

Type 8175 can be combined with...

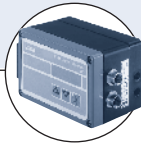


Type 2030



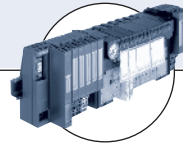
Type 2712

Continuous Control Valve



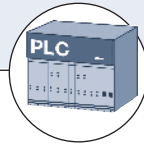
Type 6213

Continuous SIDE Control



Type 8644

Valve island with electronic I/O



PLC

- Level measurement up to 32.8 ft (10 m)
- Multi-language menu control
- Interference echo filter
- Extensive additional functions (simulation, Teach In, programmable tank shapes)

The Type 8175 is a non-contact filling level transmitter. It consists of an ultra-sonic sensor and an electronics module with a signal converter and a digital display. The sensor and the electronics module can be supplied as a

compact unit or as remote components. The remote electronics module is available in either wall or panel mounting. The units with the relay option make it possible to provide alarm messages and to automatically

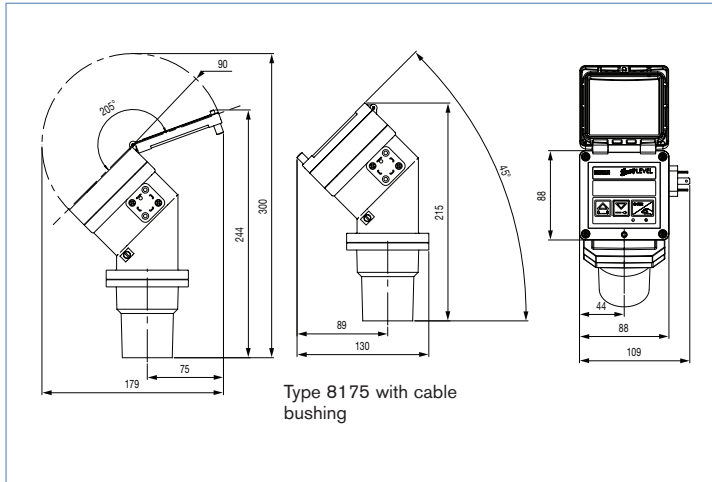
carry out filling and draining procedures. The unit is suitable for measurements in open or closed tanks for all liquids, and also for limited use with solids (depending on angle).

Technical data	
Measurement range	For liquids Compact version 1.0 ft to 32.8 ft (0.3 m to 10 m) Panel / wall mount 1.0 ft to 23.0 ft (0.3 m to 7 m)
Measurement accuracy	± 0.25% of the measurement range
Resolution	± 1/8" (3 mm)
Blocking distance	12" (30 cm) from transmitter base
Frequency	50 kHz
Pulse rate	8 pulses/s
Full beam width	16° conical
Operating voltage	18 to 32 V DC or 115/230 V AC
Current consumption	≤ 200 mA
Current flow	Sinking or sourcing
Output signal (invertable)	4 to 20 mA or 20 to 4 mA
Alarm display	22 mA
Relay output (als Option)	2 relays (3 A) freely adjustable
Load	≤1300 Ω at 32 V, ≤1000 Ω at 24 V, ≤550 Ω at 18 V
Safety switching in case of loss of power or signal	Relay contacts drop off (N/O contact function)
Electrical connection	NPT 1/2, M16 x 1.5 ¹⁾

¹⁾ M16 x 1.5 = Cable gland for cables with Ø 4 - 8 mm

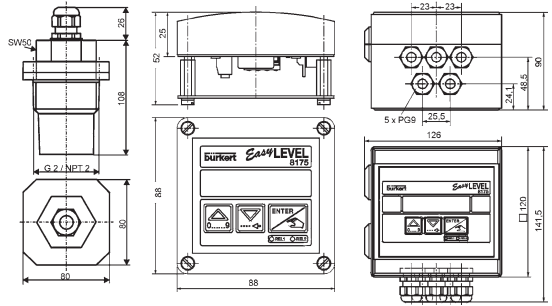
Technical data (continued)	
Display	8-digit LCD display, 9 mm high alphanumeric characters
Display of filling level	Selectable as cm, m, inch, feet
Display of volume	Selectable as l, m ³ , US gal or Imp gal
Operation	3 film buttons
Protection	Operating parts sealed by hinged cover in operation
Media temperature	-40 to +176 °F (-40 to +80 °C)
Ambient temperature	-4 to +140 °F (-20 to +60 °C)
Humidity	Max. 80% non condensated
Temperature compensation	Programmable, according to gaseous medium in the path of the pulses
Pressure range	≤ 29 psi (2 bar) at +77 °F (+25 °C)
Materials	
Sensor	PVDF
Transmitter body	
Compact and cabinet	PC with 20% glass-fibre
Field mounting version	ABS
Protecting class	IP 65
Mounting thread	NPT 2 or G 2

Dimensions [mm] and ordering charts



Type 8175 with cable bushing

Remote versions



Type 8170 ultrasonic sensor with 33 ft or 66 ft cable

Type 8175 transmitter electronics module for panel mounting

Type 8175 transmitter electronics module for wall mounting

Ordering chart for compact version

Mounting thread	Operating voltage	Relay outputs	Electrical connection	Item no.
NPT 2"	18 to 32 V DC	none	1/2" conduit plug (DIN 43650))	430 827
		2	1/2" conduit entry (1x)	430 828
		2	1/2" conduit entry (2x)	430 829
	115/230 V AC	none	1/2" conduit entry (2x)	430 830
2		1/2" conduit entry (2x)	430 831	

Ordering chart for transmitter electronics module

for panel and wall mount versions for coupling with the ultra-sonic sensor Type 8170

Version	Operating voltage	Relay outputs	Electrical connection	Item no.
Panel mount	18 to 32 V DC	none	terminals	436 567
		2	terminals	436 568
Wall mount	18 to 32 V DC	none	5 x M16 x 1.5	436 569
		2	5 x M16 x 1.5	436 570
	115/230 V AC	none	5 x M16 x 1.5	437 339
		2	5 x M16 x 1.5	437 340

Ordering chart for Type 8170 ultra-sonic sensor

for coupling with the transmitter electronics modules for panel and wall mount

Mounting thread	Length of the connecting cable to the transmitter	Item no.
NPT 2"	33 ft (10 m)	436 563
	66 ft (20 m)	436 564

Note

The panel and wall mount versions of the Type 8175 ultra-sonic transmitter allow a spatially separated layout of the sensor (on the part being measured) and the transmitter electronics (e.g., in the control cabinet or in a control room).

The Type 8170 sensor is fitted with a connecting cable to the transmitter in the cable lengths 33 or 66 ft. Compared to the compact unit, the application possibilities are extended as a result. In comparison to the compact version (measurement range up to 22.8 ft), the measurement range of the separate versions is only 23 ft.

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

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