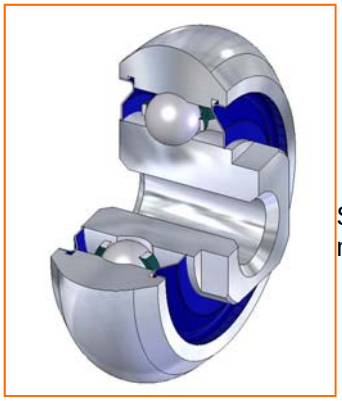
MONORACE: ML SERIES

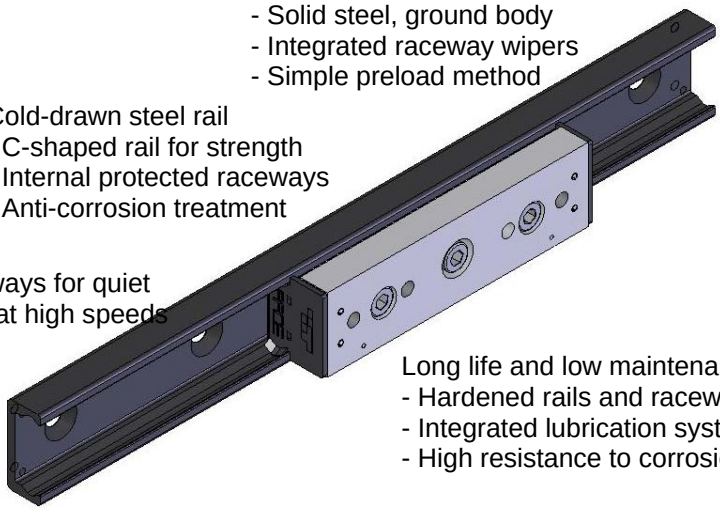
Single row precision ball bearing
- Sealed and lubed for life
- Integrated eccentric or concentric pivot



Compact slider
- Solid steel, ground body
- Integrated raceway wipers
- Simple preload method

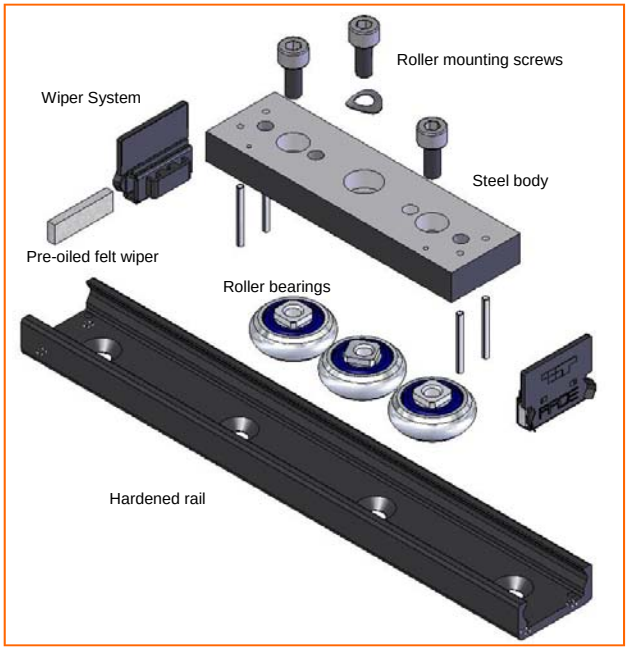
Cold-drawn steel rail
- C-shaped rail for strength
- Internal protected raceways
- Anti-corrosion treatment

Smooth raceways for quiet motion, even at high speeds



Long life and low maintenance
- Hardened rails and raceways
- Integrated lubrication system
- High resistance to corrosion

Durable raceway wiper system
- Integrated lubricator
- Easy to replace



ML Rail

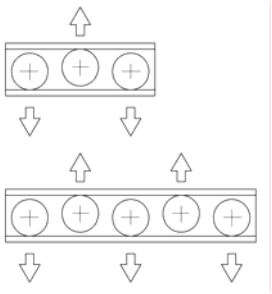
The ML Series compact rail is made from cold-drawn steel alloy. Its C-shape increases the rails rigidity and strength while providing good protection of the sliders' running surfaces. These running surfaces are smooth for quite operation, even at high speeds. The rails are Nitrite hardened along with an innovative oxidation treatment making both the rails and raceways very resistant to both corrosion and wear, and assuring long life of the system. The rails are available in two sizes (28mm and 43mm) and with two mounting hole styles (countersunk (MLS) and counterbored (MLL)).

