

## Applications

Easy to use, electromechanical limit switches offer specific qualities:

- Visible operation.
- Able to switch strong currents (10 A conventional thermal current).
- Electrically separated contacts.
- Precise operating points (consistency).
- Immune to electromagnetic disturbances.

They are purpose-built detection devices thanks to these characteristics:

- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

## Description

Limit switches, which are made of reinforced UL-V0 thermoplastic fiber-glass, offer double insulation and a degree of protection of IP65.

The casing come in 3 dimension: – AP... 30 mm. width – BP... 40 mm. width – DP... 50 mm. width

**Casing**

- 30 mm. width with standardized dimensions acc. to EN 50047
- 40 mm. width with standardized dimensions acc. to EN 50041
- 50 mm. width

**Mounting the casing**

- 2 x M4 screws on top part for 30 mm. width
- 2 or 4 x M5 screws for 40 mm. width
- 2 or 4 x M4 screws on top part for 50 mm. width

**Contact Block:**

- Contact configuration: NO + NC, 2 NO, 2 NC, 2NO + 1NC, 1NO + 2NC, 3NC, 3NO (only for BP series)
- Positive opening operation
- Snap action or slow action
- Contacts are electrically separated

**Connecting terminals:**

- Block of 2 contacts: M3.5 (+, -) pozidriv 2 screw
- Block of 3 contacts: M3 (+, -) screw
- Screw head with captive cable clamp
- Markings conform with IEC 60947-1, IEC 60947-5-1 standards

**A variety of operating heads:**

- Plain plunger
- Roller plunger
- Roller lever, adjustable or not, etc.

Assembled using 4 x ø 3 screws for 30 and 50 mm width.  
Assembled using 4 x ø 4 screws for 40 mm width.

**Cover:**

- Closed using ø 3 screw for 30 and 50 mm width.
- Self clipping closure for 40 mm width.

One piece sealing gasket to ensure tightness.

**Electrical connection:**

- 1 x cable gland for AP series
- 1 x cable gland for BP series
- 2 x cable gland for DP series

## Symbols

Example: 

A	P	1	T	41	Z	1	1
---	---	---	---	----	---	---	---

Structure: 

	P						
--	---	--	--	--	--	--	--

<p><b>Casing width:</b></p> <p><b>A</b> = 30 mm width + 1 cable inlet</p> <p><b>B</b> = 40 mm width + 1 cable inlet</p> <p><b>D</b> = 50 mm width + 2 cable inlets</p>	<p><b>Plastic casing</b></p>	<p><b>Contact block</b></p> <p><b>11:</b> 1 NO + 1 NC contacts</p> <p><b>20:</b> 2 NO contacts</p> <p><b>02:</b> 2 NC contacts</p> <p><b>12P:</b> 1 NO + 2 NC contacts</p> <p><b>21P:</b> 2 NO + 1 NC contacts</p> <p><b>03P:</b> 3 NC contacts</p> <p><b>Only for BP series:</b></p> <p><b>12:</b> 1 NO + 2NC contacts</p> <p><b>21:</b> 2 NO + 1 NC contacts</p> <p><b>03:</b> 3 NC contacts</p> <p><b>30:</b> 3 NO contacts</p> <p><b>Z:</b> Snap action</p> <p><b>W:</b> Slow action (contact dependent)</p> <p><b>X:</b> Slow action non-overlapping late make</p> <p><b>Y:</b> Slow action overlapping early make</p>
<p><b>Electrical connection</b></p> <p><b>1:</b> cable inlets for PG13.5 cable gland</p> <p><b>2:</b> cable inlets for 1/2 NPT cable gland *</p> <p><b>3:</b> cable inlets for PG11 cable gland (only for AP and DP series)</p> <p><b>4:</b> cable inlets for M16 x 1,5 cable gland (only for AP and DP series)</p> <p><b>5:</b> cable inlets for M20 x 1,5 cable gland</p>	<p><b>Plastic heads</b></p> <p><b>T:</b> for AP and DP series</p> <p><b>H:</b> for BP series only</p>	
<p><b>Operating heads:</b> codes 10 - 9999</p>		

\* In AP... and DP... series, the 1/2" NPT thread is obtained by the use of a plastic adapter (delivered not mounted).

