



- Large temperature range of use
- Large inner connection chamber
- High-quality metal Ex e enclosure with outer PE connection
- Degree of protection IP66/67
- Five different contact versions
- Ten different actuator versions

E4

MY R. STAHL 8074D



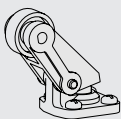
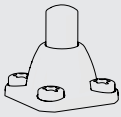
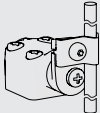
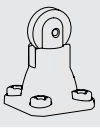
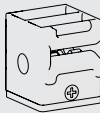
Position switches are used to position, control and monitor the moving parts on machines and systems. Because they meet the requirements of the EN 50 041 and IEC 60947-5-1 product standards, they can also be used as a position switch with a safety function. Series 8074/2 position switches are approved for use in hazardous areas of Zones 1, 2, 21 and 22.

In conjunction with a safety door guard and the corresponding circuitry, the PL position switches fulfil the requirements of "e" in accordance with EN ISO 13849-1, or up to SIL 3 in accordance with EN 62061. They are identified with the $\oplus$ character to signify positive opening. There are snap- and slow-action versions with different types of contacts as well as with a variety of different actuating elements.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

Selection Table						
Actuator		Adjustable rotary lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	No	8074/2-1-DS-40	257189	386 g
		Slow-action contact, Over-lapping	No	8074/2-5-DS-40	257218	386 g
		Snap-action contact	No	8074/2-2-DS-40	258060	386 g
	2 NC	Slow-action contact	No	8074/2-3-DS-40	257209	386 g
	2 NO	Slow-action contact	No	8074/2-4-DS-40	271265	386 g
Actuator		Long rotary lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-DL-40	257188	422 g
		Slow-action contact, Over-lapping	Yes	8074/2-5-DL-40	257217	422 g
		Snap-action contact	Yes	8074/2-2-DL-40	258059	422 g
	2 NC	Slow-action contact	Yes	8074/2-3-DL-40	257208	422 g
Actuator		Misalignment switch				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	No	8074/2-1-SR-40	257201	486 g
		Snap-action contact	No	8074/2-2-SR-40	258062	486 g

Selection Table

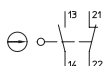
Actuator		Parallel roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-WPH-40	278572	440 g
		Slow-action contact	Yes	8074/2-2-WPH-40	278575	258 g
	2 NC	Slow-action contact	Yes	8074/2-3-WPH-40	278573	-
Actuator		Plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-W-40	257197	298 g
		Slow-action contact, Over-lapping	Yes	8074/2-5-W-40	257212	298 g
		Snap-action contact	Yes	8074/2-2-W-40	258054	298 g
	2 NC	Slow-action contact	Yes	8074/2-3-W-40	257203	298 g
Actuator		Rod lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	No	8074/2-1-DD-40	257190	340 g
		Slow-action contact, Over-lapping	No	8074/2-5-DD-40	257219	340 g
		Snap-action contact	No	8074/2-2-DD-40	258061	340 g
	2 NC	Slow-action contact	No	8074/2-3-DD-40	257210	340 g
Actuator		Roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-WH-40	278457	404 g
		Slow-action contact	Yes	8074/2-2-WH-40	278571	790 g
		Slow-action contact	Yes	8074/2-5-WH-40	278459	410 g
	2 NC	Slow-action contact	Yes	8074/2-3-WH-40	278458	392 kg
Actuator		Roller plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-R-40	257184	299 g
		Slow-action contact, Over-lapping	Yes	8074/2-5-R-40	257213	299 g
	2 NC	Slow-action contact	Yes	8074/2-3-R-40	257204	299 g
Actuator		Rotary lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-D-40	257187	360 g
		Slow-action contact, Over-lapping	Yes	8074/2-5-D-40	257216	360 g
		Snap-action contact	Yes	8074/2-2-D-40	258058	360 g
	2 NC	Slow-action contact	Yes	8074/2-3-D-40	257207	360 g
Actuator		Safety switch				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8074/2-1-AZ-20	257202	340 g
	2 NC	Slow-action contact	No	8074/2-3-AZ-20	257211	340 g

The actuators are included, but not installed.
Actuators without positive opening are not suitable for safety circuits!

