



- Large temperature range of use
- Plastic Ex e enclosure
- Degree of protection IP66/67
- Five different contact versions
- Different actuator versions which can be repositioned by 4 x 90°
- Can also be used as simple apparatus

E4

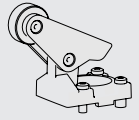
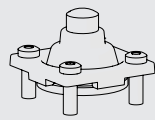
MY R. STAHL 8060B



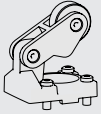
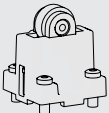
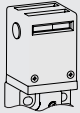
Position switches are used to position, control and monitor the moving parts on machines and systems. Because they meet the requirements of the EN 50 047 and IEC 60947-5-1 product standards, they can also be used as a position switch with a safety function. Series 8060/2 position switches are approved 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 ⊕ 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	8060/2-1-DS-60	254890	130 g
		Slow-action contact, Over-lapping	No	8060/2-5-DS-60	254896	130 g
		Snap-action contact	No	8060/2-2-DS-60	254899	130 g
	2 NC	Slow-action contact	No	8060/2-3-DS-60	254893	130 g
Actuator		Parallel roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-WPH-60	254885	102 g
		Slow-action contact, Over-lapping	Yes	8060/2-5-WPH-60	254887	102 g
		Snap-action contact	Yes	8060/2-2-WPH-60	254888	102 g
	2 NC	Slow-action contact	Yes	8060/2-3-WPH-60	254886	102 g
Actuator		Plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-W-60	254793	96 g
		Slow-action contact, Over-lapping	Yes	8060/2-5-W-60	254797	96 g
		Snap-action contact	Yes	8060/2-2-W-60	254799	96 g
	2 NC	Slow-action contact	Yes	8060/2-3-W-60	254795	96 g

Selection Table

Actuator		Rod lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	No	8060/2-1-DD-60	254891	133 g
		Slow-action contact, Over-lapping	No	8060/2-5-DD-60	254897	133 g
		Snap-action contact	No	8060/2-2-DD-60	254900	133 g
	2 NC	Slow-action contact	No	8060/2-3-DD-60	254894	133 g
Actuator		Roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-WH-60	254881	101 g
		Slow-action contact, Over-lapping	Yes	8060/2-5-WH-60	254883	101 g
		Snap-action contact	Yes	8060/2-2-WH-60	254884	101 g
	2 NC	Slow-action contact	Yes	8060/2-3-WH-60	254882	100 g
Actuator		Roller plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-R-60	254794	100 g
		Slow-action contact, Over-lapping	Yes	8060/2-5-R-60	254798	100 g
		Snap-action contact	Yes	8060/2-2-R-60	254800	100 g
	2 NC	Slow-action contact	Yes	8060/2-3-R-60	254796	100 g
Actuator		Rotary lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-D-60	254889	115 g
		Slow-action contact, Over-lapping	Yes	8060/2-5-D-60	254895	115 g
		Snap-action contact	Yes	8060/2-2-D-60	254898	115 g
	2 NC	Slow-action contact	Yes	8060/2-3-D-60	254892	115 g
Actuator		Safety switch				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Slow-action contact	Yes	8060/2-1-AZ-60	254902	127 g
	2 NC	Slow-action contact	Yes	8060/2-3-AZ-60	257239	127 g
Actuator		Spring rod head				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight
	1 NC + 1 NO	Snap-action contact	No	8060/2-2-TK-60	254901	122 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

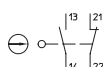
Variant	8060/2-1-... 8060/2-2-... 8060/2-5-...	8060/2-3-... 8060/2-4-...
Explosion Protection		
IECEx gas explosion protection	Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb
ATEX gas explosion protection	Ⓔ II 2 G Ex db eb IIC T6 Gb	Ⓔ II 2 G Ex db eb IIC T6 Gb

