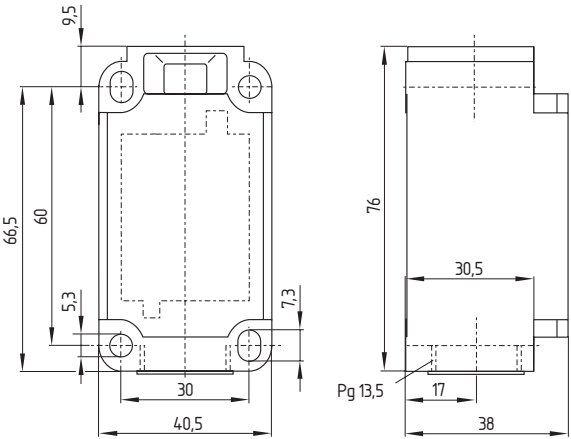


**3. Position switches with safety function / Class 1**  
**3.7 Z/T 336 range**



**Features**

- Thermoplastic enclosure
- Double insulated
- Available with 2 positive break NC contacts to EN 60 947-5-1
- Snap action with constant contact pressure up to switching point
- Slow action available with 2 positive break NC contacts
- Slow action available with overlapping or staggered contacts
- Wiring compartment
- Wide range of alternative actuators
- Actuator heads can be repositioned in steps 4 x 90°
- Angle of roller lever adjustable in 10° steps
- Good resistance to oil and petroleum spirit

**Info**

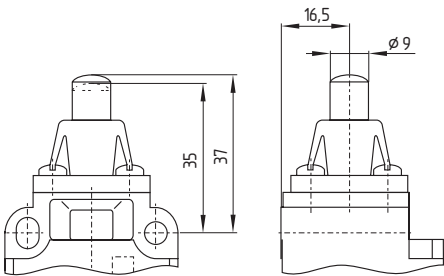
- Available with M 12 plug (A-coding), ordering suffix -ST
- Available with M 12 plug (B-coding), ordering suffix -2310
- Cable entry 1/2" NPT, ordering suffix -NPT
- Cable entry M 20 x 1.5, ordering suffix -M20
- Metal rollers on enquiry

**Ordering details**

Position switch with safety function / class 1 series Z/T 336 with plunger S with snap action with two NC contacts and M 12 plug with B-coding: ZS 336-02z-2310



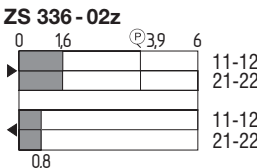
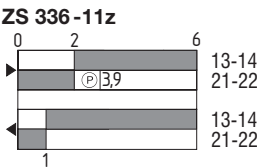
Plunger S



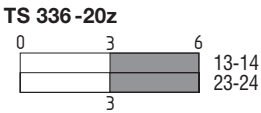
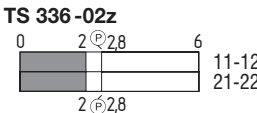
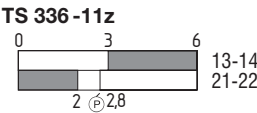
- Features
- Actuator type B to EN 50041
  - Required actuating force  
12 N for snap action,  
17 N for slow action
  - Actuating speed with actuating  
angle 0° to switch axis  
max. 0.5 m/s

|                            |      |       |      |       |      |       |
|----------------------------|------|-------|------|-------|------|-------|
| Contacts/<br>Switch travel | 1 NO | 13↔14 | 2 NC | 11↔12 | 2 NO | 13↔14 |
|                            | 1 NC | 21↔22 |      | 21↔22 |      | 23↔24 |

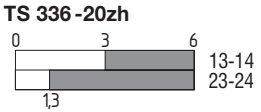
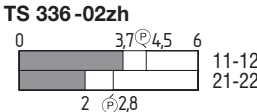
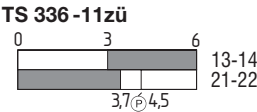
Snap action



Slow action



Slow action,  
overlapping contacts



3.

