



V3 83161 Standard 831613 Part number 83161338



Nominal ratings 0.1 A to 20 A / 250 VAC
 Operating temperature up to +125 °C
 Conforming to EN 61058 and UL 1054
 Choice of actuators with 4 possible fixing positions

	Type	Function	Connections	
	83161102	High release force 831611	I (changeover)	W2
	83161118	High release force 831611	I (changeover)	W3
	83161110	High release force 831611	I (changeover)	W6A5*
	MADE TO ORDER	High release force 831611	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	High release force 831611	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	High release force 831611	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	High-current 831612	I (Changeover)	W2
	MADE TO ORDER	High-current 831612	I (Changeover)	W3
	MADE TO ORDER	High-current 831612	I (Changeover)	W6A5*
	MADE TO ORDER	High-current 831612	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	High-current 831612	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	High-current 831612	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	83161301	Standard 831613	I (Changeover)	W2
	83161338	Standard 831613	I (Changeover)	W3
	83161304	Standard 831613	I (Changeover)	W6A5*
	MADE TO ORDER	Standard 831613	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Standard 831613	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Standard 831613	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Low force 831614	I (Changeover)	W2
	MADE TO ORDER	Low force 831614	I (Changeover)	W3
	MADE TO ORDER	Low force 831614	I (Changeover)	W6A5*
	MADE TO ORDER	Low force 831614	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Low force 831614	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Low force 831614	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	83161502	Very low force 831615	I (Changeover)	W2
	83161501	Very low force 831615	I (Changeover)	W3
	83161503	Very low force 831615	I (Changeover)	W6A5*
	MADE TO ORDER	Very low force 831615	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Very low force 831615	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Very low force 831615	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Very low force 831615 SP 4136	I (changeover)	W2
	MADE TO ORDER	Very low force 831615 SP 4136	I (changeover)	W3
	MADE TO ORDER	Very low force 831615 SP 4136	I (changeover)	W6A5*
	MADE TO ORDER	Very low force 831615 SP 4136	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Very low force 831615 SP 4136	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Very low force 831615 SP 4136	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
	MADE TO ORDER	Wide contact gap 831616	I (changeover)	W2

MADE TO ORDER	Wide contact gap 831616	I (changeover)	W3
MADE TO ORDER	Wide contact gap 831616	I (changeover)	W6A5*
MADE TO ORDER	Wide contact gap 831616	I (Changeover)	W3R5* - W5 - W6D8* - W7A5 - 2W7A8*
MADE TO ORDER	Wide contact gap 831616	R (Normally closed)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*
MADE TO ORDER	Wide contact gap 831616	C (Normally open)	W2 - W3 - W3R5* - W5 - W6A5* - W6D8* - W7A5 - 2W7A8*

Electrical characteristics

Rating nominal / 250 V (A)	16
Rating thermal / 250 V (A)	20
Mechanical characteristics	
Maximum operating force (N)	0,8
Min. Release force (N)	0,2
Maximum total travel force (N)	2
Max. permitted overtravel force (N)	20
Maximum rest position (mm)	16,2
Operating position (mm)	14,7 \pm 0,3
Maximum differential travel (mm)	0,35
Min. overtravel CRA (mm)	1,2
Ambient operating temperature (°C)	-20 \rightarrow +125
Mechanical life for 2/3 CRA (operations)	2 x 10 ⁷
Contact gap (mm)	0,4
Weight (g)	5,6

Additional specifications

Components

Material

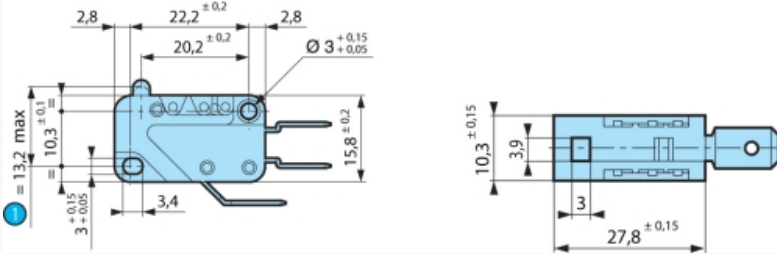
- Housings : polyamide or polyester
- Button : polyamide
- Contacts : AgNi

