T-Rail



Fixed rails used as the main load bearing in radial and axial forces.

The rails are available in 4 different sizes: 18, 28, 43, 63 mm.

Longer single rails up to max. 4080 mm on request. For longer rail systems, see section ”Joined rails” in Technical Information.

Dimensions in mm.

D1 Fixing holes for Torx® screws with low head (custom design) included in scope of supply.
D2 Fixing holes for countersunk head screws according to DIN 7991.

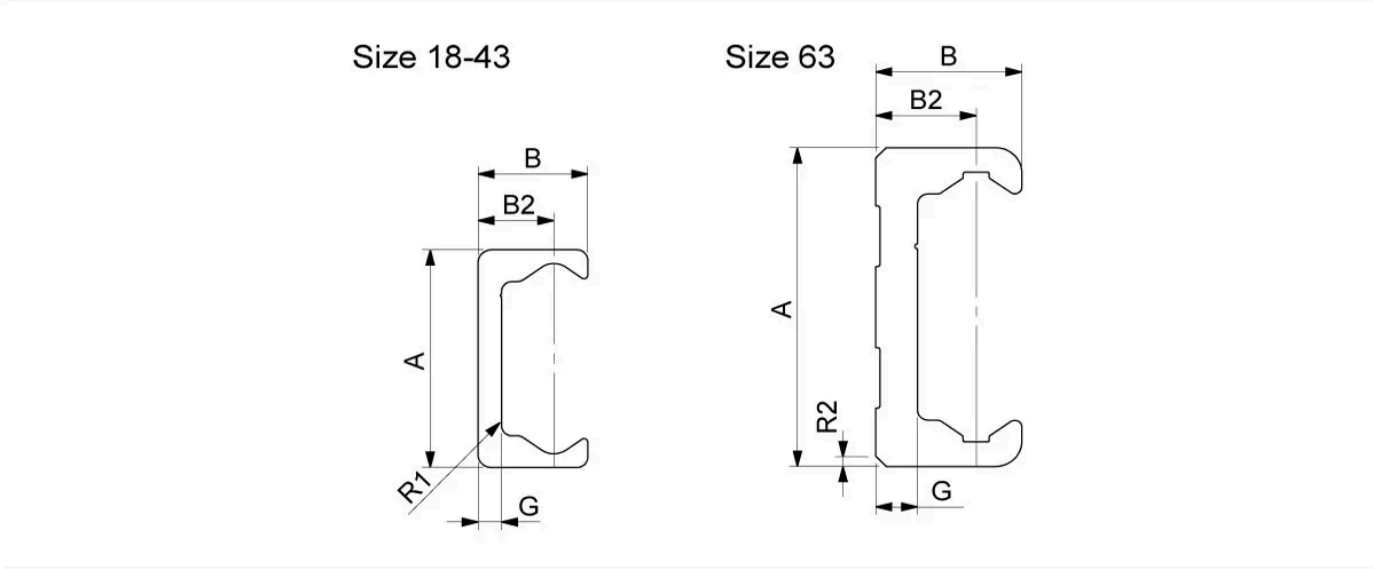
Material: Size 18, cold-drawn roller bearing carbon steel C43 F. Sizes 28-63 Cf53. Zinc-plated according to ISO 2081. Rail raceways are induction hardened and ground
Max. Acceleration (m/s²): 20 (depending on application)
Max. Operating Speed (m/s): 9 (depending on application)
Max. Radial Load Capacity (N): 15,000 (per slider)
Temperature range (°C): -20 to +120

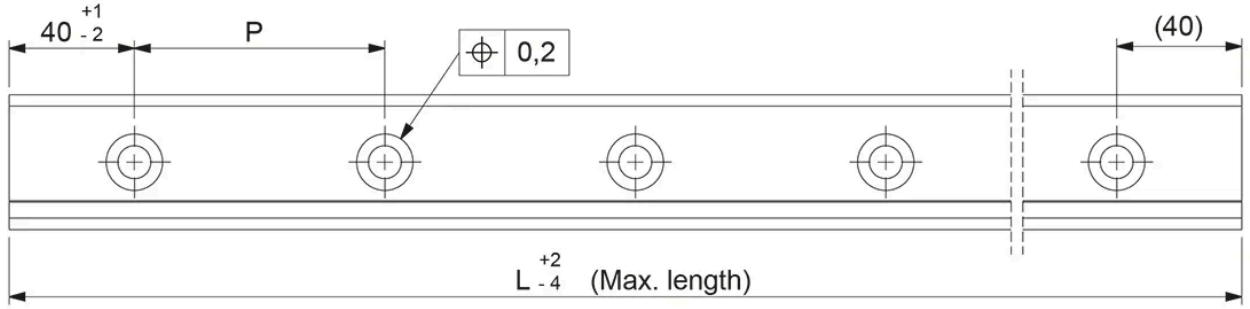
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General Data

