PUSHBUTTONS AND TOGGLES - SUBMINIATURE

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8354

- > Double-break flexible leaf snap-action mechanism
- > Momentary or maintained action
- > Changeover-SPDT microswitch as standard
-) One, two, three and four-pole configurations
-) Long life
-) Ratings from 1 mA 4 V \pm to 6 A 250 V \sim
- Operating temperature -40 °C up to +125 °C









Main specifications									
			Pushbuttons					Toggles	
		Action	Momentary	Momentary + Maintained*	Momentary	Momentary + Maintained*	Momentary	Maintained 2 positions	Maintained 2 positions
Fe		Features	Large button Side outputs		Large button Rear outputs		Small button Side outputs	Large lever Side outputs	Small lever Side outputs
			83542	83540	83543	83541	83547	83544	83546
		Connections							
1-pole (8354-0)	I (changeover)	W2 (solder)	83542002	83540001		-	83547001	83544001	83546004
2-pole (8354-3)	I (changeover)	W2 (solder)	83542301	83540301	83543301	83541301	83547301	83544301	83546302
3-pole (8354-6)	I (changeover)	W2 (solder)	83542601	83540601	83543601	83541601	83547602	83544601	83546601
Electrical characteristics									
Rating nominal / 250 V AC (A)			6	6	_6	6	6	6**	6
Rating thermal / 250 V AC (A)		· /	11	11	11	11	11	11**	11
Mechanical characteristics									
Maximum operating force, 1-pole (N)		1.6	1.6		-		3	3	
Maximum operating force, 2-pole (N)			3.2	3.2	3,2	3,2	2	4	4
Maximum operating force, 3-pole (N)			4.8	4.8	4,8	4,8	3		
Maximum total travel force (N)			20	20	20	20	5		-
Pretravel (mm)			0.7	0.7		0,7	1,2	-	-
Total travel (mm)			5	3.9	5	3,9	3,5	30°	30°
Ambient operating temperature (°C)			-40 → +125	-40 → +125	-40 → +125	<u>-40 → +125</u>	-40 → +105	-40 → +125	-40 → +125
Mechanical life - normal travel*** (op.)			106	- -	106	- -	106	105	405
Mechanical life - total travel (op.)			5 x 10 ⁵	5 x 10 ⁵	_5 x 10⁵	_5 x 10⁵	5 x 10 ⁵	105	105
Weight, 1-pole (g)			12	13	-		7,5	18	

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Additional specifications

- Buttons, toggles: PA66, POM (83547), nickel-plated steel (83544, 83546)
- Mounting brackets: zinc-plated steel
- Barrels, knurled bezels, nuts: nickel-plated brass
- Locating washer: stainless steel
- Contacts: silver alloy (gold-plated silver alloy: on request)
- Terminals: copper nickel

Weight, 2-pole (g)

Weight, 3-pole (g)

- Sealing cap (accessory): silicone rubber

- Degree of protection: IP40 (button side), IP50 with cap (accessory)

21

24

11

14

- Protection against electric shock: Class I

20

23

- Rated insulation voltage Ui: 250 V, 48 V (83544)
- Impulse withstand voltage Uimp: 2.5 kV, 0.5 kV (83544)

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- Pollution degree: 3, 2 (83541, 83543, 83544)
- Certification marks: Paus on request / W

Product adaptations



- > Functions on request: normally closed (R) or normally open (C) SPST microswitches
- > 4-pole pushbuttons: 835419, 835439

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-) Dual-current variants with gold-plated contacts for use from 1 mA to 5 A
- > Rear outputs on 83540, 83542, 83544, 83546 and 83547 models (1-pole only)
- > Side outputs on 83541 and 83543
- > Terminals for printed boards
- Higher operating force on 83542 (SP3134)
- > Sealing cap accessory for IP50 protection on button side (for 83540, 83541, 83542, 83543)
- > Red button on 83540, 83541, 83542, 83543 models
- > cURus approved models

Standard product

Product made to order



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¹⁹ * Push slightly for momentary action. Fully push for maintained action, to latch, then to unlatch. ** Ratings at 48 V \sim

^{***} Normal travel: until point of resistance

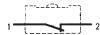
Principles (per pole)

Double break snap-action switch Changeover - SPDT (form Za):



Both circuits must be used at same polarity

Normally closed - SPST-NC (form Y)

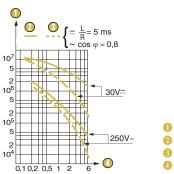


Normally open - SPST-NO (form X)



Curves

Operating curve for types 8354



Number of cycles

| 2

Resistive circuit
Inductive circuit

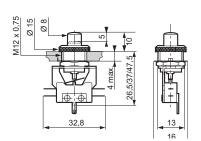
Current in Amps

The operating curve relates to contact life, but switch durability is also limited by mechanical life of operating device : see "Mechanical life"

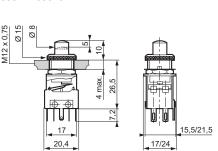
Dimensions

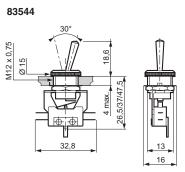
Products

83540 - 83542

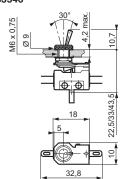


83541 - 83543

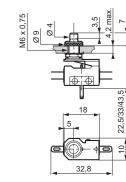






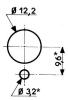


83547



Panel cutouts

83540 - 83541 - 83542 - 83543 - 83544



* When used with the locating washer

83546 - 83547 Ø1,8*

Connections

W2 solder or quick-connect 2.8 x 0.5

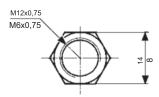


X1 for PCB (consult us)



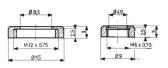
Mounting accessories

Hexagonal nuts



Thickness: 1.5

Knurled bezels





Mounting accessories

Part numbers for accessories

70514222

70602118

70514221

70602117

70135750

70135751

Knurled bezel-M12

Sealing cap-black
Sealing cap-red

Installation recommendations

See "Basic technical concepts"

How to order

Use the 8 digit part numbers when they are defined

Other cases, precise:

Type of switch/nb of poles - Function - Connection - UL approval* - Adaptation* + Mounting accessories*

* if needed

Example: 835426 I W2 UL + 70135750

Warning:

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