HYCONTROL
LEVEL MEASUREMENT SOLUTIONS



MICROFLEX-D ULTRASONIC LEVEL TRANSMITTER

MICROFLEX-D ULTRASONIC TRANSMITTERS

The **Microflex-D** from **Hycontrol** is a compact, non-intrusive, loop-powered ultrasonic level transmitter for continuous measurement of liquids. Microflex-D does not compromise on quality and provides effortless and intuitive operation together with easy and flexible mounting.



Microflex-D's high chemical compatibility and measuring range of either 8 metres (**Microflex-D**) or 12 metres (**Microflex-D ER**) makes it appropriate for applications in a wide range of industries.

The Microflex-D emits an ultrasonic pulse which is reflected from the surface of the liquid being measured. The reflected signal is processed using specially developed software to enhance the correct signal and reject false echoes. An automatic sensitivity control allows the unit to dynamically adjust and improve the received echoes to achieve the best possible measurement accuracy.

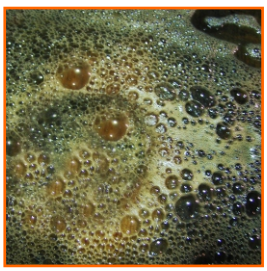
WIDE RANGE OF LIQUID-BASED APPLICATIONS

- River level
- Wet wells
- Inlet screens
- Tanks
- Sumps
- Pump stations
- Water towers
- Dams
- Basin levels
- Ink levels
- Diesel tanks
- Slurry levels
- Fuel storage
- Tide levels
- Chemical storage

MICROFLEX-D'S KEY FEATURES INCLUDE

- Two-wire 4-20 mA with HART connectivity
- Simple programming via built-in LCD display
- Ranges of up to 12 metres (40 ft)
- Non-contact measurement
- Low overall cost of ownership
- Ingress protection class IP67, NEMA 4x
- Adaptive sensitivity control
- Volume linearization with 32-point table
- Automatic temperature compensation
- Chemical-resistant PVDF transducer
- Simple installation





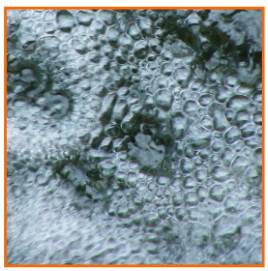
Waste



Oils



Water



Chemicals



Slurry

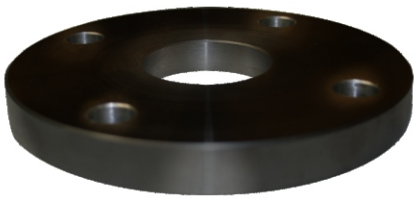
TECHNICAL DATA

TYPE	MICROFLEX-DB	MICROFLEX-DN	MICROFLEX-DBER	MICROFLEX-DNER
Maximum Range	8 metres (26 ft)		12 metres (40 ft)	
Operating Voltage	7 - 28VDC at the terminal (residual ripple no greater than 100mV)			
Power Consumption	500mW @ 24VDC			
Analog Output	4-20mA modulating output module with HART (Recommended 250 Ohm @ 24VDC)			
Analog Resolution	14 bits			
Communications	4-20mA with HART			
Blanking Distance	250 mm (10 inch)			
Frequency	50 KHz			
Resolution	1 mm (0.04")			
Electronic Accuracy	+/- 0.5% of maximum range		+/- 0.25% of maximum range	
Operating Temperature	-40°C to 60°C			
Maximum Operating Pressure	-0.5 to 3 bar (0 - 44 PSI)			
Automatic Temperature Compensation	Yes			
Beam Angle	7°			
Materials	Transducer: PVDF Housing: Powder coated aluminium			
Display	4-line graphic display			
Keypad	4 keys = CAL, RUN, UP, DOWN			
Memory	>10 years data retention			
Enclosure Sealing	IP67			
Cable Entries	M20 cable glands			
Mounting	2" BSPT Thread	2" NPT Thread	2" BSPT Thread	2" NPT Thread
Typical Weight	1kg (2.2 pounds)			
Volume	Pre-set common vessel shapes 32 point programmable linearization table Requires PC connection with Vision System II software			

