



- Operating temperature range: -60 °C to +60 °C
- Large inner connection chamber
- Plastic Ex e enclosure
- Degree of protection IP66/67
- Five different contact versions
- Different actuator versions, which can be displaced by 4 x 90°
- Also applicable as simple apparatus

E4

WebCode 8070C

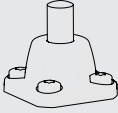
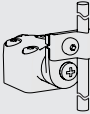


Plastic Position switch; switch dimensions meet the requirements of DIN EN 50041. It is designed to detect the position of moving components. Certified versions fulfil the requirements for safety switches as set out in EN 13849-1 and have positive-opening contacts in accordance with EN 60947-5-1.

	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 kg
	1 NC + 1 NO	Slow-action contact	No	8070/2-1-DS-U60	275363 ■	0.256
		Slow-action contact, Overlapping	No	8070/2-5-DS-U60	275367	0.167
		Snap-action contact	No	8070/2-2-DS-U60	275364	0.256
	2 NC	Slow-action contact	No	8070/2-3-DS-U60	275365	0.256
		Slow-action contact	No	8070/2-3-DS-U60	258239	0.256
	2 NO	Slow-action contact	No	8070/2-3-DS-U60	275366	0.167
Actuator		Parallel roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-WPH-U60	258222 ■	0.170
		Snap-action contact	Yes	8070/2-2-WPH-U60	258230 ■	0.170
		Snap-action contact	No	8070/2-5-WPH-U60	268114	0.167
	2 NC	Slow-action contact	Yes	8070/2-3-WPH-U60	268111	0.167
		Slow-action contact	Yes	8070/2-3-WPH-U60	268111	0.167

Selection Table

Actuator		Plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-W-U60	258219 ■	0.167
		Slow-action contact, Over-lapping	Yes	8070/2-5-W-U60	258243	0.167
		Snap-action contact	Yes	8070/2-2-W-U60	258227 ■	0.167
	2 NC	Slow-action contact	Yes	8070/2-3-W-U60	258235	0.167
	2 NO	Slow-action contact	No	8070/2-4-W-U60	268432	0.167
Actuator		Rod lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	No	8070/2-1-DD-U60	275068 ■	0.242
		Slow-action contact, Over-lapping	No	8070/2-5-DD-U60	258244	0.242
		Slow-action contact, Over-lapping	No	8070/2-5-DD-U60	275362	0.242
		Snap-action contact	No	8070/2-2-DD-U60	258233	0.242
		Snap-action contact	No	8070/2-2-DD-U60	275069	0.242
	2 NC	Slow-action contact	No	8070/2-3-DD-U60	258240	0.242
		Slow-action contact	No	8070/2-3-DD-U60	275070	0.242
	2 NO	Slow-action contact	No	8070/2-4-DD-U60	275361	0.167
Actuator		Roller lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-WH-U60	258221 ■	0.168
		Snap-action contact	Yes	8070/2-2-WH-U60	258229 ■	0.168
		Snap-action contact	No	8070/2-5-WH-U60	268113	0.167
	2 NC	Slow-action contact	Yes	8070/2-3-WH-U60	258237	0.168
	2 NO	Snap-action contact	No	8070/2-4-WH-U60	268434	0.167
Actuator		Roller plunger				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-R-U60	258220 ■	0.168
		Snap-action contact	Yes	8070/2-2-R-U60	258228 ■	0.168
		Snap-action contact	No	8070/2-5-R-U60	268112	0.167
	2 NC	Slow-action contact	Yes	8070/2-3-R-U60	258236	0.168
	2 NO	Snap-action contact	No	8070/2-4-R-U60	268433	0.167
Actuator		Rotary lever				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-D-U60	275063 ■	0.234
		Slow-action contact, Over-lapping	Yes	8070/2-5-D-U60	275067	0.167
		Snap-action contact	Yes	8070/2-2-D-U60	275064 ■	0.234
	2 NC	Slow-action contact	Yes	8070/2-3-D-U60	275065 ■	0.234
	2 NO	Slow-action contact	No	8070/2-4-D-U60	258242	0.234
		Slow-action contact	No	8070/2-4-D-U60	275066	0.243

Selection Table

Actuator		Safety switch				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Slow-action contact	Yes	8070/2-1-AZ-U60	258226 ■	0.194
	2 NC	Slow-action contact	Yes	8070/2-3-AZ-U60	258241 ■	0.194
Actuator		Spring rod head				
Figure	Contacts	Switching function	Positive opening operation	Product Type	Art. No.	Weight kg
	1 NC + 1 NO	Snap-action contact	No	8070/2-2-TK300-U60	275346 ■	0.204
		Snap-action contact	No	8070/2-2-TK-U60	258234 ■	0.204

The actuators enclosed are not mounted.
Actuators without positive opening are not suitable for safety circuits!

