

Metal Position Switch

Series 8074



www.stahl.de



10764E00

- > Dimensions and characteristic values according to EN 50041
- > Replaceable contact element in flameproof enclosure
- > Positive opening contacts
- > Wide range of actuators
- > All actuators can be displaced by 4 x 90°
- > Contact element with low-action contact or overlapping low-action contact
- > Largely oil- und petrol-resistant

E4



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 suitable, among others, for ensuring safety in elevator construction, conveyor technology and in mechanical and plant engineering. Series 8074 may be used in safety circuits as the devices fulfill IEC/EN 60947-5-1 and the contacts are positive opening. For this series, a belt-alignment position switch is also available. This switch, which uses a length-adjustable lever with nylon reel as actuator element, monitors the conveyor belt run. If the conveyor becomes misaligned, the lever is actuated, resulting in a safety signal switching off the conveyor.









	ATEX					
Zone	0	1	2	20	21	22
For use in		x	x		x	x

WebCode 8074A

Metal Position Switch

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Selection Table





Design	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
 10788E00	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	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

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Design	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	8074	0.028	
	Angled actuator	8074	0.037		
	Adjustable actuator	8074	0.035		

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Explosion Protection

Europe (ATEX)	
Gas and dust	BVS 05 ATEX E 007 Ⓢ II 2 G Ex d e IIC T6 Gb (Ta = - 20 ... + 40 °C) Ⓢ II 2 G Ex d e IIC T5 Gb (Ta = - 20 ... + 60 °C) Ⓢ II 2 D Ex tD A21 IP67 T80°C Db (Ta = - 20 ... + 40 °C) Ⓢ II 2 D Ex tD A21 IP67 T95°C Db (Ta = - 20 ... + 60 °C)
Certifications and certificates	
Certificates	ATEX, Kazakhstan (TR), Russia (TR), Belarus (TR)

Technical data

Electrical data	
Electrical load	
Min. electrical load	24 V AC / DC, 10 mA
Max. electrical load	AC-15: 250 V AC, 6 A DC-13: 230 V DC, 0.25 A
Back-up fuse	6 A (time-lag)
Ambient conditions	
Ambient temperature	see explosion protection data
Mechanical data	
Degree of protection	IP67 according to IEC/EN 60529
Material	
Enclosure	Zinc die cast, coated
Contacts	Silver
Service life	max. 10 ⁶ operations *) max. 1800 operations/h *) Replace contact element after max. 10 ⁶ operations
Connection	M3 screw type terminal, max. 1.5 mm ²

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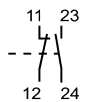
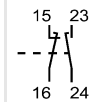
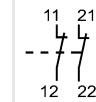

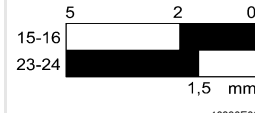
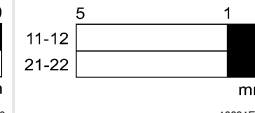
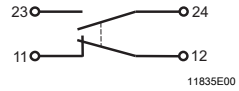
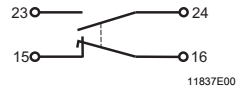
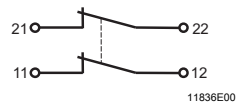
Technical data

Mounting / Installation

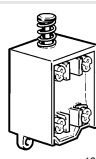
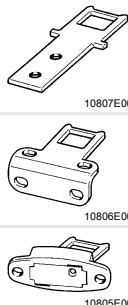
Cable glands	8161: 1 x M20 x 1.5
Clamping range	6 ... 13 mm

Contact

Version

	8074/1-1-..	8074/1-5-..	8074/1-3-..
Circuit diagram			
Switching path			
Switching function	Slow-action contact 1 NC + 1 NO	Slow-action contact 1 NC + 1 NO, overlapping	Slow-action contact 2 NC
			
