

## Product information

### Mini float switch

### Series M60

Engler mini float switches are characterized by its compact and efficient design especially in the field of small vessel, system and aggregate monitoring.

The M60 series offers the user a wide range of standardized types regarding connection, fastening, material, functions as well as the possibility to assemble the mini float switch custom-made for is process.

Despite of attractive globally competitive prices Engler also offers in this segment first-class quality and a high level of service, flexibility and customer service.

Optionally it is possible to combine the level monitoring with temperature switches or temperature sensors and thus to reach an even better efficiency in the process of the user.

For more information please look at the following pages:

2. Mini float switch M60 with plug-type connector, 3-pole DIN 175301-803  
Selection possibility regarding fastening, material, function and length
3. Mini float switch M60 with plug-type connector M12, 4-, 5-, 6- and 8-pole  
Selection possibility regarding fastening, material, function and length
4. Mini float switch M60 with plug-type connector 2x M12  
Selection possibility regarding fastening, material, function and length
5. Mini float switch M60 with terminal housing  
Selection possibility regarding fastening, material, function and length
6. Mini float switch M60 with plug-type connector 6-pole DIN  
Selection possibility regarding fastening, material, function and length
7. Mini float switch M60 out of stainless steel with M12 and 3-pole DIN plug-type connectors

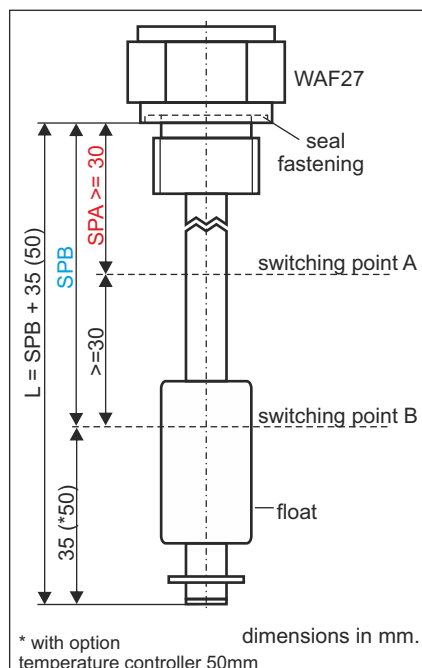
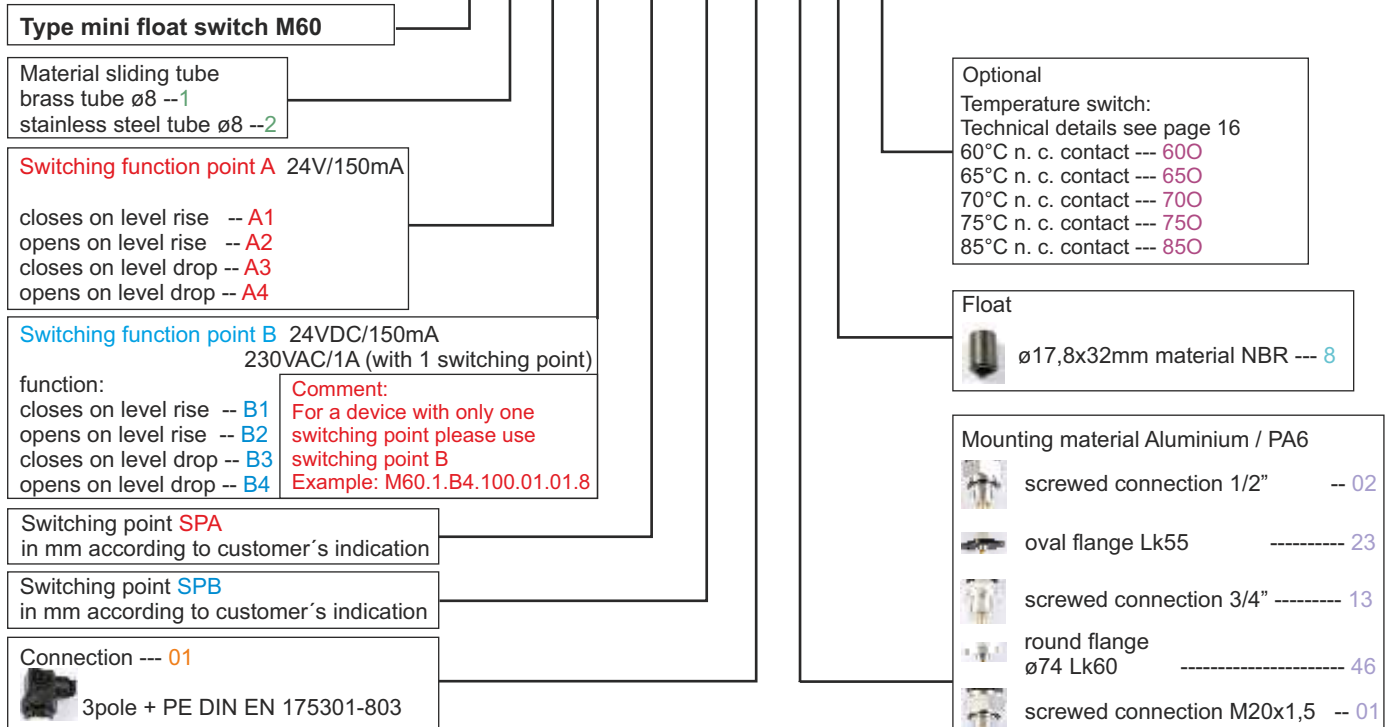
# Product information

## Mini float switch M60 with plug-type connector 3-pole DIN



### Order key

M60 . 1 . A1 . B4 . 100 . 200 . 01 . 01 . 8 . 600





# Product information

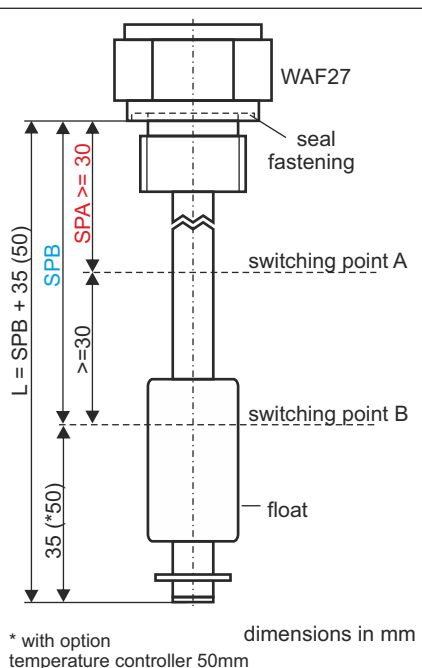
## Mini float switch M60 with plug-type connector 2xM12



### Order key

M60. 1 . A1 . B4 . 100 . 200 . 09 . 01 . 8 . 600

<b>Type mini float switch M60</b>		<b>Optional</b>
Material sliding tube brass tube ø8 --1 stainless steel tube ø8 --2		Temperature switch: Technical details see page 16 60°C n. c. contact --- 60O 65°C n. c. contact --- 65O 70°C n. c. contact --- 70O 75°C n. c. contact --- 75O 85°C n. c. contact --- 85O
<b>Switching function point A</b> 24V/150mA		Temperature sensor PT100 Technical details see page 16 PT100 2 wire --- PT100 PT100 3 wire --- PT103 PT100 4 wire --- PT104
closes on level rise -- A1 opens on level rise -- A2 closes on level drop -- A3 opens on level drop -- A4 change over contact -- A5		Temperature sensor PT1000 Technical details see page 16 PT1000 2 wire --- PT1000
<b>Switching function point B</b> 24VDC/150mA		<b>Float</b> ø17,8x32mm Material NBR --- 8
closes on level rise -- B1 opens on level rise -- B2 closes on level drop -- B3 opens on level drop -- B4 change over contact -- B5 <b>Comment:</b> For a device with only one switching point please use switching point B Example: M60.1.B4.100.01.01.8		<b>Mounting material Aluminium / PA6</b> screwed connection 1/2" ----- 02 screwed connection 3/4" ----- 13 screwed connection 1" ----- 22 round flange ø74 Lk60 ----- 46 screwed connection M20x1,5 --- 01 screwed connection M22x1,5 --- 24 screwed connection M24x1,5 --- 33
<b>Switching point SPA</b> in mm according to customer's indication		
<b>Switching point SPB</b> in mm according to customer's indication		
<b>Connection</b> 2x M12 4 pole --- 09		



# Product information

## Mini float switch M60 with terminal housing



### Order key

M60. 1 . A1 . B4 . 100 . 200 . 10 . 01 . 8 . 600

#### Type mini float switch M60

Material sliding tube  
brass tube ø8 --1  
stainless steel tube ø8 --2

**Switching function point A** 24V/150mA  
closes on level rise -- A1  
opens on level rise -- A2  
closes on level drop -- A3  
opens on level drop -- A4  
change over contact -- A5

**Switching function point B** 230VAC/1A (1 switching point)  
24VDC/150mA (2 switching point)

closes on level rise -- B1  
opens on level rise -- B2  
closes on level drop -- B3  
opens on level drop -- B4  
change over contact -- B5  
**Comment:**  
For a device with only one  
switching point please use  
switching point B  
Example: M60.1.B4.100.01.01.8

**Switching point SPA**  
in mm according to customer's indication

**Switching point SPB**  
in mm according to customer's indication

connection --- 10

terminal housing  
material aluminium

#### Optional

Temperature switch:  
Technical details see page 16  
60°C n. c. contact --- 600  
65°C n. c. contact --- 650  
70°C n. c. contact --- 700  
75°C n. c. contact --- 750  
85°C n. c. contact --- 850

Temperature sensor PT100  
Technical details see page 16  
PT100 2 wire --- PT100  
PT100 3 wire --- PT103  
PT100 4 wire --- PT104

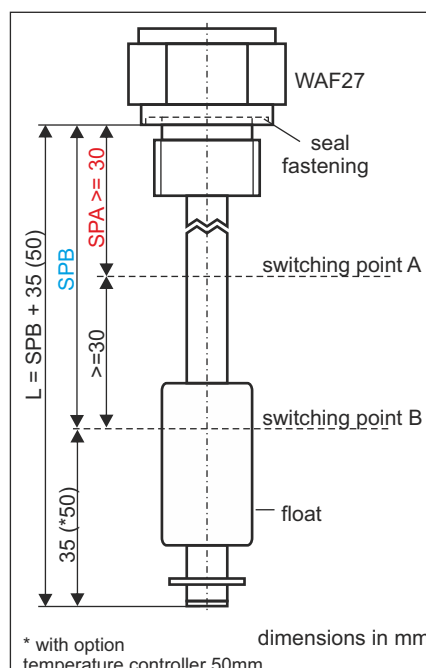
Temperature sensor PT1000  
Technical details see page 16  
PT1000 2 wire --- PT1000

#### Float

ø17,8x32mm material NBR --- 8

#### Mounting material aluminium / PA6

- screwed connection 1/2" ----- 02
- oval flange Lk55 ----- 23
- screwed connection 3/4" ----- 13
- round flange  
ø74 LK60 ----- 46
- screwed connection M20x1,5 --- 01
- screwed connection 1" ----- 22
- screwed connection M24x1,5 --- 33
- screwed connection M22x1,5 --- 24



# Product information

## Mini float switch M60 with plug-type connector 6-pole DIN



### Order key

M60 . 1 . A1 . B4 . 100 . 200 . 13 . 01 . 8 . 600

**Type mini float switch M60**

Material sliding tube  
brass tube ø8 --1  
stainless steel tube ø8 --2

**Switig function point A** 24V/150mA  
closes on level rise -- A1  
opens on level rise -- A2  
closes on level drop -- A3  
opens on level drop -- A4  
change over contact -- A5

**Switching function point B** 230VAC/1A (1 switching point)  
24VDC/150mA (2 switching points)  
closes on level rise -- B1  
opens on level rise -- B2  
closes on level drop -- B3  
opens on level drop -- B4  
change over contact -- B5

**Comment:**  
For a device with only one switching point please use switching point B  
Example: M60.1.B4.100.01.01.8

**Switching point SPA**  
in mm according to customer's indication

**Switching point SPB**  
in mm according to customer's indication

**Connection**  
6pole + PE nach  
DIN EN 175201-804  
(DIN 43651)-- 13

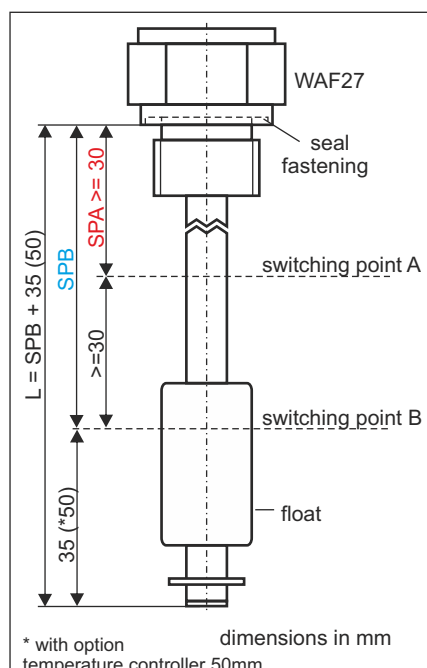
Optional  
Temperature switch:  
Technical details see page 16  
60°C n. c. contact --- 600  
65°C n. c. contact --- 650  
70°C n. c. contact --- 700  
75°C n. c. contact --- 750  
85°C n. c. contact --- 850

Temperature sensor PT100  
Technical details see page 16  
PT100 2 wire --- PT100  
PT100 3 wire --- PT103  
PT100 4 wire --- PT104

Temperature sensor PT1000  
Technical details see page 16  
PT1000 2 wire --- PT1000

**Float**  
ø17,8x32mm material NBR --- 8

**Mounting material aluminium**  
screwed connection M20x1,5 --- 01  
screwed connection 1" ----- 22



# Product information

## Mini float switch M60 out of stainless steel with M12 or 3-pole DIN plug-type connector



### Order key

M60. 2 . A1 . B4 . 100 . 200 . 02 . 10 . 2 . 600

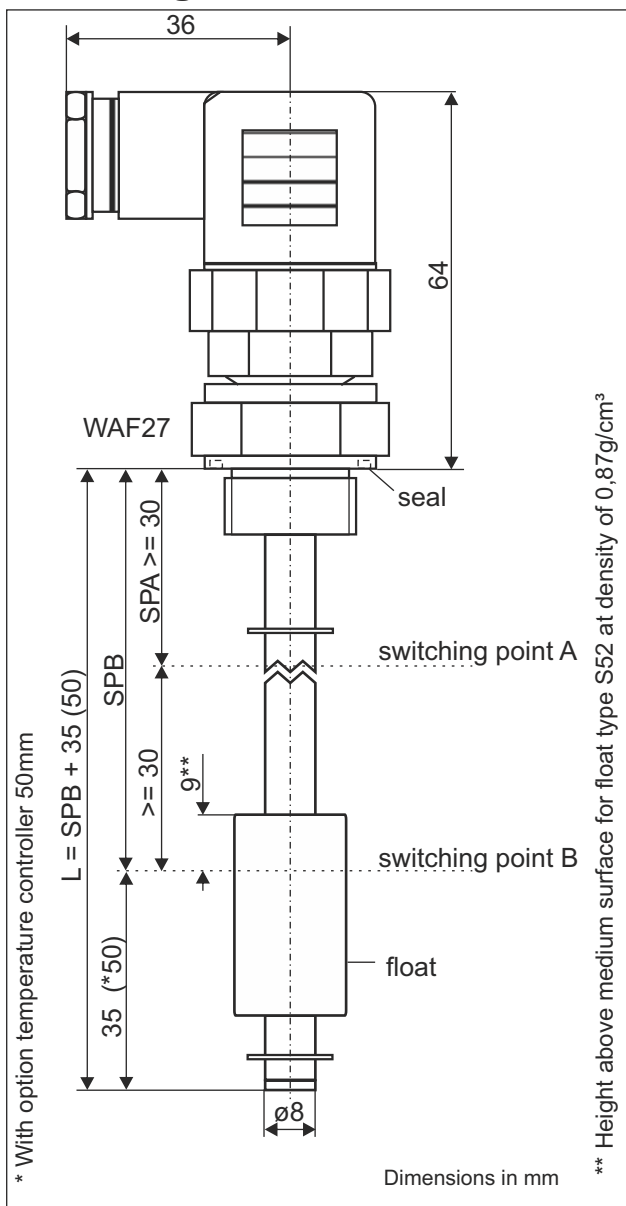
<p><b>Type mini float switch M60</b></p>	<p>WAF27 seal fastening switching point A switching point B float</p> <p>L = SPB + 35 (50) SPA &gt;= 30 &gt;= 30 35 (*50)</p> <p>* with option temperature controller 50mm</p>	<p>Optional</p> <p>Temperature switch: Technical details see page 16 60°C n. c. contact --- 600 65°C n. c. contact --- 650 70°C n. c. contact --- 700 75°C n. c. contact --- 750 85°C n. c. contact --- 850</p> <p>Temperature sensor PT100 Technical details see page 16 PT100 2 wire --- PT100 PT100 3 wire --- PT103 PT100 4 wire --- PT104</p> <p>Temperature sensor PT1000 Technical details see page 16 PT1000 2 wire --- PT1000 <b>Comment: Sensors only possible in conjunction with M12 plug-type connector</b></p>
<p>Material sliding tube stainless steel tube ø8 --2</p>		<p>Float</p> <p>ø27x31mm material stainless steel --- 2 only in combination with 1" screwed connection</p> <p>ø17,8x32mm material NBR --- 8</p>
<p><b>Switching function point A</b> 24V/150mA</p> <p>closes on level rise -- A1 opens on level rise -- A2 closes on level drop -- A3 opens on level drop -- A4</p>		<p>Mounting material stainless steel</p> <p>screwed connection 1" ----- 10 in connection with M12 WAF27</p> <p>screwed connection 1" ----- 10 in connection with DIN 3 pole WAF40</p> <p>screwed connection 1/2" ----- 27 only with NBR float type 52</p>
<p><b>Switching function point B</b> 230VAC/1A (1 switching point and only in combination with connection 01) 24VDC/150mA (2 switching point)</p> <p>closes on level rise -- B1 opens on level rise -- B2 closes on level drop -- B3 opens on level drop -- B4</p> <p><b>Comment:</b> For a device with only one switching point please use switching point B Example: M60.2.B4.100.01.10.2</p>		
<p><b>Switching point SPA</b> in mm according to customer's indication</p>		
<p><b>Switching point SPB</b> in mm according to customer's indication</p>		
<p><b>Connection</b></p> <p>M12 4 pole --- 02 M12 5 pole --- 08 M12 6 pole --- 17 M12 8 pole --- 12</p> <p>3pol + PE DIN EN 175301-803 --- 01</p>		

# Data sheet / product information

## Mini float switch M60...01.02.8

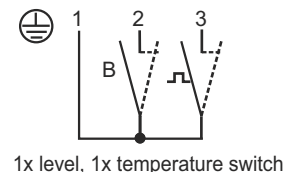
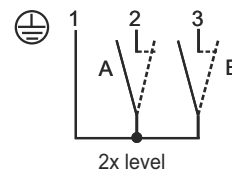
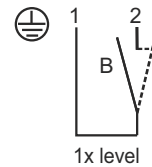
### plug-type connector 3-pole DIN EN 175301-803

### Mounting 1/2"



#### Terminal diagrams 3-pole + PE DIN EN 175301-803

(further connection alternatives upon requests)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1/2", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

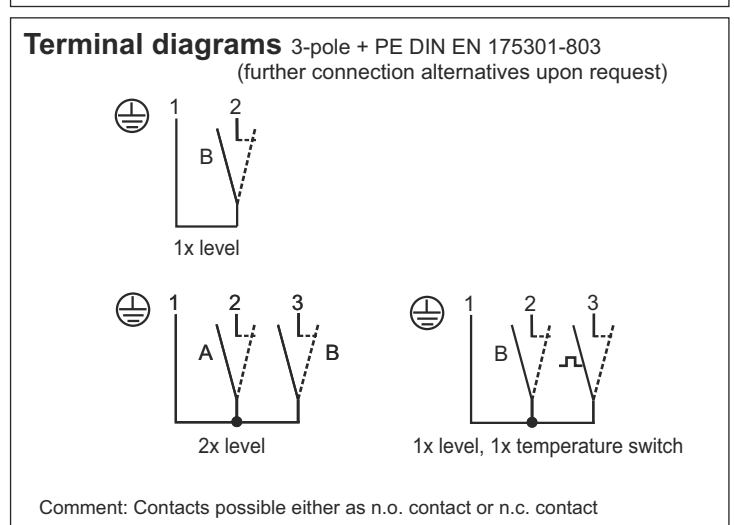
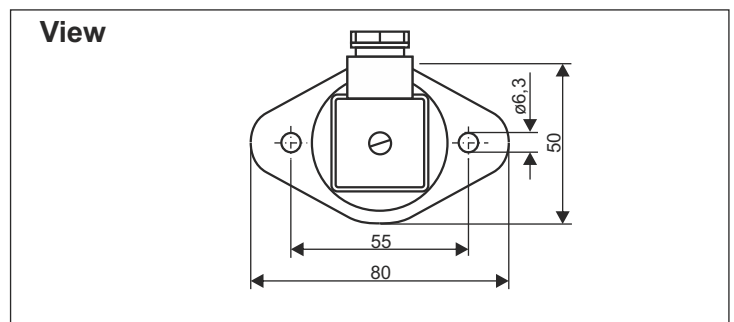
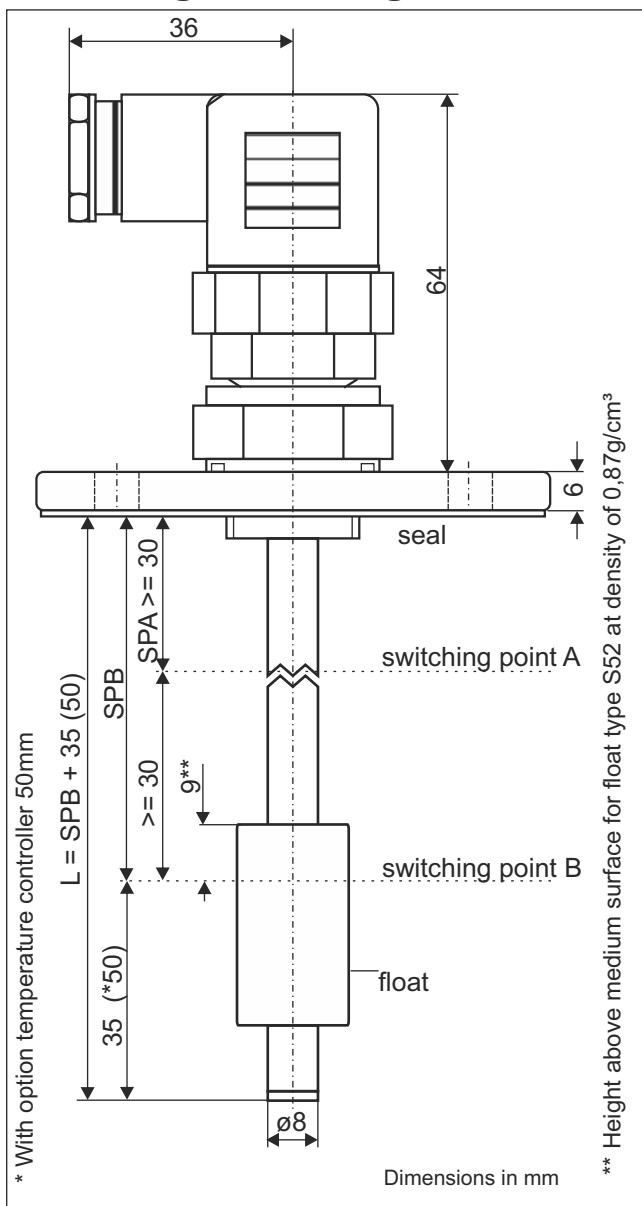


