

Accessories for plastic bodied limit switches

Fixing support



For type

I 88

Bi

ENK

Part number**319.1871.157****319.1871.158****319.1871.154**

Stock status: Ex stock / Built to order

-/●

-/●

-/●

Finger protection



For type

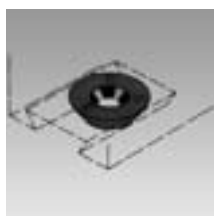
I 88, Bi, ENK

Part number**359.5900.060**

Stock status: Ex stock / Built to order

●/-

Guide disc



For type

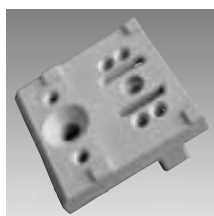
I 88

Part number**351.5900.209**

Stock status: Ex stock / Built to order

●/-

Subplate for switch cabinet



For type

I 88

Part number**359.5900.087**

Stock status: Ex stock / Built to order

●/-

Actuator selection table

Actuator	Code	Seal iw = internally w = externally	Plastic bodied					Metal bodied			
			COMBI Page 10	TINY Page 14	I 88 Page 19	BIGGY Page 25	ENK Page 28	GC I Page 32	SN 2 Page 38	ENM 2 Page 42	D I Page 46
Plunger	-	iw	-	-	-	-	●	-	-	-	-
	-	w	-	●	●	●	-	-	-	-	-
	-	IP 30	●	-	-	-	-	-	-	-	-
	-	IP 43	-	-	-	-	-	-	-	-	○
Roller ball	KU	iw	-	-	-	-	-	○	○	○	-
Mushroom	P	w	-	-	-	-	-	-	-	-	●
Telescopic plunger	L	iw	-	-	-	-	-	●	○	○	-
Plunger (adjustable)	ST	w	-	-	-	-	-	●	○	○	●
	ST	iw	-	-	-	-	-	●	○	○	-
	ST	IP 30	●	-	-	-	-	-	-	-	-
Button	K	IP 30	●	-	-	-	-	-	-	-	-
Roller plunger	R	IP 30	●	-	-	-	-	-	-	-	-
	R	iw	-	●	○	●	●	●	●	●	-
		w	-	-	-	-	-	-	-	-	●
		IP 43	-	-	-	-	-	-	-	-	○
Roller plunger (long)	R...L	iw	-	○	●	○	-	-	-	-	-
Roller plunger (short)	R...K	iw	-	○	●	○	-	-	-	-	-
Roller lever	H	IP 30	●	-	-	-	-	-	-	-	-
	H	w	-	●	●	●	●	-	-	-	-
	H, HT	iw	-	-	-	-	-	●	○	○	-
	Roller lever (long)	H/D-WI	w	-	-	-	-	-	●	●	○
HL		iw	-	-	-	-	-	●	○	○	-
HL/D-H		w	-	-	-	-	-	●	○	○	●
D-H		IP 43	-	-	-	-	-	-	-	-	○
Roller lever (adjustable)	DGH	w	-	○	●	○	○	○	●	●	-
Roller lever (adjustable)	DGK	w	-	○	●	○	○	○	●	●	-
Angled roller lever	KN	iw	-	-	-	-	-	●	○	○	-
	KN	w	-	○	●	○	-	●	○	○	○
Roller lever (directional)	KG	iw	-	-	-	-	-	●	○	○	-
	KG	w	-	○	●	○	-	●	○	○	-
Bi-stable roller lever	DR	iw	-	-	-	-	-	●	○	○	-
Wobble stick	FF	iw	-	-	-	-	-	●	●	○	-
	FF	w	-	●	○	●	●	-	-	-	-
Wobble stick (long)	FFL	w	-	-	-	-	-	●	○	○	-
Turret head	AH	iw	-	●	●	●	-	●	○	○	●
Turret head (star clamp)	AHS	iw	-	●	●	●	-	○	●	○	-
Turret head (positive drive)	AHS-V	iw	-	-	-	-	●	○	●	●	-
Turret head (or force disconnection in forward & return travel)	AHZ	iw	-	-	-	-	-	○	○	●	-
Turret head (adjustable)	AV	iw	-	●	●	●	●	●	○	●	●
Turret head (adjustable rod)	AD	iw	-	●	●	●	●	●	○	●	○
Turret head (spring)	AF	iw	-	○	●	○	○	●	●	○	-

● Catalogue model (stock item or to order)

○ Technically possible (on request)

