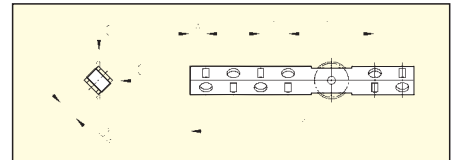


7.1 Cages

Roller Cages Type KBS, Sizes 3–6 for FORMULA-S

- Suitable for all types of fitting
- Captive rollers

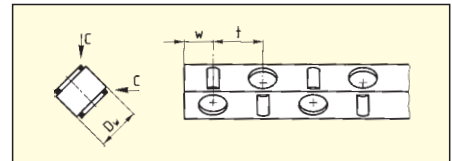


Type	Size	D_w	t	t_z	w	C/Roller in N
KBS	3	3	5	18	3.5	410
KBS	4	4.5	6.5	23	4	850
KBS	6	6.5	8.5	27	5	1800
KBS	9	9	12	40	7.5	3900

Ordering example: 2 Roller Cages KBS 4 × 15 rollers for RN 4

Roller cages Type KBN, for RN and RNG, Sizes 3–12

- Suitable for all types of fitting
- Captive rollers
- POM

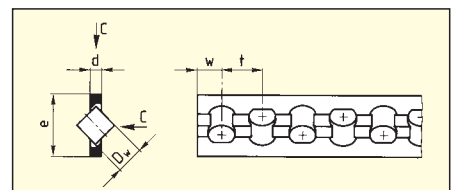


Type	Size	D_w	t	w	C/Roller in N
KBN	3	3	5	3.5	410
KBN	4	4.5	6.5	4	850
KBN	6	6.5	8.5	5	1800
KBN	9	9	12	7.5	3900
KBN	12	12	15	9	6500

Ordering example: 2 Roller Cages KBN 4 × 15 rollers

Roller Cages Type AC, Sizes 1–12 for R and RD

- Suitable for all types of fitting
- Captive rollers
- Material: Sizes 1 and 2 POM
from size 3 PA 12 GF 30%
Steel wire

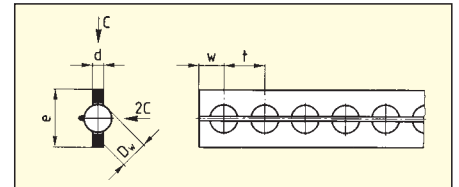


Type	Size	D_w	d	e	t	w	C/ Roller in N	Max. Length in N
AC	1	1.5	0.45	3.5	3	1.5	50	70
AC	2	2	0.75	5	4	2	85	85
AC	3	3	1	7	5	2.5	130	1200
AC	6	6	2.5	14	9	6	530	1500
AC	9	9	3.5	20	14	9	1300	1500
AC	12	12	4.5	25	18	11	2500	1500

Ordering example: 2 Roller cages AC 3 × 20 rollers

Ball cages Type AK, Sizes 1–12 for R and RD

- Suitable for all types of fitting
- Captive balls
- Material: Sizes 1 to 3 POM
from size 6 PA 12 GF 30%
Steel wire composite

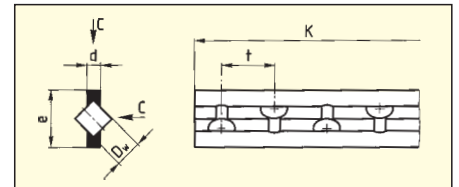


Type	Size	D _w	d	e	t	w	C/ Ball in N	Max. Length
AK	1	1.5	0.45	3.5	2.2	1.5	9	80
AK	2	2	0.75	5	4	2	15	100
AK	3	3	1	7	4.2	2.5	25	180
AK	6	6	2.5	14	9	6	65	1500
AK	9	9	3.5	20	14	9	150	1500
AK	12	12	4.5	25	18	11	260	1500

Ordering example: 2 Ball cages AK 1 × 5 balls

Roller Cages Type EE, Sizes 6 and 9 for R 6, R 9, RD 6 and RD 9 (Special Accessories)

- Use only with specially designated Linear bearings (suffix EE) and Type GB or GC endpieces
- For horizontal and vertical fitting
- Captive rollers
- Acts as a dirt wiper, thus running friction is somewhat higher
- When ordering, it is essential that the overall cage length K is quoted
- Material PE plastic
- Not suitable for protruding cages and gravity loaded bearings



Type	Size	D _w	d	e	t	C/Roller in N
EE	6	6	3.2	13.5	12	530
EE	9	9	4.6	19	18	1300

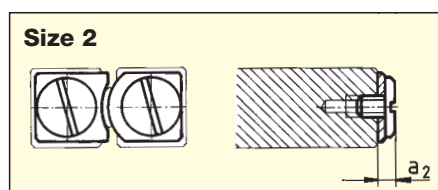
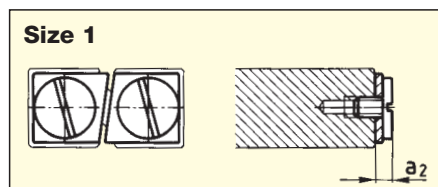
Ordering example: 2 Roller cages EE 6 × 150 mm length

Other materials for cages/rolling elements on request

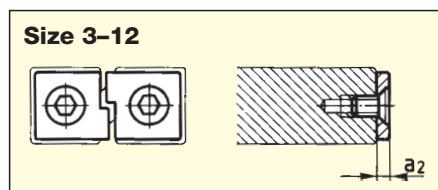
7.2 Endpieces

Endpieces Type GB

- For horizontal or vertical fitting
- For R 1 and R 2

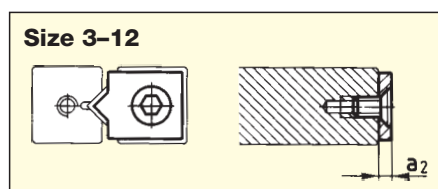


- For horizontal or vertical fitting
- For Type EE roller cages
- For R 3 to R 12



