

# Data sheet

## Mini float switch in stainless steel with plug connector 3-pole

### Order key

M60. 2 . A1 . B4 . 100 . 200 . 01 . 01 . 8 . 600

Type mini float switch M60

Material tube  
stainless steel tube ø8 --2

Function switching point A 24V/150mA

closes on level rise -- A1  
opens on level rise -- A2  
closes on level drop -- A3  
opens on level drop -- A4

Function switching point B 24VDC/150mA  
230VAC/1A (with 1 switching point)

function:  
closes on level rise -- B1  
opens on level rise -- B2  
closes on level drop -- B3  
opens on level drop -- B4

**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

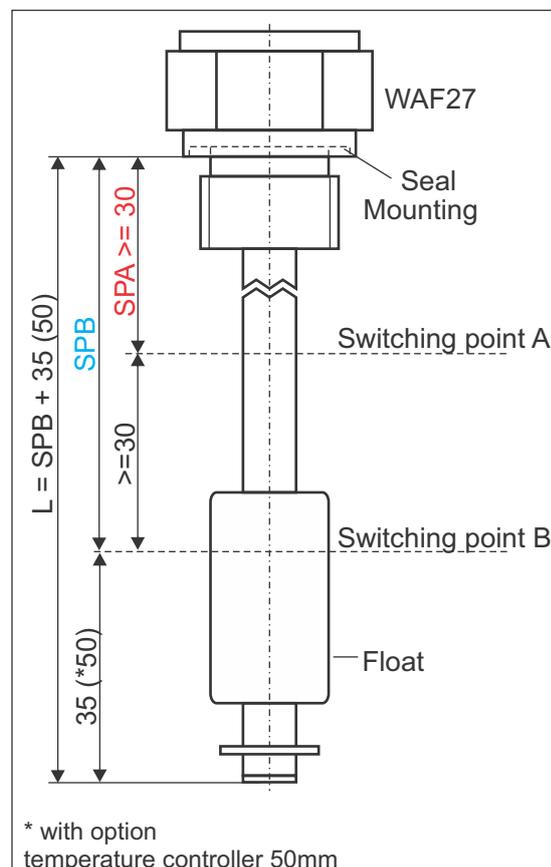
Switching point SPB  
in mm according to customer's indication

Optional  
Temperature switch:  
Technical data  
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

Float  
ø17,8x32mm material NBR --- 8

Mounting material alu / Pa6  
screwed connection 1/2" ----- 27  
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

Connection --- 01  
3pol + PE DIN EN 175301-803

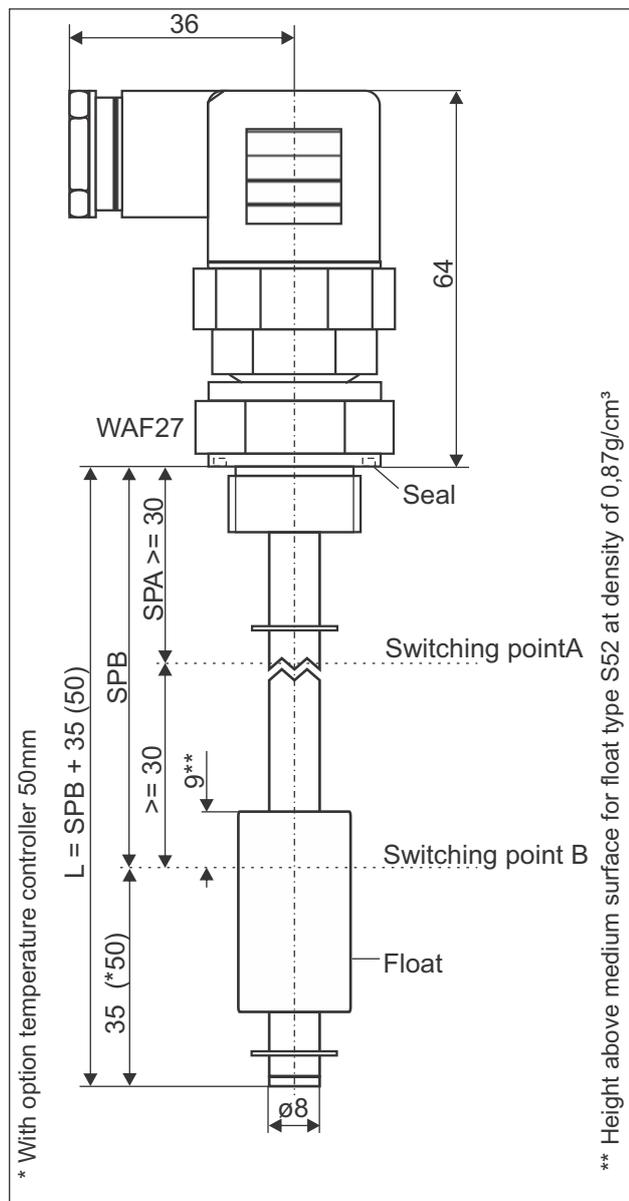


## Data sheet

### Mini float switch in stainless steel with plug connector 3-pole

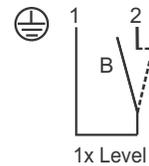
Type: M60...01.27.8

Mounting 1/2"

