COST-EFFECTIVE REVOLUTION IN LINEAR MOTION



THE MARKETS ONLY NITRIDING HARDENED LINEAR ROLLER GUIDE



MAXIMUM COMPACTNESS

Compact C section rails in a range of sizes, with protected internal rollers.



BLACK FINISH SLIDERS

Elegant, top quality, black finish obtained by coating-free thermochemical treatment. Flame and abrasion resistant. Does not flake off like zinc plating and other deposited treatments.



OPTIMUM LUBRICATION

Extended, maintenance-free lifetime thanks to wipers with slow release felt lubricating pads that deposit a thin film of oil on the raceways.







MAXIMUM STRENGTH

Fully nitrided hardened and black oxidised rails for excellent wear resistance and effective protection against corrosion.



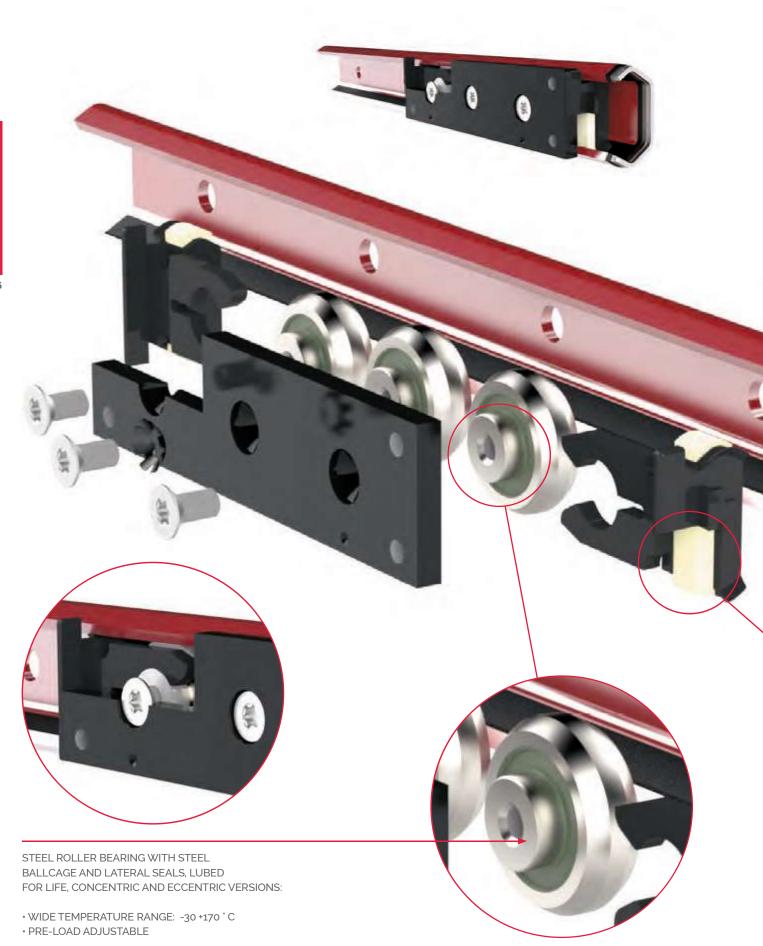
SMOOTH SLIDING

Superbly smooth sliding, thanks to optimal preload adjustment of the eccentric rollers and good lubrication provided by the wipers with incorporated felt, impregnated with lubricant.



SELF-ALIGNING SYSTEM

Can be used in conjunction with LUN U section rails to create a self-aligning two-slide motion system capable of compensating for installation alignment errors.







CONFIGURATIONS

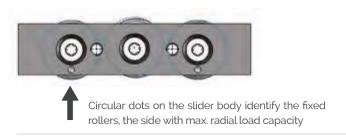
- The sliders are available in 3 and 5 rollers configuration.
 The 3 roller version has the two lateral rollers aligned and in contact with the same raceway. These two rollers are concentric and "fixed"
 - blocked with Loctite. The adjustable central roller is eccentric for preloading against the opposite raceway.
- The 5 roller version has the two lateral and central roller aligned against the same raceway. These three rollers are "fixed". The lateral are concentric rollers, while the central is an eccentric roller. The two adjustable rollers, next to the lateral roller, are eccentric and preloaded against the opposite raceway.