# Data sheet / product information

## Mini float switch M60...01.23.8

### plug-type connector 3-pole DIN EN 175301-803

### Mounting oval flange



[Back to product group](#)

#### Technical data:

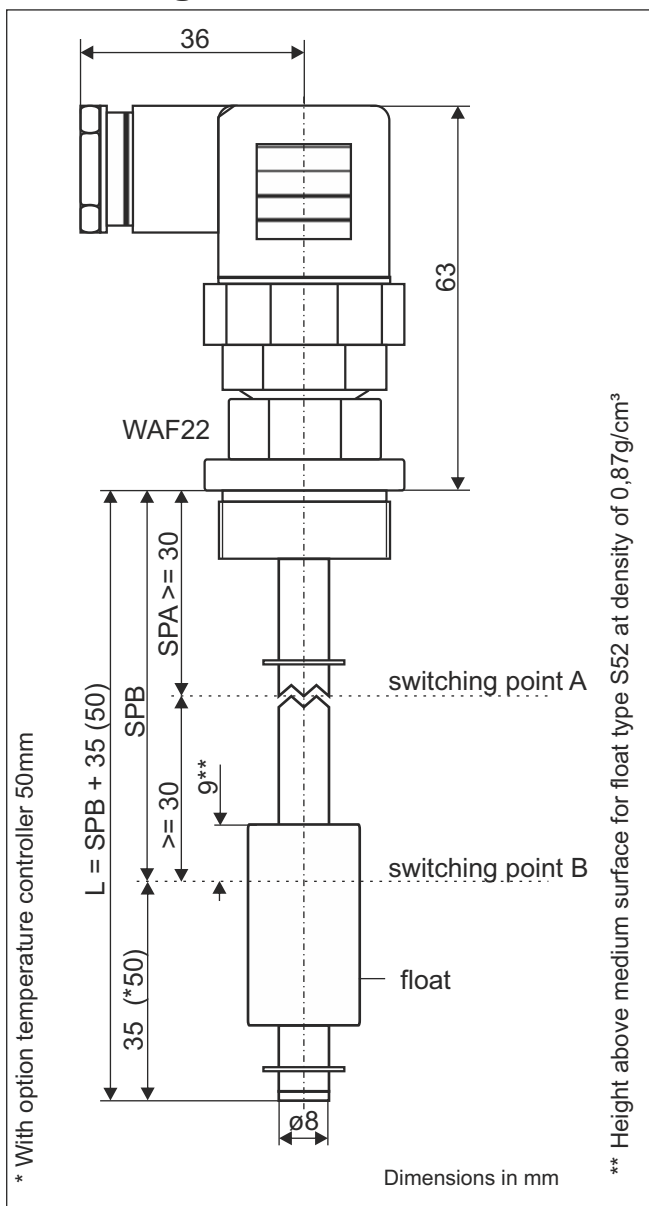
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	oval flange, LK 55mm, material makrolon
Mounting position:	vertical $\pm 10^\circ$
Seal:	flat seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...01.13.8

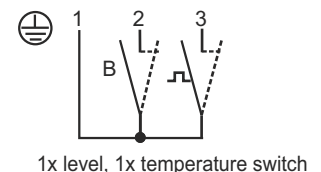
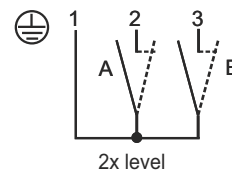
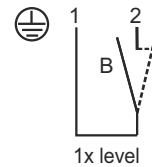
### plug-type connector 3pole DIN EN 175301-803

### Mounting 3/4"



#### Terminal diagrams 3-pole + PE DIN EN 175301-803

(further connection alternatives upon request)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

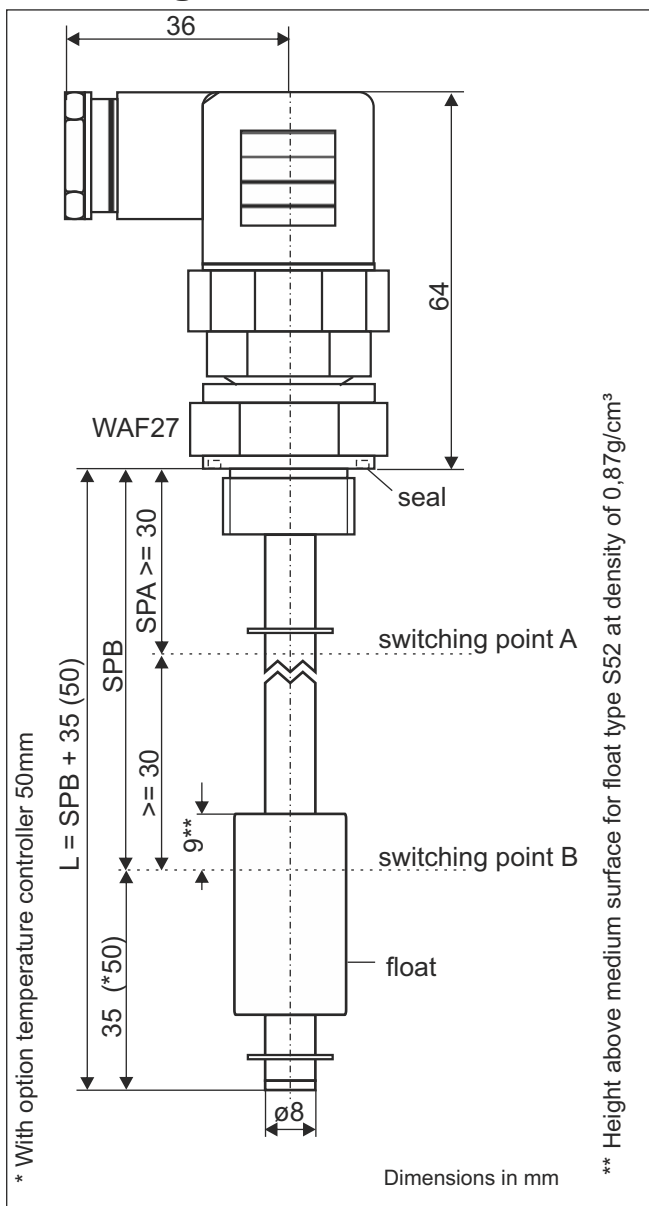
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 3/4", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...01.01.8

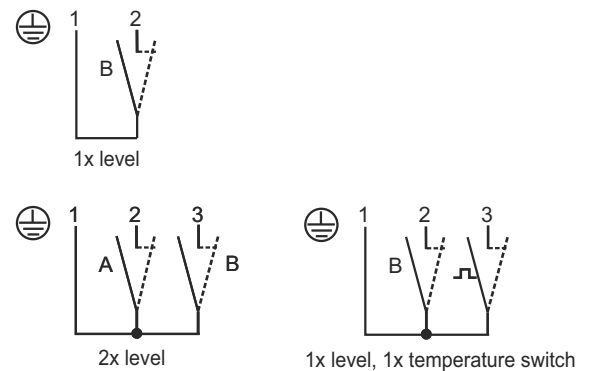
### plug-type connector 3-pole DIN EN 175301-803

### Mounting M20x1,5



#### Terminal diagrams 3-pole + PE DIN EN 175301-803

(further connection alternatives upon request)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M20x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

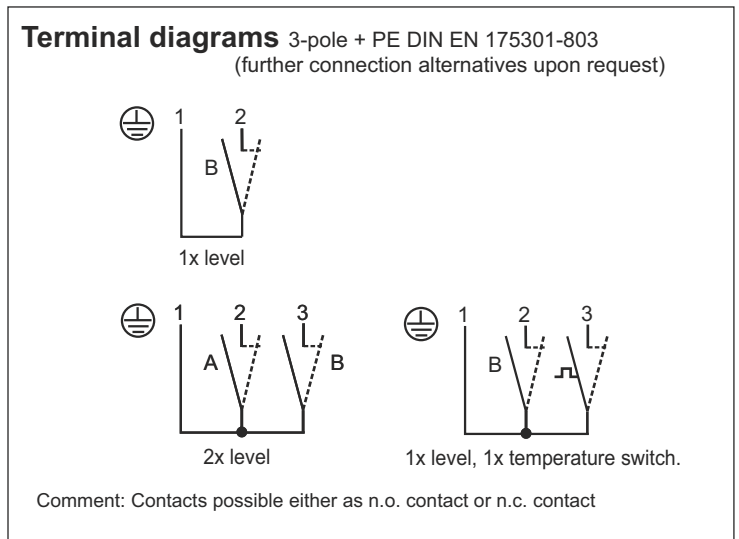
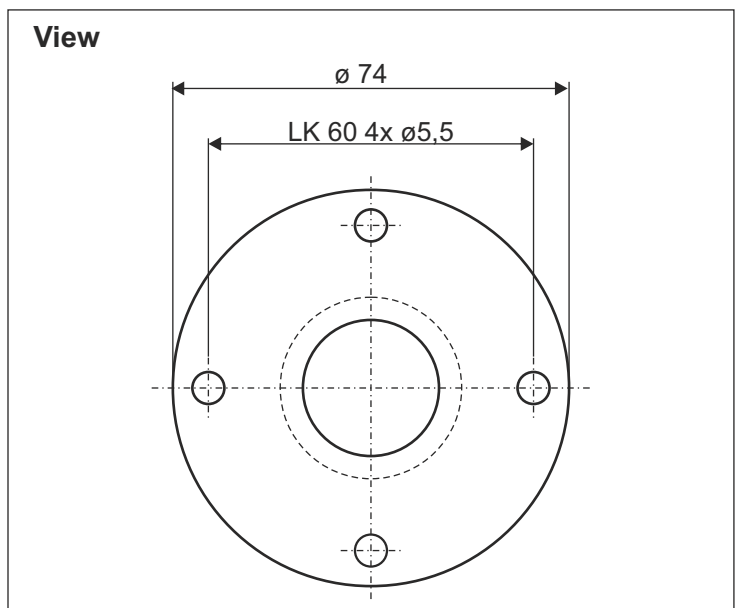
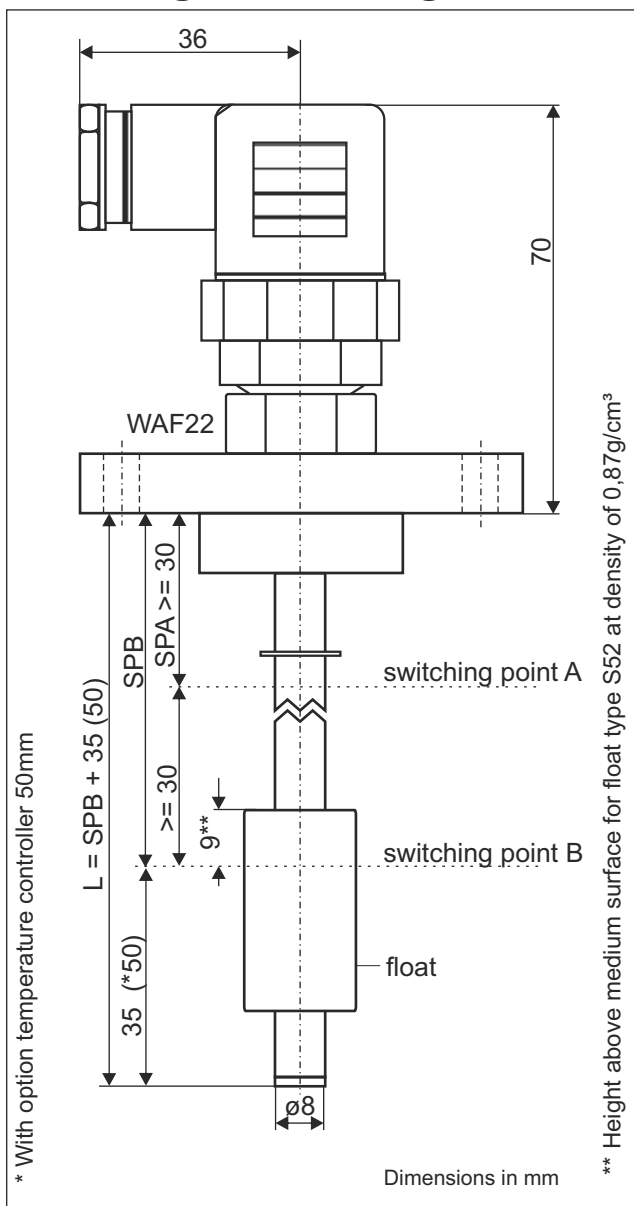
Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

# Data sheet / product information

## Mini float switch M60...01.46.8

### plug-type connector 3-pole DIN EN 175301-803

### Mounting round flange



[Back to product group](#)

#### Technical data:

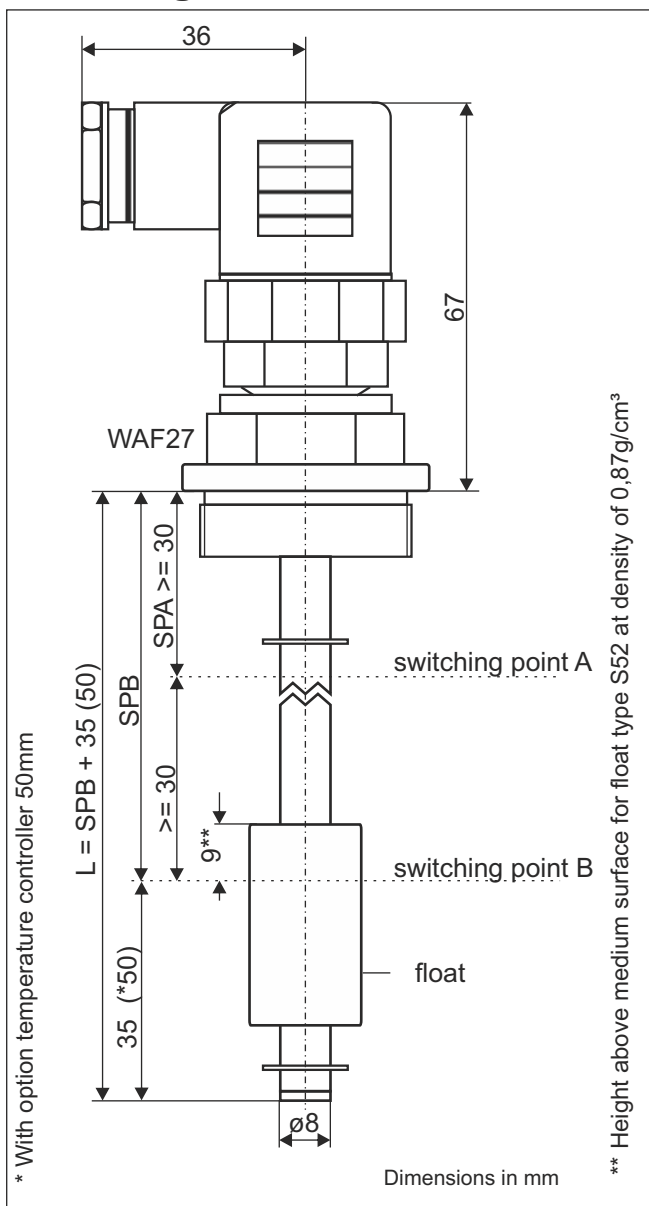
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	round flange AD 74mm, LK 60mm, material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...01.22.8

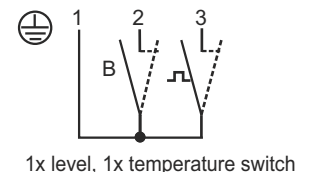
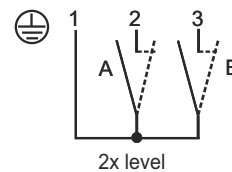
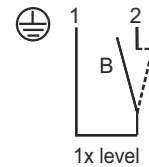
### plug-type connector 3-pole DIN EN 175301-803

### Mounting 1"



#### Terminal diagrams 3-pole + PE DIN EN 175301-803

(further connection alternatives upon requests)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

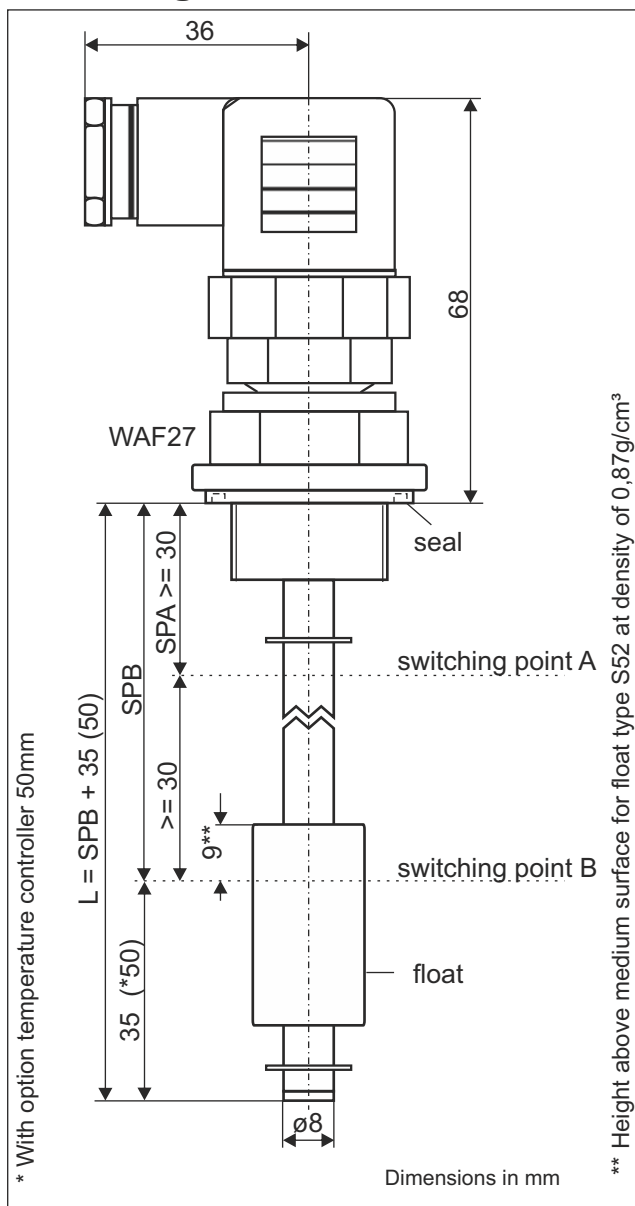
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...01.33.8

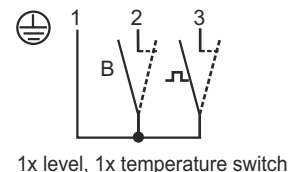
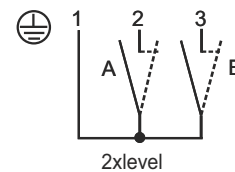
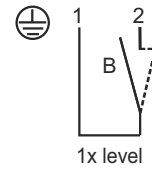
### plug-type connector 3-pole DIN EN 175301-803

### Mounting M24x1,5



#### Terminal diagrams 3-pole + PE DIN EN 175301-803

(further connection alternatives upon request)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M24x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	O-ring $\varnothing 26 \times 2$ , material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