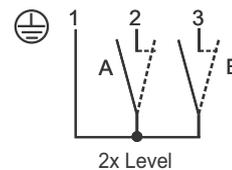


#### Terminal diagrams 3-pole + PE DIN EN 175301-803

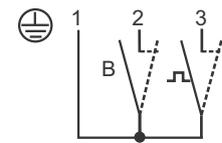
(further connection alternatives upon requests)



1x Level



2x Level



1x Level, 1x Temperature switch

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

#### Technical data:

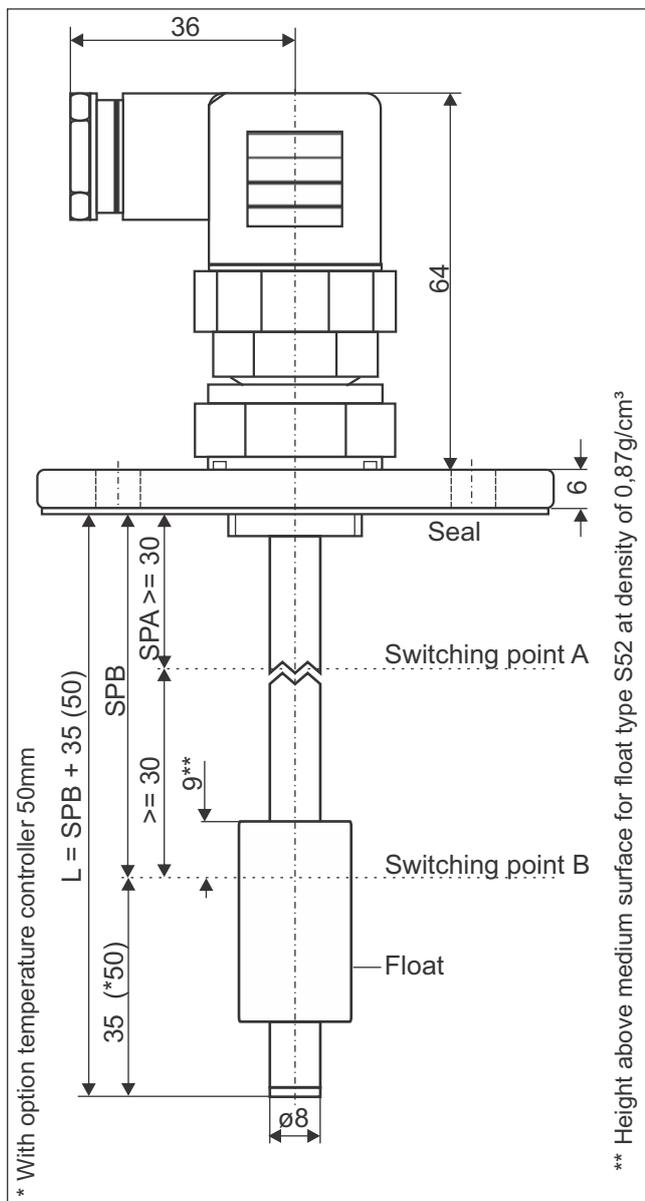
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1/2", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material accto customer specification
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, see performance data
Temperature sensor:	optional, see performance data
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

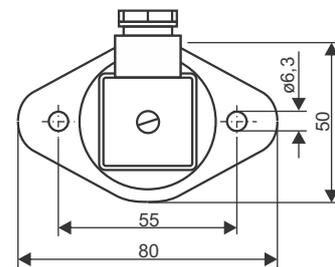
## Mini float switch in stainless steel with plug connector 3-pole

Type: M60...01.23.8

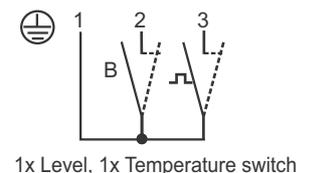
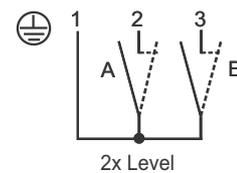
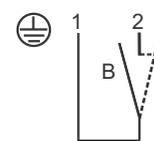
Mounting oval flange



