

Pump Controller 703

General



Pump Controller 703 is a compact unit for the control of level in two or three pumps or valves between up to six adjustable levels. The Pump Controller 703 is supplied with either an ultrasonic or a hydrostatic sensor system. Pump Controller 703 has a 3-digit display for level indication. Pump Controller 703 is distinguished by easy calibration access through the front panel.

2.23

Special features

- Ultrasonic or hydrostatic sensor system.
- Measuring range from 0-3m up to 0-30m.
- 4 output relays for control and alarm and level proportional mA output signal with adjustable range.
- 3-digit LED display for indication and reading of all measuring values and settings.

Application

Pump Controller 703 is used for the measurement and control of levels in tanks containing harmful or aggressive liquids. Pump Controller 703 is designed for the control of pumps in pumping stations, sewage plants, water works or in the processing industry. In general, the Pump Controller is used where two pumps or valves with two alarms need to be controlled between adjustable levels.

Specifications

Converter 703

Measuring range	Determined by sensor
Supply	220-240 / 110-120 / 24V AC, consumption approx. 10 VA
Temperature	-20...+60 °C
Input signal	From Ultrasonic Sensor, Pressure Transmitter or 4-20 mA
Accuracy	≤ ±1%
Output	Analogue: 0-20 / 4-20 mA, max. 500Ω Digital: 4 relays with voltage free charge-over contact Inductive load: 250V, 4A ohmic, max. 100 VA inductive Data: RS 232
Indication	3 digit LED display
Operation	From front panel
Dimensions	185×240×115 mm (h×w×d)
Material	Polystyrol, with clear cover
Housing	IP 65
CE	EN50081-1, EN50082-1

Ultrasonic measuring system

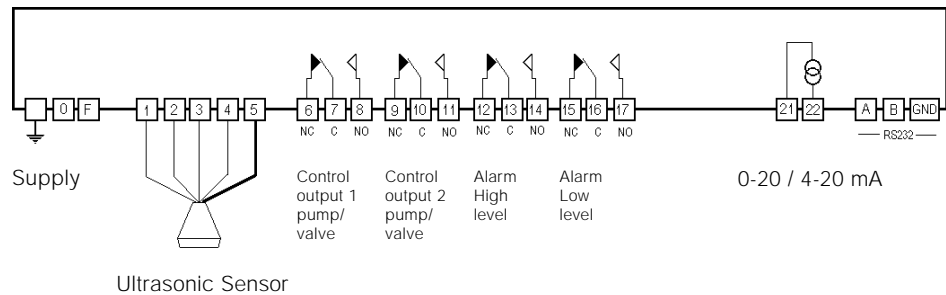


The 704U Pump Controller is supplied with a 30 kHz ultrasonic sensor with a resolution of 1 cm. For level measurement, ultrasonics are often preferred as there is no contact with the liquid being measured.

Special features

- Non-contact measuring system, no maintenance, no moving parts.
- 3° beam spread. The narrow beam ensures a high signal intensity and minimum sensitivity to surface scum and sludge.
- The sensor withstands immersion, therefore there is no damage in the event of power failure or overflow.
- Logic noise protection system ignores turbulence, slow moving scrapers and electrical disturbances.

Connection

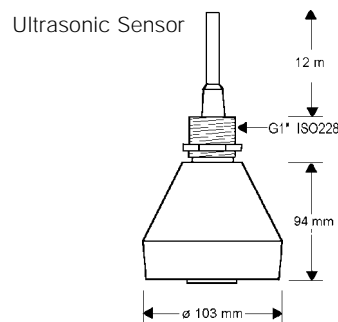


Specifications

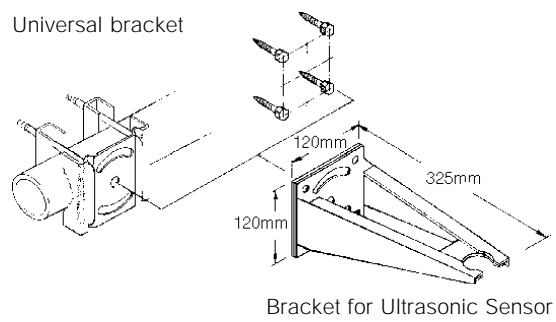
Ultrasonic Sensor 7005-1013

Measuring range	0-10 m
Frequency	30 kHz
Beam spread	3°
Temperature	-20...+60 °C
Blocking distance	75 cm
Dimension	ø103 × 94 mm
Material	PP green / POM black
Cable Max. length	Screened oil resistant PVC, length 12 m 100 m
Housing	IP68, waterproof, withstands immersion, max. 1 bar

