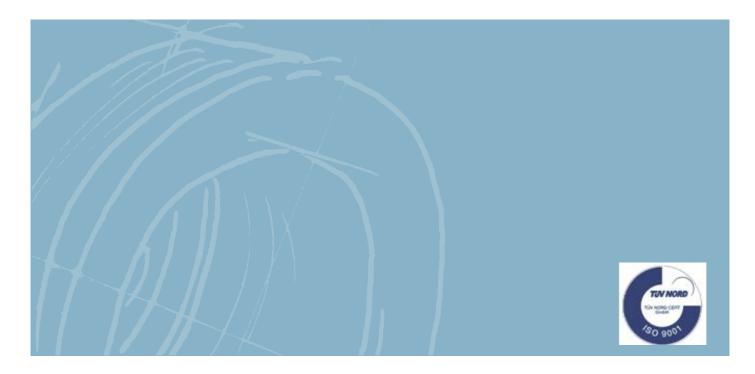


Markes GmbH & Co. KG Metallwarenfabrik

An der Susannenhöhe 2 58553 Halver, Germany Phone: + 49 (0) 2353 66985-0 Fax: +49 (0) 2353 66985-98

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.

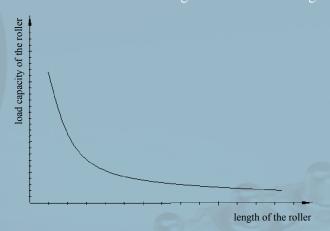
Attention: Do not use in explosion-proofed areas !!!

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:

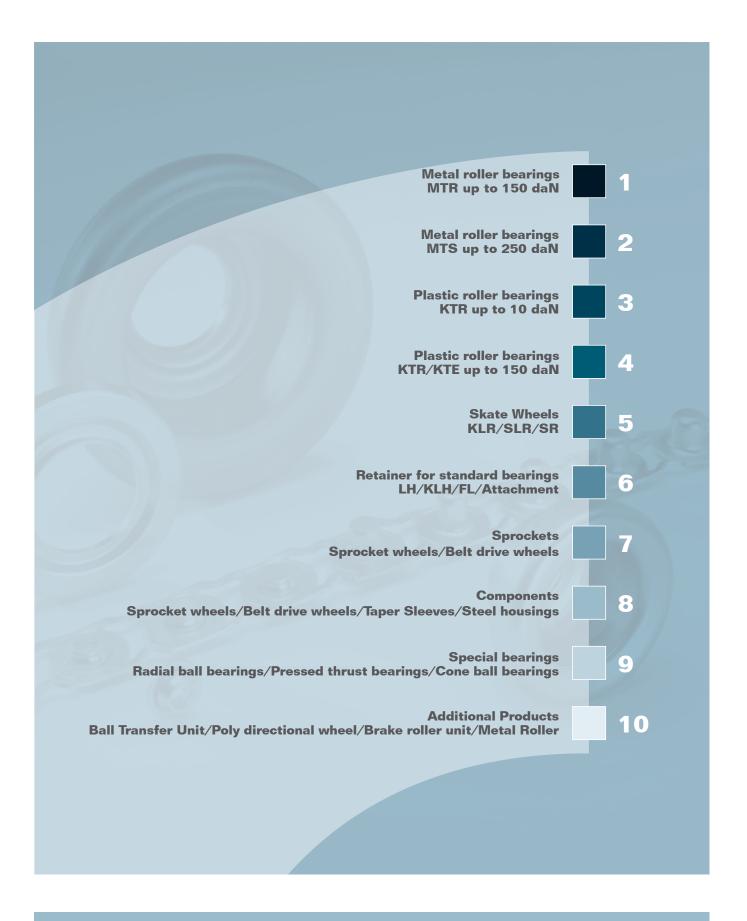
- roller length
- axis diameter
- style of the axis
- environment influences

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]



d [mm] 6; 8; 10





T [°C] -50° - 100°



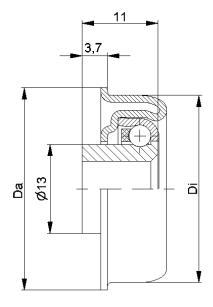


C [daN]





50/500

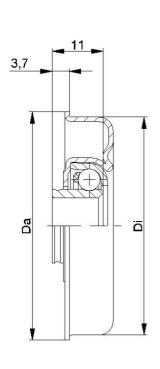


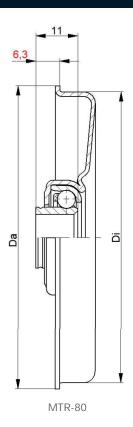


MTR-16				
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]	
MTR-30x1,2.16	27,6	29,6	30	
MTR-30x1,5.16 27,3 29,6 30				
Other dimensions on request!				

- 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





ø50: 100/350 ø60: 200 ø80: 100



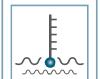


50 - 80



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





T [°C] 0° - 100°





D [mm]

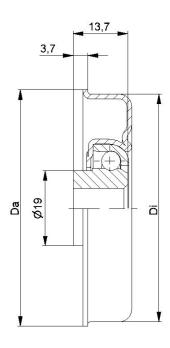


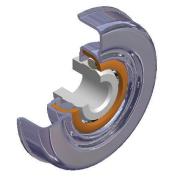






ø50: 300 200 100 ø60: ø80:





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!				

