

# Limit switches

OsiSense XC Basic

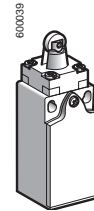
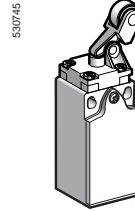
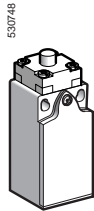
Compact design, plastic, types XCKN and XCNT

1

## ■ XCKN

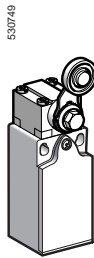
with 1 cable entry  
Conforming to CENELEC EN 50047

### □ With head for linear movement (plunger)



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### □ With head for rotary movement (lever) or multi-directional

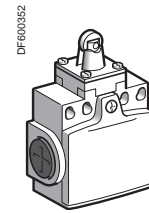
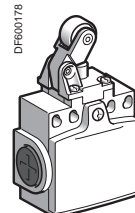
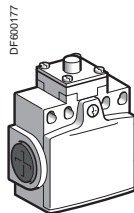


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## ■ XCNT

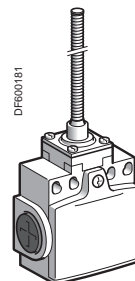
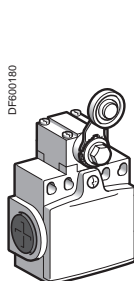
with 2 cable entries  
Conforming to CENELEC EN 50047

### □ With head for linear movement (plunger)



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### □ With head for rotary movement (lever) or multi-directional



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### Environment characteristics

<b>Conformity to standards</b>	Products	IEC 60947-5-1, EN 60947-5-1, UL 508, CSA C22-2 n° 14
	Machine assemblies	IEC 60204-1, EN 60204-1
<b>Product certifications</b>		UL, CSA, CCC
<b>Protective treatment</b>	Version	Standard: "TC"
<b>Ambient air temperature</b>	For operation	- 25...+ 70°C
	For storage	- 40...+ 70°C
<b>Vibration resistance</b>	Conforming to IEC 60068-2-6	25 gn (10...500 Hz) except XCKN●●08: 10 gn, XCKN●●39 and XCKN●●49: 15 gn
<b>Shock resistance</b>	Conforming to IEC 60068-2-27	50 gn (11 ms) except XCKN2●49●● and XCKN●●39: 15 gn, XCKN2●08●●: 20 gn and XCKN2●45●●: 35 gn
<b>Electric shock protection</b>		Class II conforming to IEC 61140 and NF C 20030
<b>Degree of protection</b>		<b>IP 65 conforming to IEC 60529; IK 04 conforming to EN 50102</b>
<b>Cable entry</b>		Depending on model: tapped entry for ISO M20 x 1.5 or Pg 11 cable gland, ISO M 16 x 1.5 cable gland or PF 1/2 (G 1/2).
<b>Materials</b>	Bodies	Plastic
	Heads	Plastic

### Contact block characteristics

<b>Rated operational characteristics</b>		$\sim$ AC-15; A300 (U <sub>e</sub> = 240 V, I <sub>e</sub> = 3 A); I <sub>the</sub> = 10 A $\overline{\text{---}}$ DC-13; R300 (U <sub>e</sub> = 250 V, I <sub>e</sub> = 0.1 A), conforming to IEC 60947-5-1 Appendix A, EN 60947-5-1
<b>Rated insulation voltage</b>	2-pole contact	U <sub>i</sub> = 500 V degree of pollution 3 conforming to IEC 60947-1 U <sub>i</sub> = 300 V conforming to UL 508, CSA C22-2 n° 14
<b>Rated impulse withstand voltage</b>	2-pole contact	U <sub>imp</sub> = 6 kV conforming to IEC 60947-1, IEC 60664
<b>Positive operation</b>		NC contacts with positive opening operation conforming to IEC 60947-5-1 Appendix K, EN 60947-5-1
<b>Short-circuit protection</b>		10 A cartridge fuse type gG (gl)
<b>Connection</b>	Screw clamp terminals	Clamping capacity, min: 1 x 0.34 mm <sup>2</sup> , max: 2 x 1.5 mm <sup>2</sup>

