









Your Pride Partner KG AUTO


LIMIT Series



▶ 종류별 형식구분 (Classification)

형명 (Name composition)	분류명 (Division name)	형태 (Form)	본 체 (Body)
KG-L001(일반형/Normal type) KG-L101(d.c Lamp type) KG-L201(a.c Lamp type)	가변 롤러레바형 (Variable roller lever)		 일반형 (Normal type)
KG-L002(일반형/Normal type) KG-L102(d.c Lamp type) KG-L202(a.c Lamp type)	가변 로드레바형 (Variable rod lever)		
KG-L003(일반형/Normal type) KG-L103(d.c Lamp type) KG-L203(a.c Lamp type)	롤러레바형 (Roller lever)		
KG-L004(일반형/Normal type) KG-L104(d.c Lamp type) KG-L204(a.c Lamp type)	롤러 프란자형 (Roller plunger)		
KG-L005(일반형/Normal type) KG-L105(d.c Lamp type) KG-L205(a.c Lamp type)	볼 프란자형 (Ball plunger)		
KG-L006(일반형/Normal type) KG-L106(d.c Lamp type) KG-L206(a.c Lamp type)	푸쉬 프란자형 (Push plunger)		
KG-L007(일반형/Normal type) KG-L107(d.c Lamp type) KG-L207(a.c Lamp type)	스프링 와이어형 (Spring wire)		

▶ 특징 (Features)

1. 알루미늄 다이캐스팅의 견고한 케이스로 되어 있어 외부의 충격에 긴 수명을 유지합니다.
(Limit switch becomes to make the aluminum die-casting in the case which is strong it maintains a long life in shick outside)
2. 내장 스위치는 2단 쌍단 기본 스위치로 구성되어 있으며, 강한 페놀 재질로 되어 있습니다.
(Inner switch is composed of 2 stage, it makes with strong quality of material)
3. 내열, 내유 및 방진의 견고한 구조이며 특히 기계적 강도가 우수한 재질을 사용하였습니다.
(Heat-proof, oil-proof, dust-proof structure)
4. 보호구조 : IP 67
5. SH02210-7001 

▶ 용도 (Use)

1. 각종 기계의 위치 결정(Location decision of various machine)
2. 하역 운반 기계의 통과 확인 및 방향제어
(Passage confirmation and directional control of cargo work transpotation machine)
3. 기타 일반 산업용기계(The other general industial machine)

▶ 성능 (Performance)

항목(List)	종류(Items)	리미트 스위치(Limit switch)
정격용량(Rating)		6A 250V AC
허용조작속도(max operating speed)		0.1~1m/s
개폐빈도 (Operating cycles)	전기적(Electrical)	120회/분(120cycles/m)
	기계적(Mechanical)	20회/분(20cycles/m)
절연저항(Insulating resistance)		100MΩ이상(d.c500V 메가)(Min 100MΩ)
접촉저항(Contact resistance)		50MΩ이하(Max 50MΩ)
내전압 (Dielectric strength)	충전부간(Between live part)	1,500V AC/1분간 50~60Hz(50~60Hz 1min)
	비충전부간(Between non-live part)	1,500V AC/1분간 50~60Hz(50~60Hz 1min)
진동(Vibration protection)	오동작(Non-action)	10~55Hz, 복진폭 1.5mm(스프링 와이어형 제외)
충격 (Shoke protection)	내구(Invasion)	약 1,000%이상(1,000% Min)
	오동작(Non-action)	약 300%이상(300% Min)
수명 (Life time)	전기적(Electrical)	100만회 이상(1mil Min)
	기계적(Mechanical)	50만회 이상(0.5mil Min)
사용주요온도/습도(Ambient temperature/humidity)		-10~+70℃/95% RH이하(20℃에서)

▶ CE 인증 (Quotation)



▶ 전기용품 안전인증 (Quotation of KTL)