Technical Data		
Variant	8060/2-1-... 8060/2-2-... 8060/2-5-...	8060/2-3-... 8060/2-4-...
Explosion Protection		
IECEx dust explosion protection	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db
ATEX dust explosion protection	Ex II 2 D Ex tb IIIC T80 °C Db	Ex II 2 D Ex tb IIIC T80 °C Db
Certificates	ATEX (BVS), China (CQST), IECEx (BVS), India (PESO), Korea (KGS)	ATEX (BVS), China (CQST), IECEx (BVS), India (PESO), Korea (KGS)
Declaration of conformity	ATEX (EUK), ATEX (Simple apparatus), China (CCC)	ATEX (EUK), ATEX (Simple apparatus), China (CCC)
Electrical Data		
DC rated operational voltage	125 V	125 V
AC operating voltage (equal potential)	500 V	400 V
AC operating voltage (unequal potential)	250 V	250 V
Rated insulation voltage	500 V	500 V
Rated insulation voltage note	(for simple apparatus: 40 V)	(for simple apparatus: 40 V)
Rated operational current max.	4 A	4 A
Rated operational current note	(for simple apparatus: 200 mA; inductance L, and capacitance C, are negligible)	(for simple apparatus: 200 mA; inductance L, and capacitance C, are negligible)
Electrical service life	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles
Mechanical service life	Max. 10 ⁶ operating cycles	Max. 10 ⁶ operating cycles
Rated surge voltage	6 kV	6 kV
Maximum operating frequency	1800 operating cycles/h	1800 operating cycles/h
Ambient Conditions		
Ambient temperature	-60 °C ... +55 °C (Max. 4 A) -60 °C ... +60 °C (Max. 2 A)	-60 °C ... +55 °C (Max. 4 A) -60 °C ... +60 °C (Max. 2 A)
Mechanical Data		
Degree of protection (IP)	IP66	IP66
Degree of protection (IP) (IEC 60529)	IP67	IP67
Degree of protection (IP) IEC 60529 note	down to -20 °C	down to -20 °C
Enclosure material	Thermoplast GF, impact resistant	Thermoplast GF, impact resistant
Cover material	Duroplast GF, impact resistant	Duroplast GF, impact resistant
Contact material	Silver-nickel	Silver-nickel
Finely stranded connection cross section	0.75 – 1.5 mm ²	0.75 – 1.5 mm ²
Solid connection cross section	0.75 – 1.5 mm ²	0.75 – 1.5 mm ²
Contact system	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)
Seal	Silicone	Silicone
Components		
Cable glands and entries	1 x M20 Ø 7 ... 13 mm	1 x M20 Ø 7 ... 13 mm
Cable entry material	Polyamide	Polyamide
Material cable gland	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced

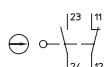
Switching capacity

	Version 8060/2-1, 8060/2-2, 8060/2-5	Version 8060/2-3, 8060/2-4
AC-12	max. 250 V with unequal potential max. 500 V with equal potential max. 4 A max. 5000 VA	max. 250 V with unequal potential max. 400 V with equal potential max. 4 A max. 4000 VA
AC-15	max. 250 V with unequal potential max. 500 V with equal potential max. 4 A max. 1000 VA	max. 250 V with unequal potential max. 400 V with equal potential max. 4 A max. 1000 VA
DC-12	max. 125 V max. 4 A max. 400 W	max. 125 V max. 4 A max. 400 W

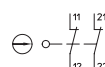
Technical Drawings – Subject to Alterations



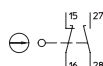
Slow-action contact, 1 NC + 1 NO
8060/-1; 807./2-1



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



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

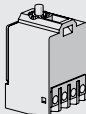


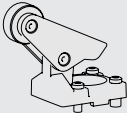
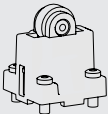
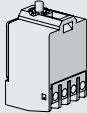
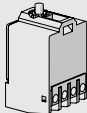
Slow-action contact, 1 NC + 1 NO, overlapping
8060/-5; 807./2-5

Accessories

Figure	Description	Art. No.	Weight
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