Levers

- Flat : stainless steel
- Roller : stainless steel, glass-filled polyamide roller
- Other polyamides

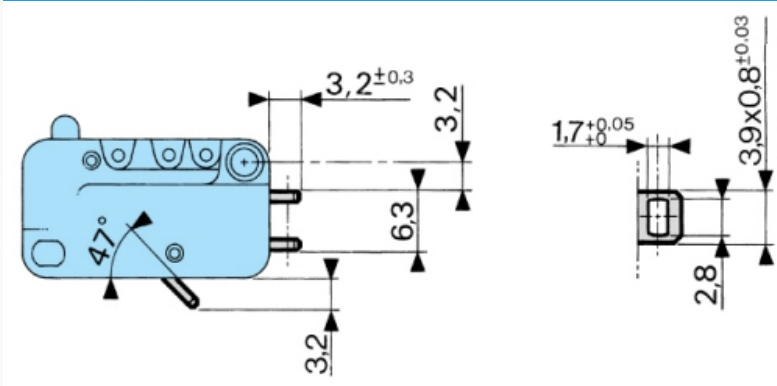
Approvals : NF

Dimension Diagram : 83161

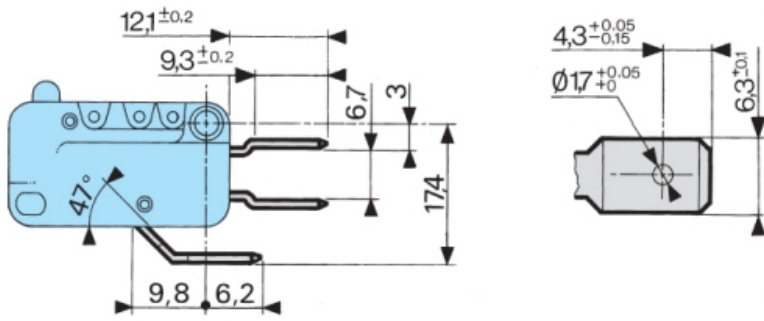


N°	Legend
1	OL

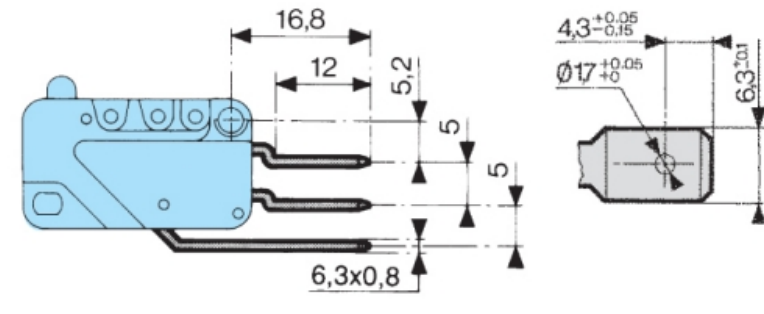
Dimension Diagram : W2 solder



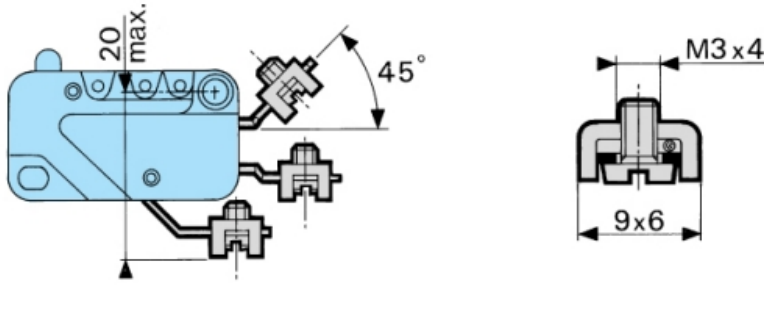
Dimension Diagram : W3 for 6.35 mm clips (6.3 x 0.8)



