

Metal Position Switch Series 8074

- Explosion protection according to
 - CENELEC
 - IEC
- For use in
 - Zone 1 and Zone 2
 - Zone 21 and Zone 22
- Dimensions and characteristic values according to EN 50041
- Replaceable contact elements in flameproof enclosure
- Positive opening contacts
- Wide range of actuators
- All actuator heads can be rotated through 4 x 90°
- Contact elements with low-action contact or overlapping slow-action contact
- Extensively oil- and petrol resistant

STAHL

Position switches are used to monitor the position of moving parts of machines and systems.

The robust zinc die cast enclosure resists mechanical load and is e.g. suitable for security tasks in elevator construction, conveyor technology as well as in mechanical and plant engineering.

Series 8074 may be used in safety circuits as the device fulfills IEC/EN 60947-5-1.





For this series there is also a belt-alignment position switch available. Here the position switch monitors the conveyor belt.

Zones 1 & 2, 21 & 22





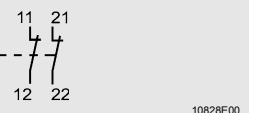
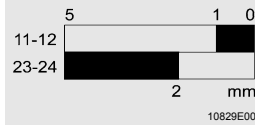

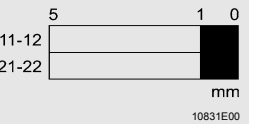
Selection Table					
Version	Actuator		Contact element	Order number	Weight kg
 10787E00	Extended plunger	Plunger of stainless steel	Slow-action contact, 1 NC / 1 NO	8074/1-1-S	0.340
			Slow-action contact, 2 NC	8074/1-3-S	0.340
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-S	0.340
 10786E00	Roller plunger	Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-RS	0.340
			Slow-action contact, 2 NC	8074/1-3-RS	0.342
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-RS	0.342
 10784E00	Roller lever plunger	Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-AR	0.340
			Slow-action contact, 2 NC	8074/1-3-AR	0.340
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-AR	0.340
 10790E00	Swivelling roller lever	Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-HR311	0.425
			Slow-action contact, 2 NC	8074/1-3-HR311	0.425
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-HR311	0.425
 10785E00	Adjustable roller lever	Roller of moulded plastic; rod of stainless steel	Slow-action contact, 1 NC / 1 NO	8074/1-1-HV	0.430
			Slow-action contact, 2 NC	8074/1-3-HV	0.430
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-HV	0.430
 10779E00	Actuating rod	Rod of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-HH-K	0.400
			Slow-action contact, 2 NC	8074/1-3-HH-K	0.400
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-HH-K	0.400
 10778E00	Spring rod	Spring of stainless steel	Slow-action contact, 1 NC / 1 NO	8074/1-1-F2	0.360
			Slow-action contact, 2 NC	8074/1-3-F2	0.360
 10782E00	Big swivelling lever	Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-HR312	0.445
			Slow-action contact, 2 NC	8074/1-3-HR312	0.445
			Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-HR312	0.445

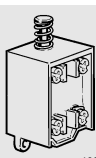
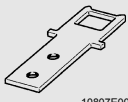
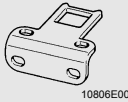
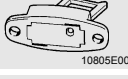

Selection Table

Version	Actuator	Contact element	Order number	Weight kg
 10780E00	Belt-alignment switch Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-BSS	0.460
 10781E00	Forked roller lever Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-GR	0.465
		Slow-action contact, 2 NC	8074/1-3-GR	0.465
 10783E00	Angled roller lever Roller of moulded plastic	Slow-action contact, 1 NC / 1 NO	8074/1-1-WR	0.340
		Slow-action contact, 2 NC	8074/1-3-WR	0.340
		Slow-action contact overlapping, 1 NC / 1 NO	8074/1-5-WR	0.340
 10788E00	Safety switch Separate actuator	Slow-action contact, 1 NC / 1 NO	8074/1-1-ZB	0.386
		Slow-action contact, 2 NC	8074/1-3-ZB	0.386
	Note: Actuators for the safety switch have to be ordered separately.			
		Straight actuator	132311	0.027
		Angled actuator	132312	0.037
	Adjustable actuator	132313	0.038	