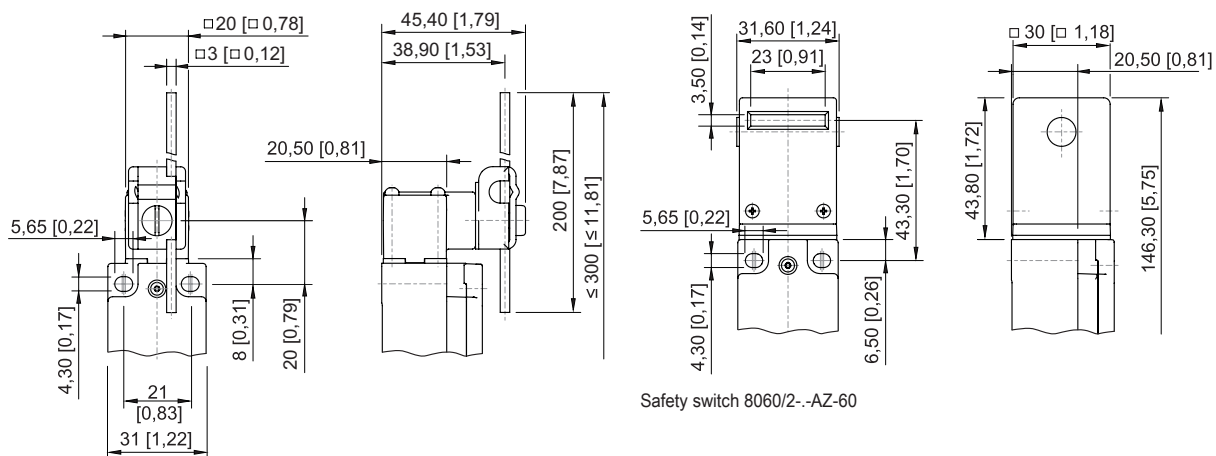
Spare Parts

Figure	Description	Art. No.	Weight
Contact element			
	2 NC slow-action contact 8080/1-3	132532	25 g
Actuator			
	Rod lever actuator	257059	50 g
	Adjustable rotary lever actuator	257058	20 g
	Rotary lever actuator	257057	35 g

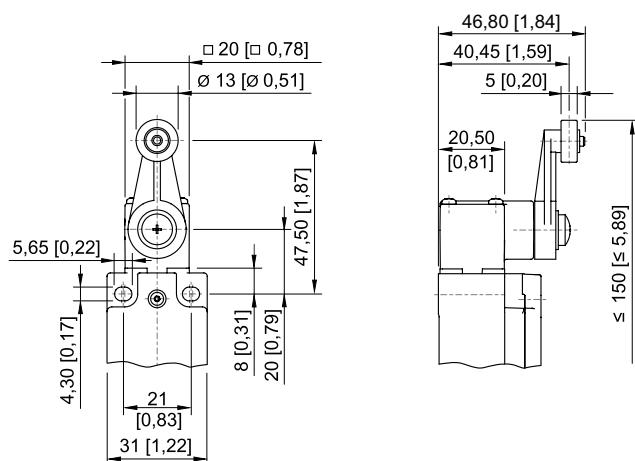
Spare Parts			
Figure	Description	Art. No.	Weight
Actuator			
	Parallel lever actuator	257056	22 g
	Roller lever actuator	257055	20 g
	Roller plunger actuator	257054	20 g
	Spring rod head actuator	257060	55 g
Contact element			
	1 NC + 1 NO slow-action contact 8080/1-1	132529	25 g
Actuator			
	Attention: 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.	-	-
Contact element			
	1 NC + 1 NO snap-action contact 8080/1-2	279482	25 g

The cable gland is included in the delivery.

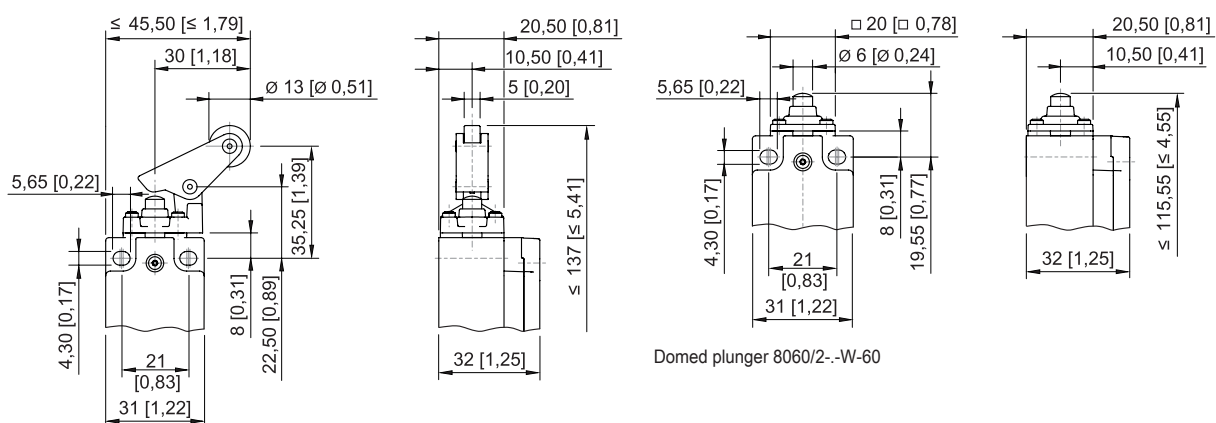
Lot size: Purchase order quantity in [no. of units]; the delivery quantity is automatically rounded to the lot size.