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

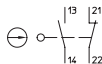
Technical Data

Variant	8070/2-1-... and 8070/2-2-... 1 NC + 1 NO	8070/2-3-... 2 NC	8070/2-1-AZ-U60 1 NC + 1 NO	8070/2-3-AZ-U60 2 NC
Explosion Protection				
IECEX gas explosion protection	Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb	Ex db eb IIC T6 Gb
IECEX dust explosion protection	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db
ATEX gas explosion protection	Ex II 2 G Ex db eb IIC T6 Gb	Ex II 2 G Ex db eb IIC T6 Gb	Ex II 2 G Ex db eb IIC T6 Gb	Ex II 2 G Ex db eb IIC T6 Gb
ATEX dust explosion protection	Ex II 2 D Ex tb IIIC T80 °C Db	Ex II 2 D Ex tb IIIC T80 °C Db	Ex II 2 D Ex tb IIIC T80 °C Db	Ex II 2 D Ex tb IIIC T80 °C Db
EAC gas explosion protection	Ex 1 Ex db e IIC T6 Gb	Ex 1 Ex db e IIC T6 Gb	Ex 1 Ex db e IIC T6 Gb	Ex 1 Ex db e IIC T6 Gb
EAC dust explosion protection	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db	Ex tb IIIC T80 °C Db
Certificates	ATEX (BVS), Canada / USA (CSA), China (CQST), EAC (CCVE), IECEX (BVS), Korea (KGS)	ATEX (BVS), Canada / USA (CSA), China (CQST), EAC (CCVE), IECEX (BVS), Korea (KGS)	ATEX (BVS), Canada / USA (CSA), China (CQST), EAC (CCVE), IECEX (BVS)	ATEX (BVS), Canada / USA (CSA), China (CQST), EAC (CCVE), IECEX (BVS)
Notes	Product label may vary. Series devices have certification according to ATEX and IECEX.			
Electrical Data				
DC rated operational voltage	125 V	125 V	125 V	125 V
AC operating voltage (unequal potential)	250 V	250 V	250 V	250 V
Rated insulation voltage	500 V	500 V	500 V	500 V
Rated operational current	4 A 2 A	4 A 2 A	4 A 2 A	4 A 2 A
Rated insulation voltage note	(for simple apparatus: 40 V)	(for simple apparatus: 40 V)	(for simple apparatus: 40 V)	(for simple apparatus: 40 V)
Rated operational current note	(for simple apparatus: 200 mA): inductance L _i and capacitance C _i are negligible	(for simple apparatus: 200 mA): inductance L _i and capacitance C _i are negligible	(for simple apparatus: 200 mA): inductance L _i and capacitance C _i are negligible	(for simple apparatus: 200 mA): inductance L _i and capacitance C _i are negligible
Electrical service life	Max. 10 ⁶ operating cycles	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	Max. 10 ⁶ operating cycles
Rated surge voltage	6 kV	6 kV	6 kV	6 kV
Short-circuit protection, max.	6 A	6 A	6 A	6 A
Maximum operating frequency	1800 operating cycles/h	1800 operating cycles/h	1800 operating cycles/h	1800 operating cycles/h
Ambient Conditions				
Ambient temperature	-60 °C ... +55 °C (Max. 4 A) -20 °C ... +60 °C (IP67 (EN 60529)) (Max. 2 A) -60 °C ... +60 °C (Max. 2 A)	-60 °C ... +55 °C (Max. 4 A) -20 °C ... +60 °C (IP67 (EN 60529)) (Max. 2 A) -60 °C ... +60 °C (Max. 2 A)	-50 °C ... +55 °C (Max. 4 A) -20 °C ... +60 °C (IP67 (EN 60529)) (Max. 2 A) -50 °C ... +60 °C (Max. 2 A)	-50 °C ... +55 °C (Max. 4 A) -20 °C ... +60 °C (IP67 (EN 60529)) (Max. 2 A) -50 °C ... +60 °C (Max. 2 A)

