

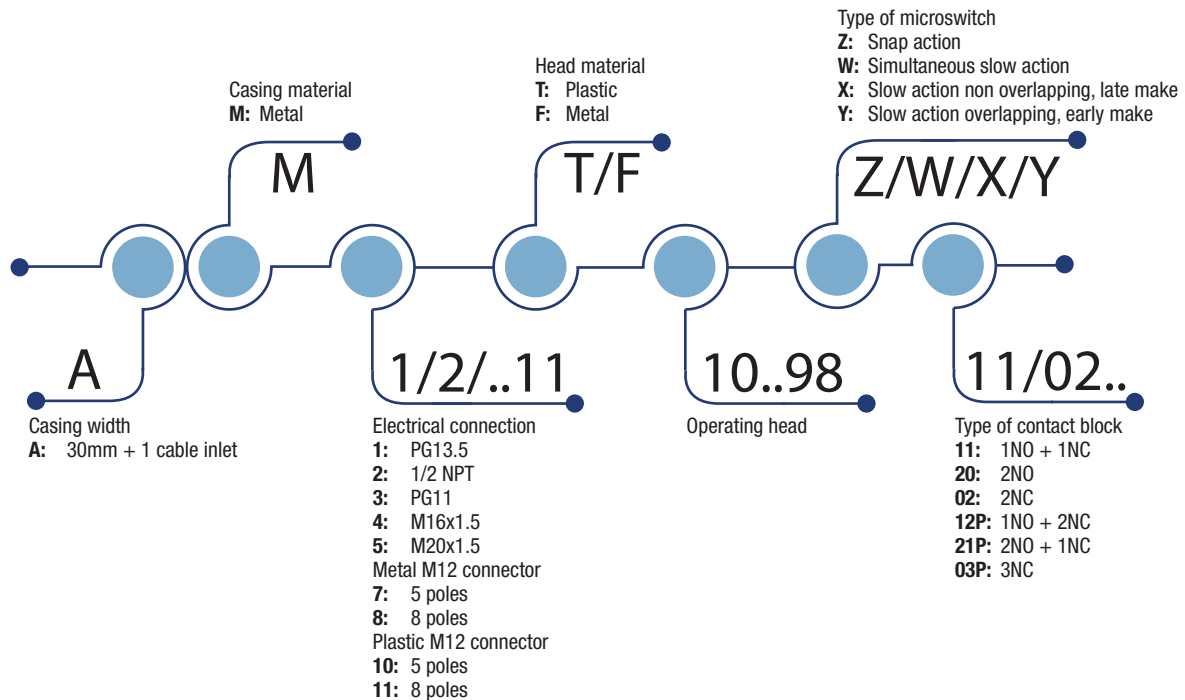
# Limit Switches **AM series**

## Summary

**APPROVALS:** UL 508 / CSA C22-2 N. 14 / IEC 60947-5-1



CB-SCHEME certification according to IEC 60947-5-1



## HOW IS IT MADE?

### 01 A variety of actuators

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

### 02 Wide range of heads

- Assembled using 4 x Ø3 screws

### 03 Casing:

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

### 04 Mounting screws

- 2 or 4 x M4 screws on top part

### 05 Cover

- 3 screws Ø3 pozidriv 1

### 06 Contact Block

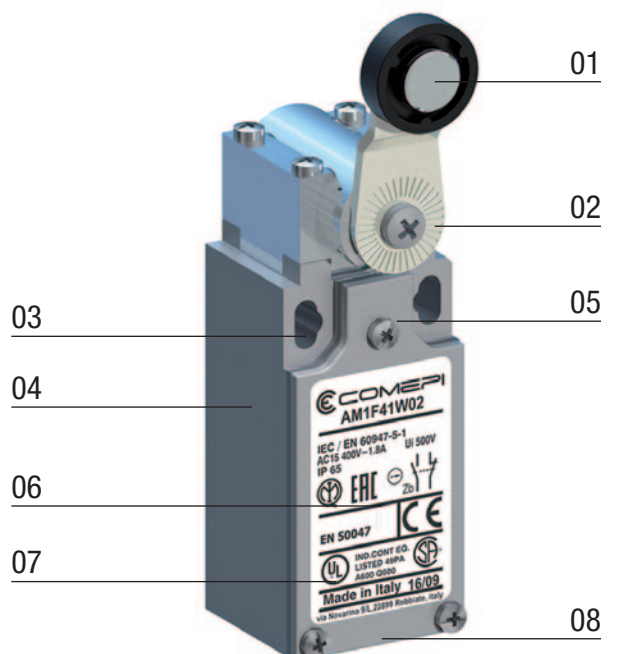
- Positive opening operation
- Snap action or slow action
- Electrically separated contacts

### 07 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

### 08 Electrical connection

- 1 x threaded cable entry suitable for cable gland, M12 connector or DEUTSCH connector