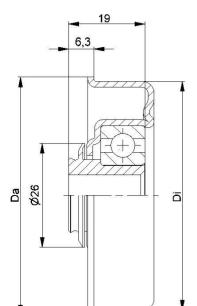
G Housing: Steel, Zinc plated

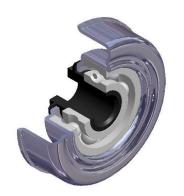
G Bearing RL-30-2

C Bearing Shell: Steel, Hardened

6 Ball: Steel







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	
Other dimensions on request!				

C Housing: Steel, Zinc plated

C Reducing Bush: Plastic

G Bearing 6202





ø50: 100 ø60: 150 ø80: 100

MTR-40.15





15



C [daN] 120 - 150



T [°C]





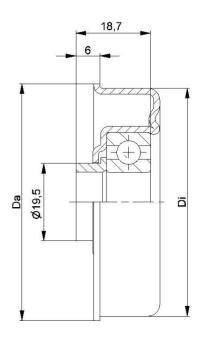
14,
d [mm]

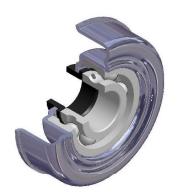






ø50:	100
ø60:	150
ø80:	100





MTR-40.15				
Туре	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





MTR-45.17





d [mm]





T [°C]



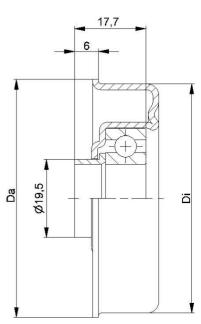


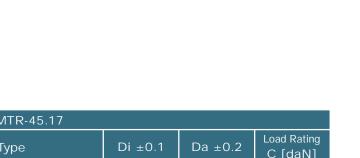
	17
Γ	

C [daN] 120 - 150









MTR-45.17				
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]	
MTR-50x1,5.45.17	47,3	49,5	120	
MTR-60x2,0.45.17	56,3	59,5	150	
MTR-60x3,0.45.17	54,3	59,5	150	
MTR-80x2,0.45.17	76,5	79,5	150	
Other dimensions on request!				

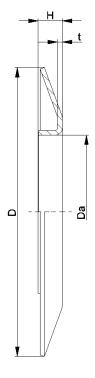
C Housing: Steel, Zinc plated

C Distance Bush: Plastic

G Bearing 6003



100











D [mm] 50 - 108



d [mm]



C [daN]











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°







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]

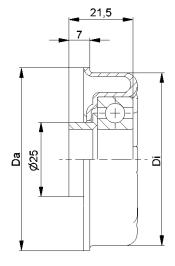


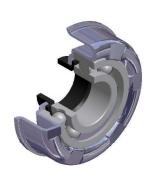
FP 2



Carton [pcs

50/100





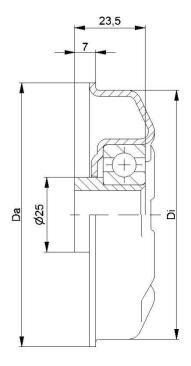
MTS-46			
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]
MTS-63,5x2,9.46	58,1	61,5	200
Other dimensions on request!			

♥ Housing: Steel, Zinc plated

C Distance Bush: Plastic

G Bearing 6004







MTS-44



D [mm] 80 - 108



d [mm] 16; 17; SW14



C [daN] 250

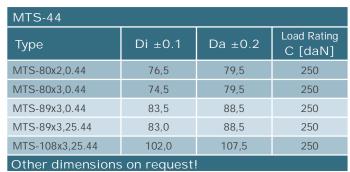


T [°C] 0° - 100°



FD '





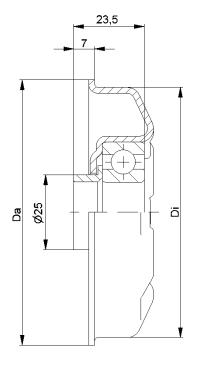
C Housing: Steel, Zinc plated

G Reducing Bush: Plastic

G Bearing 6204







Di ±0.1

76,5

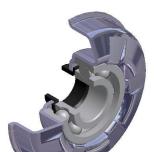
74,5

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

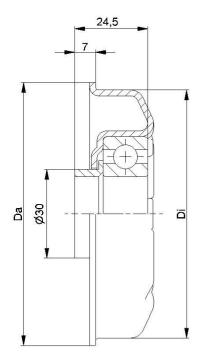
MTS-108x3,25.44

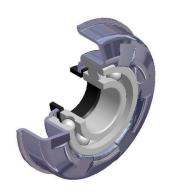
G Bearing 6204

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°

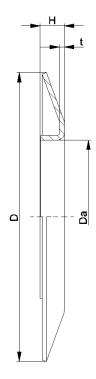


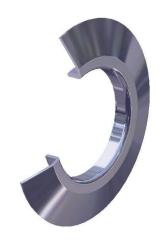


MTS-47					
Туре	Di ±0.1	Da ±0.2	Load Rating C [daN]		
MTS-89x3,0.47	83,5	88,5	250		
MTS-108x3,25.47	102,0	107,5	250		
Other dimensions on request!					