#### General Technical Data

Standards		Plastic Casing	
		Devices conform with international IEC 60947-5-1 and European EN 60947-5-1 standards	
<b>Certifications - Approvals</b>			
<b>Air temperature</b> near the device			
- during operation	°C	- 25 ... + 70	
- for storage	°C	- 30 ... + 80	
<b>Climatic withstand</b>		According to IEC 60068-2-3 and salty mist according to IEC 60068-2-11	
<b>Mounting positions</b>		All positions are authorised	
<b>Shock withstand</b> (according to IEC 60068-2-27 and EN 60068-2-27)		50g* (1/2 sinusoidal shock for 11 ms) no change in contact position	
<b>Resistance to vibrations</b> (acc. to IEC 60068-2-6 and EN 60068-2-6)		25g (10 ... 500 Hz) no change in position of contacts greater than 100 µs	
<b>Protection against electrical shocks</b> (acc. to IEC 60536)		Class II	
<b>Degree of protection</b> (according to IEC 60529 and EN 60529)		IP 65	
<b>Consistency (measured over 1 million operations)</b>		0.1 mm (upon closing point)	
<b>Minimum actuation speed</b>		m/s	
		Slow action contacts 0.060 / Snap action contacts 0.001	

#### Electrical Data

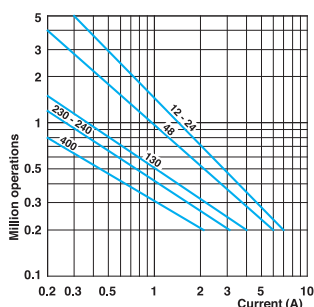
<b>Rated insulation voltage <math>U_i</math></b>		500 V (degree of pollution 3) (400 V for contacts type Z02, X12P, X21P, W03P)												
- according to IEC 60947-1 and EN 60947-1		A 600, Q 600 (A 300, Q 300 for contacts type X12P, X21P, W03P)												
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>		6 (4kV for contacts type X12P, X21P, W03P)												
(according to IEC 60947-1 and EN 60947-1)														
<b>Conventional free air thermal current <math>I_{th}</math></b>		10												
(according to IEC 60947-5-1) $\theta < 40$ °C														
<b>Short-circuit protection</b>		10												
$U_e < 500$ V a.c. - gG (gl) type fuses														
<b>Rated operational current</b>														
$I_e$ / AC-15 (according to IEC 60947-5-1)	24 V - 50/60 Hz	A	10											
	120 V - 50/60 Hz	A	6											
	400 V - 50/60 Hz	A	4											
$I_e$ / DC-13 (according to IEC 60947-5-1)	24 V - d.c.	A	6											
	125 V - d.c.	A	0.55											
	250 V - d.c.	A	0.4											
<b>Switching frequency</b>		Cycles/h												
		3600												
<b>Load factor</b>		0.5												
<b>Resistance between contacts</b>		mΩ												
		25												
<b>Connecting terminals</b>		M3.5 (+, -) pozidriv 2 screw with cable clamp (M3 for 3 poles contacts type)												
<b>Terminal for protective conductor</b>		-												
<b>Connecting capacity</b>		1 or 2 x mm <sup>2</sup>												
		0.75 ... 2.5 (0.34... 1.5 for 3 poles contacts type)												
<b>Terminal marking</b>		According to IEC 60947-5-1												
<b>Mechanical durability</b>		Millions of operations												
		<table border="0"> <tr> <td>15</td> <td rowspan="3">} AP•T {</td> <td>10...12; 30...34; 38</td> <td rowspan="3">} BP•H {</td> <td>11...13; 31...33</td> </tr> <tr> <td>10</td> <td>13; 41...48; 51...55; 61...75</td> <td>41...44; 51...54; 61...75</td> </tr> <tr> <td>&gt;5</td> <td>14; 35; 36; 39; 91...93; 98</td> <td>14; 19; 35...37; 91...93</td> </tr> </table>		15	} AP•T {	10...12; 30...34; 38	} BP•H {	11...13; 31...33	10	13; 41...48; 51...55; 61...75	41...44; 51...54; 61...75	>5	14; 35; 36; 39; 91...93; 98	14; 19; 35...37; 91...93
15	} AP•T {	10...12; 30...34; 38	} BP•H {	11...13; 31...33										
10		13; 41...48; 51...55; 61...75		41...44; 51...54; 61...75										
>5		14; 35; 36; 39; 91...93; 98		14; 19; 35...37; 91...93										
<b>Electrical durability</b> (according to IEC 60947-5-1)		Utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves below)												

\* except for AP/DP•T42, T52, T5200, T55 and T5500: 25 g.

