

KXL Limit Switch

A Versatile and Best-Selling Basic Limit Switch

- Designed for efficient one-side actuation at the operating head.
- Built with SUS304 stainless steel springs for superior durability.
- Features highly precise actuation angles for accurate control.
- Boasts a high protection rating of IP67 (dust-tight and water-resistant).
- Delivers high load capacity and low contact resistance. It ensures stable switching, excellent arc extinction, long service life, and top-tier safety.
- Equipped with solid silver contacts for reliable conductivity.

400-886-3633
www.kacon.net

KACON

Limit Switch

KXL Series

Part Number Description

KXL - ❶ ❷ ❸

❶ Head Type	301 : Push Plunger	706 : Ø50 Adjustable Roller Lever - Aluminum	
	302 : Roller Plunger	726 : Ø50 Adjustable Roller Lever - Rubber	
	303 : Ball Plunger	717 : Yoke Roller Lever	
	702 : Roller Lever	727 : Yoke Roller Lever	
	703 : Adjustable Roller Lever	737 : Yoke Roller Lever	
	713 : Adjustable Roller Short Lever	747 : Yoke Roller Lever	
	704 : Adjustable Rod Lever	901 : Spring Rod	
	705 : Ø50 Roller Lever -Aluminum	902 : Spring Wire	
	725 : Ø50 Roller Lever - Rubber	923 : Metal Spring Rod	
❷ Indicator Lamp	No mark : Standard(No Indicator)	D : LED Lamp (12 ~ 24VDC / AC)	A : Neon Lamp (100 ~ 240VAC)
❸ Material	No mark : Iron	S : Stainless steel/Copper	

General Specification

Contact Form		1N/O + 1N/C
Contact Material		Ag alloy
Rated Current		12A 250VAC resistance load
Insulation Resistance		Min. 100MΩ 500VDC Insulation resistance
Contact Resistance		Max. 15mΩ
Surge Current	NC Contacts	Max 30A
	NO Contacts	Max 20A
Internal Voltage	Between the terminals	1,000VAC 50/60Hz 1 Minute
	Between each terminal and non-charging parts	2,200VAC 50/60Hz 1 Minute
	Between Terminals and Ground	2,200VAC 50/60Hz 1 Minute
Life Cycle	Mechanical	Min. 10,000,000
	Electrical	Min. 1,000,000
On/Off Frequency	Mechanical	120 / Min.
	Electrical	30 / Min.
Operation Speed		1mm ~ 1m/sec
Vibration Resistance		10 ~ 55Hz Dual wave length 1.5mm
Shock Resistance	Malfunction	1,000m/s² Max. approx. 100G
	Destruction	300m/s² Max. approx. 30G
Degree Of Protection		IP67
Electric Shock Protection Class		Class I
Ambient Temperature		-10 ~ +80°C (with no icing)
Ambient Humidity		Max. 95%RH
Housing Material		Aluminum die-casting

Limit Switch

KXL Series

Performance And Specification

Rated Voltage	Non-Inductive				Inductive			
	Resistance Load		Lamp Load		Motor Load		Inductive Load	
	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	14A		3.5A	1.75A	8A	3.5A	14A	
250VAC	12A		3A	1.5A	5A	2.5A	12A	
500VAC	10A		2.5A	1.2A	2.5A	1.2A	10A	
30VDC	8A		6A		6A		8A	
125VDC	1A		0.3A		0.3A		1A	
250VDC	0.5A		0.2A		0.2A		0.5A	