- 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









6; 8; 10



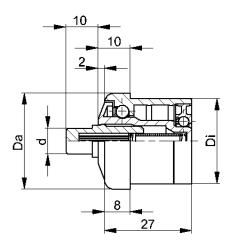


T [°C] 0° - 80°



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

& Ball, Spring C 00: Steel





KTR-16.00 KTR-16.01





d [mm] 5;6

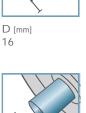


C [daN]



T [°C] 0° - 80°

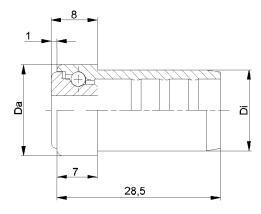








500/2500





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

C Inner Race: Plastic

C Ball Cage: Plastic

C Ball

C 00: Steel

G 01: 1.4034







D [mm]



d [mm] 6; 8



C [daN]



T [°C] 0° - 80°





Carton [pcs

500/1000

2



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

Other dimensions on request!

Housing: PlasticInner Race: PlasticBall Cage: Plastic

C Ball



KTR-30.00 KTR-30.01



D [mm] 30



d [mm] 6; 8; 10



C [daN]



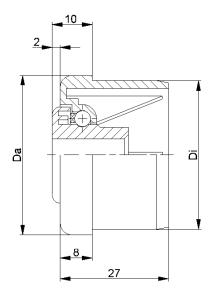
T [°C] 0° - 80°

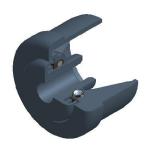




Carton [pcs.]

50/250/500





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 .OO	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

G Ball Cage: Plastic

C Ball

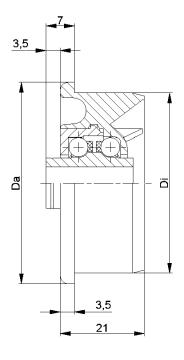
6 00: Steel

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
Other dimensions	on roa	ootl			

Other dimensions on request!

Housing: PlasticInner Race: PlasticBearing Cap: Plastic

G Ball Cage: Plastic **G** Ball







D [mm] 50



d [mm] 8; 10



C [daN] 15



T [°C] 0° - 80°

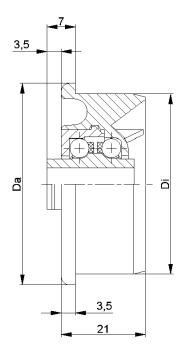


-



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

Inner Race: PlasticBearing Cap: Plastic

& Ball Cage: Plastic

C Ball

C 02: Steel







D [mm]



d [mm] 12; SW11



C [daN]



T [°C] 0° - 80°





Carton [pcs.]

DK-KTR-02



D [mm]



d [mm]





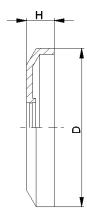
C [daN]



T [°C] 0° - 80°





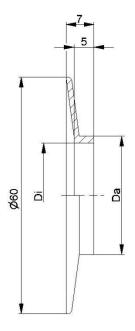




DK-KTR				
Туре	D	Н		
DK-KTR-02 40,5 7				
Other dimensions on request!				

c Seal Bonnet: Plastic













D [mm]



d [mm]



C [daN]



T [°C] 0° - 80°



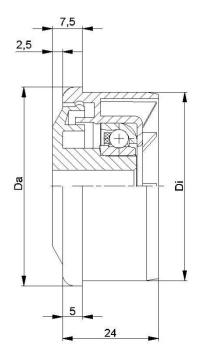


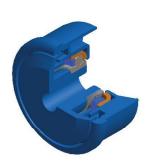


BS-					
Туре	Di	Da			
BS-30x1,8	26,5	29,9			
BS-40x1,5	37,1	39,9			
BS-40x2,3	35,5	39,9			
Other dimensions	on request				

& 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	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



10; 12; 15; SW11



C [daN]

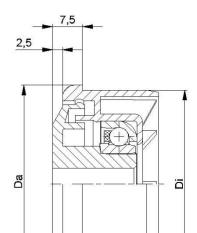


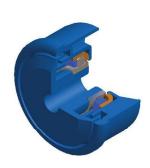
T [°C] 0° - 80°





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

C Bearing RL-31

© Single Labyrinth Seal: Plastic

ISTIC

6 Bearing Shell: 1.4301

Inner Race: 1.4305Ball Cage: Plastic

C Ball: 1.4301



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





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°

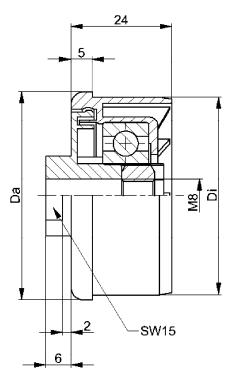


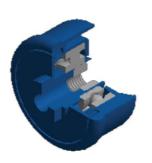
FD 2



Carton [pcs.]