### View



### 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

### Technical data:

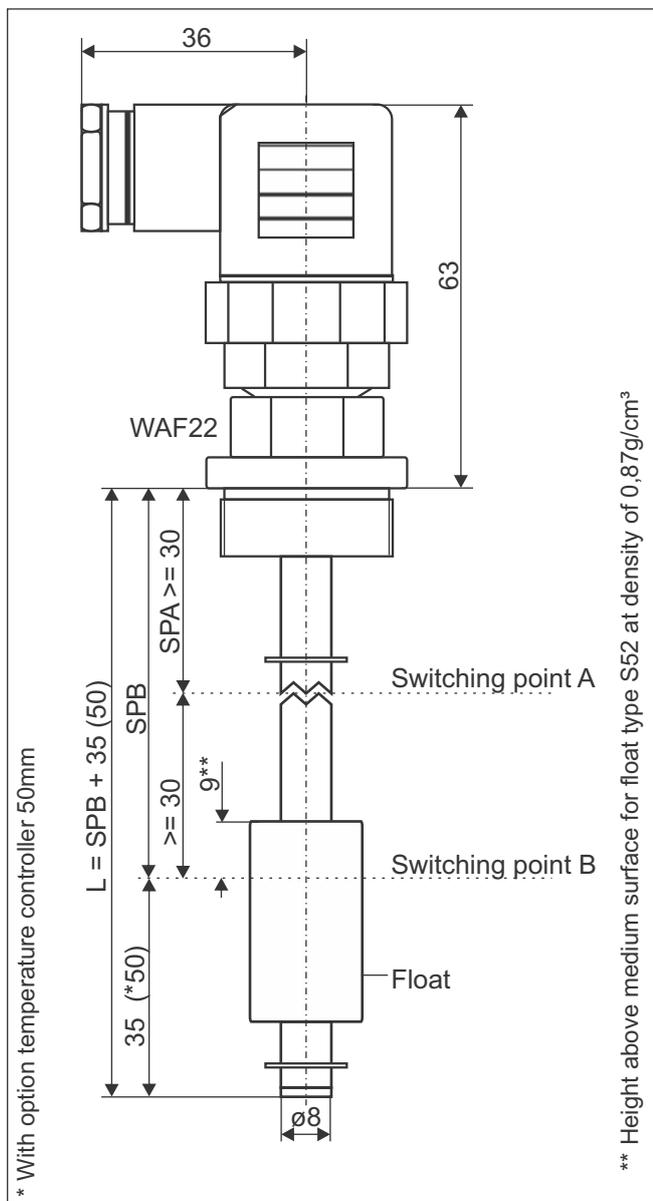
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	oval flange, LK 55mm, material makrolon
Mounting position:	vertical $\pm 10^\circ$
Seal:	flat seal, material NBR
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. to customer 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, see performance data
Temperature sensor:	optional, see performance data
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

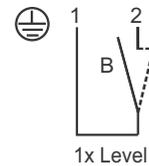
## Mini float switch in stainless steel with plug connector 3-pole

Type: M60...01.13.8

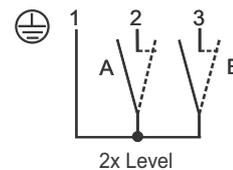
Mounting 3/4"



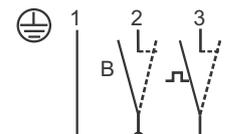
### Terminal diagrams 3-pole + PE DIN EN 175301-803 (further connection alternatives upon request)



