

Expert[™] 7060

HYDROSTATIC LEVEL TRANSMITTER

General

The MJK Expert[™] 7060 hydrostatic level transmitter is ideal for measuring levels in storage tanks, wet wells and pump stations in both water and wastewater plants.

The Expert™ 7060 has a piezoresistive measuring system and built-in breather tube for direct air pressure compensation. The design is very robust and it is a useful all-round transmitter, used in waterworks, sewage treatment plants and industrial applications.

The Expert™ 7060D hydrostatic digital/analog level transmitter is a variant of the 7060 and is a precision transmitter with built-in ModBus protocol for measurement readout and remote calibration during operation. It is developed for low-energy installations and hook-up with MJK Chatter™ Datalogger.

The ExpertTM 7060A hydrostatic digital/analog level transmitter is also a variant of the 7060 and offers a voltage output linear to the level. The transmitter is typically used in combination with the MJK Chatter $^{\text{TM}}$ Datalogger and controllers with analog DC voltage input.

The design without sharp edges prevents particles, textiles and paper from sticking to the housing or the diaphragm.

Features

- Stainless steel diaphragm, polypropylene body
- 2-wire 4 20 mA loop powered, 10-30VDC
- Low voltage versions digital RS485 supply voltage 3,6-30VDC
- Very low drift (<0.5%) and high accuracy (±0.25%) year after year
- Field re-programmable for custom ranges and zero offset calibration
- Measuring ranges from 0 3 m to 0 30 m
- Steel reinforced PUR cable with high tensile strength (1000kg)
- Iron bar reinforced shield body with epoxy potting.

Applications

- Waste water
- Process water
- Drinking water.

DATASHEET

EN 2.75 EXPERT 7060 DATASHEET 1907





Expert™ 7060 Level Transmitter



Specifications

Expert 7060 Level Trans						
Nominal measuring range	0 - 3 m		0 - 5 m	0 -10 m	0 - 30 m	
Measuring principle	Piezo-resistive (relative pressure)					
Min. programmable range	0 - 2 m		0 - 2 m	0 - 2 m	0 - 10 m	
Max. programmable range	0 - 12 m		0 - 12 m	0 - 12 m	0 - 60 m	
Non-standard range	Min. 0 - 2 r	n / Max. 0 - 300	m			
Max. overpressure	3 bar		3 bar	3 bar	11 bar	
Temperature range	-10° C to 6	0° C				
Temp. deviation, zero point	Better than ± 0.02 % / ° C					
Temp. deviation, Full range	Better than ± 0.02 % / ° C					
Linearity / Stability	Better than \pm 0.5 % FS / \pm 0.1 % FS					
Measurement accuracy	Better than \pm 0.25 % FS @ \pm 10 to 30° C Better than \pm 0.5 % FS @ full temperature range					
Long time stability	Better than ± 0.5 % FS per year					
Materials	Housing: PP / Diaphragm: Stainless steel (1.4404 / AISI 316 L)					
	7060	7060 10 - 30 VDC (12 - 30 V DC for cable lengths above 100 m)				
Supply voltage	7060A	7060A 11 - 30 VDC				
	7060D	7060D 3,6 - 30 VDC/ RS485				
	7060 2-wire 4 - 20 mA (passive transmitter) / ModBus RS485					
Output signal	7060A 0 - 5 VDC / ModBus RS485					
	7060D Digital signal: RS485 ModBus level- and temperature transmitter signal.					
Cable	$2 \times 0.5 \text{ mm}^2 \text{ (pressure)} + 5 \times 0.15 \text{ mm}^2 \text{ (data), shielded, PUR insulation, } 1000 \text{kg pull strength}$			rength		
Cable length®	12 m		12 m	12 m	35 m	
Enclosure	IP 68, with	stands a static p	ressure equal to max. overpre	essure		
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,					
Combondalismontorial calcon						

 $^{^{\}scriptsize{\textcircled{\scriptsize{1}}}}\!\mathsf{Can}$ be delivered with other cable lengths on request.

Electrical Connections

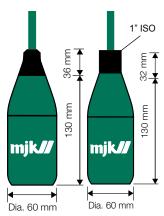


Designations		
1	Red	Positive (+) wire
2	Brown	Negative (-) wire
3	Black	Shield (NOT signal ground!)
4	Tube	Air pressure compensation tube
5	Hidden	Programming wires

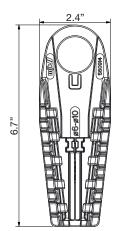


© Programming		
Green	N/C	
Brown	N/C	
Yellow	RS485 B	
White	N/C	
Grey	RS485 A	

Dimensions



MJK Expert™ 7060 level transmitter



560914 Plastic mounting bracket for MJK Expert™ 7060 Level Transmitter (1 pcs. is delivered with each transmitter)

Expert[™] 7060 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 Busoperation and real-time value.

Expert Link is free of charge. Link to download center on www.mjk.com.







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



202922 Transmitter connection box IP 67 enclosure for a safe connection of 4-20 mA cables.®



200126 Field indicator 531, display insert, 4-20 mA loop powered, IP 65 enclosure. For instant local readout. \odot

 $^{\,\}Phi\,$ For a complete display you need both the 200126 Field indicator 531 display insert and the 202922 Transmitter connection box.

Expert[™] 7060 Level Transmitter



Order Numbers

$\textbf{Expert}^{\intercal} \texttt{7050}, \textbf{Piezoresistive}, \textbf{Absolute Pressure}, \textbf{4-20mA/Supply 10-30VDC}$

202912 Pressure transmitter 7050 Range 0-2 bar (ABS)

Expert™ 7060, Piezoresistive, Relative Pressure, 4-20mA/Supply 10 - 30VDC		
202930	Hydrostatic transmitter 7060 range 0-3m	
202932	Hydrostatic transmitter 7060 range 0-5m	
202935	Hydrostatic transmitter 7060 range 0-10m	
202940	Hydrostatic transmitter 7060 range 0-30m	

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

Expert™ 7060A, Piezoresistive, Relative Pressure, 0-5VDC/Supply 11 - 30VDC		
203772-2,5	Hydrostatic transmitter 7060A range 0-2,5m, out 0-5V	
203772	Hydrostatic transmitter 7060A range 0-10m, out 0-5V	

Order Numbers Accessories

Expert™ Hydrostatic Transmitter Accessories		
109113	MJK product test certificate. Must be requested upon order!	
200126	Field indicator 531, display insert, 4-20 mA loop powered	
202918	Sacrificial copper ring for Expert™ 2100, 7050, 7060	
202920①	Cable length, not standard	
202921②	1" ISO thread for Expert™ 2100, 7060	
202922	Transmitter connection box	
202925	Not standard measuring range	
203992	PC Interface (USB/RS485) for Expert™ Transmitter 3400D/7060/7070	
560914	Plastic mounting bracket for Expert™ Transmitter, cable Ø6-10mm	
561172	1" ISO Nut for sensor	
691004®	Cable for Expert™ 3400 & 7060, PUR	
840100	Expert Link	

 \oplus MUST be ordered when ordering the ExpertTM level transmitter, can only be mounted on factory. \oplus MUST be ordered when ordering the transmitter, the thread top can only be mounted on factory.



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