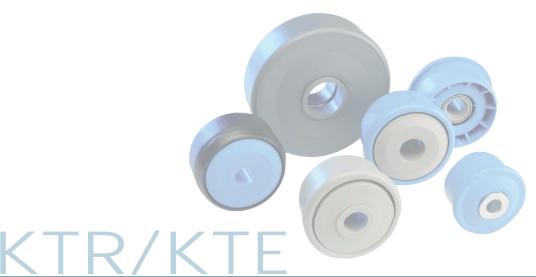
ø50: 250

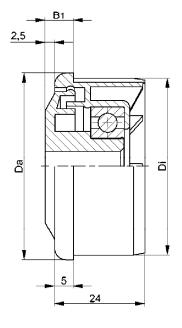




KTR-40.M8			
Туре	Di +0,2	Da	Load Rating C [daN]
KTR-50x1,5.40	47,3	49,9	80
Other dimensions on request!			

- **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



10; 12; 15; SW11



C [daN] 80; 120



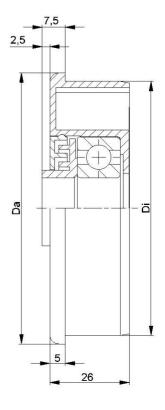
T [°C] 0° - 80°





Carton [pcs.]

ø40: ø50: 250 200 ø60:





Type Di +0,2 Da Load Rating C [daN]

KTR-89x3,0.44 83,3 88,9 150

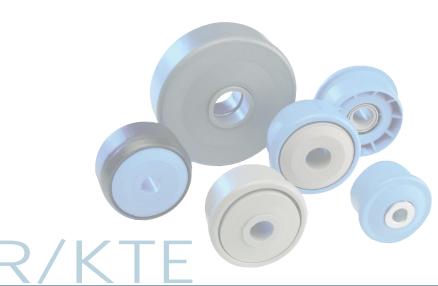
c Housing: Plastic

G Inner Labyrinth Seal: Plastic

Other dimensions on request!

© Outer Labyrinth Seal: Plastic

G Bearing 6204







D [mm] 89



d [mm] 20



C [daN] 150



T [°C] 0° - 80°



EP 2



Carton [pcs.]

KTR-43/44



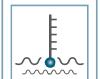
D [mm] 63,5 - 80



d [mm] 6303: 17 6204: 20



C [daN] 150



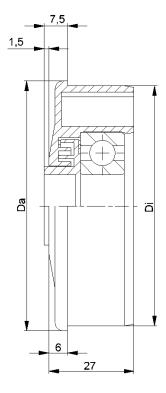
T [°C]



FD 2



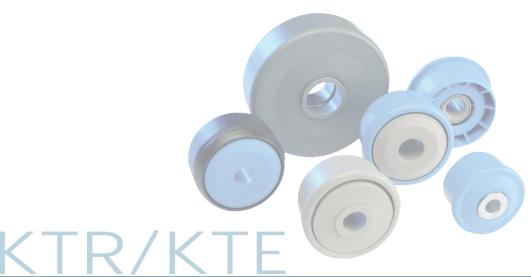
Carton [pcs.]





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



KTR-43/44



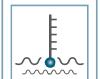
D [mm] 63,5 - 80



d [mm] 6303: 12 6204: 15



C [daN] 150



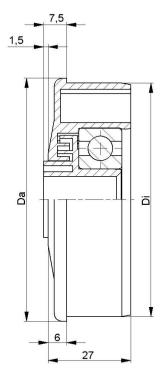
T [°C] 0° - 80°

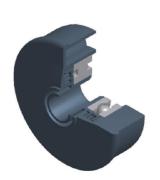


FD 2



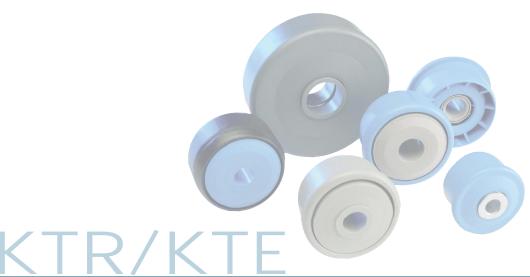
Carton [pcs.]





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



KTE-30



D [mm] 50



d [mm] 10; 12; 15; SW11



C [daN] 80



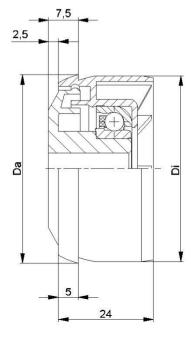
T [°C]



Oil



Carton [pcs.]





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

Bearing Shell: Steel, HardenedInner Race: Steel, Hardened

Cage: Plastic
Ball: Steel



KTE-31



D [mm]



d [mm] 10; 12; 15; SW11



C [daN] 25

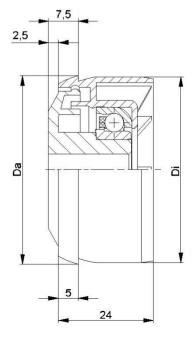


T [°C] 0° - 80°





Carton [pcs.]





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

© Bearing RL-31

G Bearing Shell: 1.4301 **c** 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



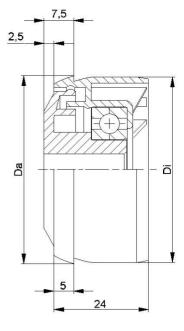
T [°C] 0° - 80°



FD 2



Carton [pcs.]