RLV Sliders

The RLV Series Sliders are built from a ground steel body and include either 3 or 5 rollers and a wiper/lubricator system. The 3 roller sliders have the first and last roller in contact with the raceway in the loading direction and a middle roller with eccentric pivot preload against the opposite raceway.
The 5 roller sliders have rollers 1, 3, and 5 in contact with the raceway in the load direction, while rollers 2 and 4 with the eccentric pivot preload against the opposite raceway. The eccentric pivot allows these rollers to be easily preloaded at the optimal setting against the opposite raceway.

A durable end wiper system keeps the raceways clean from contaminates while an integrated, pre-oiled felt wiper provides continuous lubrication of the raceways. The continuous lubrication and ease of replacement of the entire wiper system provides for very low maintenance.

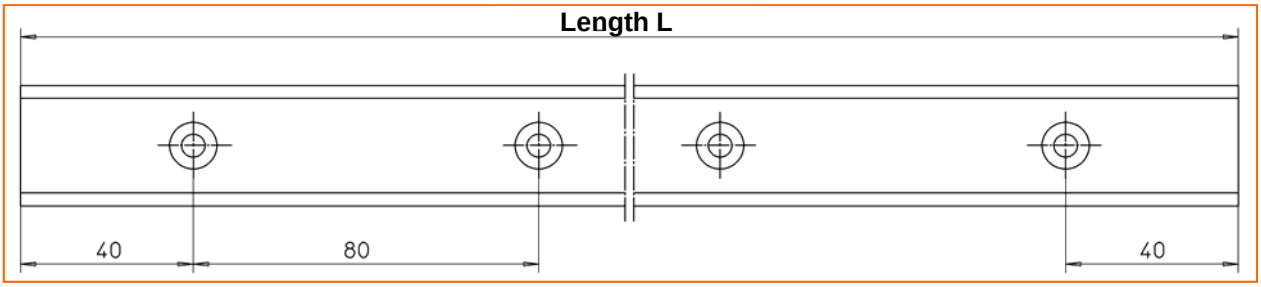
The sliders withstand loads and moments in all directions, but due to the asmetric roller/rail contacts, the normal and moment load capacities vary depending on slider orientation and loading direction. Therefore the sliders must be correctly oriented in the rails during installation, - see the illustration below.



Technical Characteristics

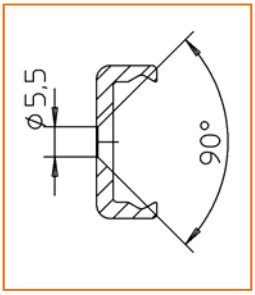
- The rail is made from cold-drawn steel alloy and completely Nitrite hardened. A subsequent oxidation treatment provides high resistance to corrosion and wear on both the rail and raceways.
- The raceways are smooth for quiet operation.
- Precision rollers are made of hardened bearing steel (100Cr6), lubed for life, and sealed with 2Z lip seals.
- Slider body is ground steel and black zink-plated.
- Mounting screws are bright zink-plated.
- Operating temperature –40 to +120C°
- Slider has adjustable eccentric rollers for easy preload adjustment and smooth movement without clearance.
- Wiper System is made from wear resistant thermoplastic and include integrated pre-oiled felt wipers for long lasting lubrication of raceways.
- Max speed : 9 m/s

Rail Dimensions for ML 28

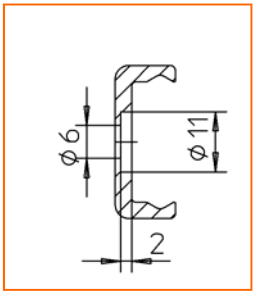


Length L (mm)															(weight 1 kg/m)
240	320	400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440
1520	1600	1680	1760	1840	1920	2000	2080	2160	2240	2320	2400	2480	2560	2640	2720
2800	2880	2960	3040	3120	3200	3280	3360	3440	3520	3600	3680	3760	3840	3920	4000

