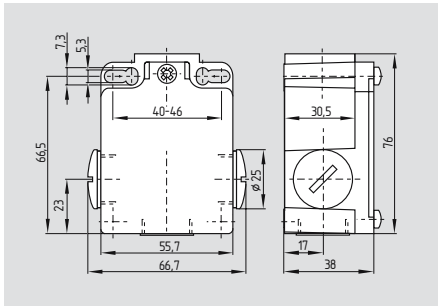


Position switches with safety function

T 355



- Metal enclosure
- Mounting details nach DIN EN 50041 (large)
- Large design
- Switching function non-latching
- Slow action also available with overlapping or staggered contacts
- Protection class IP 67
- max. 3 contacts
- 3 cable entries M20 x 1.5
- Screw terminals max. 2.5 mm² with conductor ferrules
- Large range of actuating elements available
- Actuating elements can be turned in steps 4 x 90°
- Angle of roller lever adjustable in 10° steps
- High resistance to oil and fuel

Technical data

Standards: IEC/EN 60947-5-1
BG-GS-ET-15

Design: DIN EN 50041

Enclosure: light-metal die-cast, paint finish

Protection class : IP 67

Contact material: Silver

Switching elements: changeover contact with double break Zb or 2 NC contacts, galvanically separated contact bridges

Switching system: ⊖ IEC 60947-5-1
Slow action,
Positive break NC contact

Termination: Screw terminals, male connector M12

Cable section: max. 2.5 mm²
(including conductor ferrules)

Cable entry: 3 x M 20 x 1.5

U_{imp}: 6 kV

U_i: -03z, -12z: 4kV
500 V

U_j: -03z, -12z: 250 V

I_{the}: 10 A

Utilisation category: AC-15; DC-13

I_e/U_e: 4 A / 230 VAC
1A / 24 VDC

Short-circuit protection: 6 A gL/gG D-fuse

Ambient temperature: - 30 °C ... + 80 °C

Mechanical life: 30 million operations

Switching frequency: max. 5000/h

Duration to standstill: < 2ms

Switching time: in accordance with the actuating speed

Actuators

Plunger	S
Roller plunger	R
Roller lever	1K
Angled lever	3K
Roller lever	H
	7H-2138
	7H-1058/2138
	7H-2079-2
	H-1058
Rod lever	10H

Approvals



Ordering data

T ① 355-②z③-④-⑤

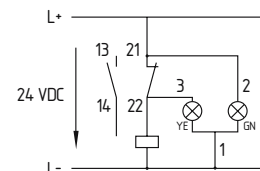
N°	Add	Description
①		Selection of actuators, see page 3-38
②	11	1 NO / 1 NC contact
	02	2 NC contacts
	20	2 NO contacts
	01/01	1 NC contact left / 1 NC contact right
	12	1 NO contact / 2 NC contacts
	03	3 NC contacts
③	h	Slow action with staggered contacts
	ü	with overlapping contacts

N°	Add	Description
④	M20	Cable entry M20
	NPT	Cable entry NPT 1/2"
	ST	Connector M12
⑤	1058	for Roller lever rubber roller 50 mm
	1058/2138	rubber roller 50 mm and lever arm length-adjustable in steps

Note:

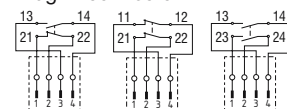
The actuator is defined by item ① and ⑤ of the ordering data.

Note



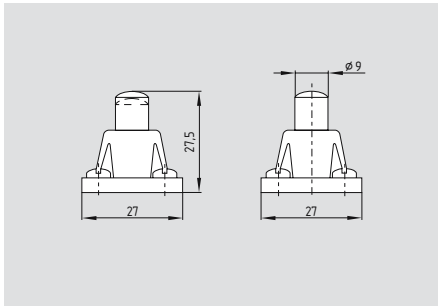
Version with LED:
ordering suffix G24, protected against incorrect polarity and voltage spikes.