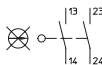
Technical Data

Variant	8070/2-1-... and 8070/2-2-... 1 NC + 1 NO	8070/2-3-... 2 NC	8070/2-1-AZ-U60 1 NC + 1 NO	8070/2-3-AZ-U60 2 NC
Mechanical Data				
Degree of protection (IP)	IP66	IP66	IP66	IP66
Enclosure material	Thermoplast GF, impact resistant	Thermoplast GF, impact resistant	Thermoplast GF, impact resistant	Thermoplast GF, impact resistant
Cover material	Duroplast GF, impact resistant	Duroplast GF, impact resistant	Duroplast GF, impact resistant	Duroplast GF, impact resistant
Contact material	Silver-nickel	Silver-nickel	Silver-nickel	Silver-nickel
Finely stranded connection cross section	0.75 – 1.5 mm ²	0.75 – 1.5 mm ²	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	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	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)	≥ 1.5 mm (isolating distance ≥ 3 mm)
Seal	Silicone	Silicone	Silicone	Silicone
Components				
Cable glands and entries	1 x M20 Ø 7 to 13 mm	1 x M20 Ø 7 to 13 mm	1 x M20 Ø 7 to 13 mm	1 x M20 Ø 7 to 13 mm
Cable entry material	Polyamide	Polyamide	Polyamide	Polyamide
Material cable gland	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced	Polyamide, Glass fibre reinforced

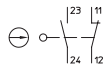
Technical Drawings – Subject to Alterations



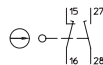
Slow-action contact 1 NC + 1 NO
8060/-1; 807-/2-1



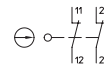
Slow-action contact 2 NO
8060/-4; 807-/2-4



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



Slow-action contact 1 NC + 1 NO, make before break
8060/-5; 807-/2-5



Slow-action contact 2 NC
8060/-3; 807-/2-3

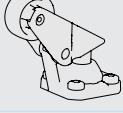
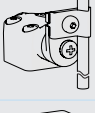
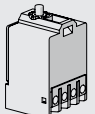
Accessories

Figure	Description	Art. No.	Weight kg
Actuator			
	Straight actuator	258607 ■	0.100
	Bent actuator	258608 ■	0.100
	Movable actuator	258609 ■	0.100

Accessories

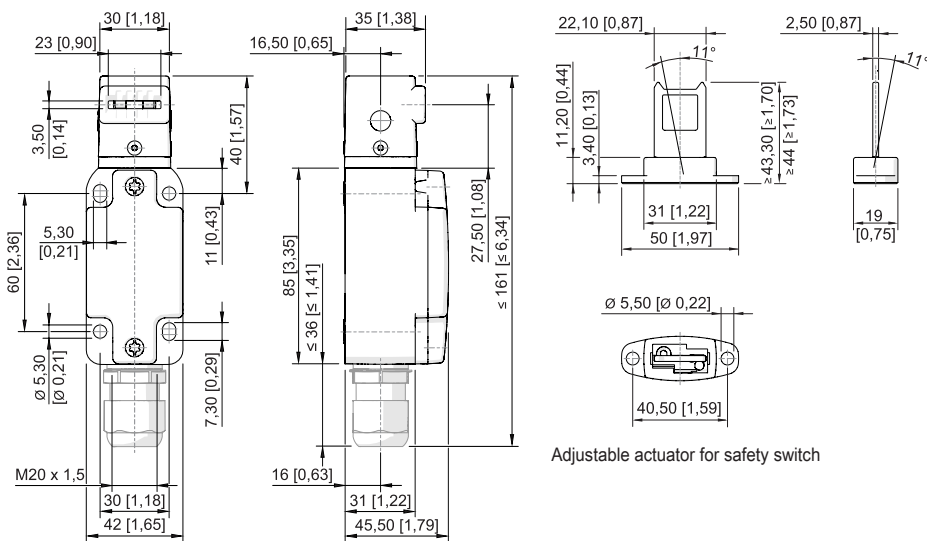
Figure	Description	Art. No.	Weight kg
Cable gland made of plastic			
	8161/7-M20-1307, Ex e Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm Lot size 50 pieces	239172 ▲	0.013