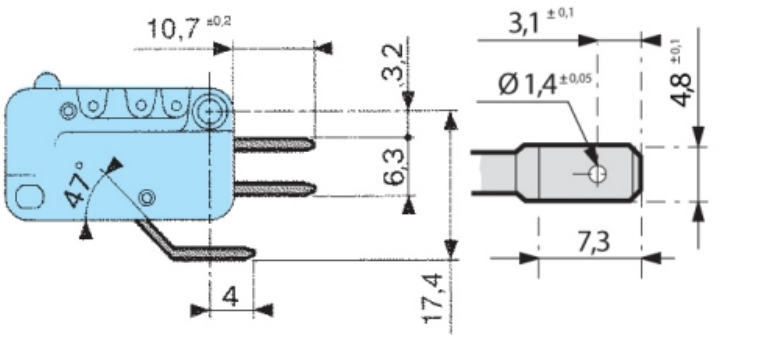
Dimension Diagram : W3R5 for 6.35 mm clips (6.3 x 0.8)



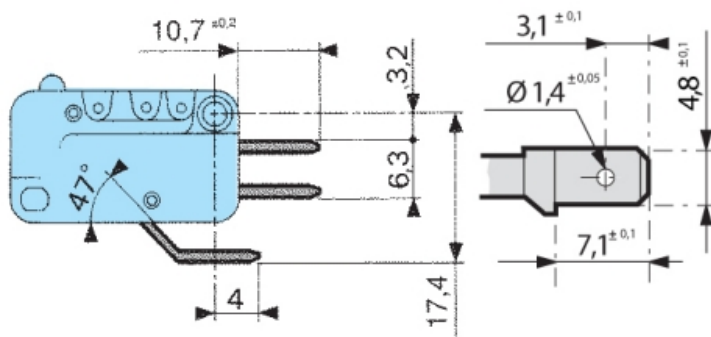
Dimension Diagram : W5 screw



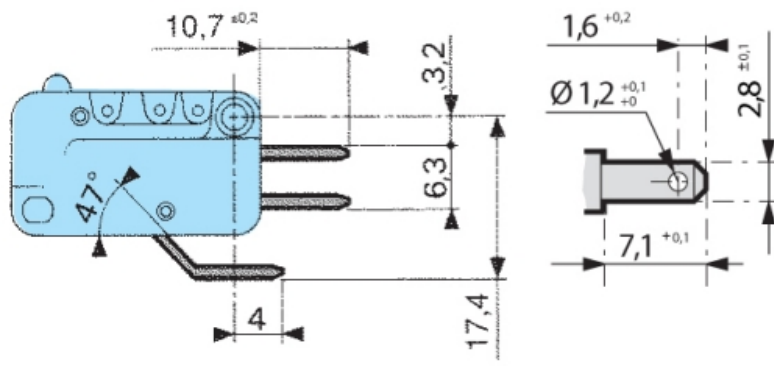
Dimension Diagram : W6A5 for 4.8 mm clips (4.8 x 0.5)



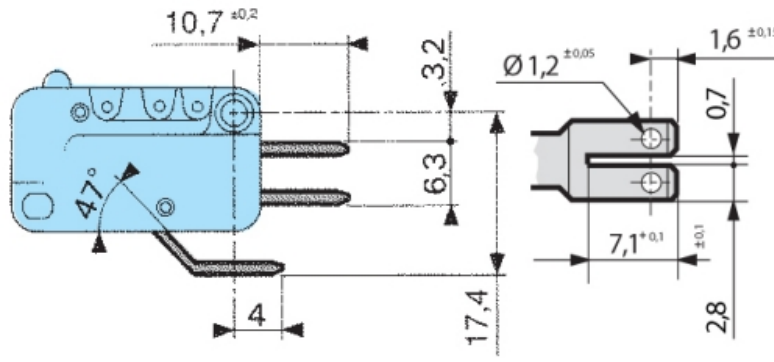
Dimension Diagram : W6D8 for 4.8 mm clips (4.8 x 0.8)