Plug-in connector:



Position switches with safety function

Plunger S

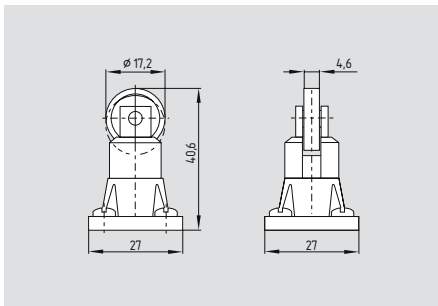


- Actuator type B to DIN EN 50041
- Required actuating force 17 N
- Actuating speed with actuating angle 0° to switch axis max. 0.5 m/s
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	TS 3..-11z 	TS 3..-11zü 	
2 NC contacts	TS 3..-02z 		TS 3..-02zh
2 NO contacts	TS 3..-20z 		TS 3..-20zh
1 NO contact 2 NC contacts	TS 3..-12z 	TS 3..-12zü 	
3 NC contacts	TS 3..-03z 		TS 3..-03zh

Roller plunger R



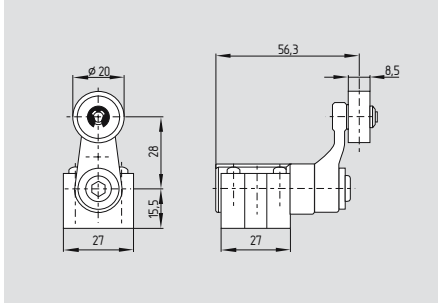
- Actuator type C to DIN EN 50041
- Required actuating force 17 N
- Actuating speed with actuating angle 30° to switch axis max. 0.5 m/s
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	TR 3..-11z 	TR 3..-11zü 	
2 NC contacts	TR 3..-02z 		TR 3..-02zh
2 NO contacts	TR 3..-20z 		TR 3..-20zh
1 NO contact 2 NC contacts	TR 3..-12z 	TR 3..-12zü 	
3 NC contacts	TR 3..-03z 		TR 3..-03zh

Position switches with safety function

Roller lever H

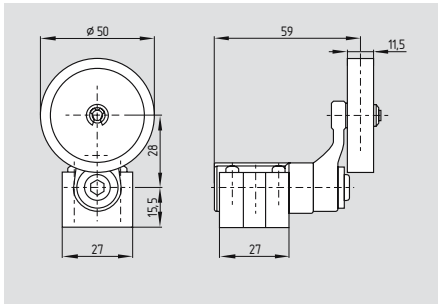


- Actuator type A to DIN EN 50041
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle of 30° max. 2.5 m/s
- On version TVH ...-01/01z positive break only to one side.
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Metal lever
- Suitable for T 335, T 355, T 336
- plastic roller
- metal roller ordering suffix RMS

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T4VH 3..-11z 	T4VH 3..-11zü 	
2 NC contacts	T4VH 3..-02z 		T4VH 3..-02zh
2 NO contacts	T4VH 3..-20z 		T4VH 3..-20zh
1 NC contact left 1 NC contact right	TVH 3..-01/01z 		
1 NO contact 2 NC contacts	T4VH 3..-12z 	T4VH 3..-12zü 	
3 NC contacts	T4VH 3..-03z 		T4VH 3..-03zh

Roller lever H-1058



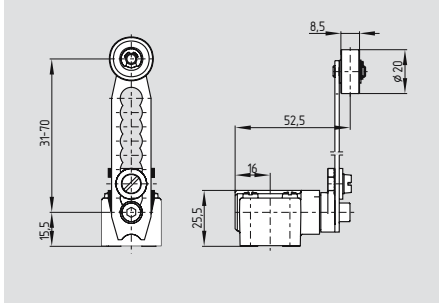
- Actuator type A to DIN EN 50041
- With rubber roller 50 mm
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle of 30° max. 2.5 m/s
- On version TVH 336-01/01z positive break only to one side.
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Metal lever
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)	Slow action with End position resting (T, r)
1 NO contact 1 NC contact	T4VH 3..-11z - 1058 	T4VH 3..-11zü - 1058 		T4VH 3..-11yr-1058
2 NC contacts	T4VH 3..-02z - 1058 		T4VH 3..-02zh - 1058 	T4VH 3..-02yr-1058
2 NO contacts	T4VH 3..-20z - 1058 		T4VH 3..-20zh - 1058 	T4VH 3..-20yr-1058
1 NC contact left 1 NC contact right	TVH 3..-01/01z-1058 			

Position switches with safety function

Roller lever 7H-2138

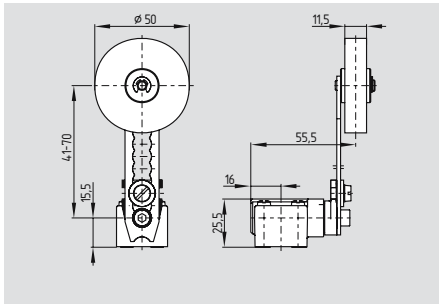


- For safety tasks ⊕
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle of 30° max. 2.5 m/s
- On version TV7H ...-01/01z-2138 positive break only to one side.
- Positive-break NC contact
- Lever arm length adjustable in steps
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Metal lever
- Suitable for T 335, T 355, T 336
- plastic roller
- metal roller ordering suffix RMS