# Limit Switches **AM series**

## Description

### 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:

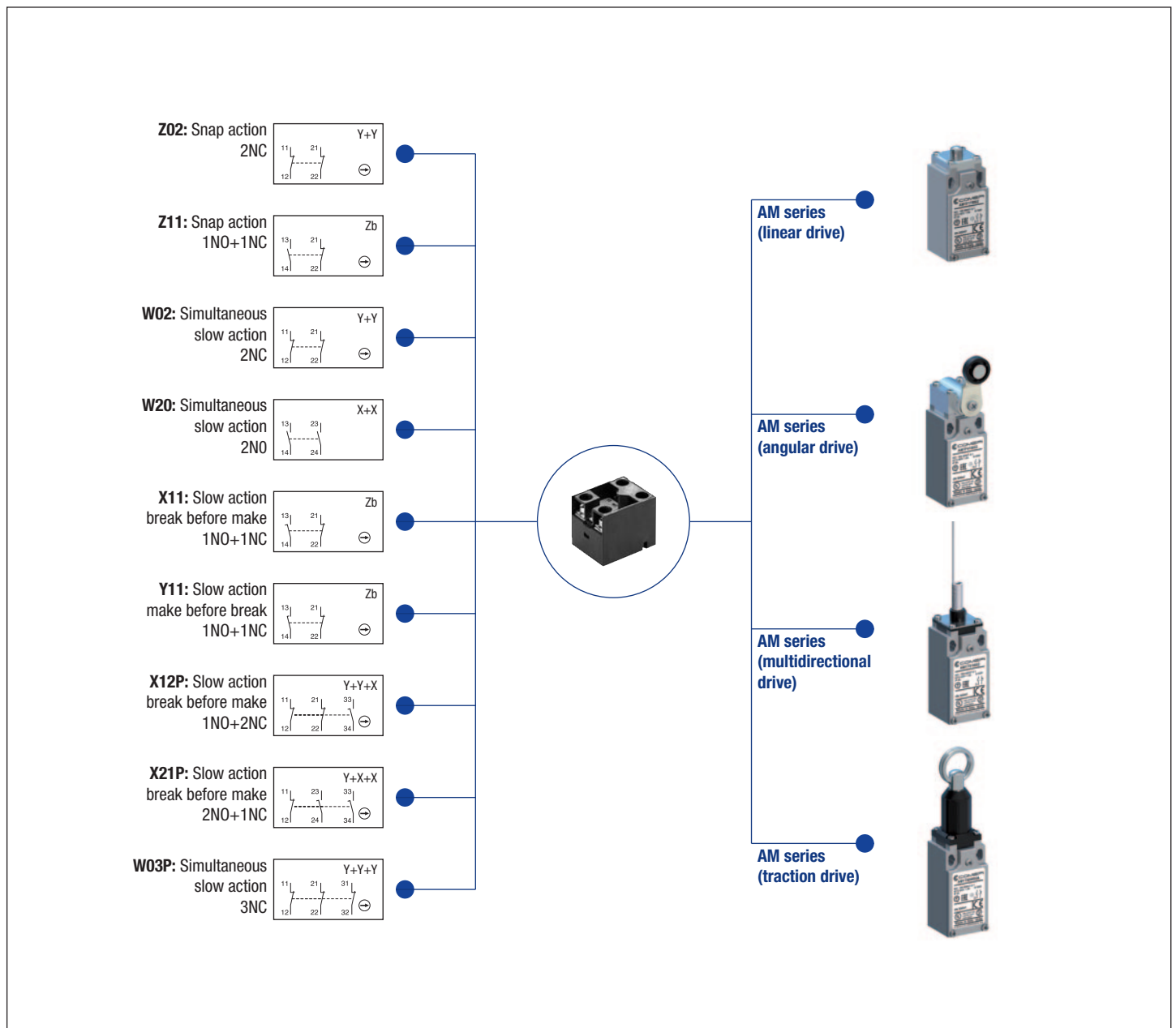
- Presence/absence.
- Positioning and travel limit.
- Objects passing/counting.

### DESCRIPTION

Limit switches, which are made of zinc alloy (Zamak), offer a degree of protection of IP66.

They comply with the requirements of European Directives (Low Voltage and RoHS) and are conform to European and International Standards.

The CE declaration of these products are available in the download section of website [www.comepi.it](http://www.comepi.it) or by writing to the following email address: [tecnico@comepi.it](mailto:tecnico@comepi.it)  
DDC02 - Limit Switches.



# Limit Switches **AM series**

## Technical Data

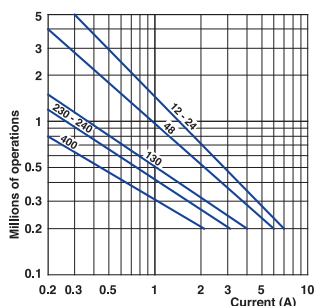
|   | <b>AM Series</b>                  |               |
|---|-----------------------------------|---------------|
| <b>Standards</b>  | IEC 60947-5-1<br>EN 60947-5-1     |               |
| <b>Certifications - Approvals</b>                                 | UL - CSA - IMQ - EAC - CCC - UKCA |               |
| <b>Air temperature</b> near the device                            |                                   |               |
| – during operation  | °C                                | – 25 ... + 70 |
| – for storage   | °C                                | – 30 ... + 80 |
| <b>Mounting positions</b>   | All positions are authorised      |               |
| <b>Protection against electrical shocks</b> (acc. to IEC 61140)   | Class I                           |               |
| <b>Degree of protection</b> (according to IEC 60529 and EN 60529) | IP 66*                            |               |

