

SLS – Slimline, long, standard height R1823 ... 2.



Dynamic characteristics

Travel speed: $v_{max} = 4 \text{ m/s}$

Acceleration: $a_{max} = 150 \text{ m/s}^2$

Recommended combination based on preload and accuracy class

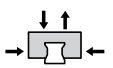
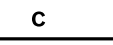


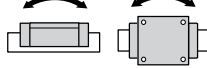
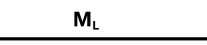
- ▶ For preload C2: H and P (preferably)
- ▶ For preload C3: P and SP

Material numbers

| Size | Roller Runner Block with size | Preload class | | Accuracy class | | | | Seals | | |
|------|-------------------------------|---------------|----|----------------|---|----|----|-------|------------------|----|
| | | C2 | C3 | H | P | SP | UP | DS | SS ¹⁾ | AS |
| 25 | R1823 2 | 2 | | 3 | 2 | 1 | 9 | 2X | – | – |
| | | | 3 | | 2 | 1 | 9 | 2X | – | – |
| 35 | R1823 3 | 2 | | 3 | 2 | 1 | 9 | 2X | 24 | 2A |
| | | | 3 | | 2 | 1 | 9 | 2X | 24 | 2A |
| 45 | R1823 4 | 2 | | 3 | 2 | 1 | 9 | 2X | 24 | 2A |
| | | | 3 | | 2 | 1 | 9 | 2X | 24 | 2A |
| 55 | R1823 5 | 2 | | 3 | 2 | 1 | 9 | 2X | – | 2A |
| | | | 3 | | 2 | 1 | 9 | 2X | – | 2A |
| 65 | R1823 6 | 2 | | 3 | 2 | 1 | 9 | 2X | – | – |
| | | | 3 | | 2 | 1 | 9 | 2X | – | – |

1) In Preparation

Technical data

| Size | Mass (kg) | Load ratings ²⁾ (N) | | Torsional moment load capacity ²⁾ (Nm) | | Longitudinal moment load capacity ²⁾ (Nm) | |
|------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| | |  |  |  |  |  |  |
| | m | C | C ₀ | M _t | M _{to} | M _L | M _{Lo} |
| 25 | 0.68 | 33300 | 76400 | 432 | 990 | 420 | 970 |
| 35 | 1.95 | 74900 | 155400 | 1490 | 3080 | 1220 | 2530 |
| 45 | 3.65 | 132300 | 276400 | 3270 | 6830 | 2690 | 5630 |
| 55 | 5.30 | 174000 | 374900 | 5100 | 10990 | 4420 | 9520 |
| 65 | 10.68 | 295900 | 606300 | 10510 | 21540 | 8870 | 18180 |

2) Determination of the dynamic load capacities and load moments is based on a stroke travel of 100,000 m according to DIN ISO 14728-1. However, often only 50,000 m is actually stipulated. For comparison: Multiply values C, M_t and M_L from the table by 1.23.

Order example

Options:

- ▶ Roller Runner Block SLS
- ▶ Size 35
- ▶ Preload class C2
- ▶ Accuracy class H
- ▶ With double-lip seal 2X