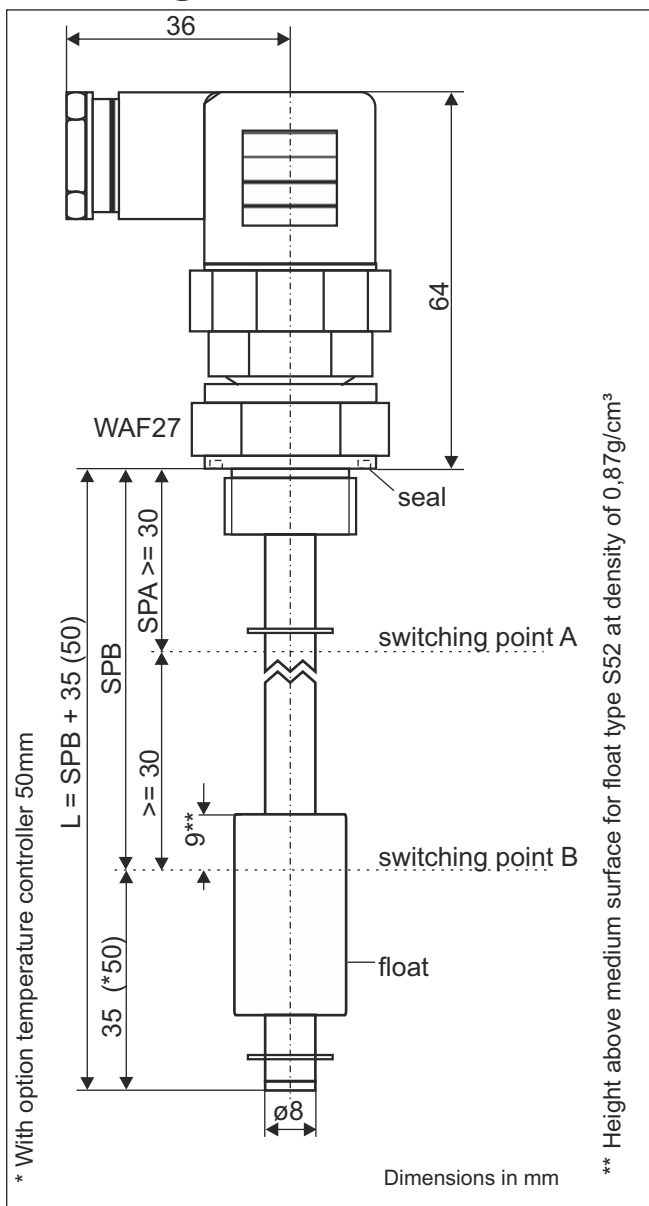
Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

# Data sheet / product information

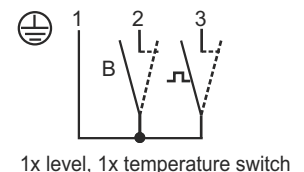
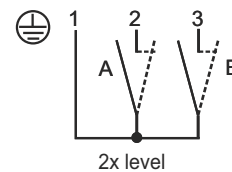
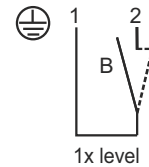
## Mini float switch M60...01.24.8

### plug-type 3-pole DIN EN 175301-803

### Mounting M22x1,5



#### Terminal diagrams 3-pole + PE DIN EN 175301-803 (further connection alternatives upon request)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M22x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

## Data sheet / Product information

### Temperature switch, PT100 and PT1000 optional to mini float switch series M60

#### Temperature switch:

Temperature switch point ranges:

60°C normally closed --- **60O**

65°C normally closed --- **65O**

70°C normally closed --- **70O**

75°C normally closed --- **75O**

85°C normally closed --- **85O**

#### Technical data:

Technology: *bimetal*

Accuracy:  $\pm 5^{\circ}\text{C}$

Reset temperature: *Temperature switching point -  $30^{\circ}\text{C} \pm 15^{\circ}\text{C}$*

Switching voltage: *230VAC - connection 01, 10, 13*

*24VDC - connection 02, 08, 09, 12, 17*

Switching current: *1A - connection 01, 10, 13*

*150mA - connection 02, 08, 09, 12, 17*

#### Temperature sensor PT100

PT100 2 wire --- **PT100**

PT100 3 wire --- **PT103**

PT100 4 wire --- **PT104**

#### Technical data:

Nominal resistance: *100 Ohm at  $0^{\circ}\text{C}$*

Tolerance: *DIN EN 60751, class B*

Temperature coefficient: *TK = 3850ppm/K*

Temperature range: *-20 up to  $100^{\circ}\text{C}$*

Self-heating: *0,4K/mW*

#### Temperature sensor PT1000

PT1000 2 wire --- **PT1000**

PT1000 3 wire --- **PT1003**

#### Technical data:

Nominal resistance: *1000 Ohm at  $0^{\circ}\text{C}$*

Tolerance: *DIN EN 60751, class B*

Temperature coefficient: *TK = 3850ppm/K*

Temperature range: *-20 up to  $100^{\circ}\text{C}$*

Self-heating: *0,2K/mW*

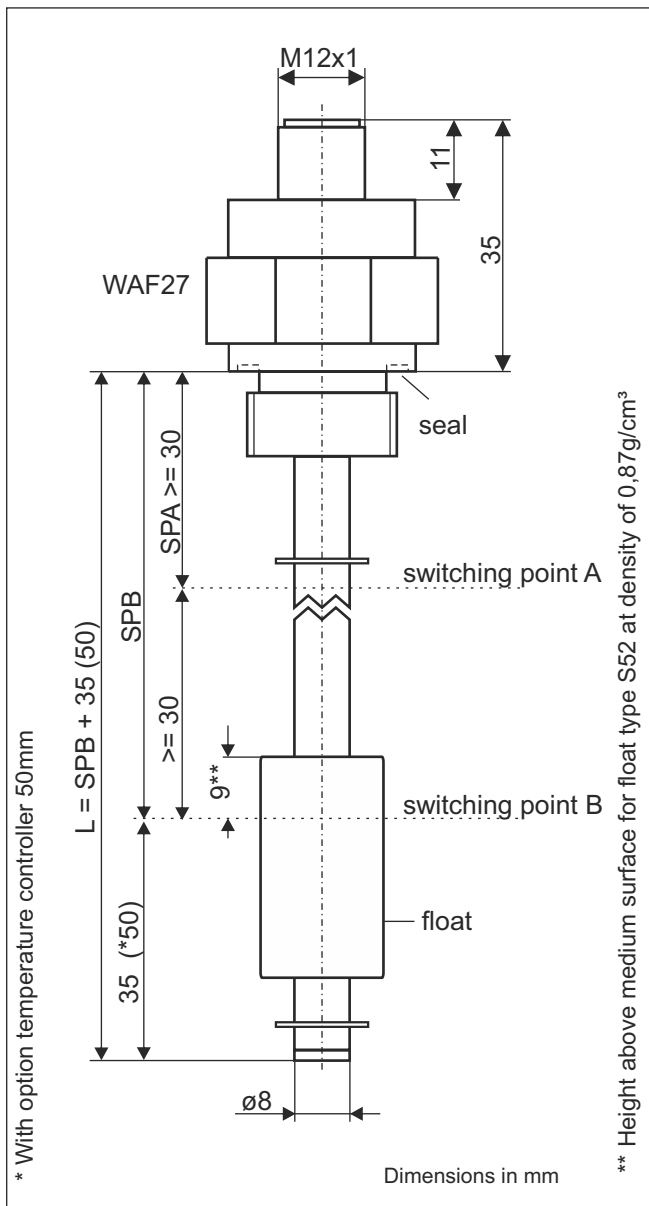


# Data sheet / product information

## Mini float switch M60...02.02.8 / M60...08.02.8

### plug-type connector M12 4-pole / 5-pole

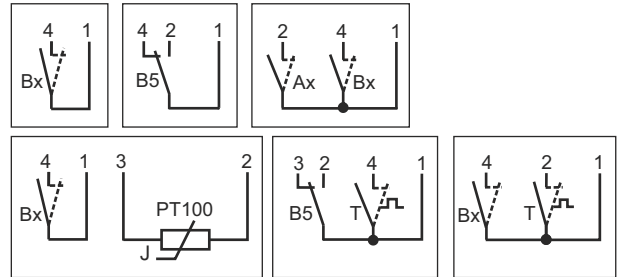
### Mounting 1/2"



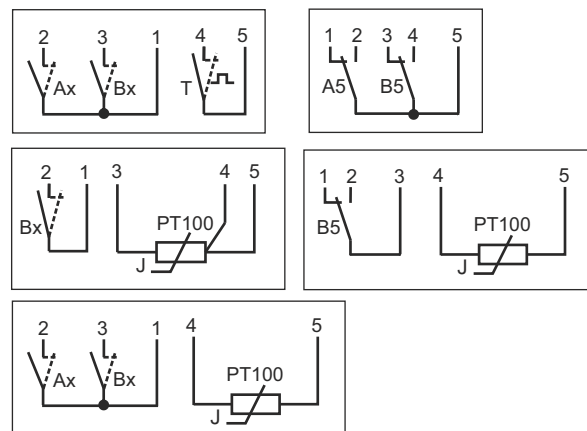
### Terminal diagrams

#### M12 4-pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



#### M12 5-pole (08)



\*\* Height above medium surface for float type S52 at density of 0,87g/cm<sup>3</sup>

[Back to product group](#)

### Technical data:

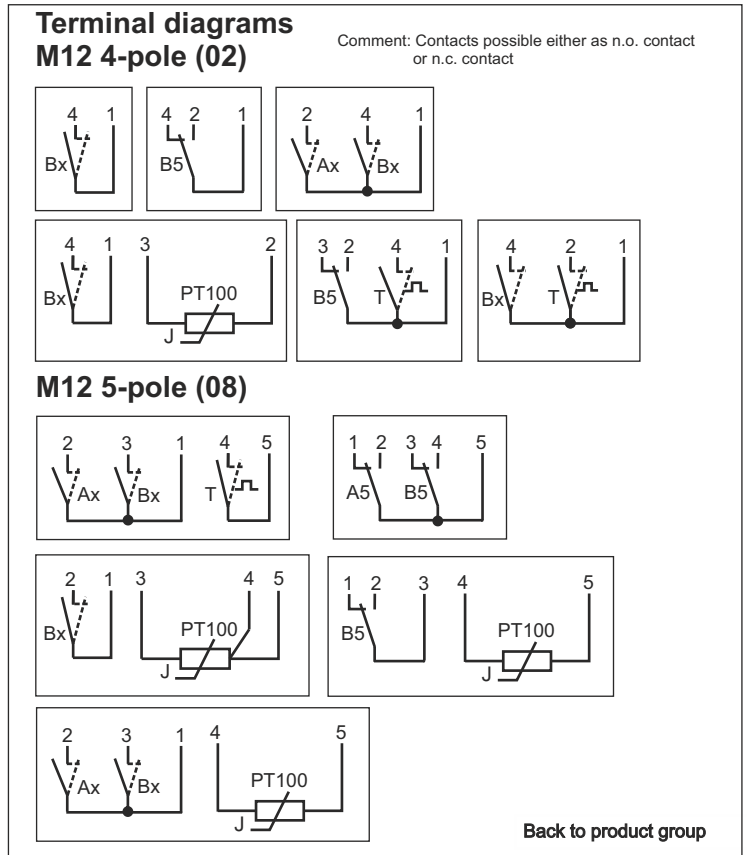
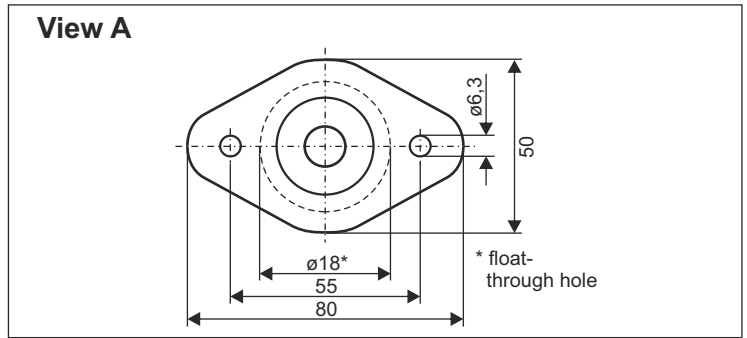
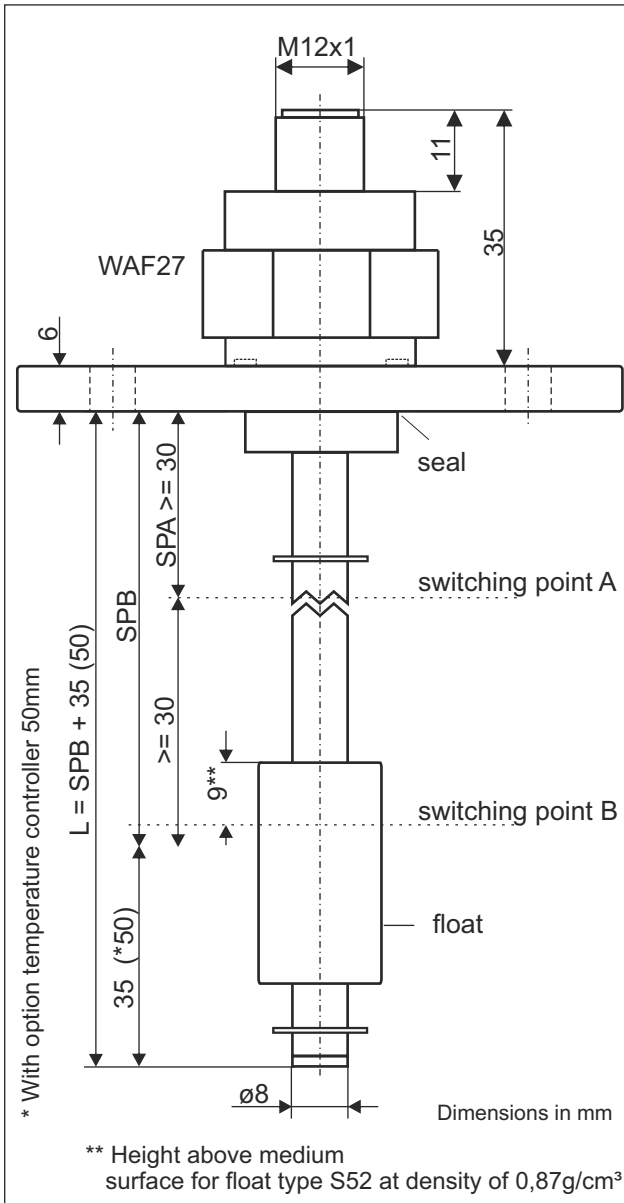
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	thread 1/2", material aluminium
Mounting position:	vertical ± 10°
Seal:	profile seal, material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.23.8 / M60...08.23.8

### plug-type connector M12 4-pole / 5-pole

### Mounting oval flange



### Technical data:

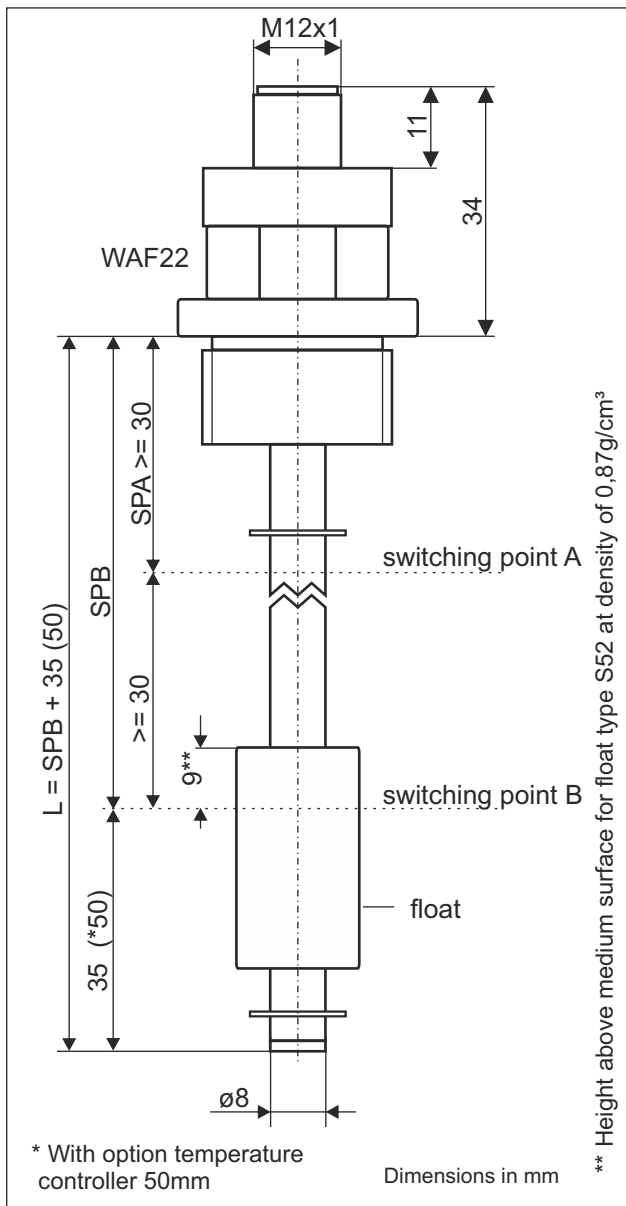
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	oval flange 80x50mm, material makrolon
Mounting position:	vertical $\pm 10^\circ$
Seal:	material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.13.8 / M60...08.13.8

### plug-type connector M12 4-pole / 5-pole

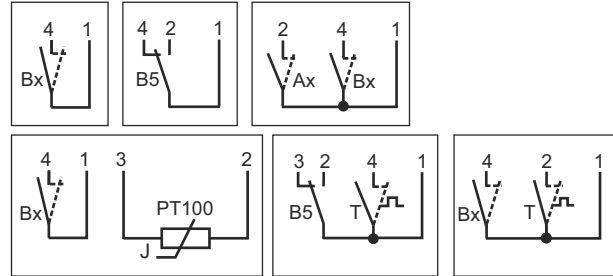
### Mounting 3/4"



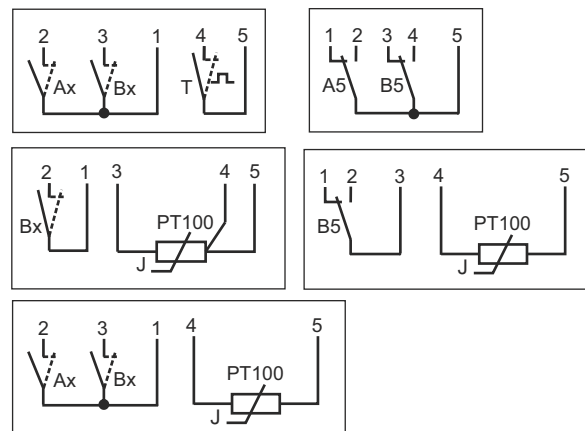
#### Terminal diagrams

##### M12 4-pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



##### M12 5-pole (08)



[Back to product group](#)

#### Technical data:

Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	thread 3/4", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contactc or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

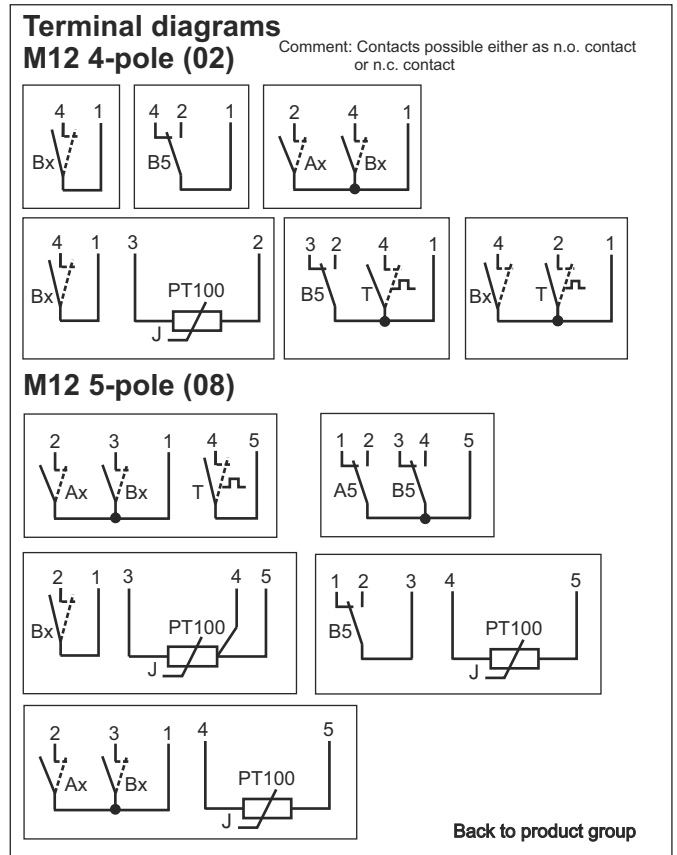
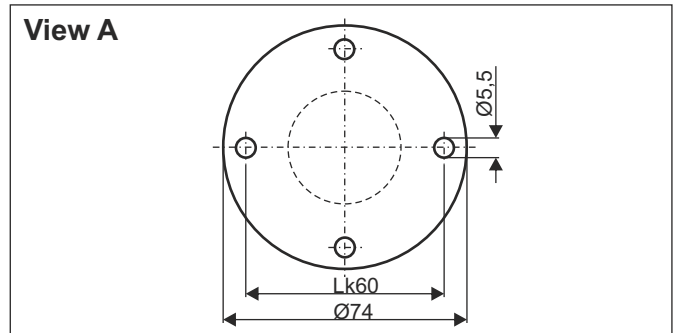
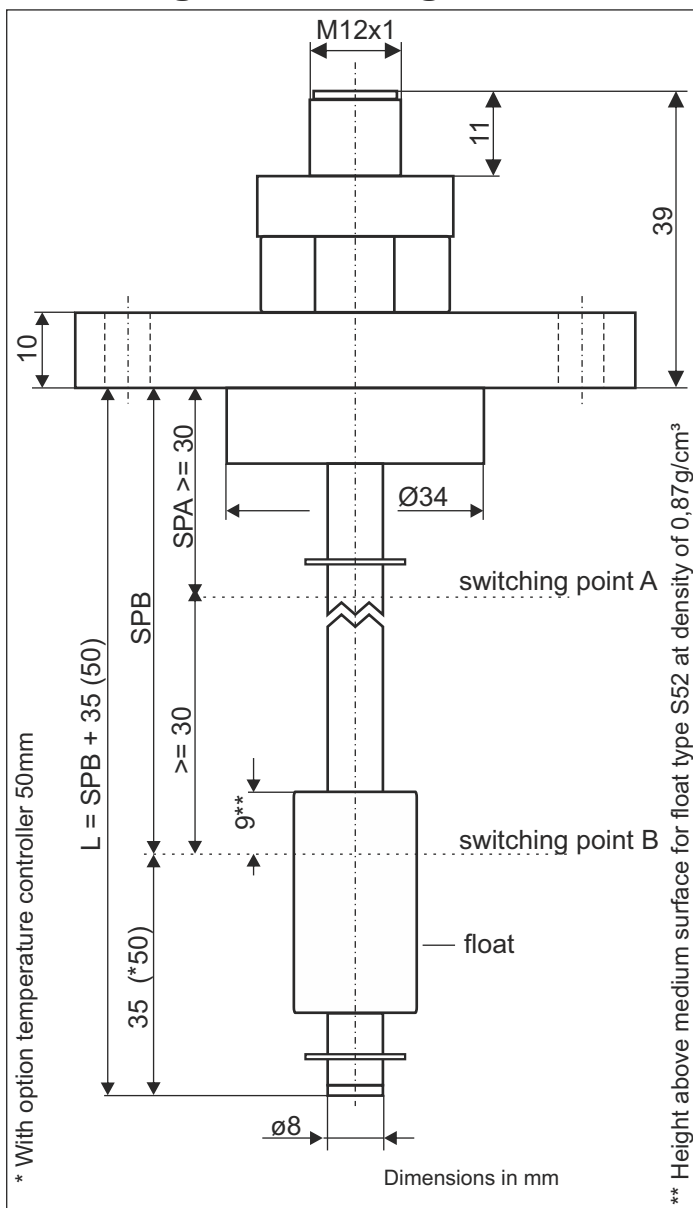
Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