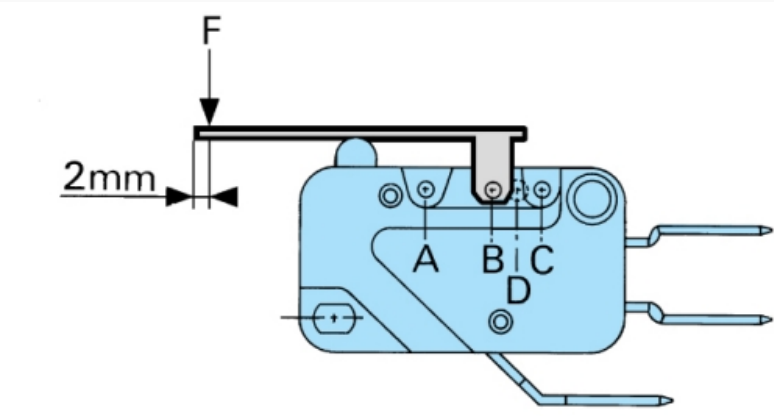
Dimension Diagram : W7A5 for 2.8 mm clips (2.8 x 0.5)



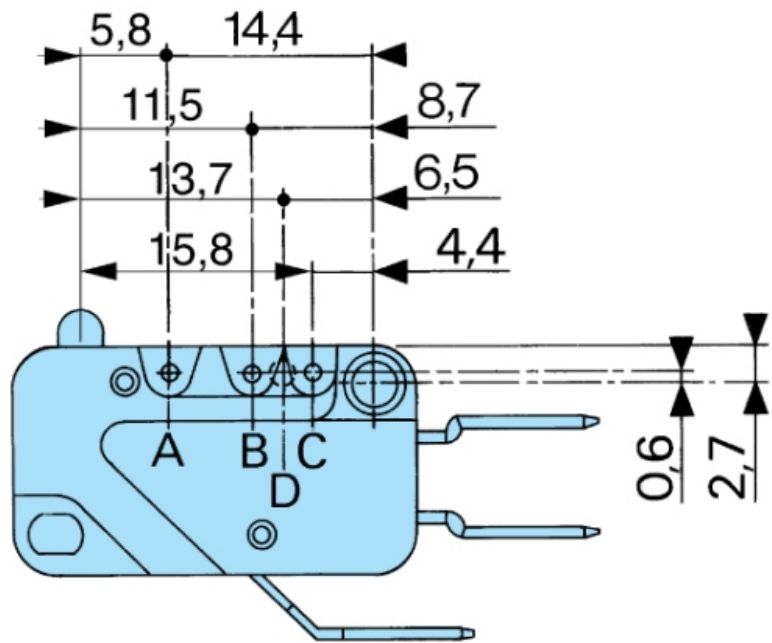
Dimension Diagram : 2W7A8 for 2.8 mm clips (2.8 x 0.8)



