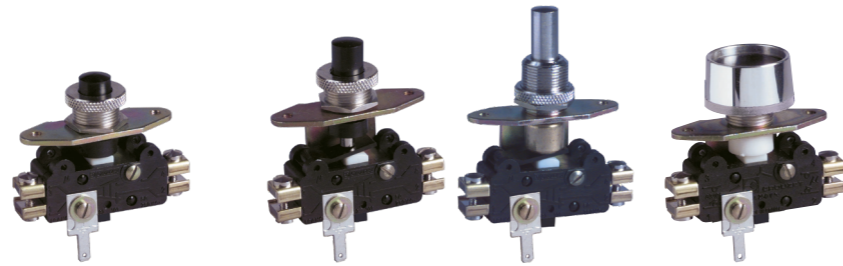


PUSHBUTTONS AND TOGGLES - MINIATURE

8350 / 8351 / 8352 / 8353

- › Double-break flexible leaf snap-action mechanism
- › Momentary or maintained action
- › Changeover-SPDT microswitch as standard
- › One, two and three-pole configurations
- › Long life
- › Ratings from 10 mA 4 V_{DC} to 10 A 250 V_{AC}
- › Operating temperature -40 °C up to +125 °C
- › Choice of connections



Main specifications

		Pushbuttons				
		Momentary	Momentary + Maintained*	Momentary	Momentary	Momentary
		Standard	Long travel	Long travel	Long travel Metal plunger	Recessed button
		83507	83553 ***	83513	83522	83535
Function	Connections					
1-pole (835--0)	I (changeover)	W1 (screw)	●	83513003	83522011	83535012
	I (changeover)	W2 (solder)	83553003	83513005	83522005	83535007
	I (changeover)	W3 (QC 6.3x0.8)	●	83513010	83522016	83535021
2-pole (835--3)	I (changeover)	W1 (screw)	●	83513309	●	●
	I (changeover)	W2 (solder)	●	83513301	83522302	83535306
	I (changeover)	W3 (QC 6.3x0.8)	●	●	●	●
Electrical characteristics						
Rating nominal / 250 V AC (A)		10	10	10	10	10
Rating thermal / 250 V AC (A)		17.5	17.5	17.5	17.5	17.5
Mechanical characteristics						
Maximum operating force, 1-pole (N)		4	4/25	4	4	4
Maximum operating force, 2-pole (N)		8	8/25	8	8	8
Maximum total travel force, 1-pole (N)		-	-	35	15	-
Maximum total travel force, 2-pole (N)		-	-	35	15	-
Pretravel (mm)		1.1	1.1	1.1	1.1	1.1
Total travel (mm)		2.2	6	6	6	2.2
Ambient operating temperature (°C)		-40 → +85	-40 → +85	-40 → +85	-40 → +85	-40 → +85
Mechanical life (operations)		10 ⁶	5 x 10 ⁵	10 ⁶	10 ⁶	10 ⁶
Weight, 1-pole (g)		26	24	30	40	29
Weight, 2-pole (g)		39	34	43	53	42

* Push slightly for momentary action. Fully push for maintained action, to latch, then to unlatch
 ** One side momentary, the other side maintained
 *** Please consult us

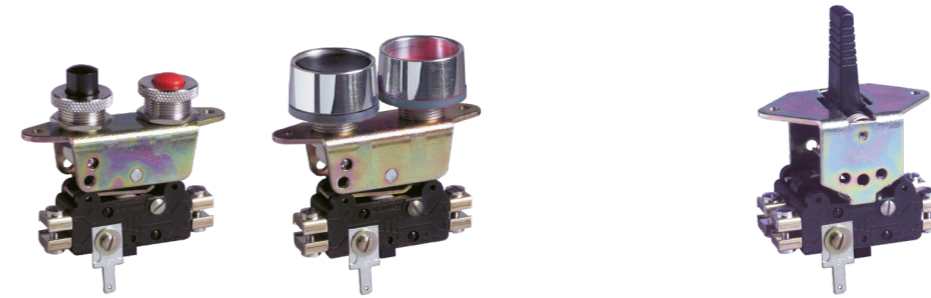
Additional specifications

- Buttons, toggles: POM, PA66 (83502, 83507), nickel-plated brass (83522)
- Mounting brackets: zinc-plated steel
- Barrels, knurled bezels, nuts: nickel-plated brass
- Button collars: chrome-plated ABS (83533, 83535)
- Contacts: silver alloy (gold-plated silver alloy: on request)
- Terminals: brass, copper nickel (W2)
- Sealing cap (accessory): silicone rubber
- Degree of protection: IP40 (button side), IP50 with cap (accessory)
- Protection against electric shock: Class I (see also "installation recommendations")
- Rated insulation voltage U_i: 250 V (for U_i 400 V, please consult us)
- Impulse withstand voltage U_{imp}: 2.5 kV
- Pollution degree: 3
- Conformity / Certifications: on request /