- Not available

Operating direction	Plunger direction		Approach speed/angle						Notes
			m/s	0.1	0.5	1	2	5	
	↓	Metal	A	20°	20°	10°	5°	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction.
			B	20°	20°	10°	5°	-	
		Plastic	A	20°	20°	10°	5°	-	
			B	20°	20°	10°	5°	-	
	↓	Metal	A	30°	5°	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction. Plunger tip is adjustable on type ST
			B	30°	5°	-	-	-	
		Plastic	A	30°	5°	-	-	-	
			B	30°	5°	-	-	-	
	↓	Metal	A	30°	30°	20°	10°	5°	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction.
			B	30°	30°	20°	10°	5°	
		Plastic	A	30°	30°	20°	10°	5°	
			B	30°	30°	20°	10°	5°	
	↓	Metal	A	-	-	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction.
			B	20°	20°	10°	-	-	
		Plastic	A	-	-	-	-	-	
			B	40°	40°	30°	20°	10°	
	↓	Metal	A	-	-	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction. Upper part of the actuator with roller – adjustable
			B	20°	20°	10°	-	-	
		Plastic	A	-	-	-	-	-	
			B	40°	40°	30°	20°	10°	
	↓	Metal	A	-	-	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid 90° to the plunger direction. Upper part of the actuator with roller – adjustable
			B	30°	30°	20°	10°	-	
		Plastic	A	-	-	-	-	-	
			B	40°	40°	40°	30°	20°	
	↓	Metal	A	-	-	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid 90° to the plunger direction.
			B	30°	30°	20°	10°	-	
		Plastic	A	-	-	-	-	-	
			B	40°	40°	40°	30°	20°	
	↓	Metal	A	-	-	-	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in plunger direction.
			B	40°	40°	30°	20°	-	
		Plastic	A	-	-	-	-	-	
			B	40°	40°	40°	30°	20°	
	↓	Metal	A	45°	45°	40°	30°	-	<ul style="list-style-type: none"> The information shown in the diagrams for contact travel / switching force is valid in direction of rotation. Switch position will remain until return actuation
			B	45°	45°	40°	30°	-	
		Plastic	A	-	-	-	-	-	
			B	-	-	-	-	-	
	↓	Metal	A	60°	50°	45°	-	-	<ul style="list-style-type: none"> The information shown in the diagrams for switching angle/actuator torque is valid for any operating direction. Not suitable for operators protection
			B	-	-	-	-	-	
		Plastic	A	20°	20°	10°	5°	-	
			B	-	-	-	-	-	
	↓	Metal	A	45°	45°	45°	40°	30°	<ul style="list-style-type: none"> The information shown in the diagrams for switching angle/actuator torque is valid in direction of rotation. Roller lever adjustable on the shaft gradually (step by step) in radial direction and can be turned by 180°
			B	45°	45°	45°	40°	30°	
		Plastic	A	45°	45°	45°	40°	30°	
			B	45°	45°	45°	40°	30°	
	↓	Metal	A	45°	45°	45°	40°	30°	<ul style="list-style-type: none"> The information shown in the diagrams for switching angle/actuator torque is valid in direction of rotation. Roller lever adjustable in longitudinal & radial direction on the shaft and can be turned by 180° Not suitable for operators protection
			B	45°	45°	45°	40°	30°	
		Plastic	A	45°	45°	45°	40°	30°	
			B	45°	45°	45°	40°	30°	
	↓	Metal	A	45°	45°	40°	30°	20°	<ul style="list-style-type: none"> The information shown in the diagrams for switching angle/actuator torque is valid in direction of rotation. Rod adjustable in longitudinal & radial (step by step) direction
			B	45°	45°	40°	30°	20°	
		Plastic	A	45°	45°	40°	30°	20°	
			B	45°	45°	40°	30°	20°	
	↓	Metal	A	45°	45°	40°	30°	20°	<ul style="list-style-type: none"> The information shown in the diagrams for switching angle/actuator torque is valid in direction of rotation. Spring adjustable in radial direction on the shaft Not suitable for operators protection
			B	45°	45°	40°	30°	20°	
		Plastic	A	45°	45°	40°	30°	20°	
			B	45°	45°	40°	30°	20°	

Limit switches

Technical data

Switches with turret head housing

When supplied the contacts work in both directions according to the contact travel diagrams

Adjustment of the actuator standard position on the shaft:

The standard position of the unit can be changed and fixed step by step for exact positioning.