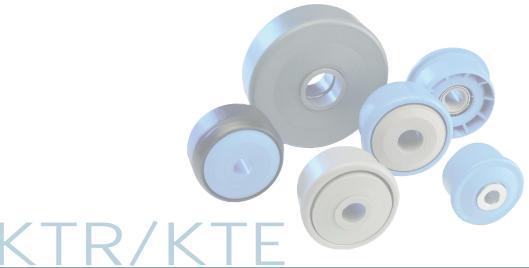
KTE-42			
Туре	Di +0,3	Da	Load Rating C [daN]
KTE-50x1,5.42	47,1	47,9	80
Other dimensions on request!			

G Housing: Plastic

G Single Labyrinth Seal: Plastic

G Bearing 6002

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



SLR-



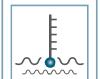
D [mm]



d [mm] 6; 8



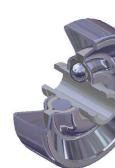
C [daN] 20



T [°C] -30° - 140°







SLR		
Туре	Load Rating C [daN]	
SLR-480	20	
Other dimensions on request!		

c Skate Wheel: Steel





24 16,2



KLR-02 KLR-03



D [mm]



d [mm] 6;8



C [daN] 15



T [°C] 0° - 80°



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

Other dimensions on request!

C Housing: Plastic

C Inner Race: Plastic

G Bearing Cap: Plastic

C Ball Cage: Plastic

C Ball

C 02: Steel



Carton [pcs.]

250

SR-02 SR-03



D [mm]



d [mm] 6; 8



C [daN] 15



T [°C] 0° - 80°

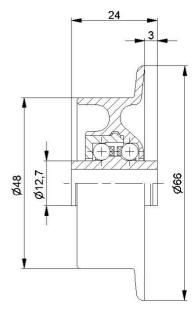


-



Carton [pcs.]

250





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

Other dimensions on request!

Housing: PlasticInner Race: Plastic

Bearing Cap: PlasticBall 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]

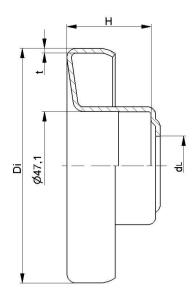


6204: D47, d20, H14



Skeleton Container [pcs.]

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	





LH-6204 N



D [mm] 63,5 - 108



d [mm] 20



C [daN]



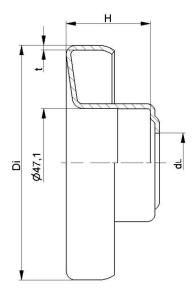
T [°C]



6204: D47, d20, H14



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



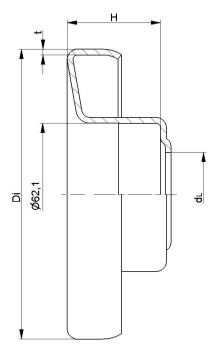


LH-6204 N					
Туре	Di	н	dL	t	
LH-63,5x1,75/6204N	60,5	31,8	21	1,5	
LH-89x3,0/6204N *	83,7	33,5	21	1,5	
LH-108x3,25/6204N	102,1	36,5	21	2,0	
Other dimensions on request!					

C Retainer for Standard Bearings: Steel

*Alternative: Stainless





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

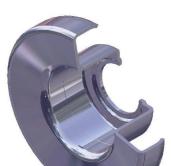
40.5

40.5

40,5

Type





LH-6305



D [mm] 89 - 159



d [mm] 25



C [daN]



T [°C]



D62, d25, H17



dL

36,5

36,5

36,5

36,5

36,5

36,5

2,0

2,0

2,0

2,5

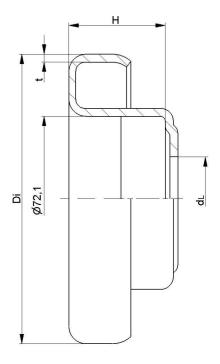
2,5

2,5

Skeleton

Container [pcs.]

2600 ø89: ø108: 1900 ø133: 1150



LH-108x3,25/6306

LH-133x3,6/6306

LH-159x4,5/6306

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

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

42

42

42

102,1

126,3

150,5

LH-6308



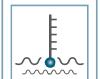
D [mm] 133 - 159



d [mm] 40



C [daN]



T [°C]



6308: D90, d40, H23



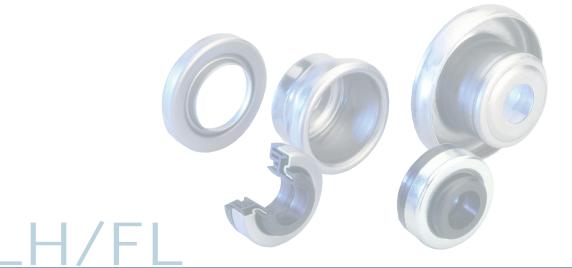
ø159:

Di Ø90,1 H H Ø48,7



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



600

FL-6204



D [mm] 60 - 76



d [mm] 20



C [daN]



T [°C]



6204: D47, d20, H14



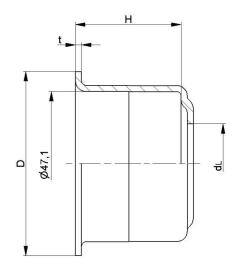
Skeleton Container [pcs.]