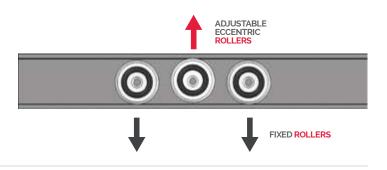
MAXIMUM LOAD CAPACITY

The sliders' max. radial load capacities are given by the highest number of rollers aligned against the same raceway. As non symmetric roller positioning, the sliders must be positioned correctly during installation to obtain listed radial load capacities. Circular marks on the slider body, indicate the side with most rollers in contact with same raceway.

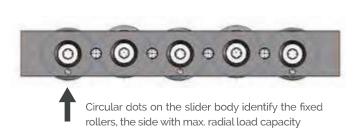
SLIDER WITH 3 AND 5 ROLLERS

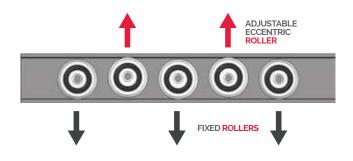
SLIDER WITH 3 ROLLERS



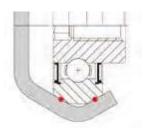


SLIDER WITH 5 ROLLERS



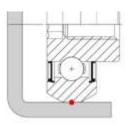


CONTACT POINTS OF THE ROLLERS



LAN GUIDING RAIL

The two inclined bearing slopes run on the two slopes of the V-shaped raceways of the LAN rail. These 2 points contact on each roller in upper or lower raceway, assure both radial and axial load capacity.



LUN FLOATING RAIL

The flat central surface of the roller runs on the flat raceway of the LUN rail. This one point contact of each roller in upper or lower raceway, provide only radial load capacity, but allows for axial floating capability.





DESIGN

 Our new LAN and LUN series rails are made from sheet steel and shaped by high precision, ultra-smooth forming rollers.
 They are then fully nitrided, black oxidised and impregnated with rust inhibitor for maximum corrosion resistance.

RAIL MOUNTING HOLES

 Rail mounting holes have an 80 mm pitch. Either ISO 7380 button head Allen screws or T-RACE flat head M-TORX series screws can be used.

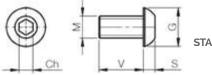
Reference code	A (mm)	B (mm)	C (mm)	d (mm)	E (mm)	Screw type standard	WEIGHT (kg)
LAN 26	26	14	9,5	6,5	2,5	M5 (ISO 7380)	0,80
LAN 30	29,5	15	10	6,5	2,5	M5 (ISO 7380)	0,95
LAN 40	39,5	21	13	9	3	M8 (ISO 7380)	1,55
LUN 40	38,5	21	13	9	3	M8 (ISO 7380)	1,70

LAN SERIES

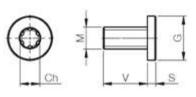
LUN SERIES

FIXING SCREW DIMENSIONS

Reference code	KIT CODE (100 pz)	Screw type	М	٧	G	S	Ch	Tightening torque
LAN 26	KIT-40.VB-E.0510.ZB	M5x10 ISO 7380	M5	10	9,5	2,7	3	9 Nm
LAN 30	KIT-40.VC-SP01.0510.ZB	M8x10 ISO 7380	M5	10	10	2	T25	9 Nm
	KIT-40.VB-E.0810.ZB	M8x10 (ISO 7380)	M8	10	14	4,3	5	20 Nm
LAN 40 LUN 40	KIT-40.VC-SP01.0812.ZB	M8x12 (TORX)	M8	12	16	3	T40	20 Nm
	KIT-40.VC-SP01.0816.ZB	M8x16 (TORX)	M8	16	16	3	T40	20 Nm