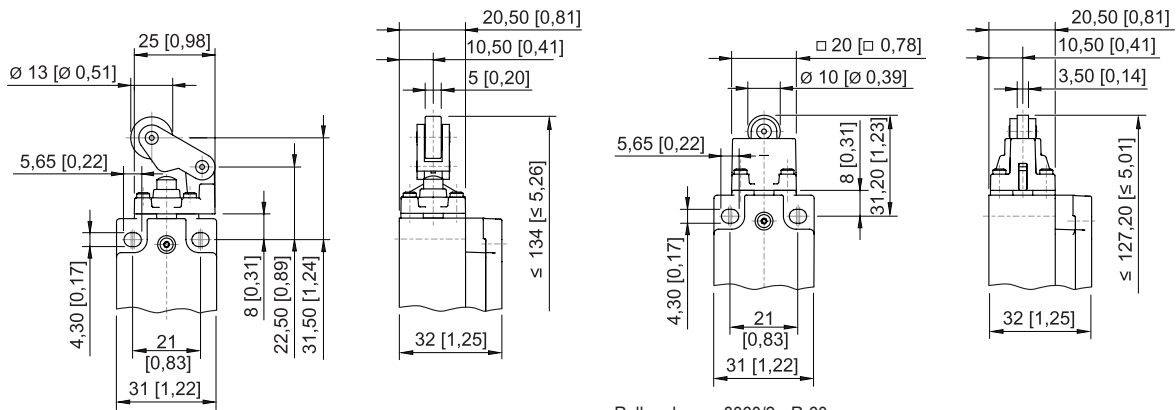
Rod lever 8060/2--DD-60



Swivelling lever 8060/2--D-60

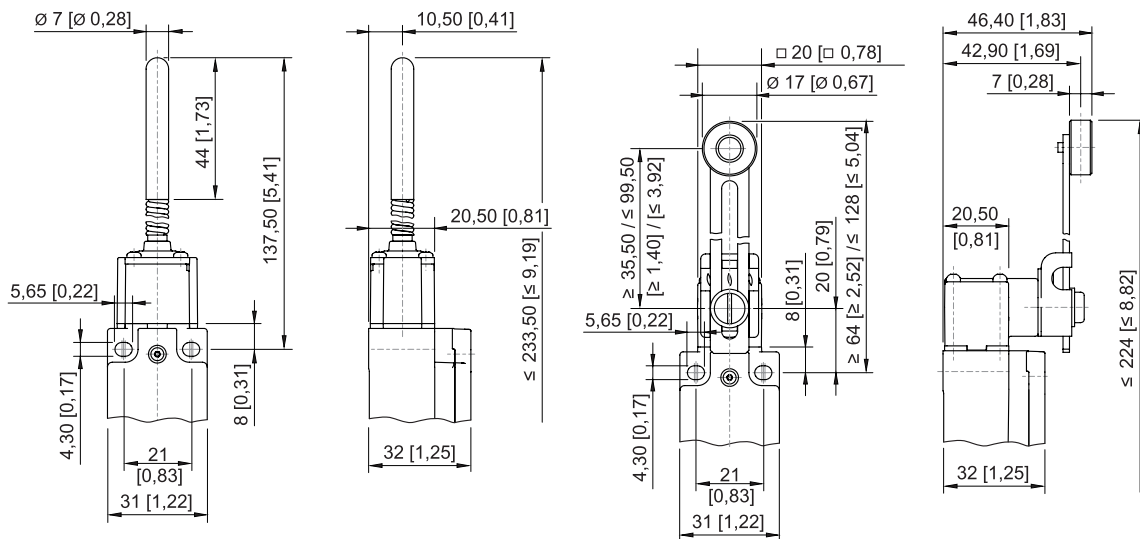


Roller lever 8060/2--WPH-60



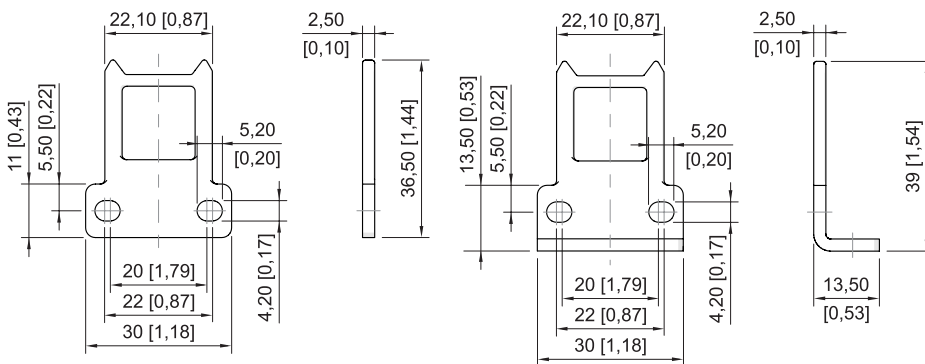
Roller lever 8060/2--WH-60

Roller plunger 8060/2--R-60



Spring rod 8060/2--TK-60

Swivelling lever 8060/2--DS-60



Straight actuator for safety switch

Bent actuator for safety switch

E4