▶ **형명구성 (Name composition)**

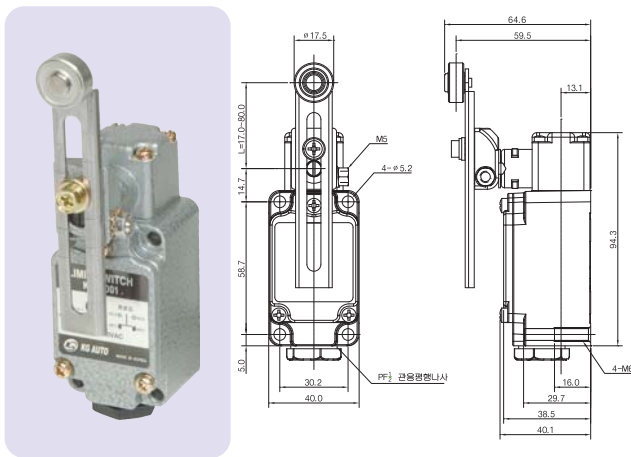
KG-L □ □ □

- 1. 기본형명(리미트스위치)
Basic name(Limit switch)
- 2. 동작표시방식 (Indication from)
00 : 기본형 (Normal type)
10 : 램프부착형 (d.c 24V) Lamp type
20 : 램프부착형 (a.c 110V/250V) Lamp type
- 3. 동작특성 (Operation form)
 - 1 : 가변롤러레바형 (Variabl roller lever)
 - 2 : 가변로드레바형 (Variable rod lever)
 - 3 : 롤러레바형 (Roller lever)
 - 4 : 롤러프란자형 (Roller plunger)
 - 5 : 볼프란자형 (Ball plunger)
 - 6 : 푸쉬프란자형 (Push plunger)
 - 7 : 스프링와이어형 (Spring wire)

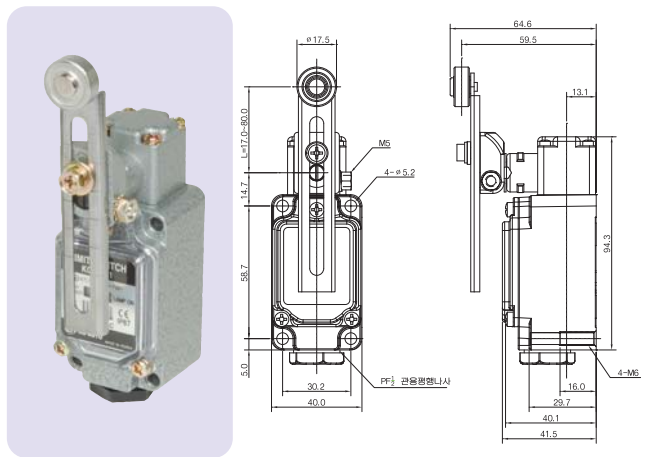
● **외형 치수 및 동작 특성 (External form/ Drawing)**

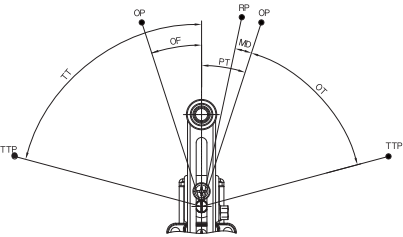
가변롤러 레바형 (Variable roller lever)

▶ KG-L001



▶ KG-L201



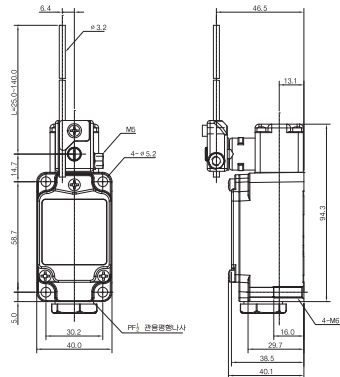


동작에 필요한 힘, OF (Operating Force)	최대(Min)14N(1428gf)
복귀 되는 힘, RF (Release Force)	최소(Min)2.1N(214gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)15° ±5°
동작후의 움직임, OT (Overtravel)	최대(Min)30°
응차의 움직임,MD (Movement Differential)	최대(Min)12°
전체의 움직임, TT (Totaltravel)	최대(Min)40°

