

Expert 1100

HYDROSTATIC LEVEL TRANSMITTER

2.74

General

The MJK Expert™ 1100 Level Transmitter has a small external diameter and is made of 316L stainless steel.

The transmitter is designed for measuring levels and temperature in wells and drinking water tanks.

The MJK Expert™ 1100 is an accurate 2-wire transmitter with a piezoresistive measuring system with direct air pressure and temperature compensation.

Features

- Stainless steel diaphragm, steel AISI 316L body
- 2-wire 4-20 mA loop powered, 10-30VDC
- Very low drift (<0.5%) and high accuracy ($\pm 0.25\%$) year after year
- Field re-programmable for custom ranges and zero offset calibration
- Measuring ranges from 0-10 ft. to 0-100 ft.

Applications

- Process water
- Drinking water
- Ground water bore holesw
- Reservoirs



mjk
a xylem brand

DATASHEET

US 2.74 expert 1100 datasheet 1810

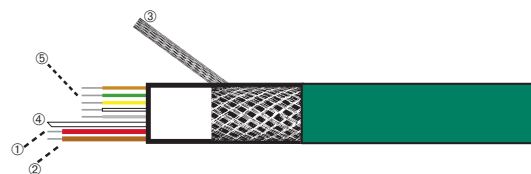
Expert 1100 Level Transmitter

Specifications

Expert 1100 Level Transmitter			
Nominal measuring range	0-10 ft.	0-30 ft.	0-100 ft.
Measuring principle	Piezoresistive (relative pressure)		
Min. programmable range	0-6 ft.	0-12 ft.	0-36 ft.
Max. programmable range	0-36 ft.	0-36 ft.	0-200 ft.
Non-standard range	Min. 0-6 ft. / Max. 0-900 ft.		
Max. overpressure	3,5 bar/50 psi	3,5 bar/50 psi	10 bar/150 psi
Temperature range	15 °F to 150 °F		
Temp. deviation, zero point	Better than ± 0.01 %/°F		
Temp. deviation, full range	Better than ± 0.008 %/°F		
Linearity/Stability	Better than ± 0.5 % FS/± 0.1 % FS		
Measurement accuracy	Better than ± 0.25 % FS @ 50 to 85 °F Better than ± 0.5 % FS @ full temperature range		
Long time stability	Better than ± 0.5 % FS per year		
Materials	Housing and diaphragm made from stainless steel (AISI 316 L)		
Supply voltage	10-30 V DC (12-30 V DC for cable lengths above 315 ft.)		
Output signal	2-wire 4-20 mA (passive transmitter)/Modbus RS485		
Cable	2 × AGW 20 (pressure) + 5 x AGW (data), shielded, PUR insulation		
Cable length ^①	39 ft.	39 ft.	115 ft.
Enclosure	NEPA 6P, withstands a static pressure equal to max. overpressure		
Test approvals	CE directive: 89/336/EEC, 2004/108/EC, 1999/EC EN 61326-1, 61326-2-3, EN 55011, 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-8 EN 61000-6-4 2007-02-19, EN 61000-6-2 2005-09-08,		

① The cable length may be extended by using the transmitter connection box (202922) and twisted shielded pair wire.

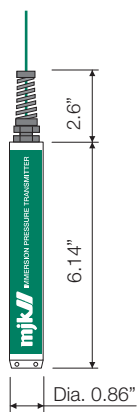
Electrical Connections



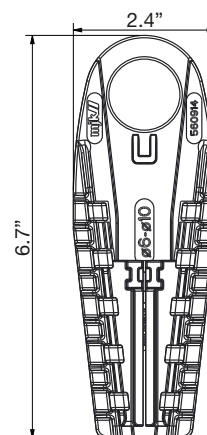
Designations		
1	Red	Positive (+) wire
2	Brown	Negative (-) wire
3	Black	Shield (NOT signal ground!)
4	Tube	Air pressure compensation tube
5	Hidden	Programming wires