1x Level



2x Level



1x Level, 1x Temperature switch

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

### Technical data:

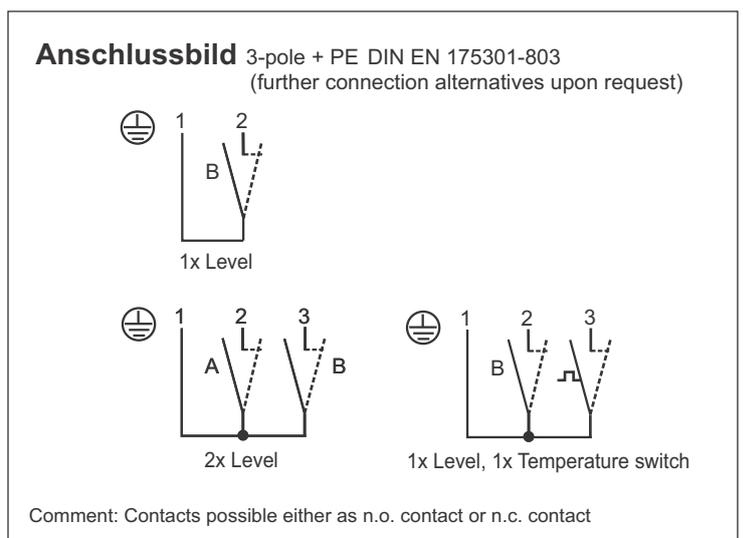
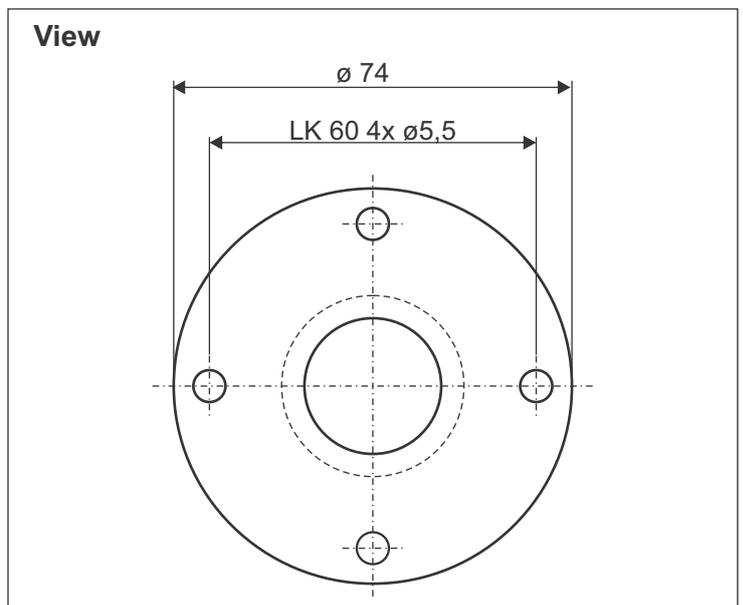
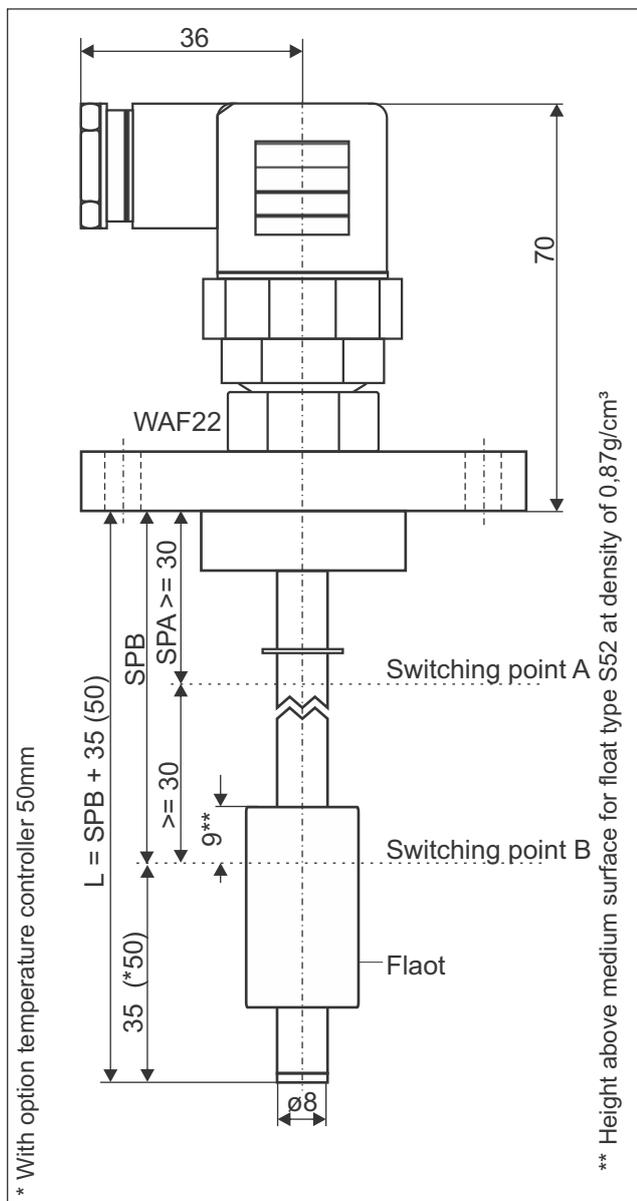
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 3/4", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. to customer specification
Float:	$\varnothing 17,8 \times 32$ 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, see performance data
Temperature sensor:	optional, see performance data
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