 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



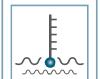
D [mm] 89 - 108



d [mm] 20



C [daN]

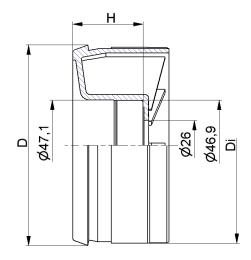


T [°C] 100°



6204: D47, d20, H14

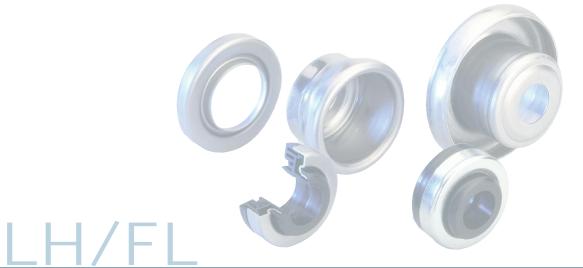






KLH-6204					
Туре	Di	н	D		
KLH-89x3,0/6204	83,2	36,5	85,3		
KLH-108x3,0/6204 102,2 36,5 104,3					
Other dimensions on request!					

C Retainer for Standard Bearings: Plastic



KLH-6204



D [mm] 90



d [mm] 20



C [daN]

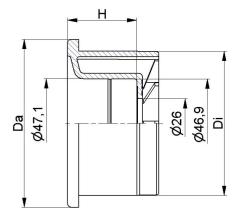


T [°C]



6204: D47, d20, H14

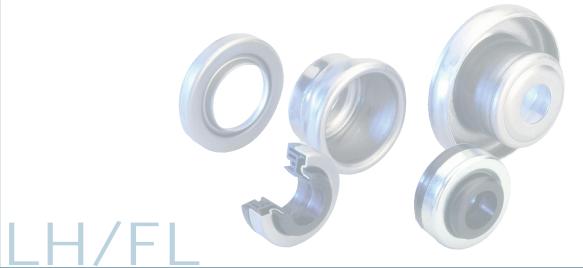






KLH-6204					
Туре	Da	Di	н		
KLH-90x7,0/6204 88,8 76,3 36,5					
Other dimensions	Other dimensions on request!				

C Retainer for Standard Bearings: Plastic









C [daN]







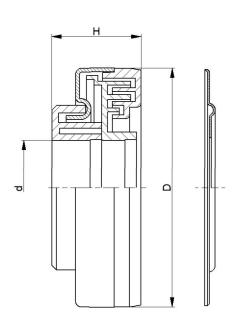
d [mm] 17 - 40

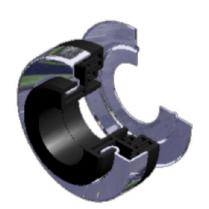


T [°C] 0° - 80°



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!				

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)







D [mm]



d [mm] 17, 20



C [daN]



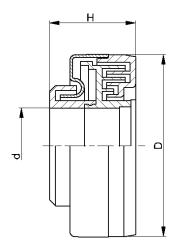
T [°C] 0° - 80°



_



Carton [pcs





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

C Rain Cap: Plastic

Inner Labyrinth Seal: PlasticOuter Labyrinth Seal: Plastic

Grease: EP2





D [mm]



d [mm] 20



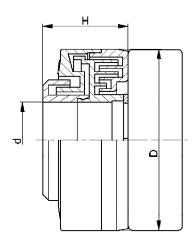
C [daN]



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!					

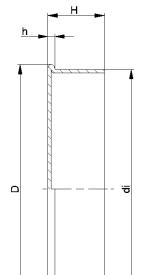
C Seal Bonnet: Plastic

C Rain Cap: Plastic

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



Seal Bonnet LH









LH- closed						
Туре	D	di	н	h		
LH-6204	50	47,4	14,7	1,8		
Other dimensions on request!						

c Seal Bonnet: Steel



LH-



D [mm]



d [mm]





C [daN]

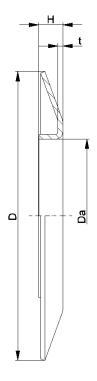


T [°C]





ST-6204	12!
ST-6305	100
ST-6306	100







BS-



D [mm]



d [mm]



C [daN]



T [°C]







25

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°

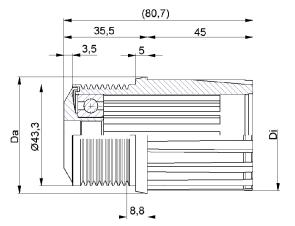


FD 1



Carton [pcs.]

100



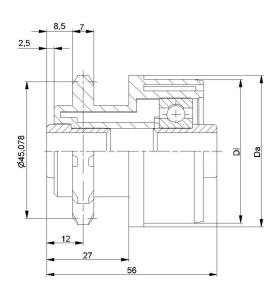


V-Beltdrive PJ VR-						
Type Di Da Load Rating C [daN]						
50x1,5.40	47,3	49,8	80			
Driving belt avail	able on requ	est!				

- C Housing: Plastic
- **©** Single Labyrinth Seal: Plastic
- ❸ Bearing 6202 also with two bearings available



Plastic VR-Belt Drive





 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

 Other dimensions on request!

C Housing: Plastic

c Reducing Bush: Plastic

G Bearing 6202







D [mm] 50



d [mm] 12



C [daN]



T [°C] 0° - 80°



EP 2



Carton [pcs.]