	Positive opening contacts according to IEC/EN 60947-5-1		

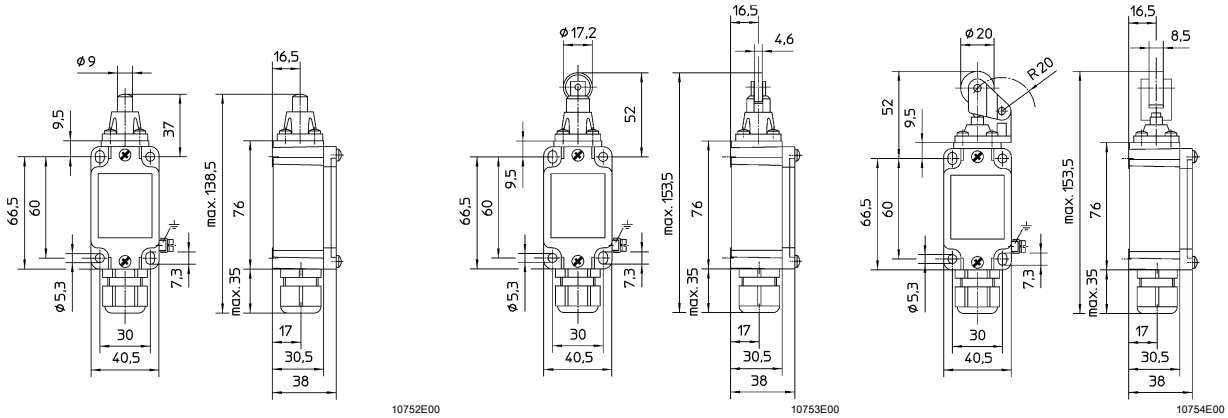
Accessories and Spare Parts

Designation	Figure	Art. no.	Weight kg	
Contact block		1 NC + 1 NO Slow-action contact 8084/1-1 S/Ö	132805	0.032
		2 NC Slow-action contact 8084/1-3 2Ö	132806	0.032
		1 NC + 1 NO Slow-action contact, overlapping 8084/1-5 S/Ö UE	132807	0.030
Actuator		Straight 8074/1-.-ZB	132311	0.028
		Angled 8074/1-.-ZB	132312	0.037
		Adjustable 8074/1-.-ZB	132313	0.035
Cable gland		M20 x 1.5 8161/5-M20-13	138518	0.012

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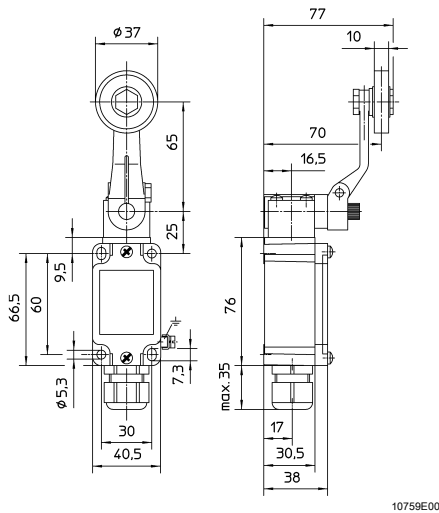
Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



