

U-Rail

Floating rails are used for load bearing of radial forces and, in combination with the fixed bearing T-rail or compensation K-rail, as a support carrier for occurring moment loads.

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

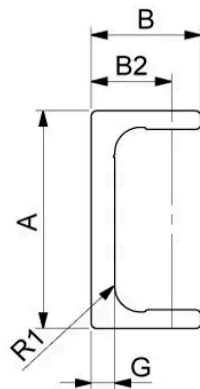


General Data

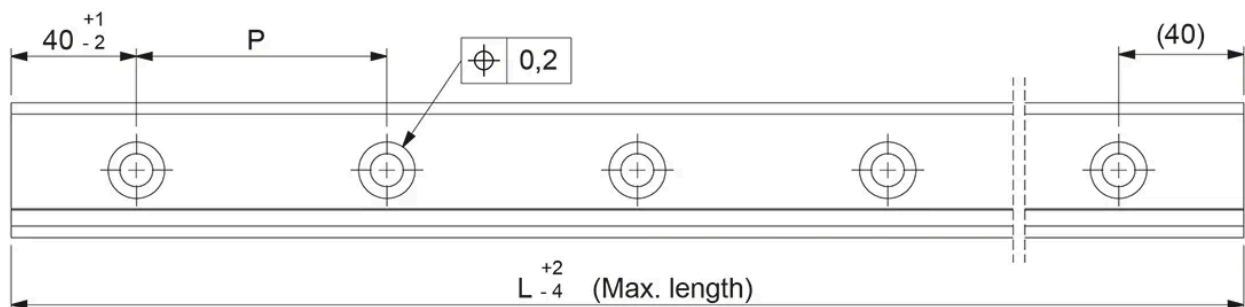
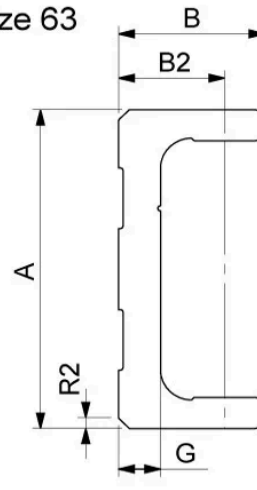
Designation	Size
ULC18	18
ULV18	18
ULC28	28
ULV28	28
ULC43	43
ULV43	43
ULC63	63
ULV63	63

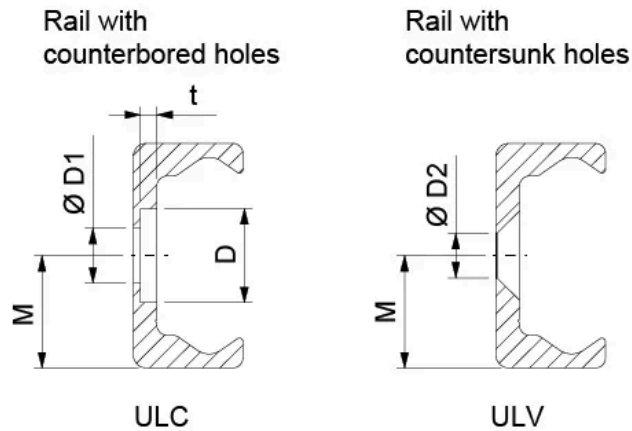
Dimensions

Size 18-43



Size 63





Designation	M	A	B	B2	R1	R2	L	D	D1
ULC18	9	18	8.25	5.75	1	-	2000	9.5	M4
ULV18	9	18	8.25	5.75	1	-	2000	9.5	M4
ULC28	14	28	12	8.5	1	-	3200	11	M5
ULV28	14	28	12	8.5	1	-	3200	11	M5
ULC43	21.5	43	21	14.5	1	-	4080	18	M8
ULV43	21.5	43	21	14.5	1	-	4080	18	M8
ULC63	31.5	63	28	19.25	-	2x45°	4080	15	M8
ULV63	31.5	63	28	19.25	-	2x45°	4080	15	M8

Designation	D2	t	G	P	Min. length
ULC18	M4	1.9	2.6	80	160
ULV18	M4	1.9	2.6	80	160
ULC28	M5	2	3	80	240
ULV28	M5	2	3	80	240
ULC43	M8	3.1	4.5	80	400
ULV43	M8	3.1	4.5	80	400
ULC63	M10	5.2	8	80	560
ULV63	M10	5.2	8	80	560

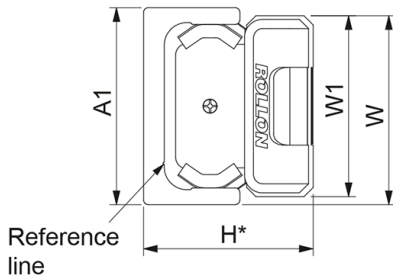
Load & Weight

Designation	Weight Rail (kg/m)
ULC18	0.55
ULV18	0.55
ULC28	1.0
ULV28	1.0
ULC43	2.6
ULV43	2.6
ULC63	6.0

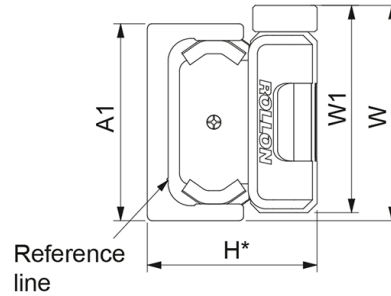
Designation	Weight Rail (kg/m)
ULV63	6.0

Rail/Slider Combination

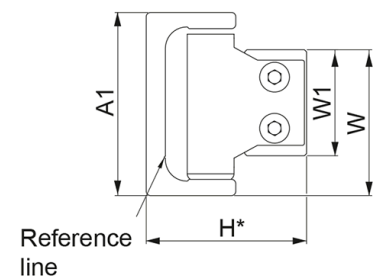
U-rail with NSW slider



U-rail with NSD slider



U-rail with CSW slider



* Nom. value

Designation	A1	H (Rail+NSW/NSA)	H (Rail+NSD/NSDA)	H (Rail+CSW/CSWK)	W1 (Rail+NSW/NSA)
ULC18	18 (+0.25/-0.10)	16,5*	n/a	15*	16 (0/-0.2)
ULV18	18 (+0.25/-0.10)	16,5*	n/a	15*	16 (0/-0.2)
ULC28	28 (+0.25/-0.10)	23.9*	23.9*	23.9*	24.9 (0/-0.2)
ULV28	28 (+0.25/-0.10)	23.9*	23.9*	23.9*	24.9 (0/-0.2)
ULC43	43 (+0.35/-0.10)	37*	37*	37*	39.5 (0/-0.2)
ULV43	43 (+0.35/-0.10)	37*	37*	37*	39.5 (0/-0.2)
ULC63	63 (+0.35/-0.10)	50.5*	n/a	49.8*	60 (0/-0.2)
ULV63	63 (+0.35/-0.10)	50.5*	n/a	49.8*	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)
ULC18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
ULV18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
ULC28	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)
ULV28	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)
ULC43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.15/-0.30)
ULV43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.15/-0.30)
ULC63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/ -0.30)
ULV63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/ -0.30)