

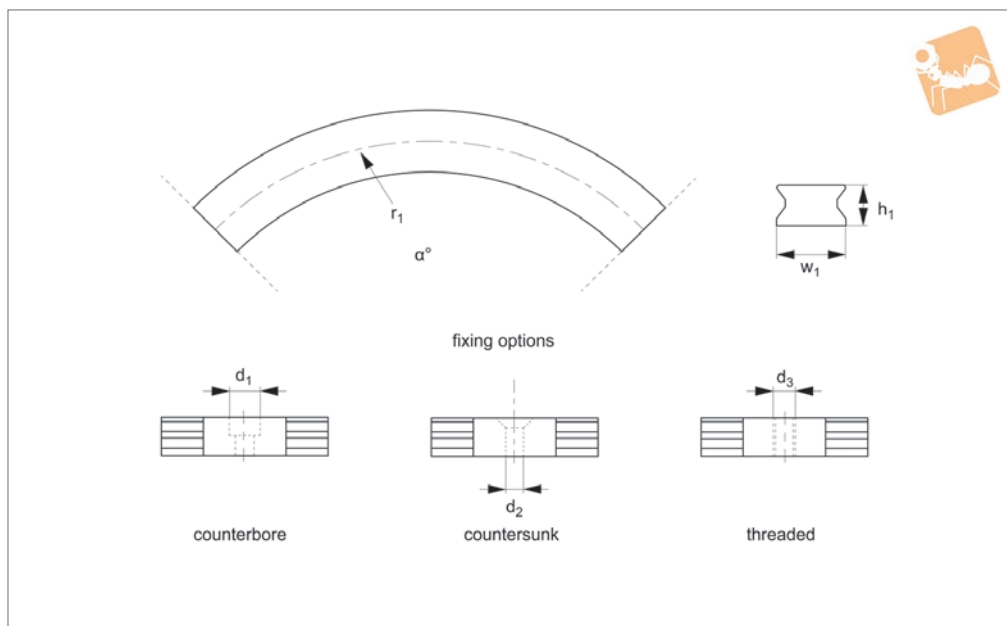


Constant Radius Rails

Stainless steel; size 16



Long Linear
Rails



L1979.CRX16

LONG LINEAR RAILS

Material

Stainless steel rail AISI 316L.

Temperature range -30°C to +80°C.

Rail weight 1.2 Kg/m.

±1°.

Recommended rail hole is counterbored
(easy to install).

Technical Notes

Standard radii are shown below but any radius (from $r_1 > 120\text{mm}$) can be produced. Advise angle required and fixing option type.

Tips

Combine with curviline sliders (L1979.CRX16-070).
Recommended hole pitch on rail is 80mm.
Rail tolerance ±0.5mm, angle tolerance

Important Notes

Not to be used in high-cycle applications.

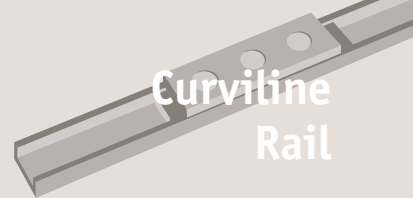
Order No.	w_1	h_1	r_1	α°	d_1 for	d_2 for	d_3 for
L1979.CRX16-0150-xx	16.5	10	150	tba	M5	M5	M6
L1979.CRX16-0200-xx	16.5	10	200	tba	M5	M5	M6
L1979.CRX16-0250-xx	16.5	10	250	tba	M5	M5	M6
L1979.CRX16-0300-xx	16.5	10	300	tba	M5	M5	M6
L1979.CRX16-0400-xx	16.5	10	400	tba	M5	M5	M6
L1979.CRX16-0500-xx	16.5	10	500	tba	M5	M5	M6
L1979.CRX16-0600-xx	16.5	10	600	tba	M5	M5	M6
L1979.CRX16-0700-xx	16.5	10	700	tba	M5	M5	M6
L1979.CRX16-0800-xx	16.5	10	800	tba	M5	M5	M6
L1979.CRX16-0900-xx	16.5	10	900	tba	M5	M5	M6
L1979.CRX16-1000-xx	16.5	10	1000	tba	M5	M5	M6



Ordering Example

L1979 • CRX16 - 0200 - 060 - X

Product Number Rail width Radius: r (mm) >120 Angle: α° Fixing hole type:
CB - Counterbored
CS - Countersunk
TR - Threaded



The Curviline rail system offers a cost-effective solution to curvi-linear applications.

