roller Bearing KTR-00/01 with spring axis







D [mm] 20; 30; 40



d [mm] 6; 8



C [daN] 10; 15



T [°C] 0° - 80°



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Plastic Rollers with Spring Axis

Dear Customer.

Are you unable to find what you need in our extensive range of products? Or do you need a special version for a specific application?

To enable the preparation of an offer that is tailored to your needs you are kindly requested to answer the following questions:

By Fax: +49 (0)2353 66985-98 By Mail: info@markes.de

Kindly enclose a drawing or sketch with your request for quotation – if available.

Ball bearing assemblies:		Particulars:		
Product in chapter / on page: Deviating dimensions, version:		Call off amount: time?		
		O Non-recurrent requirement O P	ermanent requirement	
		71 1 6 6		
Carrying canacity		Packing unit?		
Carrying capacity: Number of revolutions:		Customer specific test specifications have to be respected? O YES O NO		
Further requirements:		If YES, please specify?		
Alternative materials are permissible?	O YES O NO	-		
Variants are planned?	O YES O NO			
Plastic part:		Metal part:		
Specified material?		Specified material?		
Antistatic treatment is required? O YES O NO		Surfaces?		
Treatment for contact with foodstuffs is required?		Hardening and/or tempering?		
O YES O NO		Raw edge/direction of punching?		
•		- ·	O YES O NO	
Specified surface?		Appearance standards?		
Appearance standards? Further requirements (customer logo, etc.)	.)?	Further requirements (customer logo, et	c.)? 	
		-		
Alternative materials are permissible?	O YES O NO	·	O YES O NO O YES O NO	
Variants are planned?	O ILS ONO	Variants are planned?	O ILS ONO	
Person to contact to cla	rify techni			
Firm:		Phone:		
		Fax: Email:		
Department:		■ 2 = 11.		