– AH, AHS, AHZ, AF, AD, AV:
Adjustment in 15° steps (fig. 1)

– AHS-V
Adjustment in 7,5° increments or 15° positive drive steps selected by reversing the drive washer between the lever and head (fig. 2)

– Adjustment AV, AD
Adjustment in radial direction

– AH, AHS, AHS-V, AHZ, AV:
By rotating 180° the roller lever is usable at a different axial level (fig 3. and 4)

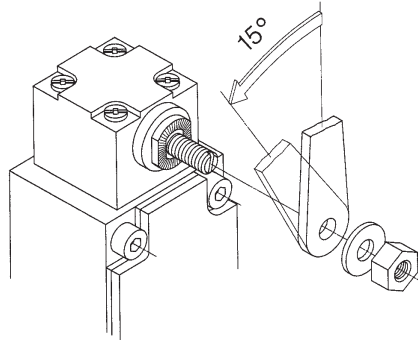


Fig. 1

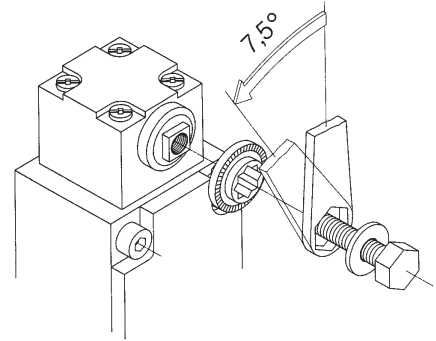


Fig. 2

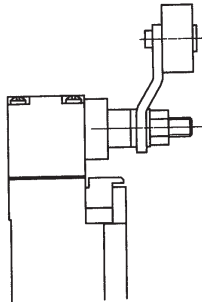


Fig. 3

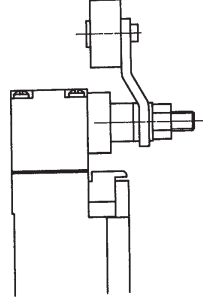


Fig. 4

Adjustment for switching (dependent on direction)

With actuators AHS, AHS-V, AV, AD

When supplied as standard the contacts work in both directions according to the contact travel diagrams. By simply changing the actuator push rod, an idle run function can be achieved in the chosen direction (fig 5. and 6). The idle run function may be used in control systems, which cannot handle successive signals due to the return "over swing" of very long actuators AV/AD.

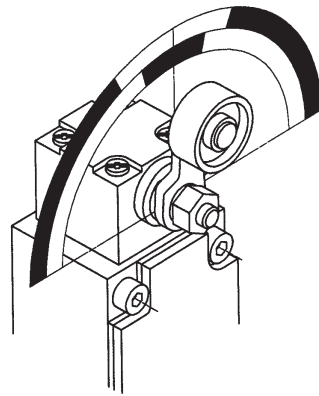


Fig. 5

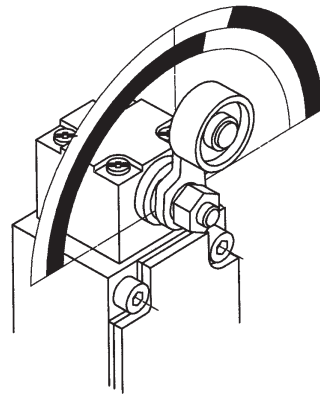


Fig. 6

Forced disconnect

Forward and return movement AHZ

For special safety applications the forced disconnection of the NC contacts may be required in the forward movement (moving in one direction) as well as in the return movement (back to normal position). For operator safety applications the roller must be positively guided in both directions (see fig. 7 and 8).

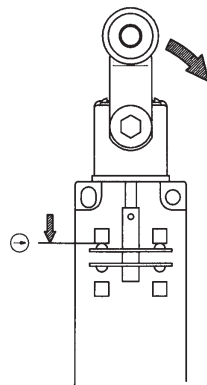


Fig. 7

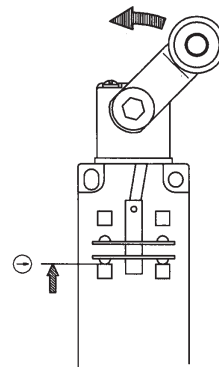


Fig. 8

Note – when altering actuators AH, AHS, AHS-V, AHZ, AF, AD, AV, DGH, DGK

– the assured conditions of supply will change.

After the adjustment, the user must make sure that the part reaches the necessary safety levels.