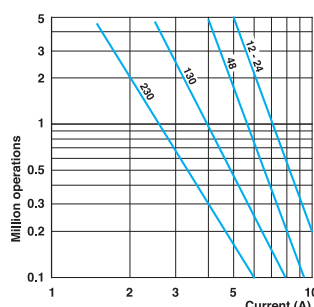
IMQ listed values

For the complete list of approved products, contact our technical department

#### AC-15 - Snap action



#### AC-15 - Slow action



DC-13	Snap action	Slow action
	Power breaking for a durability of 5 million operating cycles	
Voltage 24 V	9.5 W	12 W
Voltage 48 V	6.8 W	9 W
Voltage 110 V	3.6 W	6 W

### Electrical Connection

- AP1:** one cable inlet for PG 13,5 Cable Gland
- AP2:** one cable inlet by 1/2" NPT Plastic Adapter
- AP3:** one cable inlet for PG11 Cable Gland
- AP4:** one cable inlet for M16 x 1,5 Cable Gland
- AP5:** one cable inlet for M20 x 1,5 Cable Gland



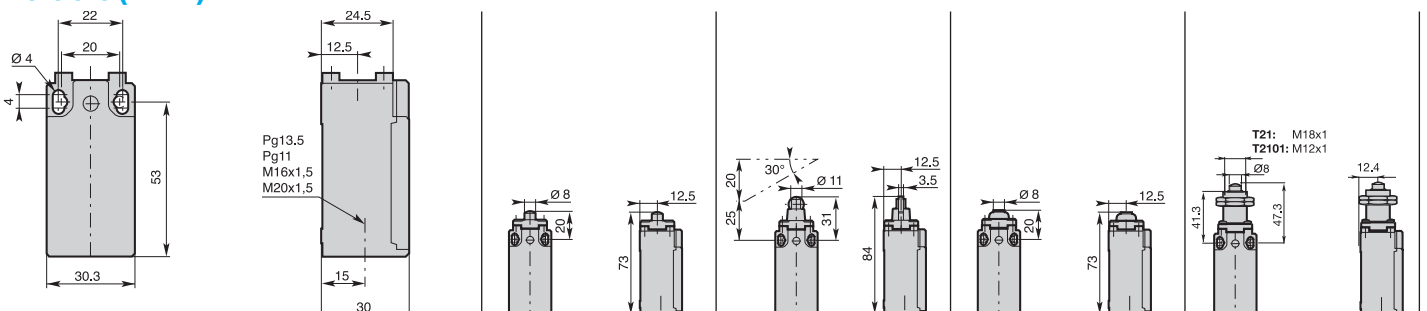
### Operating Head Type

	<b>T1• - Plain plunger</b> T10: nylon plunger T11: metal plunger	<b>T1• - Roller plunger</b> T12: metal roller T13: nylon roller	<b>T14 - Metal plunger with dust protection cup</b>	<b>T21 - Plain plunger with M18x1 fixing nuts</b> <b>T2101 - Plain plunger with M12x1 fixing nuts</b>
Conformity /  (N.C. contact with positive opening operation)	EN 50047	EN 50047	EN 50047	
Max actuation speed [m/s]	0,5	0,3	0,5	0,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	15 / 30	12 / 30	15 / 30	15 / 30

### Additional Technical Datas

	<b>AP•T1•Z11</b>	<b>AP•T1•Z11</b>	<b>AP•T14Z11</b>	<b>AP•T21Z11</b>
<b>Z11</b> Snap Action Contacts (1NO + 1NC)				
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)				
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)				
<b>W02</b> Slow Action Contacts (2NC)				
<b>W20</b> Slow Action Contacts (2NO)				
<b>Z02</b> Snap Action Contacts (2NC)				
<b>X12P</b> Non overlapping Slow Action Contacts (1NO + 2NC)				
<b>X21P</b> Non overlapping Slow Action Contacts (2NO + 1NC)				
<b>W03P</b> Slow Action Contacts (3NC)				
<b>Weight (packing per unit)</b> [kg]	<b>0,070</b>	<b>0,075</b>	<b>0,070</b>	<b>0,080</b>

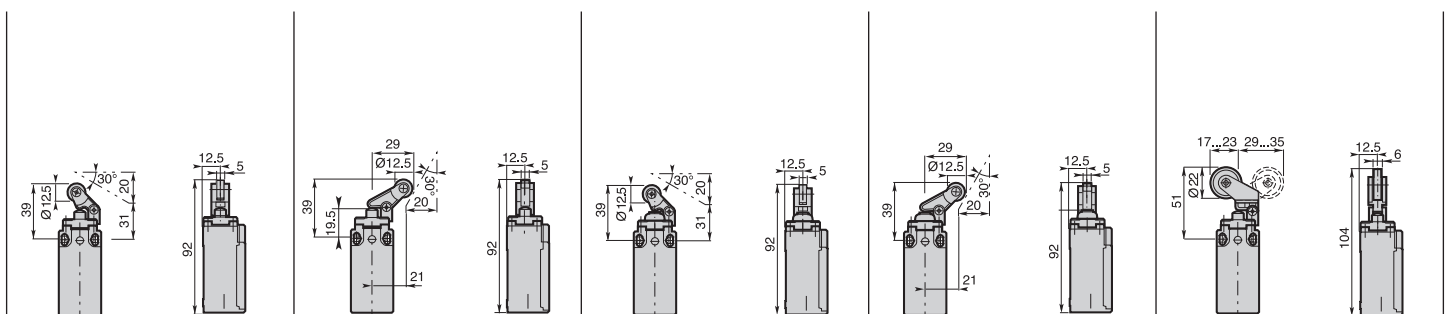
### Dimensions (in mm)