⑤ Programming	
Green	N/C
Brown	N/C
Yellow	RS485 B
White	N/C
Grey	RS485 A

Dimensions



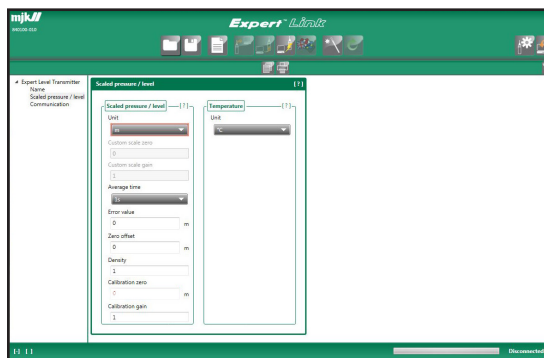
MJK Expert™ 1100 level transmitter



Mounting bracket for MJK Expert™ 1100 level transmitter

Expert 1100 Level Transmitter

Accessories



Expert Link Software

840100 Expert Link for Windows for support of the Expert series. Use with 203992 PC (USB) Interface.

Information (pressure- and temperature range, version of software etc.):

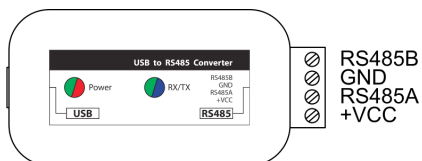
- Indication of actual pressure value and adjusting measuring ranges
- Selection of units
- Setting of a new zero and gain for the transmitter
- Reprogramming of the analog output (i.e. different unit, other pressure range)
- Setting of the instrument address (for Bus-operation and real-time value).

Expert Link is free of charge.

Link to download center on www.mjk.com.



USB to PC connection



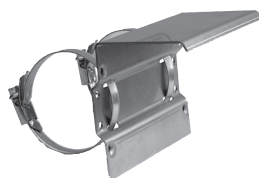
203992 PC Interface used for connecting Expert Hydrostatic Level Transmitters to a PC using Expert Link.



202922 Transmitter connection box NEMA 6 enclosure for a safe connection of 4-20 mA cables.Ⓜ



200126 Field indicator 531, display insert, 4-20mA loop powered, NEMA 6 enclosure. For instant local readout.Ⓜ



200117 Rainroof/Sun Shield for 531, weather protection for display and connection box.

Ⓜ For a complete display you need both the 20016 531 display insert and the 202922 transmitter connection box.

Expert 1100 Level Transmitter

Order Numbers

Expert™ 1100, Piezoresistive, Relative Pressure, 4-20mA	
MJK209950	Pressure Transmitter 1100, Range 0-10 ft., 39 ft. cable
MJK209955	Pressure Transmitter 1100, Range 0-30 ft., 39 ft. cable
MJK209960	Pressure Transmitter 1100, Range 0-100 ft., 105 ft. cable
MJK209960-150	Pressure Transmitter 1100, Range 0-100 ft., 150 ft. cable
MJK209960-200	Pressure Transmitter 1100, Range 0-100 ft., 200 ft. cable
MJK209960-250	Pressure Transmitter 1100, Range 0-100 ft., 250 ft. cable
MJK209960-350	Pressure Transmitter 1100, Range 0-100 ft., 350 ft. cable
MJK209960-500	Pressure Transmitter 1100, Range 0-100 ft., 500 ft. cable

Order Numbers Accessories

Expert™ Hydrostatic Transmitter Accessories	
MJK200117	Rainroof/Sun shield for 531, display and connection box
MJK200126	Field indicator 531, display insert, 4-20 mA loop powered
MJK202922	Transmitter connection box
MJK560914	Plastic Mounting Bracket for Expert™ Transmitter, cable Ø6-10 mm
MJK691075-ft.	Communication cable 2x2x0.5 mm ² (AWG24) shielded twisted pair

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