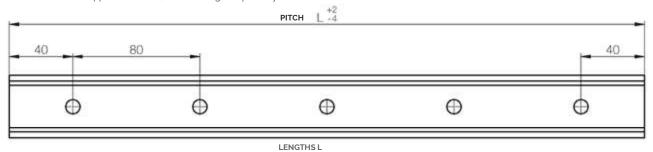


STANDARD ISO 7380 SCREWS



SPECIAL T RACE 40.VC-SP01 SCREWS

The screws are not supplied with rails, can be bought separately.



RAIL SIZE

DIMENSIONS From 160 mm to 2000 mm

DII-121101011011	200 .																							
Rail												Length	L (mm)											
codes	160	240	320	400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000
LAN 26	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•
LAN 30		•	•	•	•	•	•	•	•	•	•	•	0	•	•		0	•		•	0	•	0	•
LAN 40			•	•	•	•	•	•	0	•	•	•	•	•		•	•	•	•	•	0	•		•
LUN 40																					0		0	•

DIMENSIONS From 2080 mm to 4000 mm

١	Ava	ilab	le	in	stoc	k

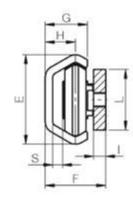
Rail												Le	ngth L (mm)											
codes	2080	2160	2240	2320	2400	2480	2560	2640	2720	2800	2880	2960	3040	3120	3200	3280	3360	3440	3520	3600	3680	3760	3840	3920	4000
LAN 26	•	0	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	0	•
LAN 30	•	0	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	0	•	0	•
LAN 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LUN 40				•		•		•				0			0	0				•					•

ORDER CODES	VERSION	CHARACTERISTICS
LAN40-1040	BASIC	Rolled steel rail with "T RACE NOX" nitride hardening, black oxidation, cut to size after treatment. The cut ends are protected with black spray paint.
LAN40-1040-KB	КВ	As base version, but with additional treatment "TRACE e-coating 1.0" black electro painting on the entire surface, except on the inner raceway area, providing a high corrosion resistance, up to 700 hours in salty fog. The raceways are still protected by the standard oxidation and raceway lubrication.
LAN40-1040-CW	CW o CR	As base version, but with additional coloring "TRACE p-color 1.0". CW is white-color version and CR is red-color version, - on the entire surface, except on the inner raceway area, providing a high corrosion resistance, up to 700 hours in salty fog. The raceways are still protected by the standard oxidation and raceway lubrication.

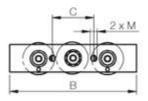
39

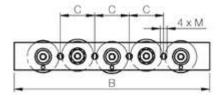
The PAN26 -PAN30 sliders have slim steel body with black glossy cataphoresis painting for high corrosion resistance. They are available in 3 and 5 rollers, with and without wipers.





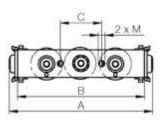
SLIDERS without wipers



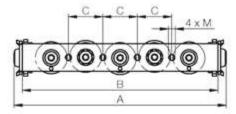


PAN26-3

SLIDERS with wipers

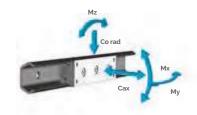






PAN26-5T

PAN26-5



Code	Е	F	G	Н	s	1	L	М	А	В	С	Weight	Dynamic coefficient		Lo	ad capac	ity	
Code	(mm)	(g)	C (N)	Co rad	Co ax	Mx (Nm)	My (Nm)	Mz (Nm)										
PAN26-3									-		00	100	4000	4400	000			46
PAN26-3T	26	20		0.5	0.7			Me	104	92	30	110	1280	1120	380	3	9	16
PAN26-5	. 20	22	14	9,5	3,7	4	20	M5	-	4.40	25	140	4700	4500	5.40	_	45	45
PAN26-5T									154	142	25	150	1730	1520	540	5	15	45
PAN30-3									-		00	120	4060	4000	400	,	40	47
PAN30-3T	20.5	10.0	4.5	10	2.2	4	20	Me	104	92	30	130	1360	1200	420	4	10	17
PAN30-5	29,5	19,9	15	10	3,3	4	20	M5	-	1.10	25	160	1830	1620	590	6	47	50
PAN30-5T									154	142	25	170	1030	1020	580	O	17	50