3.9

Position switches with safety function / Class 1

Technical data

|                                                  | Z/T 256                                                                                        | Z/T 335                    | Z/T 336                                                  |
|--------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------|
| Standards:                                       | IEC/EN 60947-5-1; EN 1088; BG-GS-ET-15                                                         |                            |                                                          |
| Design:                                          | Fixings to EN 50047                                                                            | EN 50047                   |                                                          |
| Enclosure:                                       | Glass-fibre reinforced thermoplastic, self-extinguishing                                       | Zinc diecasting, enamelled | Glass-fibre reinforced thermoplastic, self-extinguishing |
| Protection class:                                | IP 67 to IEC/EN 60529/DIN VDE 0470-1                                                           |                            |                                                          |
| Contact material:                                | Silver                                                                                         |                            |                                                          |
| Contact type:                                    | Change-over with double break Zb or 2 NC contacts, with galvanically separated contact bridges |                            |                                                          |
|                                                  | NC contacts with positive break                                                                |                            |                                                          |
| Switching system:                                | ⊖ IEC 60947-5-1; Ⓢ BG-GS-ET-15; slow or snap action, NC contacts with positive break           |                            |                                                          |
|                                                  | Snap action Z or slow action T                                                                 |                            |                                                          |
| Termination:                                     | Screw terminals for max. 2.5 mm <sup>2</sup> cables (including conductor ferrules)             |                            |                                                          |
| Rated impulse                                    |                                                                                                |                            |                                                          |
| withstand voltage U <sub>imp</sub> :             | 6 kV                                                                                           | 6 kV; -03z, -12z: 4 kV     | 6 kV                                                     |
| Rated insulation voltage U <sub>i</sub> :        | 500 V                                                                                          | 500 V; -03z, -12z: 250 V   | 500 V                                                    |
| Thermal test current I <sub>th</sub> :           | 10 A                                                                                           |                            |                                                          |
| Utilisation category:                            | AC-15; DC-13                                                                                   |                            |                                                          |
| Rated operating                                  |                                                                                                |                            |                                                          |
| current/voltage I <sub>e</sub> /U <sub>e</sub> : | 4 A/230 VAC; 2.5 A/400 VAC; 1 A/500 VAC; 1 A/24 VDC                                            |                            |                                                          |
| Max. fuse rating:                                | 10 A (slow blow); 16 A (quick blow), 6 A (slow blow) as positive break position switch         |                            |                                                          |
| Ambient temperature:                             | – 30 °C ... + 80 °C                                                                            |                            |                                                          |
| Mechanical life:                                 | 20 million operations                                                                          | 30 million operations      |                                                          |
| Switching frequency:                             | Max. 5,000/h                                                                                   |                            |                                                          |
| Switching point accuracy:                        | –                                                                                              |                            |                                                          |
| Actuating speed:**                               | Z 256: Min. 10 mm/min                                                                          | Z 335: min. 10 mm/min      | Z 336: min. 10 mm/min                                    |
|                                                  | T 256: Min. 60 mm/min                                                                          | T 335: min. 60 mm/min      | T 336: min. 60 mm/min                                    |
| Contact break for                                |                                                                                                |                            |                                                          |
| complete stroke:                                 | Z 256: 2 x 2 mm                                                                                | –                          |                                                          |
|                                                  | T 256: 2 x 3.5 mm                                                                              |                            |                                                          |
| Bounce duration:                                 | Z 256: < 3 ms                                                                                  | Z 335: *                   | Z 336: *                                                 |
|                                                  | T 256: *                                                                                       | T 335: < 2 ms              | T 336: < 2 ms                                            |
| Switchover time:                                 | Z 256: > 5.5 ms                                                                                | Z 335: < 2 ms              | Z 336: < 2 ms                                            |
|                                                  | T 256: *                                                                                       | T 335: *                   | T 336: *                                                 |
| Positive break force:                            | See switch description                                                                         |                            |                                                          |
| Positive break stroke:                           | See switch description                                                                         |                            |                                                          |



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In accordance with actuating speed

For the switch plunger