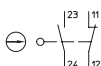
Safety switch, split actuator made of metal (please order separately; see accessories and spare parts).

Technical Data			
Variant	8074/2-1-... 8074/2-2-... 8074/2-5-...	8074/2-3-... 8074/2-4-...	8074/2-...-AZ-20
Explosion Protection			
IECEX gas explosion protection	Ex db eb IIC T6 / T5 Gb	Ex db eb IIC T6 / T5 Gb	Ex db eb IIC T6 / T5 Gb
IECEX dust explosion protection	Ex tb IIIC T80 °C / T95 °C Db	Ex tb IIIC T80 °C / T95 °C Db	Ex tb IIIC T80 °C / T95 °C Db
ATEX gas explosion protection	Ⓔ II 2 G Ex db eb IIC T6 / T5 Gb	Ⓔ II 2 G Ex db eb IIC T6 / T5 Gb	Ⓔ II 2 G Ex db eb IIC T6 / T5 Gb
ATEX dust explosion protection	Ⓔ II 2 D Ex tb IIIC T80 °C / T95 °C Db	Ⓔ II 2 D Ex tb IIIC T80 °C / T95 °C Db	Ⓔ II 2 D Ex tb IIIC T80 °C / T95 °C Db
Certificates	ATEX (BVS), China (CQST), IECEX (BVS)		
Notes	Product label may vary. Series devices are labelled with ATEX and IECEX.		
Electrical Data			
DC rated operational voltage	125 V	125 V	230 V
AC operating voltage (equal potential)	500 V	400 V	250 V
AC operating voltage (unequal potential)	250 V	250 V	250 V
Rated operational current max.	6.6 A	6.6 A	6 A
Rated operational current note	6.6 A at T6 4.4 A at T5	6.6 A at T6 4.4 A at T5	6 A at 230 V DC 0.25 A at 250 V AC
Electrical service life	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles
Mechanical service life	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles
Rated surge voltage	4 kV	4 kV	4 kV
Max. short-circuit protection	10 A	10 A	10 A
Maximum operating frequency	1800 operating cycles/h	1800 operating cycles/h	1800 operating cycles/h
Ambient Conditions			
Ambient temperature	-40 °C ... +70 °C (T6) -40 °C ... +70 °C (T5)	-40 °C ... +70 °C (T6) -40 °C ... +70 °C (T5)	-20 °C ... +40 °C (T6) -20 °C ... +60 °C (T5)
Mechanical Data			
Degree of protection (IP) (IEC 60529)	IP66	IP66	IP66
Cover material	1.4401 blasted stainless steel	1.4401 blasted stainless steel	1.4401 blasted stainless steel
Enclosure material	Corrosion-resistant aluminium, powder-coated	Corrosion-resistant aluminium, powder-coated	Corrosion-resistant aluminium, powder-coated
Max. earth connection	4 mm²	4 mm²	4 mm²
Contact material	Silver-nickel	Silver-nickel	Silver-nickel
Finely stranded connection cross section	0.75 – 2.5 mm²	0.75 – 2.5 mm²	0.75 – 1.5 mm²
Solid connection cross section	0.75 – 2.5 mm²	0.75 – 2.5 mm²	0.75 – 1.5 mm²
Contact system	2-pole, galvanically separated, with double break	2-pole, galvanically separated, with double break	2-pole, galvanically separated, with double break
Contact opening	≥ 1.5 mm (isolating distance ≥ 3 mm)	≥ 1.5 mm (isolating distance ≥ 3 mm)	≥ 1.5 mm (isolating distance ≥ 3 mm)
Components			
Cable glands and entries	1 x M20 Ø 4 ... 13 mm	1 x M20 Ø 4 ... 13 mm	1 x M20 Ø 4 ... 13 mm
Cable entry material	Polyamide	Polyamide	Polyamide
Material cable gland	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced

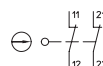
Technical Drawings – Subject to Alterations



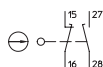
Slow-action contact, 1 NC + 1 NO
8060/-1; 807./2-1



