

# FLS – Flanged, long, standard height R1853 ... 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 <sup>1)</sup>	AS
25	R1853 2	2		3	2	1	9	2X	–	–
			3		2	1	9	2X	–	–
35	R1853 3	2		3	2	1	9	2X	24	2A
			3		2	1	9	2X	24	2A
45	R1853 4	2		3	2	1	9	2X	24	2A
			3		2	1	9	2X	24	2A
55	R1853 5	2		3	2	1	9	2X	–	2A
			3		2	1	9	2X	–	2A
65	R1853 6	2		3	2	1	9	2X	–	–
			3		2	1	9	2X	–	–

1) In Preparation

**Technical data**

Size	Mass (kg)	Load ratings <sup>2)</sup> (N)		Torsional moment load capacity <sup>2)</sup> (Nm)		Longitudinal moment load capacity <sup>2)</sup> (Nm)	
	m	C	Co	Mt	Mo	ML	MLo
25	0.93	33300	76400	432	990	420	970
35	2.70	74900	155400	1490	3080	1220	2530
45	5.15	132300	276400	3270	6830	2690	5630
55	7.15	174000	374900	5100	10990	4420	9520
65	14.18	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, Mt and ML from the table by 1.23.

**Order example**

Options:

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

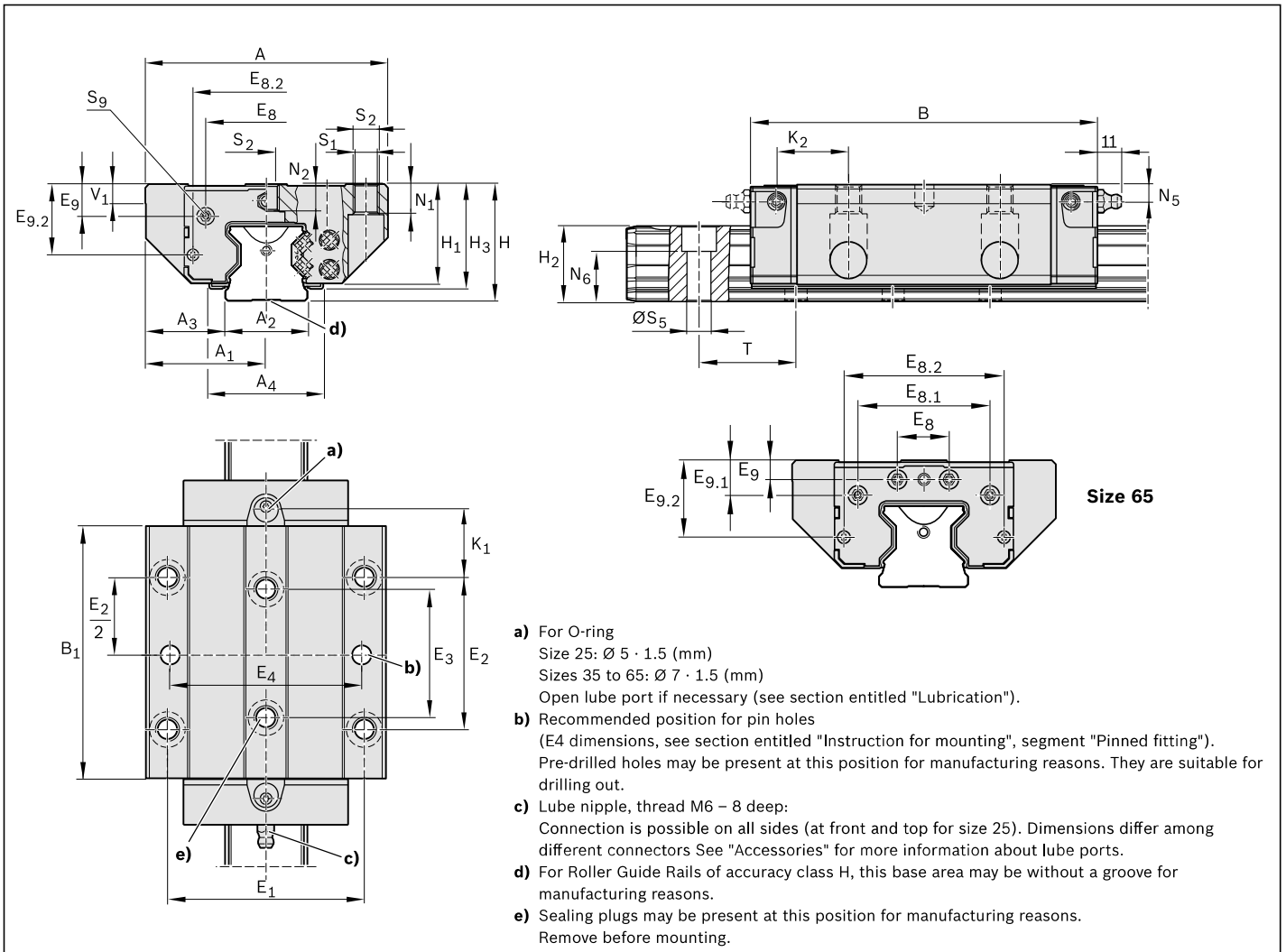
Material number: R1853 323 2X

**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  
(E<sub>4</sub> dimensions, see section entitled "Instruction for mounting", segment "Pinned fitting").  
Pre-drilled holes may be present at this position for manufacturing reasons. They are suitable for drilling out.
- 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 <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub> <sup>1)</sup>	B	B <sub>1</sub>	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	E <sub>4</sub>	E <sub>8</sub>	E <sub>8.1</sub>	E <sub>8.2</sub>	E <sub>9</sub>	E <sub>9.1</sub>	E <sub>9.2</sub>