Contact Block

KXL-104

12A big capacity built-in switch



Indication Lamp Name Plate

KXL-102

12 ~ 24VAC/DC LED Lamp



KXL-103

100 ~ 240VAC NEON Lamp



Product Type

KXL-301



KXL-302



KXL-303



KXL-702



KXL-703



KXL-713



KXL-704



KXL-705



KXL-725



KXL-706



KXL-726



KXL-717
KXL-737
KXL-727
KXL-747



KXL-901



KXL-923



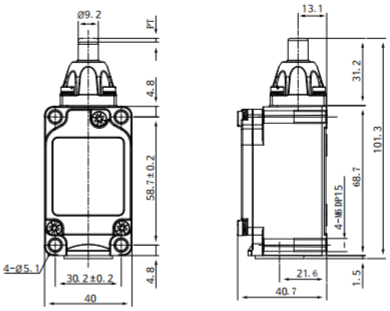
KXL-902



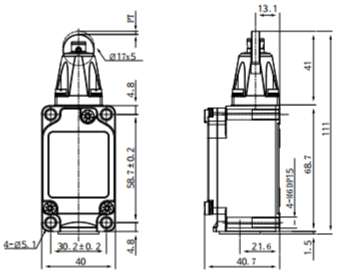
Limit Switch

KXL Series

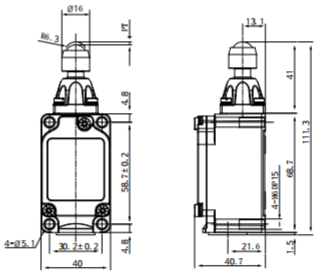
Product Selection

	Indicator Lamp	Part Number	Dimension
 Push Plunger	Standard	KXL - 301	
	LED Lamp	KXL - 301D	
	Neon Lamp	KXL - 301A	

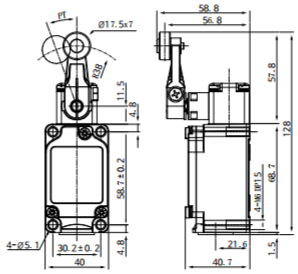
Operating Force(Max)	OF	2720gf(26.67N)
Return Force(Min)	RF	910gf(8.92N)
Pre-travel(Max)	PT	1.7mm
Over-travel(Min)	OT	6.4mm
Movement Differential(Max)	MD	1mm
Operating Position	OP	34±0.8mm
Total Travel Position	TTP	29.5mm

	Indicator Lamp	Part Number	Dimension
 Roller Plunger	Standard	KXL - 302	
	LED Lamp	KXL - 302D	
	Neon Lamp	KXL - 302A	

Operating Force(Max)	OF	2720gf(26.67N)
Return Force(Min)	RF	910gf(8.92N)
Pre-travel(Max)	PT	1.7mm
Over-travel(Min)	OT	5.6mm
Movement Differential(Max)	MD	1mm
Operating Position	OP	44±0.8mm
Total Travel Position	TTP	39.5mm

	Indicator Lamp	Part Number	Dimension
 Ball Plunger	Standard	KXL - 303	
	LED Lamp	KXL - 303D	
	Neon Lamp	KXL - 303A	

Operating Force(Max)	OF	2720gf(26.67N)
Return Force(Min)	RF	910gf(8.92N)
Pre-travel(Max)	PT	1.7mm
Over-travel(Min)	OT	4mm
Movement Differential(Max)	MD	1mm
Operating Position	OP	44. 5±0.8mm
Total Travel Position	TTP	41mm

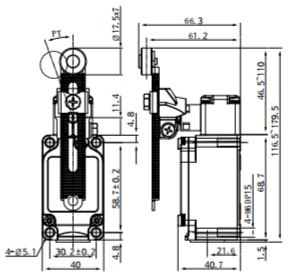
	Indicator Lamp	Part Number	Dimension
 Roller Lever	Standard	KXL - 702	
	LED Lamp	KXL - 702D	
	Neon Lamp	KXL - 702A	

Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

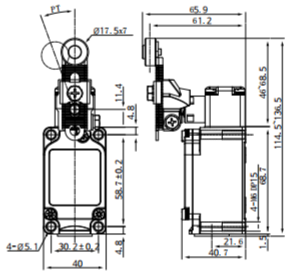
Limit Switch

KXL Series

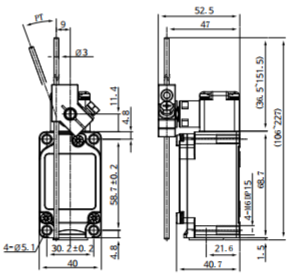
Product Selection

	Indicator Lamp	Part Number	Dimension
 Adjustable Roller Lever Lever - SUS	Standard	KXL - 703	
	LED Lamp	KXL - 703D	
	Neon Lamp	KXL - 703A	

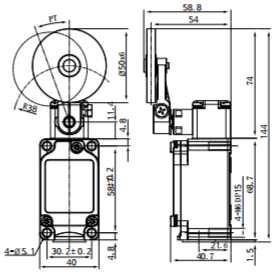
Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

	Indicator Lamp	Part Number	Dimension
 Adjustable Roller Short Lever Lever - SUS	Standard	KXL - 713	
	LED Lamp	KXL - 713D	
	Neon Lamp	KXL - 713A	

Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

	Indicator Lamp	Part Number	Dimension
 Adjustable Rod Lever Lever - SUS	Standard	KXL - 704	
	LED Lamp	KXL - 704D	
	Neon Lamp	KXL - 704A	

Operating Force(Max)	OF	142gf(1.44N)
Return Force(Min)	RF	28gf(0.27N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

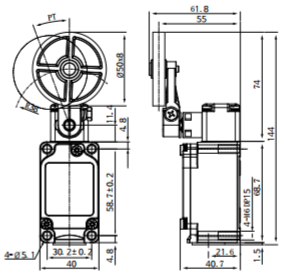
	Indicator Lamp	Part Number	Dimension
 Ø50 Roller Roller - Aluminum	Standard	KXL - 705	
	LED Lamp	KXL - 705D	
	Neon Lamp	KXL - 705A	

Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

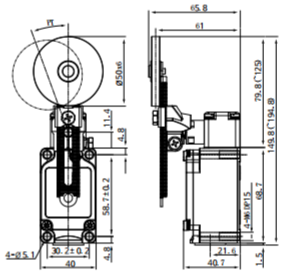
Limit Switch

KXL Series

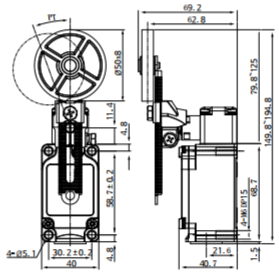
Product Selection

	Indicator Lamp	Part Number	Dimension
 Ø50 Roller Roller - Rubber	Standard	KXL - 725	
	LED Lamp	KXL - 725D	
	Neon Lamp	KXL - 725A	

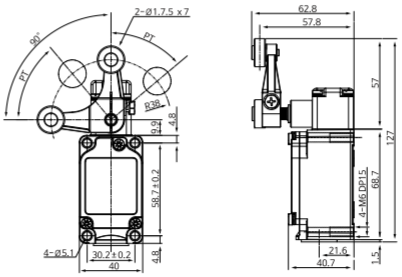
Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

	Indicator Lamp	Part Number	Dimension
 Ø50 Adjustable Roller Roller - Aluminum Lever - SUS	Standard	KXL - 706	
	LED Lamp	KXL - 706D	
	Neon Lamp	KXL - 706A	

Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

	Indicator Lamp	Part Number	Dimension
 Ø50 Adjustable Roller Roller - Rubber Lever - SUS	Standard	KXL - 726	
	LED Lamp	KXL - 726D	
	Neon Lamp	KXL - 726A	

Operating Force(Max)	OF	1360gf(13.34N)
Return Force(Min)	RF	227gf(2.23N)
Pre-travel(Max)	PT	25±5°
Over-travel(Min)	OT	50°
Movement Differential(Max)	MD	23°
Total Travel	TT	85°

	Indicator Lamp	Part Number	Dimension
 York Roller Lever	Standard	KXL - 717	
	LED Lamp	KXL - 717D	
	Neon Lamp	KXL - 717A	