### Electrical Data

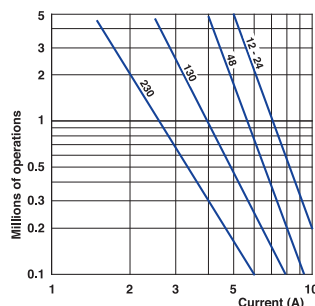
|  |  |  |
|--|--|--|
| <b>Rated insulation voltage <math>U_i</math></b><br>- according to IEC 60947-1 and EN 60947-1<br>- according to UL 508 and CSA C22-2 n° 14 | 500 V (degree of pollution 3) (400 V for contacts type Z02, X12P, X21P, W03P)<br>A 300, Q 300  |  |
| <b>Rated impulse withstand voltage <math>U_{imp}</math></b><br>(according to IEC 60947-1 and EN 60947-1)                                   | kV   | 6  |
| <b>Conventional free air thermal current <math>I_{th}</math></b><br>(according to IEC 60947-5-1) $\theta < 40$ °C                          | A  | 10   |
| <b>Short-circuit protection</b><br>$U_e < 500$ V a.c. - gG (gl) type fuses   | A  | 10   |
| <b>Rated operational current</b><br>$I_e$ / AC-15 (according to IEC 60947-5-1)   | 24 V - 50/60 Hz A<br>120 V - 50/60 Hz A<br>400 V - 50/60 Hz A  | 10<br>6<br>4   |
| $I_e$ / DC-13 (according to IEC 60947-5-1)   | 24 V - d.c. A<br>125 V - d.c. A<br>250 V - d.c. A  | 6<br>0.55<br>0.4                                     |
| <b>Switching frequency</b>   | Cycles/h   | 3600   |
| <b>Load factor</b>   |  | 0.5  |
| <b>Resistance between contacts</b>   | m $\Omega$   | 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>   | M3.5 (+, -) pozidriv 2 screw with cable clamp  |  |
| <b>Recommended tightening torque</b>   | <b>Metal</b>   |  |
| <b>Cover</b>   | 0,8Nm, max 0,9   |  |
| <b>Head</b>  | 0,8Nm, max 0,9   |  |
| <b>Microswitch</b>   | 0,8Nm, max 0,9   |  |
| <b>Connecting capacity</b>   | 1 or 2 x mm <sup>2</sup>   | 0.34 ... 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>   | 15 millions of operations F11; F12; T21; T2101; T30...34; T38<br>10 millions of operations F41...46; F51...56; F61...75<br>>5 millions of operations T14; T35; T36; T39; T91...93; T98 |  |
| <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 F52, F5200, F55, F5500, F73, F74, T92, T93: the degree of protection is IP65

### 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         |

# Limit Switches **AM series**

## Technical Data

### Technical data approved by IMQ

| Standards                                      | Devices conform with international IEC 60947-5-1 and European EN 60947-5-1 standards |        |
|--|--|--------|
| Degree of protection                           | IP 66*   |        |
| Rated insulation voltage $U_i$                 | 500 V (degree of pollution 3)<br>(400V for type Z02, X12P, X21P, W03P)               |        |
| Rated impulse withstand voltage $U_{imp}$      | 6 kV   |        |
| Conventional free air thermal current $I_{th}$ | 10 A   |        |
| Short-circuit protection - gG (gI) type fuses  | 10 A   |        |
| Rated operational current                      |  |        |
| $I_e$ / AC-15                                  | 24 V - 50/60 Hz  | 10 A   |
|  | 400 V - 50/60 Hz   | 4 A    |
| $I_e$ / DC-13                                  | 24 V - d.c.  | 6 A    |
|  | 125 V - d.c.   | 0.55 A |
|  | 250 V - d.c.   | 0.4 A  |

\* except for F52, F5200, F55, F5500, F73, F74, T92, T93: the degree of protection is IP65

### Technical data approved by UL

| Standards   | Devices conform with UL 508 |
|---|-----------------------------|
| <b>Contact blocks type Z11, X11, Y11, W02 and Z02</b> |                             |
| Utilization categories                                | A300, Q300                  |
| <b>Contact blocks type X12P, X21P and W03P</b>        |                             |
| Utilization categories                                | A300, Q300                  |

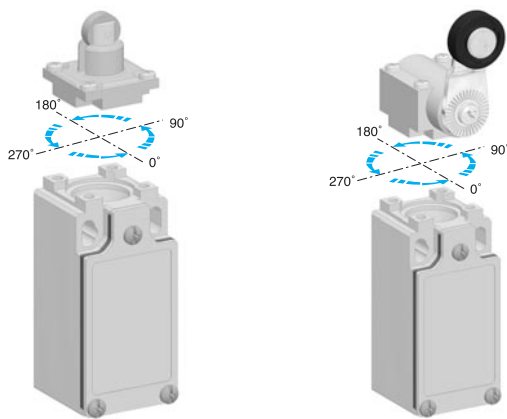
Use 60/75°C copper (Cu) conductor only. Wire rages 14-18 AWG stranded or solid. The terminal tightening torque of 7 lbs-in / 0.78 Nm. Suitable for conduit connection only with use of adapter sleeve optionally provided or recommended by the manufacturer.

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

## IMPLEMENTATION

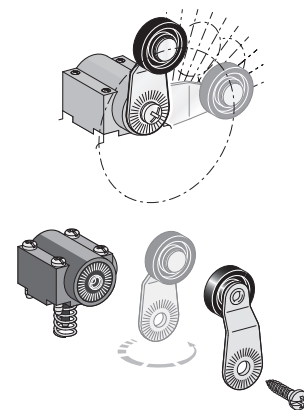
### Operating head orientation

The head can be rotated each 90°. Recommended tightening torque 0,5 Nm (max 0,8 Nm).

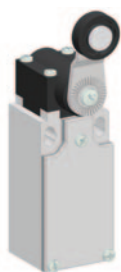


### Lever adjustment

The lever of the angular actuators can be adjusted every 10° and round turned in order to obtain the maximum flexibility on the working plan. Recommended tightening torque 0,5 Nm (max 0,8 Nm).



## Special Versions



### Plastic actuators

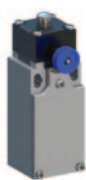
The operating heads used in plastic limit switches AP and DP series have the same dimensions of the ones used in the corresponding metal AM and DM series. It is therefore possible to supply "mixed" versions, that is:

- plastic operating head on metal casing
- metal operating head on plastic casing

### Manual reset operating head

Limit switches equipped with special operating head with manual reset button.

For more information:



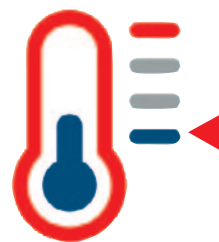
For further informations, please contact our technical department.

