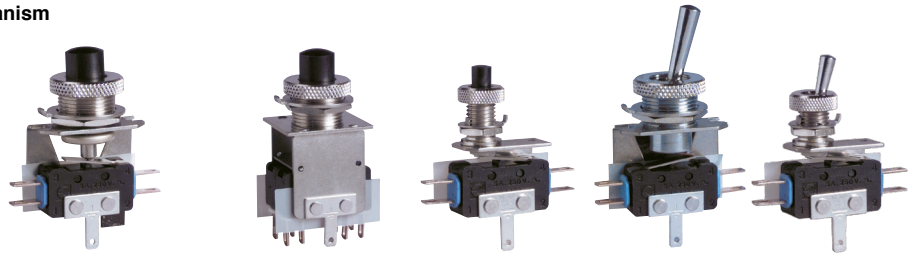


# PUSHBUTTONS AND TOGGLES - SUBMINIATURE

## 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 $\overline{\text{DC}}$  to 6 A 250 V $\sim$
- › Operating temperature -40 °C up to +125 °C



### Main specifications

		Pushbuttons					Toggles
		Momentary	Momentary + Maintained*	Momentary	Momentary + Maintained*	Momentary	Maintained 2 positions
Features		Large button Side outputs		Large button Rear outputs		Small button Side outputs	Small lever Side outputs
		83542	83540	83543	83541	83547	83546
Function	Connections						
1-pole (8354-0)	I (changeover) W2 (solder)	83542002	83540001	-	-	83547001	83546004
2-pole (8354-3)	I (changeover) W2 (solder)	83542301	83540301	83543301	83541301	83547301	83546302
3-pole (8354-6)	I (changeover) W2 (solder)	83542601	83540601	83543601	83541601	83547602	83546601
Electrical characteristics							
Rating nominal / 250 V AC (A)		6	6	6	6	6	6
Rating thermal / 250 V AC (A)		11	11	11	11	11	11
Mechanical characteristics							
Maximum operating force, 1-pole (N)		1.6	1.6	-	-	1	3
Maximum operating force, 2-pole (N)		3.2	3.2	3,2	3,2	2	4
Maximum operating force, 3-pole (N)		4.8	4.8	4,8	4,8	3	5
Maximum total travel force (N)		20	20	20	20	5	-
Pretravel (mm)		0.7	0.7	0,7	0,7	1,2	-
Total travel (mm)		5	3.9	5	3,9	3,5	30°
Ambient operating temperature (°C)		-40 → +125	-40 → +125	-40 → +125	-40 → +125	-40 → +105	-40 → +125
Mechanical life - normal travel*** (op.)		10 <sup>6</sup>	-	10 <sup>6</sup>	-	10 <sup>6</sup>	-
Mechanical life - total travel (op.)		5 x 10 <sup>5</sup>	5 x 10 <sup>5</sup>	5 x 10 <sup>5</sup>	5 x 10 <sup>5</sup>	5 x 10 <sup>5</sup>	10 <sup>5</sup>
Weight, 1-pole (g)		12	13	-	-	7,5	8
Weight, 2-pole (g)		15	16	19	20	10	11
Weight, 3-pole (g)		18	19	22	23	13	14

\* Push slightly for momentary action. Fully push for maintained action, to latch, then to unlatch.  
 \*\*\* Normal travel: until point of resistance

### Additional specifications

- Buttons, toggles: PA66, POM (83547), nickel-plated steel (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
- Sealing cap (accessory): silicone rubber
- Degree of protection: IP40 (button side), IP50 with cap (accessory)
- Protection against electric shock: Class I
- Rated insulation voltage U<sub>i</sub>: 250 V,
- Impulse withstand voltage U<sub>imp</sub>: 2.5 kV,
- Pollution degree: 3, 2 (83541, 83543)
- Conformity / Certifications: on request /

### Product adaptations



- › Functions on request: normally closed (R) or normally open (C) SPST microswitches
- › 4-pole pushbuttons: 835419, 835439
- › Dual-current variants with gold-plated contacts for use from 1 mA to 5 A
- › Rear outputs on 83540, 83542, 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