<b>T30 - Plastic roller lever</b> T30: on plastic plunger T31: on metal plunger	<b>T32 - Plastic roller lever</b> T32: on metal plunger T34: on plastic plunger	<b>T35 - Plastic roller lever on metal plunger with dust protection cup</b>	<b>T36 - Plastic roller lever on metal plunger with dust protection cup</b>	<b>T38 - Adjustable plastic roller lever on metal plunger</b> <b>T39 - Same as above with dust protection cup</b>
EN 50047 1,0 7 / 24	EN 50047 1,0 7 / 24	EN 50047 1,0 7 / 24	EN 50047 1,0 7 / 24	EN 50047 1,0 7 / 24

<b>AP•T3•Z11</b> 0 4.9 9.0 14.5 21.0 mm 21-22 13-14 21-22 13-14	<b>AP•T3•Z11</b> 0 4.9 9.0 14.5 21.0 mm 21-22 13-14 21-22 13-14	<b>AP•T35Z11</b> 0 4.9 9.0 14.5 21.0 mm 21-22 13-14 21-22 13-14	<b>AP•T36Z11</b> 0 4.9 9.0 14.5 21.0 mm 21-22 13-14 21-22 13-14	<b>AP•T3•Z11</b> 0 8.8 15.0 23.2 32.0 mm 21-22 13-14 21-22 13-14
<b>AP•T3•X11</b> 0 6.0 10.5 21.0 mm 21-22 13-14 8.6	<b>AP•T3•X11</b> 0 6.0 10.5 21.0 mm 21-22 13-14 8.6	<b>AP•T35X11</b> 0 6.0 10.5 21.0 mm 21-22 13-14 8.6	<b>AP•T36X11</b> 0 6.0 10.5 21.0 mm 21-22 13-14 8.6	<b>AP•T3•X11</b> 0 10.6 18.5 32.0 mm 21-22 13-14 15.1
<b>AP•T3•Y11</b> 0 10.2 14.6 21.0 mm 21-22 13-14 5.4	<b>AP•T3•Y11</b> 0 10.2 14.6 21.0 mm 21-22 13-14 5.4	<b>AP•T35Y11</b> 0 10.2 14.6 21.0 mm 21-22 13-14 5.4	<b>AP•T36Y11</b> 0 10.2 14.6 21.0 mm 21-22 13-14 5.4	<b>AP•T3•Y11</b> 0 16.8 25.1 32.0 mm 21-22 13-14 9.4
<b>AP•T3•W02</b> 0 5.7 10.2 21.0 mm 11-12 21-22	<b>AP•T3•W02</b> 0 5.7 10.2 21.0 mm 11-12 21-22	<b>AP•T35W02</b> 0 5.7 10.2 21.0 mm 11-12 21-22	<b>AP•T36W02</b> 0 5.7 10.2 21.0 mm 11-12 21-22	<b>AP•T3•W02</b> 0 9.6 17.8 32.0 mm 11-12 21-22
<b>AP•T3•W20</b> 0 5.3 21.0 mm 13-14 23-24	<b>AP•T3•W20</b> 0 5.3 21.0 mm 13-14 23-24	<b>AP•T35W20</b> 0 5.3 21.0 mm 13-14 23-24	<b>AP•T36W20</b> 0 5.3 21.0 mm 13-14 23-24	<b>AP•T3•W20</b> 0 9.2 32.0 mm 13-14 23-24
<b>AP•T3•Z02</b> 0 5.1 8.6 13.1 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•Z02</b> 0 5.1 8.6 13.1 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T35Z02</b> 0 5.1 8.6 13.1 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T36Z02</b> 0 5.1 8.6 13.1 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•Z02</b> 0 8.8 14.6 22.8 32.0 mm 11-12 21-22 11-12 21-22
<b>AP•T3•X12P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•X12P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T35X12P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T36X12P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•X12P</b> 0 11.9 19.7 32.0 mm 11-12 21-22 11-12 21-22
<b>AP•T3•X21P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•X21P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T35X21P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T36X21P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•X21P</b> 0 11.9 19.7 32.0 mm 11-12 21-22 11-12 21-22
<b>AP•T3•W03P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•W03P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T35W03P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T36W03P</b> 0 6.8 11.8 21.0 mm 11-12 21-22 11-12 21-22	<b>AP•T3•W03P</b> 0 11.9 19.7 32.0 mm 11-12 21-22 11-12 21-22
<b>0,075</b>	<b>0,080</b>	<b>0,075</b>	<b>0,080</b>	<b>0,080</b>



