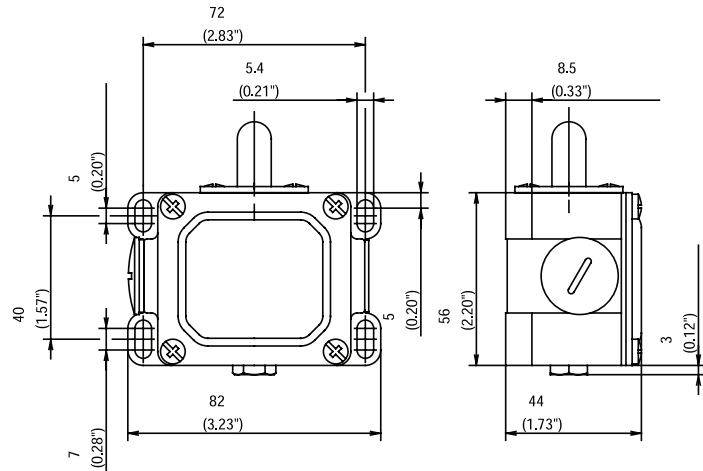


## D Series



### Recommended use

Heavy duty switch body for designed for harsh operating conditions with very sturdy actuators and switching systems.


### Product advantages

- Protection class IP65 to VDE 0470 T1
- Enclosure: Aluminum pressure die-casting
- Cover: Sheet aluminum
- Actuator can be repositioned by 4 x 90° (depending on type)
- Cable entries 2 x M20 x 1.5
- Connection designation conforming to DIN EN 50013
- Sturdy contacts
- Hard wearing guide bushes

### Options

- AS interface versions on request
- Preassembled with customer-specific cables and connectors on request

### Design layout

- Slow-action and snap-action contacts
- Versions: 1 NC / 1NO, 2 NC, 2 NO, 3 NC, 3 NO, overlapping contacts
- All NC contacts with  in the circuit diagram are positively opening contacts
- Latching function on request

### Mounting

- 4 slots for M5 screws

### Installation advantages

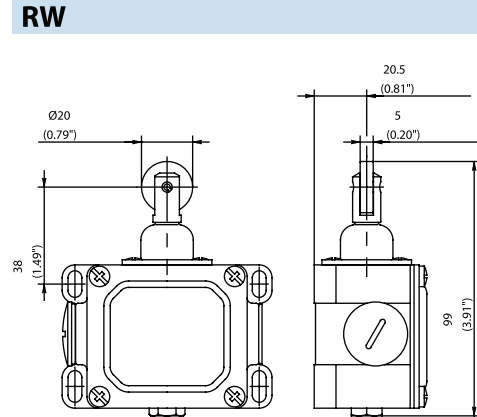
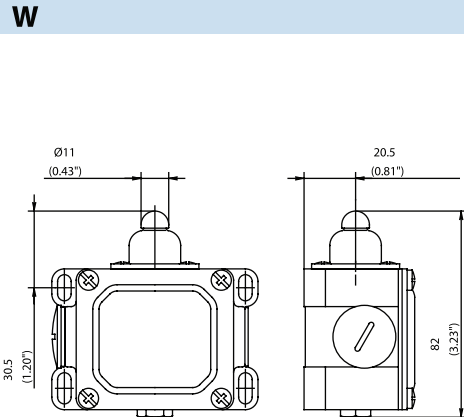
- 2 cable entries for through-wiring
- Large internal connection space
- Captive cover screws

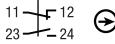
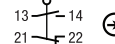
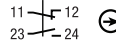
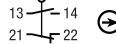
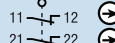
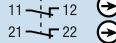




### Technical data

Electrical data	
Rated insulation voltage	U <sub>i</sub> max. 400 V AC
Conventional thermal current (up to) <sup>1</sup>	I <sub>th</sub> 10 A
Rated operating voltage	U <sub>e</sub> max. 240 V
Utilization category	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V/3 A
Short-circuit protection (up to) <sup>1</sup>	Fuse 10 A gL/gG
Protection class	I
Mechanical data	
Enclosure material	Aluminum pressure die-casting
Ambient temperature	-30 °C to +80 °C
Mechanical service life	10 x 10 <sup>6</sup> switching cycles
B10d	20 Mill.
Switching frequency	≤ 100/min.
Type of connection	Screw connections
Conductor cross sections	Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>
Cable entry	2 x M20 x 1.5
Protection class	IP65 conforming to IEC/EN 60529
Standards	
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1	
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1	

<sup>1</sup> Depending on switching system. See Table in the Technical Section

## D Series



Switching Operation	Slow Action	Snap Action	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>604.1103.002</b> D-U1 W 	<b>604.1153.156</b> D-SU1 W 	<b>604.1118.229</b> D-U1Z RW 	<b>604.1168.162</b> D-SU1 RW 
<b>2 NC Contacts</b>	<b>604.1803.090</b> D-A2 W 	-	<b>604.1818.741</b> D-A2Z RW 	-
<b>2 NO Contacts</b>	<b>604.1803.046</b> D-E2 W 	-	<b>604.1818.052</b> D-E2 RW 	-
<b>1 NC / 1 NO Contacts Overlapping</b>	<b>604.1303.134</b> D-UV1Z W 	-	<b>604.1318.140</b> D-UV1Z RW 	-