150

Plastic Sprocket Wheel

KKR-40



D [mm] 50



d [mm] 12



C [daN]



T [°C] 0° - 80°

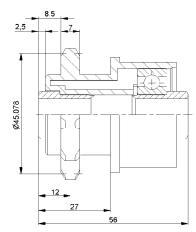


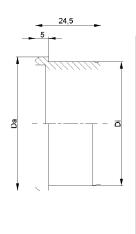
FD 3



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	Other dimensions on request!				

c Housing: Plastic

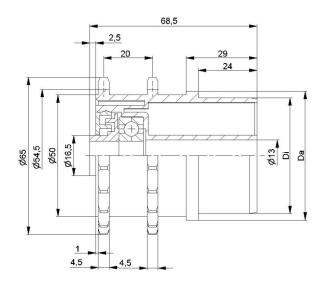
C Reducing Bush: Plastic

c Sliding Ring: Plastic

G Bearing 6202



Plastic Sprocket Wheel







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

c Housing: Plastic

G Inner Labyrinth Seal: Plastic

C Outer Labyrinth Seal: Plastic

G Bearing 6201



KKR-41



D [mm] 53



d [mm] 12



C [daN]



T [°C] 0° - 80°





Plastic Sprocket Wheel

88.5



KKR-40



D [mm]



d [mm] 12



C [daN]



T [°C]



-



Carton [pcs.]

150

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

Other dimensions on request!

G Housing: Plastic

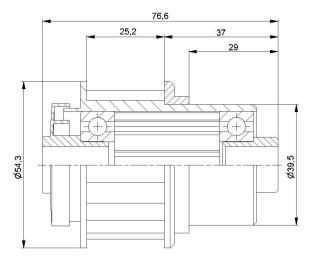
C Labyrinth Seal: Plastic

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

C Bearing 6202



Plastic Synchronous Belt Drive

VR-40



D [mm]



d [mm]



C [daN]



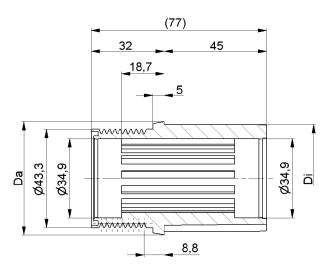
T [°C] 0° - 80°





Carton [pcs.]

100





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

c Housing: Plastic



Components 8

KKR-40



D [mm]



d [mm]



C [daN]



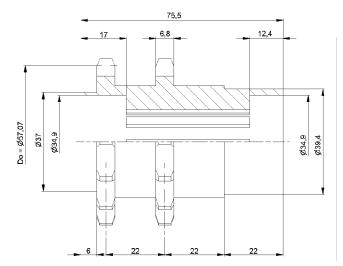
T [°C]





Carton [pcs.]

500





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

Other dimensions on request!

G 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

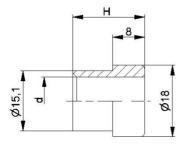
Other dimensions on request!

G Housing: Plastic

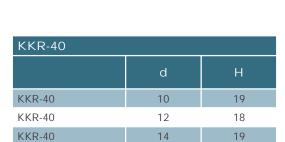


Plastic Synd

Components 8







19

KKR-40 SW11
Other dimensions on request!

C Reducing Bush: Plastic



Reducing Bush





D [mm]



d [mm] 10; 12; 14; SW11



C [daN]



T [°C]



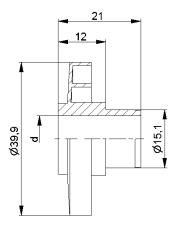
-



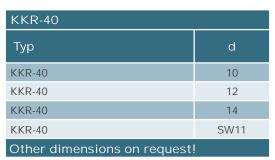
Carton [pc:

500/8000

Components 8







C Labyrinth Seal: Plastic



KKR-40



D [mm]



d [mm] 10; 12; 14; SW11



C [daN]



T [°C]

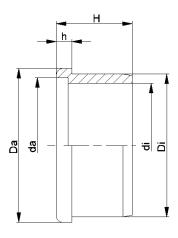


-



Odi tori [pcs

200/1000







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	s on reque	est!				

C Distance Ring Fix: Plastic



Distance Ring Fix

KKR-40



D [mm] 50 - 60



d [mm]



C [daN]

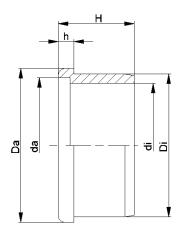


T [°C] 0° - 80°





ø50: 400 ø60: 250











D [mm] 50 - 60



d [mm]



C [daN]



T [°C] 0° - 80°





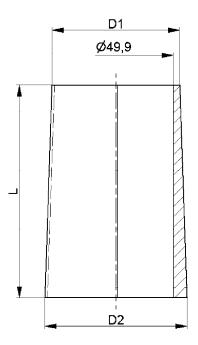
Carton [pcs.]

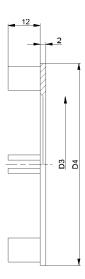
400

KKR-40						
Тур	Di	Da	di	da	н	h
50x1,5	47,2	50	40,6	44,6	25	5
Other dimensions on request!						