### Electrical Connection

- AP1:** one cable inlet for PG 13,5 Cable Gland
- AP2:** one cable inlet by 1/2" NPT Plastic Adapter
- AP3:** one cable inlet for PG11 Cable Gland
- AP4:** one cable inlet for M16 x 1,5 Cable Gland
- AP5:** one cable inlet for M20 x 1,5 Cable Gland



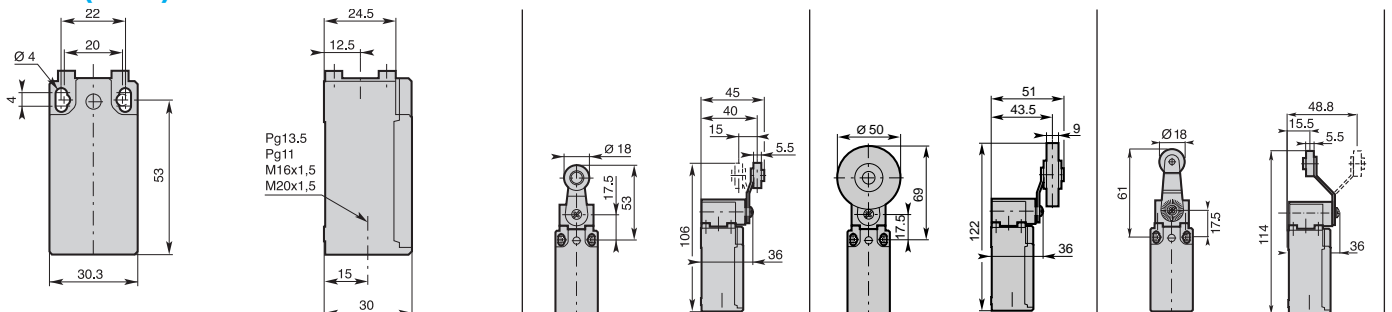
### Operating Head Type

	<b>T4• - Ø 18 roller lever</b> T41: nylon roller T43: metal roller	<b>T42 - Ø 50 rubber roller lever</b>	<b>T4• - Ø 18 roller lever</b> T45: nylon roller T46: metal roller
Conformity /  (N.C. contact with positive opening operation)	EN 50047		
Max actuation speed [m/s]	1,5	1,5	1,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	0,10 / 0,32	0,10 / 0,32	0,10 / 0,32

### Additional Technical Datas

		<b>AP•T4•Z11</b>	<b>AP•T4Z211</b>	<b>AP•T4•Z11</b>
<b>Z11</b> Snap Action Contacts (1NO + 1NC)				
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)				
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)				
<b>W02</b> Slow Action Contacts (2NC)				
<b>W20</b> Slow Action Contacts (2NO)				
<b>Z02</b> Snap Action Contacts (2NC)				
<b>X12P</b> Non overlapping Slow Action Contacts (1NO + 2NC)				
<b>X21P</b> Non overlapping Slow Action Contacts (2NO + 1NC)				
<b>W03P</b> Slow Action Contacts (3NC)				
<b>Weight (packing per unit)</b>	<b>[kg]</b>	<b>0,095</b>	<b>0,115</b>	<b>0,095</b>

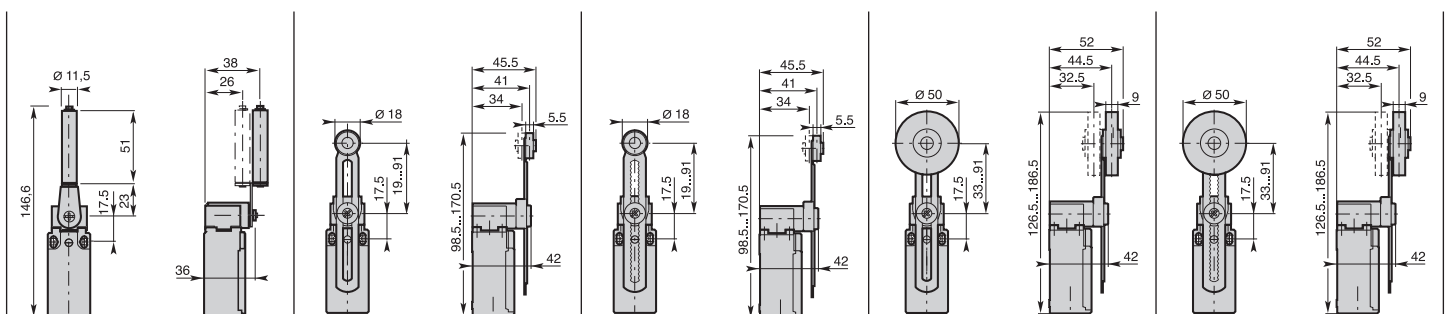
### Dimensions (in mm)