Technical Data

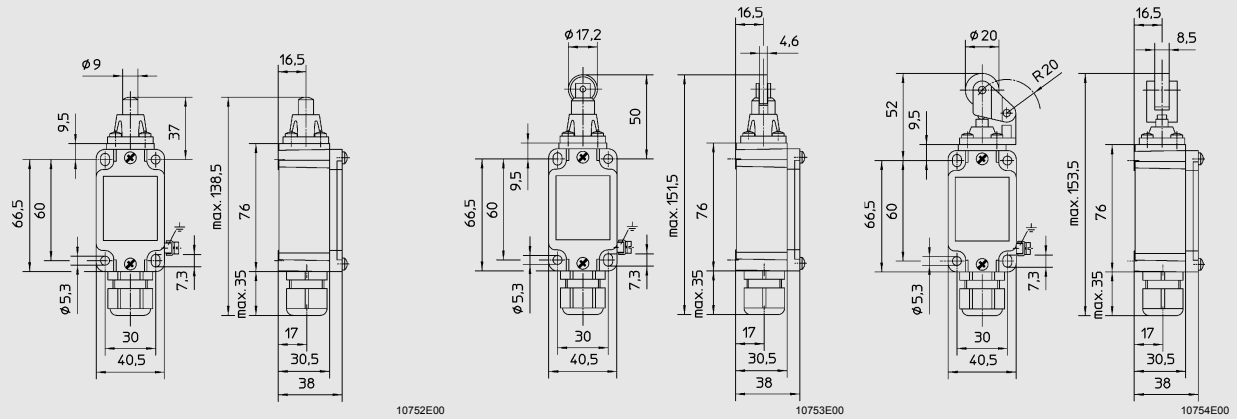
Explosion protection	
Gas explosion protection	⊕ II 2 G EEx de IIC T6
Dust explosion protection	⊕ II 2 D IP65 T80 °C
Certificates	
Gas explosion protection	BVS 05 ATEX E 007
Dust explosion protection	BVS 05 ATEX E 007
Other certificates	Russia (CTB), Belarus (Promatomnadzor)
Material	
Enclosure	Zinc die cast, coated
Contacts	Silver
Degree of protection	IP65
Ambient temperature	- 20 ... + 60 °C
Actuator	
Fixing	4 x M3 screws
Cable glands	1 x M20x1.5 cable gland
Cable dia. range	6 ... 13 mm

Technical Data				
Contact	Version	8074/1-1-..	8074/1-5-..	8074/1-3-..
	Circuit diagram			
Switching function	Switching path			
	Electrical load	Slow-action contact 1 NC + 1 NO	Slow-action contact 1 NC + 1 NO, overlapping	Slow-action contact 2 NC
Electrical load	Min. electrical load	24 V AC/DC / 10 mA		
	Max. electrical load	250 V AC/ 6 A (AC-15) 230 V DC/ 0,25 A (DC-13)		
Back-up fuse	6 A (time-lag)			
Service life	max. 10 ⁶ operations *) max. 1800 operations/h *) Replace contact element after max. 10 ⁶ operations			

Accessories and Spare Parts						
Designation	Illustration			Order number	Weight kg	
Contact block		1 NC + 1 NO	Slow-action contact	8084/1-1 S/Ö	132805	0.030
		2 NC	Slow-action contact	8084/1-3 2Ö	132806	0.030
		1 NC + 1 NO	Slow-action contact, overlapping	8084/1-5 S/Ö UE	132807	0.030
Actuator		Straight		8074/1-.-ZB	132311	0.027
		Angled		8074/1-.-ZB	132312	0.037
		Adjustable		8074/1-.-ZB	132313	0.038
Cable gland		M20 x 1.5		8161/5-M20-13	138518	0.012