Rail Fastening Methods

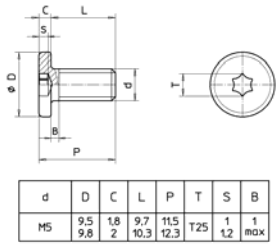


MLS 28
For countersunk holes:
M5 flat head screws,
ISO 5933



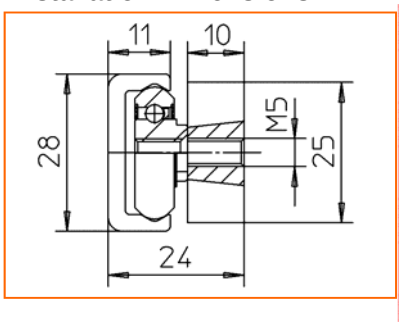
MLL 28
For counterbored holes:
Special ultra low head
M5 Torx screws

Special Torx Screws.
Tightening torque : 11 Nm



d	D	C	L	P	T	S	B
M5	9,5 9,8	1,8 2	9,7 10,3	11,5 12,3	T25	1 1,2	1 max

Installation Dimensions

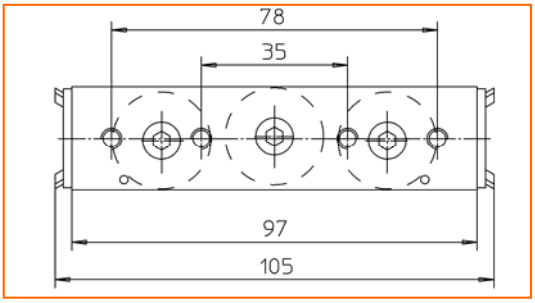


Order Codes : ML S 28 - 1040

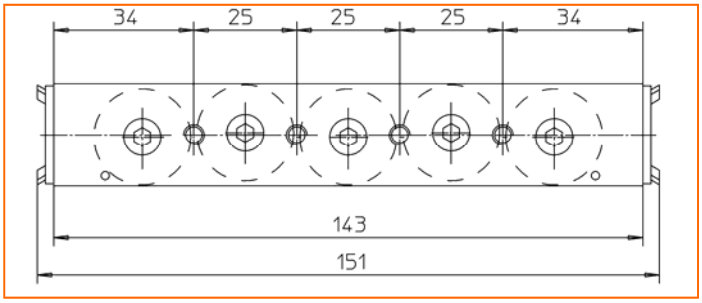
Rail type — Hole type — Dimension — Length

Slider Dimensions

RLV28-3
3 roller type

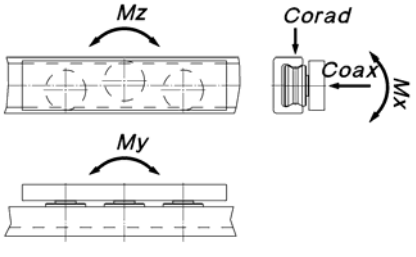


RLV28-5
5 roller type



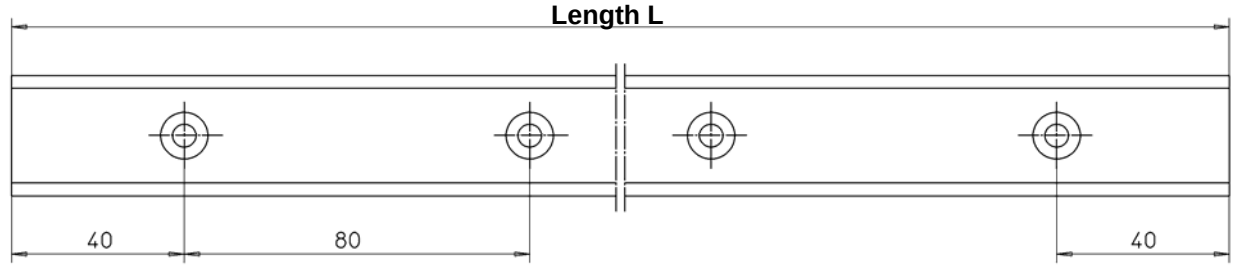
Slider codes	C (N)	Co rad. (N)	Co ax. (N)	Mx (Nm)	My (Nm)	Mz (Nm)	Weight (g)
RLV28-3	4946	2112	704	5,4	13	29	220
RLV28-5	7419	3168	1056	9,7	21	79	330

For other general information see main catalogue.