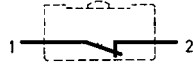
Contact us

## Principles (per pole)

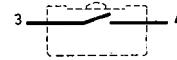
Double break snap-action switch  
Changeover - SPDT (form Za):



Normally closed - SPST-NC (form Y)



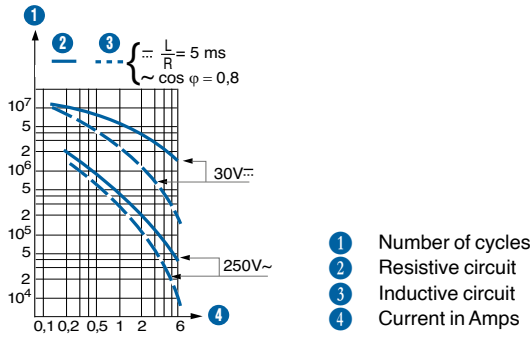
Normally open - SPST-NO (form X)



Both circuits must be used at same polarity

## Curves

Operating curve for types 8354

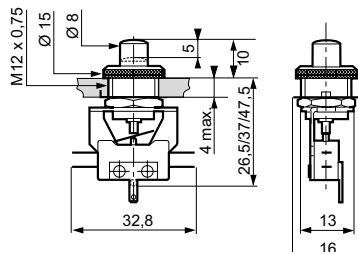


The operating curve relates to contact life, but switch durability is also limited by mechanical life of operating device : see "Mechanical life"

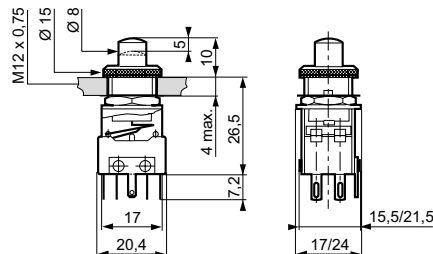
## Dimensions

### Products

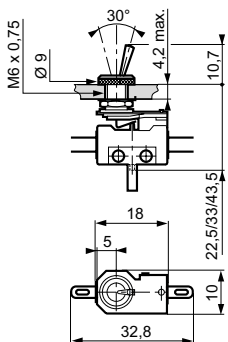
83540 - 83542



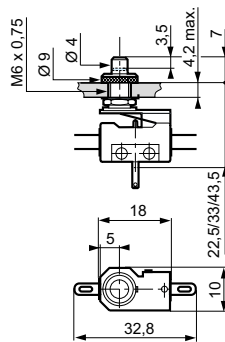
83541 - 83543



83546



83547



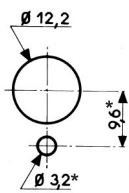
Recommended tightening torques on barrel nuts and knurled bezels:

M12 x 0.75: 2 to 4 N.m

M6 x 0.75: 0.8 to 1.5 N.m

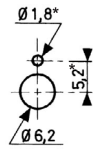
## Panel cutouts

83540 - 83541 - 83542 - 83543



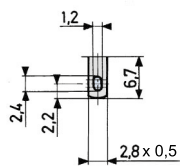
\* When used with the locating washer

83546 - 83547

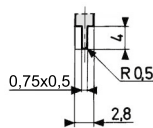


## Connections

W2 solder or quick-connect 2.8 x 0.5

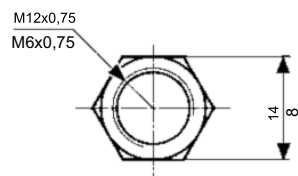


X1 for PCB (consult us)



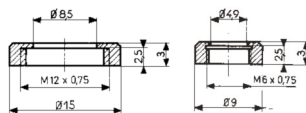
## Mounting accessories

Hexagonal nuts



Thickness: 1.5

Knurled bezels



## Mounting accessories

Part numbers for accessories

70514222

70602118

70514221

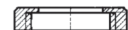
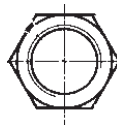
70602117

Hexagonal nut-M6

Hexagonal nut-M12

Knurled bezel-M6

Knurled bezel-M12



## 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 | W2 UL

## Warning:

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