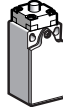
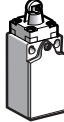





# Limit switches

OsiSense XC Basic

Compact design, plastic, type XCKN


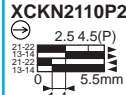
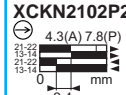
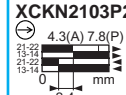
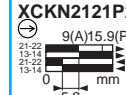
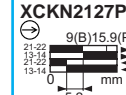


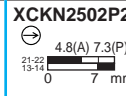
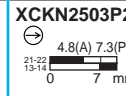
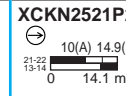
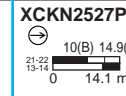

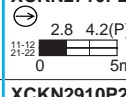
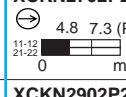
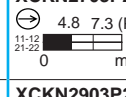
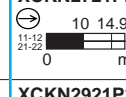
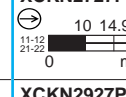

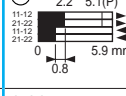
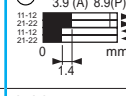
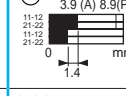
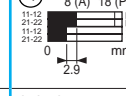
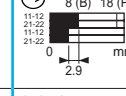



Complete switches with 1 cable entry

Type of head	Plunger (fixing by the body)				
					





Type of operator	Metal end plunger	Plastic roller plunger for lateral cam approach	Plastic roller plunger for traverse cam approach	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever plunger, vertical actuation in 1 direction
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Sold and packed in lots of	20	20	20	20	20
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### References of complete switches with 1 ISO M20 x 1.5 cable entry

 2-pole NC + NO snap action	 XCKN2110P20 2.5 4.5(P) 5.5mm	 XCKN2102P20 4.3(A) 7.8(P) 2.4	 XCKN2103P20 4.3(A) 7.8(P) 2.4	 XCKN2121P20 9(A) 15.9(P) 5.2	 XCKN2127P20 9(B) 15.9(P) 5.2
 2-pole N/C + N/O break before make, slow break	 XCKN2510P20 2.8 4.2(P) 5.5mm	 XCKN2502P20 4.8(A) 7.3(P) 7 mm	 XCKN2503P20 4.8(A) 7.3(P) 7 mm	 XCKN2521P20 10(A) 14.9(P) 14.1 mm	 XCKN2527P20 10(B) 14.9(P) 14.1 mm
 2-pole NC + NC simultaneous, slow break	 XCKN2710P20 2.8 4.2(P) 5mm	 XCKN2702P20 4.8 7.3 (P) mm	 XCKN2703P20 4.8 7.3 (P) mm	 XCKN2721P20 10 14.9(P) mm	 XCKN2727P20 10 14.9(P) mm
 2-pole NC + NC snap action	 XCKN2910P20 2.2 5.1(P) 5.9mm	 XCKN2902P20 3.9 (A) 8.9(P) 1.4	 XCKN2903P20 3.9 (A) 8.9(P) 1.4	 XCKN2921P20 8 (A) 18 (P) 2.9	 XCKN2927P20 8 (B) 18 (P) 2.9
Weight (kg)	0.065	0.065	0.065	0.070	0.070
Contact operation	 closed  open	(A) (B) = cam displacement (P) = positive opening point		 NC contact with positive opening operation	

### Characteristics

Switch actuation	On end	By 30° cam	
Type of actuation			 
Maximum actuation speed	0.5 m/s	0.3 m/s	1 m/s
Mechanical durability (in millions of operating cycles)	10		
Minimum force or torque	For tripping	15 N	12 N
	For positive opening	30 N	20 N
Cable entry	1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm		

### References of complete switches with 1 Pg 11 cable entry

For complete switches with 1 Pg 11 cable entry replace P20 by G11.  
Example: XCKN2110P20 becomes XCKN2110G11.