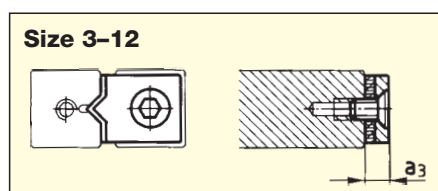
Endpieces Type GC

- For protruding cages
- For R 3 to R 12



Endpieces Type GC-A with Wipers

- For horizontal or vertical fitting
- Felt Wiper
- For R 3 to R 12



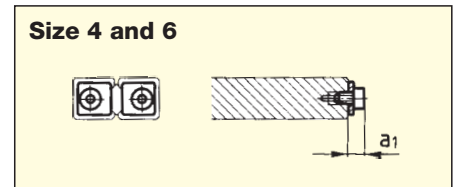
Size	1	2	3	6	9	12
a_1	-	-	2	3	3	3
a_2	1.7	2	2	3	4	5
a_3	-	-	5	6	7	8

Ordering example: 8 Endscrews GA 6 or 4 Endpieces GC-A 9

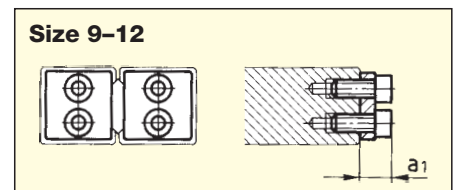
Endpieces delivered with attaching screws

Endpieces Type GBN

- For horizontal and vertical fitting
- For RNG 4 and 6

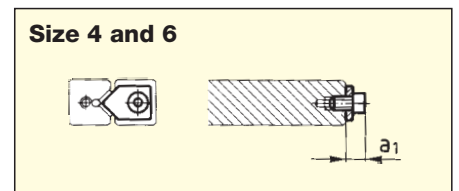


- For RNG 9 to 12

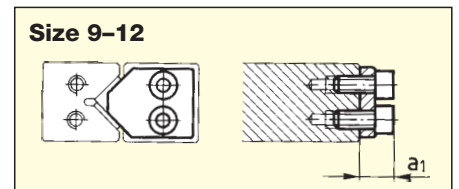


Endpieces Type GCN

- For protruding cages
- For RNG 4 and 6

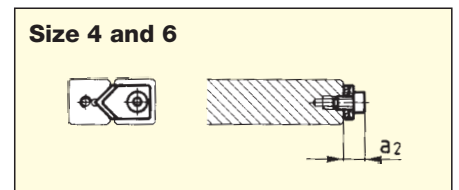


- For RNG 9 to 12

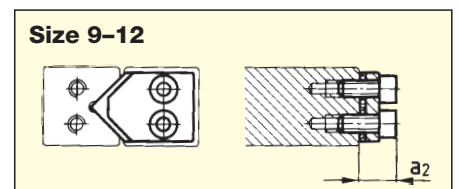


Endpieces Type GCN-A with Wipers

- For horizontal and vertical fitting
- Plastic wiper
- For RNG 4 and 6



- For RNG 9 to 12



Size	4	6	9	12
a₁	4	4	4	8.5
a₂	5.5	5.5	5.5	10

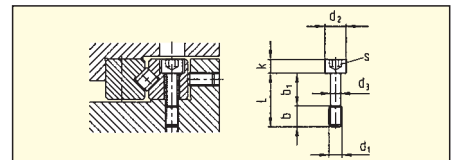
Ordering example: 40 Endpieces GBN 9

Endpieces delivered with attaching screws

7.3 Attaching Screws

Special Attaching Screws for R and RN Type GD, Sizes 3–12

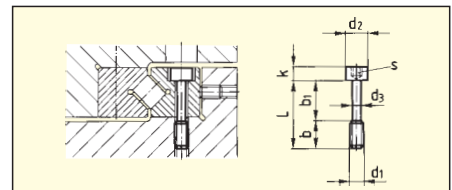
– To compensate for difference in hole pitch



Type	Size	L	b	b ₁	d ₁	d ₂	d ₃	k	s
GD	3	12	5	7	M3	5	2.3	3	2.5
GD	4	16	7	9	M4	6.5	3	4	3
GD	6	20	8	12	M5	8	3.9	5	4
GD	9	30	12	18	M6	8.5	4.6	6	5
GD	12	40	17	23	M8	11.3	6.25	8	6

Special Attaching Screws for RNG Type GDN, Sizes 4–12

– To compensate for difference in hole pitch



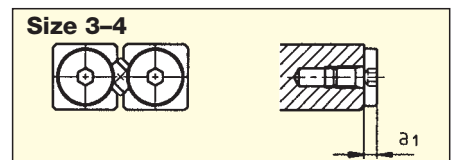
Type	Size	L	b	b ₁	d ₁	d ₂	d ₃	k	s
GDN	4	12	5	7	M2.5	4.5	1.85	2.5	2
GDN	6	16	5	11	M3	5.5	2.3	3	2.5
GDN	9	25	11	14	M4	7	3	4	3
GDN	12	30	12	18	M6	10	4.6	6	5

Ordering example: 50 Special Attaching Screws GDN 9

7.4 Endscrews

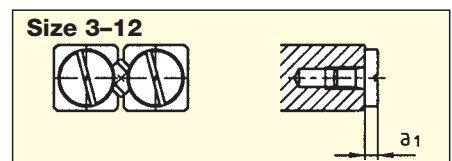
Endscrews Type GAN

- a₁ = 2
- For RN 3–RN 4



Endscrews Type GA

- For horizontal fitting
- For R 3–R 12
- From RN 6–RN 12



Order numbers in bold face are standard articles