Snap-action contact, 1 NC + 1 NO
8060/-2; 807./2-2

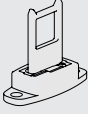


Slow-action contact, 2 NCs
8060/-3; 807./2-3

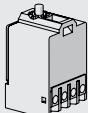
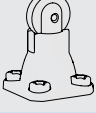
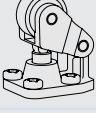
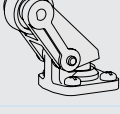


Slow-action contact, 1 NC + 1 NO, overlapping
8060/-5; 807./2-5

Accessories

Figure	Description	Art. No.	Weight
Actuator			
	straight, for 8074/2--AZ	132311	28 g
	bent, for 8074/2--AZ	132312	37 g
	movable, for 8074/2--AZ	132313	35 g
Plastic cable gland			
	8161/7-M20-1304, Ex e Polyamide, M20 x 1,5 mm, 4 – 13 mm Lot size 50 pieces	239156	10 g

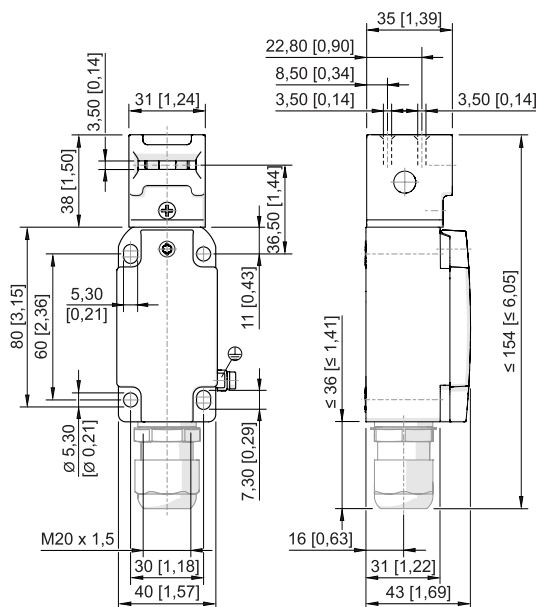
Spare Parts

Figure	Description	Art. No.	Weight
Contact element			
	1 NC + 1 NO slow-action contact 8080/1-1	132529	25 g
	1 NC + 1 NO snap-action contact 8080/1-2	279482	25 g
	2 NC slow-action contact 8080/1-3	132532	25 g
Actuator			
	Rotary lever actuator	257533	102 g
	Long rotary lever actuator	257534	102 g
	Roller plunger actuator	257520	102 g
	Roller lever actuator	278460	100 g
	Parallel lever actuator	278574	-
Attention: Actuators and switches are factory-matched. Only the identical actuator of the original switch may be selected from the spare parts table. If a different actuator is used, a new switch is required.		-	-

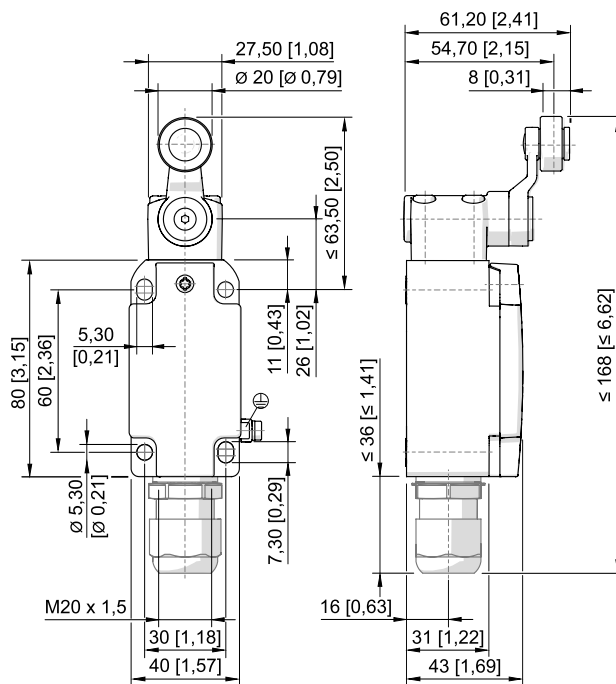
Lot size: Purchase order quantity in [no. of units]; the delivery quantity is automatically rounded to the lot size.