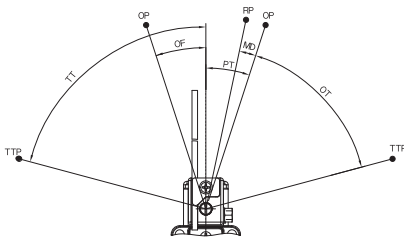
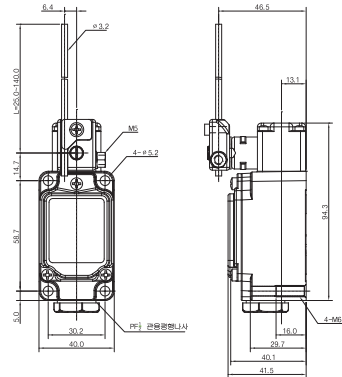
● 외형 치수 및 동작 특성 (External form/ Drawing)

가변로드 레바형 (Variable rod lever)

▶KG-L002



▶KG-L202

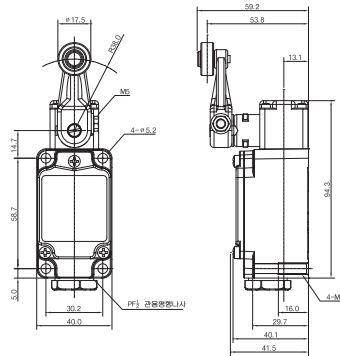


동작에 필요한 힘, OF (Operating Force)	최대(Min)14N(153gf)
복귀 되는 힘, RF (Release Force)	최소(Min)2.1N(25gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)15° ±5°
동작후의 움직임, OT (Overtravel)	최대(Min)30°
응차의 움직임, MD (Movement Differential)	최대(Min)12°
전체의 움직임, TT (Totaltravel)	최대(Min)40°

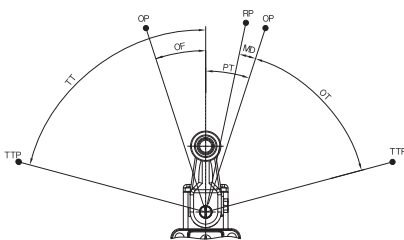
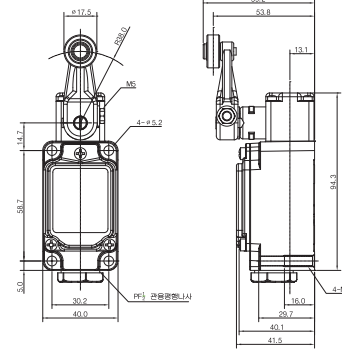
● 외형 치수 및 동작 특성 (External form/Drawing)

롤러 레바형 (Roller lever)

▶KG-L003



▶KG-L203



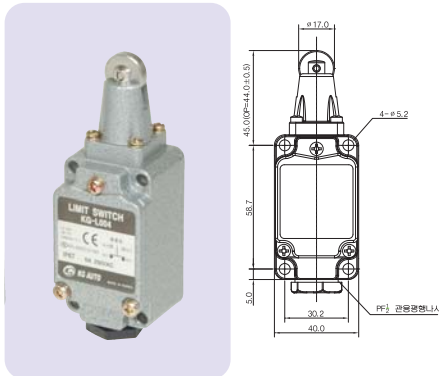
동작에 필요한 힘, OF (Operating Force)	최대(Min)14N(1428gf)
복귀 되는 힘, RF (Release Force)	최소(Min)2.1N(214gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)15° ±5°
동작후의 움직임, OT (Overtravel)	최대(Min)30°
응차의 움직임, MD (Movement Differential)	최대(Min)12°
전체의 움직임, TT (Totaltravel)	최대(Min)40°

프리미엄리미트

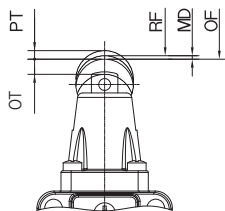
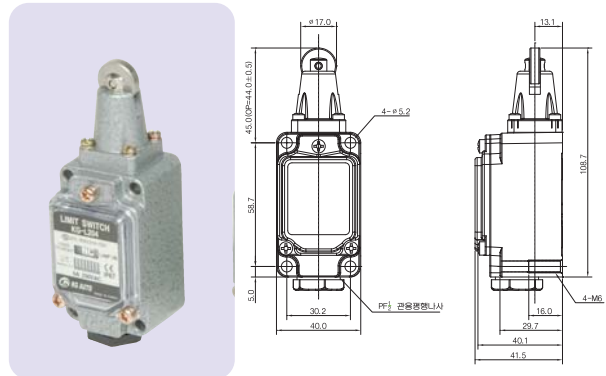
● 외형 치수 및 동작 특성 (External form/ Drawing)

