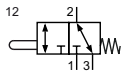


**Technical details**

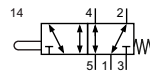
|                          |   |
|--------------------------|---|
| <b>Connection</b>        | G1/8  |
| <b>Nominal size</b>      | 4 mm  |
| <b>Temperature range</b> | -10°C ... +70°C   |
| <b>Medium</b>            | Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature. |
| <b>Materials</b>         | Body: Al (anodized), seals: NBR, inner parts: stainless steel and brass, stem: stainless steel  |
|                          | T-28-311 in accordance with 2014/34/EU (ATEX) available. (Chapter 13)   |



Mechanically operated spool valve including mounting adapter for actuator mount.

**3/2-way-Valves**


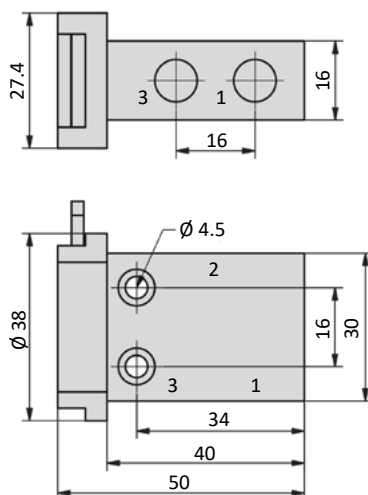
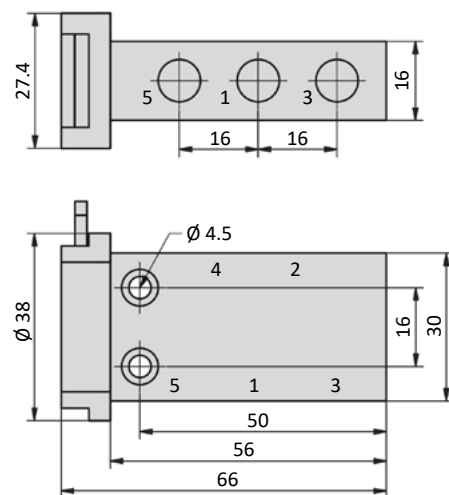
**T-28-311**  
3/2-way, mechanical spring return, stem operated



**T-28-511**  
5/2-way, mechanical spring return, stem operated

**Technical data**

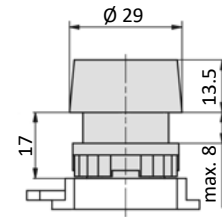
| Model-no.:                          | T-28-311 | T-28-511 |
|-------------------------------------|----------|----------|
| <b>Operating pressure (bar)</b>     | 0 ... 12 | 0 ... 12 |
| <b>Flow rate (NI/min)</b>           | 450      | 465      |
| <b>Actuating force at 6 bar (N)</b> | 25       | 15       |
| <b>Actuation stroke (mm)</b>        | 4        | 4        |
| <b>Weight (kg)</b>                  | 0.058    | 0.075    |

**Dimensions**
**T-28-311**

**T-28-511**


- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhausts

# Actuator $\varnothing$ 22.5 mm

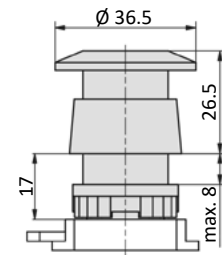
## 18-T-23-011-xx Push button



| Model-no.: 18-T-23-011-xx +  | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 13       | 23       |
| Weight (with valve) (kg)     | 0.057    | 0.073    | 0.090    | 0.067    | 0.091    |

Please complete: xx = Color ( 20 = green, 21 = green with white line, 30 = black, 40 = red, 42 = red with white circle, 50 = yellow, 60 = blue )

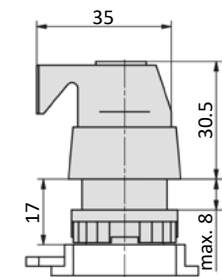
## 18-T-23-012-xx Mushroom



| Model-no.: 18-T-23-012-xx +  | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 13       | 23       |
| Weight (with valve) (kg)     | 0.062    | 0.078    | 0.095    | 0.072    | 0.096    |

Please complete: xx = Color ( 20 = green, 30 = black, 40 = red )

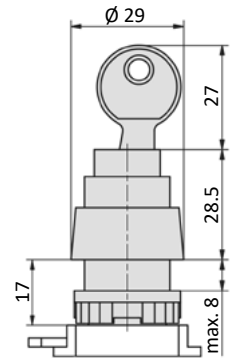
## 18-T-23-013 2 position switch



| Model-no.: 18-T-23-013 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 26       | 25       |
| Weight (with valve) (kg)     | 0.064    | 0.080    | 0.097    | 0.074    | 0.098    |

