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.

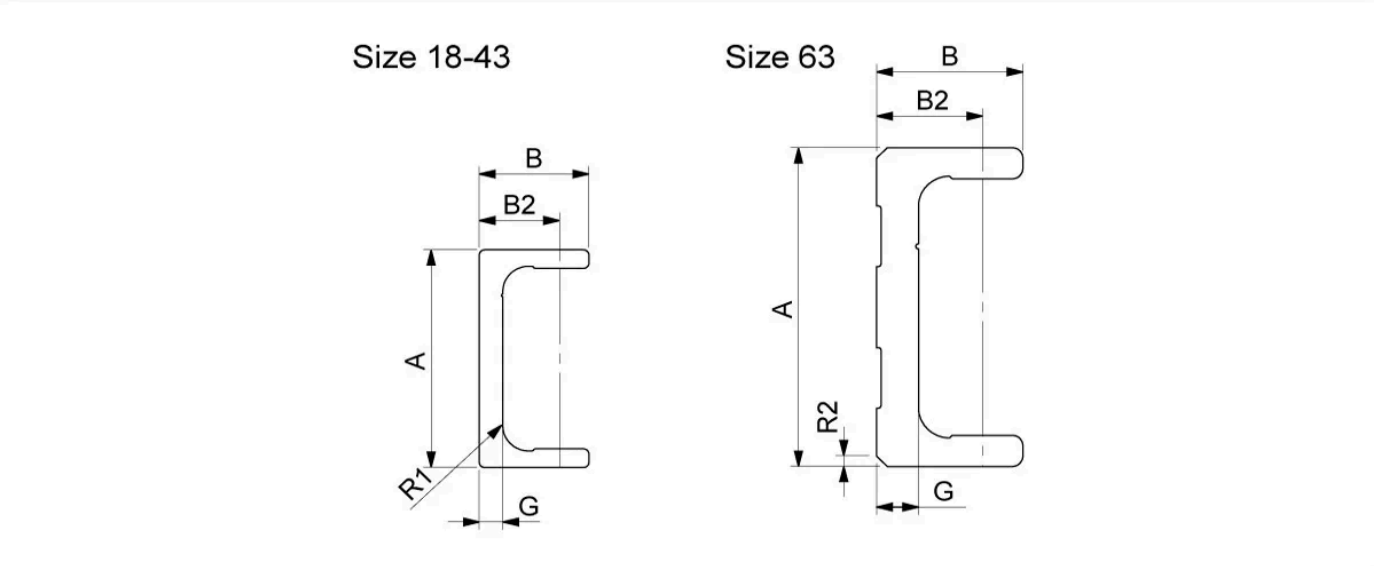
Material: Size 18, cold-drawn roller bearing carbon steel C43 F. Sizes 28-63 Cf53. Zinc-plated according to ISO 2081. Rail raceways are induction hardened and ground
Max. Acceleration (m/s²): 20 (depending on application)
Max. Operating Speed (m/s): 9 (depending on application)
Max. Radial Load Capacity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

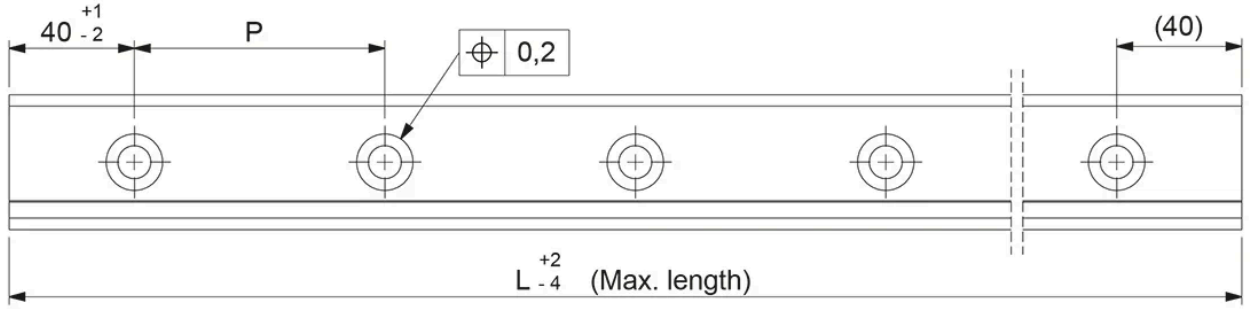
Every care has been taken to ensure the accuracy of the information in this document, but we take no liability for any errors or omissions. We reserve the right to make changes without prior notice.

General Data

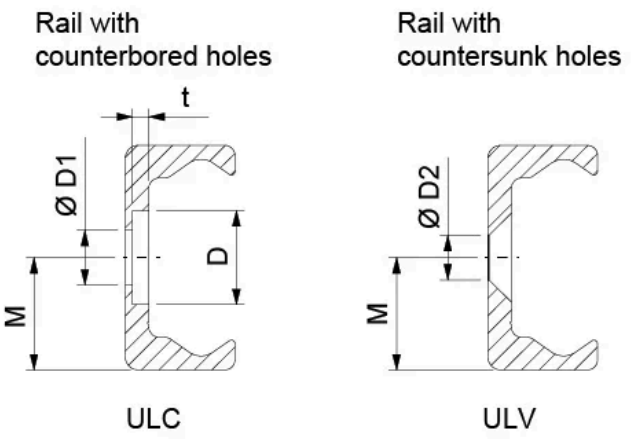
Designation	Size
ULC18	18
ULV18	18
ULC28	28
ULV28	28
ULC43	43
ULV43	43
ULC63	63
ULV63	63

Dimensions





Every care has been taken to ensure the accuracy of the information in this document, but we take no liability for any errors or omissions. We reserve the right to make changes without prior notice.



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

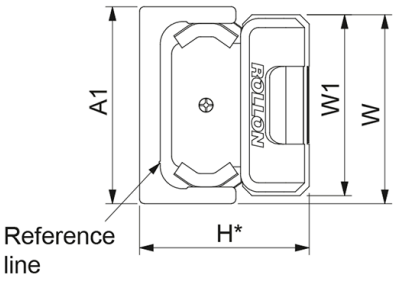
Designation	Weight Rail (kg/m)
ULC18	0.55
ULV18	0.55
ULC28	1.0
ULV28	1.0
ULC43	2.6
ULV43	2.6
ULC63	6.0

Every care has been taken to ensure the accuracy of the information in this document, but we take no liability for any errors or omissions. We reserve the right to make changes without prior notice.

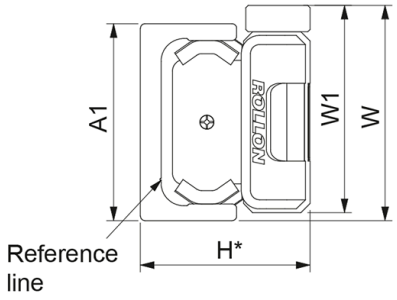
Designation	Weight Rail (kg/m)
ULV63	6.0

Rail/Slider Combination

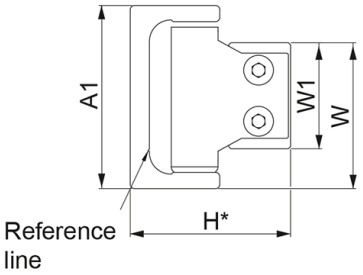
U-rail with NSW slider



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)

Every care has been taken to ensure the accuracy of the information in this document, but we take no liability for any errors or omissions. We reserve the right to make changes without prior notice.