Spare Parts

Figure	Description	Art. No.	Weight kg
Actuator			
	Roller plunger actuator	258602 ■	0.100
	Spring rod head actuator	258605 ■	0.100
	Roller lever actuator	258603 ■	0.100
	Parallel roller lever actuator	258604 ■	0.100
	Rotary lever actuator	275368 ■	0.040
	Adjustable rotary lever actuator	275370 ■	0.080
	Rod lever actuator	275369 ■	–
	Safety switch actuator	258606	0.100
Contact element			
	1 NC + 1 NO slow-action contact 8080/1-1	132529 ■	0.025
	1 NC + 1 NO slow-action contact 8080/1-2	279482 ■	0.025
	2 NC slow-action contact 8080/1-3	132532 ■	0.025

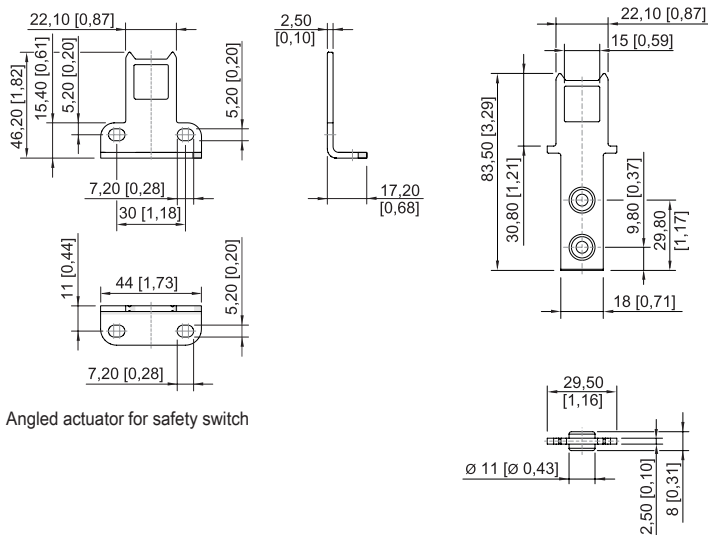
Lot size: Purchase order quantity in [pieces], the delivery quantity is automatically rounded to the lot size.

