

Sealed

→ 83 139

- IP66/IP67 protection,
- Protection against hydrocarbons, detergents
- Double break switching
- Double insulated or Atex flameproof casing
- Choice of actuators



Main specifications

		Standard 83 139 0	Low temperature 83 139 5	Double insulated 83 139 2	Flameproof 83 139 1
Function	Connections				
I (changeover)	Standard lead output	83 139 003	83 139 503	-	83 139 103
I (changeover)	Lead output on right/left	●	●	-	●
I (changeover)	Cable output	-	-	83 139 201	-
Electrical characteristics					
Rating nominal / 250 V AC (A)		6	6	6	6
Rating thermal / 250 V AC (A)		11	11	11	11
Mechanical characteristics					
Maximum operating force (N)		3	3	3	3
Min. Release force (N)		0.6	0.6	0.6	0.6
Maximum total travel force (N)		4	4	4	4
Max. permitted overtravel force (N)		10	10	10	10
Rest position max. (mm)		A= 8.8 B= 9.8	A=8.8 B=9.8	B=9.8	B = 9.8
Tripping point depending on position of fixing holes (mm)		A = 7.7 ^{±0.4} B = 8.7 ^{±0.4}	A=7.7 ^{±0.4} B=8.7 ^{±0.4}	B = 8.7 ^{±0.4}	B = 8.7 ^{±0.4}
Differential travel (mm)		0.35 ±0.1	0.35 ±0.1	0.35 ±0.1	0.35 ±0.1
Min. overtravel (mm)		0.25	0.25	0.25	0.25
Ambient operating temperature (°C)		0 → +85	-40 → +85	-40 → +85	-40 → +70
Mechanical life (operations)		10 ⁷	5 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶
Contact gap (mm)		0.3 x 2	0.3 x 2	0.3	0.3 x 2
Weight (g)		37	37	45	37
Fixations					
Fixings - 4 holes (standard)		A	A	-	-
Fixing - 2 holes		B	B	B	B
Connections					
Connection		4 flexible leads 0.75 mm ² length 0.50 m Ø ext. 2 mm	4 flexible leads 0.75 mm ² Ø ext. 2 mm	Cable 3 x 0.75 mm ² length 0.50 m Ø ext. 5.2 mm	4 flexible leads 0.75 mm ² length 0.50 mm Ø ext. 2 mm
Standard wire output		S	S	-	S
Wire output on right		D	D	-	D
Wire output on left		G	G	-	G
Comments					
Components		Characteristics specific to 83 139 1			
Material		- Conform to standards EN 60079-0 and 60079-1			
- Case : polyester UL94V0		- Conform to the European directive 2014/34/EU concerning potentially explosive atmospheres			
- Contacts : silver		- Classification / Product marking: Ⓜ II 2 G - Ex d IIC Gb			
- Membrane : nitrile for 83 139 0 silicone for 83 139 1/2/5		- CE Test Certificate type n° LCIE 02 ATEX 0034 U			
Levers		- Notification number : LCIE 11 ATEX4001			
- stainless steel					
- Roller : polyamide					

Product adaptations



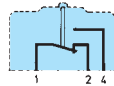
- Special levers
- Special leads, cables, cable harnesses
- Specific operating temperatures
- Two-pole version: 831398
- UL approval

Principles

Double break changeover switch
Types 83 139 0 / 83 139 1 / 83 139 5

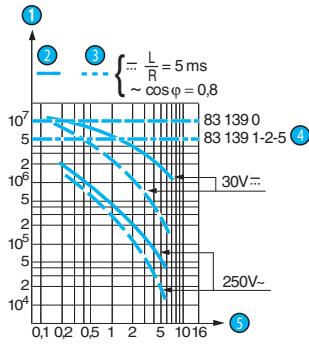


Single break changeover switch
Type 83 139 2



Curves

Operating curve for types 83 139 0 / 1 / 2 / 5

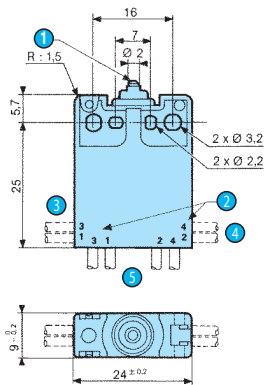


- 1 Number of cycles
- 2 Resistive circuit
- 3 Inductive circuit
- 4 Mechanical life limit
- 5 Current in Amps

Dimensions

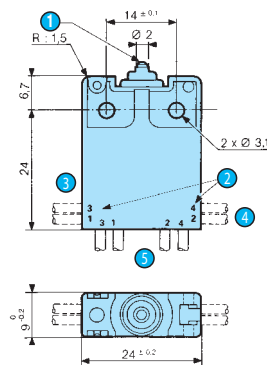
→ Product

83 139 0 - 5
A fixing = 4 holes



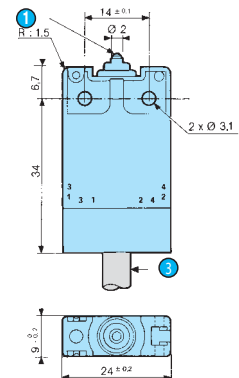
- 1 R : 1.5 spherical
- 2 Lead reference on casing
- 3 Lead output on left
- 4 Lead output on right
- 5 Standard lead output (black)
 - 1 = black lead
 - 2 = brown lead
 - 3 = grey lead
 - 4 = blue lead