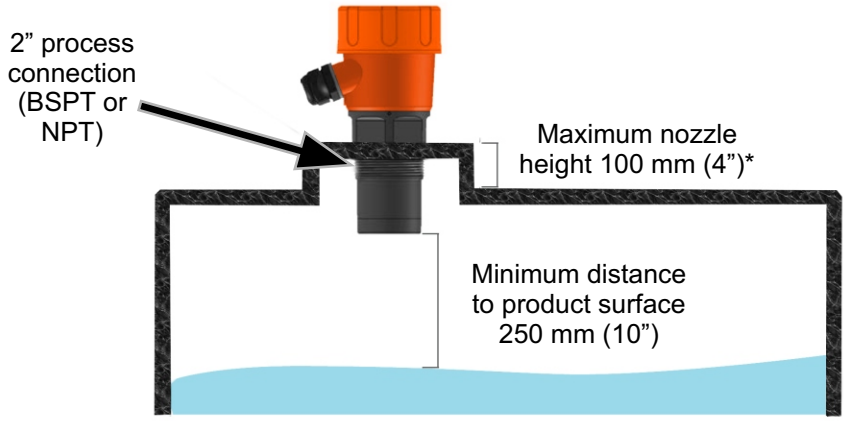
OPTIONAL ACCESSORIES

- 2" ANSI Flange for BSPT threaded units
- 2" ANSI Flange for NPT threaded units
- Minilink-MiniUSB - PC connector for Vision System II

Please consult a Hycontrol representative for flange order codes.