### Other cable entries

For complete switches with ISO M16 x 1.5 or PF 1/2 (G 1/2) cable entry, please consult our Customer Care Centre.

### Other contacts

For complete switches with 2-pole contacts:  
NO + NC make before break, slow break,  
NO + NO simultaneous, slow break, please consult our Customer Care Centre.

For complete switches with 3-pole contacts:  
NC + NO + NO snap action,  
NC + NC + NO snap action,  
NC + NC + NO break before make, slow break,  
NC + NO + NO break before make, slow break, please consult our Customer Care Centre.

# Limit switches

OsiSense XC Basic

Compact design, plastic, type XCKN

Complete switches with 1 cable entry

Type of head	Rotary (fixing by the body)				Multi-directional	
Type of operator	Thermoplastic roller lever	Variable length thermoplastic roller lever	Thermoplastic roller lever, Ø 50 mm	Variable length thermoplastic roller lever, Ø 50 mm	Spring rod	"Cat's whisker"
Sold and packed in lots of	20	20	20	20	20	20

References of complete switches with 1 ISO M20 x 1.5 cable entry							
	2-pole NC + NO snap action	XCKN2118P20 	XCKN2145P20 	XCKN2139P20 	XCKN2149P20 	XCKN2108P20 	XCKN2106P20 
	2-pole N/C + N/O break before make, slow break	XCKN2518P20 	XCKN2545P20 	XCKN2539P20 	XCKN2549P20 	XCKN2508P20 	XCKN2506P20 
	2-pole NC + NC simultaneous, slow break	XCKN2718P20 	XCKN2745P20 	XCKN2739P20 	XCKN2749P20 	XCKN2708P20 	XCKN2706P20 
	2-pole NC + NC snap action	XCKN2918P20 	XCKN2945P20 	XCKN2939P20 	XCKN2949P20 	XCKN2908P20 	XCKN2906P20 
Weight (kg)		0.085	0.090	0.110	0.115	0.085	0.075
Contact operation				(A) (B) = cam displacement (P) = positive opening point			

Characteristics		
Switch actuation	By 30° cam	By any moving part
Type of actuation		
Maximum actuation speed	1.5 m/s	1 m/s (any direction)
Mechanical durability	10 million operating cycles	5 million operating cycles
Minimum force or torque	For tripping: 0.1 N.m For positive opening: 0.15 N.m	0.13 N.m
Cable entry	1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm	

### References of complete switches with 1 Pg 11 cable entry

For complete switches with 1 Pg 11 cable entry replace P20 by G11.  
Example: XCKN2118P20 becomes XCKN2118G11.

### Other cable entries

For complete switches with ISO M16 x 1.5 or PF 1/2 (G 1/2) cable entry, please consult our Customer Care Centre.

### Other contacts

For complete switches with 2-pole contacts:  
NO + NC make before break, slow break,  
NO + NO simultaneous, slow break, please consult our Customer Care Centre.

For complete switches with 3-pole contacts:  
NC + NO + NO snap action,  
NC + NC + NO snap action,  
NC + NC + NO break before make, slow break,  
NC + NO + NO break before make, slow break, please consult our Customer Care Centre.