# Data sheet / product information

## Mini float switch M60...02.46.8 / M60...08.46.8

### plug-type connector M12 4-pole / 5-pole

### Mounting round flange



### Technical data:

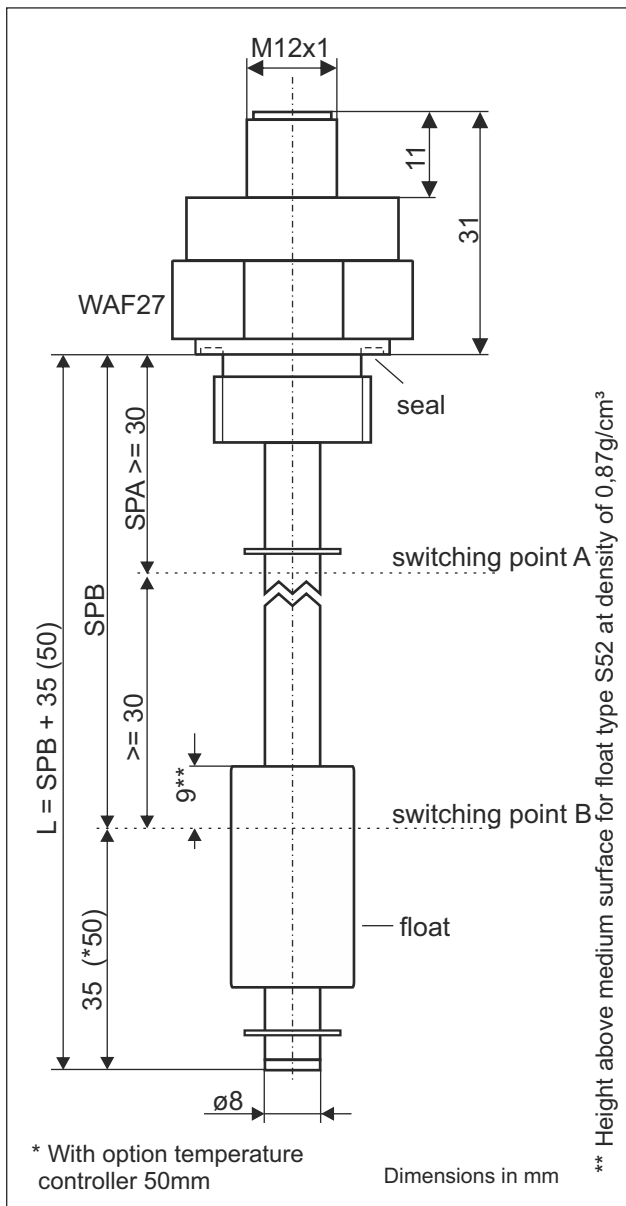
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	round flange AD 74mm, LK 60mm, material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	Ø8mm material brass or stainless steel, length and material according to customer specification
Float:	Ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contactc or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.01.8 / M60...08.01.8

### plug-type connector M12 4-pole / 5-pole

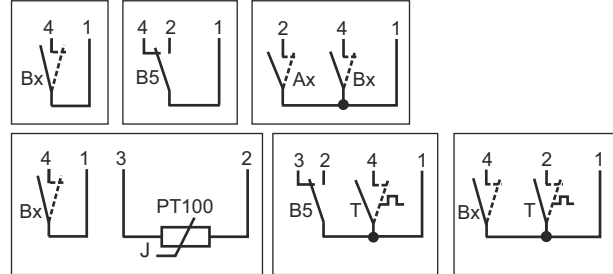
### Mounting M20x1,5



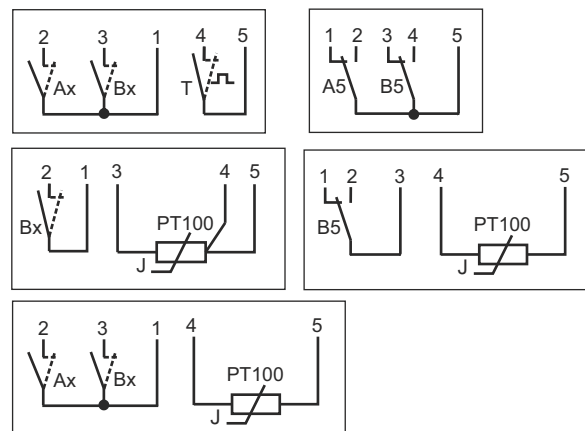
#### Terminal diagrams

##### M12 4pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



##### M12 5-pole (08)



[Back to product group](#)

#### Technical data:

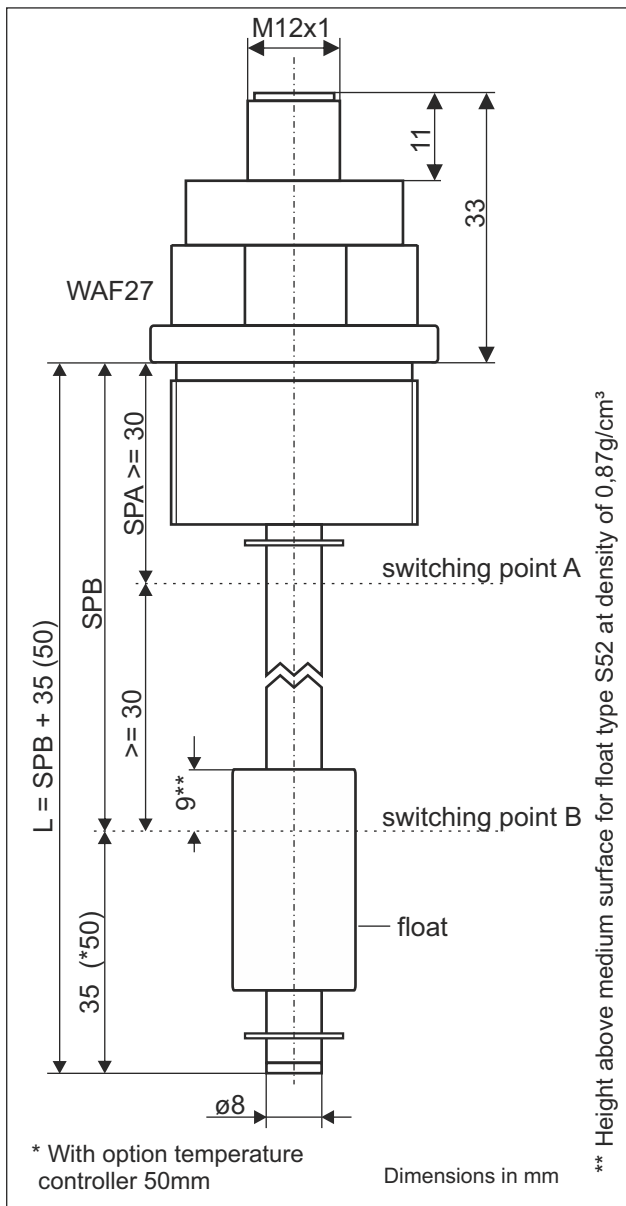
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	thread M20x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contact / n.c. Contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.22.8 / M60...08.22.8

### plug-type connector M12 4-pole / 5-pole

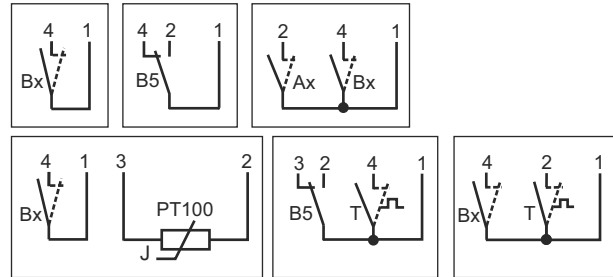
### Mounting 1"



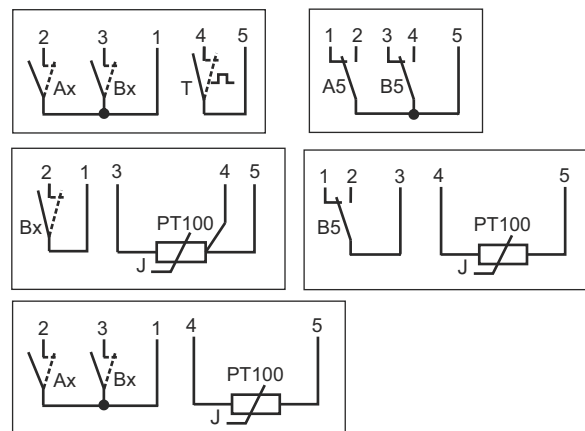
#### Terminal diagrams

##### M12 4-pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



##### M12 5-pole (08)



[Back to product group](#)

#### Technical data:

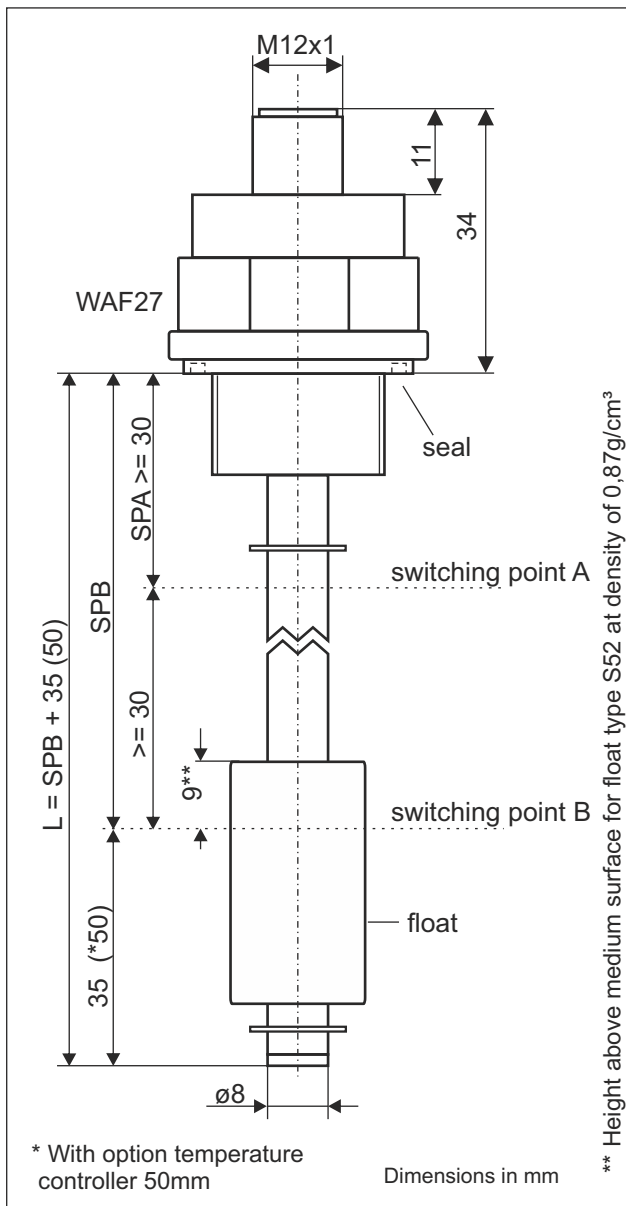
Connection:	plug-type connector M12x1 4-pole and 5-pole, material TPU
Mounting:	thread 1", material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o., contact/ n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.33.8 / M60...08.33.8

### plug-type connector M12 4-pole / 5-pole

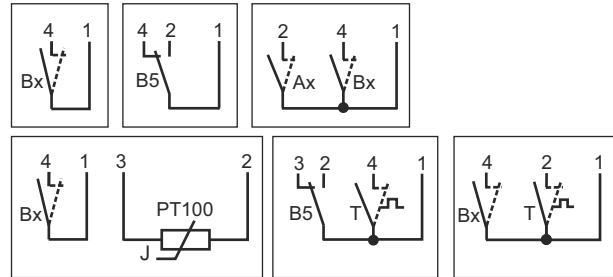
### Mounting M24x1,5



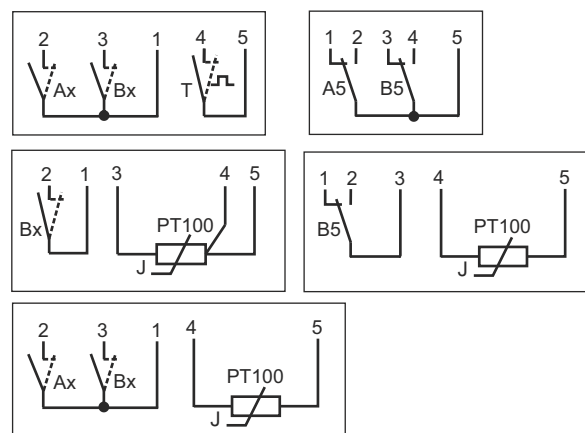
#### Terminal diagrams

##### M12 4-pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



##### M12 5-pole (08)



[Back to product group](#)

#### Technical data:

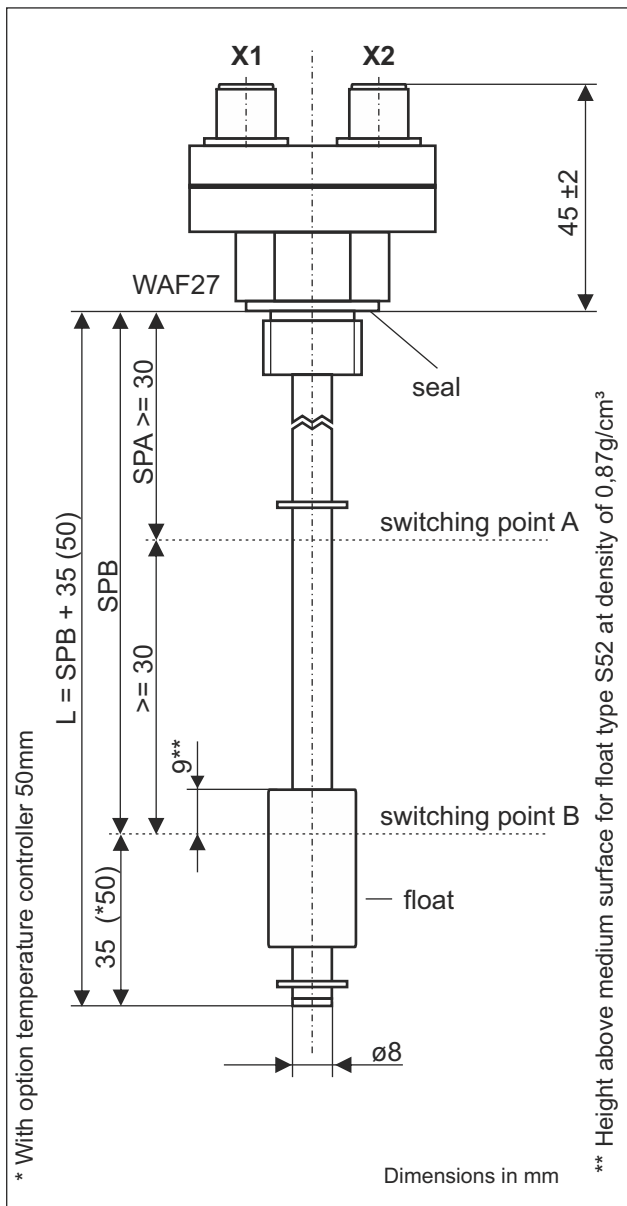
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	thread M24x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contact n.o., contacts/ n.c. Contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

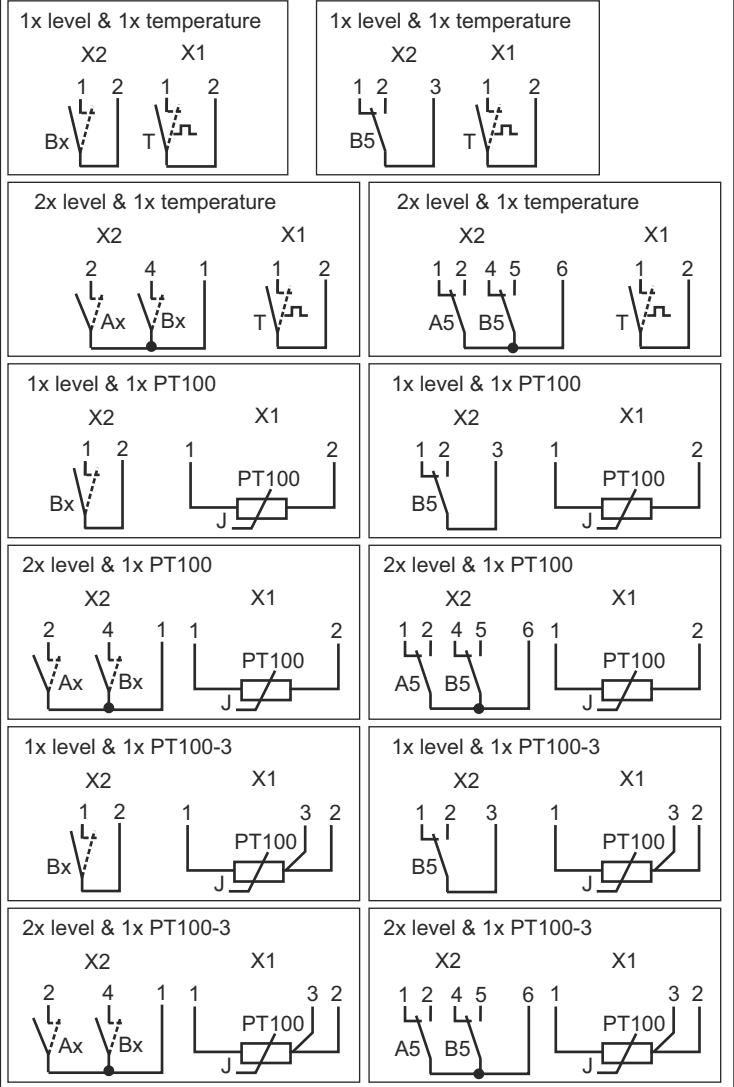
## Mini float switch M60...09.02.8

### with plug-type connector 2xM12

### Mounting 1/2"



### Example for terminal diagrams



Back to product group

### Technical data:

Connection:	Plug-type connector 2x M12x1 4-pole, material TPU, on aluminium housing
Mounting:	thread 1/2", material aluminium
Mounting position:	vertical ± 10°
Seal:	profile seal, material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contact n.o., contact / n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

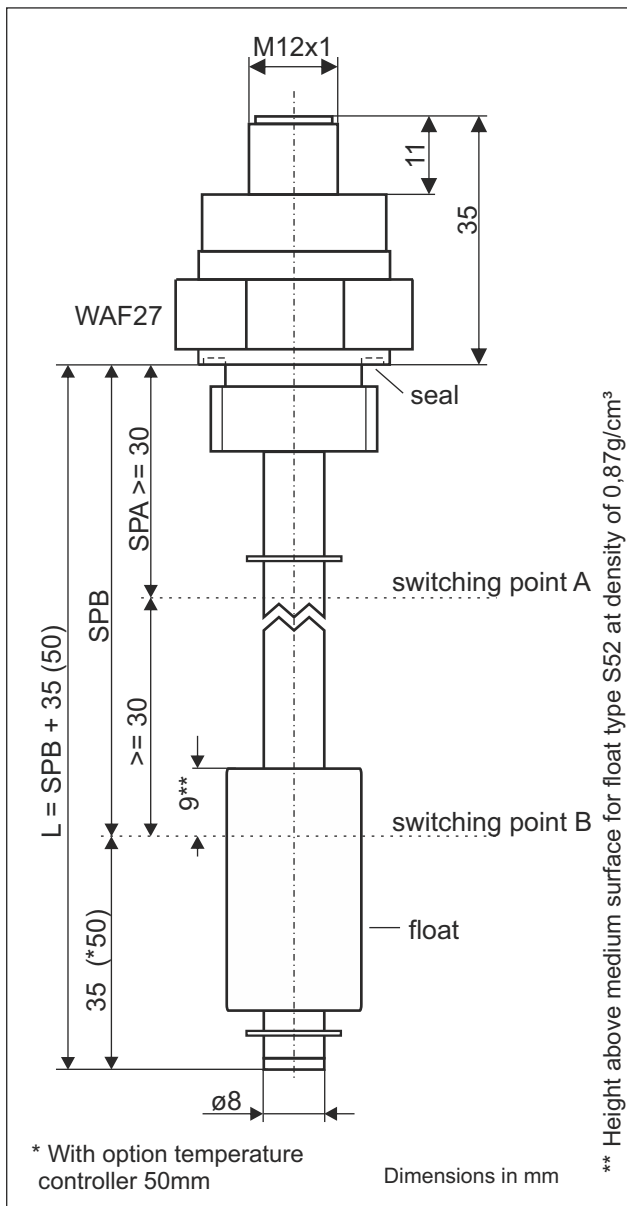


# Data sheet / product information

## Mini float switch M60...02.24.8 / M60...08.24.8

### plug-type connector M12 4-pole / 5-pole

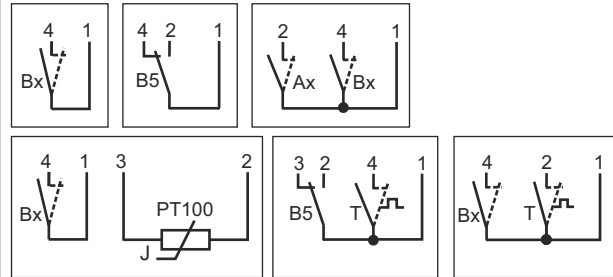
### Mounting M22x1,5



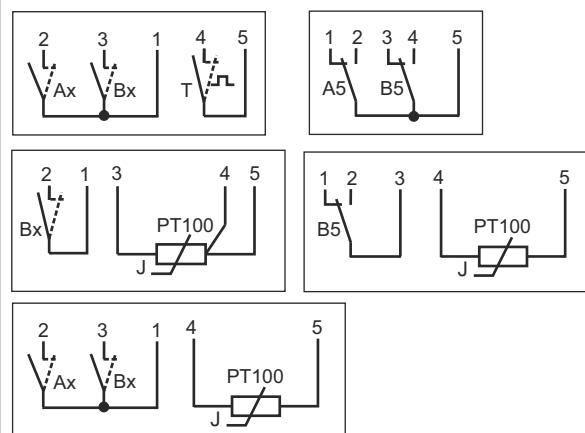
#### Terminal diagrams

##### M12 4-pole (02)

Comment: Contacts possible either as n.o. contact or n.c. contact



##### M12 5-pole (08)



[Back to product group](#)