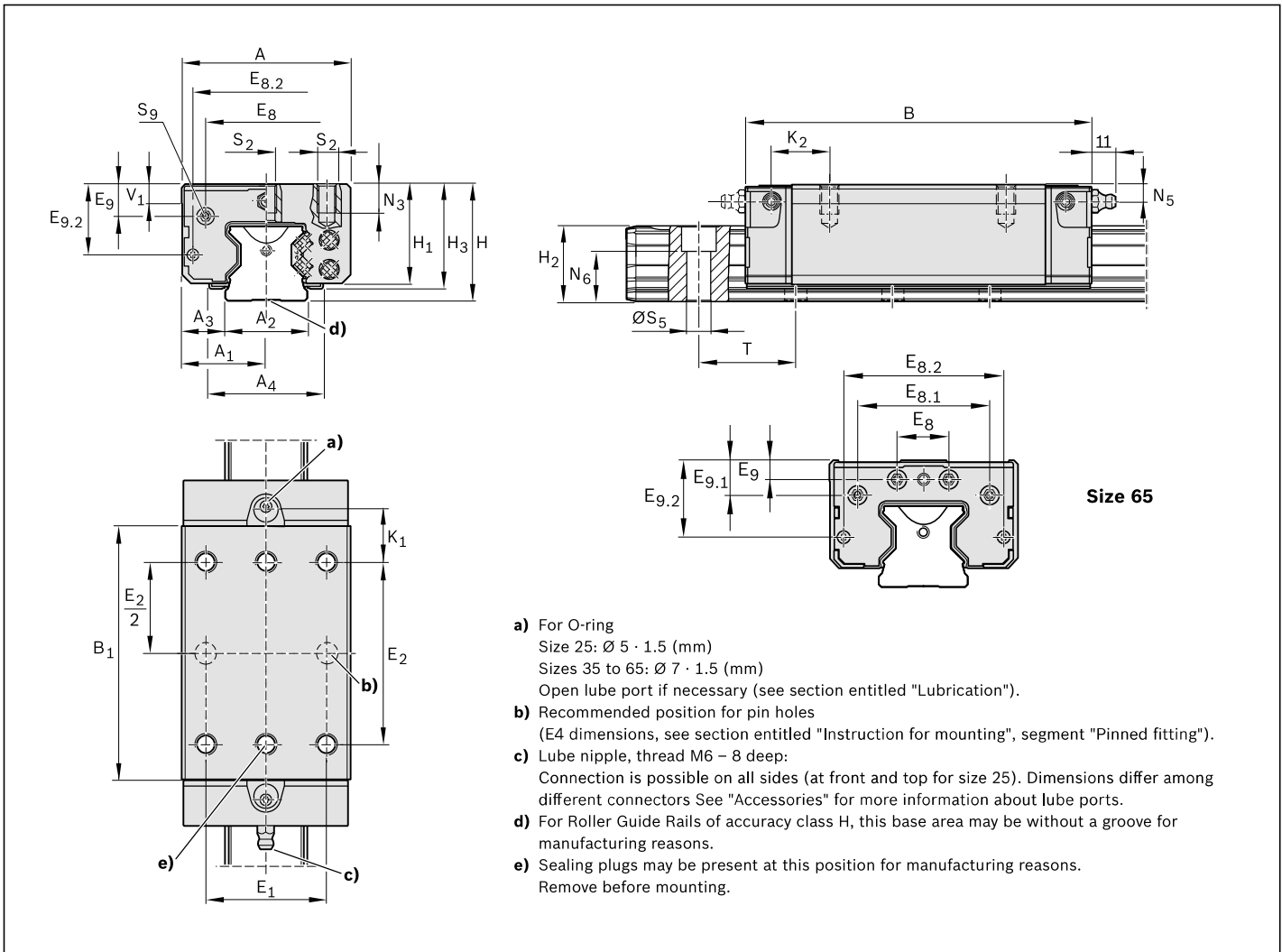
Material number: R1823 323 2X

Preload classes

- C2 = Average preload
- C3 = High preload
- C1, C4, C5 upon request

Seals

- DS = Double-lip seal
- SS = Standard seal
- AS = Longitudinal seal



- a) For O-ring
Size 25: Ø 5 · 1.5 (mm)
Sizes 35 to 65: Ø 7 · 1.5 (mm)
Open lube port if necessary (see section entitled "Lubrication").
- b) Recommended position for pin holes
(E₄ dimensions, see section entitled "Instruction for mounting", segment "Pinned fitting").
- c) Lube nipple, thread M6 – 8 deep:
Connection is possible on all sides (at front and top for size 25). Dimensions differ among different connectors. See "Accessories" for more information about lube ports.
- d) For Roller Guide Rails of accuracy class H, this base area may be without a groove for manufacturing reasons.
- e) Sealing plugs may be present at this position for manufacturing reasons.
Remove before mounting.

Dimensions (mm)

| Size | A | A ₁ | A ₂ | A ₃ | A ₄ ¹⁾ | B | B ₁ | E ₁ | E ₂ | E ₈ | E _{8.1} | E _{8.2} | E ₉ | E _{9.1} | E _{9.2} |
|------|-----|----------------|----------------|----------------|------------------------------|--------|----------------|----------------|----------------|----------------|------------------|------------------|----------------|------------------|------------------|
| 25 | 48 | 24 | 23 | 12.5 | - | 115.00 | 81.5 | 35 | 50 | 33.4 | - | 40.2 | 8.30 | - | 21.40 |
| 35 | 70 | 35 | 34 | 18.0 | 47.0 | 142.00 | 103.6 | 50 | 72 | 50.3 | - | 60.5 | 13.10 | - | 29.10 |
| 45 | 86 | 43 | 45 | 20.5 | 55.6 | 179.50 | 134.0 | 60 | 80 | 62.9 | - | 72.0 | 16.70 | - | 36.50 |
| 55 | 100 | 50 | 53 | 23.5 | 63.3 | 209.65 | 162.1 | 75 | 95 | 74.2 | - | 81.6 | 18.85 | - | 40.75 |
| 65 | 126 | 63 | 63 | 31.5 | - | 255.30 | 194.0 | 76 | 120 | 35.0 | 93.00 | 106.0 | 9.30 | 26.00 | 55.00 |

| Size | H | H ₁ | H ₂ ²⁾ | H ₂ ³⁾ | H ₃ ⁴⁾ | K ₁ | K ₂ | N ₃ | N ₅ | N ₆ ^{±0.5} | S ₂ | S ₅ | S ₉ ⁵⁾ | T ⁶⁾ | V ₁ |
|------|----|----------------|------------------------------|------------------------------|------------------------------|----------------|----------------|----------------|----------------|--------------------------------|----------------|----------------|------------------------------|-----------------|----------------|
| 25 | 36 | 30 | 23.60 | 23.40 | - | 20.55 | - | 8 | 5.5 | 14.3 | M6 | 7 | M3-6,5 deep | 30.0 | 7.5 |
| 35 | 48 | 41 | 31.10 | 30.80 | 43 | 22.55 | 24.40 | 12 | 7.0 | 19.4 | M8 | 9 | M3-6,0 deep | 40.0 | 8.0 |
| 45 | 60 | 51 | 39.10 | 38.80 | 53 | 33.70 | 36.60 | 18 | 8.0 | 22.4 | M10 | 14 | M4-9,0 deep | 52.5 | 10.0 |
| 55 | 70 | 58 | 47.85 | 47.55 | 60 | 41.25 | 44.40 | 17 | 9.0 | 28.7 | M12 | 16 | M5-8.0 deep | 60.0 | 12.0 |
| 65 | 90 | 76 | 58.15 | 57.85 | - | 49.00 | 52.00 | 21 | 9.3 | 36.5 | M16 | 18 | M4-8.0 deep | 75.0 | 15.0 |

- 1) Dimension A₄ = Width of the additional longitudinal seal
- 2) Dimension H₂ with cover strip
- 3) Dimension H₂ without cover strip
- 4) Dimension H₃ = Total Roller Runner Block including the additional longitudinal seal
- 5) Thread for connecting parts
- 6) T = Rail separation of the Roller Guide Rail