# Limit switches

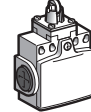
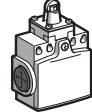
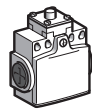
OsiSense XC Basic

Compact design, plastic, type XCNT

Complete switches with 2 cable entries

1

Type of head	Plunger (fixing by the body)			
Type of operator	Metal end plunger	Plastic roller plunger for lateral cam approach	Plastic roller plunger for traverse cam approach	Thermoplastic roller lever plunger, horizontal actuation in 1 direction
Sold and packed in lots of	10	10	10	10



## References of complete switches with 2 ISO M16 x 1.5 cable entries

<p>2-pole NC + NO snap action</p>	<p><b>XCNT2110P16</b></p> <p>1.8 4.6(P)</p>	<p><b>XCNT2102P16</b></p> <p>3.1(A) 7.8(P)</p>	<p><b>XCNT2103P16</b></p> <p>3.1(A) 7.8(P)</p>	<p><b>XCNT2121P16</b></p> <p>6.5(A) 15.7(P)</p>
<p>2-pole N/C + N/O break before make, slow break</p>	<p><b>XCNT2510P16</b></p> <p>1.8 3.2(P)</p>	<p><b>XCNT2502P16</b></p> <p>3.1(A) 5.6(P)</p>	<p><b>XCNT2503P16</b></p> <p>3.1(A) 5.6(P)</p>	<p><b>XCNT2521P16</b></p> <p>6.5(A) 11.3(P)</p>
<p>2-pole NC + NC simultaneous, slow break</p>	<p><b>XCNT2710P16</b></p> <p>1.8 3.2(P)</p>	<p><b>XCNT2702P16</b></p> <p>3.1 5.6(P)</p>	<p><b>XCNT2703P16</b></p> <p>3.1 5.6(P)</p>	<p><b>XCNT2721P16</b></p> <p>6.5 11.3(P)</p>
Weight (kg)	0.085	0.085	0.085	0.090
Contact operation	<p>(A) (B) = cam displacement (P) = positive opening point</p> <p> NC contact with positive opening operation</p>			

## Characteristics

Switch actuation	On end	By 30° cam	
Type of actuation			
Maximum actuation speed	0.5 m/s	0.3 m/s	1 m/s
Mechanical durability (in millions of operating cycles)	10		
Minimum force or torque	For tripping	15 N	12 N
	For positive opening	30 N	20 N
Cable entry	2 entries tapped M16 x 1.5 mm for ISO cable gland, clamping capacity 4 to 8 mm		

## References of complete switches with 2 Pg 11 cable entries

For complete switches with 2 Pg 11 cable entries replace P16 by G11.  
Example: XCNT2110P16 becomes XCNT2110G11.

## Complete switches with 1/2" NPT cable entry

For complete switches with 1/2" NPT cable entry use adaptor DE9 RA1012 (compatible with XCNT●●●G11).



DE9RA1012

Description	Sold in lots of	Unit reference	Weight kg
Adaptor for 1/2" NPT conduit (male Pg 11 / female 1/2" NPT)	10	DE9RA1012	0.050

## Other contacts

For complete switches with 2-pole contacts:  
NO + NC make before break, slow break,  
NO + NO simultaneous, slow break, please consult our Customer Care Centre.

# Limit switches

OsiSense XC Basic

Compact design, plastic, type XCNT

Complete switches with 2 cable entries

Type of head	Rotary (fixing by the body)				Multi-directional	
Type of operator	Thermoplastic roller lever	Variable length thermoplastic roller lever	Thermoplastic roller lever, Ø 50 mm	Variable length thermoplastic roller lever, Ø 50 mm	Spring rod	"Cat's whisker"
Sold and packed in lots of	10	10	10	10	8	8