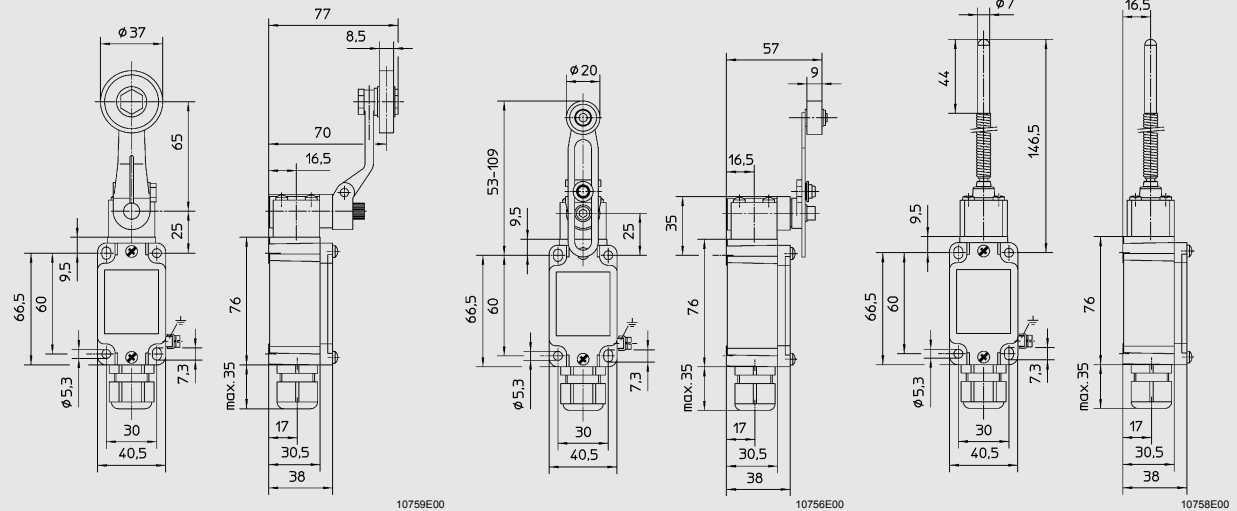
Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