Flexibility when you need it

Constant radius, variable radius are available in standard radii, non-standard radii to your drawings are also possible. Straight and curved sections in a single length can be supplied.

Any radius

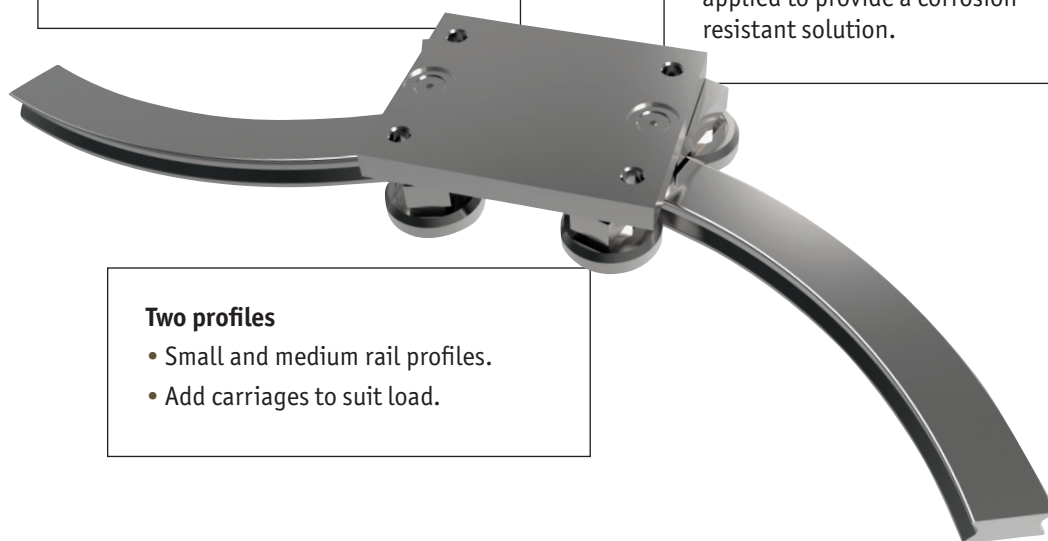
- From 120mm radius upwards.
- Standard and special radii.
- Angles up to 360°.

Anti-corrosion

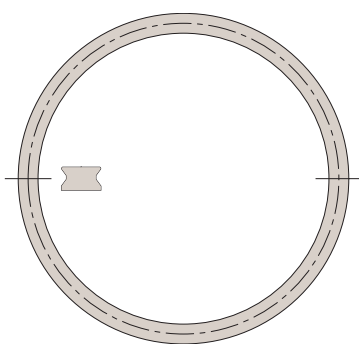
Alloy coating or nickel plating of the rails and sliders can be applied to provide a corrosion resistant solution.

Two profiles

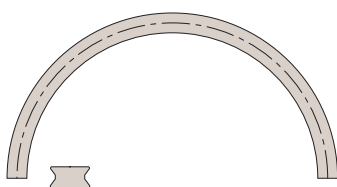
- Small and medium rail profiles.
- Add carriages to suit load.



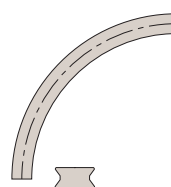
Examples



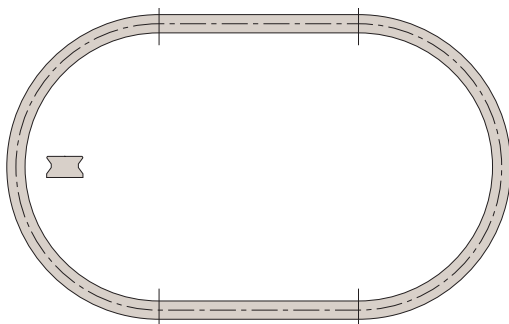
Circle



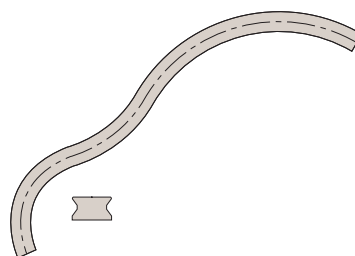
Semi-circle



Arcs



Ovals



Complex rails with varied radii and angles

Curviline Rail from Automotion Components



Specifications

- Maximum speed 1,5 m/s.
- Maximum acceleration 2 m/s².
- Maximum rail length 3600 mm.
- Two rail sizes 16,5 and 23,5 mm width.
- Minimum radius 120 mm.
- Recommended hole pitch 80 mm.
- Radius tolerance $\pm 0,5$ mm ($\pm 1^\circ$).
- Maximum radial load per slider 1615N.
- Temperature range -30°C to +80°C.
- Roller bearing seals 2Z (dust proof), lubricated for life.
- Rollers from 100Cr6, (stainless versions with rubber seals 2RS available on request).
- Sliders are preload adjustable.
- Not suitable for moment loads.
- Special coatings and finishes available on request.