References of complete switches with 2 ISO M16 x 1.5 cable entries						
	<b>XCNT2118P16</b> 25° 70°(P) 	<b>XCNT2145P16</b> 25° 70°(P) 	<b>XCNT2139P16</b> 25° 70°(P) 	<b>XCNT2149P16</b> 25° 70°(P) 	<b>XCNT2108P16</b> 20° 	<b>XCNT2106P16</b> 20° 
	<b>XCNT2518P16</b> 25° 46°(P) 	<b>XCNT2545P16</b> 25° 46°(P) 	<b>XCNT2539P16</b> 25° 46°(P) 	<b>XCNT2549P16</b> 25° 46°(P) 	<b>XCNT2508P16</b> 20° 	<b>XCNT2506P16</b> 20° 
	<b>XCNT2718P16</b> 25° 46°(P) 	<b>XCNT2745P16</b> 25° 46°(P) 	<b>XCNT2739P16</b> 25° 46°(P) 	<b>XCNT2749P16</b> 25° 46°(P) 	<b>XCNT2708P16</b> 20° 	<b>XCNT2706P16</b> 20° 
Weight (kg)	0.105	0.120	0.120	0.120	0.100	0.090
Contact operation	closed open				(A) (B) = cam displacement (P) = positive opening point	
					NC contact with positive opening operation	

Characteristics		
Switch actuation	By 30° cam	By any moving part
Type of actuation		
Maximum actuation speed	1.5 m/s	1 m/s (any direction)
Mechanical durability	10 million operating cycles	5 million operating cycles
Minimum force or torque	For tripping: 0.1 N.m For positive opening: 0.15 N.m	0.13 N.m
Cable entry	2 entries tapped M16 x 1.5 mm for ISO cable gland, clamping capacity 4 to 8 mm	

## References of complete switches with 2 Pg 11 cable entries

For complete switches with 2 Pg 11 cable entries replace P16 by G11.  
Example: XCNT2118P16 becomes XCNT2118G11.

## Complete switches with 1/2" NPT cable entry

For complete switches with 1/2" NPT cable entry use adaptor DE9 RA1012 (compatible with XCNT●●●●G11).



DE9RA1012

Description	Sold in lots of	Unit reference	Weight kg
Adaptor for 1/2" NPT conduit (male Pg 11 / female 1/2" NPT)	10	DE9RA1012	0.050

## Other contacts

For complete switches with 2-pole contacts:  
NO + NC make before break, slow break,  
NO + NO simultaneous, slow break, please consult our Customer Care Centre.