## Mini float switch in stainless steel with plug connector 3-pole

Type: M60...01.46.8

Mounting round flange



### Technical data:

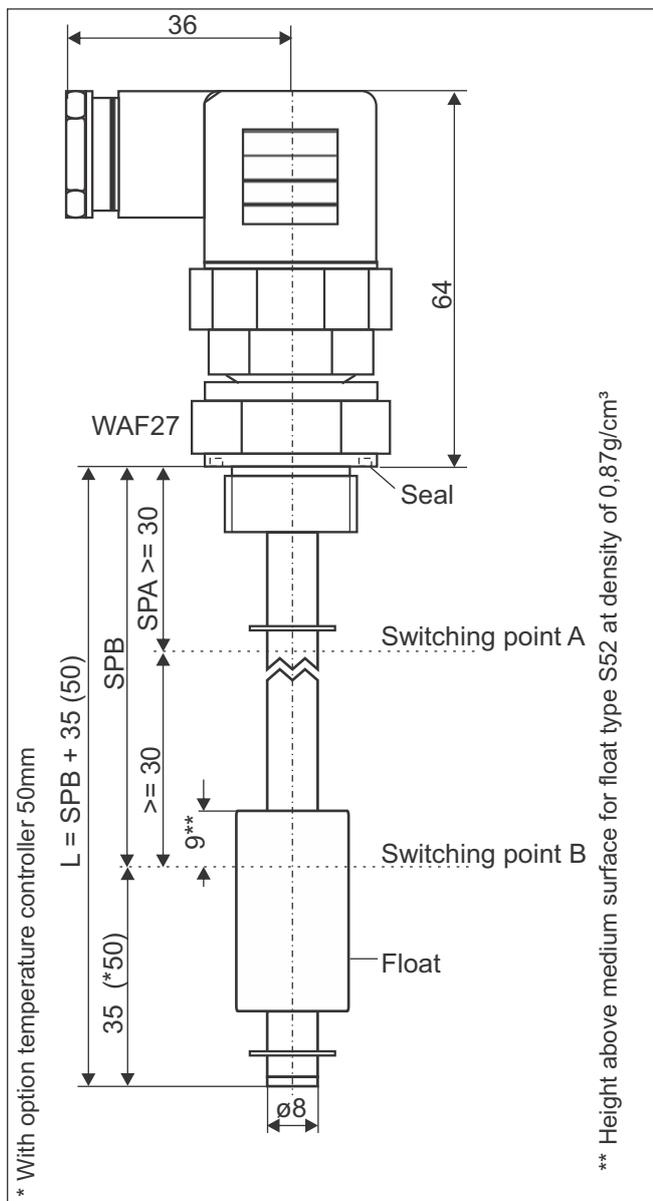
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	round flange AD 74mm, LK 60mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. to customer specification
Float:	$\varnothing 17,8 \times 32$ 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, see performance data
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

## Mini float switch in stainless steel with plug connector 3-pole

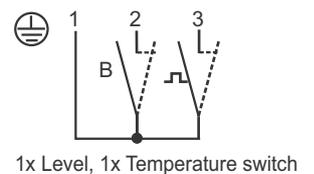
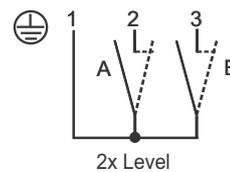
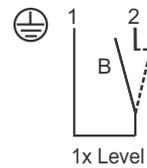
Type: M60...01.01.8

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

### Technical data:

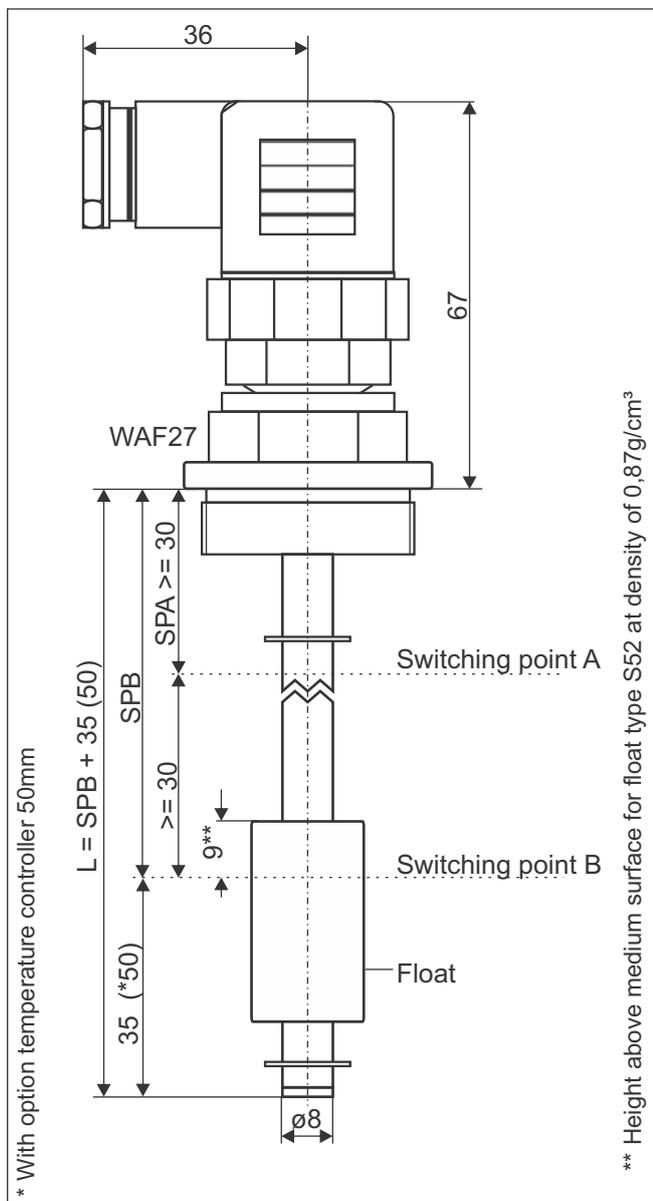
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M20x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. to customer 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, see performance data
Temperature sensor:	optional, see performance data
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