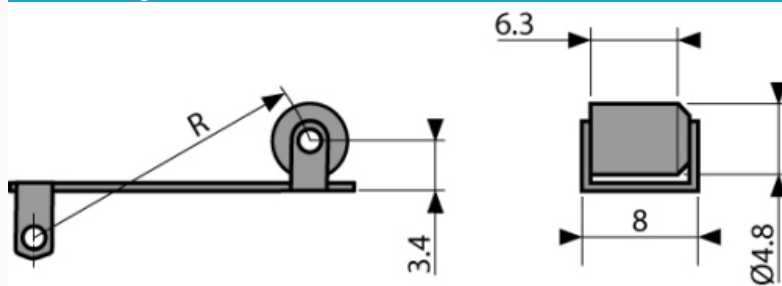
Dimension Diagram : Levers



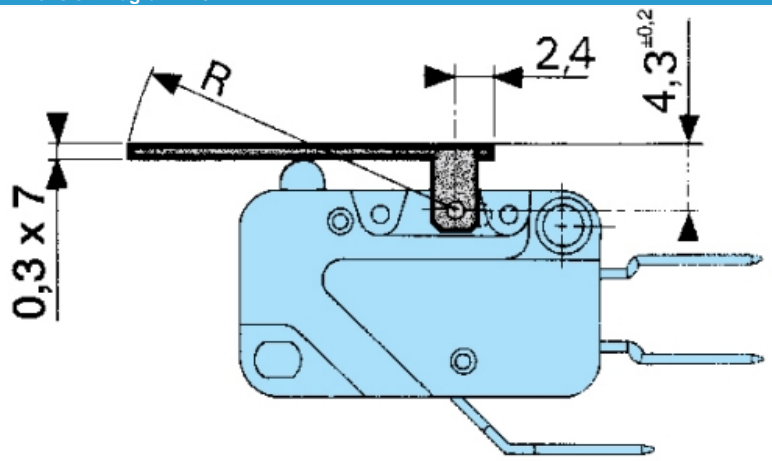
Dimension Diagram :