롤러 프란자형 (Roller plunger)

▶KG-L004



▶KG-L204

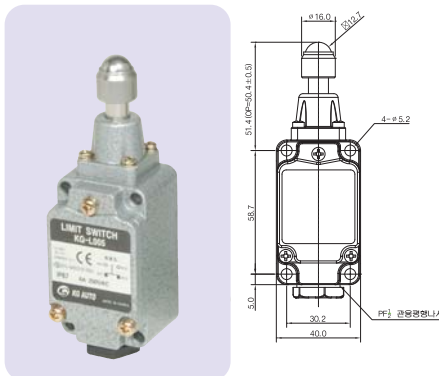


동작에 필요한 힘, OF (Operating Force)	최대(Min)28N(2857gf)
복귀 되는 힘, RF (Release Force)	최소(Min)8N(816gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)2.0mm
동작후의 움직임, OT (Overtravel)	최대(Min)4mm
응차의 움직임,MD (Movement Differential)	최대(Min)1.0mm

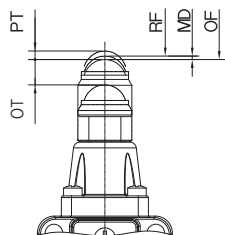
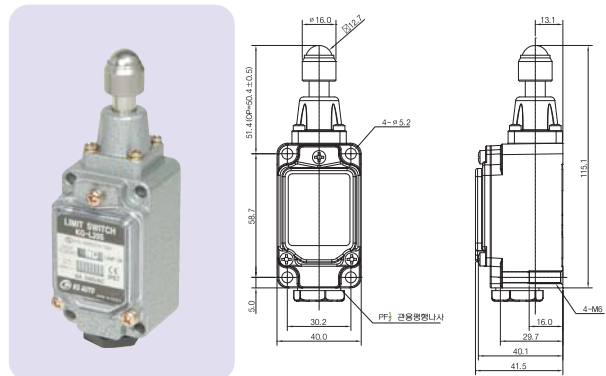
● 외형 치수 및 동작 특성 (External form/ Drawing)

볼 프란자형 (Ball plunger)

▶KG-L005



▶KG-L205

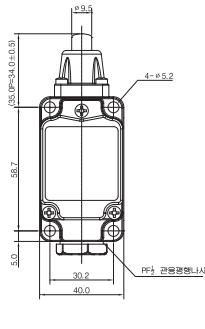


동작에 필요한 힘, OF (Operating Force)	최대(Min)28N(2857gf)
복귀 되는 힘, RF (Release Force)	최소(Min)8N(816gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)2.0mm
동작후의 움직임, OT (Overtravel)	최대(Min)4mm
응차의 움직임,MD (Movement Differential)	최대(Min)1.0mm

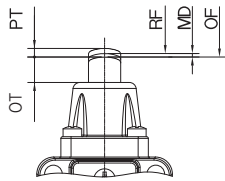
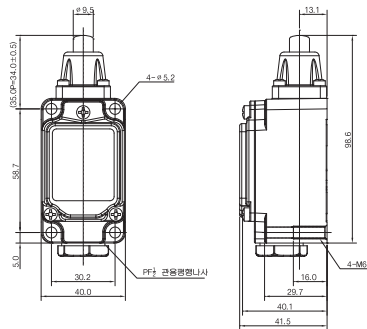
● 외형 치수 및 동작 특성 (External form/Drawing)

푸쉬 프란저형 (Push plunger)

