

Precision Rail-Guide Sets RE and RE-ACS

Material:

Rails: Tool steel 1.2842 (90MnCrV8), hardness 61±3 HRC.
 Rollers: Bearing steel 100Cr6, hardness 62±4 HRC.
 Cages and end pieces: Plastic.

Technical data:

- Speed: Up to 3 m/s.
- Acceleration: Up to 80 m/s².
- Accuracy class: P10 (max. 10µm/1000 mm).
 Higher accuracy classes P5 and P2 on request.
- Temperature range: -20°C to +80°C.

Lubrication: The rails have to be lubricated before mounting (z.B. lithium soap grease on mineral oil basis). Relubrication intervals depend on the type of application.

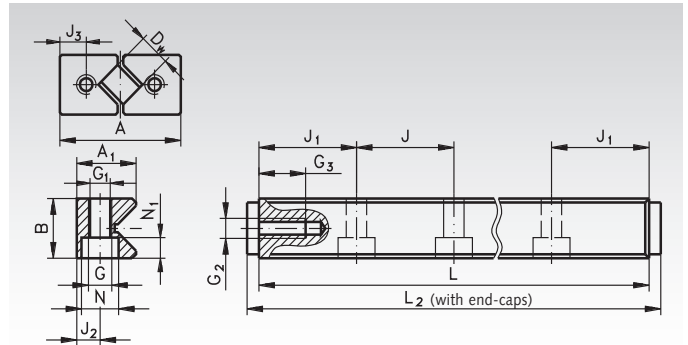
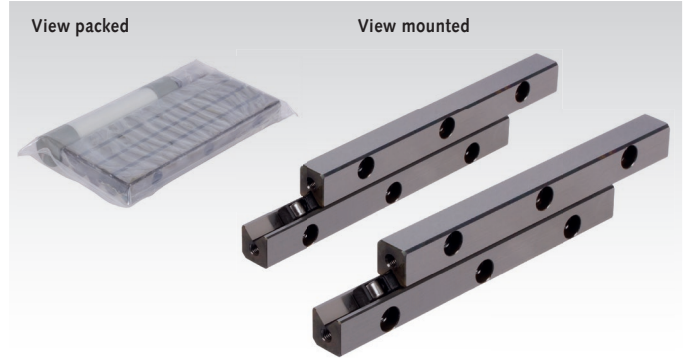
Contents of Delivery: A set consists of 4 half-rails, 2 plastic cages with rollers and 8 end pieces (delivered unassembled). From these components a complete rail-pair unit can be assembled.

Sizes: Two sizes with different lengths. Other sizes on request.

Design RE: For applications with limited travel, if high stiffness or load bearing capacity and positioning accuracy is required in very confined spaces. The rails are usually supplied in pairs, see contents of delivery.

Design RE-ACS: As version RE, but with an additional Anti-Creeper-System (ACS) that prevents the cage from creeping. This means the cage is guided by a plastic gear and teeth at the profile base. Hub and Load Rating are lower than for version RE (see table).

Applications: machine tools, handling systems, special machinery, measuring and testing equipment.



Ordering Details: e.g.: Product No. 649 703 01, Rail-Guide Sets RE Size 3, Length 50 mm

Product No. RE	Size	A ^{-0.3} mm	B ^{-0.2} mm	L mm	L ₂ mm	Stroke mm	A ₁ mm	D _w mm	J mm	J ₁ mm	J ₂ mm	G mm	G ₁ mm	N mm	N ₁ mm	J ₃ mm	G ₂ mm	G ₃ mm	Load Rating		Weight g
																			dyn. C N	stat. C ₀ N	
649 703 01	3	18	8	50	54	25	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	4230	5100	103
649 703 02	3	18	8	75	79	38	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	5803	7650	148
649 703 03	3	18	8	100	104	50	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	7263	10200	195
649 703 04	3	18	8	125	129	63	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	8644	12750	242
649 703 05	3	18	8	150	154	75	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	9964	15300	288
649 703 06	3	18	8	175	179	88	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	11238	17850	335
649 703 07	3	18	8	200	204	100	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	12471	20400	382
649 703 15	6	31	15	100	106	46	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	25743	27300	665
649 703 16	6	31	15	150	156	80	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	34000	39000	981
649 703 17	6	31	15	200	206	92	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	44204	54600	1302
649 703 18	6	31	15	250	256	126	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	51431	66300	1617
649 703 19	6	31	15	300	306	160	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	58382	78000	1933
649 703 20	6	31	15	350	356	172	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	67304	93600	2254
649 703 21	6	31	15	400	406	206	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	73781	105300	2569

Product No. RE-ACS	Size	A ^{-0.3} mm	B ^{-0.2} mm	L mm	L ₂ mm	Stroke mm	A ₁ mm	D _w mm	J mm	J ₁ mm	J ₂ mm	G mm	G ₁ mm	N mm	N ₁ mm	J ₃ mm	G ₂ mm	G ₃ mm	Load Rating		Weight g
																			dyn. C N	stat. C ₀ N	
649 703 29	3	18	8	50	54	20	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	3465	4250	102
649 703 30	3	18	8	75	79	30	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	5294	6800	103
649 703 31	3	18	8	100	104	45	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	6300	8500	193
649 703 32	3	18	8	125	129	62	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	7731	11050	240
649 703 33	3	18	8	150	154	79	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	9090	13600	286
649 703 34	3	18	8	175	179	94	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	9964	15300	333
649 703 35	3	18	8	200	204	100	8,7	4	25	12,5	3,5	M4	3,3	6	3,2	4	M3	6	11653	18700	381
649 703 43	6	31	15	100	106	37	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	22826	23400	660
649 703 44	6	31	15	150	156	71	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	31318	35100	976
649 703 45	6	31	15	200	206	105	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	39196	46800	1291
649 703 46	6	31	15	250	256	117	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	49056	62400	1612
649 703 47	6	31	15	300	306	151	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	56093	74100	1928
649 703 48	6	31	15	350	356	163	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	65107	89700	2249
649 703 49	6	31	15	400	406	197	15,2	8	50	25	6	M6	5,2	9,5	5,2	6,75	M5	9	71640	101400	2564