### Low Temperature

The limit switches for low temperature applications are useful for refrigerated cells or equipments where the air operational temperature is very low. These devices, made in special materials, are able to extend the operational temperature range down to -40°C, maintaining mechanical performances intact.

To order add the digits "40" following the operating head indication in part number.

For example: AM1F11Z11 → AM1F1140Z11

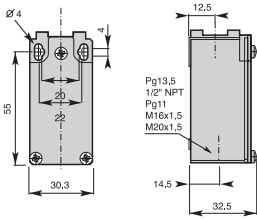


# Limit Switches **AM\_F/AM\_T** series

## Metal casing IP66 - 30 mm. width

### Electrical connection:

- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector



### Contact Blocks

|                         | <b>F11 - Plain Metal plunger</b> | <b>F12 - Metal roller plunger</b> | <b>T14 - Metal plunger with dust protection cup</b> |
|-------------------------|----------------------------------|-----------------------------------|---|
| <b>Z11</b> (1NO + 1NC)  | AM•F11Z11                        | AM•F12Z11                         | AM•T14Z11   |
| <b>X11</b> (1NO + 1NC)  | AM•F11X11                        | AM•F12X11                         | AM•T14X11   |
| <b>Y11</b> (1NO + 1NC)  | AM•F11Y11                        | AM•F12Y11                         | AM•T14Y11   |
| <b>W02</b> (2NC)        | AM•F11W02                        | AM•F12W02                         | AM•T14W02   |
| <b>W20</b> (2NO)        | AM•F11W20                        | AM•F12W20                         | AM•T14W20   |
| <b>Z02</b> (2NC)        | AM•F11Z02                        | AM•F12Z02                         | AM•T14Z02   |
| <b>X12P</b> (1NO + 2NC) | AM•F11X12P                       | AM•F12X12P                        | AM•T14X12P  |
| <b>X21P</b> (2NO + 1NC) | AM•F11X21P                       | AM•F12X21P                        | AM•T14X21P  |
| <b>W03P</b> (3NC)       | AM•F11W03P                       | AM•F12W03P                        | AM•T14W03P  |

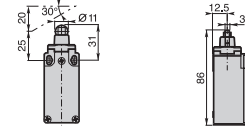
### F11 - Plain Metal plunger



Conformity EN50047  
Min. actuating force  
Weight

15N (30N ⇄)  
180 g

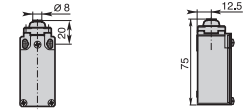
### F12 - Metal roller plunger



Conformity EN50047  
Min. actuating force  
Weight

12N (30N ⇄)  
190 g

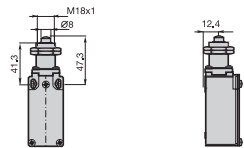
### T14 - Metal plunger with dust protection cup



Conformity EN50047  
Min. actuating force  
Weight

15N (30N ⇄)  
165 g

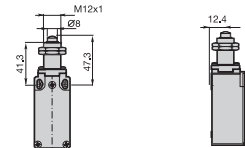
### T21 - Plain plunger with M18x1 fixing nuts



Min. actuating force  
Weight

15N (30N ⇄)  
175 g

### T2101 - Plain plunger with M12x1 fixing nuts

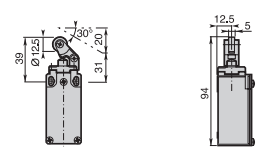
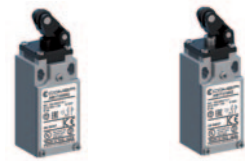


Min. actuating force  
Weight

15N (30N ⇄)  
175 g

### T3 - Plastic roller lever

T30: on plastic plunger T31: on metal plunger



Conformity EN50047  
Min. actuating force  
Weight

7N (24N ⇄)  
170 g

### Contact Blocks

|                         | <b>T21 - Plain plunger with M18x1 fixing nuts</b> | <b>T2101 - Plain plunger with M12x1 fixing nuts</b> | <b>T3 - Plastic roller lever</b> |
|-------------------------|---|---|----------------------------------|
| <b>Z11</b> (1NO + 1NC)  | AM•T21Z11   | AM•T2101Z11   | AM•T30Z11 AM•T31Z11              |
| <b>X11</b> (1NO + 1NC)  | AM•T21X11   | AM•T2101X11   | AM•T30X11 AM•T31X11              |
| <b>Y11</b> (1NO + 1NC)  | AM•T21Y11   | AM•T2101Y11   | AM•T30Y11 AM•T31Y11              |
| <b>W02</b> (2NC)        | AM•T21W02   | AM•T2101W02   | AM•T30W02 AM•T31W02              |
| <b>W20</b> (2NO)        | AM•T21W20   | AM•T2101W20   | AM•T30W20 AM•T31W20              |
| <b>Z02</b> (2NC)        | AM•T21Z02   | AM•T2101Z02   | AM•T30Z02 AM•T31Z02              |
| <b>X12P</b> (1NO + 2NC) | AM•T21X12P  | AM•T2101X12P  | AM•T30X12P AM•T31X12P            |
| <b>X21P</b> (2NO + 1NC) | AM•T21X21P  | AM•T2101X21P  | AM•T30X21P AM•T31X21P            |
| <b>W03P</b> (3NC)       | AM•T21W03P  | AM•T2101W03P  | AM•T30W03P AM•T31W03P            |

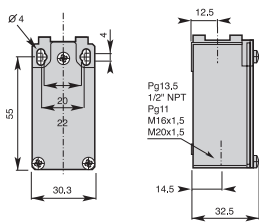
Operation diagrams: page 123 - All dimensions are in mm