▶KG-L006



▶KG-L206

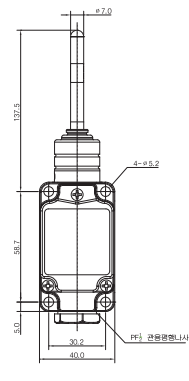


동작에 필요한 힘, OF (Operating Force)	최대(Min)28N(2857gf)
복귀 되는 힘, RF (Release Force)	최소(Min)8N(816gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)2.0mm
동작후의 움직임, OT (Overtravel)	최대(Min)4mm
응차의 움직임,MD (Movement Differential)	최대(Min)1.0mm

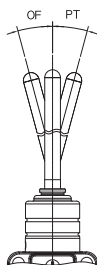
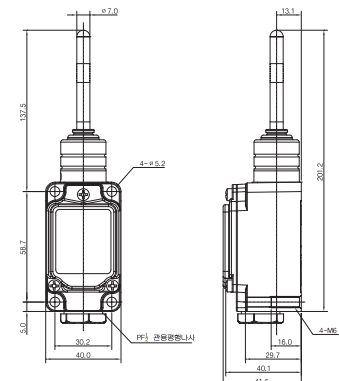
● 외형 치수 및 동작 특성 (External form/Drawing)

스프링 와이어형 (Spring wire)

▶KG-L007



▶KG-L207



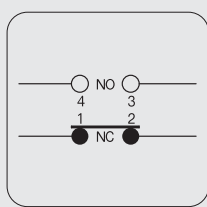
동작에 필요한 힘, OF (Operating Force)	최대(Min)1.5N(153gf)
동작까지의 움직임, PT (Pretravel)	최대(Min)20° ±10mm

● 내장 스위치 및 접점 회로도 (Inner switch & circuit diagrams)

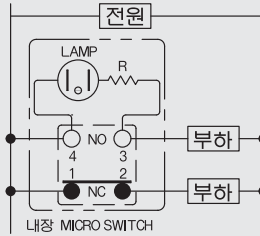
▶KG-LS100



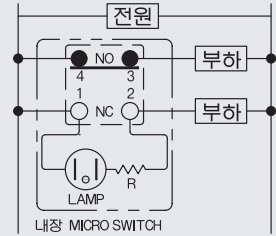
▶기본형



▶NC일때 Lamp ON

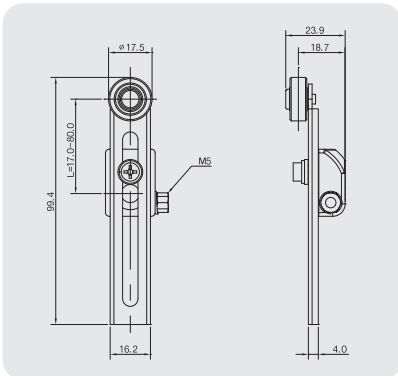


▶NO일때 Lamp ON

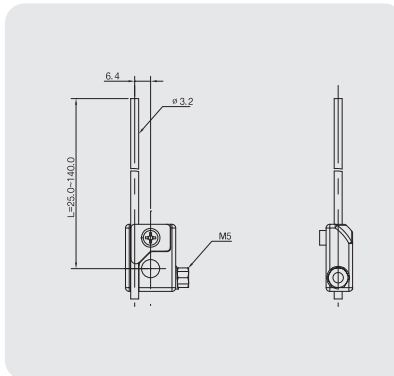


● 레버 외형 치수 (External form of Lever)

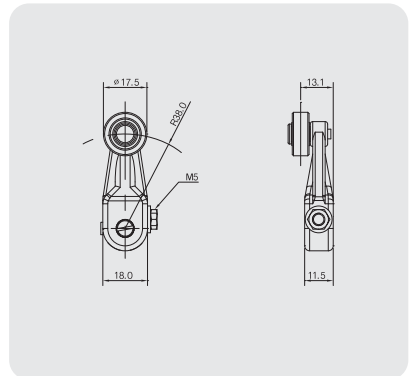
▶KG-LE100



▶KG-LE200



▶KG-LE300



● 주의사항 (Attention handling)

