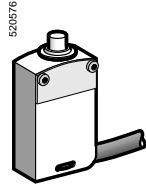


■ XCS-M  
pre-cabled

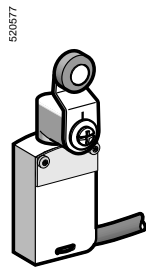
□ With head for linear movement (plunger). Fixing by the body.

2



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□ With head for rotary movement (lever). Fixing by the body.



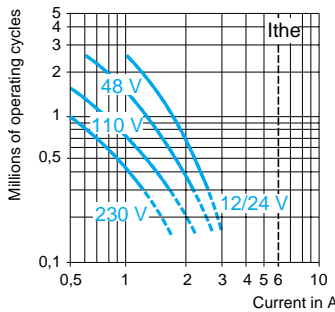
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Environment		
Conforming to standards	Products	IEC 60 947-5-1, EN 60 947-5-1, UL 508, CSA C22-2 n° 14
	Machine assemblies	IEC 60 204-1, EN 60 204-1, EN 1088
Product certifications		UL, CSA (Except products with special cables)
Protective treatment		Standard version: "TC"
Ambient air temperature		Operation: - 25...+ 70 °C. Storage: - 40...+ 70 °C
Vibration resistance		XCS-M snap action: 5 gn. XCS-M slow break: 25 gn (10...500 Hz) conforming to IEC 60068-2-6
Shock resistance		25 gn, (18 ms) conforming to IEC 60068-2-27
Electric shock protection		Class I conforming to IEC 61140 and NF C 20-030
Degree of protection		<b>IP 66, IP 67 and IP 68 (1) conforming to IEC 60 529; IK 06 conforming to EN 50 102</b>
Materials		Body: zamak, heads: zamak, fixings: 5-lobe torque
Repeat accuracy		0.05 mm on the tripping points

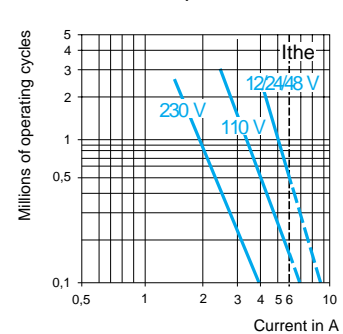
Contact block characteristics	
Rated operational characteristics	~ AC-15; B300 (Ue = 240 V, Ie = 1.5 A) ≡ DC-13; R300 (Ue = 250 V, Ie = 0.1 A), conforming to IEC 60 947-5-1 Appendix A, EN 60 947-5-1
Rated insulation voltage	Ui = 400 V degree of pollution 3 conforming to IEC 60 947-5-1 Ui = 300 V conforming to UL 508, CSA C22-2 n° 14
Rated impulse withstand voltage	U imp = 4 kV conforming to IEC 60 947-1, IEC 60 664
Positive opening operation (depending on model)	N/C contacts with positive opening operation conforming to IEC 60 947-5-1 Appendix K, EN 60 947-5-1
Resistance across terminals	≤ 25 mΩ conforming to IEC 60 255-7 category 3
Short-circuit protection	6 A cartridge fuse type gG (gl)
Minimum actuation speed	N/C + N/O snap action contact: 0.01 m/minute, N/C + N/O break before make, slow break contact: 6 m/minute
Electrical durability	<ul style="list-style-type: none"> <li>■ Conforming to IEC 60 947-5-1 Appendix C</li> <li>■ Utilisation categories AC-15 and DC-13</li> <li>■ Maximum operating rate: 3600 operating cycles/hour</li> <li>■ Load factor: 0.5</li> </ul>

a.c. supply ~ 50/60 Hz  
 ≡ inductive circuit

**XCS-M snap-action (N/C + N/C + N/O, N/C + N/C + N/O + N/O contact)**



**XCS-M slow break (N/C + N/C + NO contact)**



d.c. supply ≡

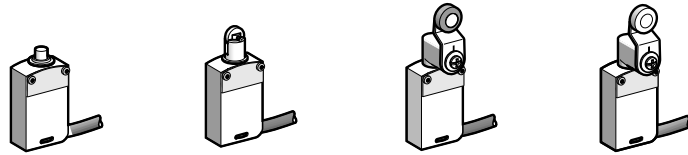
Power broken in W for 5 million operating cycles				
Voltage	V	24	48	120
≡	W	3	2	1

Power broken in W for 5 million operating cycles				
Voltage	V	24	48	120
≡	W	4	3	3

(1) Protection against prolonged immersion: the test conditions are subject to agreement between the manufacturer and the user.