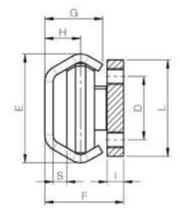
41

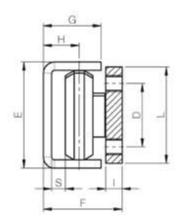
COST EFFECTIVE



The PAN40 slider has slim steel body with black glossy cataphoresis painting for high corrosion resistance. They are available in 3 and 5 roller version, with and without wipers.



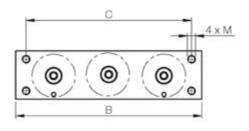


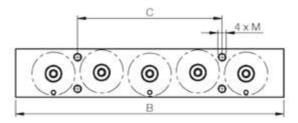


SLIDER WITH LAN40 RAIL

SLIDER WITH LUN40 RAIL
THE USE OF LUN40 RAIL IS DESCRIBED ON PAGE 46

SLIDERS without wipers



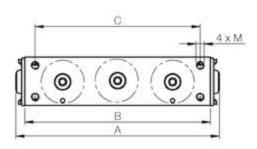


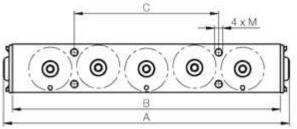
PAN40-3

PAN40-3T

PAN40-5

SLIDERS with wipers









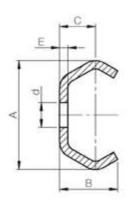
O. I.	T	Е	F	G	Н	S	ı	L	М	А	В	С	D	Weight	Dynamic		Lo	ad capac	ity	
Code	Туре	(mm)	(g)	coefficient C (N)	Co rad	Co ax	Mx (Nm)	My (Nm)	Mz (Nm)											
PAN40-3										-				430			000			
PAN40-3T	LAN40		-0						NAC	148	135	120		450	2720	2400	820	10	25	50
PAN40-5		39	28	21	13	5	6	35	M6	-			23	600	- 0					
PAN40-5T										208	195	105		620	3670	3240	1150	18	42	125
PAN40-3										-				430	.0					
PAN40-3T	LUN40	-0	-0			_			NAC	148	135	120		450	1850	1850	0	0	0	34
PAN40-5		38	28	21	13	5	6	35	M6	-			23	600	0.400	2.400				0.4
PAN40-5T										208	195	105		620	2460	2460	0	0	0	84

LAX RAILS

- The LAX rails with its PAX sliders and rollers are made entirely
 of stainless steel. They offer a simple and practical solution for
 all applications where high corrosion resistance is required,
 in particular for food industry, chemical, pharmaceutical and
 medical industries.
- For applications in severe marine environments is proposed the version with all parts electro polished (p-version) for extra high corrosion resistances. The product is easily washable for applications subject to frequent cleaning and do not release particles in the environment and is particularly indicated for cleanroom applications. They are available in two sizes: 26 and 40 mm.

FIXING HOLES

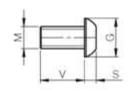
 Rails have fixing pitch 80mm for standard INOX Button-head screws ISO 7380.



