

PRESSURE TRANSDUCERS

ANALOG OR DIGITAL OUTPUTS SERIES LP 660



The pressure transducers Series LP 660 are used in oleodynamics, pneumatics and, in general, in industrial applications on machineries, on plants and for general purpose whenever extreme mechanical ruggedness, accuracy, reliability and high performances are requested. Moreover the direct interchangeability of the pressure connection with Bourdon gauges allows the remote transfer of the pressure data measurement. The models of the Series LP 660 differ either for the internal electronics: analog or digital, or for the pressure connection: G 1/4" or G 1/2".

Construction features standardized for all Series LP 660:

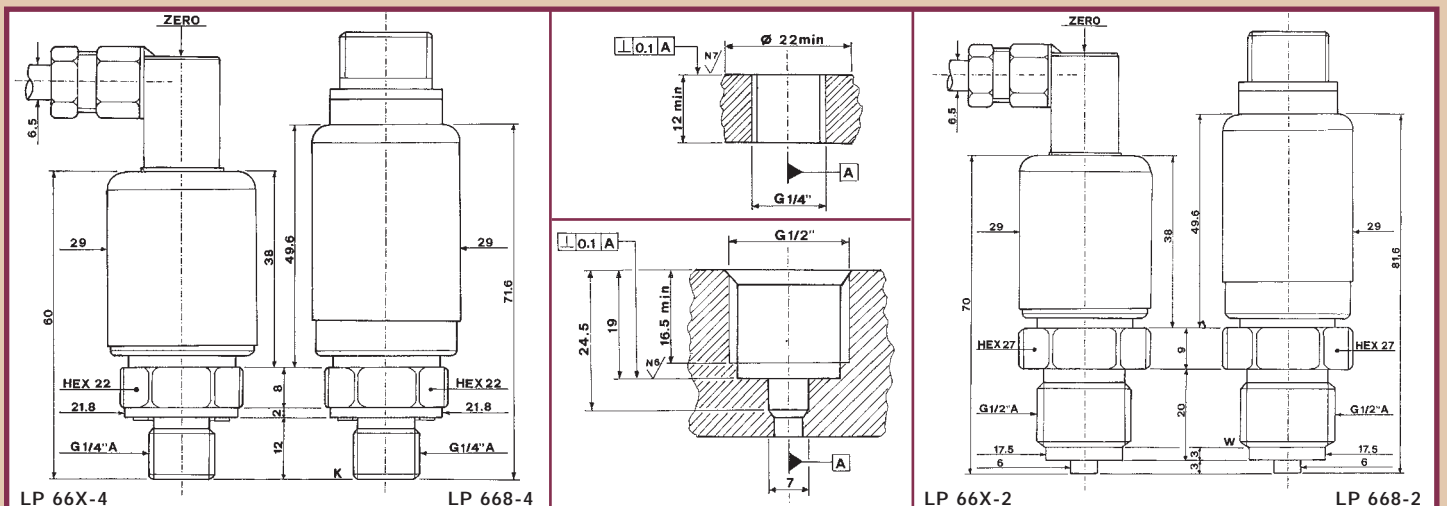
- Body and enclosure: in stainless steel.
- Wet parts: stainless steel Aisi 316 L, NBR, ceramics.
- Pressure connections: G 1/4" with square section seal; G 1/2" with flat seal.
- Sensor: resistive bridge with 4 active arms deposited on ceramic block.
- CE mark.

Electrical features standardized for the Models with analog outputs:

- Zero regulation: by a multiturn potentiometer adjustable from outside through the central hole of the connector locking screw (with connector plugged and transducer on, too).
- SMD electronics with multilayer circuit (for the most restricted CE standards).

Electrical features of the Model LP 668 with digital electronics and digital output:

- Digital outputs: RS 422; RS 485; CAN bus.
- A/D converter: 24 bit.
- Remote control of zero and gain.
- Commands for the suppression of zero and of residual line pressure.
- Output direct in mechanical units.
- System for internal diagnostics and overpressure indications.
- Multidrop communication: up to 32 transducers on a single serial line.
- Setup command for A/D converter frequency and filter bandwidth.
- Up to 3 different calibration sets with multiple linearization points (8 max).



TECHNICAL SPECIFICATIONS

SPECIFICATIONS COMMON TO ALL THE SERIES

- **Measuring ranges*:** 0 to 1 - 2 - 5 - 10 - 20 - 50 - 100 - 200 - 400 - 600 bars.
- **Overload:** 7 - 7 - 12 - 25 - 50 - 120 - 250 - 400 - 600 - 800 bars.
- **Operating temperature range:** - 20 to + 80°C. Rh ≤95%.
- **Environmental protection:** at least IP 65.
- **CE Standards:** EN 50081-2 (for emission); EN 50082-2 (for immunity).

*Note: 500 - 700 - 1100 - 1400 - bars: see Series LP 650.

SPECIFICATIONS OF THE MODELS WITH ANALOG ELECTRONICS AND ANALOG OUTPUT:

Models	Internal electronics	N. of wires	Supply voltage	Signal output	Zero regulations	Connector pin connections			
						0	1	2	3
LP 665	Voltage amplifiers	3	0 to 12 up to 36 V single polarity	0* to 5V	±10% FS minimum	N/C	output	common	supply +
LP 661				0* to 10V					
LP 664	Current amplifier	2	0 to 8 up to 36 V	4 to 20 mA	±10% min. of 4 mA	N/C	N/C	common	4 to 20 mA supply +

* Note: typical zero pedestal: 0,15 V due to the single polarity supply. It is compensable by the external electronics. N/C = not connected.

- **Total error:** (typical) (non-linearity + hysteresis): up to 20 bars: $\leq \pm 0,3 \%$ FS bsl; up to 400 bars $\leq \pm 0,4 \%$ FS bsl.
- **Temperature variations:** of zero: $\leq \pm 0,03 \%$ FS /°K, of sensitivity: $\leq \pm 0,03 \%$ FS /°K.

SPECIFICATIONS OF THE MODEL LP 668 WITH DIGITAL ELECTRONICS AND DIGITAL OUTPUT:

- Digital outputs: RS 422; RS 485; CAN bus. • Baud rate for RS 422 and RS 485: from 1200 to 115.200 baud.
- Baud rate for CAN: up to 1 M bit. • A/D converter: 24 bit max. • Sampling rate: from 7,5 Hz to 3,8 KHz.
- Automatic input filter bandwidth: from 1,94 Hz to 780 Hz (-3 dB). • Analog output: 0 to 5 V (option).
- Supply: from 7 to 28 Vdc; 20 mA, typical.

HOW TO ORDER:

- Output: 5 = 0 to 5 V; 1 = 0 to 10 V; 4 = 4 to 20 mA; 8 = RS485 and RS422; 9 = CAN bus
- Pressure connection: G 1/4" (suffix -4); G 1/2" A (suffix -2)

Mod. LP 66X-X



Specifications and prices may change without notice.

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