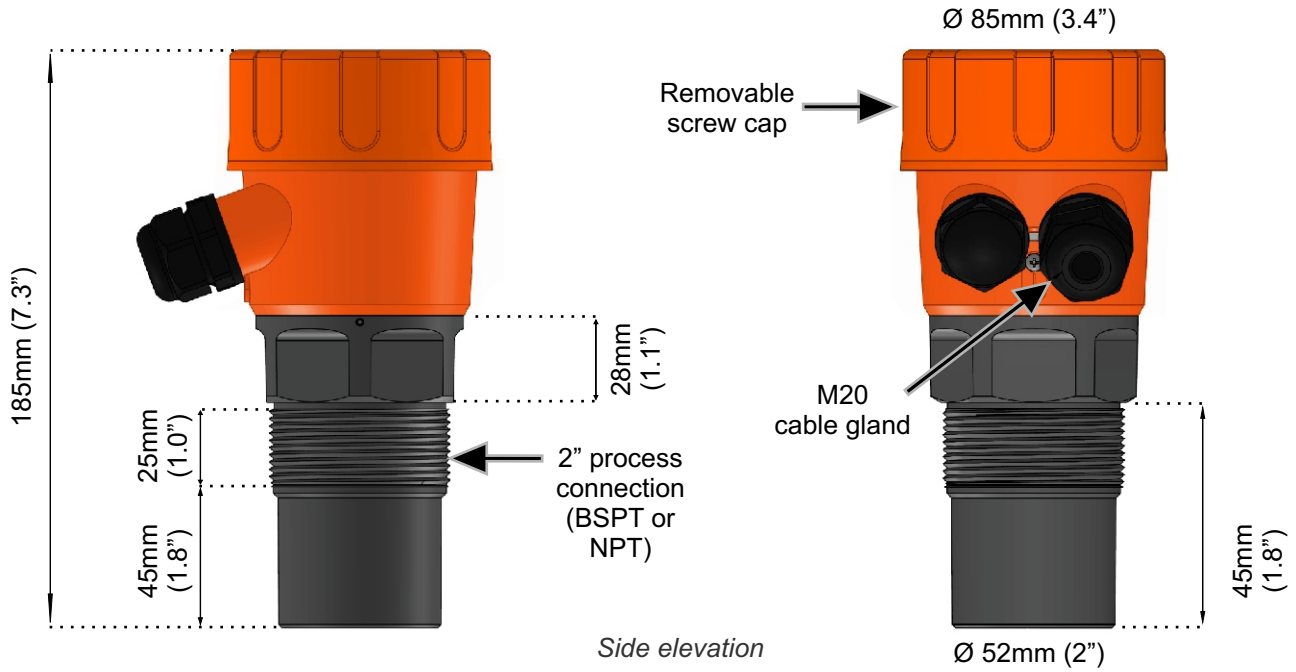


MOUNTING



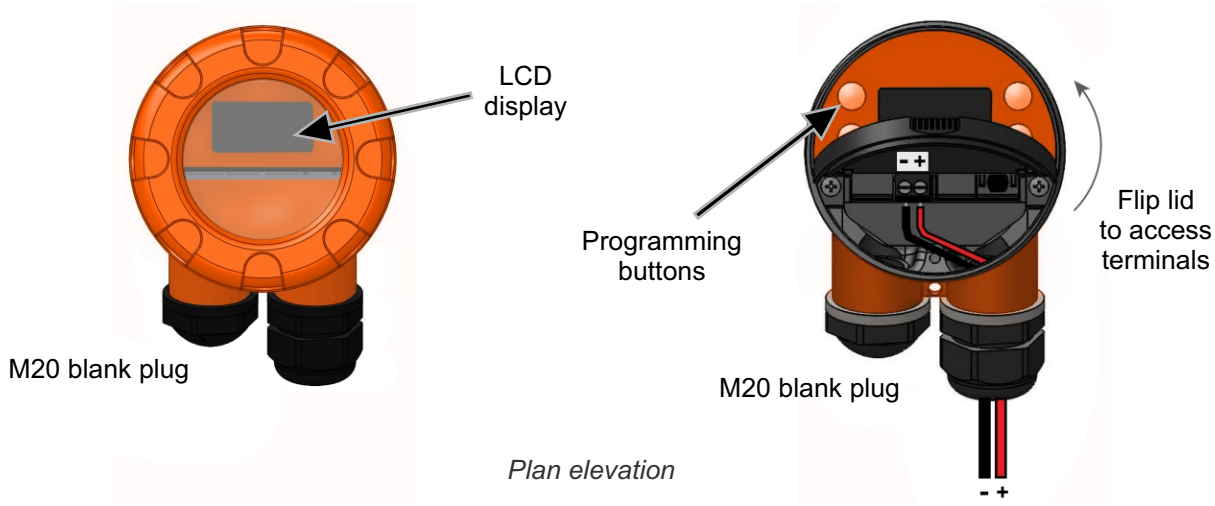
** Please note that nozzle heights exceeding this value may disrupt the transmitted signal and interfere with level measurement.*

DIMENSIONS



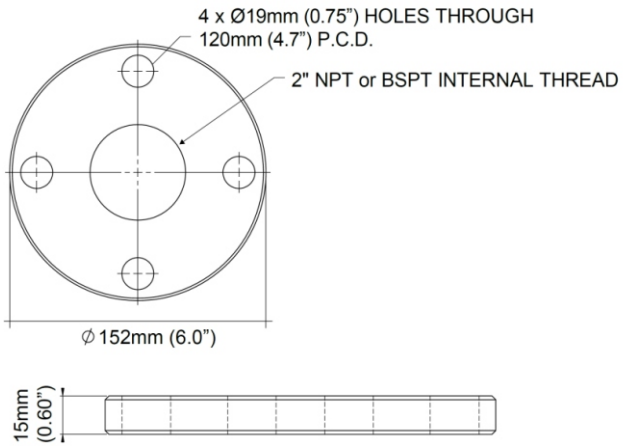
Side elevation

WIRING



Plan elevation

OPTIONAL FLANGE DIMENSIONS



HYCONTROL - THE COMPLETE LEVEL SOLUTION

Hycontrol has been at the forefront of level control and measurement technology for over thirty-five years, providing effective solutions for diverse applications across a wide range of industries ranging from quarrying to food; from nuclear power to chemical; and from animal feed to waste recycling. From our manufacturing base in Redditch, Worcestershire, we have been trusted to oversee thousands of applications across the UK and around the world.

At Hycontrol, we pride ourselves on providing a 'complete solution' service to our UK customers. We provide a turnkey solution for level equipment requirements, with the experience and skill to design, manufacture, install and maintain bespoke measurement and control systems that are crafted to suit the particular needs of each individual customer.

We understand the consequences of inaccurate or unreliable level systems, and therefore each Hycontrol installation is tailored precisely to match your application. Our goal is simple: to provide the best-engineered solution - *without compromise*.

With one of the widest ranges of level measurement technologies on the market including award-winning silo pressure safety systems and a patented range of foam detection and control equipment, backed up by a team of highly experienced engineers and technicians, Hycontrol is a leading force in the manufacture and supply of advanced level solutions.