SERIE LAX

Reference code	A (mm)	B (mm)	C (mm)	d (mm)	E (mm)	Screw type standard	WEIGHT (kg)
LAX 26	26	14	9,5	6,5	2,5	M5 (ISO 7380)	0,80
LAX 40	39,5	21	13	9	3	M8 (ISO 7380)	1,55



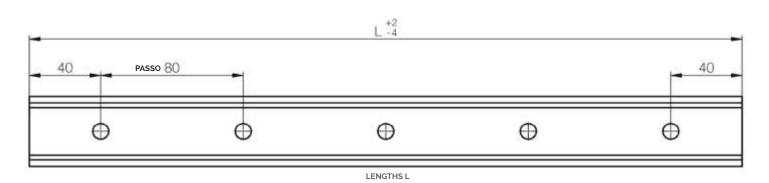


VITI INOX STANDARD ISO 7380

FIXING SCREW DIMENSIONS

Reference code	KIT CODE (100 pz)	Screw type	М	٧	G	S	Ch	Tightening torque
LAZ 26	KIT-40.VB-E.0510.ZB	M5X10 (ISO 7380)	M5	10	9,5	2,7	3	
LAZ 40	KIT-40.VB-E.0810.ZB	M8X10 (ISO 7380)	M8	10	14	4,3	5	

The screws are not supplied with rails, can be bought separately.



RAIL SIZE

DIMENSIONS From 160 mm to 2000 mm

												Length	L (mm)											
Rail codes	160	240	320	400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000
LAX 26	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LAX 40			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

DIMENSIONS From 2080 mm to 4000 mm

Available in stock

												Le	ngth L	mm)											
Rail codes	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
LAX 26	•	•	•	0	•		•	0	•	•	•	0	•	0	•	•	•	•	•		•	0	•	•	•
LAX 40	•	•	•	0	•	•	•	0	•	•	•	0	•	0	•	0	•	•	•		•	0	•	•	•

ORDER CODES	VERSION	CHARACTERISTICS
LAX40-1040	BASIC	Profiled rail, INOX AISI 304
LAX40-1040 -P	P	As base rail but with electro polished after cutting to size. Tested to 1000 hours in salty fog.

COST EFFECTIVE

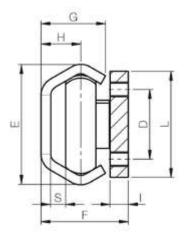




The sliders are composed of a stainless steel AISI 304 body and 3 stainless steel AISI 440 rollers without wipers. The version with wipers is available only for the size 40.



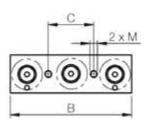




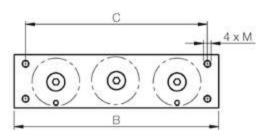
SLIDER WITH PAX26 RAIL

SLIDER WITH PAX40 RAIL

SLIDERS without wipers

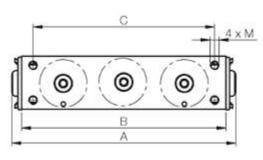


PAX26-3



PAX40-3

SLIDERS with wipers



PAX40-3T

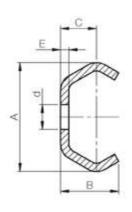


Code	Е	F	G	н	s	ı	L	М	А	В	С	D	Weight		Lo	ad capac	ity	
Code	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(g)	Co rad (N)	Co ax	Mx (Nm)	My (Nm)	Mz (Nm)
PAX26-3	26	22	14	9,5	3,7	4	20	M5	-	80	30	-	95	800	400	3	9	12
PAX40-3		-0.0-			_			140	-				430	1600	800	9	23	32
PAX40-3T	39,5	28,65	21	13	5	6	35	M6	148	135	120	23	450	1600	800	9	23	32

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LAZ RAILS

- The LAZ rails with its PAZ sliders are made of zinc plated steel, while the rollers are hardened bearing steel. They offer a simple and economical solution for a wide range applications, where high frequency is not required.
- The compact overall dimensions, internal protected raceways, the ease of assembly and the good ratio of load capacity /size make this product a winning choice compared to other self-built or available solutions on the market. The rails are available in two dimensions: 26 and 40 mm.