#### Technical data:

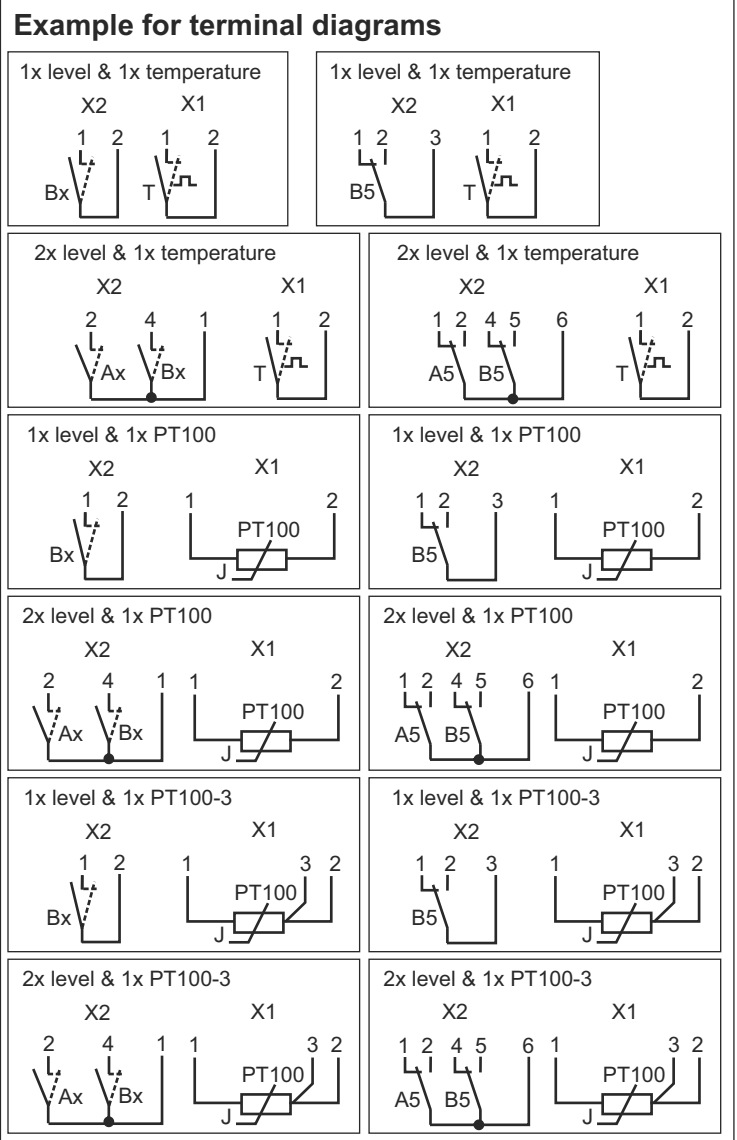
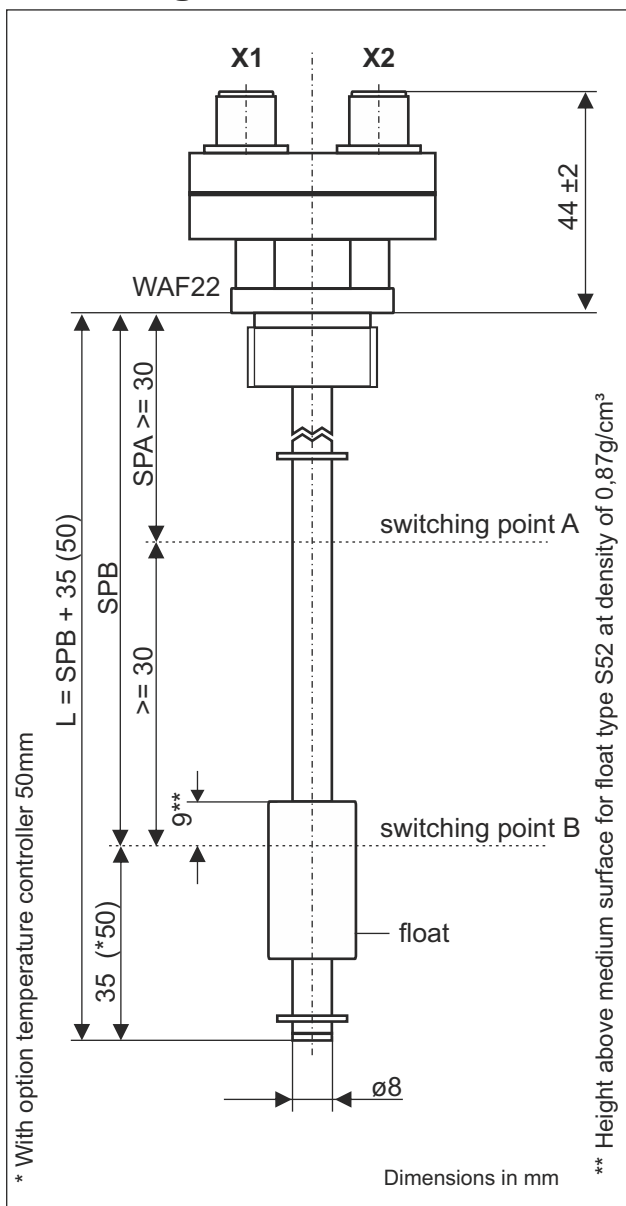
Connection:	plug-type connector M12x1, 4-pole and 5-pole, material TPU
Mounting:	thread M22x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contact n.o. contact / n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...09.13.8

### with plug-type connector 2xM12

### Mounting 3/4"



Back to product group

### Technical data:

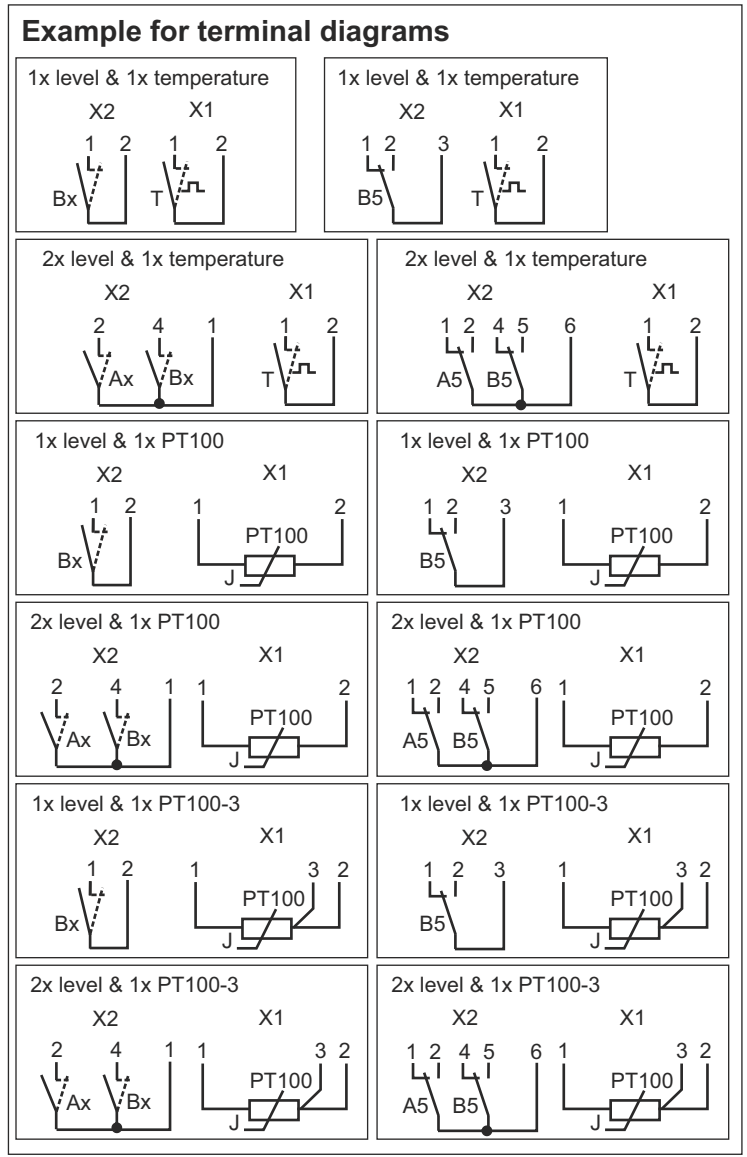
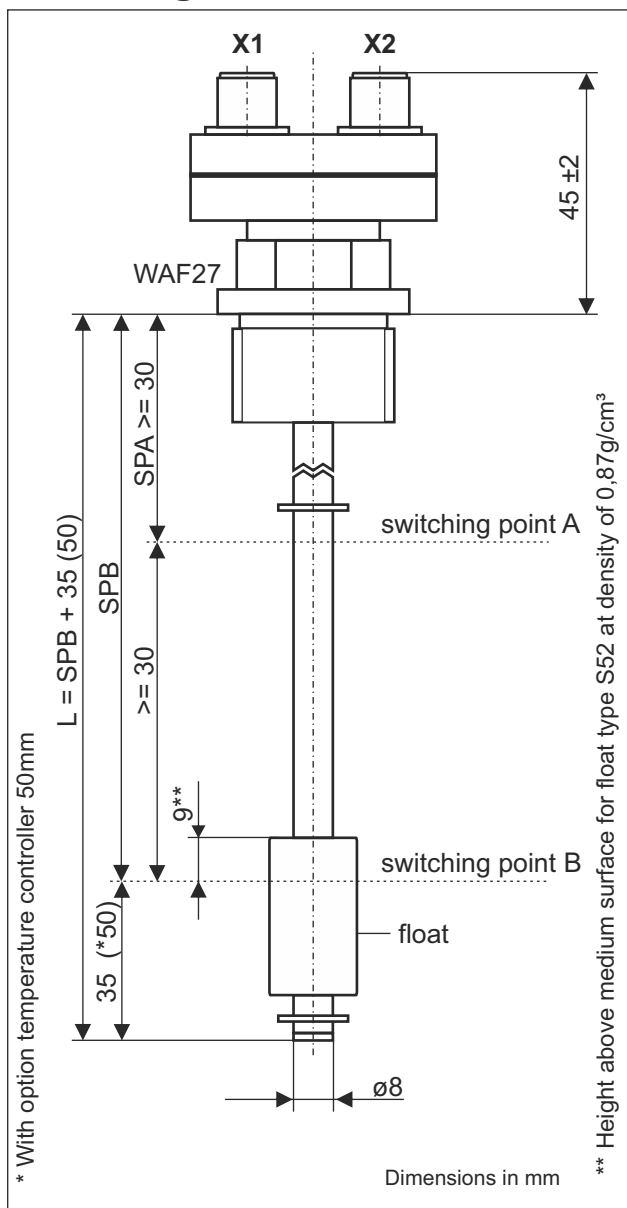
Connection:	Plug-type connector 2x M12x1 4-pole, material TPU, on alu housing
Mounting:	thread 3/4", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o., contact / n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...09.22.8

### with plug-type connector 2xM12

### Mounting 1"



Back to product group

### Technical data:

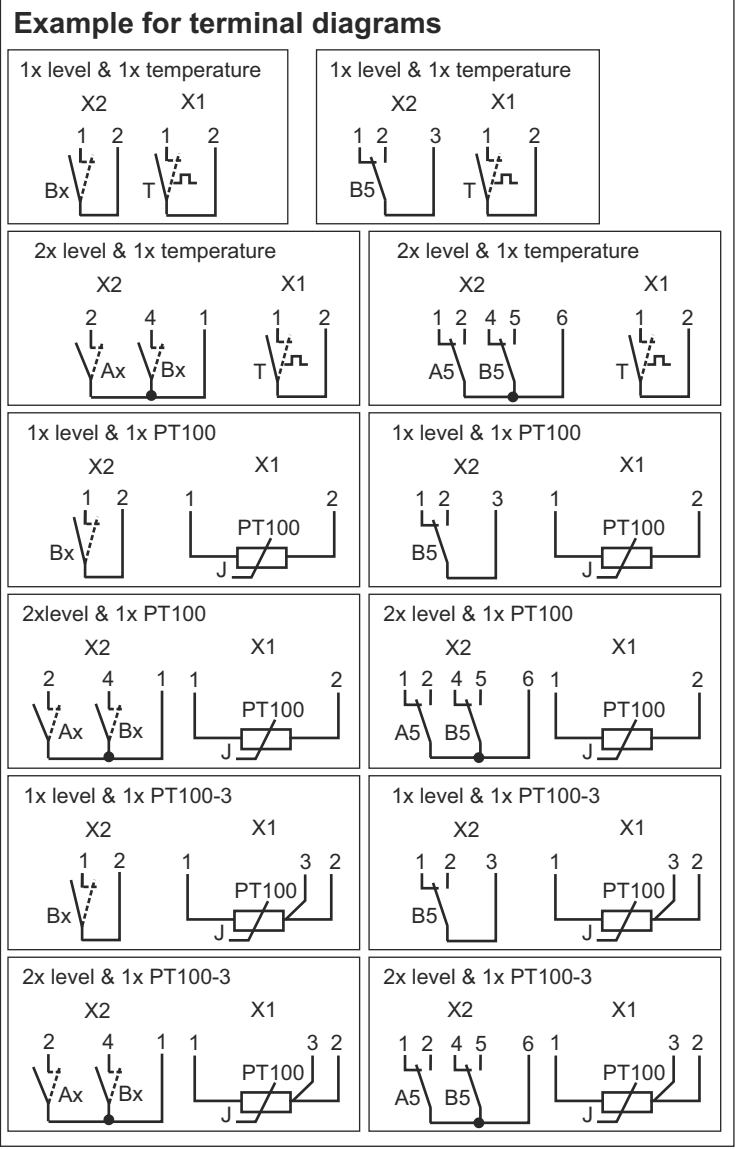
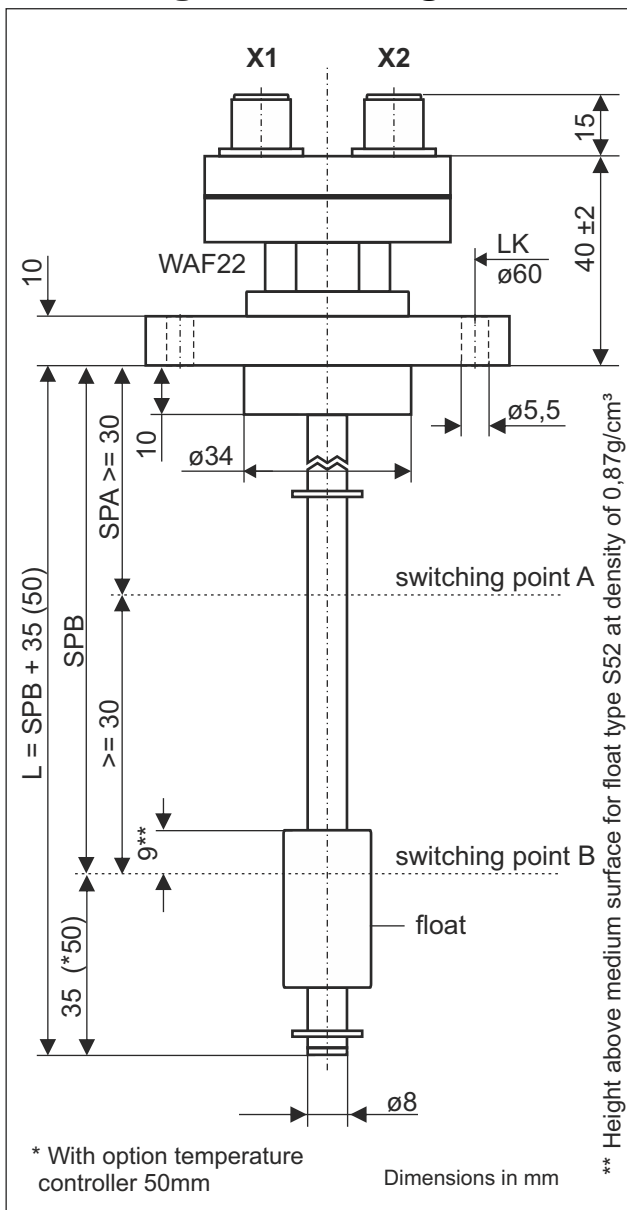
Connection:	plug-type connector 2x M12x1 4-pole, material TPU, on aluminium housing
Mounting:	thread 1", material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contact, n.o. contact / n.c. contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...09.46.8

### with plug-type connector 2xM12

### Mounting round flange



Back to product group

### Technical data:

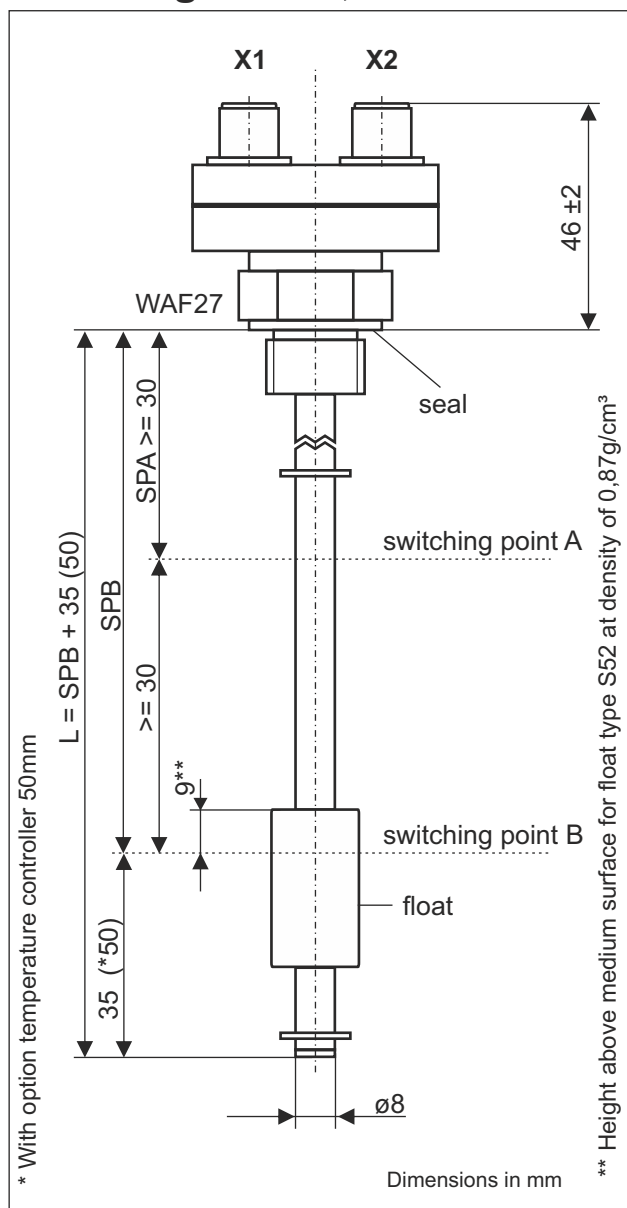
Connection:	plug-type connector 2x M12x1, 4-pole, material TPU, on alu housing
Mounting:	round flange AD 74mm, material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts, n.o. contact / n.c. Contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

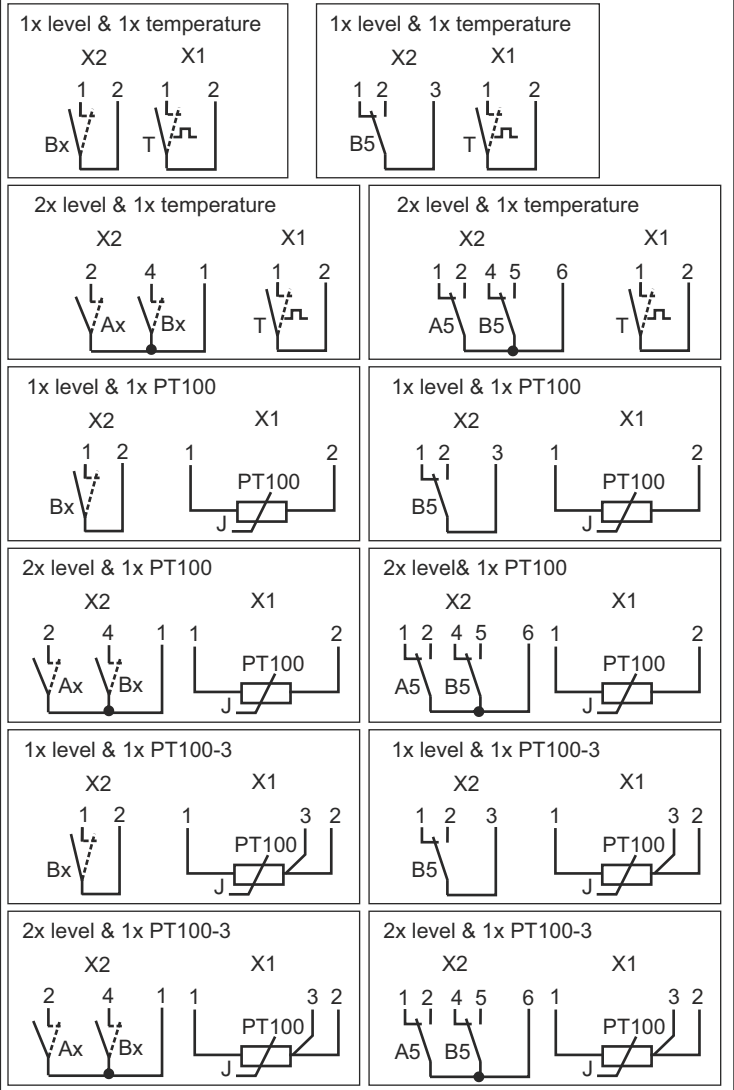
## Mini float switch M60...09.01.8

### with plug-type connector 2xM12

### Mounting M20x1,5



### Example for terminal diagrams



[Back to product group](#)

