

UHMW Guide Rail Shields

Shaped Type

RoHS10

Standard Type
NLA
NLAA
NLK
NLR8, 10, 12
NLL3, 5
NLV3, 5, 6, 10 (See below for detailed dimensions.)

*NLA · NLAA · NLK · NLR8-12 ± 0.05

Material: UHMW

Thermal Expansion Coefficient: $1.7 \times 10^{-4}/^{\circ}\text{C}$

NLA (Matching Plate Dimension 25x6)	NLAA (Matching Plate Dimension 25x6)	NLK (Matching Plate Dimension 22x3)	NLR8 (Matching Rod Dimension Ø8)	NLR10 (Matching Rod Dimension Ø10)
NLR12 (Matching Rod Dimension Ø12)	NLL3 (Matching Plate Thickness 3)	NLL5 (Matching Plate Thickness 5)	NLV3 (Matching Plate Thickness 3)	NLV5 (Matching Plate Thickness 5)
NLV6 (Matching Plate Thickness 6)	NLV10 (Matching Plate Thickness 10)	Caution: NLL□, NLE□3 and 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 the material's large thermal expansion coefficient into consideration. The supporting metal structure should be filled end-to-end.		

Type	L 1mm Increment	Unit Price/m 1~20 pc(s).
NLA	50~1800	
NLAA		
NLK		
NLR8		
NLR10		
NLR12	50~9900	
NLL3		
NLL5		
NLV3		
NLV5		
NLV6		
NLV10		

For orders larger than indicated quantity, please check with WOS.

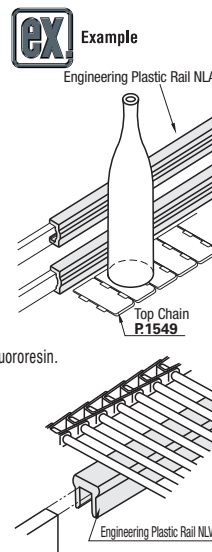
Ordering Example: Part Number - L
NLA - **800**

Features of UHMW

- Abrasion Resistance: Approx. 6x of Fluorinated Resin. Approx. 5x of Nylon Resin. Approx. 6x of Polyurethane. tribological property is the same as that of fluororesin. No. 20 of Health and Welfare Ministry.
- Self-lubricating
- Passed standard test

Characteristic Values (Reference Values)

Item	Unit	UHMWPE	Nylon 6	Fluororesin
Specific Gravity	-	0.94	1.08	2.2
Tensile Strength	MPa	44	64	25
Tensile Elongation	%	450	210	300
Hardness	Rockwell R Scale	40	95	32
Impact Strength	Izod Notch kJ/m	>137	13	16
Thermal Expansion Coefficient	$10^{-4}/^{\circ}\text{C}$	1.7	0.8	1.0
Heat Resistance Temperature	$^{\circ}\text{C}$	80	80~120	260~278
Moisture Absorption Ratio	%	<0.01	1.5	<0.01
Dielectric Constant	-	2.3	4.0	2.1
Breakdown Voltage	kV/mm	50	20	20
Strong Acid Resistance	-	○	×	○
Alkali Resistance	-	○	○	○
Organic Solvent Resistance	-	○	○	○



Slide Tapes / Strong Double-Sided Tapes / Guide Rails

Slide Tapes

NLTP

Base Material (Ultra High-Molecular-Weight Polyethylene)
 Heat Resistance Temperature: -30~80°C Color: Milky White

Part Number	Base Material Thickness	Tape Width	Tape Length	Unit Price 1~4 pc(s).	Volume Discount Rate
NLTP 1320	0.13	20	40m		
NLTP 1330		30			
NLTP 1340		40			
NLTP 1350	0.5	50	20m		
NLTP 5020		20			
NLTP 5030		30			
NLTP 5040		40			
NLTP 5050	50				

For orders larger than indicated quantity, please check with WOS.

Strong Double-Sided Tapes

RMT

Base Material (Polyester)
 Heat Resistance Temperature: -40~70°C

Part Number	Tape Thickness	Tape Width	Tape Length	Unit Price 1~4 pc(s).	Volume Discount Rate
RMT3310	0.33	10	20m		
RMT3315		15			
RMT3320		20			
RMT3325		25			
RMT3330		30			
RMT3335	35				
RMT3340	40				

For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number
NLTP1320

Dynamic Friction Coefficient (Reference Value)

	Dry	Water Lubricated
UHMWPE	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
Fluororesin	0.04~0.25	0.04~0.08
Polyacetal	0.15~0.35	0.10~0.20

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

Taped Subject	Base Material Thickness 0.13	Base Material Thickness 0.5	Referential Adhesive Strength (RMT)
EN 1.4301 Equiv.	9.8	8.8	21.6N
Polyvinyl Chloride Resin	18.6	18.6	

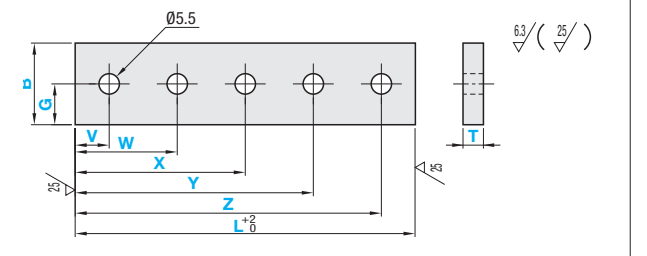
(Test Method) 180° Peeling Test: Temperature: 23°C, Peeling Speed: 300mm/min

- ### Cautions on the Usage of Tape
- Remove contamination including dust, grease and water.
 - Some materials have low adhesion properties.
 - NLTP attached 1 or 2 days prior to assembly will have higher bonding strength.
 - RMT bonds well to ultra high-molecular-weight polyethylene (UHMWPE).

Guide Rails

RoHS10

Type	M Material	S Surface Treatment
SGL	EN 1.0038	(Black)
SGLM	Equiv.	Electroless Nickel Plating



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

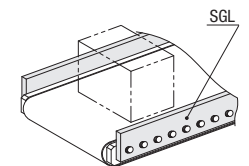
When N is selected, no hole will be machined.

Ordering Example: Part Number - B - T - L - G - V - W - X - Y - Z
SGL - **N** - **22** - **3** - **300**
SGLM - **5H** - **25** - **5** - **800** - **G14** - **V15** - **W265** - **X480** - **Y600** - **Z785**

N (Non-Hole Machined) Type Body Price (The body price of SGLM is calculated by adding the price in the table to the SGL price.)

Type	B	L 1mm Increment	Body Price				Body Price SGLM
			3	5	6	10	
SGL	22	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
SGL	25	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
SGL	32	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
SGL	38	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					

Ordering Example



Hole Machining Charge

With Hole Machining Type	Hole Machining Charge
2H	
3H	
4H	
5H	

The price of the Hole Machined Type is the body price plus the hole machining charge.

(Ex.) Part Number - B - T - L - G - V - W
SGL2H - **25** - **5** - **50** - **G13** - **V15** - **W35**

(Body Price) + (Hole Machining Charge) = Hole Machined Type Unit Price

Volume Discount Rate is not applicable to hole machining charge.