# Limit switches

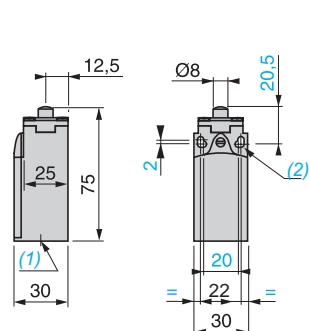
OsiSense XC Basic

Compact design, plastic, type XCKN

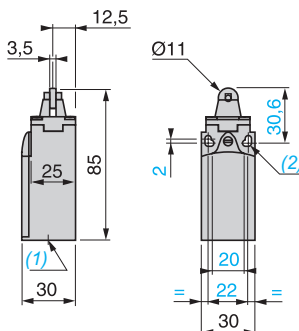
Complete switches with 1 cable entry

## Dimensions

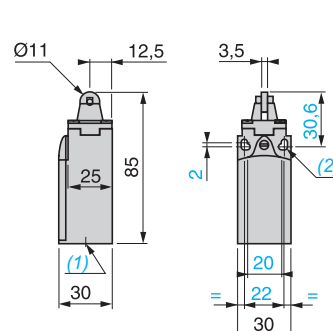
XCKN2•10P20



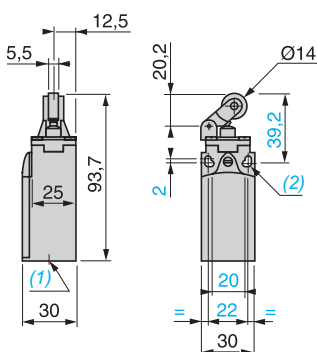
XCKN2•02P20



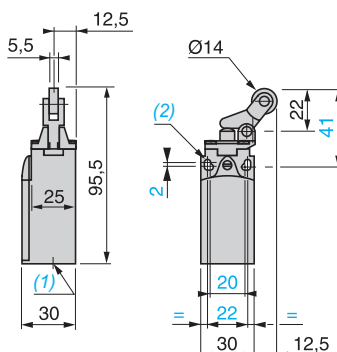
XCKN2•03P20



XCKN2•21P20

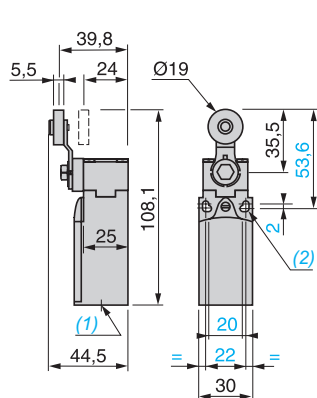


XCKN2•27P20

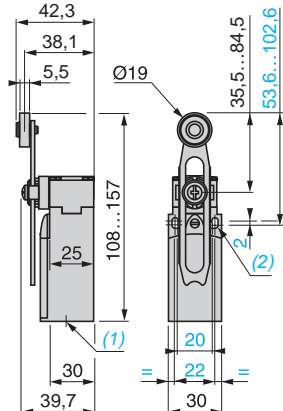


(1) 1 tapped entry for ISOM20 x 1.5 or Pg 11 cable gland.  
 (2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

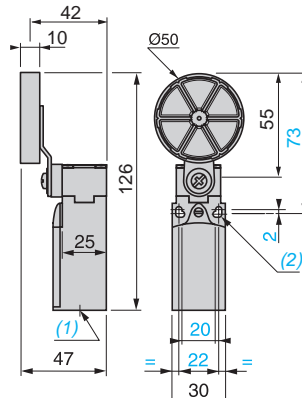
XCKN2•18P20



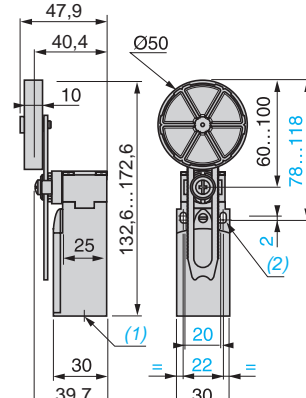
XCKN2•45P20



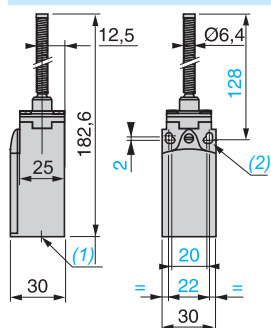
XCKN2•39P20



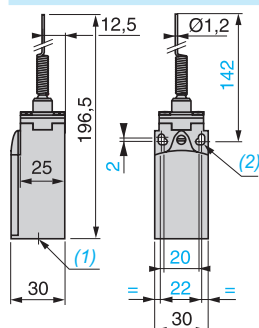
XCKN2•49P20



XCKN2•08P20



XCKN2•06P20



(1) 1 tapped entry for ISOM20 x 1.5 or Pg 11 cable gland.  
 (2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