### Technical data:

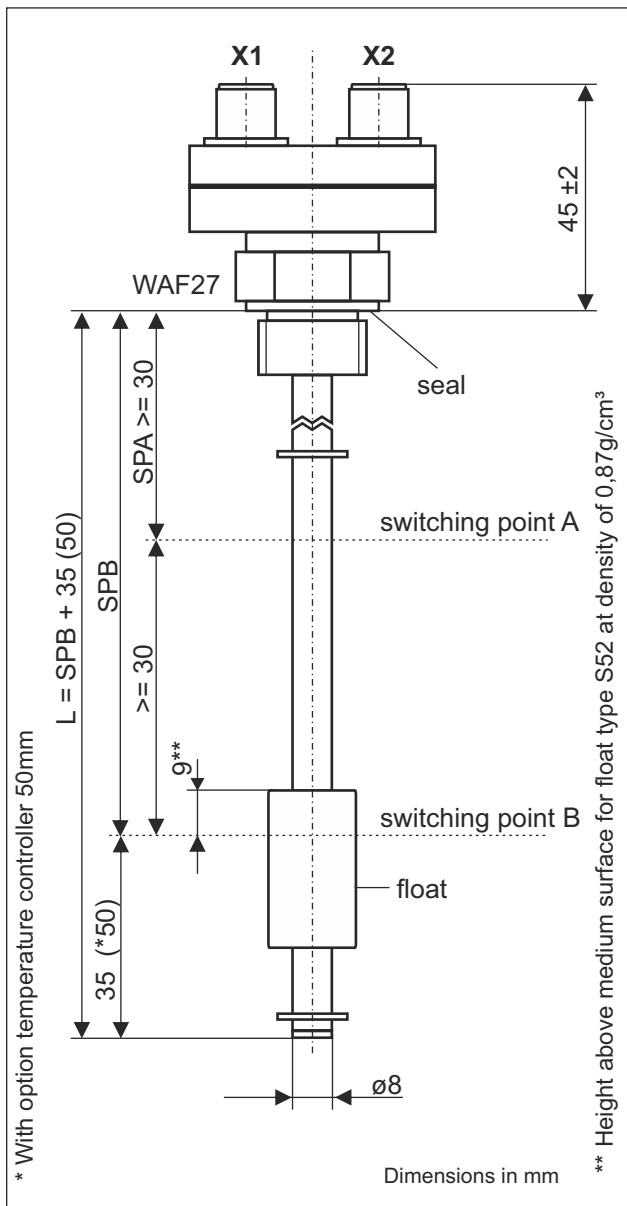
Connection:	connector 2x M12x1 4-pole, material TPU, on aluminium housing
Mounting:	thread M20x1,5, material aluminium
Mounting position:	vertical ± 10°
Seal:	profile seal, material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts, n.o. contact / n.c. Contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

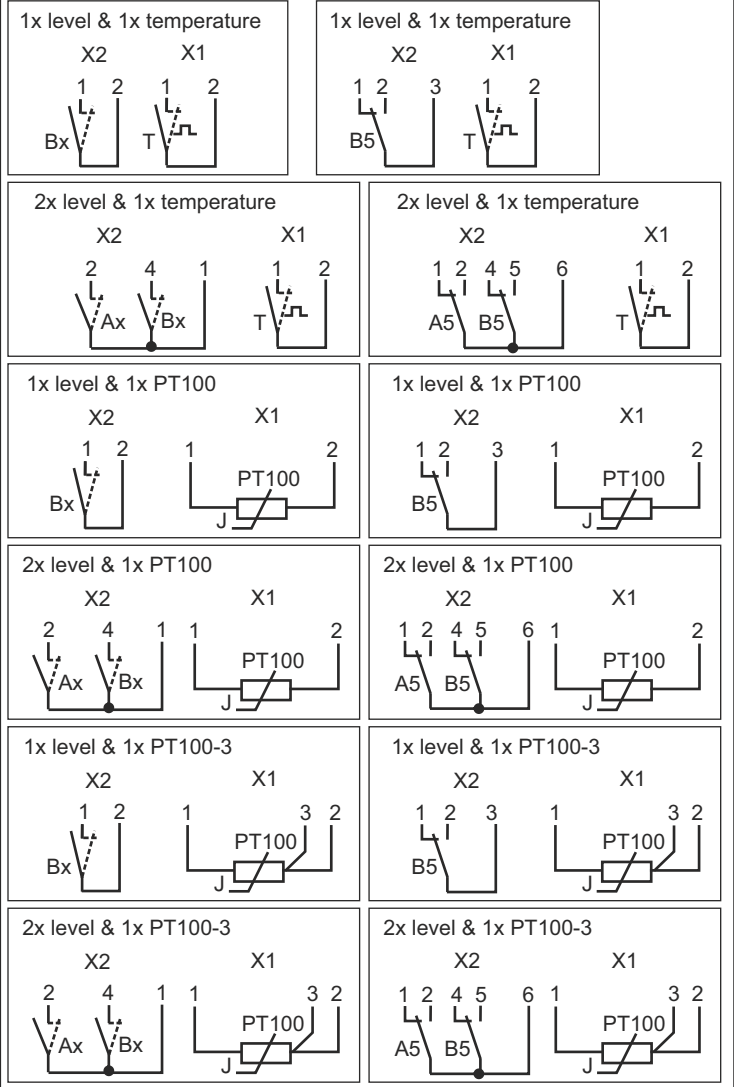
## Mini float switch M60...09.24.8

### with plug-type connector 2xM12

### Mounting M22x1,5



### Example for terminal diagrams



Back to product group

### Technical data:

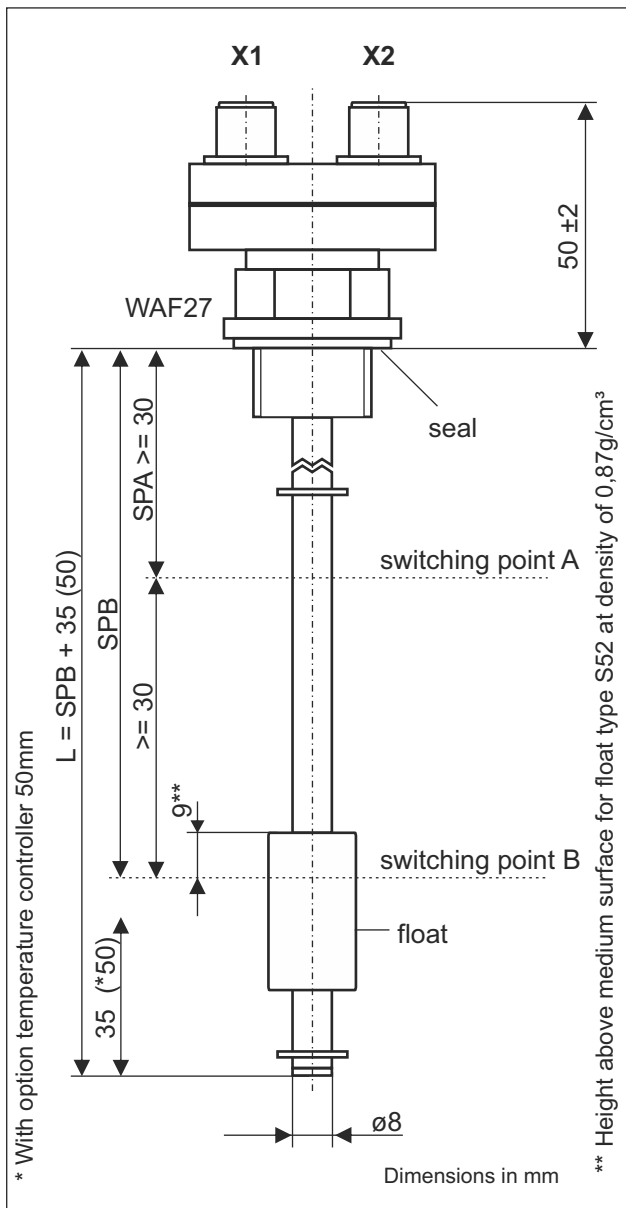
Connection:	plug-type connector 2x M12x1, 4-pole, material TPU, on aluminium housing
Mounting:	thread M22x1,5, material aluminium
Mounting position:	vertical ± 10°
Seal:	profile seal, material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts, n.o. contact / n.c. Contact or 2x change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

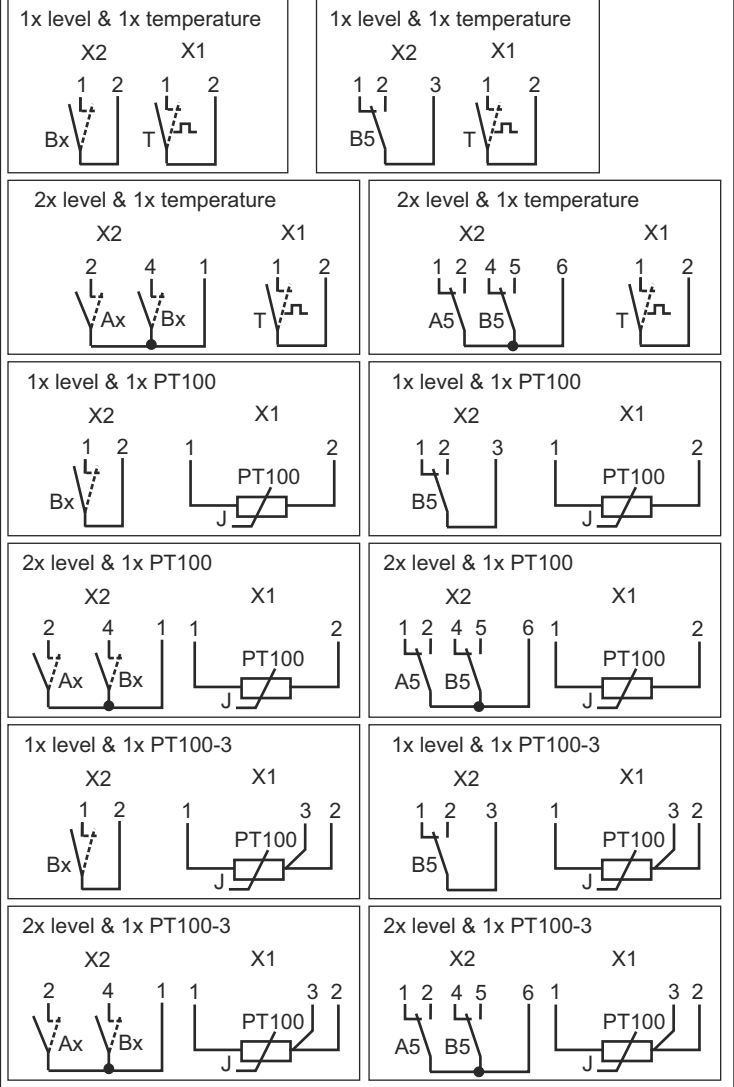
## Mini float switch M60...09.33.8

### with plug-type connector 2xM12

### Mounting M24x1,5



### Example for terminal diagrams



[Back to product group](#)

### Technical data:

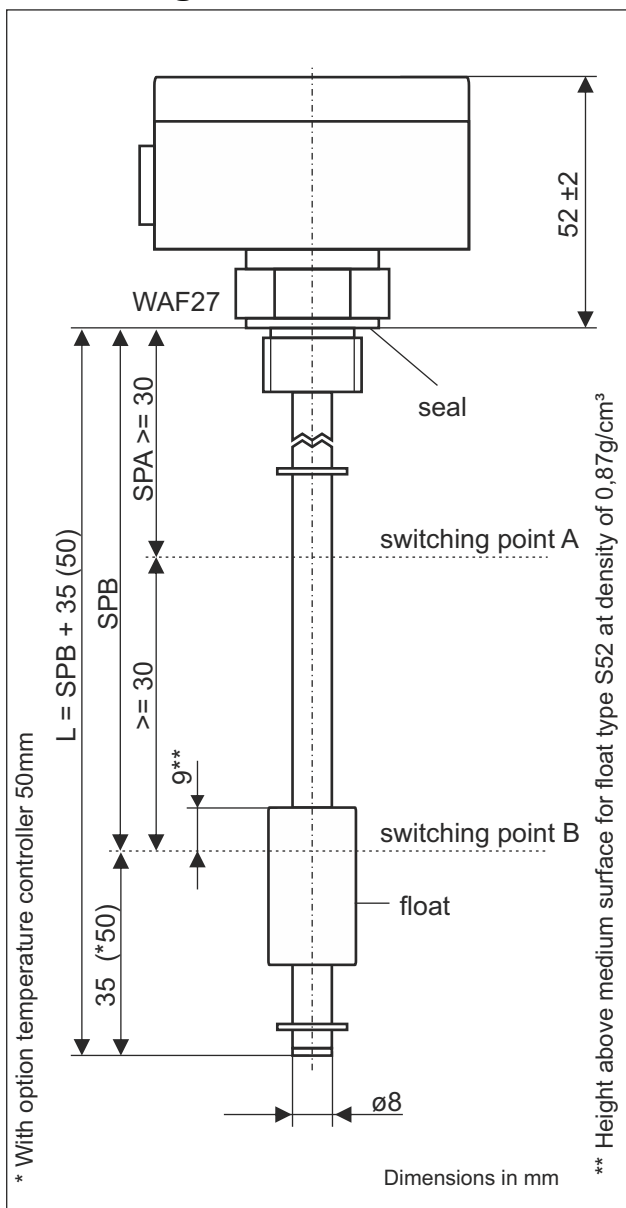
Connection:	plug-type connector 2x M12x1, 4-pole, material TPU, on alu housing
Mounting:	thread M24x1,5, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts, n.o. contact / n.c. contact or change over contact, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	$-20^\circ\text{C}$ to $100^\circ\text{C}$ in medium, $-15^\circ\text{C}$ to $70^\circ\text{C}$ above mounting
Protection rating:	IP 65

# Data sheet / product information

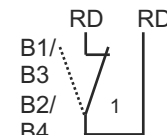
## Mini float switch M60...10.02.8

### with terminal housing

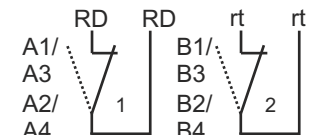
### Mounting 1/2"



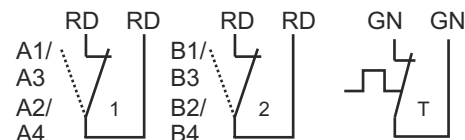
### Example for Terminal diagrams



1 x n.o. contact/n.c. contact  
E.g. order key  
M60.1.B1.80.10.02.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.02.8



2 x n.o. contact/n.c. contact 1x temperature switch  
E.g. order key  
M60.2.A2.B4.60.200.10.02.8.700

[Back to product group](#)

### Technical data:

Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	thread 1/2", material aluminium
Mounting position:	vertical ± 10°
Seal:	material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

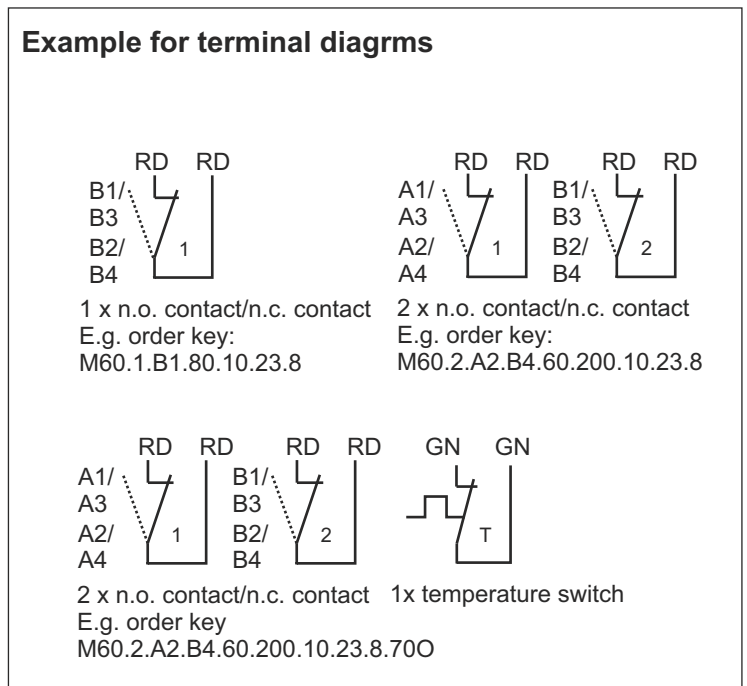
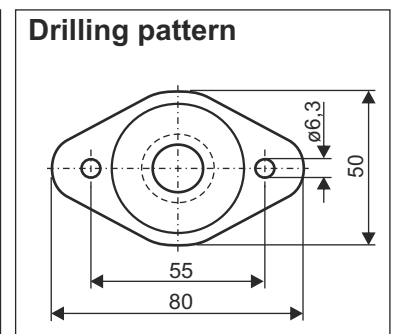
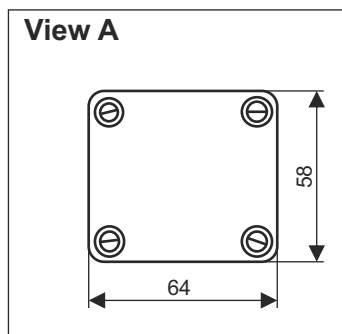
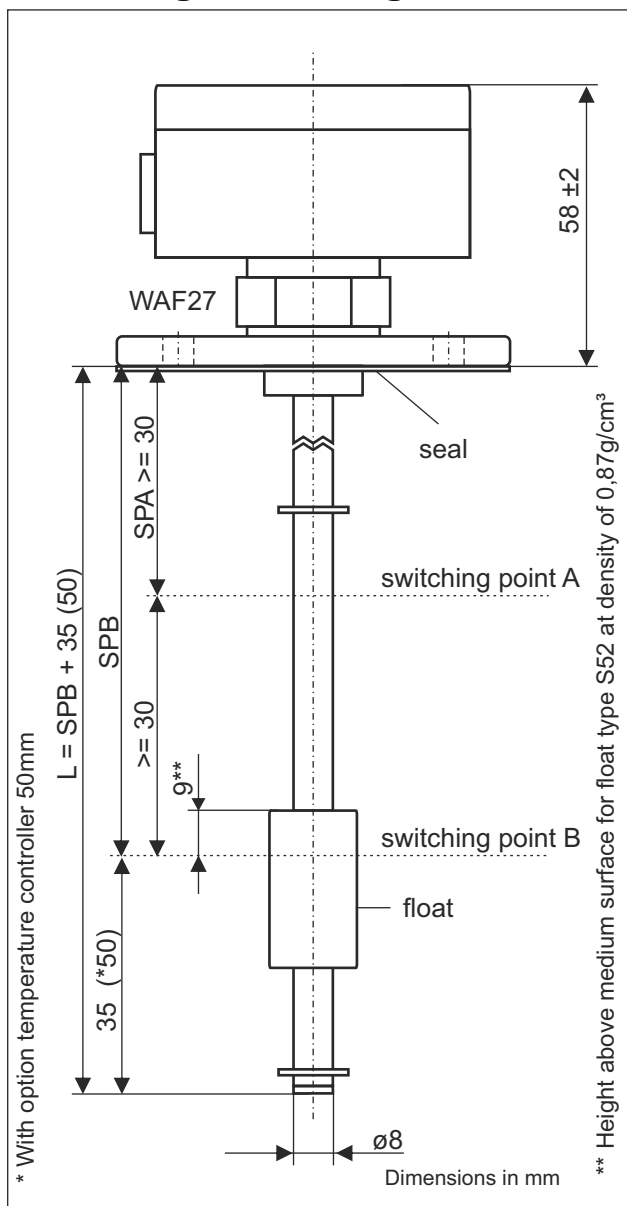


# Data sheet / product information

## Mini float switch M60...10.23.8

### with terminal housing

### Mounting oval flange



[Back to product group](#)