8074/1--S
Extended plunger

8074/1--RS
Roller Plunger

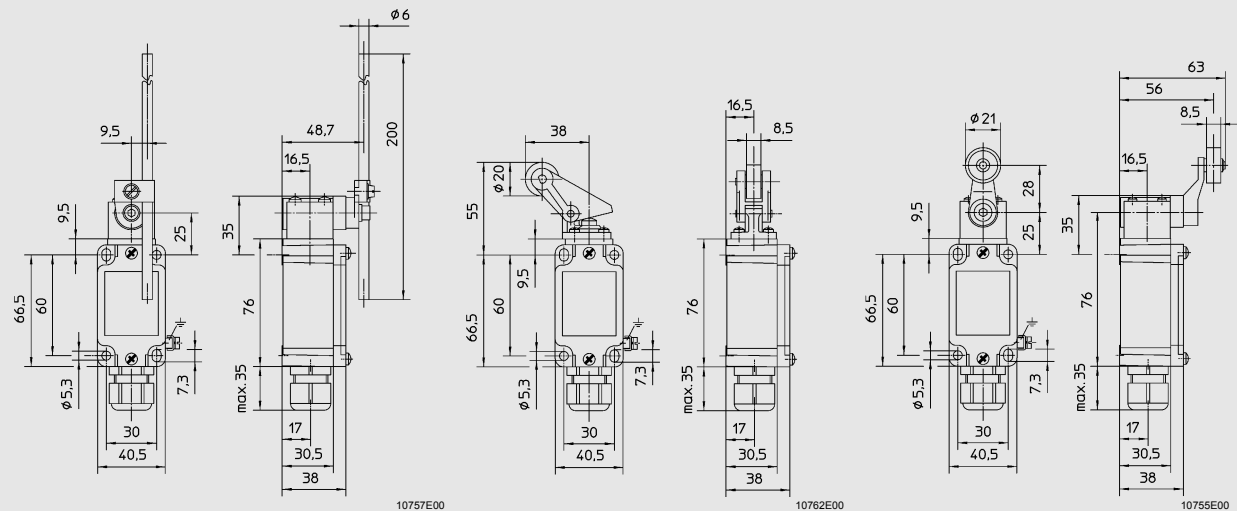
8074/1--AR
Roller lever plunger



8074/1--HR312
Big swivelling lever

8074/1--HV
Adjustable roller lever

8074/1--F2
Spring rod actuator



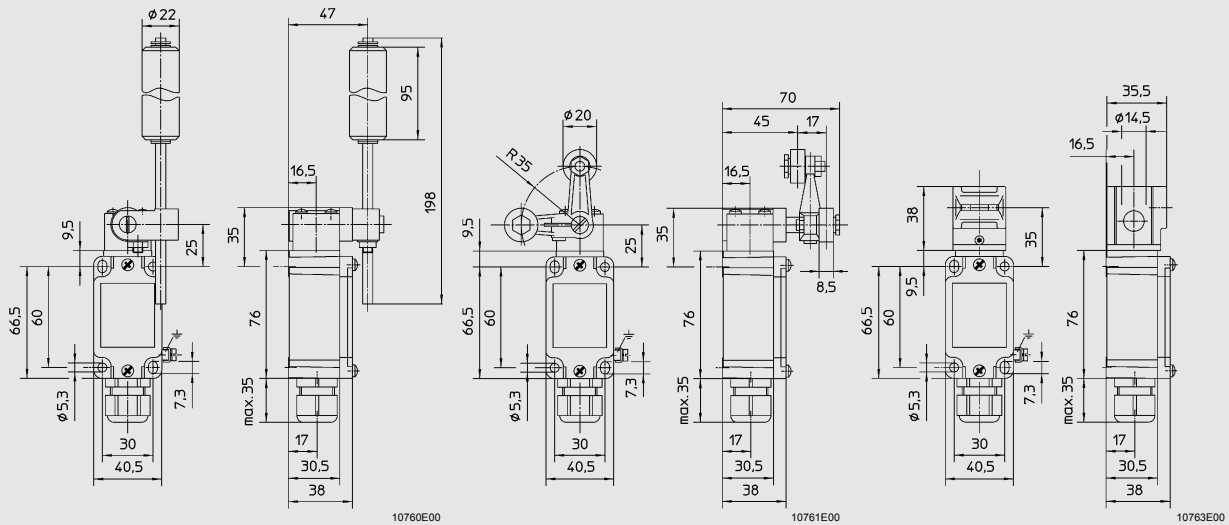
8074/1--HH-K
Actuating rod

8074/1--WR
Angled roller lever

8074/1--HR311
Swivelling roller lever



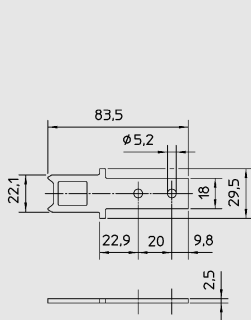
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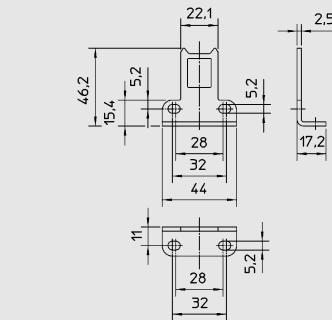
8074/1--BSS
Belt-alignment switch

8074/1--GR
Forked roller lever

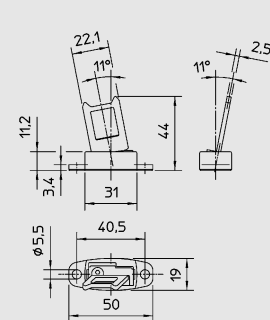
8074/1--ZB
Safety switch



Straight actuator;
for safety switch 8074/1--ZB



Angled actuator;
for safety switch 8074/1--ZB



Adjustable actuator;
for safety switch 8074/1--ZB

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.

