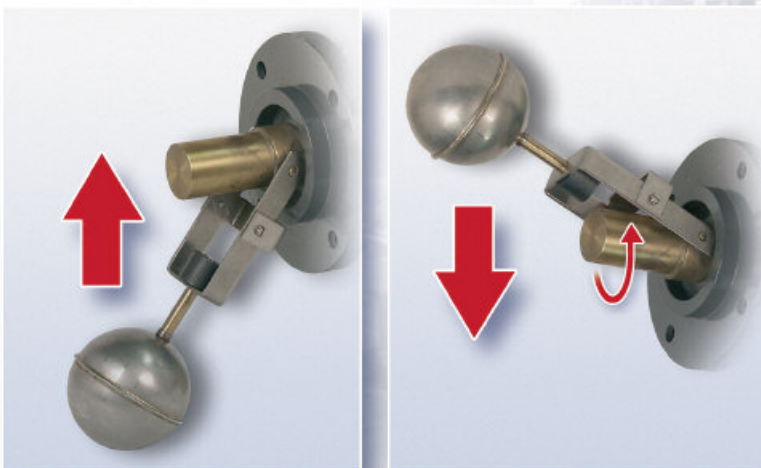




## Level and temperature switch iTNA20

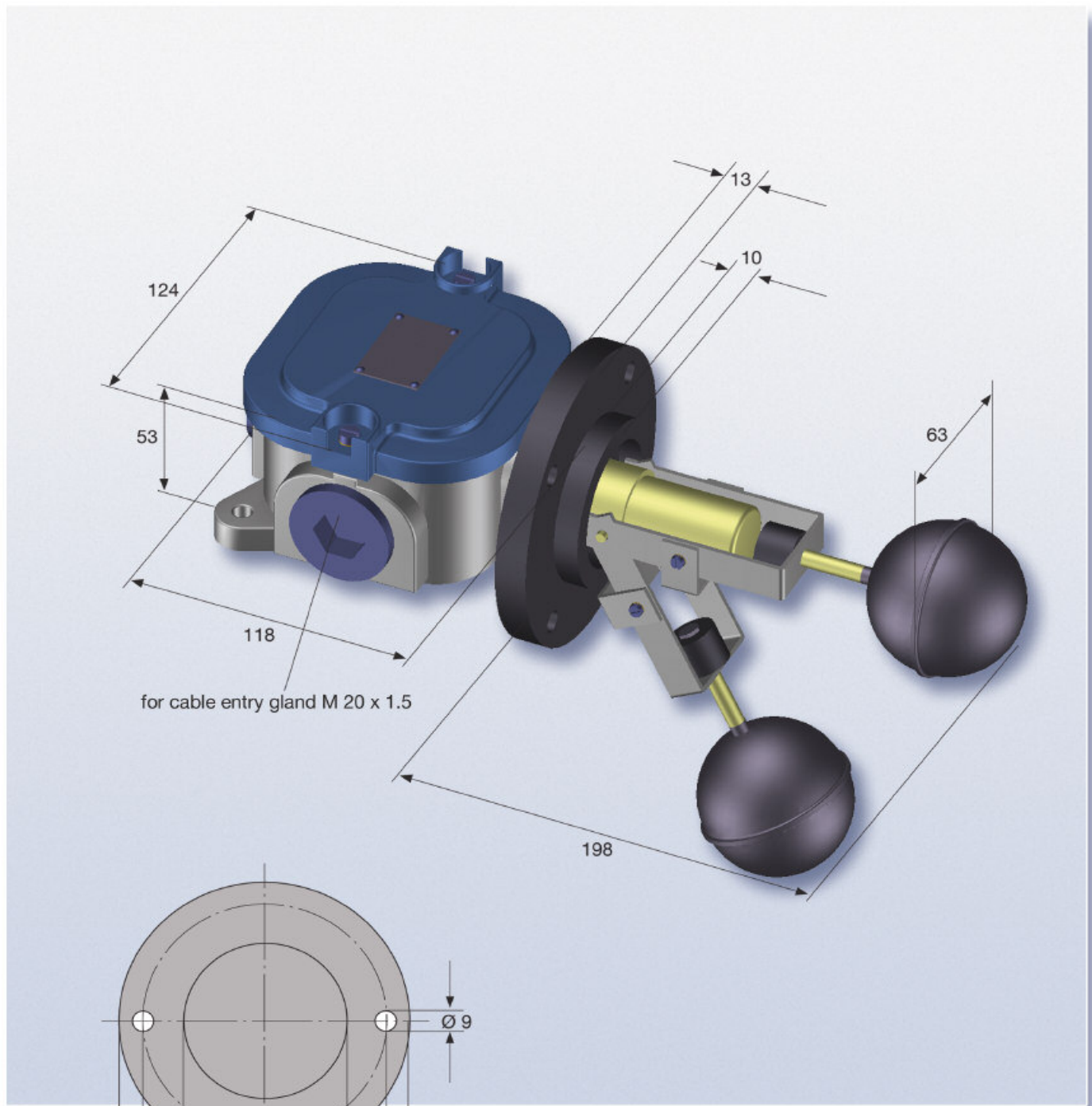
monitors level and temperature of fluids in open or closed unpressurized containers