83 139 0 - 1 - 5
B fixing = 2 holes



- 1 R : 1.5 spherical
- 2 Lead reference on casing
- 3 Lead output on left
- 4 Lead output on right
- 5 Standard lead output (black)
 - 1 = black lead
 - 2 = brown lead
 - 3 = grey lead
 - 4 = blue lead

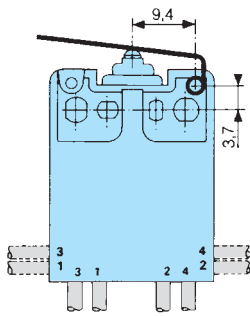
83 139 2
B fixing = 2 holes



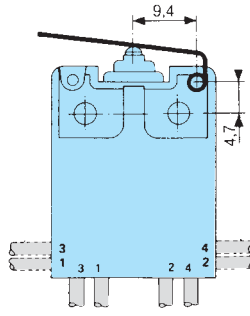
- 1 R : 1.5 spherical
- 3 Cable 3 x 0.75 mm² length 0.50 m
 - 1 = black lead
 - 2 = brown lead
 - 4 = blue lead

→ Actuator mounting positions

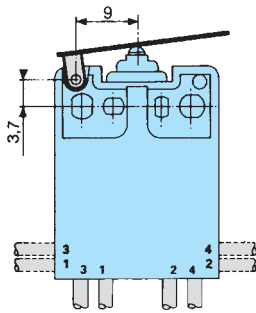
Type 139
A fixing = 4 holes



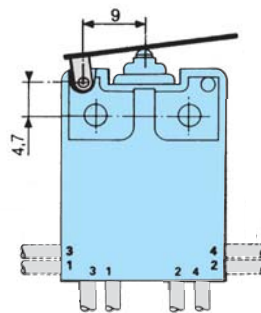
Type 139
B fixing = 2 holes



Type 161
A fixing = 4 holes

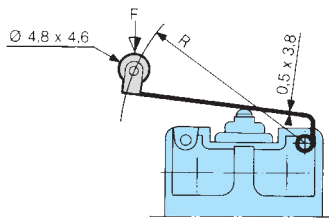


Type 161
B fixing = 2 holes

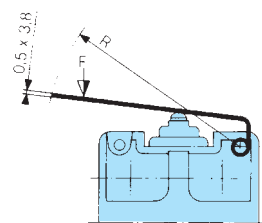


→ Actuators

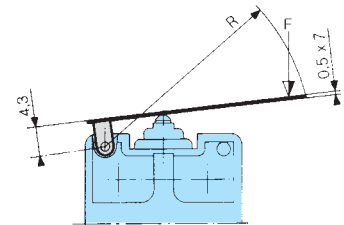
139 EX



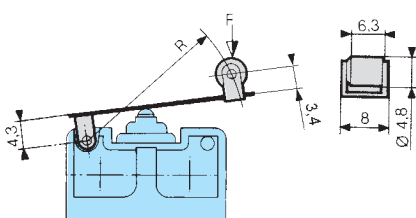
139 AX



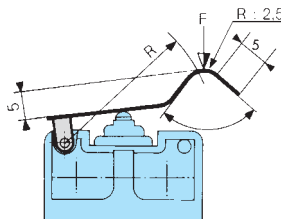
161 A



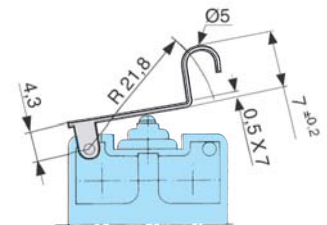
161 E



161 F


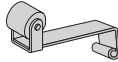




161 G





Actuators and fixing positions

Part numbers for standard actuators

		79 215 740		70 507 524		79 215 742		70 507 529	
Actuators		Flat 139 AX F29.7 mm**		Roller 139 EX F28.7 mm**		Flat 161A R14.2 - F25.4 mm		Roller 161E R13.6 - F24.1 mm	
									
Operating force - max.	N	1.5		1.5		2.6		1.7	
Release force - min.	N	0.2		0.2		0.35		0.2	
Differential travel	mm	1.5		1.5		0.7		1.25	

Part numbers for standard actuators

		70 507 528		79 218 651	
Actuators		Flat 161F F22.3 mm		Dummy roller 161 G F21.8	
					
Operating force - max.	N	2		2	
Release force - min.	N	0.2		0.2	
Differential travel	mm	1.1		1.1	

Unless indicated, flat actuators and roller actuators are delivered unmounted.

** Factory fitted

Note : We recommend greasing the switch pushbutton lightly when fitting actuators.

Other information

Mounting - Operation

See basic technical concepts

Warning:

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