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T4V7H 3...-11z-2138 	T4V7H 3...-11z-2138 	
2 NC contacts	T4V7H 3...-02z-2138 		T4V7H 3...-02zh-2138
2 NO contacts	T4V7H 3...-20z-2138 		T4V7H 3...-20zh-2138
1 NC contact left 1 NC contact right	TV7H 3...-01/01z-2138 		
1 NO contact 2 NC contacts	T4V7H 3...-12z-2138 	T4V7H 3...-12z-2138 	
3 NC contacts	T4V7H 3...-03z-2138 		T4V7H 3...-03zh-2138

Roller lever 7H-1058/2138



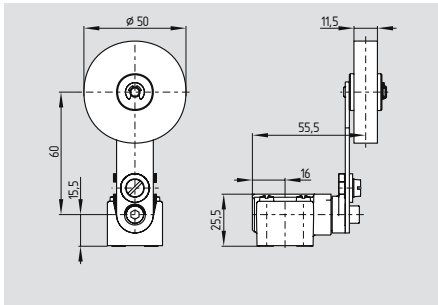
- For safety tasks ⊕
- With large rubber roller
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle of 30° max. 2.5 m/s
- On version TV7H ...-01/01z-1058/2138 positive break only to one side.
- Positive-break NC contact
- Lever arm length adjustable in steps
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Metal lever
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T4V7H 3...-11z-1058/2138 	T4V7H 3...-11z-1058/2138 	
2 NC contacts	T4V7H 3...-02z-1058/2138 		T4V7H 3...-02zh-1058/2138
2 NO contacts	T4V7H 3...-20z-1058/2138 		T4V7H 3...-20zh-1058/2138
1 NC contact left 1 NC contact right	TV7H 3...-01/01z-1058/2138 		
1 NO contact 2 NC contacts	T4V7H 3...-12z-1058/2138 	T4V7H 3...-12z-1058/2138 	
3 NC contacts	T4V7H 3...-03z-1058/2138 		T4V7H 3...-03zh-1058/2138

Position switches with safety function

Roller lever 7H-2079-2

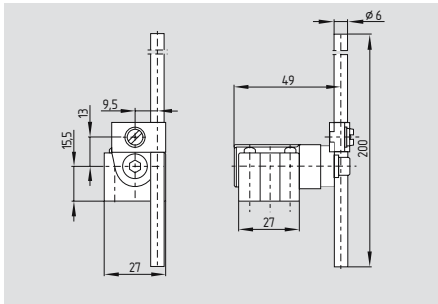


- For safety tasks ⊕
- With large rubber roller
- Plastic roller Ø 20 mm available, ordering suffix -2079-1
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle of 30° max. 2.5 m/s
- On version TV7H ...-01/01z-2079-2 positive break only to one side.
- Positive-break NC contact
- With fixed 7H lever
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Metal lever
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T4V7H 3...-11z-2079-2 	T4V7H 3...-11zü-2079-2 	
2 NC contacts	T4V7H 3...-02z-2079-2 		T4V7H 3...-02zh-2079-2
2 NO contacts	T4V7H 3...-20z-2079-2 		T4V7H 3...-20zh-2079-2
1 NC contact left 1 NC contact right	TV7H 3...-01/01z-2079-2 		
1 NO contact 2 NC contacts	T4V7H 3...-12z-2079-2 	T4V7H 3...-12zü-2079-2 	
3 NC contacts	T4V7H 3...-03z-2079-2 		T4V7H 3...-03zh-2079-2

Rod lever 10H



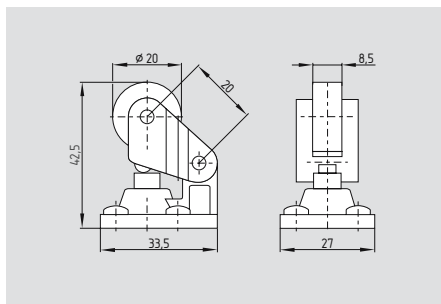
- Only suitable for positioning tasks
- Actuator type D to DIN EN 50041
- Plastic rod
- Required actuating torque 31 Ncm
- Actuating speed with actuating angle 30° max. 2.5 m/s
- Aluminium rod, ordering suffix -1183
- Lever angle adjustable in 10° steps
- Actuator can be turned in steps 4 x 90°
- Suitable for T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T4V10H 336-11z 	T4V10H 336-11zü 	
2 NC contacts	T4V10H 336-02z 		T4V10H 336-02zh
2 NO contacts	T4V10H 336-20z 		T4V10H 336-20zh
1 NC contact left 1 NC contact right	TV10H 336-01/01z 		