- For attachment at the side of the container
- Minimum and maximum threshold functions optional at rising or falling level
- Largely unaffected by external influences
- Resistant to aggressive fluids
- Maintenance free as contacts are operated by magnets
- Type of protection: IP 54 according to EN 60529/IEC 529
- Ex-approval: I M2 EEx ia I intrinsically safe according to Directive 94/9/EC



Changing the monitoring function from a rising to a falling fluid level by turning the flange by 180

iTNA20





## iTNA20

### FUNCTION AND DESIGN

In combination with one or several thermal contact cartridges, the level and temperature switch includes the following two functions:

- monitoring that a specified fluid level is maintained
- monitoring the temperature of the fluid

The level is monitored on the basis of the magnet switch principle. The level and temperature switch is attached to the side of the container at the defined maximum or minimum fluid level point. If the fluid exceeds or falls short of the specified level the float will move the permanent magnet attached to it to the front of the contact pipe thus switching the reed contact over.

The reed contact installed in the contact pipe and completely sealed is designed as a pulse switch. The contact pipe is enclosed by an additional protection pipe which is provided with the attachment flange and the float. This design permits to also replace the functional unit of a filled container without removing the flange with the protection pipe and the float from the tank.

### Application

- The level and temperature switch is suitable for all applications where it is necessary to know the minimum or maximum fluid level in a container. It can thus be used as alert system or to control the fluid supplied or flowing off.
- The level contact is available as normally closed, normally open or change-over contact.
- For temperature monitoring, the thermal contact can be designed as normally closed or normally open contact.
- Other features are available upon request.



## iTNA20

### TECHNICAL DATA

Level contacts	latching type - normally open, normally closed, change-over contact
Operating life	> 10 <sup>9</sup> switching operations
Temperature range	-20 °C to 85 °C
Temperature contact	normally closed or normally open
Switching temperature	50 °C to 85 °C, other values upon request
Fitting position	horizontal
Type of connection	terminal housing
Type of protection	IP 54 according to EN 60529/IEC 529
Ex-approval	I M2 EEx ia I acc. to Directive 94/9/EC
Certificate number	BVS 03 ATEX E 312

### TYPE CODE AND ORDERING INFORMATION

<b>*TN A 20A K * 1 / ** **</b>	Response temperature [°C]
	contact type code: 10 ▶ normally open 20 ▶ normally closed
	1 level contact
	Contact type code: 4 ▶ latching type contact NO/NC 80 mm 5 ▶ latching type change-over contact 80 mm other contacts upon request
	Type of connection: K ▶ terminal
	Series
	Design acc. to ATEX
	Levelswitch
	i ▶ intrinsically safe w ▶ non-explosionproofed version

### TYPICAL EXAMPLE

<b>iTNA20AK41/2080</b>	<ul style="list-style-type: none"> <li>■ Intrinsically safe levelswitch without smoothing pipe acc. to ATEX</li> <li>■ Connection via terminal</li> <li>■ Latching type contact NO/NC 80 mm</li> </ul>	<ul style="list-style-type: none"> <li>■ 1 Levelcontact</li> <li>■ With response temperature at 80 °C</li> </ul>
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Subject to technical alterations · Version 08/12