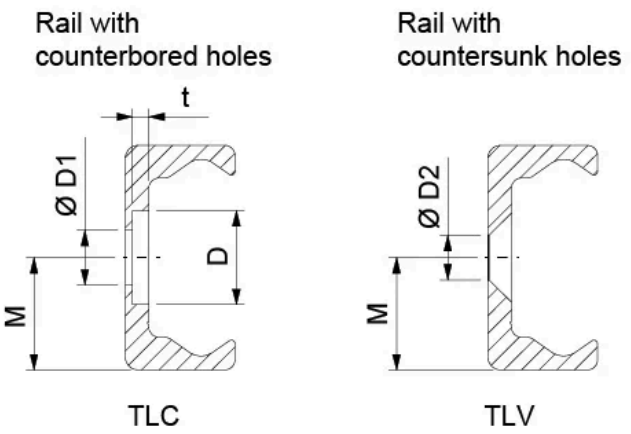
Designation	Size
TLC18	18
TLV18	18
TLC28	28
TLV28	28
TLC43	43
TLV43	43
TLC63	63
TLV63	63

Dimensions





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Designation	M	A	B	B2	R1	R2	L	D	D1
TLC18	9	18	8.25	5.75	1.5	-	2000	9.5	M4
TLV18	9	18	8.25	5.75	1.5	-	2000	9.5	M4
TLC28	14	28	12.25	8.5	1	-	3200	11	M5
TLV28	14	28	12.25	8.5	1	-	3200	11	M5
TLC43	21.5	43	21	14.5	2.5	-	4080	18	M8
TLV43	21.5	43	21	14.5	2.5	-	4080	18	M8
TLC63	31.5	63	28	19.25	-	2x45°	4080	15	M8
TLV63	31.5	63	28	19.25	-	2x45°	4080	15	M8

Designation	D2	t	G	P	Min. length
TLC18	M4	2	2.8	80	160
TLV18	M4	2	2.8	80	160
TLC28	M5	2	3	80	240
TLV28	M5	2	3	80	240
TLC43	M8	3.1	4.5	80	400
TLV43	M8	3.1	4.5	80	400
TLC63	M10	5.2	8	80	560
TLV63	M10	5.2	8	80	560

Load & Weight

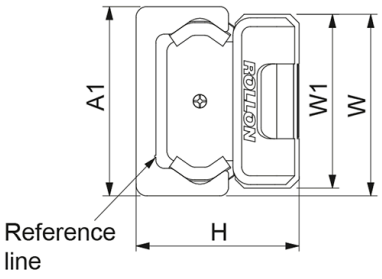
Designation	Weight Rail (kg/m)
TLC18	0.55
TLV18	0.55
TLC28	1.0
TLV28	1.0
TLC43	2.6
TLV43	2.6
TLC63	6.0

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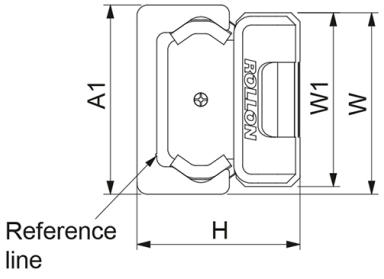
Designation	Weight Rail (kg/m)
TLV63	6.0

Rail/Slider Combination

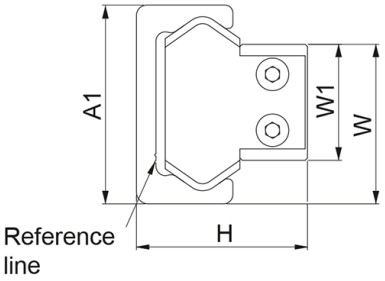
T-rail with NSW slider



T-rail with NSW slider



T-rail with CSW slider



Designation	A1	H (Rail+NSW/NSA)	H (Rail+NSD/NSDA)	H (Rail+CSW/CSWK)	W1 (Rail+NSW/NSA)
TLC18	18 (+0.25/-0.10)	16.5 (±0.15)	n/a	15 (±0.15)	16 (0/-0.2)
TLV18	18 (+0.25/-0.10)	16.5 (±0.15)	n/a	15 (±0.15)	16 (0/-0.2)
TLC28	28 (+0.25/-0.10)	23.9 (±0.15)	23.9 (±0.15)	23.9 (±0.15)	24.9 (0/-0.2)
TLV28	28 (+0.25/-0.10)	23.9 (±0.15)	23.9 (±0.15)	23.9 (±0.15)	24.9 (0/-0.2)
TLC43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
TLV43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
TLC63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)
TLV63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)

Designation	W1 (Rail+NSD/NSDA)	W1 (Rail+CSW/CSWK)	W (Rail+NSW/NSA)	W (Rail+NSD/NSDA)	W (Rail+CSW/CSWK)
TLC18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
TLV18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
TLC28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
TLV28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
TLC43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.10/-0.30)
TLV43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.10/-0.30)
TLC63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)
TLV63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)

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