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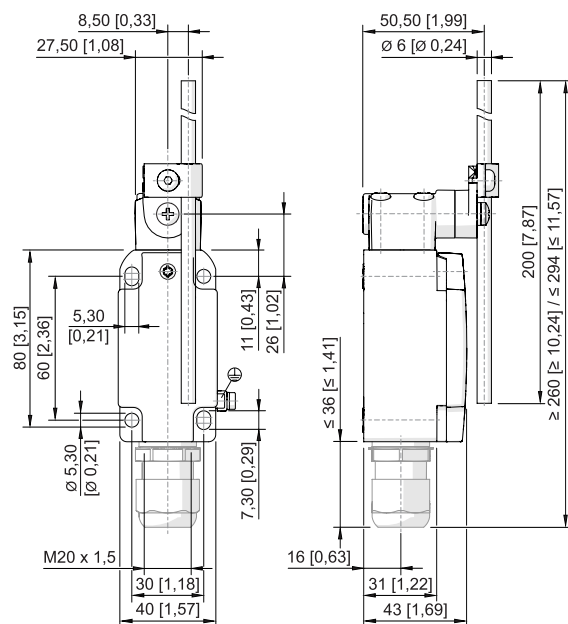
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



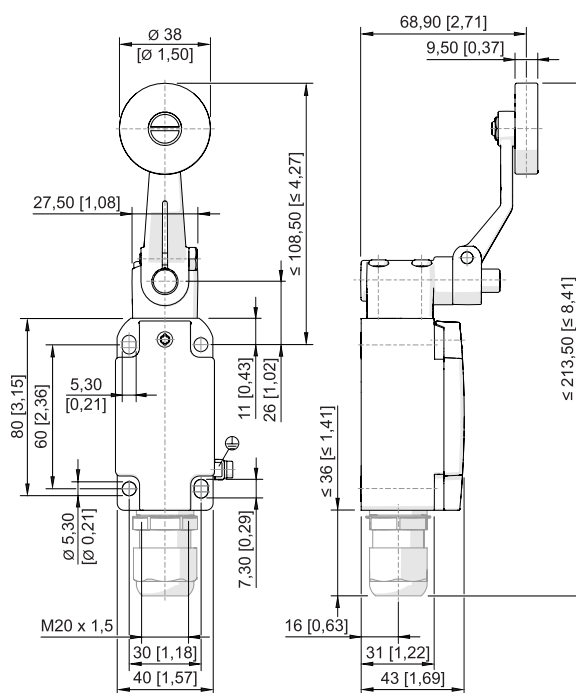
Safety switch 8074/2.-AZ-20



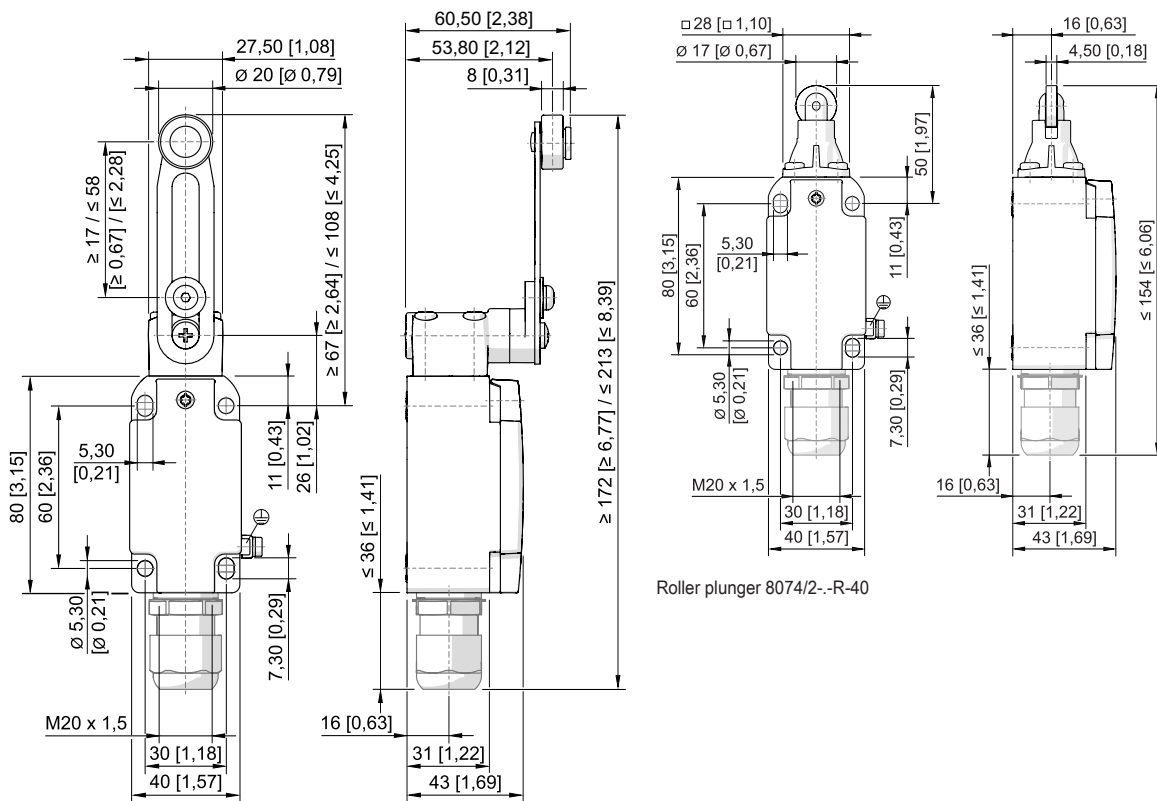
Swivelling lever 8074/2.-D-40