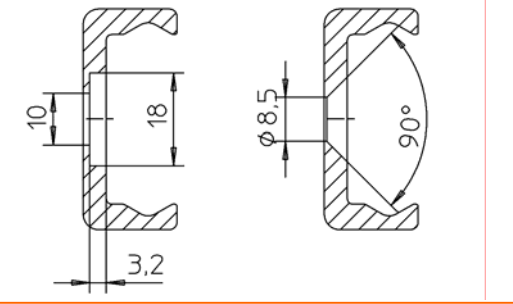
Rail Dimensions for ML 43

Length L

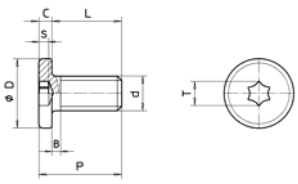


Length L (mm)															(weight 1 kg/m)
		400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440
1520	1600	1680	1760	1840	1920	2000	2080	2160	2240	2320	2400	2480	2560	2640	2720
2800	2880	2960	3040	3120	3200	3280	3360	3440	3520	3600	3680	3760	3840	3920	4000

Rail Fastening Methods

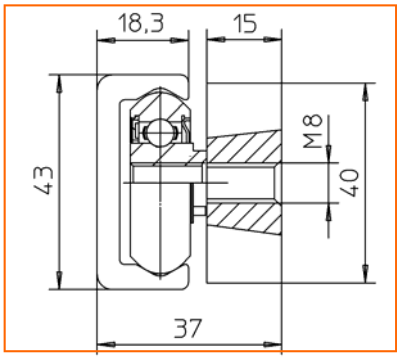


Special Torx Screws.
Tightening Torque : 25 Nm



d	D	C	L	P	T	S	B
M5	9,5 9,8	1,8 2	9,7 10,3	11,5 12,3	T25	1 1,2	1 max

Installation Dimension



MLS 43
For countersunk holes:
M8 screws

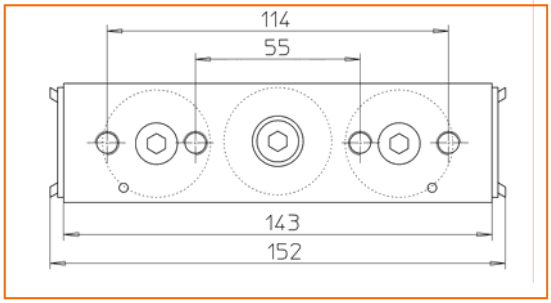
MLL 43
For counterbored holes:
Special ultra low-head
M8 Torx screws

Order Codes : ML S 43 - 1040

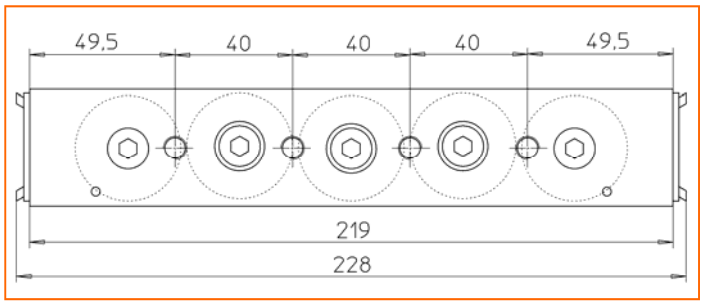
Rail type — Hole type — Dimension — Length

Slider Dimensions

RLV43-3
3 roller type



RLV43-5
5 roller type



Slider code	C (N)	Co rad. (N)	Co ax. (N)	Mx (Nm)	My (Nm)	Mz (Nm)	Weight (g)
RLV43-3	11900	5230	1743	21	47	106	700
RLV43-5	17850	7845	2615	38	79	298	1070

For other general information see main catalogue.