### Technical data:

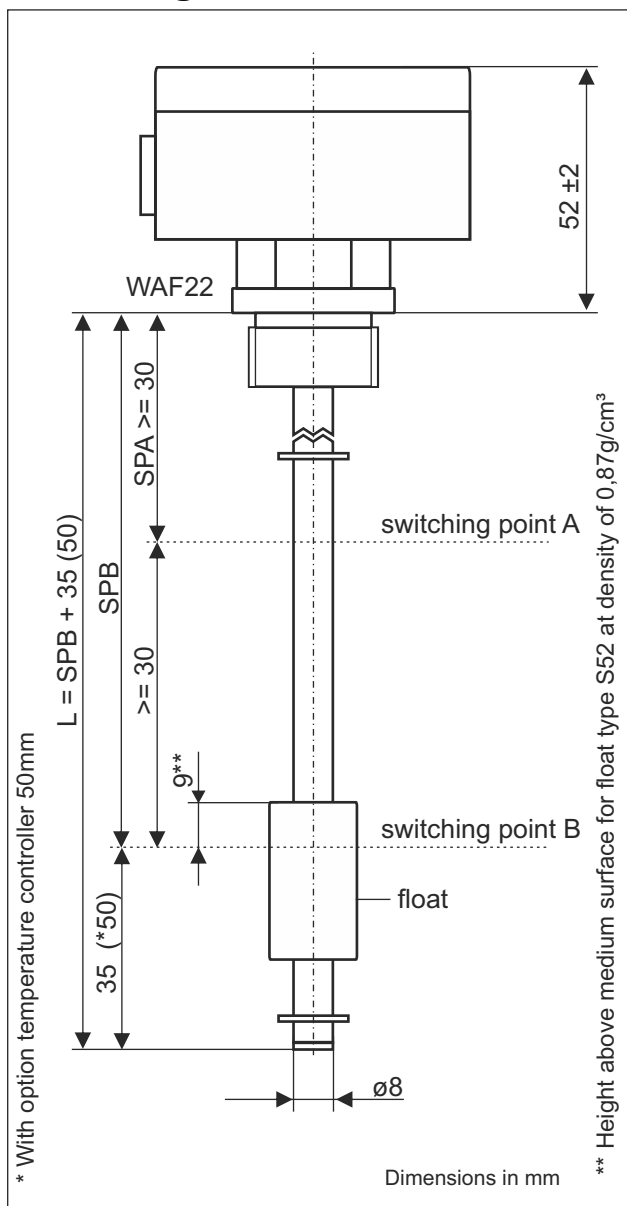
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	oval flange, material PA6 GF 30 (Makrolon)
Mounting position:	vertical ± 10°
Seal:	material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

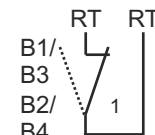
## Mini float switch M60...10.13.8

### with terminal housing

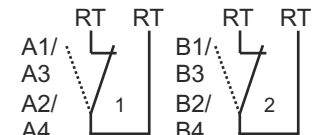
### Mounting 3/4"



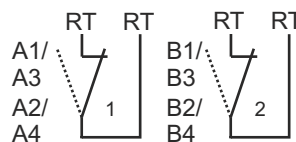
### Example for Terminal diagrams



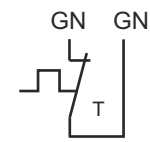
1 x n.o. contact/n.c. contact  
E.g. order key  
M60.1.B1.80.10.13.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.13.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.13.8.700



1x temperature switch

[Back to product group](#)

### Technical data:

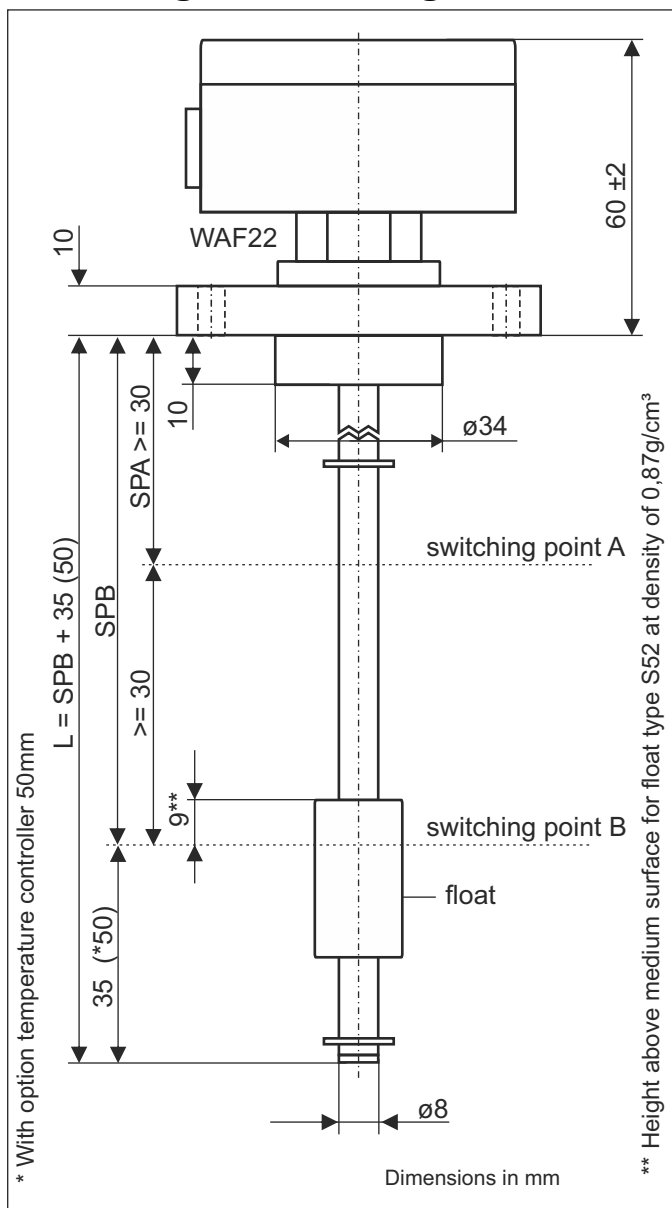
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing 64x58x35mm (wxdxh), cable entry at the housing M16x1,5, housing material aluminium, colour grey thread 3/4", material aluminium
Mounting:	vertical ± 10°
Mounting position:	vertical ± 10°
Sliding tube:	Ø8mm material brass or stainless steel, length and material according to customer specification
Float:	Ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

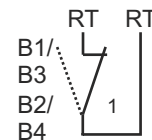
## Mini float switch M60...10.46.8

### with terminal housing

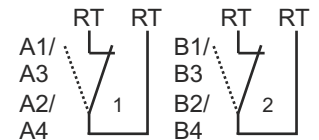
### Mounting round flange



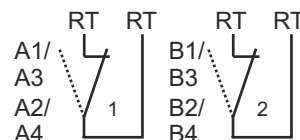
#### Example for Terminal diagrams



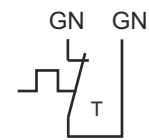
1 x n.o. contact/n.c. contact  
E.g. order key  
M60.1.B1.80.10.46.8



2 x Sn.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.46.8

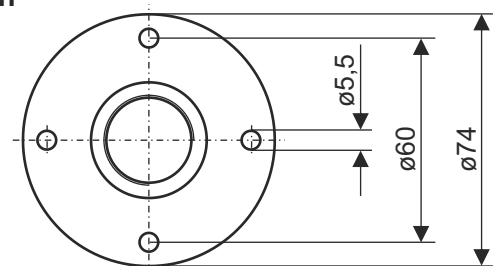


2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.46.8.700



1x temperature switch

#### Drill plan



[Back to product group](#)

#### Technical data:

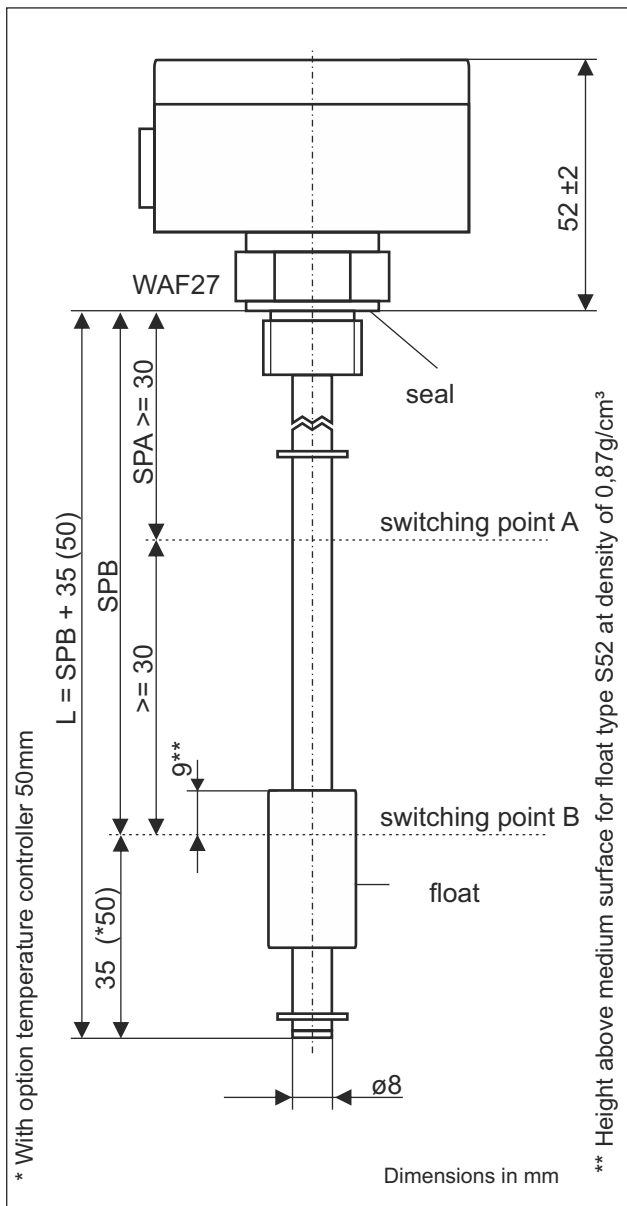
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	round flange AD74mm, material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

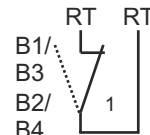
## Mini float switch M60...10.01.8

### with terminal housing

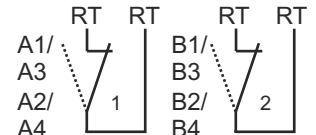
### Mounting M20x1,5



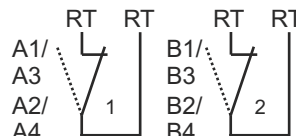
#### Example for Terminal diagrams



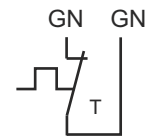
1 x n.o. contact/n.c. contact  
E.g. order key  
M60.1.B1.80.10.01.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.01.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.01.8.700



1x temperature switch

[Back to product group](#)

#### Technical data:

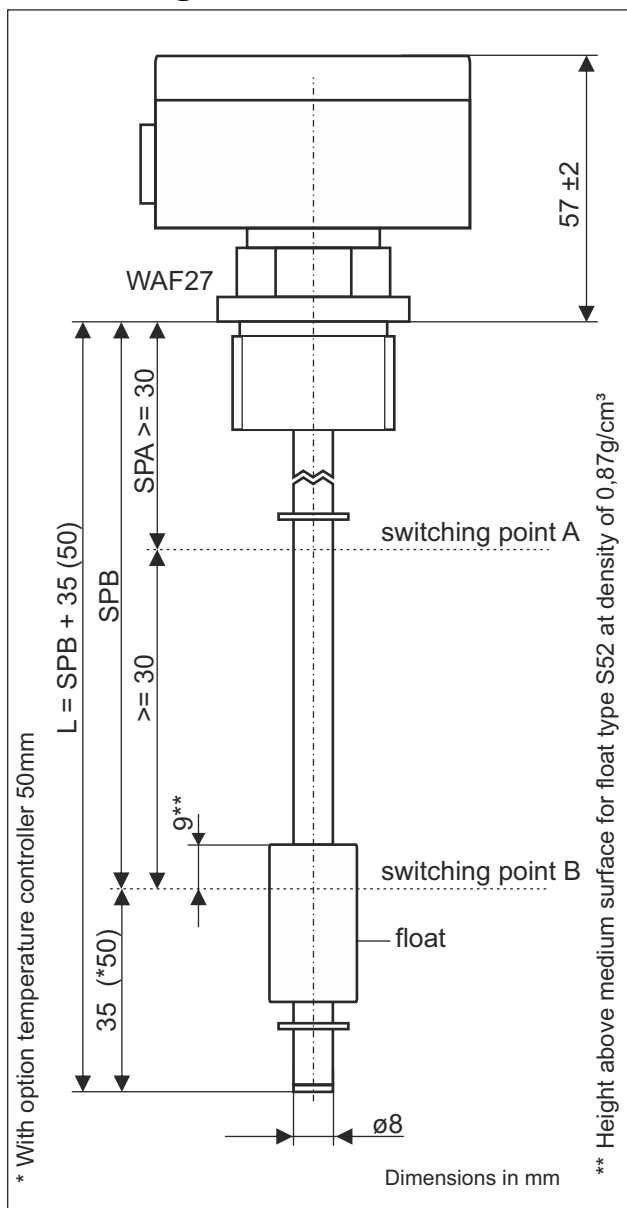
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	thread M 20x1,5, material aluminium
Mounting position:	vertical ± 10°
Seal:	material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts, n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

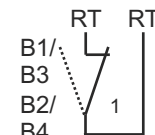
## Mini float switch M60...10.22.8

### with terminal housing

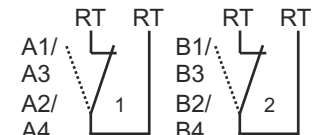
### Mounting 1"



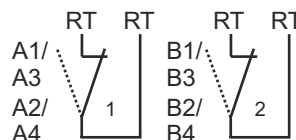
### Example for Terminal diagrams



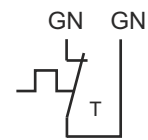
1 x n.o. contact/n.c. contact  
E.g. order key:  
M60.1.B1.80.10.22.8



2 xn.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.10.22.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.22.8.700



1x temperature switch

[Back to product group](#)

### Technical data:

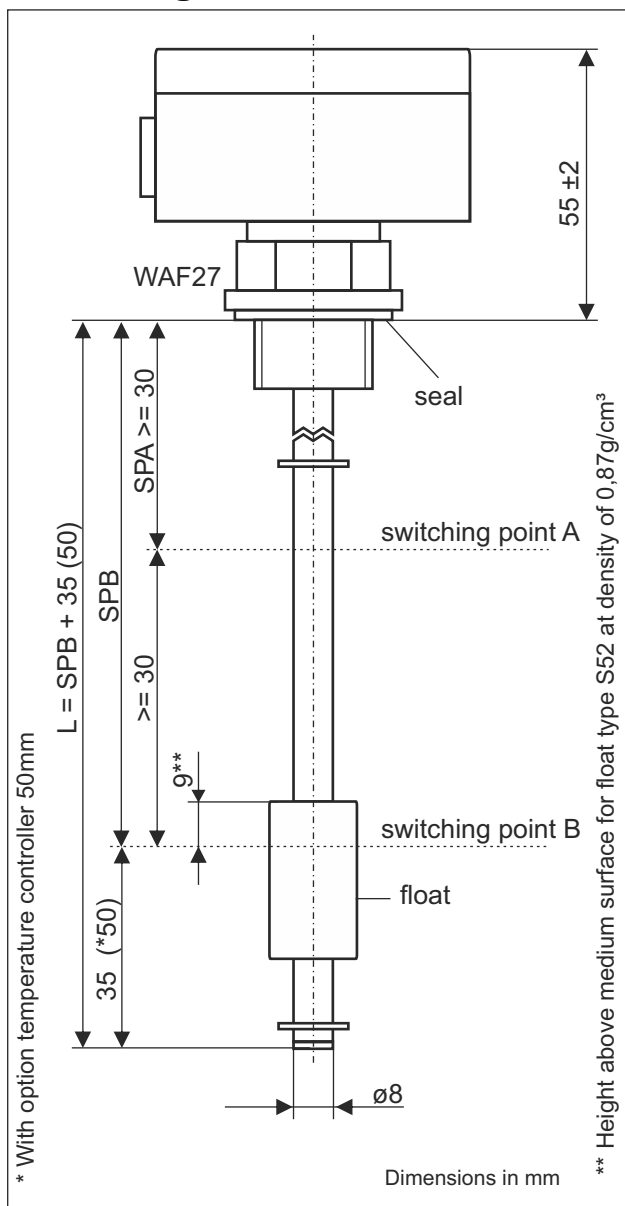
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	thread 1", material aluminium
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switing:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

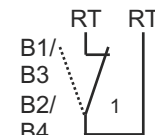
## Mini float switch M60...10.33.8

### with terminal housing

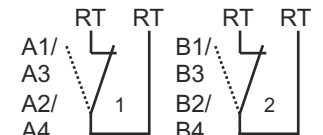
### Mounting M24x1,5



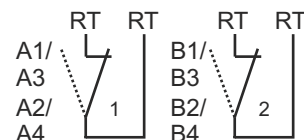
#### Example for Terminal diagrams



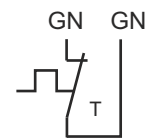
1 x n.o. contact/n.c. contact  
E.g. order key:  
M60.1.B1.80.10.33.8



2 x n.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.10.33.8



2 x n.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.10.33.8.700



1x temperature switch

[Back to product group](#)

#### Technical data:

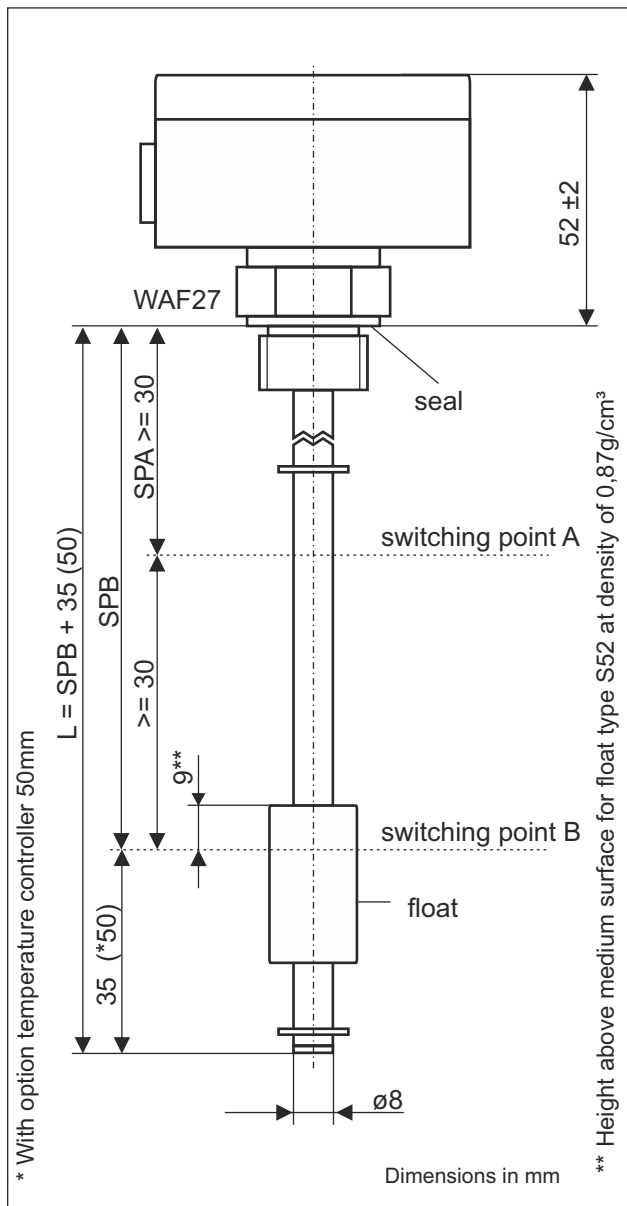
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	thread M 24x1,5, material aluminium
Mounting position:	vertical ± 10°
Seal:	material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

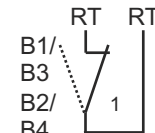
## Mini float switch M60...10.24.8

### with terminal housing

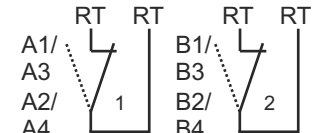
### Mounting M22x1,5



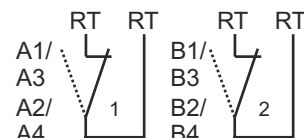
#### Example for Terminal diagrams



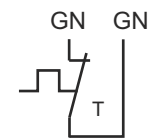
1 x n.o. contact/n.c. contact  
E.g. order key:  
M60.1.B1.80.10.24.8



2 x Sn.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.10.24.8



2 x n.o. contact/n.c. contact  
E.g. order key  
M60.2.A2.B4.60.200.10.24.8.700



1x temperature switch

[Back to product group](#)

#### Technical data:

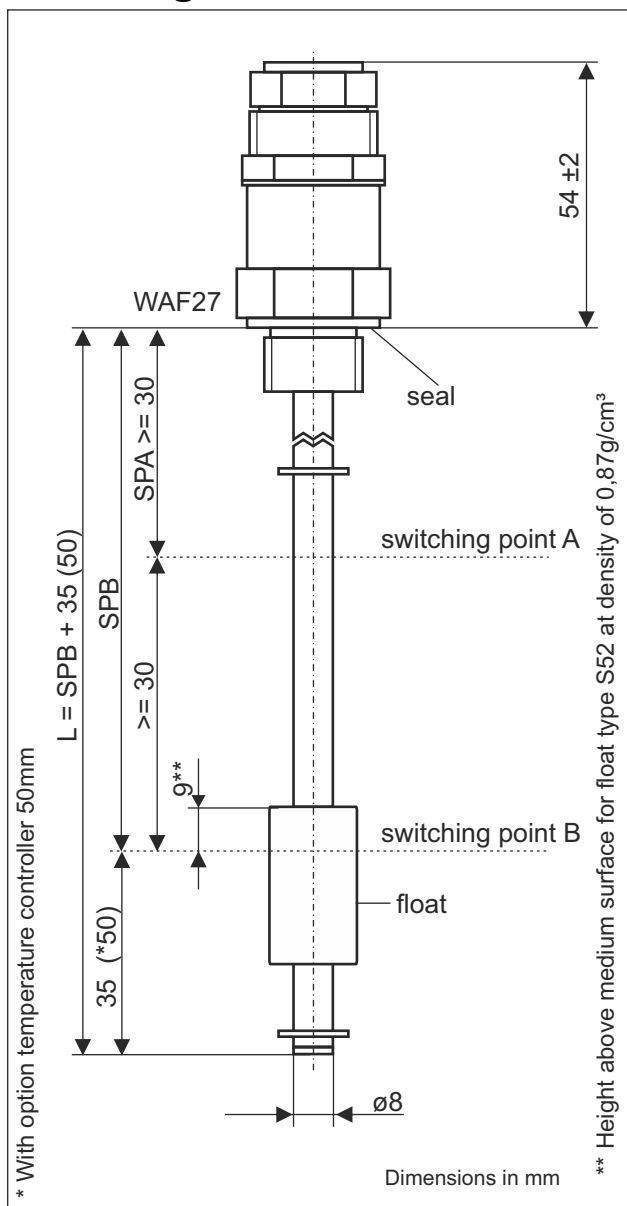
Connection:	terminal connection 1,5mm <sup>2</sup> in the housing, cable entry at the housing M16x1,5, housing material aluminium, colour grey
Mounting:	thread M 22x1,5, material aluminium
Mounting position:	vertical ± 10°
Seal:	material NBR
Sliding tube:	ø8mm material brass or stainless steel, length and material according to customer specification
Float:	ø17,8x32mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching points max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

