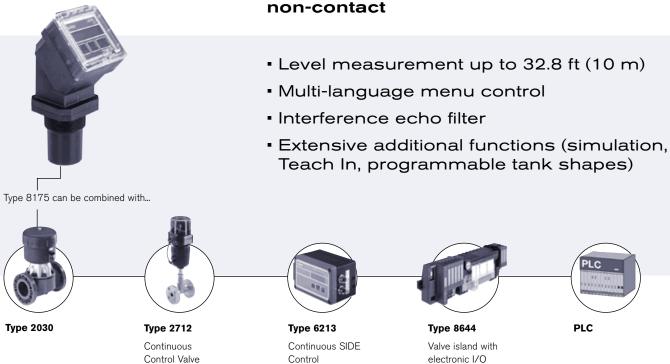
8175 Ultrasonic level transmitter, non-contact



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).

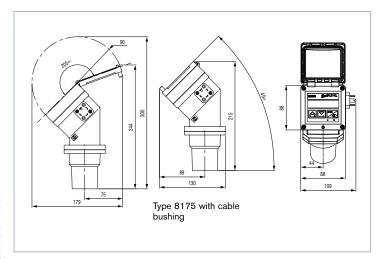
Technical data			
Measurement range	For liquids		
Compact version	1.0 ft to 32.8 ft (0.3 m to 10 m)		
Panel / wall mount	1.0 ft to 23.0 ft (0.3 m to 7 m)		
Measurement accuracy	± 0.25% of the measurement range		
Resolution	± 1/8" (3 mm)		
Blocking distance	12" (30 cm) from transmitter base		
Frequency	50 kHz		
Pulse rate	8 pulses/s		
Full beam width	8° 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	Relay contacts drop off		
loss of power or signal	(N/O contact function)		
Electrical connection	NPT 1/2, M16 x 1.5 ¹⁾		

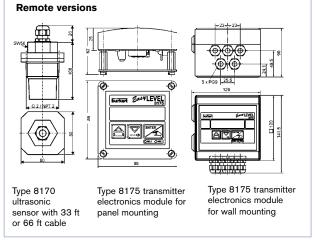
¹⁾ M16 x 1.5 =	Cable gland	for cables	with Ø 4 - 8 mm
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Technical data (continued)			
Display	8-digit LCD display,		
	9 mm high alphanumeric characters		
Display of filling level	Selectable as cm, m, inch, feet		
Display of volume	Selectable as I, m³, 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





Ordering chart for compact version				
Mounting thread	Operating voltage	Relay outputs	Electrical	ltem no.
NPT 2"	18 to 32 V DC	none	1/2" conduit plug (DIN 43650))	430 827
_			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	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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