UHMW Guide Rails Shields

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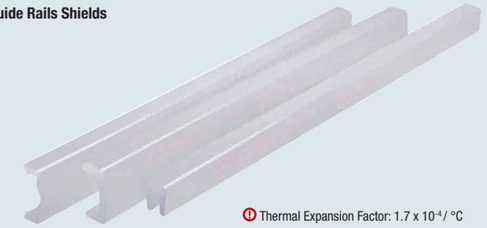


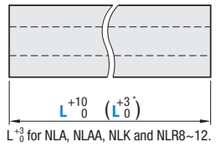
RoHS10

Thermal Expansion Factor: 1.7 x 10^{-4}/ °C

Standard Type

NLA
NLAA
NLK
NLR8, 10, 12
NLL3, 5
NLV3, 5, 6, 10

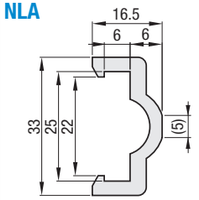
(See below for detailed dimensions)



L^{+3}_{0} for NLA, NLAA, NLK and NLR8~12.

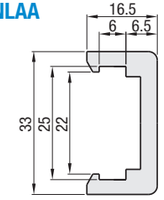
Antistatic properties may be reduced when wet. **Material:** UHMW

NLA



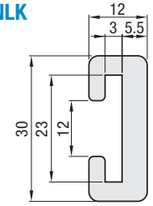
Matching Plate Dimension 25 x 6

NLAA



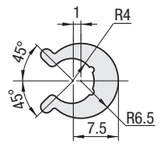
Matching Plate Dimension 25 x 6

NLK



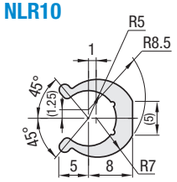
Matching Plate Dimension 22 x3

NLR8



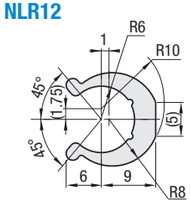
Matching Pole Dimension Ø8

NLR10



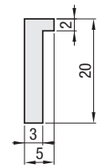
Matching Pole Dimension Ø10

NLR12

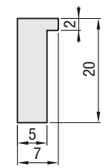


Matching Pole Dimension Ø12

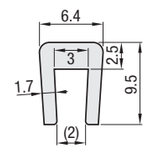
NLL3



NLL5

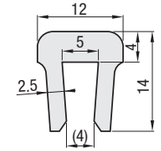


NLV3



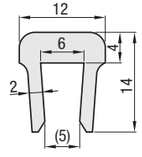
Matching Plate Thickness 3

NLV5



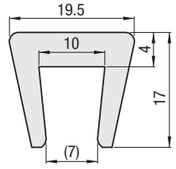
Matching Plate Thickness 5

NLV6



Matching Plate Thickness 6

NLV10



Matching Plate Thickness 10

Caution: NLL_, NLV_ are delivered in rolls and must be stretched before use.

Polymer Guide Rails should be installed by directly press fitting or by screws. When screws are to be used for mounting, take in consideration for the material's large thermal expansion coefficient.The supporting metal structure should fill end-to end.

Type	L 1 mm Increment
NLA	50–1800
NLAA	
NLK	
NLR8	
NLR10	
NLR12	
NLL3	50–9900
NLL5	
NLV3	
NLV5	
NLV6	
NLV10	

Part Number Example

Part Number	-	L
NLA	-	800

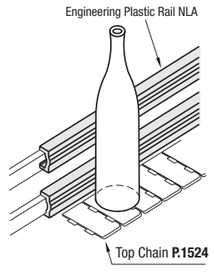
Characteristic Values

Item		Unit	Antistatic Type
Specific Gravity		—	0.94
Tensile Strength		MPa	30.3
Breaking Elongation		%	526.3
Compression Strength	5% deformed	MPa	18.2
	10% deformed	MPa	23.5
Compressive Elasticity Modulus		MPa	714.9
Bending Strength		MPa	21.0
Flexural Modulus		MPa	729.3
Izod Impact Strength	(Notched)	J/m	Does not break
Rockwell Hardness		R Scale	46.8
Deflection Temperature Under Load	4.6kgf/cm2	°C	119.4
	18.6kgf/cm2	°C	47.9
Linear Expansion Coefficient	-30–30	$\times 10^{-5}$/°C	14.2
Specific Volume Resistivity	500V	Ωcm	4.44 x 109
Heat Resistance Temperature		°C	80
Strong Acid Resistance		—	◎
Alkali Resistance		—	◎
Organic Solvent Resistance		—	◎

For Standard Type, see **P.1203**.