<b>T48 - Ceramic rod lever</b>	<b>T5 - Adjustable lever with Ø 18 roller</b> T51: nylon roller T53: metal roller	<b>T5100 - Adjustable toothed lever (step 2 mm) with Ø 18 nylon roller</b>	<b>T52 - Adjustable lever with Ø 50 rubber roller</b>	<b>T5200 - Adjustable toothed lever (step 2 mm) with Ø 50 rubber roller</b>
1,5 0,10 / 0,32	1,5 0,10 / 0,32	1,5 0,10 / 0,32	1,5 0,10 / 0,32	1,5 0,10 / 0,32

<b>AP•T48Z11</b> 0 10° 22° 38° 74° 21-22 13-14 21-22 13-14	<b>AP•T5•Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T5100Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T52Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T5200Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14
<b>AP•T48X11</b> 0 14° 28° 74° 21-22 13-14 21°	<b>AP•T5•X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T5100X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T52X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T5200X11</b> 0 21° 37° 74° 21-22 13-14 30°
<b>AP•T48Y11</b> 0 26° 42° 74° 21-22 13-14 11°	<b>AP•T5•Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T5100Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T52Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T5200Y11</b> 0 35° 51° 74° 21-22 13-14 18°
<b>AP•T48W02</b> 0 12° 28° 74° 11-12 21-22	<b>AP•T5•W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T5100W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T52W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T5200W02</b> 0 19° 37° 74° 11-12 21-22
<b>AP•T48W20</b> 0 11° 74° 13-14 23-24	<b>AP•T5•W20</b> 0 18° 74° 13-14 23-24	<b>AP•T5100W20</b> 0 18° 74° 13-14 23-24	<b>AP•T52W20</b> 0 18° 74° 13-14 23-24	<b>AP•T5200W20</b> 0 18° 74° 13-14 23-24
<b>AP•T48Z02</b> 0 10° 31° 37° 74° 11-12 21-22 11-12 21-22	<b>AP•T5•Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T5100Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T52Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T5200Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22
<b>AP•T48X12P</b> 0 17° 31° 74° 11-12 21-22 33-34 29°	<b>AP•T5•X12P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T5100X12P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T52X12P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T5200X12P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°
<b>AP•T48X21P</b> 0 17° 31° 74° 11-12 21-22 33-34 29°	<b>AP•T5•X21P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T5100X21P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T52X21P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°	<b>AP•T5200X21P</b> 0 24° 40° 74° 11-12 21-22 33-34 38°
<b>AP•T48W03P</b> 0 17° 31° 74° 11-12 21-22 33-34	<b>AP•T5•W03P</b> 0 24° 40° 74° 11-12 21-22 33-34	<b>AP•T5100W03P</b> 0 24° 40° 74° 11-12 21-22 33-34	<b>AP•T52W03P</b> 0 24° 40° 74° 11-12 21-22 33-34	<b>AP•T5200W03P</b> 0 24° 40° 74° 11-12 21-22 33-34
<b>0,100</b>	<b>0,105</b>	<b>0,105</b>	<b>0,125</b>	<b>0,125</b>



### Electrical Connection

- AP1:** one cable inlet for PG 13,5 Cable Gland
- AP2:** one cable inlet by 1/2" NPT Plastic Adapter
- AP3:** one cable inlet for PG11 Cable Gland
- AP4:** one cable inlet for M16 x 1,5 Cable Gland
- AP5:** one cable inlet for M20 x 1,5 Cable Gland