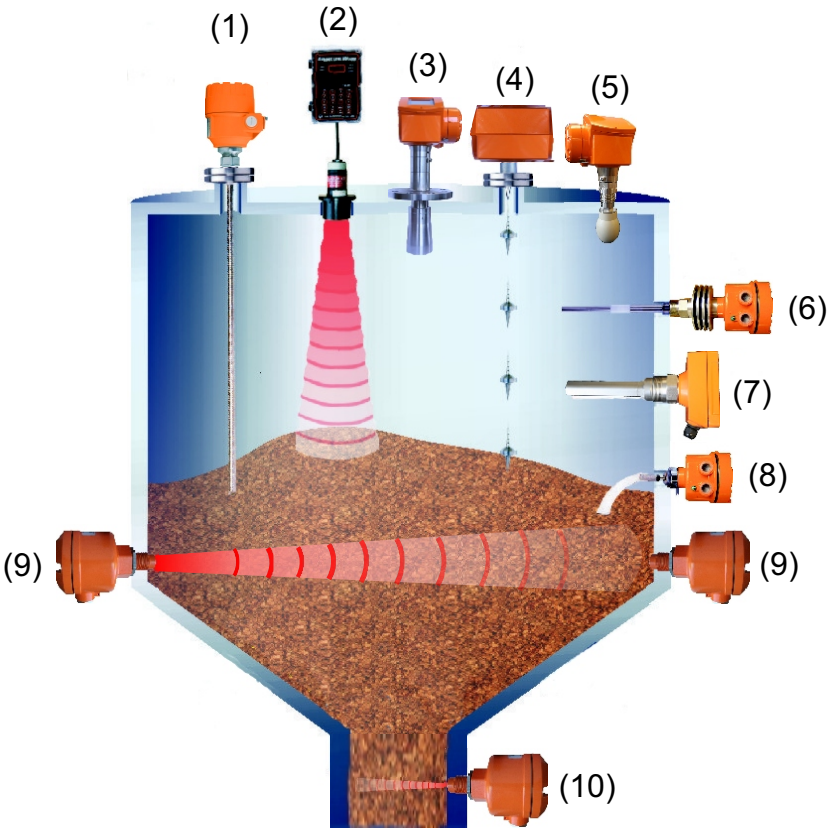




HYCONTROL LEVEL TECHNOLOGIES

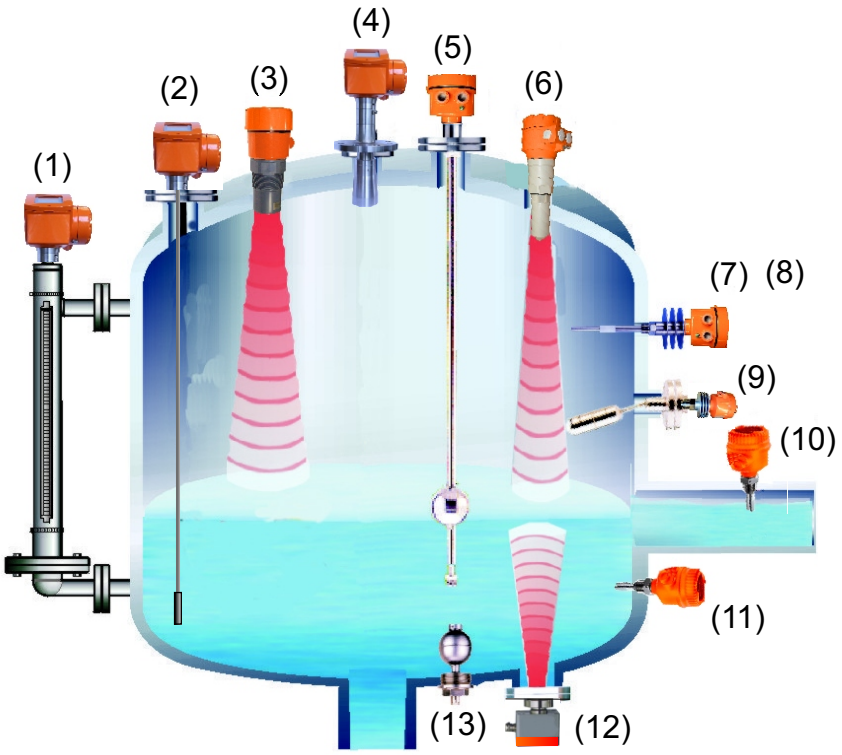
Product Range For Solids:

(1) TDR Radar for Solids
(2) 2-Wire Ultrasonic Transmitter
(3) FMCW 2-Wire Radar (Horn)
(4) Continuous Servo Level Indicator
(5) FMCW 2-Wire Radar (Drop)
(6) Capacitance Level Switch
(7) Vibrating Probe Level Switch
(8) Rotating Paddle Level switch
(9) Microwave Level Switch
(10) Doppler Flow Switch



Product Range For Liquids:

(1) Bypass Level Indicator with Radar
(2) TDR Radar for Liquids
(3) 2-Wire Ultrasonic Transmitter
(4) FMCW 2-Wire Radar (Horn)
(5) Magnetic Float Switches
(6) FMCW 2-Wire Radar (Corrosion-Proof)
(7) Capacitance Level Switch
(8) RF Admittance Level Switch
(9) Side Mounting 316 SS Float Switch
(10) Tuning Fork Level Switch
(11) Tuning Fork Level Switch
(12) Ultrasonic Through Wall
(13) Mini Magnetic Float Level Switch



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