Position switches with safety function

Roller lever 1K

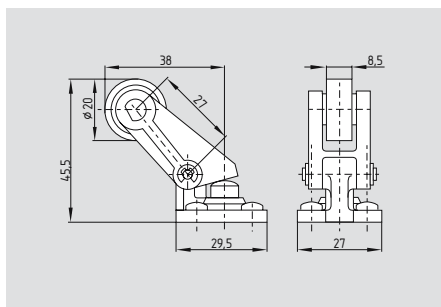


- Required actuating force 17 N
- Actuating speed with actuating angle 30° to switch axis max. 0.5 m/s
- Lever arm located to the right in the normal version; actuator can be turned clockwise in 90° steps
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T1K 3..-11z 	T1K 3..-11zü 	
2 NC contacts	T1K 3..-02z 		T1K 3..-02zh
2 NO contacts	T1K 3..-20z 		T1K 3..-20zh
1 NO contact 2 NC contacts	T1K 3..-12z 	T1K 3..-12zü 	
3 NC contacts	T1K 3..-03z 		T1K 3..-03zh

Angled lever 3K



- Required actuating force 17 N
- Actuating speed with actuating angle 30° to switch axis max. 0.5 m/s
- Actuation parallel to switch axis from below
- Actuator can be turned in steps 4 x 90°
- Suitable for T 335, T 355, T 336

Contact variants

Switch travel/ Contacts	Slow action (T)	Slow action with overlapping contacts (T, ü)	Slow action with staggered contacts (T, h)
1 NO contact 1 NC contact	T3K 3..-11z 	T3K 3..-11zü 	
2 NC contacts	T3K 3..-02z 		T3K 3..-02zh
2 NO contacts	T3K 3..-20z 		T3K 3..-20zh
1 NO contact 2 NC contacts	T3K 3..-12z 	T3K 3..-12zü 	
3 NC contacts	T3K 3..-03z 		T3K 3..-03zh

Position switches with safety function

	T 336	T 335	T 355
Standards	IEC/EN 60947-5-1 BG-GS-ET-15 UL	IEC/EN 60947-5-1 BG-GS-ET-15 UL	IEC/EN 60947-5-1 BG-GS-ET-15 UL
Design	DIN EN 50041	DIN EN 50041	DIN EN 50041
Switching behaviour	Slow action (T)	Slow action (T)	Slow action (T)
Enclosure	glass-fibre reinforced thermoplastic, self-extinguishing	Light-metal die-cast, paint finish	Light-metal die-cast, paint finish
Protection class	IP 67	IP 67	IP 67
Contact material	Silver	Silver	Silver
Switching elements	Changeover contact with double break or 2 NC contacts, galvanically separated contact bridges	Changeover contact with double break or 2 NC contacts, galvanically separated contact bridges	Changeover contact with double break or 2 NC contacts, galvanically separated contact bridges
Switching system	Positive break NC contact	Positive break NC contact	Positive break NC contact
Termination	Screw terminals, male connector M12	Screw terminals, male connector M12	Screw terminals, male connector M12
Cable section	max. 2.5 mm ² (including conductor ferrules)	max. 2.5 mm ² (including conductor ferrules)	max. 2.5 mm ² (including conductor ferrules)
Cable entry	M 20 x 1.5	M 20 x 1.5	3 x M 20 x 1.5
U_{imp}	6 kV	-02 / -20z / -11z: 6 kV -03z / -12z: 4 kV	-02 / -20z / -11z: 6 kV -03z / -12z: 4 kV
U_i	500 V	-02 / -20z / -11z: 500 V -03z / -12z: 250 V	-02 / -20z / -11z: 500 V -03z / -12z: 250 V
I_{the}	10 A	10 A	10 A
Utilisation category	AC-15 DC-13	AC-15 DC-13	AC-15 DC-13
I_e/U_e	4 A / 230 VAC 1A / 24 VDC	4 A / 230 VAC 1A / 24 VDC	4 A / 230 VAC 1A / 24 VDC
Short-circuit protection	6 A gL/gG D-fuse	6 A gL/gG D-fuse	6 A gL/gG D-fuse
Ambient temperature	- 30 °C ... + 80 °C	- 30 °C ... + 80 °C	- 30 °C ... + 80 °C
Mechanical life	30 million operations	30 million operations	30 million operations
Switching frequency	5000/h	5000/h	5000/h
Duration to standstill	< 2ms	< 2ms	< 2ms