# Limit switches

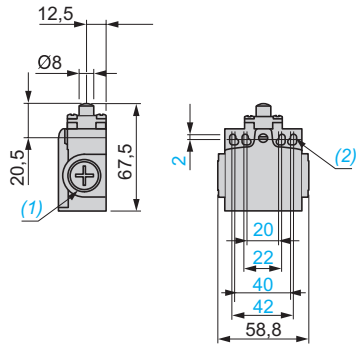
OsiSense XC Basic

Compact design, plastic, type XCNT

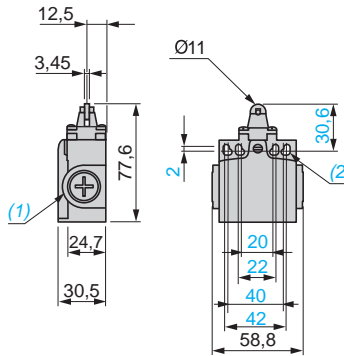
Complete switches with 2 cable entries

## Dimensions

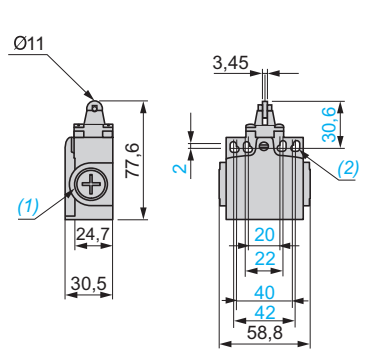
**XCNT2•10P20**



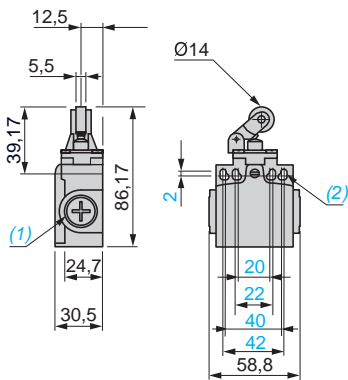
**XCNT2•02P20**



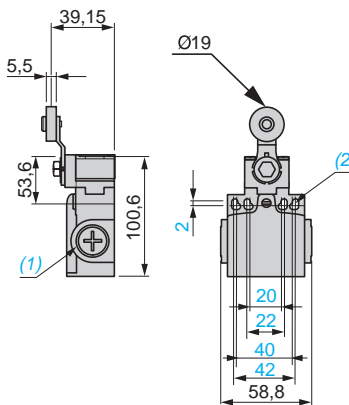
**XCNT2•03P20**



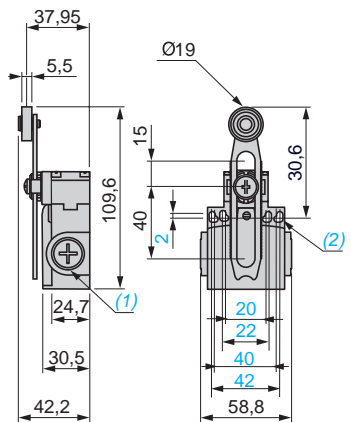
**XCNT2•21P20**



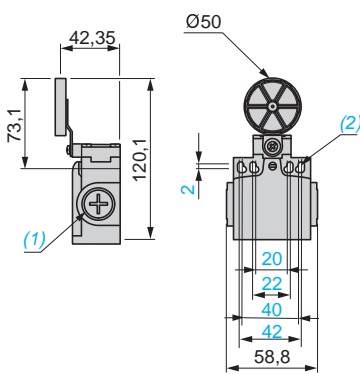
**XCNT2•18P16**



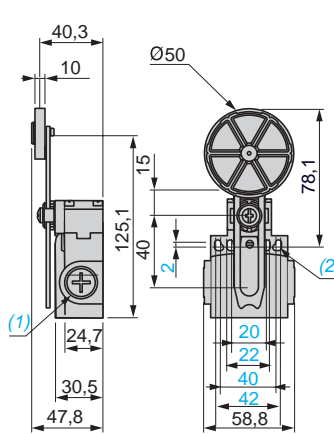
**XCNT2•45P16**



**XCNT2•39P16**

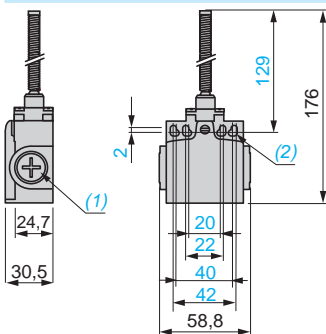


**XCNT2•49P16**



(1) 2 tapped entries for ISOM16 x 1.5 or Pg 11 cable gland.  
 (2) Ø: 4 elongated holes Ø 4.3 x 6.3

**XCNT2•08P16**



**XCNT2•06P16**

