

HySense PR100 / PR110 Mobile Pressure Sensor



The HySense PR100 / PR110 (formerly known as HT-PD) is our most popular pressure sensor for mobile hydraulic testing applications. Also popular in stationary industrial applications, measuring ranges are available from -1 up to 1000 bar and comes with a 5 or 6 pin M16x0.75 electrical connection for quick & secure cable fitting.

PR100 model comes with ISDS 4-20mA output and calibration certificates as standard.

PR110 comes with mA, V or frequency outputs with calibration certificates on request.

Features

Measuring principle	piezo-resistive (poly-cristalline silicon thin film structure on high-grade steel membrane)
Pressure type	relative pressure
Output signal	4...20 mA, 0...20mA, 0...10V, 0.2...1.6 kHz
Electrical meas. connector	5 or 6 (ISDS) pole device connector, M16 x 0.75
Mechanical connection	ISO 228 – G 1/4 A
Sealing material	profile seal ring acc. to DIN 3869, FKM
Protection type (EN 60529 / IEC 529)	IP 67 (cable connected)
Material casing / membrane	non-corrosive high-grade steel
Weight	~ 85 g

- Our most popular test sensor
- Designed for mobile test use
- Voltage, milliamp and frequency output options
- Rapid response time
- High pressure models up to 5000 bar on request
- Suits all Hydrotechnik measuring instruments & standard industrial instrumentation

Technical data

Overload range	1.5 times nominal pressure
Burst pressure	3 times nominal pressure
Mounting orientation	arbitrary
Supply voltage U _b	10 ... 30 VDC (12...30Vdc for 0-10V output)
Current consumption	6.5 mA
Over-voltage protection	32 VDC
Response time	1 ms (10 ... 90 %)
Error limit (of final value)	±0.25 % (with ISDS, linearised) / ±0.5 % (without ISDS)
Medium temperature	-40 ... +125 °C
Environmental temperature	-40 ... +105 °C
Storage temperature	-40 ... +125 °C



All Hydrotechnik instruments support ISDS functionality. ISDS is the automatic transmission of parameters and calibration data from Hydrotechnik ISDS enabled sensors to the measuring instrument:

Connect – Switch on – Measure.

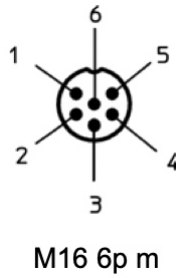
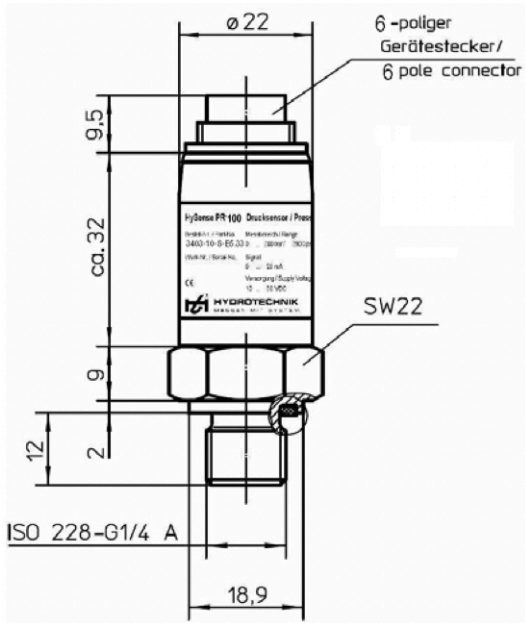
ISDS provides a higher degree of accuracy as each transducer linearisation data is automatically transferred to the connected instrument and additionally eliminates potential programming error.

Options & Ordering Information

Measuring range	PR100		PR110		
	ISDS 4...20mA output	2 wire 4...20mA output	3 wire 0...20mA output	3 wire 0... 10V output	3 wire 0.2...1.6kHz output
-1 ... 1 bar	-	3403-20-C3.37	3403-20-C3.33	3403-20-C3.39	-
-1 ... 2 bar	-	3403-68-C3.37	3403-68-C3.33	3403-68-C3.39	-
-1 ... 6 bar	3403-32-S-E5.37	3403-32-C3.37	3403-32-C3.33	3403-32-C3.39	3403-32-C3.41
0 ... 10 bar	-	3403-26-C3.37	3403-26-C3.33	3403-26-C3.39	-
0 ... 25 bar	-	3403-40-C3.37	3403-40-C3.33	3403-40-C3.39	-
0 ... 60 bar	3403-21-S-E5.37	3403-21-C3.37	3403-21-C3.33	3403-21-C3.39	3403-21-C3.41
0 ... 100 bar	-	3403-16-C3.37	3403-16-C3.33	3403-16-C3.39	-
0 ... 250 bar	3403-17-S-E5.37	3403-17-C3.37	3403-17-C3.33	3403-17-C3.39	3403-17-C3.41
0 ... 400 bar	3403-15-S-E5.37	3403-15-C3.37	3403-15-C3.33	3403-15-C3.39	3403-15-C3.41
0 ... 600 bar	3403-18-S-E5.37	3403-18-C3.37	3403-18-C3.33	3403-18-C3.39	3403-18-C3.41
0 ... 1000 bar	3403-29-S-E5.37	3403-29-C3.37	3403-29-C3.33	3403-29-C3.39	-

Other pressure ranges available on request...

PR100 Assembly Drawing & Wiring

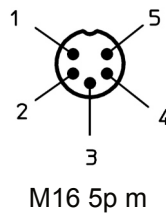
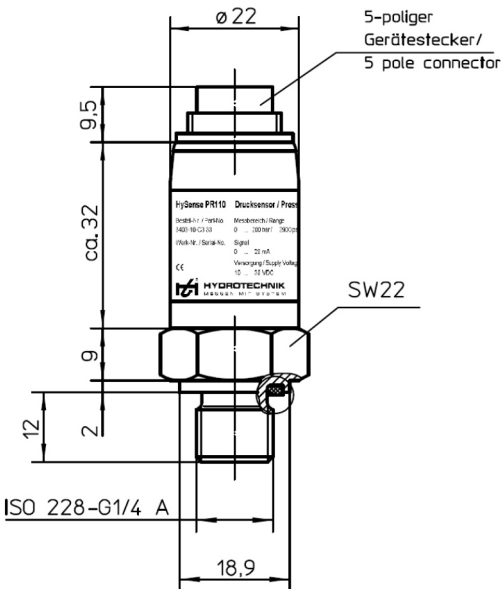


ISDS 4...20 mA

Signal+	1
GND Ub / Signal	2
+Ub	3
free	4
free	5
ISDS ¹	6

¹ red label on outer diameter of device plug.
suitable for Hydrotechnik measuring instruments

PR110 Assembly Drawing & Wiring



0...20 mA

Signal+	1
GND Ub / Signal	2
+Ub	3
free	4
free	5

4...20 mA

Signal+	1
free	2
+Ub	3
free	4
free	5

0...10 VDC

Signal+	1
GND Ub / Signal	2
+Ub	3
Signal+	4
free	5

0.2...1.6 kHz *

F-Signal	1
GND Ub / Signal	2
+Ub	3
free	4
free	5

* Enables pressure measurement in frequency channels of MultiSystem 4010, 5060, 5070 & 8050 instruments