# Expert 3400D

HYDROSTATIC LEVEL TRANSMITTER DIGITAL MODBUS

### General

Expert 3400D Hydrostatic digital level transmitter is designed with ceramic capacitive measuring system, a built-in breather tube and RS485 communication. This makes the transmitter perfect for low energy installations connected to a Chatter data logger or ModBus networks.

The transmitter is accurate and has an excellent long term stability. It is very robust and designed for applications in rough environments.

A major design feature is the programming facility using an USB-RS485 interface and a laptop computer. The user settings can be adjusted easily by using the free Expert Link software.

The design is without sharp edges which prevents particles from sticking to the housing or the diaphragm.

### Features

- Ceramic diaphragm 99,9% AL<sub>2</sub>O<sub>3</sub>, PPS glass reinforced body,
- RS-485 ModBus
- Surge resistance
- Accuracy better than  $\pm$  0.1 % and long term stability 0.1 % per year
- Field zero offset calibration
- PUR cable with steel braiding for high tensile strength
- Expert Link programming software (PC-Interface required)

#### Applications

- Aqua Culture
- Waste water
- Process water
- Sea water
- Chemical tanks with a range of acids, bases and ferric chloride.





# Expert 3400D Level Transmitter

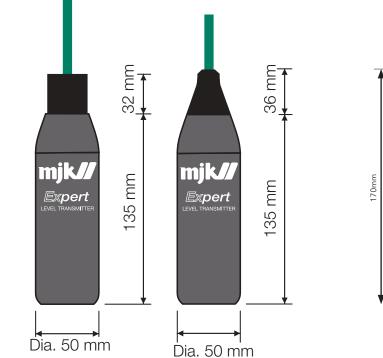


### Specifications

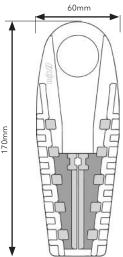
Expert 3400D Level Transmitter				
Nominal measuring range	0-1 m	0-10 m	0-100 m	0-300 m
Measuring principle	Ceramic capacitive, relative pressure Ceramic capacitive, Sealed gauge			
Max. overpressure	4 bar 10 bar 40 bar 40 bar			40 bar
Temperature range	-10 °C to 70 °C			
Temp. effect on, zero point	Better than ± 0.02 % / °C			
Temp. effect on, FS	Better than ± 0.01 % / °C			
Linearity / Stability	Better than ± 0.1 % FS / ± 0.2% FS			
Measurement accuracy $\mathbb O$	Better than ± 0.1 % FS @ +10 to 30 °C Better than ± 0.2 % FS @ full temperature range			
Long term stability	Better than ± 0.1 % FS per year			
Materials	Diaphragm: Ceramic 99.9% AL <sub>2</sub> O <sub>3</sub> Housing: PPS glass reinforced O-ring: Viton®			
Supply Voltage	10-28VDC			
Communication	RS485 Modbus			
Cable	$2 \times 0.5 \text{ mm}^2 + 5 \times 0.15 \text{ mm}^2$ , shielded, PUR insulation			
Cable length @	12 m	12 m	110 m	320 m
Enclosure	IP68, withstands a static pressure equal to max. overpressure.			
Compliance	CE directive: 89/336/EEC, 2004/108/EC, 1999/EC 61000-6-4, 61000-6-2, 60079-0,60079-11			

Can be delivered with other cable lengths on request.

Ø From factory
Ø Can be delivered with individual cable length on request







560914 Cable bracket for MJK Expert<sup>™</sup> (1 pcs. is delivered with each transmitter)

### Dimensions

# Expert 3400D Level Transmitter

### 3400D Connector

Wire color and connector pin coding for Expert 3400D with connector

Color	Pin	Connection
Yellow	D	RS 485 B
Grey	E	RS 485 A
Brown	K	Negative (-) wire
White		NC
Red	J	10-28 V DC
Black	F	Shield (NOT signal ground!)

### **Electrical Connections**

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6

Designations		
1	Red	Positive (+) wire
2	Brown	Negative (-) wire
3	Black	Shield (NOT signal ground!)
4	Grey	Data Out - RS485A
5	Yellow	Data In - RS485B
6	Tube	Air pressure compensation tube and Moisture filter

### Accessories

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Expert Link designed for Expert 3400D.

Use the software to change ID number, adjust measuring ranges, zero point and real-time value reading.

Expert Link is free of charge.



link to downloadcenter on www.mjk.com



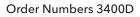


203992

PC Interface used to connect Expert 3400D to a PC, allowing adjustments made in Expert Link for 3400D



# Expert 3400D Level Transmitter



Expert™ 3400D Capasitive Ceramic, Relative Pressure, Digital RS485/10-28VDC		
203972	Hydrostatic transmitter 3400D range 0-1m Digital	
203975	Hydrostatic transmitter 3400D range 0-10m Digital	
203977	Hydrostatic transmitter 3400D (SG) range 0-100m Digital	
203978	Hydrostatic transmitter 3400D (SG) range 0-300m Digital	
203972-C	Hydrostatic transmitter 3400D range 0-1m Digital w/connector	
203975-C	Hydrostatic transmitter 3400D range 0-10m Digital w/connector	
203977-C	Hydrostatic transmitter 3400D (SG) range 0-100m Digital w/connector	
203978-C	Hydrostatic transmitter 3400D (SG) range 0-300m Digital w/connector	

### Order Numbers Accessories

203978-C	Hydrostatic transmitter 3400D (SG) range 0-300m Digital w/connector		
Order Numbers Accessories			
202920 ©	Cable length, not standard		
202924 <sup>①</sup>	1″ ISO Thread for Expert™ 3400		
209824 <sup>①</sup>	1" NPT Thread for Expert™ 3400		
203992	PC Interface (USB/RS485) for Expert™ Transmitter		
560914	Plastic Mounting Bracket for Expert™ Transmitter. Ø6-10mm		
691004 ©	Cable for Expert™ 3400 & 7060, PUR		
840100-010	Expert Link for 3400D		

① MUST be ordered when ordering the transmitter. The thread top can only be mounted on factory ② MUST be ordered when ordering the 3400D transmitter. Special cable length can only be mounted on factory



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