

# Expert™ 7060D & 7070D

2.78

## HYDROSTATIC DIGITAL LEVEL TRANSMITTERS

### General

MJK Expert™ 7060D and 7070D hydrostatic digital level transmitters are precision transmitters with built-in Modbus protocol for measurement readout and remote calibration during operation. They have been developed for low-energy installations with MJK Chatter™ Datalogger.

MJK Expert™ 7060D Level Transmitter is a robust all-round transmitter perfect for level measurements in storage tanks, borings and pumpstations in drinking water and wastewater plants.

MJK Expert™ 7070D Level Transmitter has the same specifications as the 7060D-transmitter, but additionally it has a very small outer diameter and is manufactured in AISI 316L acid-proof, stainless steel. The transmitter has been specially designed for operation in confined spaces like borings, wells og drinking water containers.

The transmitters are supplied with a piezo-resistive measuring system and direct airpressure compensation (relative versions) via an integrated ventilation tube in the cable. All transmitters have a built-in temperature compensation.

### Features

- Piezo-resistive measuring system. Stainless steel diaphragm
- Low power 3,6-30VDC supply
- Very low drift (<0.5%) and high accuracy ( $\pm 0.25\%$ ) year after year
- Field re-programmable for zero offset calibration
- Steel reinforced PUR cable with high tensile strength
- 7060D iron bar reinforced shield body with epoxy potting
- 7070D Ø22 mm slim body with epoxy potting
- Measuring ranges from 0 - 3 m to 0 - 300 m.

### Applications

- Process water
- Drinking water
- Ground water bore holes
- Reservoirs.

### DATASHEET

EN 2.78 EXPERT 7060D/7070D DATASHEET 2103



**mjk**  
a xylem brand

# Expert™ 7060D & 7070D Hydrostatic Digital Level Transmitters



## Specifications

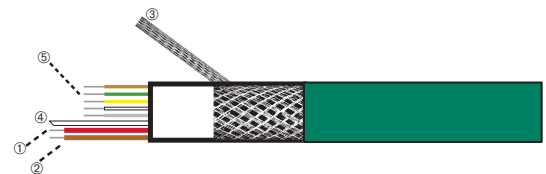
Expert™ 7060D/7070D Level Transmitter				
Nominal measuring range	0 - 3 m	0 - 10 m	0-30 m	0-100 m
Measuring principle	Piezo-resistive (relativ pressure)			(SG, sealed gauge)
Max. overpressure	3 bar	3 bar	3 bar	11 bar
Temperature range	-10 °C to 60 °C			
Temp. deviation, zero point	Better than ± 0.02 % / °C			
Temp. deviation, Full range	Better than ± 0.02 % / °C			
Linearity / Stability	Better than ± 0.5 % FS / ± 0.1 % FS			
Measurement accuracy	Better than ± 0.25 % FS @ +10 to 30 °C Better than ± 0.5 % FS @ full temperature range			
Long time stability	Better than ± 0.5 % FS a year			
Materials	Encapsulation: PP Membrane: Stainless steel (1.4404 / AISI 316 L)			
Supply voltage	3,5-30 VDC (min.12 VDC for cable lengths longer than 100 m)			
Output signal	Digital signal : 2-wire RS485 Modbus level- and temperature transmitter signal.			
Cable	2 × 0,5 mm <sup>2</sup> (pressure) + 5 × 0,15 mm <sup>2</sup> (data), shielded, PUR insulation			
Connections	Digital with connector, 10 pole male, IP 68 connected to counterpart			
Cable length <sup>①</sup>	12 m	12 m	35 m	110 m
Enclosure	IP 68; resists a static pressure equivalent to max. measuring range			
Test approvals	CE directive: 2014/30/EU, EN 61326-1, 61326-2-3			

<sup>①</sup>Can be delivered with other cable lengths on request.

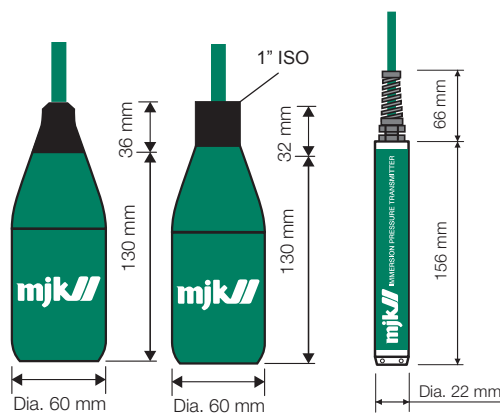
## Electrical Connections Dimensions



Designations	
1	Positive (+) wire, red
2	Negative (-) wire, brown
3	Shield (NOT signal ground!)
4	Air pressure compensation tube
5	Programming wires