- 스위치의 액추에이터에 무리한 힘이나 충격을 받지 않도록 조작체(cam, dog)에 신경써 주십시오.
(In order not to receive a force or the shock which is unreasonable in the switch actuator, preiosity in the fabrication body)
- 조작체(cam, dog)가 불안정 할 경우 동작 및 기계적 수명이 단축될 수 있습니다.
(In case of cam, dog unsettled operation or machine life will be decrease. Also ecomes the cause defective occurrence)
- 설치시 아래 그림을 참고하여 설치 하여 주십시오.
(When working, to refer to the lower part picture)

나쁜예 (Bad ex)

좋은예 (Good ex)

나쁜예 (Bad ex)

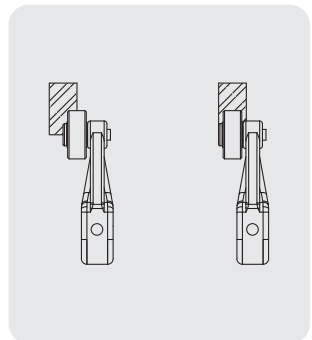
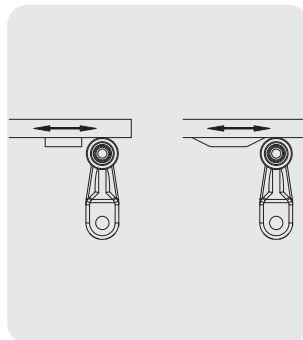
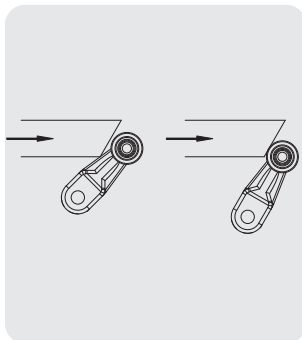
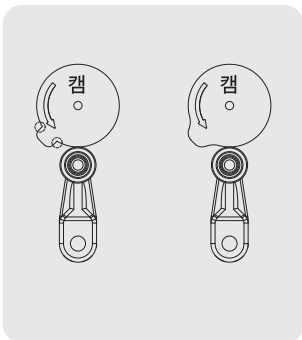
좋은예 (Good ex)

나쁜예 (Bad ex)

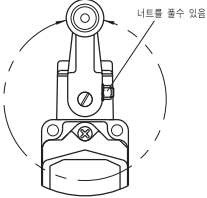
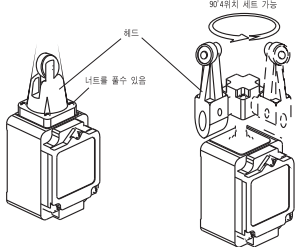
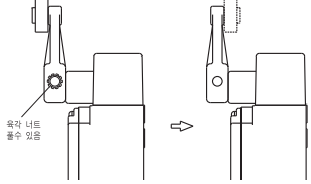
좋은예 (Good ex)

나쁜예 (Bad ex)

좋은예 (Good ex)



● 올바른 사용방법 (User guide)

모델명 (Name)	항목 (Explanation)	해설 (Figure caption)
KG-L001 KG-L002 KG-L003	액추에이터의 부착 위치가 가변됩니다. (Actuator attachment location changes) 액추에이터 레버의 육각홀 조임 볼트를 풀고 액추에이 터 위치를 360° 어느 위치로도 세트할 수 있습니다. (There is a possibility of setting actuator with 360° omnidirectionals)	
KG-L001 KG-L002 KG-L003 KG-L004	헤드의 방향이 가변됩니다. (Head location changes) 헤드의 나사를 풀면 4방향 어느 위치로도 세트할 수 있습니다. (Will release screw of the head and there is a possibility which will set even in four kind of location)	
KG-L003	롤러 레버를 역으로 부착 함으로써 롤러를 내측에 부착할 수 있습니다. (Attaches roller lever in opposition and the roller will be able to attach in internal) 수직으로 60°의 범위내에서 동작이 완료 되도록 설정하여 주십시오. (In order for to perpendicular the operation to be completed from within scope of 60° to be set)	
KG-L001 KG-L002	로드 및 레버의 길이를 조절 할 수 있습니다. (Will be able to control rod and lever length) 육각 볼트를 풀어 레버 및 로드의 길이를 조절할 수 있습니다. (Will release a six-angle bolt and will be able to control rod and lever length)	