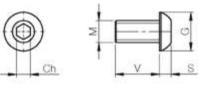


SERIE	LAZ
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Reference code	A (mm)	B (mm)	C (mm)	d (mm)	E (mm)	Screw type standard	WEIGHT (kg)
LAZ 26	26	14	9,5	6,5	2,5	M5 (ISO 7380)	0,80
LAZ 40	39,5	21	13	9	3	M8 (ISO 7380)	1,55

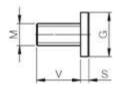
FIXING SCREW DIMENSIONS

Reference code	KIT CODE (100 pz)	Screw type	М	٧	G	S	Ch	Tightening torque
1.47.00	KIT-40.VB-E.0510.ZB	M5x10 (ISO 7380)	M5	10	9,5	2,7	3	9 Nm
LAZ 26	KIT-40.VC-SP01.0510.ZB	M ₅ ×10 (TORX)	M5	10	10	2	T25	10 Nm
	KIT-40.VB-E.0810.ZB	M8x10 (ISO 7380)	M8	10	14	4,3	5	20 Nm
LAZ 40	KIT-40.VC-SP01.0816.ZB	M8x16 (TORX)	M8	16	16	3	T40	20 Nm
	KIT-40.VC-SP01.0812.ZB	M8x12 (TORX)	M8	12	16	3	T40	20 Nm



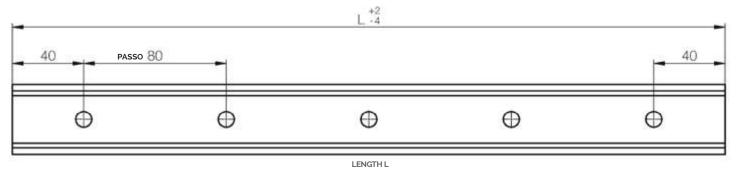
SCREWS STANDARD ISO 7380





SCREWS SPECIAL TRACE 40.VC-SP01.

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RAIL SIZE

DIMENSIONS From 160 mm to 2000 mm

												Length	L (mm)											
Rail codes	160	240	320	400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1760	1840	1920	2000
LAZ 26	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	0	•	•	•	•	•	•	•
LAZ 40			0	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	0	•	0	•

• Available in stock

DIMENSIONS From 2080 mm to 4000 mm

												Le	ngth L	mm)											
Rail codes	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
LAZ 26	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LAZ 40	•	•	•	0	•	0	•		•	•	•	0	•	•	•	0	•	0	•	0	•	0	•	•	•

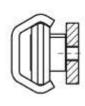
ORDER CODES	VERSION	CHARACTERISTICS
LAZ40-1040	BASIC	Rolled formed steel, zinc plated, with the rails ends with protective zinc-spray after cutting to size.

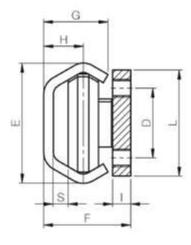


The sliders PAZ26 for the rail LAZ26 feature a zinc plated steel body with two fixing holes.

With the rail LAZ40 can be used the sliders PAN40-3 indicated also on page 41 that have a body with surface treatment T RACE e-coating 1.0 black color.



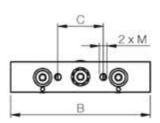




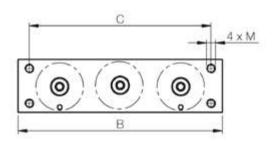
SLIDER WITH LAZ26 RAIL

SLIDER WITH LAZ40 RAIL

SLIDERS without wipers

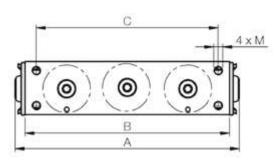


PAZ26-3



PAZ40-3

SLIDERS with wipers







O. d.	Е	F	G	Н	s	ı	L	М	A	В	С	D	Weight		Lo	ad capac	ity	
Code	(mm)	(g)	Co rad	Co ax	Mx (Nm)	My (Nm)	Mz (Nm)											
PAZ26-3	26	22	14	9,5	3.7	4	20	M5	-	80	30	-	95	800	400	3	9	12
PAZ40-3		-0			_	6		MC	-				430	1600	800	9	23	32
PAZ40-3T	39	28	21	13	5	6	35	M6	148	135	120	23	450	1600	800	9	23	32