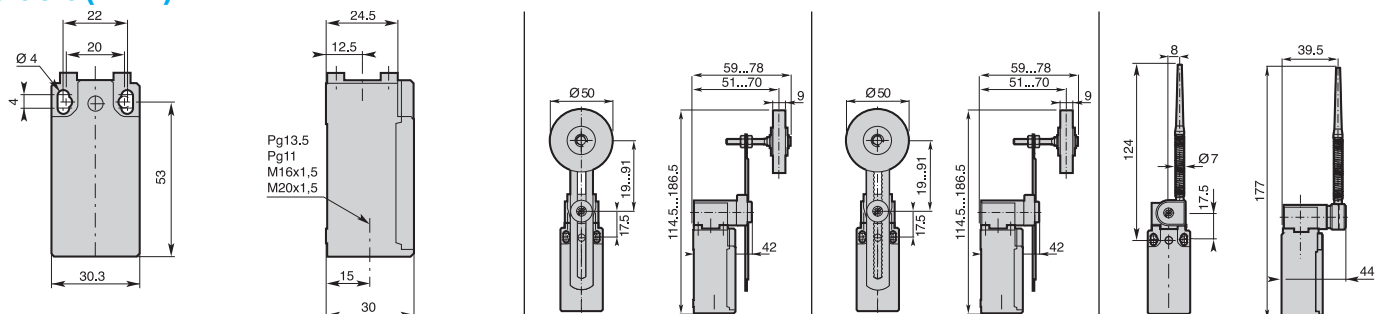
### Operating Head Type

	T55 - Adjustable lever with adjustable Ø 50 Rubber roller	T5500 - Adjustable toothed lever (step 2 mm) with adjustable Ø 50 Rubber roller	T61 - Nylon actuator with stainless steel spring
Conformity /  (N.C. contact with positive opening operation)			
Max actuation speed [m/s]	1,5	1,5	1,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	0,10 / 0,32	0,10 / 0,32	0,10 / -

### Additional Technical Datas

Order Code	Order Code	Order Code
<b>Z11</b> Snap Action Contacts (1NO + 1NC)	<b>AP•T55Z11</b>	<b>AP•T5500Z11</b>
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)	<b>AP•T55X11</b>	<b>AP•T5500X11</b>
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)	<b>AP•T55Y11</b>	<b>AP•T5500Y11</b>
<b>W02</b> Slow Action Contacts (2NC)	<b>AP•T55W02</b>	<b>AP•T5500W02</b>
<b>W20</b> Slow Action Contacts (2NO)	<b>AP•T55W20</b>	<b>AP•T5500W20</b>
<b>Z02</b> Snap Action Contacts (2NC)	<b>AP•T55Z02</b>	<b>AP•T5500Z02</b>
<b>X12P</b> Non overlapping Slow Action Contacts (1NO + 2NC)	<b>AP•T55X12P</b>	<b>AP•T5500X12P</b>
<b>X21P</b> Non overlapping Slow Action Contacts (2NO + 1NC)	<b>AP•T55X21P</b>	<b>AP•T5500X21P</b>
<b>W03P</b> Slow Action Contacts (3NC)	<b>AP•T55W03P</b>	<b>AP•T5500W03P</b>
<b>Weight (packing per unit) [kg]</b>	<b>0,130</b>	<b>0,130</b>

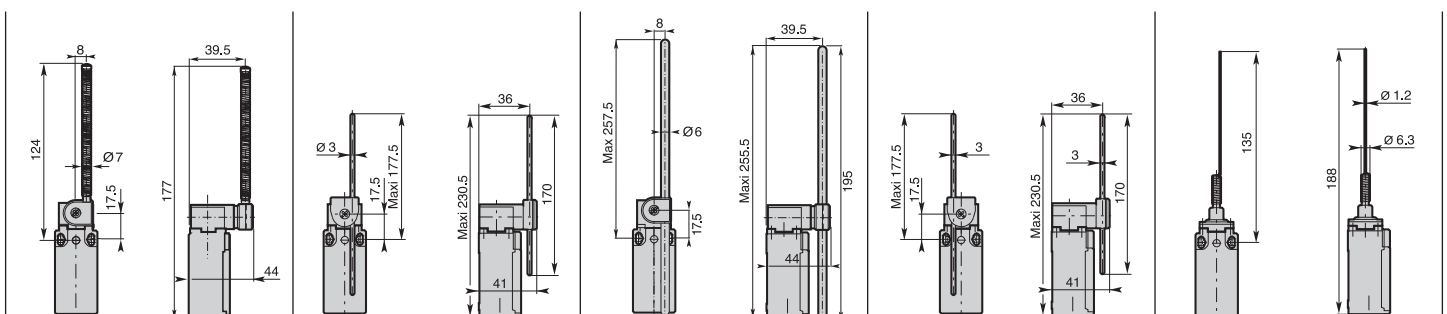
### Dimensions (in mm)





<b>T62 - Stainless steel spring actuator</b>	<b>T7• - Adjustable Ø 3 rod lever</b> T71: stainless steel rod T72: fiberglass rod	<b>T7• - Adjustable Ø 6 rod lever</b> T73: nylon rod T74: fiberglass rod	<b>T75 - Adjustable square steel rod lever</b>	<b>T91: Stainless steel spring multidirectional actuator</b>
1,5 0,10 / -	1,5 0,10 / 0,32	1,5 0,10 / 0,32	1,5 0,10 / 0,32	1,0 0,12 / -

