



ROLEK SERIES

International name: KRLK

- **Toothed belt drive**
- **Integrated roller guide with 4 or 8 bearings**
- **Guide without clearance**
- **Pre-loaded guide factory adjusted (no eccentric)**
- **Maintenance-free unit**
- **Profile made of anodised extruded aluminium**
- **Profile and end-blocs in monobloc**
- **T-slots**

DIMENSIONS (mm)

| Series | A | A 1 | A2 | B | B | C | C1 | D | E | E1 | E2 | E3 | E4 |
|----------------------|-----|-----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|
| ROLEK 62/62 | 62 | 26 | 18 | 62 | 32 | 100 | 66 | 78 | 120 | 100 | 38 | M6 | 15 |
| ROLEK 90/90 | 90 | 30 | 30 | 90 | 42 | 165 | 108 | 115 | 200 | 176 | 62 | M8 | 18 |
| ROLEK 115/105 | 115 | 35 | 35 | 105 | 60 | 230 | 164 | 130 | 280 | 250 | 110 | M10 | 18 |

| Series | F | G | H | J | ØK | K1 | ØM | N | N1 | O | P | Q | U | U1 | U2 |
|----------------------|-----|-----|----|----|----|----|----|----|-----|----|-------|-------|----|----|-----|
| ROLEK 62/62 | 100 | 80 | 35 | 50 | 15 | 28 | 47 | 38 | 2.5 | 28 | 5 x 5 | M4/16 | 32 | 10 | 2 |
| ROLEK 90/90 | 125 | 100 | 50 | 65 | 19 | 38 | 68 | 50 | 2.5 | 38 | 6 x 6 | M5/20 | 52 | 15 | 3 |
| ROLEK 115/105 | 140 | 115 | 57 | 75 | 25 | 48 | 80 | 62 | 4 | 48 | 8 x 7 | M6/25 | 60 | 17 | 3.5 |

| Series | T1 | T2 | ØT3 | R | R1 | R2 | R3 | R4 | S1 | S2 | S3 | S4 | S5 |
|----------------------|------|-----|------|---|------|-----|-----|-------|------|------|-----|----|-------|
| ROLEK 62/62 | 7 | 2.5 | 5.8 | | 10.5 | 3.5 | 5.5 | 1 x 1 | 5.2 | 10.5 | 4.5 | 3 | 1 x 1 |
| ROLEK 90/90 | 12.5 | 4 | 11.5 | 8 | 15.5 | 4 | 7.5 | 1 x 1 | 8.2 | 15.5 | 6.5 | 4 | 2 x 2 |
| ROLEK 115/105 | 15 | 7 | 15 | 8 | 15.5 | 4.5 | 7.5 | 1 x 1 | 10.2 | 18.5 | 10 | 6 | 2 x 2 |

Option A80: Attached lubricated units.

LONGER RUNNING CARRIAGES WITH 4 (ref. XL4) OR 8 ROLLERS (ref. XL8)

| | | |
|--|--|--|
| ROLEK 62/62 E = 200 E ₁ = 170 | ROLEK 90/90 E = 300 E ₁ = 270 | ROLEK 115/105 E = 400 E ₁ = 360 |
|--|--|--|

TECHNICAL DATA

| Series | Permissible load for 4 rollers (N)* | | | Static moment (Nm) | | |
|----------------------|-------------------------------------|----------------|----------------|--------------------|-----------------|-----------------|
| | F _x | F _y | F _z | M _{ox} | M _{oy} | M _{oz} |
| ROLEK 62/62 | 597 | 600 | 800 | 86 | 120 | 115 |
| ROLEK 90/90 | 1,140 | 1,500 | 2,600 | 160 | 310 | 300 |
| ROLEK 115/105 | 2,470 | 2,600 | 4,800 | 386 | 620 | 580 |

| Series | Travel per revolution | Toothed belt | Pulley mass moment of inertia |
|----------------------|-----------------------|--------------|-------------------------------|
| | mm | | Kg.m ² |
| ROLEK 62/62 | 140 | 25 AT 5 | 9.72 x 10 ⁻⁵ |
| ROLEK 90/90 | 200 | 50 AT 5 | 7.32 x 10 ⁻⁴ |
| ROLEK 115/105 | 240 | 50 AT 10 | 1.52 x 10 ⁻³ |

| Series | Total weight | Weight of carriage | Moment of inertia | |
|----------------------|-----------------------|--------------------|------------------------------------|------------------------------------|
| | Kg | Kg | I _{yy} (mm ⁴) | I _{zz} (mm ⁴) |
| ROLEK 62/62 | Stroke x 0.007 + 2 | 2.3 | 62.6 x 10 ⁴ | 76.15 x 10 ⁴ |
| ROLEK 90/90 | Stroke x 0.012 + 8.5 | 4.2 | 247 x 10 ⁴ | 300 x 10 ⁴ |
| ROLEK 115/105 | Stroke x 0.016 + 12.8 | 7.9 | 484.19 x 10 ⁴ | 720.56 x 10 ⁴ |

*For 8 rollers on request; principally, the permissible loads double.

SPEED:

Up to 7.5 m/s

ACCELERATIONS:

20m/s²

Higher accelerations on request

REPEATABILITY:

± 0.1mm

LUBRICATION:

Maintenance-free

TEMPERATURE:

From -10°C to +80°C

For other temperatures, please contact us.

MOTOR SHAFT POSITION:

See page 14-2.

SEE "OPTION SAND ACCESSORIES" FOR:

- Second, free carriage
- Long carriage with 4 or 8 rollers
- Double motor shaft
- Compact flange
- Hollow shaft coupling
- Connection
- Stroke ends
- Fixing parts
- Motor
- Motion control...

| REFERENCES | | | | | |
|---|--------------------|--------------------|---------------|------------|-------------|
| | ROLEK 62/62 | 1000 / 1300 | SAD/AG | A30 | A10C |
| Series | | | | | |
| Stroke / Total length (mm) | | | | | |
| Motor shaft position (ex. front left shaft) | | | | | |
| Options and accessories (ex. A80: connection; A10C: flange) | | | | | |