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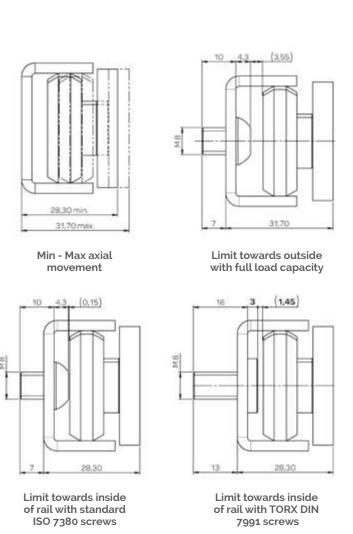
In two-slide linear motion systems, you can use one LAN40 rail with one LUN40 rail, with PAN40 sliders in both rails. This combination creates a self-aligning system capable of tolerating alignment errors of up to 3.4 mm.

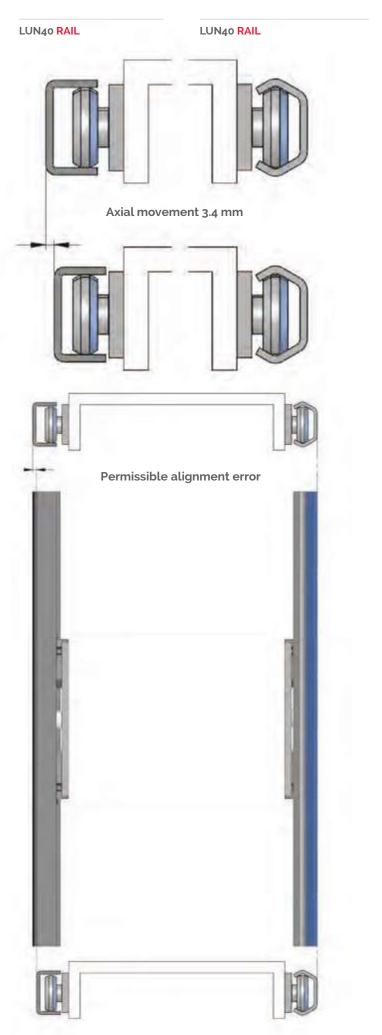
The sliders in the LAN40 guiding rail are rigidly connected, via the mobile element, to the sliders in the LUN40 floating rail on the other side. The LAN40 guiding rail ensures play-free linear motion (see the description of points of contact on page 5). The sliders in the LUN40 floating rail are therefore also play-free but able to move axially across the flat raceways. This system avoids overload on the sliders as the result of rail alignment error.

The limit of axial movement of PAN40 sliders towards the inside of LUN40 rails is determined by the size of the heads of the rail fixing screws (see figures below). In particular, T RACE's special flat head DIN 7991 screws permit approximately 1 mm of extra axial movement compared to standard ISO 7380 screws.

The limit of axial movement towards the outside of the LUN40 rail is determined by the point of departure of the roller from the raceway. The limit specified in the catalogue guarantees sufficient contact between rollers and raceway to support rated load.

Sliders in LUN40 rails offer less load capacity than the same sliders in LAN40 rails. (See the table on page 41).



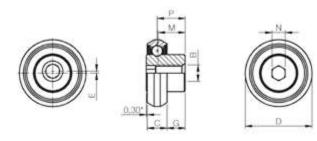


As an alternative to our standard 3 and 5-roller sliders, rollers for use with LAN and LUN rails can also be mounted on custom sliders or directly on the mobile element. In such cases, the number, arrangement and types of roller need to be chosen to match the requirements of the application. See page 30 for assembly and adjustment instructions.