## Mini float switch in stainless steel with plug connector 3-pole

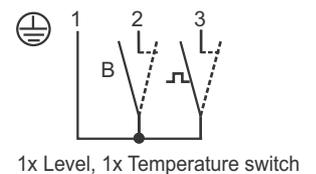
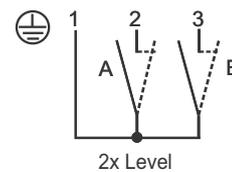
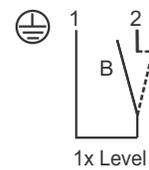
Type: M60...01.22.8

Mounting 1"



### 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

### Technical data:

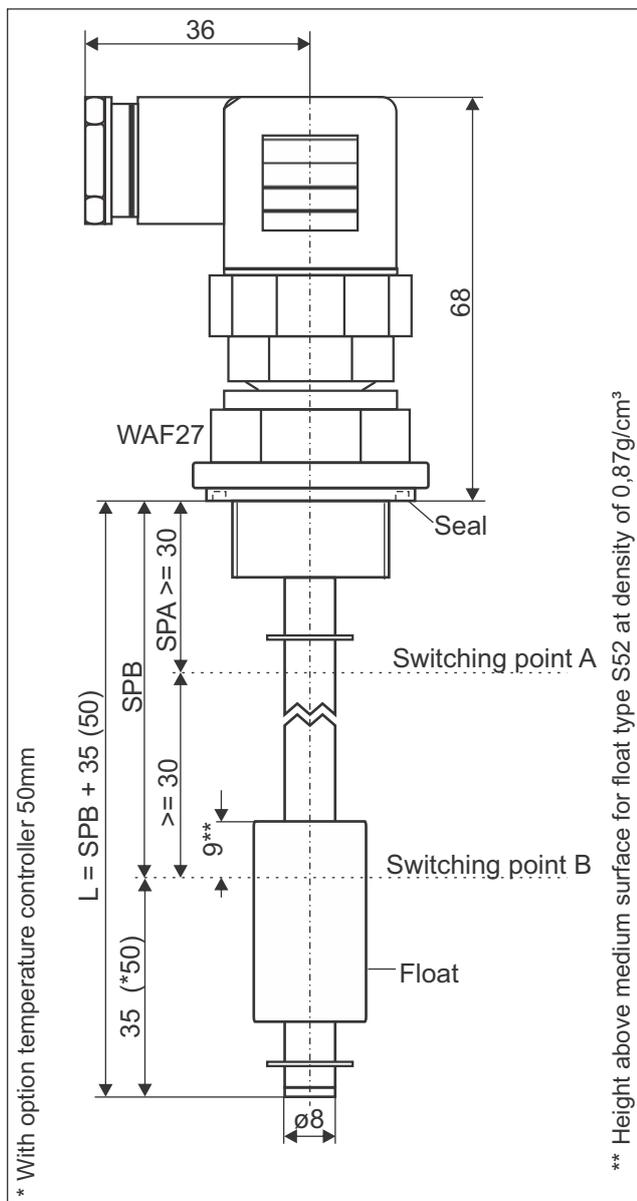
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread 1", material aluminium
Mounting position:	vertical $\pm 10^\circ$
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. to customer specification
Float:	$\varnothing 17,8 \times 32$ 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, see performance data
Temperature sensor:	optional, see performance data
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

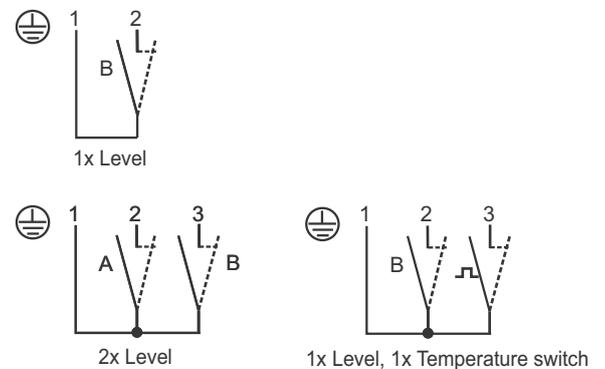
## Mini float switch in stainless steel with plug connector 3-pole