Applications



Sliding doors & windows

Internal sliding doors
gates • roof lights
display cases



Special purpose & packaging machines

Precision positioning systems
handling units • robotic systems
cutting machines



Safety guarding

Extending protective systems
sliding gates
automatic pick & place



Transport (naval)

Sliding hatches
pull-out storage



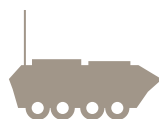
Transport (automotive)

Ambulance sliding systems
fire fighting vehicles
sliding panels



Transport (rail)

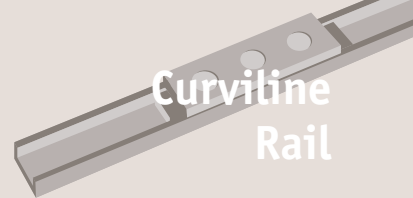
Seat adjustment
sliding doors
battery removal units



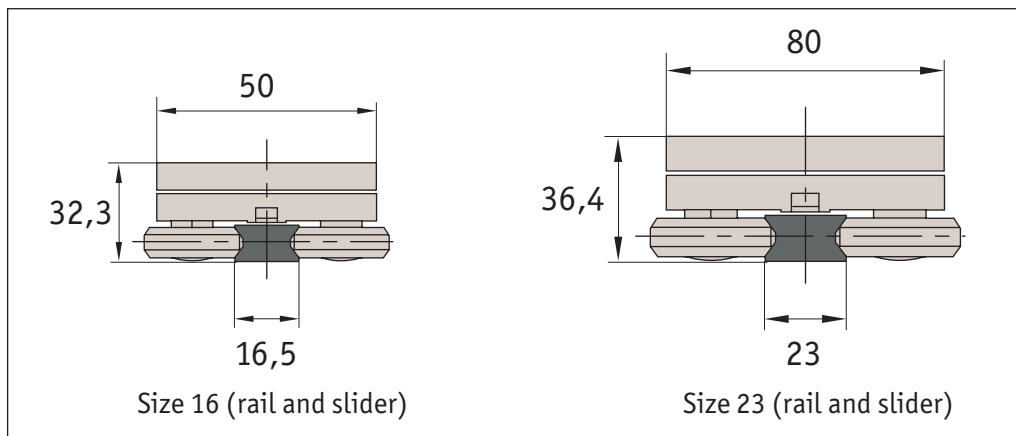
Transport (military)