Dimension



Universal bracket



Bracket for Ultrasonic Sensor

Hydrostatic measuring system

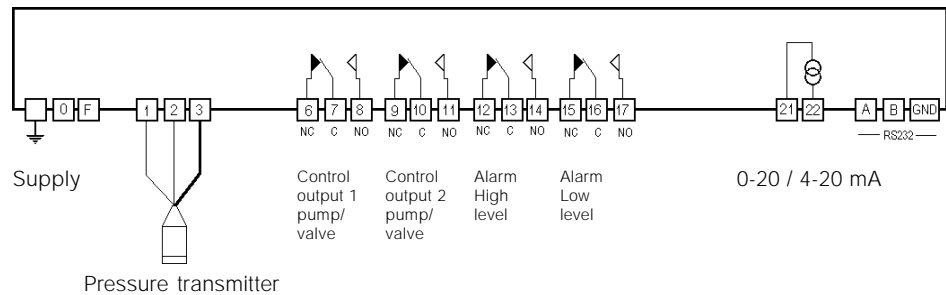


The 704P Pump Controller is supplied with either a 7050 or 7060 Pressure Transmitter. With these pressure transmitters ranges from 3 - 30 m are available. The 7050 and 7060 Pressure Transmitters are designed for measurement in liquids with suspended solids such as sewage and sludge.

Special features

- Pressure Transmitter with diaphragm of stainless steel.
- The steel reinforced cable withstands tensile stress up to 1000 kg.
- The 7050 Pressure Transmitter is without compensation tube where condensation and ice can occur.
- The 7060 Pressure Transmitter has a polyethylene compensation tube in the cable.
- The 7050 and 7060 Pressure Transmitters are designed so that no solids adhere to them.

Connection



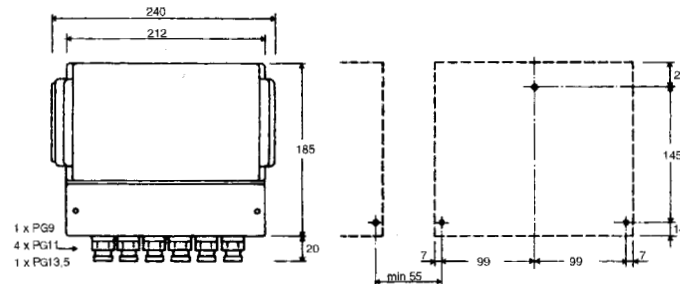
Specifications

Pressure transmitter

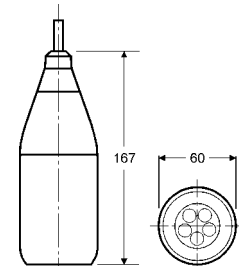
Measuring ranges	0-10 m, Pressure Transmitter 7050-1413, (absolute pressure) 0-3 m, Pressure Transmitter 7060-1413, (gauge pressure) 0-10 m, Pressure Transmitter 7060-1423, (gauge pressure) 0-30 m, Pressure Transmitter 7060-1433, (gauge pressure)
Function	2-wire, 4-20 mA
Accuracy	≤ ±1%
Temperature	-10...+60 °C
Dimension	ø 60 × 167 mm
Material	House: PP ; Diaphragm: Acid proof steel, AISI 316 L
Cable	2×0,5 mm ² , lenght 12 m (7060-1433: 35 m), can be extended
Housing	IP68, waterproof, max. 3 bar
CE	EN50081-1, EN50082-1

Dimensions

Converter 704



Pressure Transmitter



Order numbers

Pump Controller

201020	703U-1111, ultrasonic meas. system, incl. 7005-1013, meas. range 0-10 m
202004	703P-1103, without sensor, input 4-20 mA, (only absolute pressure)
202010	703P-1104, without sensor, input 4-20 mA
202015	703P-1113, hydrostatic meas. system, incl. 7050-1413, meas. range 0-10 m (with air pressure compensation)
202017	703P-1114, hydrostatic meas. system, incl. 7060-1413, meas. range 0-3 m
202019	703P-1124, hydrostatic meas. system, incl. 7060-1423, meas. range 0-10 m
202021	703P-1134, hydrostatic meas. system, incl. 7060-1433, meas. range 0-30 m

Accessories for Pump Controller

200105	Panel Mounting Kit
200115	Local Mounting Kit with rain roof

Accessories for Ultrasonic Sensor

200590	Connection box for Ultrasonic Sensor
200595	Cable length not standard (+ cable pr. meter above standard length)
690010	Cable for Ultrasonic Sensor (state meter)
200220	Bracket for Ultrasonic Sensor
200205	Universal bracket

Accessories for Pressure Transmitter

202922	Connection box for Pressure Transmitter
202923	Connection box for Pressure Transmitter, with plug for programming unit
200126	Display 531 for connection box
202920	Cable length not standard (+ cable pr. meter above standard length)
691010	Cable for Pressure Transmitter 7050 (state meter)
691014	Cable for Pressure Transmitter 7060 (state meter)