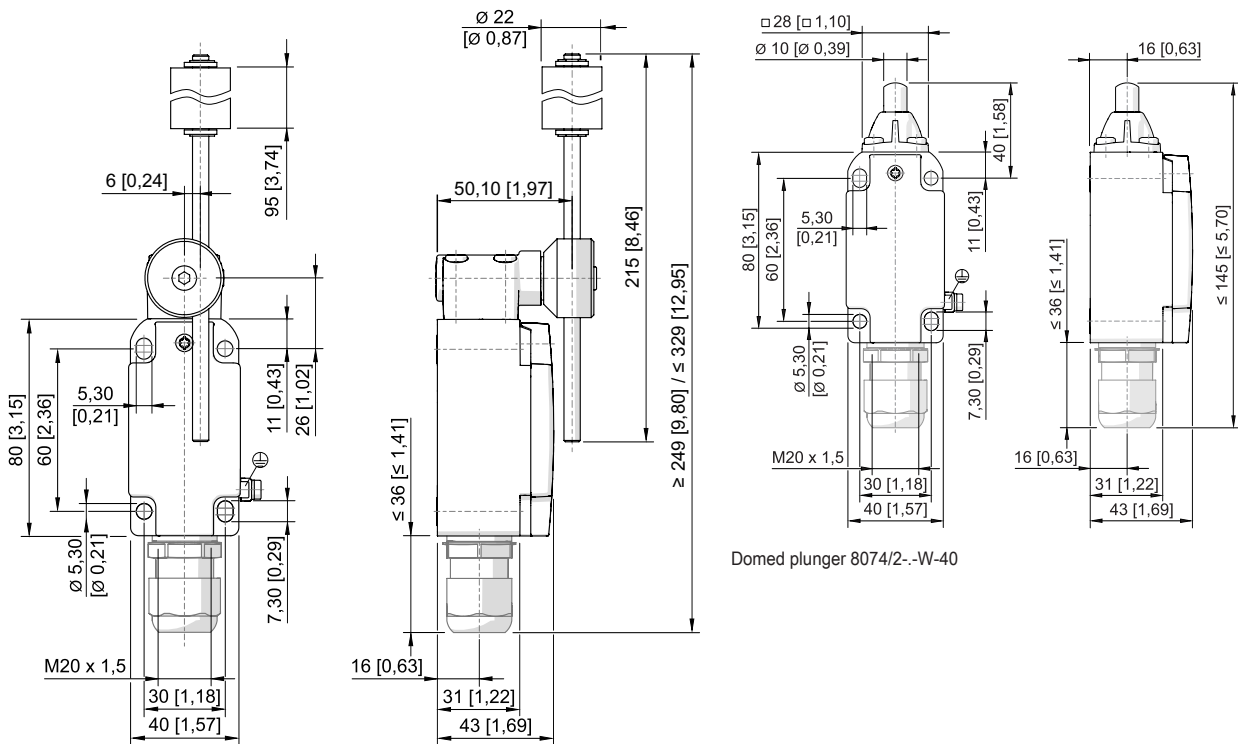
Rod lever 8074/2.-DD-40



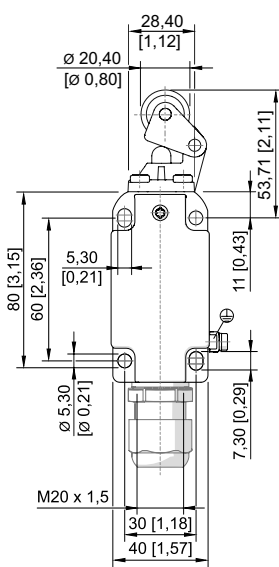
Rod lever 8074/2.-DL-40



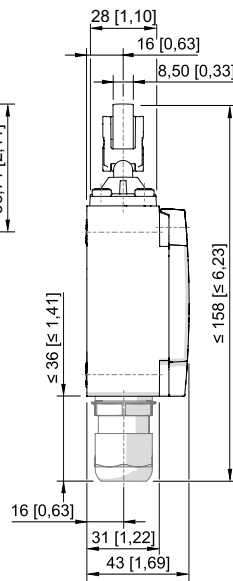
Swivelling lever 8074/2.-DS-40



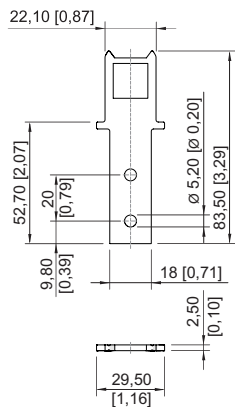
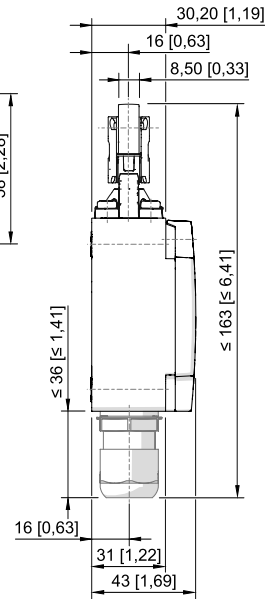
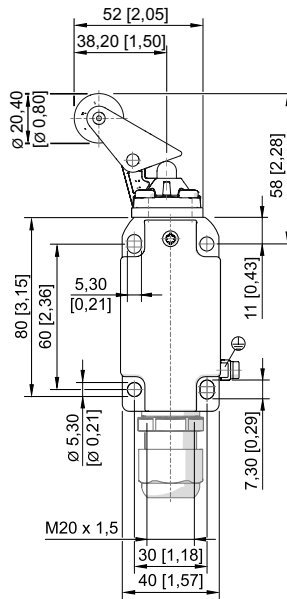