# Limit Switches **AM\_F/AM\_T** series

## Metal casing IP66 - 30 mm. width

### Electrical connection:

- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector

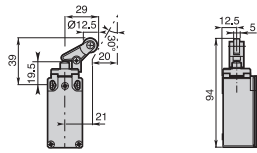


### Contact Blocks

|                         |            |            |            |            |
|-------------------------|------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•T32Z11  | AM•T34Z11  | AM•T35Z11  | AM•T36Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•T32X11  | AM•T34X11  | AM•T35X11  | AM•T36X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•T32Y11  | AM•T34Y11  | AM•T35Y11  | AM•T36Y11  |
| <b>W02</b> (2NC)        | AM•T32W02  | AM•T34W02  | AM•T35W02  | AM•T36W02  |
| <b>W20</b> (2NO)        | AM•T32W20  | AM•T34W20  | AM•T35W20  | AM•T36W20  |
| <b>Z02</b> (2NC)        | AM•T32Z02  | AM•T34Z02  | AM•T35Z02  | AM•T36Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•T32X12P | AM•T34X12P | AM•T35X12P | AM•T36X12P |
| <b>X21P</b> (2NO + 1NC) | AM•T32X21P | AM•T34X21P | AM•T35X21P | AM•T36X21P |
| <b>W03P</b> (3NC)       | AM•T32W03P | AM•T34W03P | AM•T35W03P | AM•T36W03P |

### T3• - Plastic roller lever

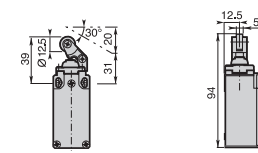
T32: on metal plunger T34: on plastic plunger



Min. actuating force  
Weight

7N (24N ⇄)  
175 g

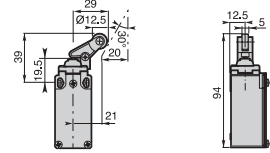
### T35 - Plastic roller lever on metal plunger with dust protection cup



Conformity EN50047  
Min. actuating force  
Weight

7N (24N ⇄)  
170 g

### T36 - Plastic roller lever on metal plunger with dust protection cup

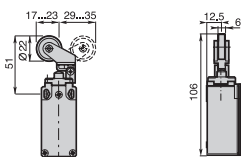


Min. actuating force  
Weight

7N (24N ⇄)  
175 g

### T3• Adjustable plastic roller lever

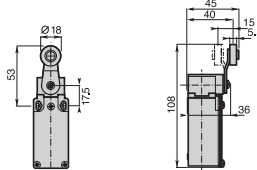
T38: on metal plunger T39: with dust protection cup



Conformity EN50047  
Min. actuating force  
Weight

7N (24N ⇄)  
175 g

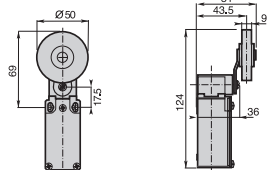
### F41 - Ø 18 nylon roller lever



Conformity EN50047  
Min. actuating torque  
Weight

0,10Nm (0,32Nm ⇄)  
235 g

### F42 - Ø 50 rubber roller lever



Min. actuating torque  
Weight

0,10Nm (0,32Nm ⇄)  
255 g

### Contact Blocks

|                         |            |            |            |            |
|-------------------------|------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•T38Z11  | AM•T39Z11  | AM•F41Z11  | AM•F42Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•T38X11  | AM•T39X11  | AM•F41X11  | AM•F42X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•T38Y11  | AM•T39Y11  | AM•F41Y11  | AM•F42Y11  |
| <b>W02</b> (2NC)        | AM•T38W02  | AM•T39W02  | AM•F41W02  | AM•F42W02  |
| <b>W20</b> (2NO)        | AM•T38W20  | AM•T39W20  | AM•F41W20  | AM•F42W20  |
| <b>Z02</b> (2NC)        | AM•T38Z02  | AM•T39Z02  | AM•F41Z02  | AM•F42Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•T38X12P | AM•T39X12P | AM•F41X12P | AM•F42X12P |
| <b>X21P</b> (2NO + 1NC) | AM•T38X21P | AM•T39X21P | AM•F41X21P | AM•F42X21P |
| <b>W03P</b> (3NC)       | AM•T38W03P | AM•T39W03P | AM•F41W03P | AM•F42W03P |

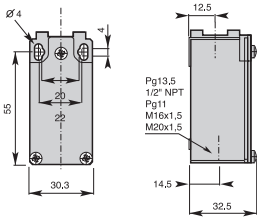
Operation diagrams: page 123 - All dimensions are in mm

# Limit Switches **AM\_F/AM\_T** series

## Metal casing IP66 - 30 mm. width

### Electrical connection:

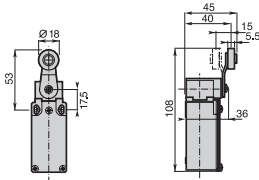
- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector



### Contact Blocks

- Z11** (1NO + 1NC)
- X11** (1NO + 1NC)
- Y11** (1NO + 1NC)
- W02** (2NC)
- W20** (2NO)
- Z02** (2NC)
- X12P** (1NO + 2NC)
- X21P** (2NO + 1NC)
- W03P** (3NC)

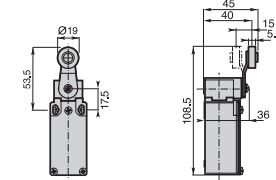
### F43 - Ø 18 metal roller lever



Conformity EN50047

Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 240 g

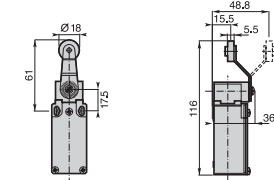
### F44 - Ø 19 steel ball bearing roller lever



Conformity EN50047

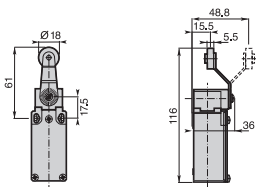
Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 240 g