Product adaptations

- › Functions on request: normally closed (R) or normally open (C) SPST microswitches
- › 3-pole configurations: 835--6 (except for 83515, 83516, 83517)
- › High DC switching capacity: 5 A 250 V_{DC} (with 83154 microswitches)
- › Dual-current variants with gold-plated contacts for use from 10mA to 5A
- › Built-in screw connections (with 83112 microswitches)
- › Solder connections on front face (with 83109 microswitches)
- › Sealing cap accessory for IP50 protection on button side (for 83502, 83507, 83513, 83535)
- › Red button on 83507 and 83535 models
- › High operating temperature: +125 °C (on 83507, 83513, 83522)
- › cURus approved models

Standard product Product made to order ● Contact us



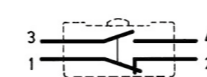
Main specifications (continued)

Tandem buttons		Toggles			Action	
Maintained		Momentary	Maintained	Momentary + Maintained **		
Standard	Recessed buttons	3 positions Auto-return to center	3 positions	3 positions Auto-return to center on momentary side	Features	
83502	83533	83515	83516	83517	Func.	Conn.
83502005	83533002	83515006	83516002	●	1-pole (835--0)	W1
83502002	83533003	83515010	●	●		W2
83502008	83533005	●	●	●		W3
83502306	●	83515302	83516303	●	2-pole (835--3)	W1
83502302	●	83515301	83516301	●		W2
●	●	●	●	●		W3
Electrical						
10	10	10	10	10	Nom rating (A)	
17.5	17.5	17.5	17.5	17.5	Therm rating (A)	
Mechanical						
20	20	8	8	8	OF max, 1p (N)	
20	20	10	10	10	OF max, 2p (N)	
-	-	-	-	-	TTF max, 1p (N)	
-	-	-	-	-	TTF max, 2p (N)	
-	-	± 16°	-	± 16°	PT (mm)	
4	4	± 24°	± 24°	± 24°	TT (mm)	
-40 → +85	-40 → +85	-40 → +85	-40 → +85	-40 → +85	Temp (°C)	
5 x 10 ⁵	5 x 10 ⁵	10 ⁵	10 ⁵	10 ⁵	Mech. life (op)	
53	54	50	50	50	Weight, 1p (g)	
64	70	71	71	71	Weight, 2p (g)	

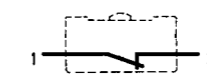
Principles (per pole)

Double break snap-action switch

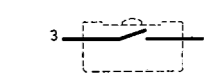
Changeover - SPDT (form Za):



Normally closed - SPST-NC (form Y)

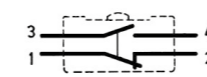
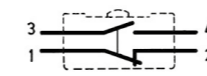


Normally open - SPST-NO (form X)



Both circuits must be used at same polarity

Changeover - 2 x SPDT (2 x form Za): for 83515/83516/83517



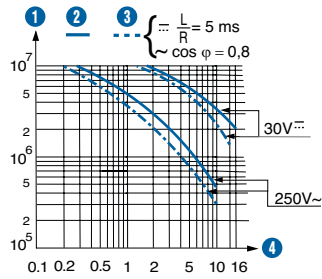
As standard: each SPDT microswitch is operated by one lever maximum position

As adaptation: both SPDT microswitches can be simultaneously operated by one lever maximum position ; the other maximum position being locked. (SP3218)

Standard product Product made to order ● Contact us

Curves

Operating curve for types 8350 / 8351 / 8352 / 8353



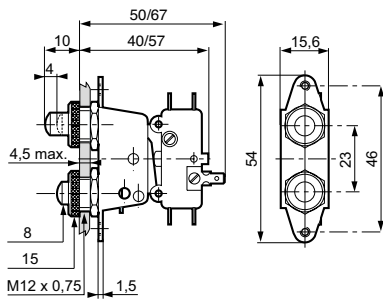
- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Current in Amps