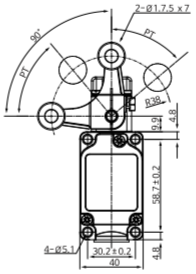
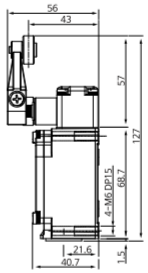
Operating Force(Max)	OF	1200gf(11.8N)
Pre-travel(Max)	PT	50±5°
Over-travel(Min)	OT	35°



Limit Switch

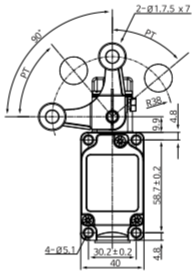
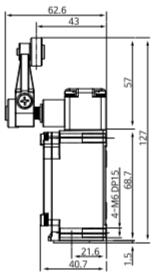
KXL Series

Product Selection

	Indicator Lamp	Part Number	Dimension
 York Roller Lever	Standard	KXL - 727	 
	LED Lamp	KXL - 727D	
	Neon Lamp	KXL - 727A	

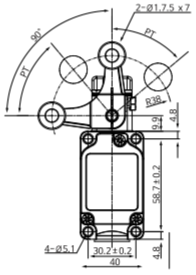
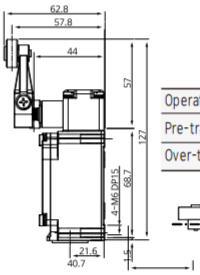
Operating Force(Max)	OF	1200gf(11.8N)
Pre-travel(Max)	PT	50±5°
Over-travel(Min)	OT	35°



	Indicator Lamp	Part Number	Dimension
 York Roller Lever	Standard	KXL - 737	 
	LED Lamp	KXL - 737D	
	Neon Lamp	KXL - 737A	

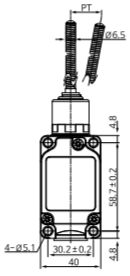
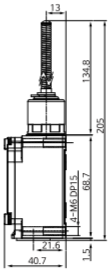
Operating Force(Max)	OF	1200gf(11.8N)
Pre-travel(Max)	PT	50±5°
Over-travel(Min)	OT	35°



	Indicator Lamp	Part Number	Dimension
 York Roller Lever	Standard	KXL - 747	 
	LED Lamp	KXL - 747D	
	Neon Lamp	KXL - 747A	

Operating Force(Max)	OF	1200gf(11.8N)
Pre-travel(Max)	PT	50±5°
Over-travel(Min)	OT	35°



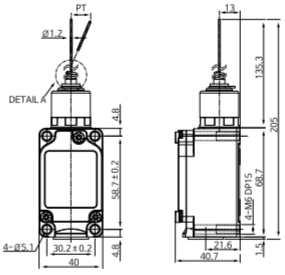
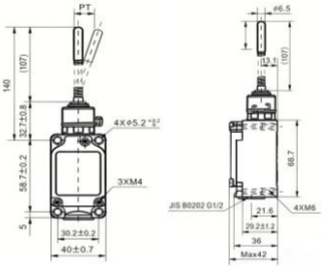
	Indicator Lamp	Part Number	Dimension
 Spring Rod Lever - SUS	Standard	KXL - 901	 
	LED Lamp	KXL - 901D	
	Neon Lamp	KXL - 901A	

Operating Force(Max)	OF	150gf(1.47N)
Pre-travel(Max)	PT	20±10°

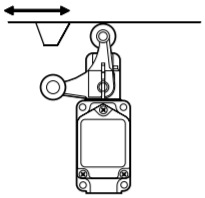
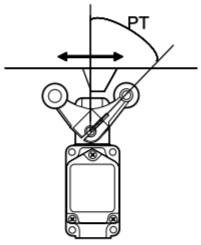
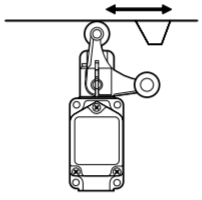
Limit Switch