C Distance Ring Friction: Plastic







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		

Conic Roller: Plastic

c Endcap: Plastic



KF-50



D [mm]



d [mm]



C [daN]

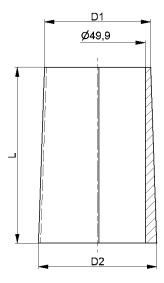


T [°C] 0° - 80°









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]

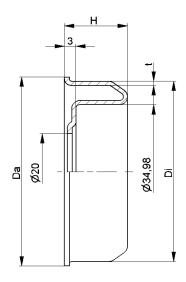


T [°C] 0° - 80°













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	on request!				

4 Housing: Steel, Zinc plated



Steel Housing



D [mm] 50 - 60



d [mm] 15



C [daN]

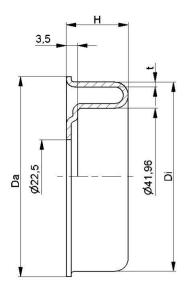


T [°C]



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



Steel Housing



D [mm] 63,5



d [mm] 20



C [daN]



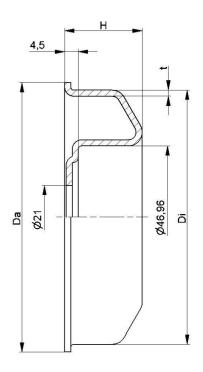
T [°C]



6004: D42; d20; H12













D [mm] 80 - 108



d [mm] 20



C [daN]



T [°C]



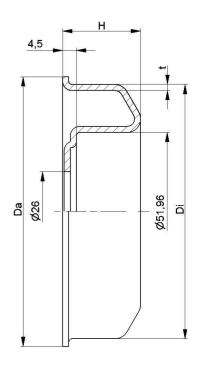
6204: D47; d20; H14



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 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!					

❸ Housing: Steel, Zinc plated





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

c Bearing Shell: Steel

G Ball: Steel

C Inner Race

C Steel: C=10daN

C Plastic: C=7daN; 0° - 80°







RL-0.280



10; 12

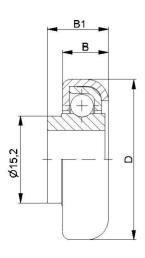


C [daN] 7; 10



T [°C] 0° - 80°







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

Capsule: Steel, Zinc Plated

c Bearing Shell: Steel

G Ball, Steel

C Inner Race

C Steel: C=10daN

C Plastic: C=7daN; 0° - 80°







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

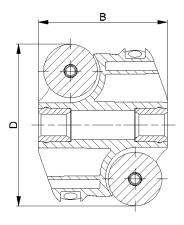
G Inner Race: Plastic

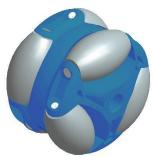






250







ASR-



d [mm] 8; 12;15; SW14



C [daN] 40



T [°C] 0° - 80°



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

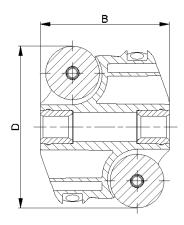
C Housing: Plastic

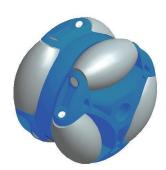
& Barrel-shaped Roller: Plastic

c Axis: 1.4301









ASR-



d [mm] 8; 10; SW9



C [daN] 10 - 20



T [°C] 0° - 80°



10	Housing:	Diactic
•	HOUSING.	FIGSUL

G Barrel-shaped Roller: Plastic

Other dimensions on request!

c Axis: 1.4301

ASR-

Туре

ASR-60

ASR-48

ASR-40



Load Rating

C [daN] 20

15

10

В

48

39

29

D

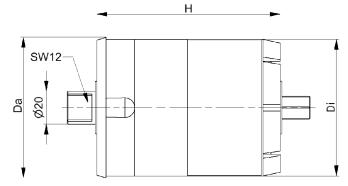
60

48



50





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	



Brake Roller Unit

BR-



D [mm] 89



d [mm] 20



C [daN] 250



T [°C] 0° - 80°



EP2



Carton [pcs.]

20

AMR-50.20



D [mm] 50



d [mm] 8; 10; 12; SW11



C [daN] 160



T [°C] 0° - 100°



Oil



Ø50

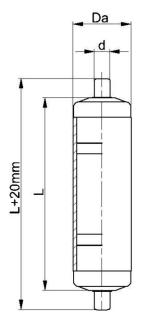


AMR-50x1,5.20					
Туре	L	Load Rating C [daN]			
AMR-50x1,5.20-66	66	160			
AMR-50x1,5.20-73	73	160			
AMR-50x1,5.20-80	80	160			
AMR-50x1,5.20-100	100	160			
Other dimensions on request!					

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 re					

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°







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:		C 11 CC 0	
		<u>*</u>	O Permanent requirement
Carrying capacity: Number of revolutions:		Packing unit? Customer specific test specifications have to be respected? O YES O NO	
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? O YES O NO		Hardening and/or tempering?	
		Raw edge/direction of punching?	
Specified colour?		Absence of burr is required?	O YES O NO
Specified surface?		Appearance standards?	
Appearance standards?		Further requirements (customer logo	o, etc.)?
Further requirements (customer logo, etc	.)?		
Alternative materials are permissible?	O YES O NO	Alternative materials are permissible	e? O YES O NO
Variants are planned?	O YES O NO	Variants are planned?	O YES O NO
Person to contact to cla	rify technic	al issues:	
Firm:		Phone:	
Name:		Fax:	
Department:		Email:	
Specified date of delivery:			