Type: M60...01.33.8

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

### Technical data:

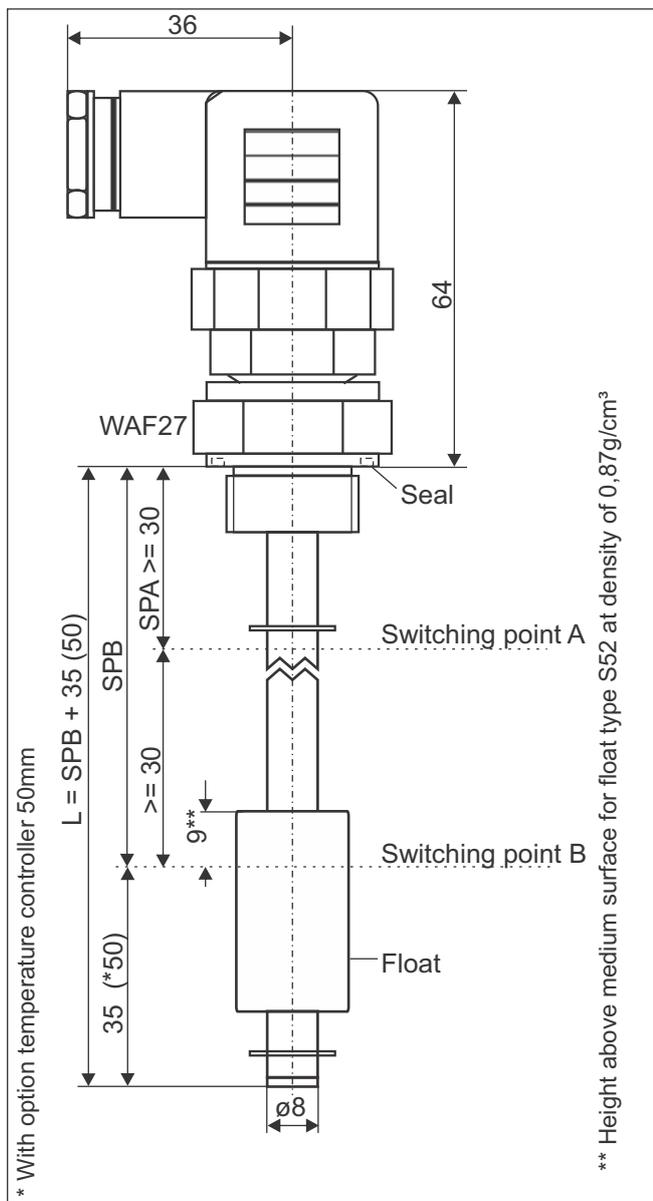
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M24x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	O-ring $\varnothing 26 \times 2$ , material NBR
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc. 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, see performance data
Temperature sensor:	optional, see performance data
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

## Mini float switch in stainless steel with plug connector 3-pole

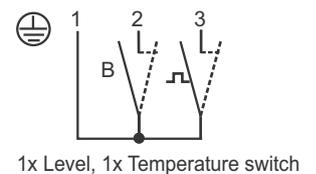
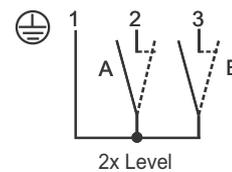
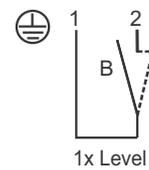
Type: M60...01.24.8

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

### Technical data:

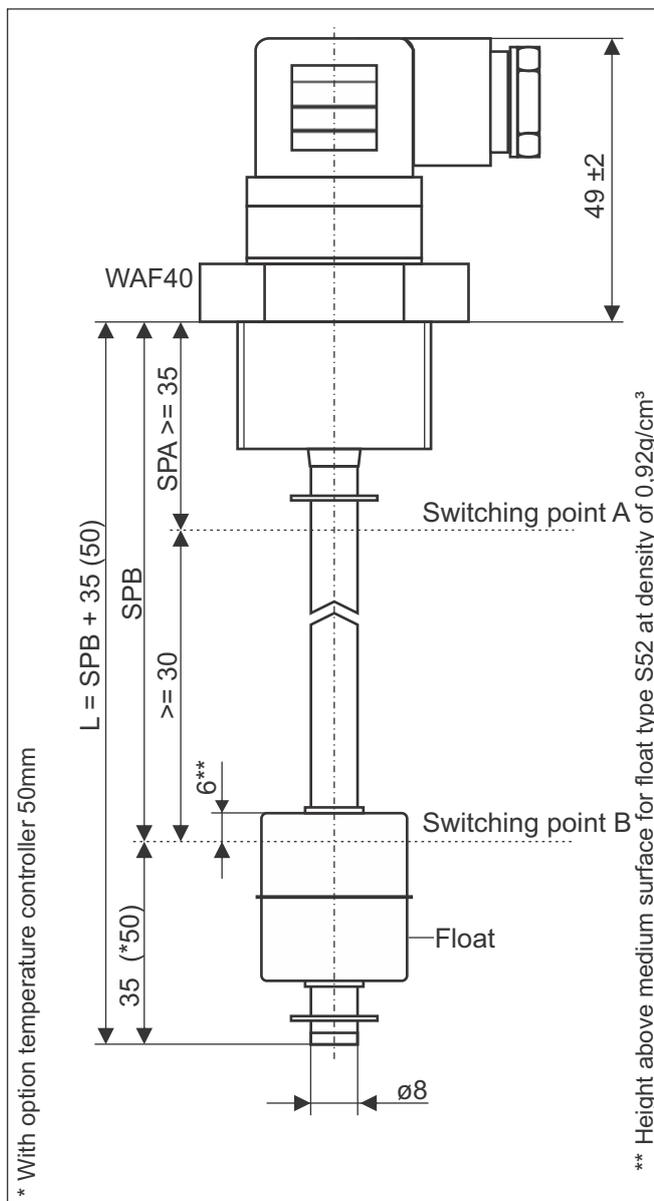
Connection:	3 pole + PE connector according DIN EN 175301-803 (DIN 43650), material PA
Mounting:	thread M22x1,5mm, material aluminium
Mounting position:	vertical $\pm 10^\circ$
Seal:	profile seal, material NBR
Sliding tube:	$\varnothing 8$ mm material stainless steel, length and material acc to customer 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, see performance data
Temperature sensor:	optional, see performance data
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