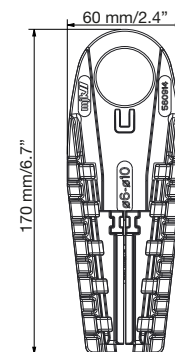


⑤ Programming 7070	
Green	N/C
Brown	N/C
Yellow	RS485 B
White	N/C
Grey	RS485 A



MJK Expert™ 7060D  
level transmitter

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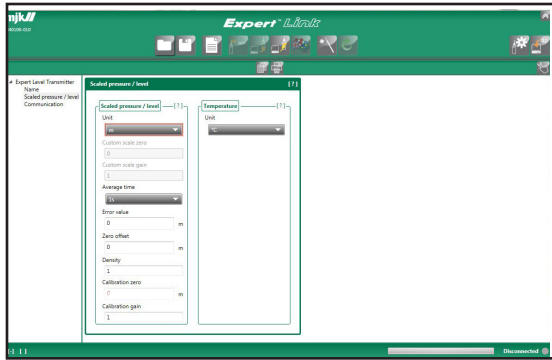


Mounting bracket for MJK  
Expert™ 7060D level transmitter

# Expert™ 7060D & 7070D Hydrostatic Digital Level Transmitters



## Accessories

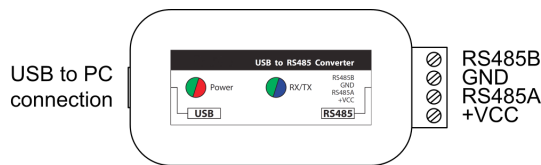


Expert Link Software

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
- Selection of units
- Setting of a new zero and gain for the transmitter
- Setting of the instrument address (for Bus-operation and real-time value).

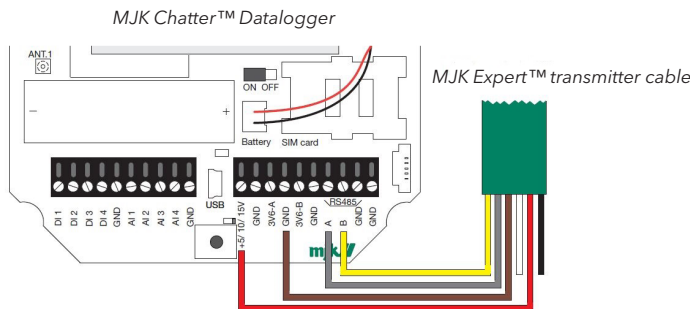


Expert Link is free of charge. Link to download center on [www.mjk.com](http://www.mjk.com).



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

## Electrical Connections Example for Chatter™ Datalogger



# Expert™ 7060D & 7070D Hydrostatic Digital Level Transmitters



## Order Numbers

Expert™ 7060D, Piezo Resistive, Relative Pressure - Digital RS485/Supply 3.6 - 30VDC	
203761	Hydrostatic transmitter 7060D range 0-3m Digital/Analog
203762	Hydrostatic transmitter 7060D range 0-10m Digital/Analog
203763	Hydrostatic transmitter 7060D range 0-30m Digital/Analog
203764	Hydrostatic transmitter 7060D range 0-3m Digital/Analog w/con.
203765	Hydrostatic transmitter 7060D range 0-10m Digital/Analog w/con.

Expert™ 7070D, Piezo Resistive, Relative Pressure - Digital RS485/Supply 3.6 - 30VDC	
203781	Hydrostatic transmitter 7070D range 0-3m digital/analog
203782	Hydrostatic transmitter 7070D range 0-10m digital/analog
203783	Hydrostatic transmitter 7070D range 0-30m digital/analog
203784	Hydrostatic transmitter 7070D range 0-3m digital/analog w/con.
203785	Hydrostatic transmitter 7070D range 0-10m digital/analog w/con.
203786	Hydrostatic transmitter 7070D range 0-30m digital/analog w/con.

Expert™ 7070D, Piezo Resistive, Absolute Pressure - Digital RS485/Supply 3.6 - 12VDC	
203790	Hydrostatic transmitter 7070D (ABS) range 0-4bar. Out. Digital
203790-CON	Hydrostatic transmitter 7070D (ABS) range 0-4bar w con. out. Digital

Expert™ 7070D, Piezo Resistive, Sealed Gate - Digital RS485/Supply 3.6 - 30VDC	
203791	Hydrostatic transmitter 7070D (SG) range 0-100m (0-10bar)
203793	Hydrostatic transmitter 7070D (SG) range 0-100m (0-10bar) w/con
203792	Hydrostatic transmitter 7070D (SG) range 0-300m (0-30bar)

## Order Numbers Accessories

Order Numbers Accessories	
202920	Cable length, not standard
202921	Price adder 1" ISO thread f/7060/3400 Pressure Transmitter
203992	PC Interface (USB/RS485) for Expert™ Transmitter 3400D/7060/7070



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