

STOP GUESSING, **START KNOWING.**

Cavity Pressure Sensor IDS-C-A1

4 mm | 9.8 pC/bar



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Description

Precision crystal elements, tailored material selection and minimal tolerances in production make the cavity pressure sensors high-precision instruments that deliver a reliable, undistorted pressure signal. Its well-proven design guarantees highest durability and consistent performance over its entire lifetime. In combination with the different cables and the mounting aids, the sensor can easily be installed and integrated into injection molding systems.

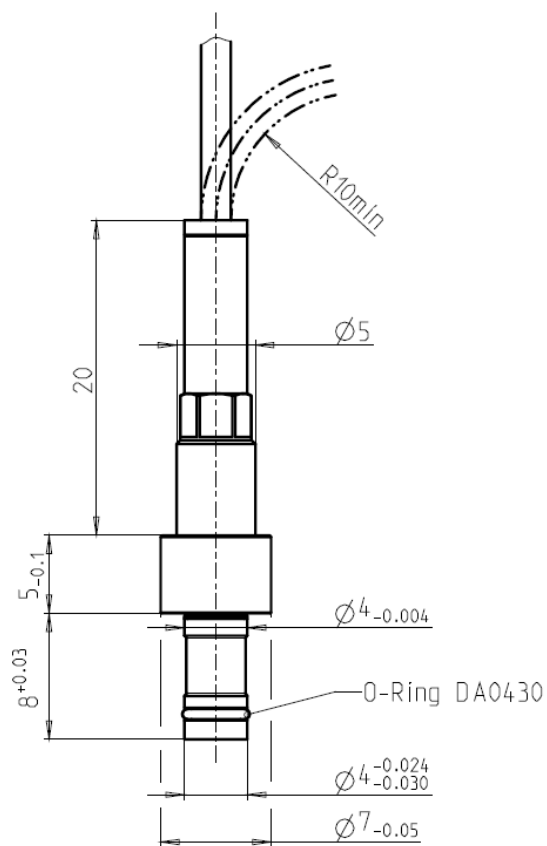
Key Features

- Measures Pressure Profiles in Injection Molding Systems
- Pressure Range up to 2000 bar
- Suitable for High Temperatures up to 450°C
- Compact and Robust Design
- Single Wire Cable or Low Noise Coaxial Cable in different lengths
- Installation Directly into Mold Cavity for Unmatched Precision

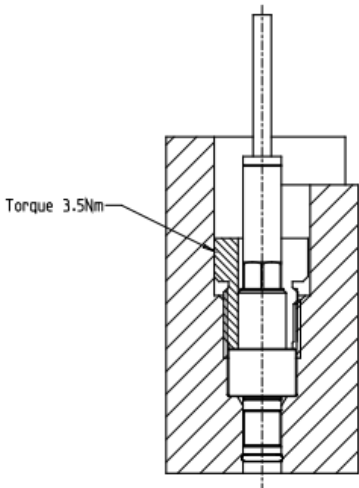
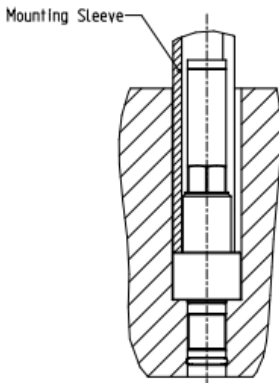
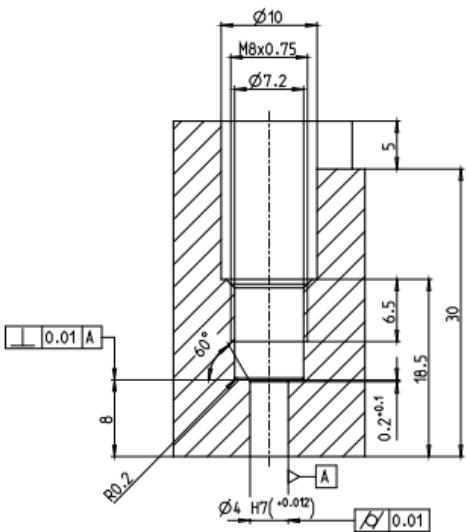
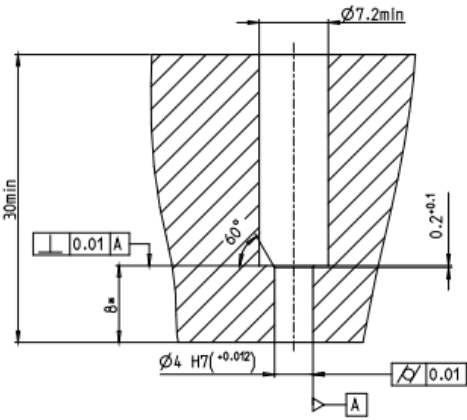
Technical Data