Misalignment switch 8074/2--SR-40



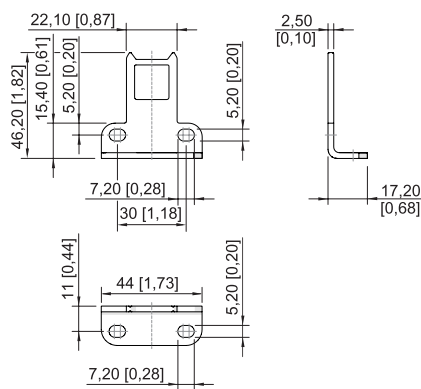
Roller lever 8074/2--WH-40



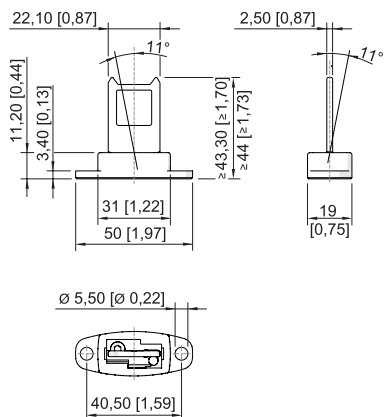
Roller lever 8074/2--WPH-40



Straight actuator for safety switch



Bent actuator for safety switch



Movable actuator for safety switch