8074/1--S
Extended plunger

8074/1--RS
Roller plunger

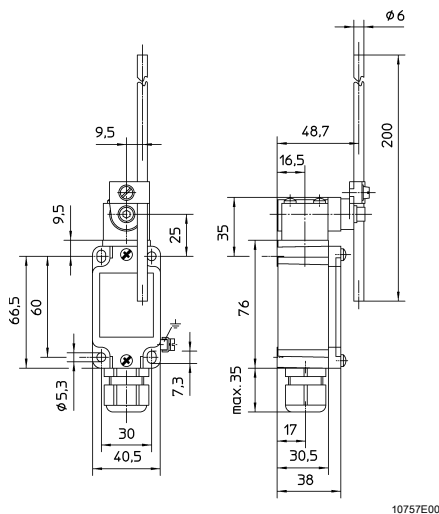
8074/1--AR
Roller lever plunger



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

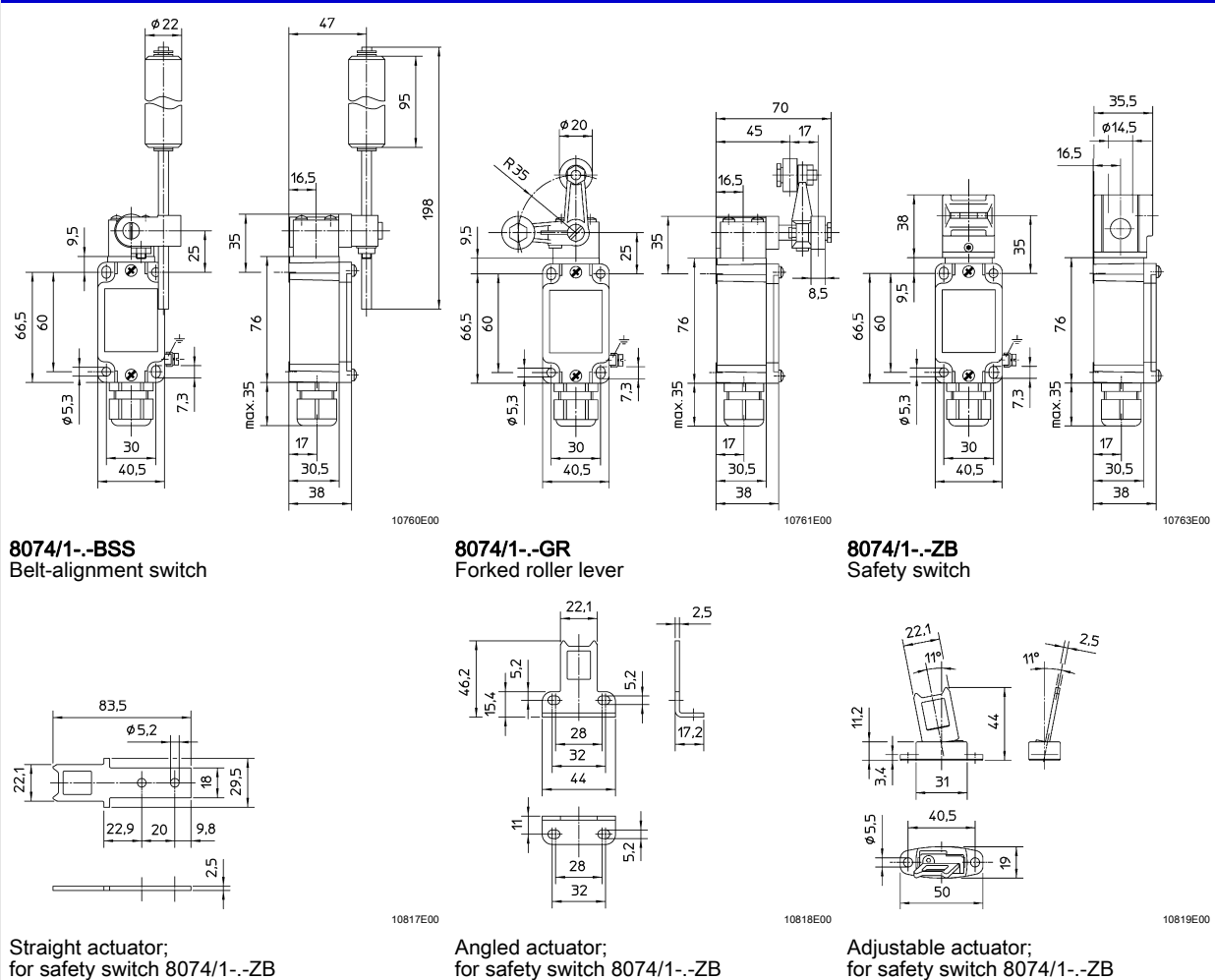
8074/1--HR311
Swivelling roller lever

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



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