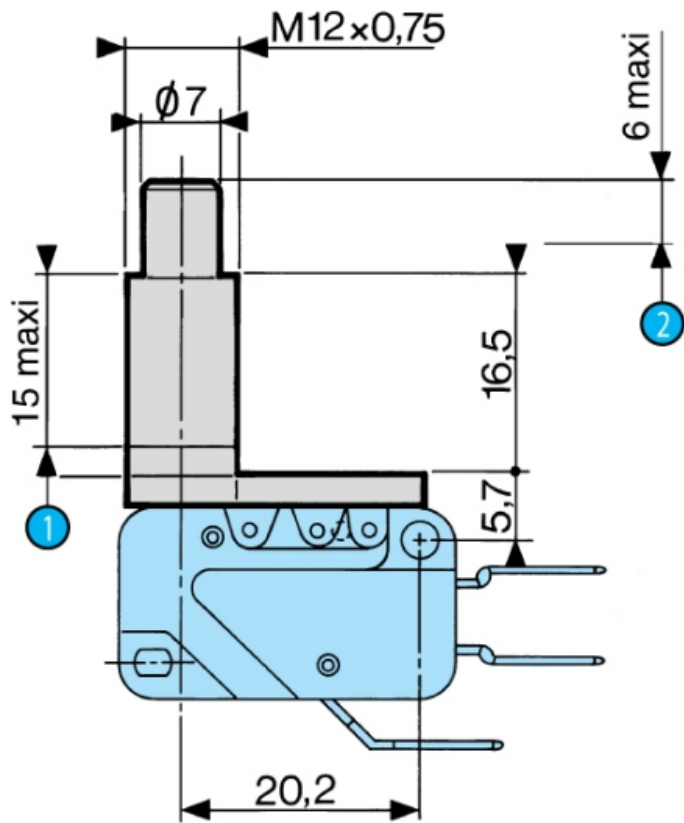
Dimension Diagram : 161 E



Dimension Diagram : 161 A

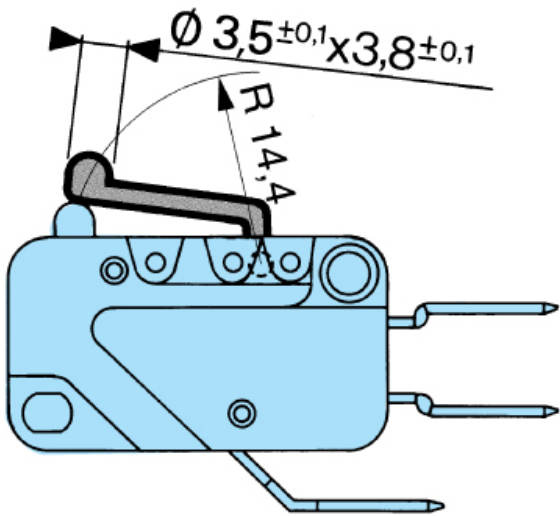


Dimension Diagram : 161 L

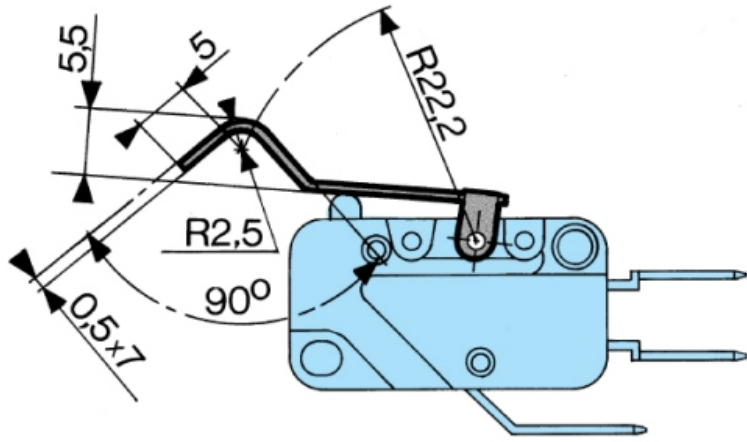


N°	Legend
1	Thread
2	Total travel

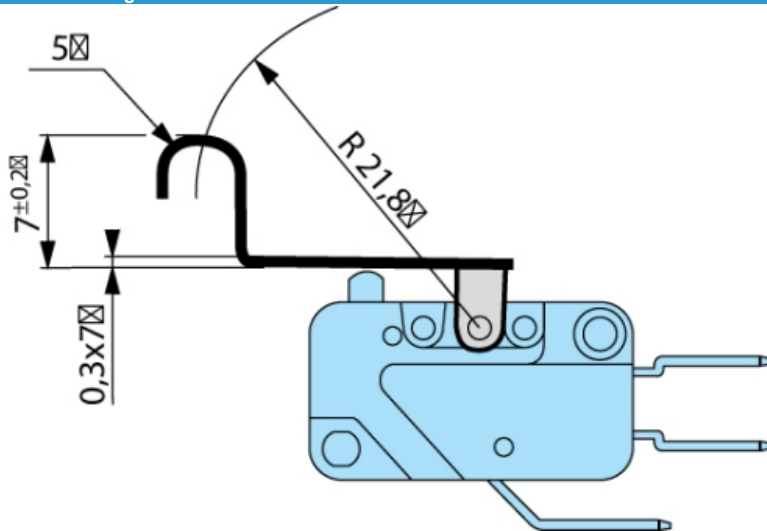
Dimension Diagram : 161 V



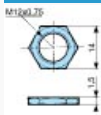
Dimension Diagram : 161 F



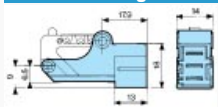
Dimension Diagram : 161 G



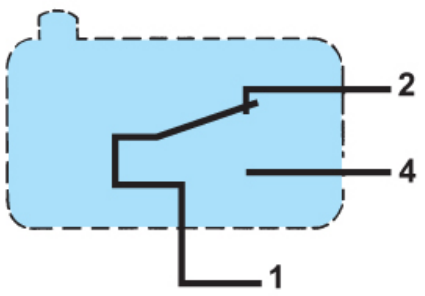
Dimension Diagram : Nut 70602118



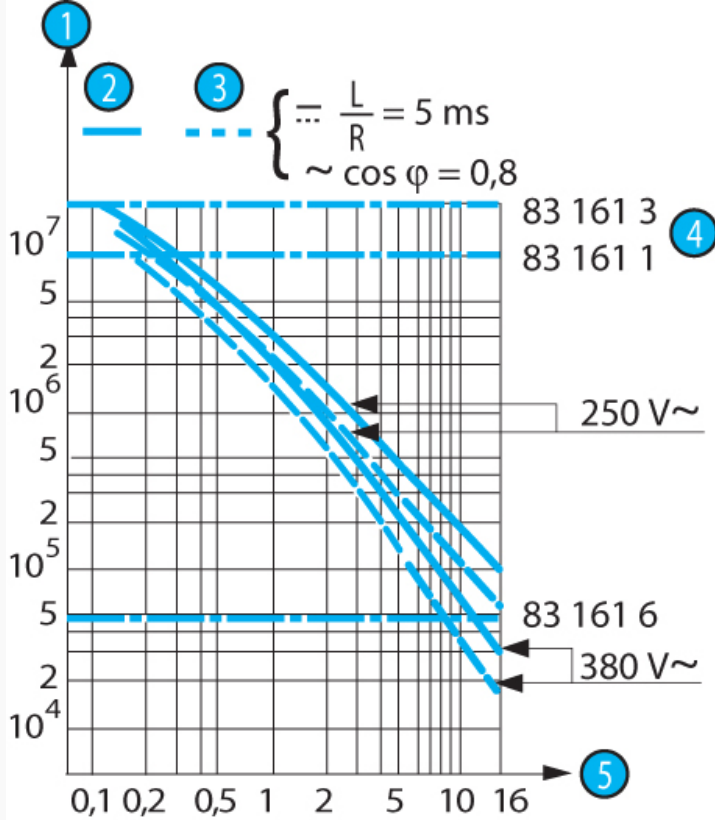
Dimension Diagram : Housing 161 J for connections W3 R5



: Single break changeover switch



Curves : Operating curve for types 831611 / 831613 / 831616



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

Part numbers for standard actuators		79 215 740	70 507 524	79 215 742	70 507 529	70 507 528
Actuators		Plain 161A R14,2	Plain 161A R25,4	Roller 161E R13,6	Roller 161E R24,1	Dummy roller 161F R22,2
Fixing positions		A B	A B C	A B	A B C	A B
Coefficient		2 1	4 2 1,5	2 1	4 2 1,5	3 1,8