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

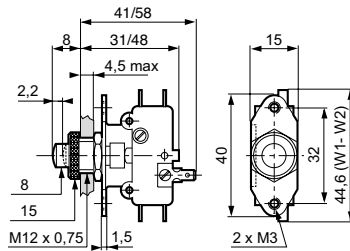
Dimensions

Products

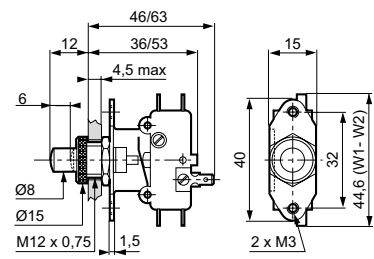
83502



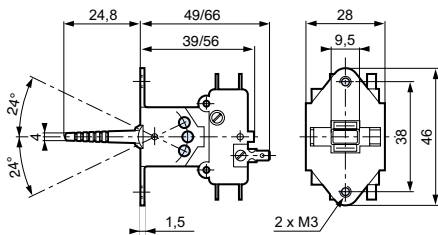
83507



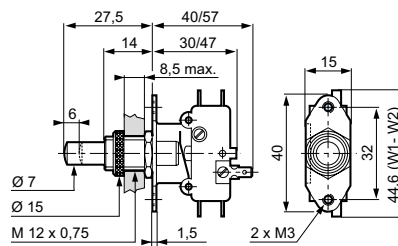
83513



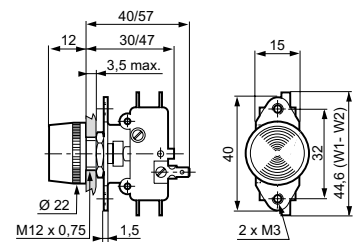
83515 - 83516 - 83517



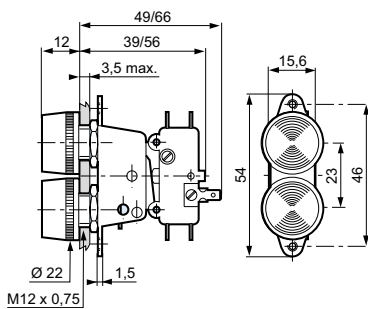
83522



83535



83533



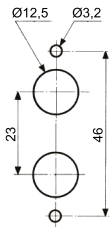
Recommended tightening torques:

Fixing by M3 screws: 0.8 to 1.2 N.m

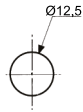
Fixing by M12 x 0.75 barrel nut and knurled bezel: 2 to 4 N.m

Panel cutouts

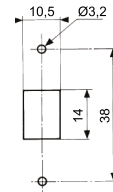
83502 - 83533



83507 - 83513 - 83522 - 83535

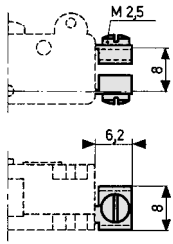


83515 - 83516 - 83517

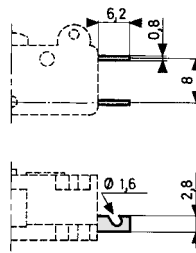


Connections

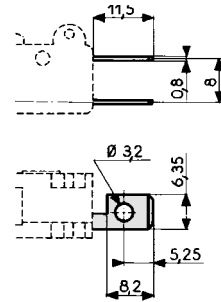
W1 screw with clamp



W2 solder



W3 quick-connect 6.3 x 0.8

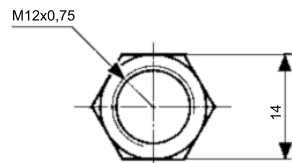


Mounting accessories

Knurled nut

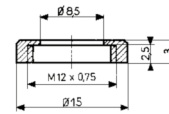


Hexagonal nut



Thickness: 1.5

Knurled bezel



Mounting accessories

Part numbers for accessories

70162306

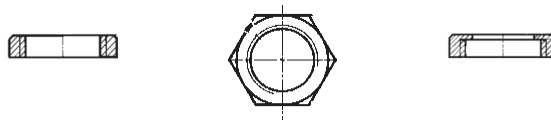
70602118

70602117

Knurled nut

Hexagonal nut-M12

Knurled bezel-M12



Installation recommendations

See "Basic technical concepts"

For 83522: to ensure protection against electric shock, direct manual operation on the metal plunger is not permitted above 48 V.

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: 835073 | W3 UL

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Pushbutton Switches](#) category:

Click to view products by [Crouzet](#) manufacturer:

Other Similar products are found below :

[8971K1133](#) [LW2L-M1C20M-A](#) [M22-D-R-GB0/K11](#) [701PB580](#) [7199K101](#) [810K12910](#) [810KSV30B](#) [FLT 2U EE 01A](#) [MML21EA2ADK](#)
[MML21KA3ABK](#) [MML23KA3AC05K-001](#) [MML23KW3AA01W](#) [8418K2](#) [8442K3](#) [8450K1](#) [860K11911T01A](#) [861901](#) [861K11911T01A07](#)
[861K13810T00A14](#) [861K13911](#) [8646AB6X718UL](#) [9533CD4+U574+U4922](#) [99-453.837](#) [A2PMA1X03EC56](#) [A3A-7310](#) [A3A-7340](#)
[12037A2ULCSA](#) [1203A2UL](#) [ABGW410-R](#) [ABN400-R](#) [121382](#) [1213C3](#) [HE3B-M2](#) [121194](#) [1212MRA](#) [1241.1183.7047](#) [121489](#)
[1223A2ULCSA](#) [1241.1183.8000](#) [1241.1183.8029](#) [D5P-MT4](#) [13435AG](#) [13445AD29GX768](#) [AG23-L2](#) [AH165-2SGLG1TE3](#) [AH165-](#)
[TGFY22](#) [AH165-TGL5Y11E3](#) [AH165-TGLR11AA3](#) [AH165-TL5Y22E](#) [AH165-TLR11E](#)