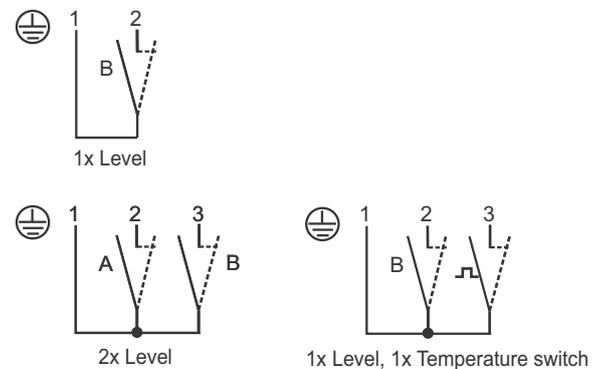
## Mini float switch in stainless steel with plug connector 3-pole

Type: M60.2...01.10.2

Mounting 1"



### 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

### 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, see performance data
Temperature sensor:	optional, see performance data
Pressure:	max. 1 bar
Operating temperature:	$-20^\circ C$ to $100^\circ C$ in medium, $-15^\circ C$ to $70^\circ C$ above mounting
Protection rating:	IP 65

## Data sheet

# Mini float switch in stainless steel with plug connector 3-pole Optional Temperaturschalter, PT100 und PT1000

### Temperaturschalter:

Temperaturschaltpunkt Bereiche:

Schalttemperatur	Rückschalttemperatur	Schalttemperatur	Rückschalttemperatur
40°C±5K	≥ 27°C	95°C±5K	70°C±15K
45°C±5K	≥ 30°C	100°C±5K	70°C±15K
50°C±5K	≥ 33°C	105°C±5K	75°C±15K
55°C±5K	34-47°C	110°C±5K	75°C±15K
60°C±5K	35-52°C	115°C±5K	80°C±15K
65°C±5K	36-57°C	120°C±5K	85°C±15K
70°C±5K	38-60°C	125°C±5K	90°C±15K
75°C±5K	38-63°C	130°C±5K	95°C±15K
80°C±5K	55°C±15K	135°C±5K	100°C±15K
85°C±5K	60°C±15K	140°C±5K	105°C±15K
90°C±5K	65°C±15K	145°C±5K	105°C±15K

### Technische Daten:

Technik: Bimetall

Genauigkeit: ±5K

Schaltspannung: 230VAC - Anschluss 01, 10, 13

24VDC - Anschluss 02, 08, 09, 12, 17

Schaltstrom: 1A - Anschluss 01, 10, 13

150mA - Anschluss 02, 08, 09, 12, 17

### Temperatursensor PT100

PT100 2 Draht --- PT100

PT100 3 Draht --- PT103

PT100 4 Draht --- PT104

### Technische Daten:

Nennwiderstand: 100 Ohm bei 0°C

Toleranz: DIN EN 60751, Klasse B

Temperaturkoeffizient: TK = 3850ppm/K

Temperaturbereich: -20 bis 100°C

Selbsterwärmung: 0,4K/mW

### Temperatursensor PT1000

PT1000 2 Draht --- PT1000

PT1000 3 Draht --- PT1003

### Technische Daten:

Nennwiderstand: 1000 Ohm bei 0°C

Toleranz: DIN EN 60751, Klasse B

Temperaturkoeffizient: TK = 3850ppm/K

Temperaturbereich: -20 bis 100°C

Selbsterwärmung: 0,2K/mW