KXL Series

Product Selection

	Indicator Lamp	Part Number	Dimension
 Spring Wire Lever - SUS	Standard	KXL - 902	
	LED Lamp	KXL - 902D	
	Neon Lamp	KXL - 902A	
 Metal Spring Rod	Standard	KXL - 923	
	LED Lamp	KXL - 923D	
	Neon Lamp	KXL - 923A	

The Operation Of The Built - In Switch In A Accordance With The Movement Of The York

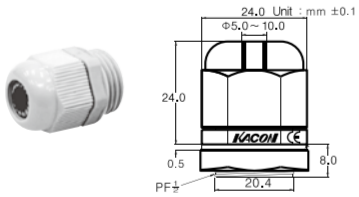
NC current application	NO current application	NO current application
		

Limit Switch

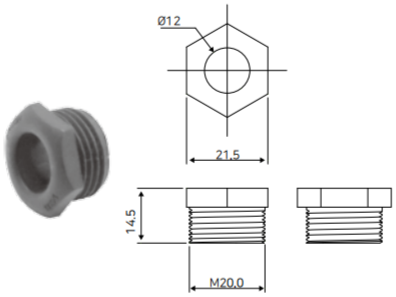
KXL Series

Basic Accessories

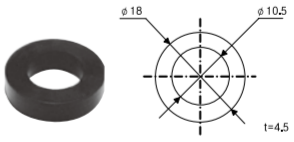
PG 13.5A



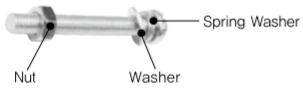
PG(Black)



Rubber Packing



Front mounting bolt



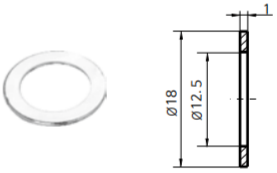
[M5X40mm X 4ea]

Rear mounting bolt



[M6X14mm X 4ea]

Washer

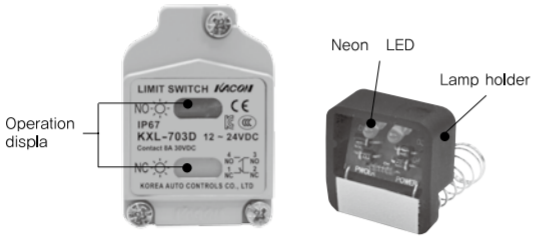


Rubber Packing

Item / Indicator Lamp	Rated Voltage	Rated Current	Order code
Neon lamp	100 ~ 240VAC	0.6 ~ 2mA	AC Load : KXL - □ A
LED lamp	12 ~ 24VAC/DC	Approx. 1mA	DC Load : KXL - □ D

- There are two types of lamps: Neon and LED lamps.
- The circuit check and fault detection are easy because the switch operation status is easily checked outside.
- The user can change the mode of operation status indication by changing the lamp holder mounting direction by 180°(up or down) inside the indicator lamp cover.
- Additional wiring is not required for the lamp terminals because the spring attached to the indicator lamp cover comes in contact with the terminal screw of the built-in switch.

Operation Indicator Lamp Direction Shift



- The LED type does not require the change of polarity because it has a built-in rectifier.
- The indicator lamp cover is formed by coating transparent resin on the Al die casting material, and can be used in the place with cutting oil. In addition, the operation status (ON in operation or non-operation) can be checked outside.
- This is ideal for the places where checking the passage of products is difficult on the conveyor line.

ON in operation



- The factory setting is"ON in operation".

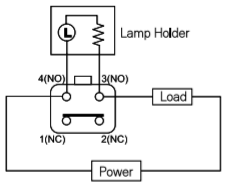
ON in non-operation



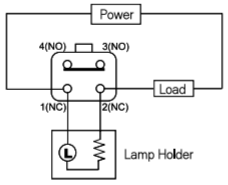
- For the use with ON in non-operation, shift the LED downward as in the figure.