### F45 - Ø 18 nylon roller lever



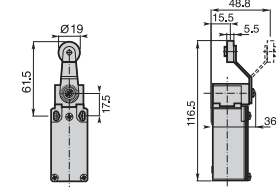
Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 250 g

### F46 - Ø 18 metal roller lever



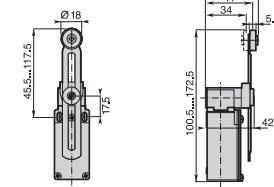
Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 255 g

### F47 - Ø 19 steel ball bearing roller lever



Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 255 g

### F51- Adjustable lever with Ø 18 nylon roller



Min. actuating torque 0,10Nm (0,32Nm ⇄)  
Weight 250 g

### Contact Blocks

- Z11** (1NO + 1NC)
- X11** (1NO + 1NC)
- Y11** (1NO + 1NC)
- W02** (2NC)
- W20** (2NO)
- Z02** (2NC)
- X12P** (1NO + 2NC)
- X21P** (2NO + 1NC)
- W03P** (3NC)

- AM•F46Z11
- AM•F46X11
- AM•F46Y11
- AM•F46W02
- AM•F46W20
- AM•F46Z02
- AM•F46X12P
- AM•F46X21P
- AM•F46W03P

- AM•F47Z11
- AM•F47X11
- AM•F47Y11
- AM•F47W02
- AM•F47W20
- AM•F47Z02
- AM•F47X12P
- AM•F47X21P
- AM•F47W03P

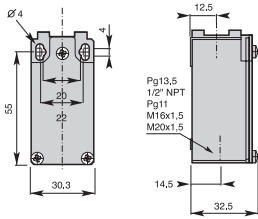
- AM•F51Z11
- AM•F51X11
- AM•F51Y11
- AM•F51W02
- AM•F51W20
- AM•F51Z02
- AM•F51X12P
- AM•F51X21P
- AM•F51W03P

# Limit Switches **AM\_F/AM\_T** series

## Metal casing IP66 - 30 mm. width

### Electrical connection:

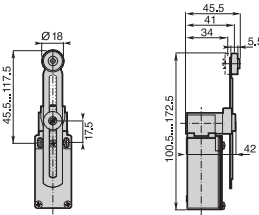
- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector



### Contact Blocks

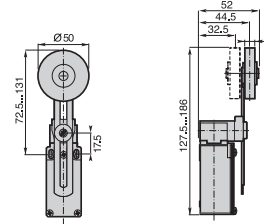
|                         |              |            |              |
|-------------------------|--------------|------------|--------------|
| <b>Z11</b> (1NO + 1NC)  | AM•F5100Z11  | AM•F52Z11  | AM•F5200Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•F5100X11  | AM•F52X11  | AM•F5200X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•F5100Y11  | AM•F52Y11  | AM•F5200Y11  |
| <b>W02</b> (2NC)        | AM•F5100W02  | AM•F52W02  | AM•F5200W02  |
| <b>W20</b> (2NO)        | AM•F5100W20  | AM•F52W20  | AM•F5200W20  |
| <b>Z02</b> (2NC)        | AM•F5100Z02  | AM•F52Z02  | AM•F5200Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•F5100X12P | AM•F52X12P | AM•F5200X12P |
| <b>X21P</b> (2NO + 1NC) | AM•F5100X21P | AM•F52X21P | AM•F5200X21P |
| <b>W03P</b> (3NC)       | AM•F5100W03P | AM•F52W03P | AM•F5200W03P |

**F5100** - Adjustable toothed lever (step 2 mm) with Ø 18 nylon roller



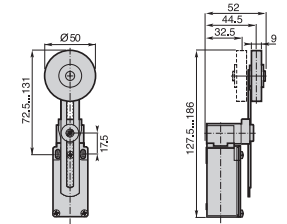
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **250 g**

**F52** - Adjustable lever with Ø 50 rubber roller



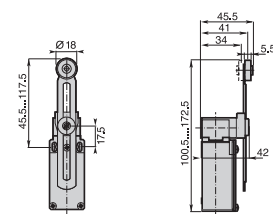
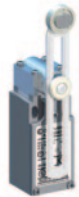
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **265 g**

**F5200** - Adjustable toothed lever (step 2 mm) with Ø 50 rubber roller



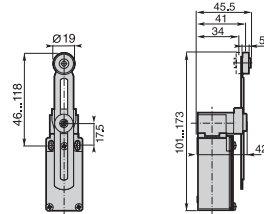
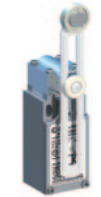
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **265 g**

**F53** - Adjustable lever with Ø 18 metal roller



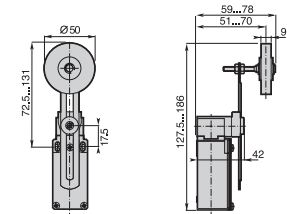
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **255 g**

**F54** - Adjustable lever with Ø 19 steel ball bearing roller



Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **255 g**

**F55** - Adjustable lever with adjustable Ø 50 rubber roller



Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **265 g**

### Contact Blocks

|                         |            |            |            |
|-------------------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•F53Z11  | AM•F54Z11  | AM•F55Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•F53X11  | AM•F54X11  | AM•F55X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•F53Y11  | AM•F54Y11  | AM•F55Y11  |
| <b>W02</b> (2NC)        | AM•F53W02  | AM•F54W02  | AM•F55W02  |
| <b>W20</b> (2NO)        | AM•F53W20  | AM•F54W20  | AM•F55W20  |
| <b>Z02</b> (2NC)        | AM•F53Z02  | AM•F54Z02  | AM•F55Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•F53X12P | AM•F54X12P | AM•F55X12P |
| <b>X21P</b> (2NO + 1NC) | AM•F53X21P | AM•F54X21P | AM•F55X21P |
| <b>W03P</b> (3NC)       | AM•F53W03P | AM•F54W03P | AM•F55W03P |