25	70	35	23	23.5	–	115.00	81.5	57	45	40	55	33.4	–	40.2	8.30	–	21.40
35	100	50	34	33.0	47.0	142.00	103.6	82	62	52	80	50.3	–	60.5	13.10	–	29.10
45	120	60	45	37.5	55.6	179.50	134.0	100	80	60	98	62.9	–	72.0	16.70	–	36.50
55	140	70	53	43.5	63.3	209.65	162.1	116	95	70	114	74.2	–	81.6	18.85	–	40.75
65	170	85	63	53.5	–	255.30	194.0	142	110	82	140	35.0	93.00	106.0	9.30	26.00	55.00

Size	H	H <sub>1</sub>	H <sub>2</sub> <sup>2)</sup>	H <sub>2</sub> <sup>3)</sup>	H <sub>3</sub> <sup>4)</sup>	K <sub>1</sub>	K <sub>2</sub>	N <sub>1</sub>	N <sub>2</sub>	N <sub>5</sub>	N <sub>6</sub> <sup>±0.5</sup>	Ø S <sub>1</sub>	S <sub>2</sub>	S <sub>5</sub>	S <sub>9</sub> <sup>5)</sup>	T <sup>6)</sup>	V <sub>1</sub>
25	36	30	23.60	23.40	–	23.05	–	9	7.3	5.5	14.3	6.7	M8	7	M3-6,5 deep	30.0	7.5
35	48	41	31.10	30.80	43	27.55	29.40	12	11.0	7.0	19.4	8.5	M10	9	M3-6,0 deep	40.0	8.0
45	60	51	39.10	38.80	53	33.70	36.60	15	13.5	8.0	22.4	10.4	M12	14	M4-9,0 deep	52.5	10.0
55	70	58	47.85	47.55	60	41.25	44.40	18	13.7	9.0	28.7	12.4	M14	16	M5-8.0 deep	60.0	12.0
65	90	76	58.15	57.85	–	54.00	57.00	23	21.5	9.3	36.5	14.6	M16	18	M4-8.0 deep	75.0	15.0

- 1) Dimension A<sub>4</sub> = Width of the additional longitudinal seal
- 2) Dimension H<sub>2</sub> with cover strip
- 3) Dimension H<sub>2</sub> without cover strip
- 4) Dimension H<sub>3</sub> = Total Roller Runner Block including the additional longitudinal seal
- 5) Thread for connecting parts
- 6) T = Rail separation of the Roller Guide Rail