Indication Lamp Wiring And Circuit Diagram

Internal Wiring Diagram



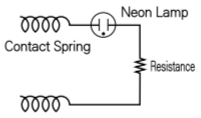
Lights on when in non-operation
[Lamp ON when NC ON]



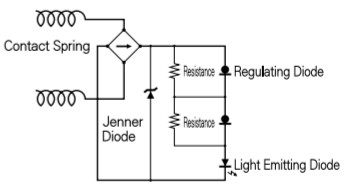
Lights on when in operation
[Lamp ON when NO ON]

Internal Circuit Drawing

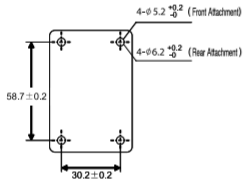
Neon Lamp

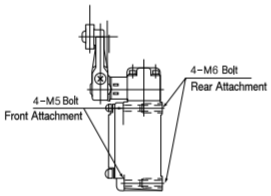


LED Lamp



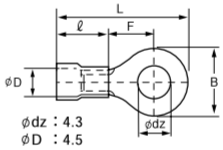
Mounting





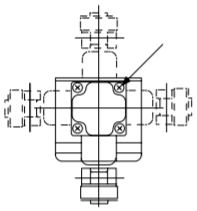
Fastening bolt is shipped
together with the product.

Pressurized Terminal In Use

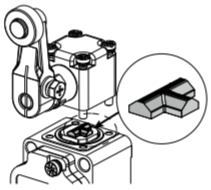


ϕdz : 4.3
ϕD : 4.5
B : 8.5
L : 21.0
F : 7.8
ℓ : 9.0 (mm)

How To Change The Attached Direction Of The Head Part

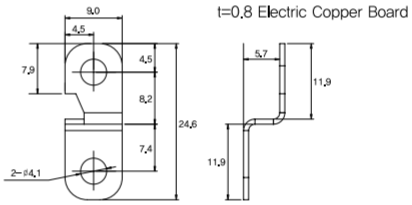


The head position can be changed
in four directions by loosening four bolts.



The arrowed internal parts must
rotate in the same direction as the head part
rotation.

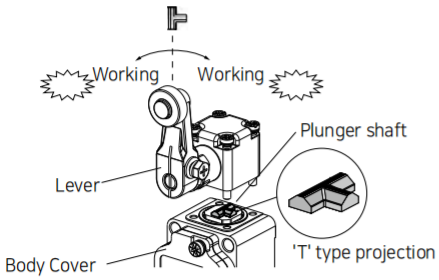
Short Bar, Available On Separate Orders



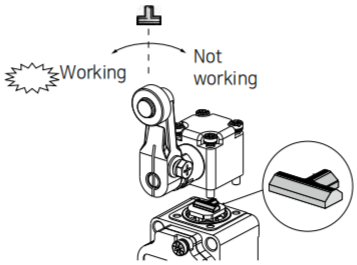
If the shorting terminal is used as in the figure, the switch can be
the single pole double throw type.

Selection of contact behavior by adjusting the direction of engagement of the internal plunger shaft

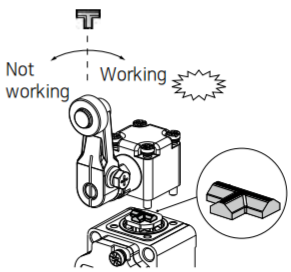
※ Applicable models: KXL-702, KXL-703, KXL-713, KXL-704, KXL-705, KXL-725, KXL-706, KXL-726
Pull out the plunger shaft according to the direction of the desired contact lever lever rotation, change the direction of the 'T' projection on the upper part of the plunger, and combine it.
Note) This example is for when the lever is on the same side as the main cover. When the lever is on the other side, align the plunger engagement direction with the lever.



All function behavior
(Factory default setting)



Contact operation only when the lever is turned to
the left



Contact operation only when the lever is rotated
to the right