<b>AP•T62Z11</b> 0 17° 31° 74° 21-22 13-14 21-22 13-14	<b>AP•T7•Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T7•Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T75Z11</b> 0 17° 31° 47° 74° 21-22 13-14 21-22 13-14	<b>AP•T91Z11</b> 0 12° 23° 21-22 13-14 21-22 13-14
<b>AP•T62X11</b> 0 21° 74° 21-22 13-14 30°	<b>AP•T7•X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T7•X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T75X11</b> 0 21° 37° 74° 21-22 13-14 30°	<b>AP•T91X11</b> 0 14° 21° 21-22 13-14
<b>AP•T62Y11</b> 0 35° 74° 21-22 13-14 18°	<b>AP•T7•Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T7•Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T75Y11</b> 0 35° 51° 74° 21-22 13-14 18°	<b>AP•T91Y11</b> 0 25° 12° 21-22 13-14
<b>AP•T62W02</b> 0 19° 74° 11-12 21-22	<b>AP•T7•W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T7•W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T75W02</b> 0 19° 37° 74° 11-12 21-22	<b>AP•T91W02</b> 0 14° 11-12 21-22
<b>AP•T62W20</b> 0 18° 74° 13-14 23-24	<b>AP•T7•W20</b> 0 18° 74° 13-14 23-24	<b>AP•T7•W20</b> 0 18° 74° 13-14 23-24	<b>AP•T75W20</b> 0 18° 74° 13-14 23-24	<b>AP•T91W20</b> 0 13° 13-14 23-24
<b>AP•T62Z02</b> 0 17° 30° 74° 11-12 21-22 11-12 21-22	<b>AP•T7•Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T7•Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T75Z02</b> 0 17° 30° 46° 74° 11-12 21-22 11-12 21-22	<b>AP•T91Z02</b> 0 12° 22° 11-12 21-22 11-12 21-22
<b>AP•T62•X12P</b> 0 24° 74° 13-14 23-24 38°	<b>AP•T7•X12P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T7•X12P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T75X12P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T91X12P</b> 0 16° 26° 13-14 23-24
<b>AP•T62•X21P</b> 0 24° 74° 13-14 23-24 38°	<b>AP•T7•X21P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T7•X21P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T75X21P</b> 0 24° 40° 74° 13-14 23-24 38°	<b>AP•T91X21P</b> 0 16° 26° 13-14 23-24
<b>AP•T62•W03P</b> 0 24° 74° 11-12 21-22 38°	<b>AP•T7•W03P</b> 0 24° 40° 74° 11-12 21-22 38°	<b>AP•T7•W03P</b> 0 24° 40° 74° 11-12 21-22 38°	<b>AP•T75W03P</b> 0 24° 40° 74° 11-12 21-22 38°	<b>AP•T91W03P</b> 0 16° 11-12 21-22
<b>0,105</b>	<b>0,105</b>	<b>0,115</b>	<b>0,105</b>	<b>0,080</b>





### Electrical Connection

- AP1:** one cable inlet for PG 13,5 Cable Gland
- AP2:** one cable inlet by 1/2" NPT Plastic Adapter
- AP3:** one cable inlet for PG11 Cable Gland
- AP4:** one cable inlet for M16 x 1,5 Cable Gland
- AP5:** one cable inlet for M20 x 1,5 Cable Gland



### Operating Head Type

	<b>T92: Multidirectional nylon actuator with stainless steel spring</b>	<b>T93: Stainless steel spring multidirectional actuator</b>	<b>T98: Pull action with ring</b>
Conformity /  (N.C. contact with positive opening operation)			
Max actuation speed [m/s]	1,0	1,0	0,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	0,12 / -	0,12 / -	30 / -

### Additional Technical Datas

Order Code	Operation Diagram	Order Code	Operation Diagram	Order Code	Operation Diagram
<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>AP•T92Z11</b>		<b>AP•T93Z11</b>	
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>AP•T92X11</b>		<b>AP•T93X11</b>	
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>AP•T92Y11</b>		<b>AP•T93Y11</b>	
<b>W02</b> Slow Action Contacts (2NC)		<b>AP•T92W02</b>		<b>AP•T93W02</b>	
<b>W20</b> Slow Action Contacts (2NO)		<b>AP•T92W20</b>		<b>AP•T93W20</b>	
<b>Z02</b> Snap Action Contacts (2NC)		<b>AP•T92Z02</b>		<b>AP•T93Z02</b>	
<b>X12P</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>AP•T92X12P</b>		<b>AP•T93X12P</b>	
<b>X21P</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>AP•T92X21P</b>		<b>AP•T93X21P</b>	
<b>W03P</b> Slow Action Contacts (3NC)		<b>AP•T92W03P</b>		<b>AP•T93W03P</b>	
<b>Weight (packing per unit)</b>	<b>[kg]</b>	<b>0,085</b>	<b>0,090</b>	<b>0,115</b>	

### Dimensions (in mm)