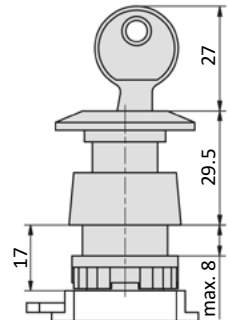
# Actuator $\varnothing$ 22.5 mm

## 18-T-23-014 Key-return



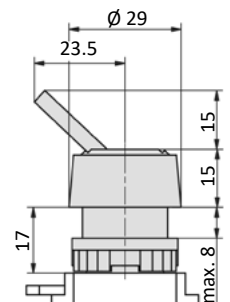
| Model-no.: 18-T-23-014 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 13       | 23       |
| Weight (with valve) (kg)     | 0.123    | 0.139    | 0.156    | 0.133    | 0.157    |

## 18-T-23-015 Stop, key-return



| Model-no.: 18-T-23-015 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 13       | 23       |
| Weight (with valve) (kg)     | 0.125    | 0.141    | 0.158    | 0.135    | 0.159    |

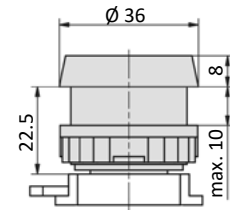
## 18-T-23-016 Toggle



| Model-no.: 18-T-23-016 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 26       | 25       |
| Weight (with valve) (kg)     | 0.069    | 0.085    | 0.102    | 0.079    | 0.103    |

# Actuator Ø 30 mm

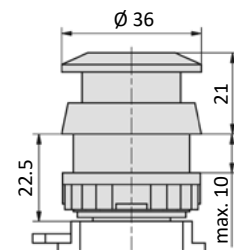
## 18-T-30-011-xx Push button



| Model-no.: 18-T-30-011-xx +  | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 15       | 24       |
| Weight (with valve) (kg)     | 0.066    | 0.082    | 0.099    | 0.076    | 0.100    |

Please complete: xx = Color ( 20 = green, 30 = black, 40 = red, 50 = yellow )

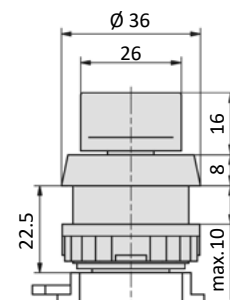
## 18-T-30-012-xx Mushroom



| Model-no.: 18-T-30-012-xx +  | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 15       | 24       |
| Weight (with valve) (kg)     | 0.071    | 0.087    | 0.104    | 0.081    | 0.105    |

Please complete: xx = Color ( 30 = black, 40 = red )

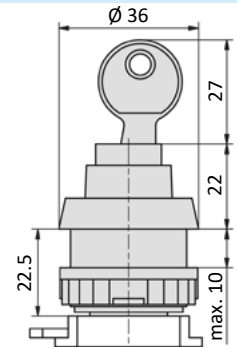
## 18-T-30-013 2 position switch



| Model-no.: 18-T-30-013 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 15       | 25       |
| Weight (with valve) (kg)     | 0.071    | 0.087    | 0.104    | 0.081    | 0.105    |

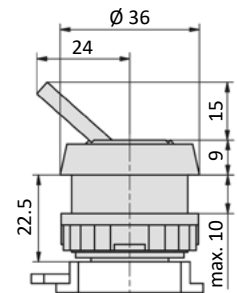
# Actuator Ø 30 mm

## 18-T-30-014 Key-return



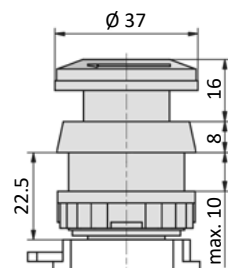
| Model-no.: 18-T-30-014 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 15       | 25       |
| Weight (with valve) (kg)     | 0.122    | 0.138    | 0.155    | 0.132    | 0.156    |

## 18-T-30-016 Toggle



| Model-no.: 18-T-30-016 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 9        | 11       |
| Weight (with valve) (kg)     | 0.069    | 0.085    | 0.102    | 0.079    | 0.103    |

## 18-T-30-018 Mushroom red, detent



| Model-no.: 18-T-30-018 +     | T-25-311 | T-28-311 | T-28-511 | T-30-310 | T-30-510 |
|------------------------------|----------|----------|----------|----------|----------|
| Symbol                       |          |          |          |          |          |
| Actuating force at 6 bar (N) | 24       | 23       | 15       | 31       | 25       |
| Weight (with valve) (kg)     | 0.077    | 0.093    | 0.110    | 0.087    | 0.111    |