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

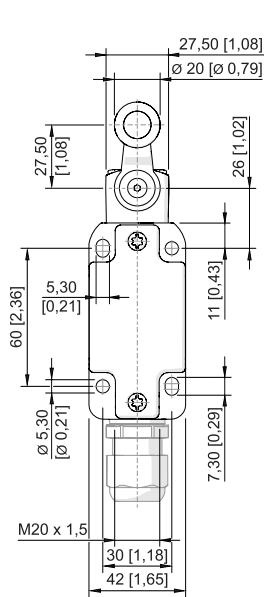


Adjustable actuator for safety switch

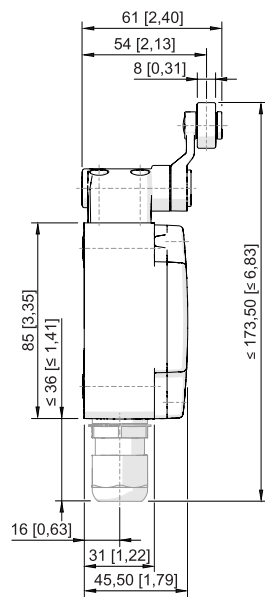
Safety switch 8070/2.-AZ-U50



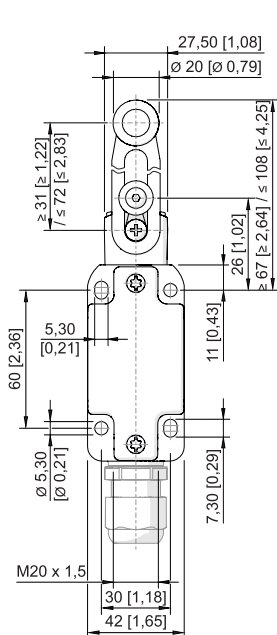
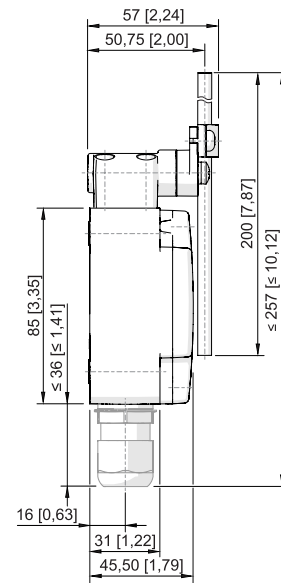
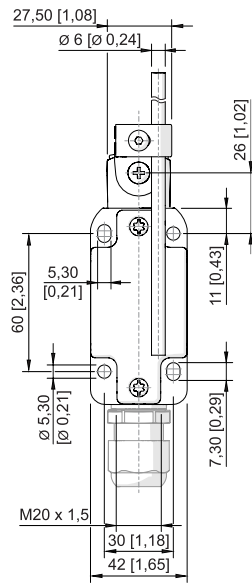
Straight actuator for safety switch



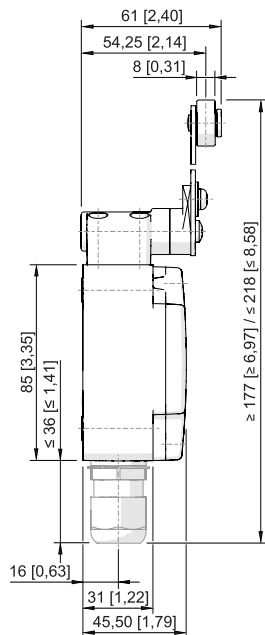
Swivelling lever 8070/2--D-U60



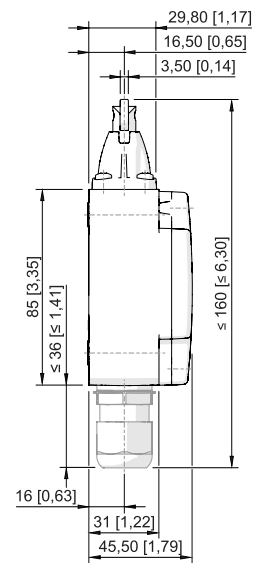
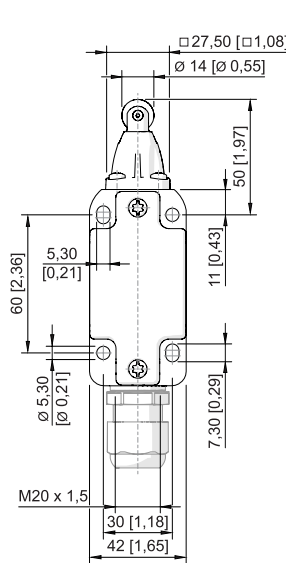
Rod lever 8070/2--DD-U60