### Replacement actuator:

#### Technical Information

	Slow Action	Snap Action	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V	240V	240V
Max. Switching Amps (up to)*	10A	10A	10A	10A
B10d (up to)*	20 Million	20 Million	20 Million	20 Million
Mechanical Service Life (up to)*	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65	IP65	IP65
Utilization Category (up to)*	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	400VAC	400VAC	400VAC	400VAC

Approvals

\* Depending on switching system - see technical information for details



#### Special features/variants (on request)

- Also available with following contacts:  
3 NC contacts (larger enclosure)  
3 NO contacts (larger enclosure)  
2 NC / 2 NO contact (larger enclosure)

#### Special features/variants (on request)

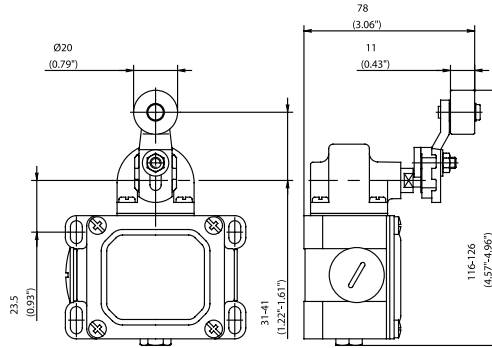
- Also available with following contacts:  
3 NC contacts (larger enclosure)  
3 NO contacts (larger enclosure)  
2 NC / 2 NO contact (larger enclosure)

Drawing dimensions in mm

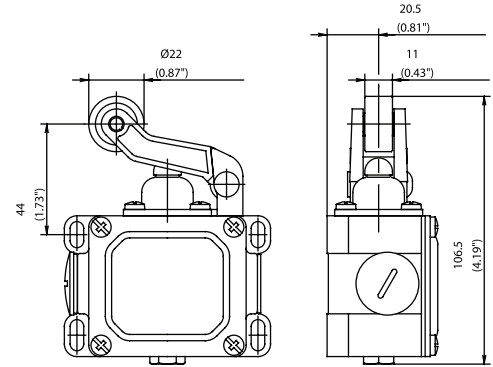
**D Series**



**AH**



**HW**



Switching Operation	Slow Action	Snap Action	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>604.1135.019</b> D-U1 AH 	<b>604.1185.173</b> D-SU1 AH 	<b>604.1121.010</b> D-U1 HW	<b>604.1171.164</b> D-SU1 HW 
<b>2 NC Contacts</b>	<b>604.1835.107</b> D-A2 AH 	-	-	-
<b>2 NO Contacts</b>	<b>614.1835.709</b> D-E2 AH 	-	-	-
<b>1 NC / 1 NO Contacts Overlapping</b>	-	-	<b>604.1321.142</b> D-UV1Z HW 	-
<b>Replacement actuator:</b>	<b>391.4350.924</b>		<b>391.4211.065</b>	

Technical Information	Slow Action	Snap Action	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V	240V	240V
Max. Switching Amps (up to)*	10A	10A	10A	10A
B10d (up to)*	20 Million	20 Million	20 Million	20 Million
Mechanical Service Life (up to)*	3 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65	IP65	IP65
Utilization Category (up to)*	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	400VAC	400VAC	400VAC	400VAC

Approvals \* Depending on switching system - see technical information for details



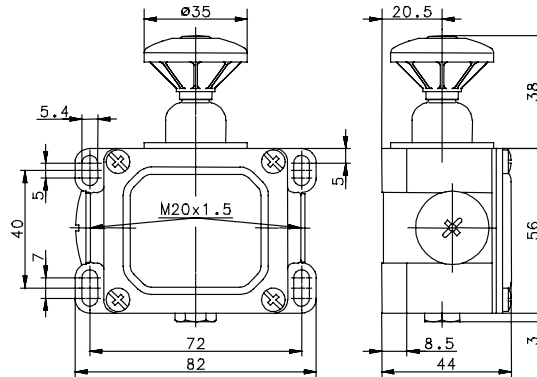
**Special features/variants (on request)**

- Available steel and different diameter rollers, different lever lengths and additional contacts:
  - 3 NC overlapping contact (larger enclosure)
  - 2 NC / 2 NO contact (larger enclosure)
- Available steel with higher temperature range, and additional contacts:
  - 3 NC overlapping contact (larger enclosure)
  - 2 NC / 2 NO contact (larger enclosure)

Drawing dimensions in mm

## D Series

### PW



Switching Operation	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>604.1113.006</b> D-U1 PW 	- -
<b>2 NC Contacts</b>	<b>604.1813.835</b> D-A2Z PW 	- -
<b>2 NO Contacts</b>	<b>604.1813.050</b> D-E2 PW 	- -
<b>1 NC / 1 NO Contacts Overlapping</b>	- -	- -

### Replacement actuator:

#### Technical Information

	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V
Max. Switching Amps (up to)*	10A	10A
B10d (up to)*	20 Million	20 Million
Mechanical Service Life (up to)*	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category (up to)*	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	400VAC	400VAC

Approvals

\* Depending on switching system - see technical information for details



### Special features/variants (on request)

- Also available with following contacts:  
3 NC contacts (larger enclosure)  
3 NO contacts (larger enclosure)  
2 NC / 2 NO contact (larger enclosure)

Drawing dimensions in mm