Sliding seats
protective hatches
stretcher extensions

Curviline Rail from Automation Components

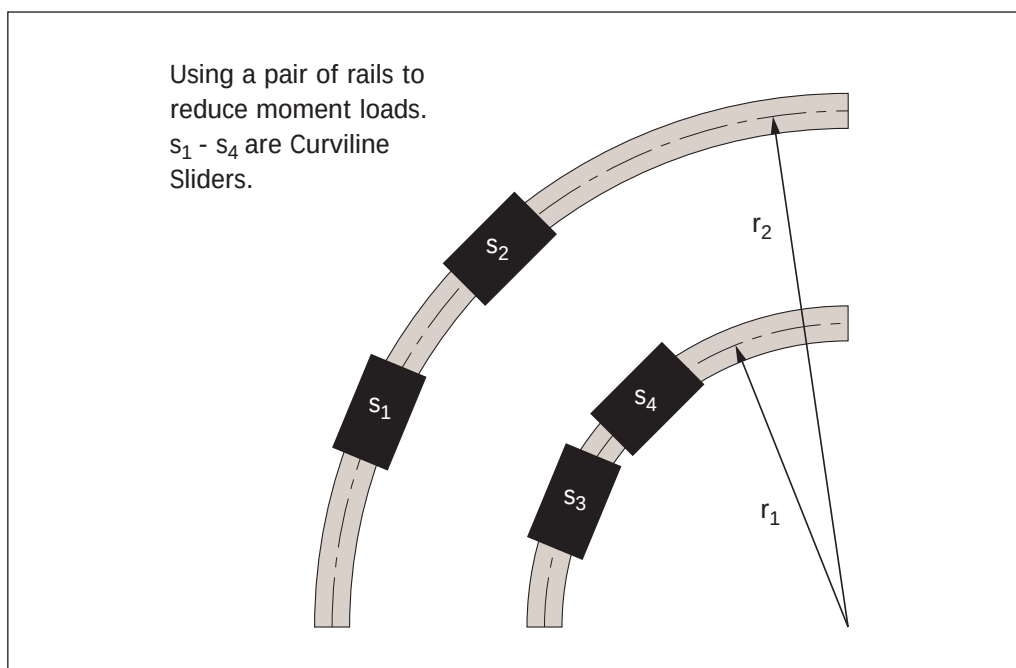
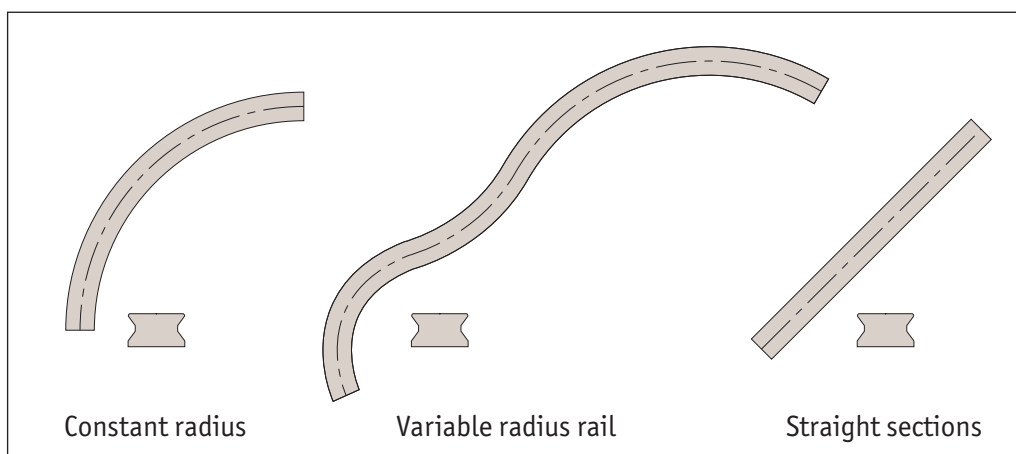


Rail sizes



The sliders have eccentric rollers that are adjustable with the thin spanner that is supplied with them. This allows the preload of the system to be set as required – tight or free running.

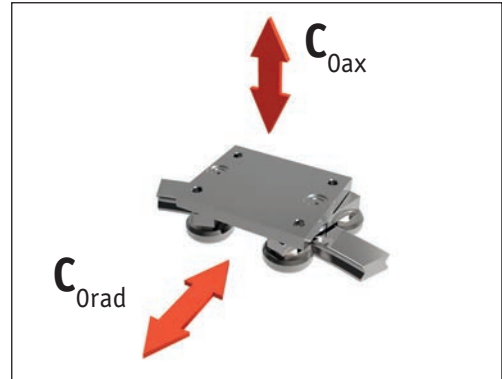
Rail types



Curviline Rail from Automation Components



Load capacities



Slider type	C_{0ax} N	C_{0rad} N
L1978.CR16-070	400	570
L1978.CR23-100	1130	1615
L1979.CR16-070	400	570
L1979.CR23-100	1130	1615

Note: Reduce any moment loads by utilising two or more sliders and/or rails.

Constant radius

Ordering Example

L1978 / L1979	•	CRX16	-	0200	-	060	-	X
Product Number		Rail width (16 or 23)		Radius: r (mm) 120 upwards		Angle: α° (0°-360°)		Fixing hole type: CB - Counterbored CS - Countersunk TR - Threaded

Variable radius

Ordering Example

L1978	•	VRX16	-	0400	-	060	-	100	-	0200	-	090
Product Number		Rail width (16 or 23)		1 st Radius (mm) $r_1 > 120$		1 st Angle: (α_1°)		l_1 (>70 mm)		2 nd Radius (mm) $r_2 > 120$		2 nd Angle: (α_2°)

Curviline Rail from Automotion Components