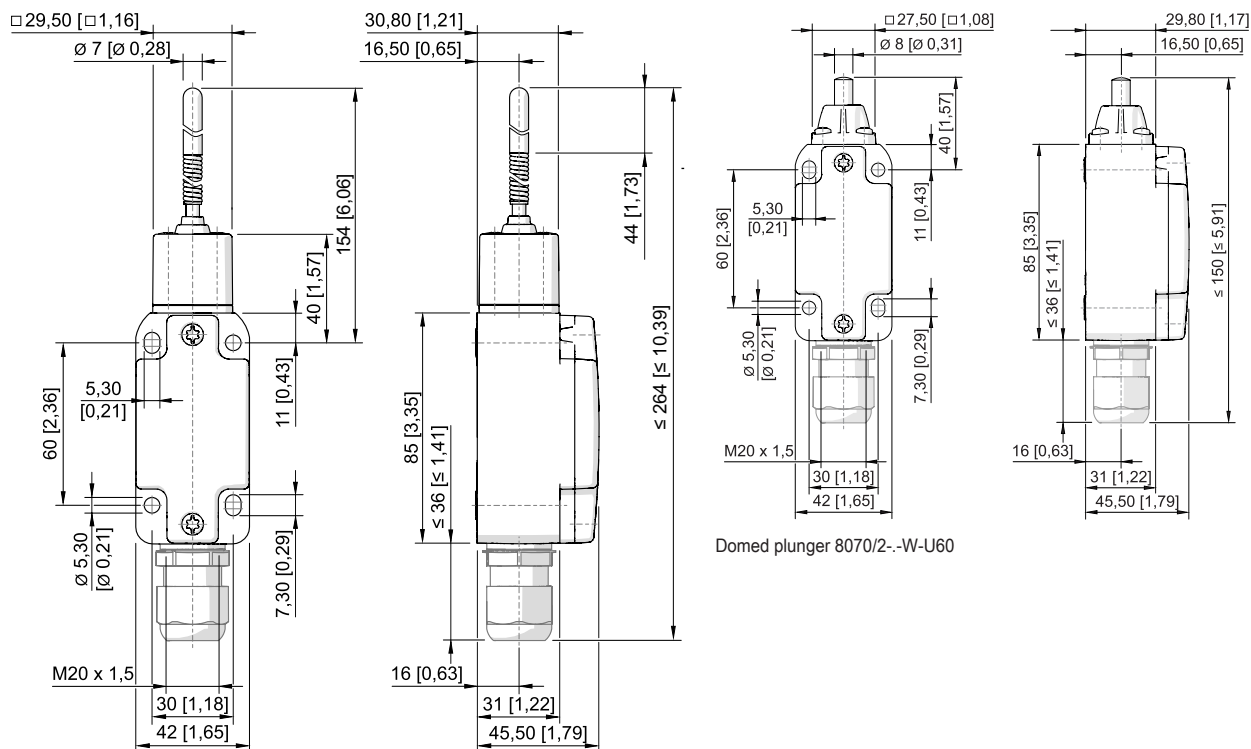
Swivelling lever 8070/2--DS-U60



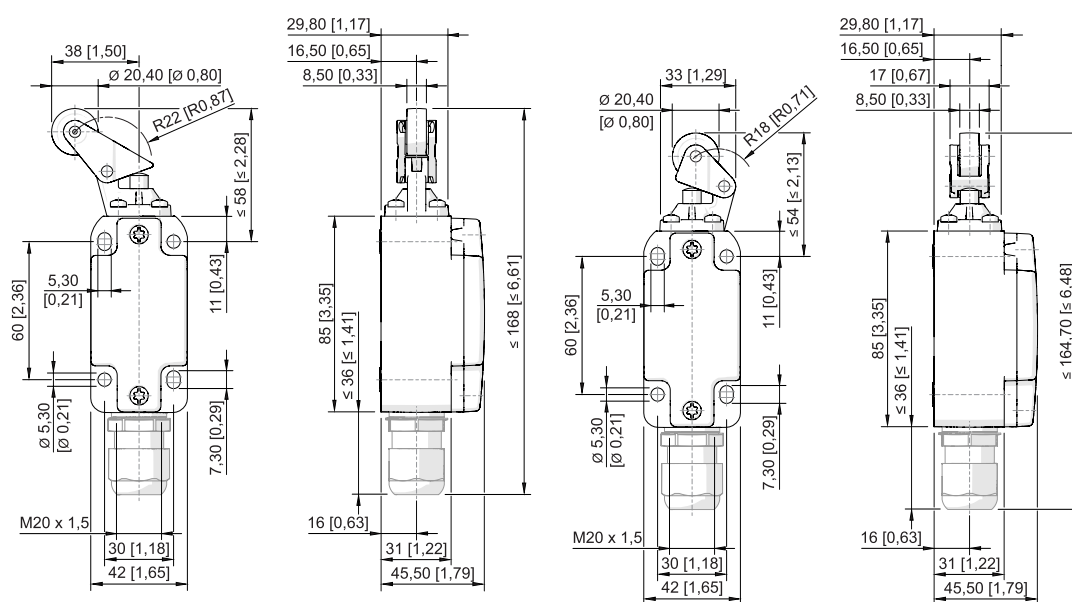
Roller plunger 8070/2--R-U60



E4



Roller plunger 8070/2--R-U60



Roller lever 8070/2--WPH-U60

Roller lever 8070/2--WH-U60