Not guaranteed values.

Application Example

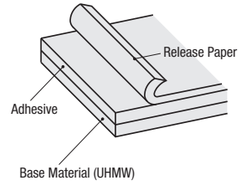


Slide Tapes / Strong Double-Sided Tapes / Guide Rails

Slide Tapes

RoHS10

NLTP



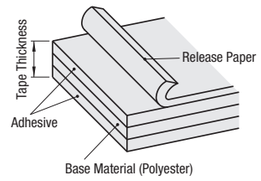
Heat Resistance Temperature -30–80°C Color: Milky White

Part Number	Base Material Thickness	Tape Width	Tape Length
NLTP 1320	0.13	20	40 m
NLTP 1330		30	
NLTP 1340		40	
NLTP 1350		50	
NLTP 5020	0.5	20	20 m
NLTP 5030		30	
NLTP 5040		40	
NLTP 5050		50	

Strong Double-Sided Tapes

RoHS10

RMT



Heat Resistance Temperature -40–70°C

Part Number	Tape Thickness	Tape Width	Tape Length
RMT3310	0.33	10	20 m
RMT3315		15	
RMT3320		20	
RMT3325		25	
RMT3330		30	
RMT3335		35	
RMT3340		40	

Part Number Example

Part Number
NLTP1320

Cautions On The Usage of Tapes

(1) Remove contamination including dust, grease and water.
(2) Some materials have low adherence properties.
(3) NLTP attached one or two days prior to assembly will have higher bonding strength.
(4) RMT bonds well to ultra high-molecular-weight polyethylene (UHMW).

Dynamic Coefficient of Friction (Reference Value)

	Dry	Water Lubricated
UHMW	0.07–0.22	0.05–0.10
Nylon 6	0.15–0.40	0.14–0.19
Nylon 66	0.15–0.40	0.14–0.19
Fluorine Resin	0.04–0.25	0.04–0.08
Polyacetal	0.15–0.35	0.10–0.20

Referential Adhesive Strength (NLTP) (Unit: N/20 mm Width)

Taped Subject	Base Material Thickness 0.13	Base Material Thickness 0.5
304 Stainless Steel	9.8	8.8
Polyvinyl Chloride Resin	18.6	18.6

Test Method: 180° Peeling Test Temperature 23°C Peeling Speed 300 mm/min

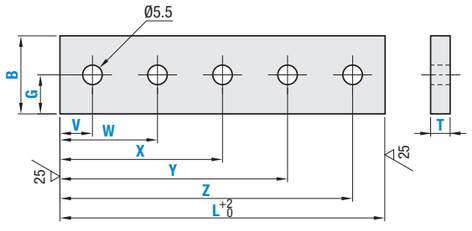
Referential Adhesive Strength (RMT)

Taped Subject	
304 Stainless Steel	21.6N

Guide Rails

RoHS10

Type	Material	Surface Treatment
SGL	1018 Carbon Steel or Equivalent	(Black)
SGLM		Electroless Nickel Plating



Part Number		B	T	L 1 mm Increment	G, V, W, X, Y, Z 0.5 mm Increment
Type	H (No. of Holes)				
SGL SGLM	N No Hole 2H 3H 4H 5H	22 25 32 38	3 5 6 10	50–1000	5–995

When selecting N, hole machining is not available.

Part Number Example

Part Number		-	B	-	T	-	L	-	G	-	V	-	W	-	X	-	Y	-	Z
Type	H (No. of Holes)																		
SGL	N	-	22	-	3	-	300												
SGLM	5H	-	25	-	5	-	800	-	G14	-	V15	-	W265	-	X480	-	Y600	-	Z785

Application Example