Sensor Type	Direct
Tip Diameter	4 mm
Operating Principle	Piezoelectric, Charge Output
Sensing Element	Quartz
Dynamic Measuring Range	0 ... 2000 bar
Overload Pressure	2500 bar
Sensitivity [nominal]	9.8 pC/bar $\pm$ 2 %
Linearity	$\leq \pm 1$ % FSO
Temperature Mold	200 °C
Temperature Melt [front of sensor]	450 °C
Internal Isolation Resistance	$> 10^{13}$ Ohm [25 °C]
Natural Frequency	80 kHz
Interfaces	
Connector type	M4x0.35

Sensor Dimensions



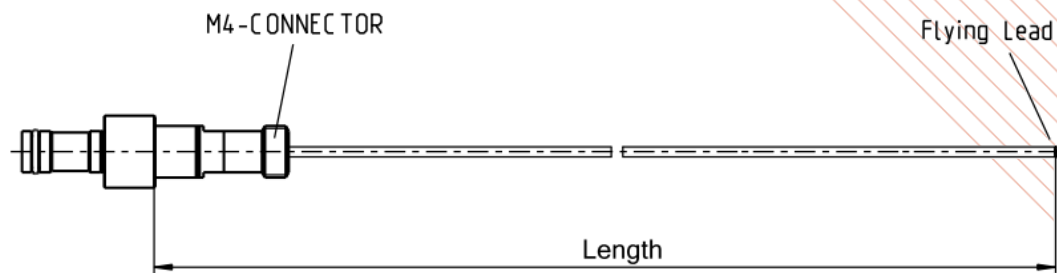
Mount Dimensions

Mounting Nut	Mounting Sleeve
 Torque 3.5Nm	 Mounting Sleeve
Borehole Dimensions - Mounting Nut	Borehole Dimensions - Mounting Sleeve
 $\text{Ø}10$ $M8 \times 0.75$ $\text{Ø}7.2$ 5 6.5 30 18.5 0.2 ± 0.1 60° $B0.2$ $\text{Ø}4 \text{ H7 } (+0.012)$ 0.01 A	 $\text{Ø}7.2_{\text{min}}$ 30_{min} 60° $\text{Ø}4 \text{ H7 } (+0.012)$ 0.2 ± 0.1 0.01 A Dimension adapted to Sensor

All Dimensions are in mm

Cable

- Single Wire Cable

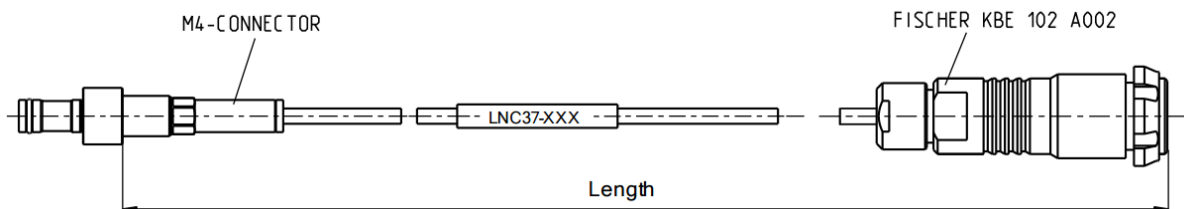


Single Wire Cable SWC4.zzz

zzz = Length in Meters: 1 | 1.5 | 2 | 2.5 | 3

e.g. 1.5 m Cable Length: SWC4.015

- Low Noise Coaxial Cable



Low Noise Coaxial Cable LNC37.zzz

zzz = Length in Meters: 1 | 1.5 | 2 | 2.5 | 3

e.g. 1.5 m Cable Length: LNC37.015

Scope of Supply

		Order Code
Sensor IDS-C-A1 with SWC4 Single Wire Cable or	1	IDS-C-A1.0
Sensor IDS-C-A1 with LNC37 Low Noise Coaxial Cable	1	IDS-C-A1.1
Sensor Type Plate	1	Included
Installation Guide	1	Included
Test Record	1	Included
O-Ring Seal	1 (spare)	DA0430

Accessories

		Order Code
Low Noise Coaxial Extension Cable IDE-1	Optional for IDS-C-A1.1	IDE-1.zzz
Mounting Nut	Optional	IMA_MN2
Mounting Sleeve	Optional	IMA_MS2
Socket Wrench	Optional	IMA_SW2