

HySense PR 101

6 pole device connector, M16 x 0.75

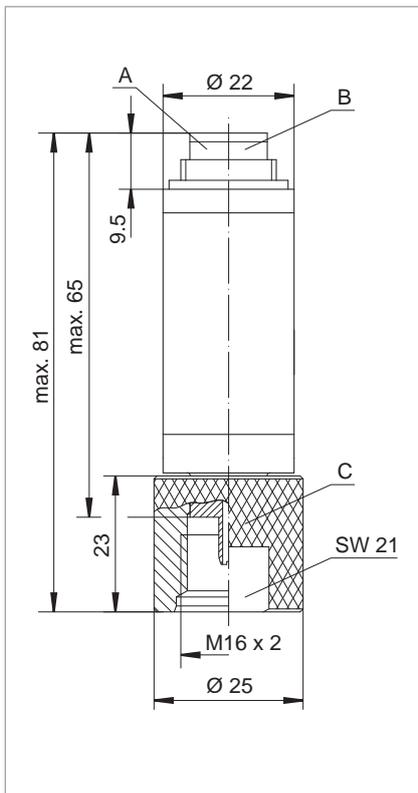


The idea is impressively simple: why shouldn't we assemble a MINIMESS® direct connector with a HySense® PR 100 ISDS pressure sensor?

Everything becomes more easy: faster installation and dismantling, smaller dimensions, less connections and less possibilities for leakages.



Qualities	
Measuring principle	piezo-resistive (poly-crystalline silicon thin film structure on a high-grade steel membrane)
Pressure type	relative pressure
Output signal	0 ... 20 mA
Electrical measuring connector	6 pole device connector, M16 x 0.75
Mechanical measuring connector	MINIMESS® direct connector, series 1620
Protection type (EN 60529 / IEC 529)	IP 65
Material casing	non-corrosive high-grade steel
Material membrane	non-corrosive high-grade steel
Weight	~ 85 g



Pin assignment	0 ... 20 mA
	1 signal +
	2 - Ub / signal - / GND
	3 + Ub
	4 free
	5 free
	6 sensor identification ISDS

Measuring range		Order number
bar	MPa	0 ... 20 mA
0 ... 60	0 ... 6,0	34W3-21-S-E5.33
0 ... 250	0 ... 25	34W3-17-S-E5.33
0 ... 400	0 ... 40	34W3-15-S-E5.33
0 ... 600	0 ... 60	34W3-18-S-E5.33

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Technical data	PR 101
Overload range	1.5-fold nominal pressure
Burst pressure	3-fold nominal pressure
Signal type	three wires analog (0 ... 20 mA)
Supply voltage U_b	10 ... 30 VDC
Current consumption	6.5 mA
Overvoltage protection	32 VDC
Error limit (with linearisation)	± 0.2 % of final value
Error limit (without linearisation)	contains the influences non-linearity, hysteresis, repeatability, zero point and span error
... at +22 °C (room temperature)	± 0.5 % of final value
... at -15 ... +85°C	$< \pm 1.0$ % of final value
... at +85 ... +100°C	$< \pm 2.5$ % of final value
... at -40 ... -15°C	$< \pm 2.5$ % of final value
Compensation temperature range	-40 ... +100 °C
Non-linearity	$< \pm 0.4$ % of final value
Reproducibility	$< \pm 0.1$ % of final value
Hysteresis	$< \pm 0.1$ % of final value
Long-term stability	$< \pm 0.1$ % of final value/year
Response time	$< = 1$ ms (10 ... 90 %)
Frequency range	$< = 1$ kHz
Isolation resistance	min. 100 MΩ
Total resistance R_G	$U_b / 0.027$
Load resistance R_L	$< = 200$ Ω
Number of load cycles	$> 1 \times 10^7$
Medium temperature	-40 ... +125 °C
Environmental temperature	-40 ... +105 °C (short-termed +125 °C)
Storage temperature	-40 ... +125 °C
EMC test	EN 50081-2, EN 50082-2
Vibrational stability	5 mm 10 ... 32 Hz, 20 g 32 ... 500 Hz, DIN EN 60068-2-6
Shock stability	50 g (11 ms half-sine)
Mounting orientation	arbitrary