Tripping point (except 83 161 6)		15,2 ^{±1} 15,2 ^{±0,41}	15,2 ^{±0,3} 15,2 ^{±1} 15,2 ^{±0,8}	20,5 ^{±1,5} 20,5 ^{±0,8}	20,5 ^{±0,8} 20,5 ^{±1,1} 20,5 ^{±1,2}	20,4 ^{±1} 20,4 ^{±0,7}
Tripping point 83 161 6		14,8 ^{±1} 15 ^{±0,45}	14,4 ^{±0,3} 14,8 ^{±1} 14,9 ^{±0,8}	20,1 ^{±1,5} 20,3 ^{±0,8}	19,7 ^{±0,8} 20,1 ^{±1,1} 20,2 ^{±1,2}	20,2 ^{±1} 20,2 ^{±0,7}
Part numbers for standard actuators		79 218 651				
Actuators		Dummy roller 161G R21,8	**Telescopic plunger 161 L	Manual action	161V	Housing 161J Nut for 161L Part no.: 70 602 118
Fixing positions		A B	D		D	
Coefficient		3 1,8	1		1	
Tripping point (except 83 161 6)		21,7 ^{±1} 21,7 ^{±0,7}	21,5 ^{±1}		18,35 ^{±0,41}	
Tripping point 83 161 6		21,5 ^{±1} 21,5 ^{±0,7}	21,5 ^{±1}			

Except where otherwise indicated, plain and roller levers are supplied unmounted.
 For factory mounting, specify fixing position A, B or C.
 ** For 83 161 1, 83 161 2, 83 161 3, 83 161 6 mounted in factory (supplied without nut)

Special adaptations

- Special levers
- Special connections
- Specific fixing
- High operating temperature
- Special operating force
- Approvals : UL - cUL