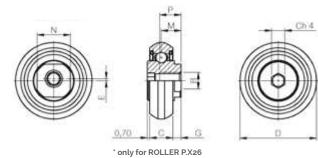
All our rollers are made from core tempered and precision ground bearing grade carbon steel. Rollers are of the single row ball bearing type, with the balls held in place by a metal cage. Precision ground surfaces ensure a smooth, silent rolling action.

Rollers are also fitted with 2Z rated metal shields to protect the ball bearings raceway and ensure good resistance to high temperatures. The ball bearing is lubricated for life with a wide temperature ranging lithium soap grease. The mounting axle is made in one piece with the inner bearing, for maximum strength. Rollers come in two types: eccentric and concentric.

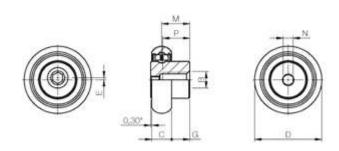
PEN and PCN series rollers for size 26 and 40 rails have a hexagonal recess for an Allen key in the side opposite the threaded fixing hole. This serves to hold the axle steady while the fixing screw is being tightened with a second Allen key. On eccentric rollers, it also serves to adjust roller position, so as to reach the desired preload setting. PEV and PCV rollers for size 30 rails have a special central square pivot accessible with a flat key, inserted between slider body and eccentric rollers. The flat key is supplied by TRACE.



									N (K	ey)			Dynamic	Load c	apacity *
Roller code	Туре	Rail type	E (mm)	D (mm)	C (mm)	M (mm)	G (mm)	P (mm)	Key	N (mm)	B (mm)	Weight (g)	load factor C (N)	Co _{rad}	Co _{ax} (N)
PCN26	concentric	1.0	-		_	0 -		0.0			14-		640	560	126
PEN26	eccentric	LA	0,6	20,2	6	8,5	5,5	8,2	4	4	M5	13	640	560	126
PCN40	concentric	1. 4	-										1360	1200	410
PEN40	eccentric	LA	0,7			- 0-					140		1360	1200	410
PCN40	concentric	LU -	-	31,5	10	9,65	4,65	10	5	5	M6	48	910	800	0
PEN40	eccentric	LU	0,7										910	800	0

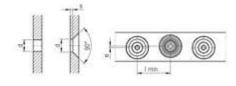


Roller	T	Е	D	С	М	G	Р	N (I	(ey)	В	Weight	Dynamic load	Load c	apacity
code	Туре	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Key	N (mm)	(mm)	(g)	factor C (N)	Co _{rad} (N)	Co _{ax} (N)
PCN30	concentric	-		_				Ц		N4-		2400	1000	250
PEN30	eccentric	0,6	23,15	/	О	2,5	6,5	KLM28	10	M5	20	2400	1000	250



Roller	_	Е	D	С	М	G	Р	N (I	(ey)	В	Weight	Dynamic load	Load c	apacity
code	Туре	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Key	N (mm)	(mm)	(g)	factor C (N)	Co _{rad} (N)	Co _{ax} (N)
PCX26	concentric	-			0 -		0 -					900	400	148
PEX26	eccentric	0,6	20,3	6	8,5	5,5	8,2	4	4	M5	13	900	40	148
PCX40	concentric	-			- 0-	. 0-				140		1800	800	296
PEX40	eccentric	0,7	31,5	10	9,65 4,65 1	10	5	5	M6	48	1800	800	296	

DRILLING OF ROLLER SUPPORTS



Roller type	d (mm) Diameter of fixing screw hole	s (mm) Length of hole	e (mm) Hole alignment error	I _{min} (mm) recommended centre to centre distance
26	5 O -0,1	1	0,2	22
30	5 O 5 -0,1	1	0,2	25
40	6 O -0,1	1,5	0,4	34