2

Type of head	Plunger (fixing by the body)	Rotary (fixing by the body)	
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Type of operator	Metal end plunger	Roller plunger	Thermoplastic roller lever	Steel roller lever
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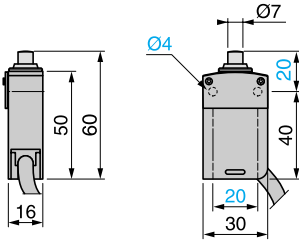
References	XCS-M3910L1	XCS-M3902L1	XCS-M3915L1	XCS-M3916L1
<b>3-pole N/C + N/C + N/O snap-action</b> 				
<b>3-pole N/C + N/C + N/O break before make, slow break</b> 				
<b>4-pole N/C + N/C + N/O + N/O snap-action</b> 				
<b>Weight (kg)</b>	0.165	0.170	0.205	0.210
<b>Contact operation</b>			(A) = cam displacement (P) = positive opening point ⊖ N/C contact with positive opening operation	

Characteristics	On end	By 30° cam	
<b>Switch actuation</b>	On end	By 30° cam	
<b>Type of actuation</b>			
<b>Maximum actuation speed</b>	0.5 m/s	0.1 m/s	1.5 m/s
<b>Mechanical durability</b>	10 million operating cycles		
<b>Minimum force or torque</b>	for tripping: 7.5 N	5 N	0.05 N.m
	for positive opening: 37.5 N	25 N	0.15 N.m
<b>Cabling</b>	3-pole contacts: Pre-cabled, PUR, 7 x 0.5 mm <sup>2</sup> , length 1 m (1). 4-pole contacts: Pre-cabled, PUR, 9 x 0.34 mm <sup>2</sup> , length 1 m (1).		

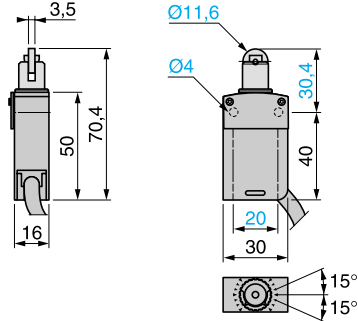
(1) For a 2 m long cable, replace L1 by L2.  
For a 5 m long cable, replace L1 by L5.

## Dimensions

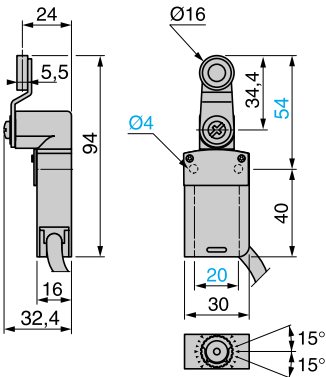
### XCS-M●●10L1



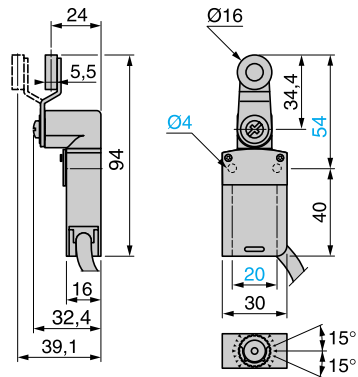
### XCS-M●●02L1



### XCS-M●●15L1



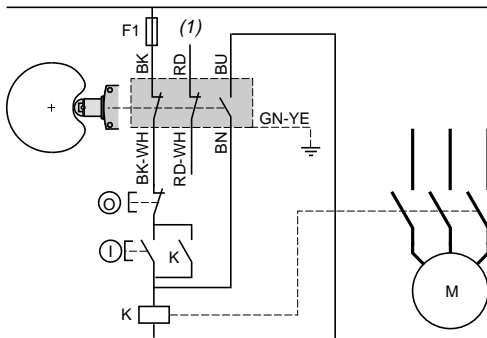
### XCS-M●●16L1



## Schemes

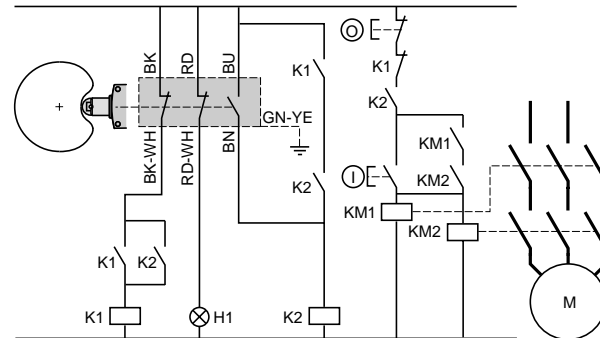
### Wiring to category 1 conforming to EN 954-1

Example with 3-pole N/C + N/C + N/O contact and protection fuse to prevent shunting of the N/C contacts, either by cable damage or by tampering.



### Wiring to category 3 conforming to EN 954-1

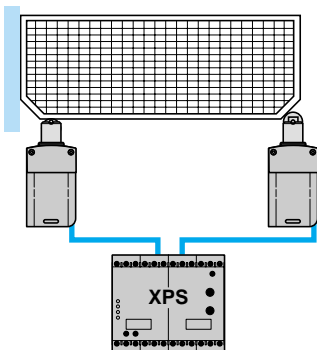
Example with 3-pole N/C + N/C+ N/O contact with mixed redundancy of the contacts and the associated control relays.



(1) Signalling contact.

H1: "limit switch not actuated" indicator.

### Example for guard monitoring using 2 switches and 1 safety module (category 4)



### Operation in positive and negative (combined) mode