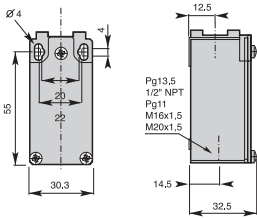
Operation diagrams: page 123 - All dimensions are in mm

# Limit Switches **AM\_F/AM\_T** series

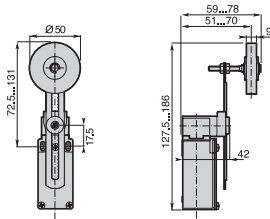
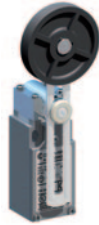
## Metal casing IP66 - 30 mm. width

### Electrical connection:

- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector

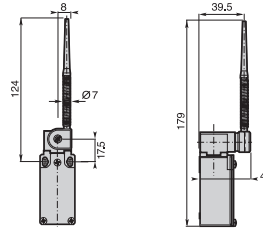


**F500** - Adjustable toothed lever (step 2 mm) with Ø 50 rubber roller



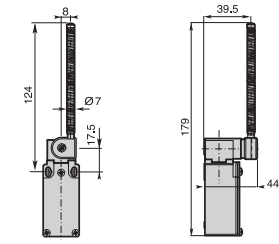
Min. actuating torque **0,10Nm (0,32Nm)**  
Weight **265 g**

**F61** - Nylon actuator with stainless steel spring



Min. actuating torque **0,10Nm**  
Weight **245 g**

**F62** - Stainless steel spring actuator

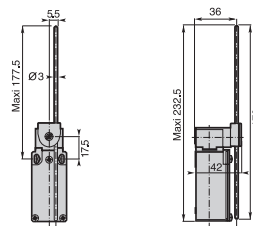


Min. actuating torque **0,10Nm**  
Weight **245 g**

### Contact Blocks

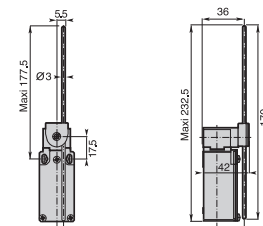
|                         |              |            |            |
|-------------------------|--------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•F5500Z11  | AM•F61Z11  | AM•F62Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•F5500X11  | AM•F61X11  | AM•F62X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•F5500Y11  | AM•F61Y11  | AM•F62Y11  |
| <b>W02</b> (2NC)        | AM•F5500W02  | AM•F61W02  | AM•F62W02  |
| <b>W20</b> (2NO)        | AM•F5500W20  | AM•F61W20  | AM•F62W20  |
| <b>Z02</b> (2NC)        | AM•F5500Z02  | AM•F61Z02  | AM•F62Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•F5500X12P | AM•F61X12P | AM•F62X12P |
| <b>X21P</b> (2NO + 1NC) | AM•F5500X21P | AM•F61X21P | AM•F62X21P |
| <b>W03P</b> (3NC)       | AM•F5500W03P | AM•F61W03P | AM•F62W03P |

**F71** - Adjustable Ø 3 rod lever with stainless steel rod



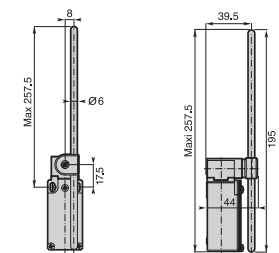
Min. actuating torque **0,10Nm (0,32Nm)**  
Weight **245 g**

**T72** - Adjustable Ø 3 rod lever with fiberglass rod



Min. actuating torque **0,10Nm (0,32Nm)**  
Weight **245 g**

**T73** - Adjustable Ø 6 rod lever with nylon rod



Min. actuating torque **0,10Nm (0,32Nm)**  
Weight **255 g**

### Contact Blocks

|                         |            |            |            |
|-------------------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•F71Z11  | AM•F72Z11  | AM•F73Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•F71X11  | AM•F72X11  | AM•F73X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•F71Y11  | AM•F72Y11  | AM•F73Y11  |
| <b>W02</b> (2NC)        | AM•F71W02  | AM•F72W02  | AM•F73W02  |
| <b>W20</b> (2NO)        | AM•F71W20  | AM•F72W20  | AM•F73W20  |
| <b>Z02</b> (2NC)        | AM•F71Z02  | AM•F72Z02  | AM•F73Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•F71X12P | AM•F72X12P | AM•F73X12P |
| <b>X21P</b> (2NO + 1NC) | AM•F71X21P | AM•F72X21P | AM•F73X21P |
| <b>W03P</b> (3NC)       | AM•F71W03P | AM•F72W03P | AM•F73W03P |

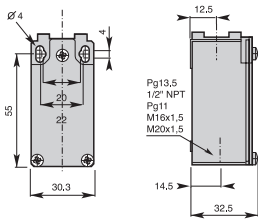
Operation diagrams: page 123 - All dimensions are in mm

# Limit Switches **AM\_F/AM\_T** series

## Metal casing IP66 - 30 mm. width

### Electrical connection:

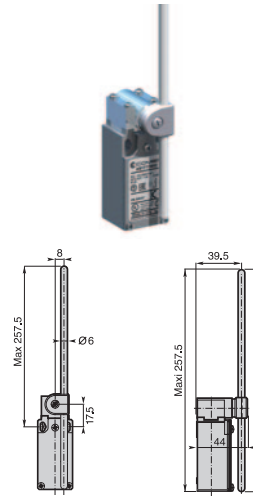
- AM1:** one cable inlet for PG 13,5 Cable Gland
- AM2:** one cable inlet by 1/2" NPT Plastic Adapter
- AM3:** one cable inlet for PG11 Cable Gland
- AM4:** one cable inlet for M16 x 1,5 Cable Gland
- AM5:** one cable inlet for M20 x 1,5 Cable Gland
- AM7:** 5 poles M12 metal connector
- AM8:** 8 poles M12 metal connector
- AM10:** 5 poles M12 plastic connector
- AM11:** 8 poles M12 plastic connector