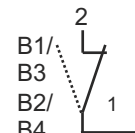
## Mini float switch M60...13.01.8

### with plug-type connector 6-pole

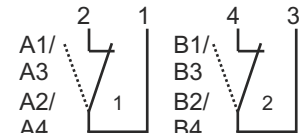
### Mounting M20x1,5



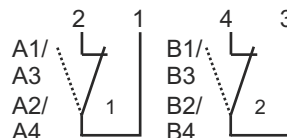
#### Example for Terminal plan



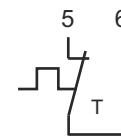
1 x n.o. contact/n.c. contact  
 E.g. order key:  
 M60.1.B1.80.13.01.8



2 x n.o. contact/n.c. contact  
 E.g. order key:  
 M60.2.A2.B4.60.200.13.01.8



2 x n.o. contact/n.c. contact  
 E.g. order key::  
 M60.2.A2.B4.60.200.13.01.8.700



1x temperature switching

[Back to product group](#)

#### Technical data:

Connection:	6 pole + PE connector acc. DIN EN 175201-804 (DIN 43651), material PET
Mounting:	thread M 20x1,5, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function Bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

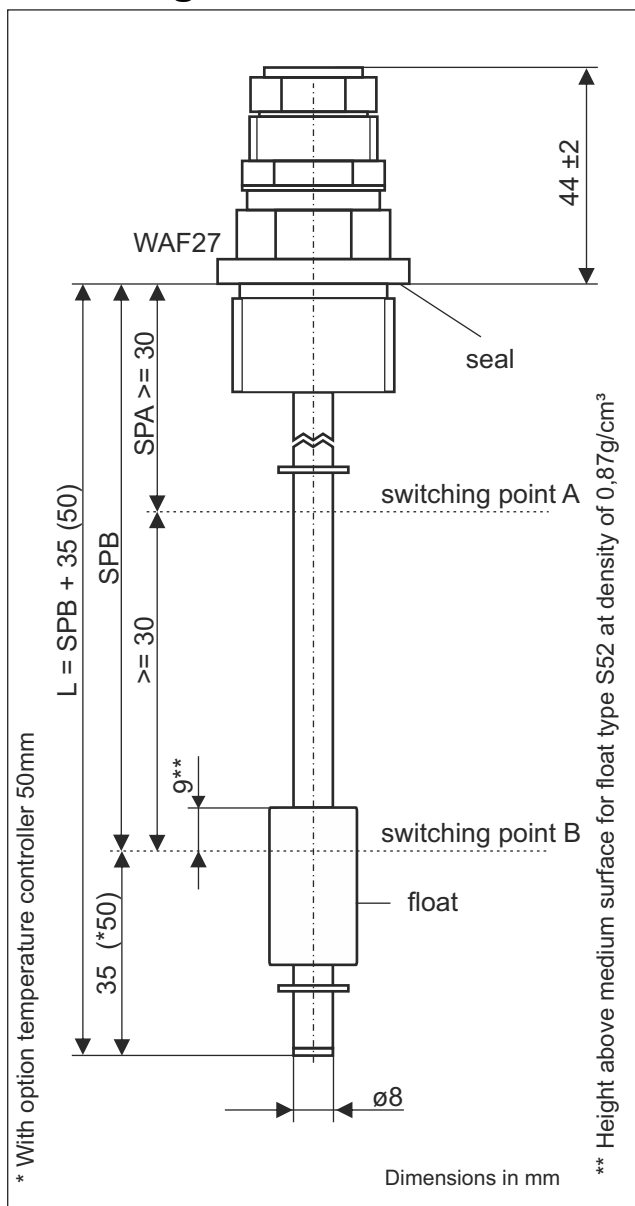


# Data sheet / product information

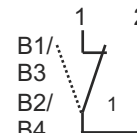
## Mini float switch M60...13.22.8

### with plug-type connector 6-pole

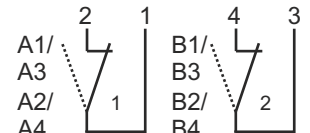
### Mounting 1"



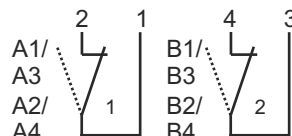
### Example for Terminal plan



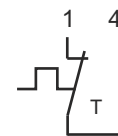
1 x n.o. contact/n.c. contact  
E.g. order key:  
M60.1.B1.80.13.22.8



2 x n.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.13.22.8



2 x n.o. contact/n.c. contact  
E.g. order key:  
M60.2.A2.B4.60.200.13.22.8.700



1x temperature switching

[Back to product group](#)

### Technical data:

Connection:	6 pole + PE connector acc. DIN EN 175201-804 (DIN 43651), material PET
Mounting:	thread 1", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material brass or stainless steel, length and material according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function Bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching points 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

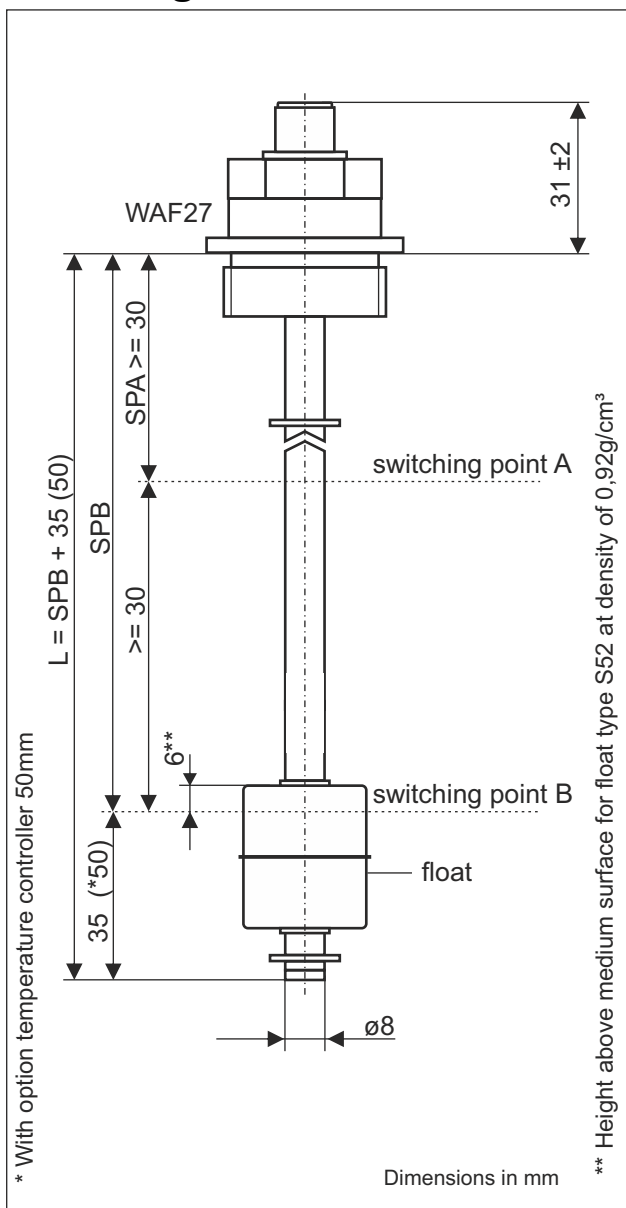
Hotline +49 (0)7389 90920 - eMail [info@engler-msr.de](mailto:info@engler-msr.de)

# Data sheet / product information

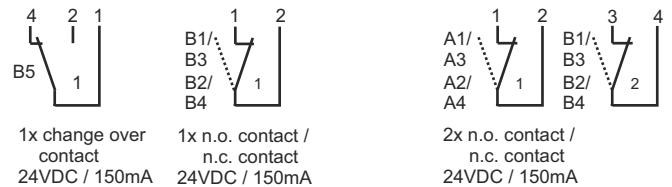
## Mini float switch M60.2...10.2

### in stainless steel with plug-type connector M12

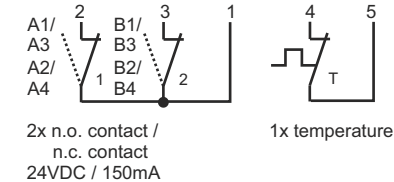
### Mounting 1"



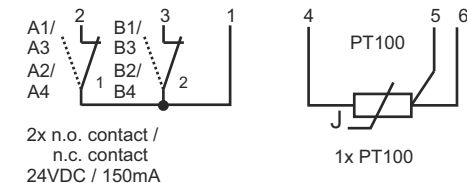
#### Example for terminal diagrams 4-pole



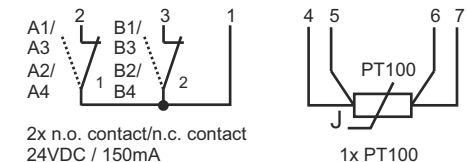
#### Example for terminal diagrams 5-pole



#### Example for terminal diagrams 6-pole



#### Example for terminal diagrams 8-pole



[Back to product group](#)

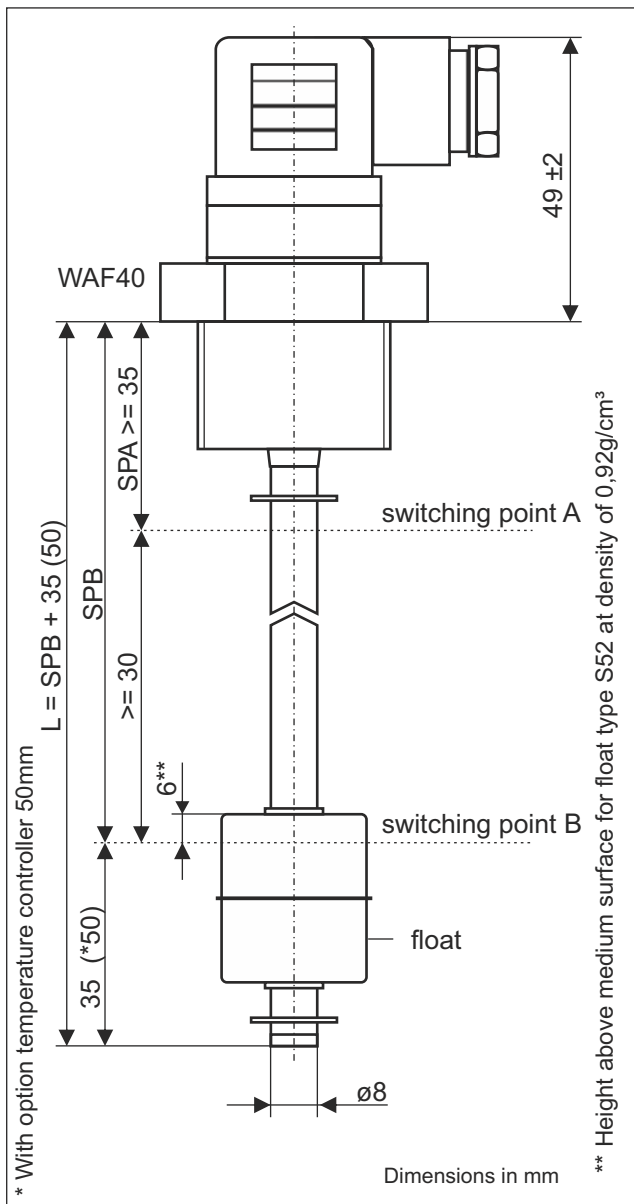
#### Technical data:

Connection:	plug-type connector M12x1, 4-pole, 5-pole, 6-pole or 8-pole according to customer specification
Mounting:	thread 1", material stainless steel
Mounting position:	vertical ± 10°
Sliding tube:	ø8mm material stainless steel, length according to customer specification
Float:	ø17,8x32mm, material stainless steel, type S12
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

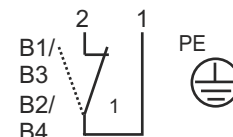
## Data sheet / product information

### Mini float switch M60.2...01.10.2

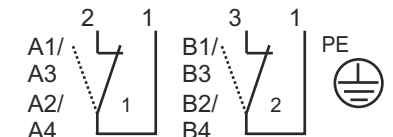
### in stainless steel with plug-type connector 3-pole DIN EN 175301-803 mounting 1"



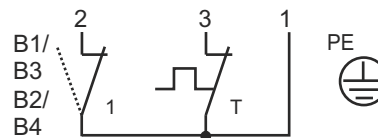
#### Example for terminal diagrams



1 x n.o./n.c. contact  
 e.g. Order key:  
 M60.2.B1.80.01.10.2



2 x n.o./n.c. Contact  
 e.g. Order key:  
 M60.2.A2.B4.60.200.01.10.2



1 x n.o./n.c. contact 1x temperature switch  
 e.g. Order key:  
 M60.2.B4.200.01.10.2.700

[Back to product group](#)

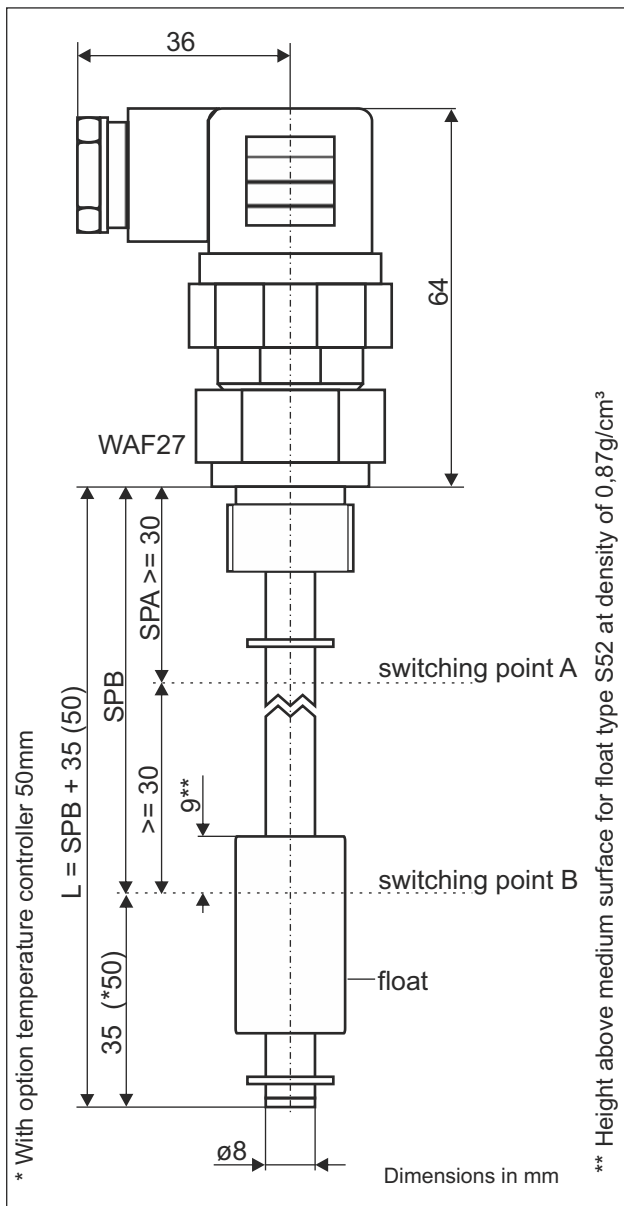
#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1", material stainless steel
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\phi 8$ mm material stainless steel, length according to customer specification
Float:	$\phi 17,8 \times 32$ mm, material stainless steel, type S12
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching point 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

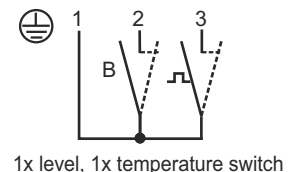
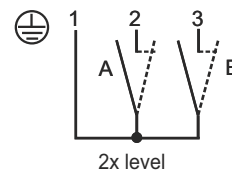
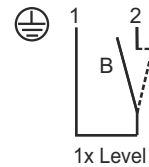
## Data sheet / product information

### Mini float switch M60...01.27.8

### in stainless steel with plug-type connector 3-pole DIN EN 175301-803 mounting 1/2"



#### Terminal diagrams 3-pole + PE DIN EN 175301-803 (further connection alternatives upon requests)



Comment: Contacts possible either as n.o. contact or n.c. contact

[Back to product group](#)

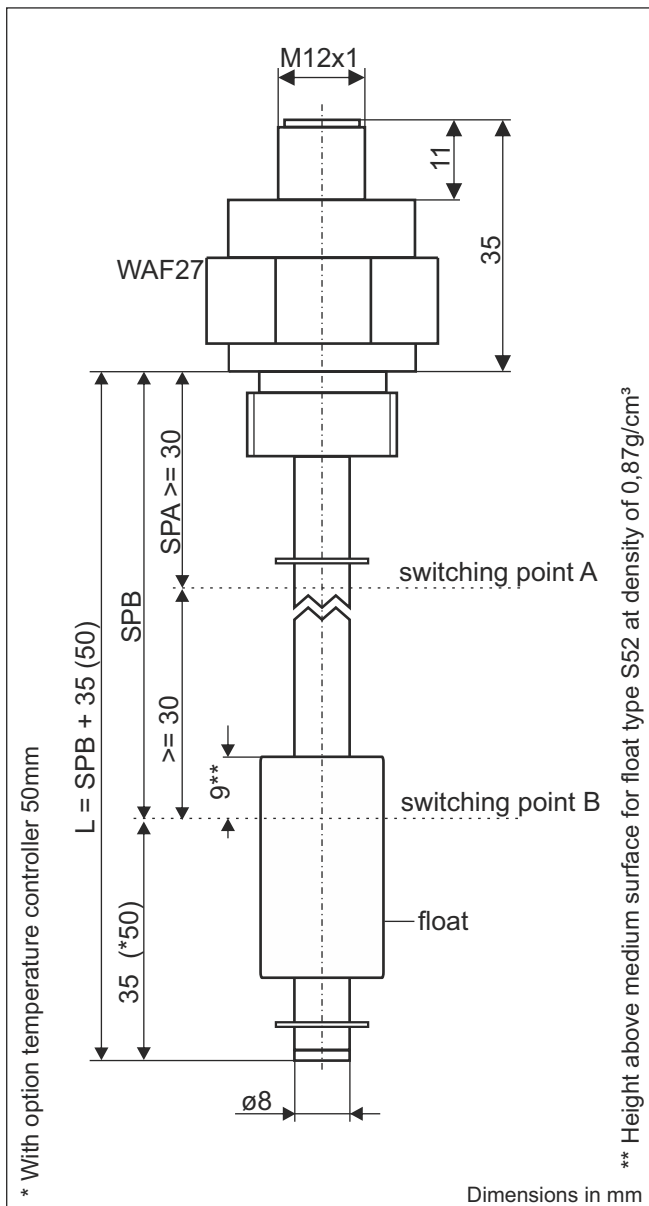
#### Technical data:

Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1/2", material stainless steel
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material stainless steel, length according to customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts, function bistable
Switching voltage:	max. 230VAC for one switching point; for two switching point max. 24VDC
Switching current:	1A for one switching point; for two switching point 150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65

# Data sheet / product information

## Mini float switch M60...02.27.8 / M60...08.27.8

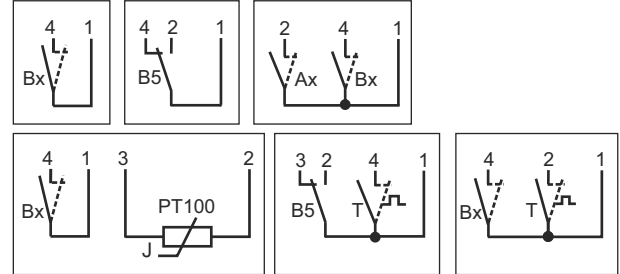
### in stainless steel with plug-type connector M12 4-pole / 5-pole mounting 1/2"



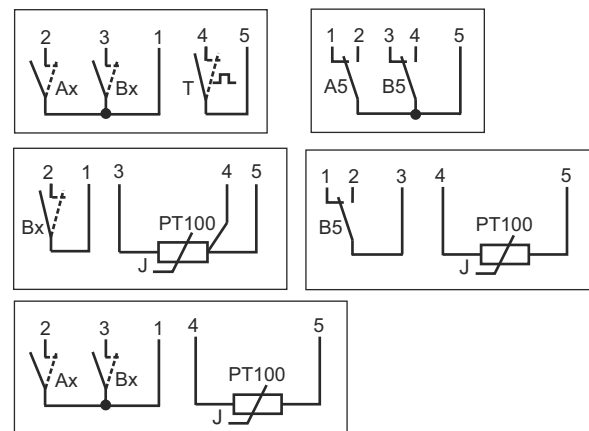
#### Terminal diagrams

##### M12 4pole (02)

Note: contacts are as normally open or normally closed possible!



##### M12 5pole (08)



[Back to product group](#)

#### Technical data:

Connection:	plug-type connector M12x1 4- and 5 -pole, material TPU
Mounting:	thread 1/2", material stainless steel
Mounting position:	vertical $\pm 10^\circ$
Tube:	$\varnothing 8$ mm material stainless steel, material and length acc. customer specification
Float:	$\varnothing 17,8 \times 32$ mm, material NBR, type S52
Reed contact:	max. 2x reed contacts n.o. contacts / n.c. contacts or 2x change over contacts, function bistabile
Switching voltage:	max. 24VDC
Switching current:	150mA
Temperature switching:	optional, power rating see page 16
Temperature sensor:	optional, power rating see page 16
Pressure:	max. 1 bar
Operating temperature:	-20°C to 100°C in medium, -15°C to 70°C above mounting
Protection rating:	IP 65