### Contact Blocks

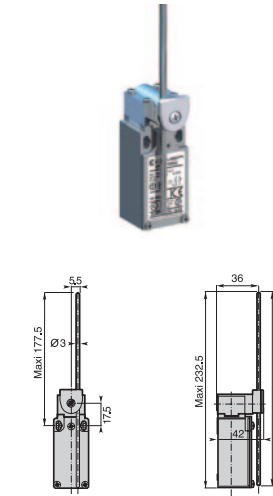
|                         |            |            |            |
|-------------------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•F74Z11  | AM•F75Z11  | AM•T91Z11  |
| <b>X11</b> (1NO + 1NC)  | AM•F74X11  | AM•F75X11  | AM•T91X11  |
| <b>Y11</b> (1NO + 1NC)  | AM•F74Y11  | AM•F75Y11  | AM•T91Y11  |
| <b>W02</b> (2NC)        | AM•F74W02  | AM•F75W02  | AM•T91W02  |
| <b>W20</b> (2NO)        | AM•F74W20  | AM•F75W20  | AM•T91W20  |
| <b>Z02</b> (2NC)        | AM•F74Z02  | AM•F75Z02  | AM•T91Z02  |
| <b>X12P</b> (1NO + 2NC) | AM•F74X12P | AM•F75X12P | AM•T91X12P |
| <b>X21P</b> (2NO + 1NC) | AM•F74X21P | AM•F75X21P | AM•T91X21P |
| <b>W03P</b> (3NC)       | AM•F74W03P | AM•F75W03P | AM•T91W03P |

### F74 - Adjustable Ø 6 rod lever with fiberglass rod



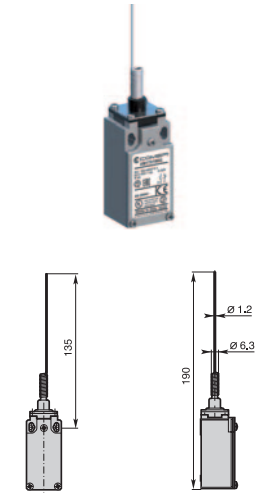
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **255 g**

### T75 - Adjustable 3x3 square steel rod lever



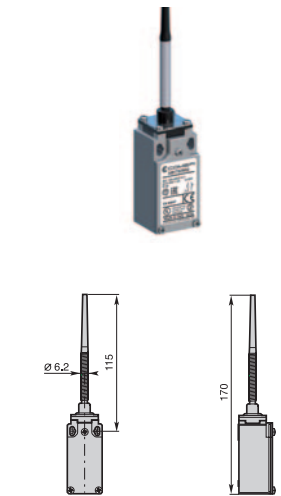
Min. actuating torque **0,10Nm (0,32Nm ⊖)**  
Weight **245 g**

### T91 - Stainless steel spring multidirectional actuator



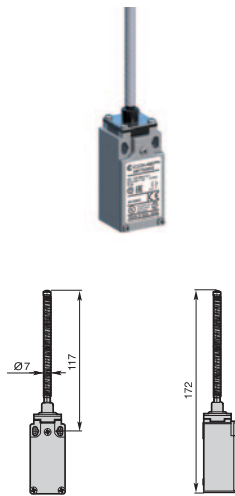
Min. actuating torque **0,12Nm**  
Weight **175 g**

### T92 - Multidirectional nylon actuator with stainless steel spring



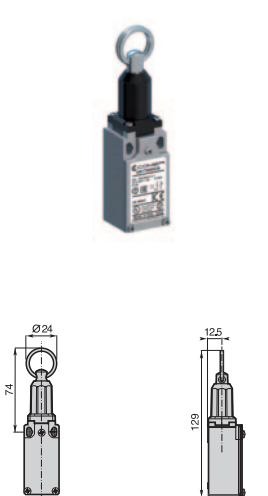
Min. actuating torque **0,12Nm**  
Weight **180 g**

### T93 - Stainless steel spring multidirectional actuator



Min. actuating torque **0,12Nm**  
Weight **185 g**

### T98 - Pull action with ring



Min. actuating force **30N**  
Weight **210 g**

### Contact Blocks

|                         |            |            |            |
|-------------------------|------------|------------|------------|
| <b>Z11</b> (1NO + 1NC)  | AM•T92Z11  | AM•T93Z11  | AM•T98Z11A |
| <b>X11</b> (1NO + 1NC)  | AM•T92X11  | AM•T93X11  | AM•T98X11A |
| <b>Y11</b> (1NO + 1NC)  | AM•T92Y11  | AM•T93Y11  | AM•T98Y11A |
| <b>W02</b> (2NC)        | AM•T92W02  | AM•T93W02  | AM•T98W02A |
| <b>W20</b> (2NO)        | AM•T92W20  | AM•T93W20  | AM•T98W20A |
| <b>Z02</b> (2NC)        | AM•T92Z02  | AM•T93Z02  |            |
| <b>X12P</b> (1NO + 2NC) | AM•T92X12P | AM•T93X12P |            |
| <b>X21P</b> (2NO + 1NC) | AM•T92X21P | AM•T93X21P |            |
| <b>W03P</b> (3NC)       | AM•T92W03P | AM•T93W03P |            |

Operation diagrams: page 123 - All dimensions are in mm