

## Kistler Cavity Pressure Sensor Heads 9204B

PCS Company offers Kistler 9204 cavity pressure sensor head that offers high resolution and a rugged, welded case, for measuring indirect cavity pressure, behind an ejector pin, during the injection molding of plastics. The charge signal (pC = Picocoulomb) output by the force sensor is converted in the Kistler charge amplifier or in a monitoring unit into a proportional output voltage that is largely independent of the length of the sensor cable. The maximum possible output voltage from the standard amplifier is 10 V.

### Features:

- Ensures consistent part quality
- Allows for precise measurement of cavity pressure
- Improves process reliability
- 12.6 mm diameter
- Machined on all sides extremely compact cavity pressure sensor head
- For cavity pressures up to 3000 bar
- M2.5 fastening thread
- 200°C max. operating temperature
- Requires 1645 cable (not included)
- Cables available in 0.4 & 1m lengths
- Compatible with RJG 9204 sensor
- M4 sensor connection



Item Number	Head Diameter	Measuring Range	Overload	Threshold	Sensitivity
18007415	12.6mm	0 - 10 kN	12000 N	30 mN	-1.6 pC/N

## Kistler Cavity Pressure Sensor Heads 9211B

PCS Company offers the Kistler 9211B miniature indirect cavity pressure sensor, offering high resolution, extremely small dimensions, and a rugged, welded case, for measuring mold cavity pressure of up to 3,000 bar during injection. The sensor is positioned under the ejector pin in the ejector plate, and measures the force curve using the ejector pin. This allows calculation of the actual mold cavity pressure. Thanks to its compactness the 9211B miniature force sensor is suitable for dynamic and quasistatic force measurements, particularly useful for applications in injection molding, where space is critical and forces are high. Indirect pressure measurement is particularly suitable for molds with small cavities.

### Features:

- Ensures consistent part quality
- Allows for precise measurement of cavity pressure
- Improves process reliability
- 6 mm diameter
- Extremely compact cavity pressure sensor
- For cavity pressures up to 3000 bar
- Requires 1645 cable (not included)
- Cables available in 0.4 & 1m lengths
- Compatible with RJG 9211 sensor
- M4 sensor connection



Item Number	Head Diameter	Measuring Range	Overload	Threshold	Sensitivity
18007424	6 mm	0 - 2.5 kN	3000 N	10 mN	-4.4 pC/N

## Kistler 1645C Coaxial Connection Cables

PCS Company offers Kistler 1645C Coaxial Connection Cables for high impedance piezoelectric measurement, which demands highly insulated coaxial cables and connectors to ensure an insulation resistance greater than  $10^{13} \Omega$  throughout the measuring chain. Only low-noise coaxial cables that produce very little triboelectricity during movement may be used. The connectors must be robust, sealed, and resistant to dirt. Kistler connectors have been developed specifically to meet these requirements. The Kistler 1645C cables are made of stainless steel. This provides improved durability, measurement reliability and accuracy compared to galvanized connectors. All Kistler connectors contain an o-ring seal at the cable and the connection ends.

### Features:

- Available in 0.40m and 1.0m lengths
- 392°F/200°C max operating temperature
- Fluoropolymer covering
- M4x0.35 pos. – Fischer KE112
- IP65 Degree of protection EN 60529
- Compatible with the 9211 and 9204 sensors
- Compatible with RJG 1645 cable
- M4 sensor connections

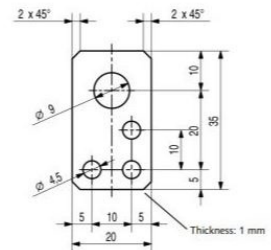
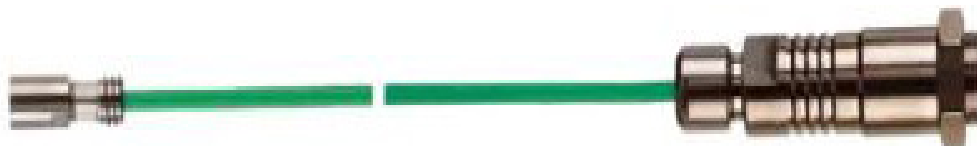


Fig. 10: Mounting plate Mat. No. 65005208



Item Number	DIA	Length	With Mounting Plate
18000565-1	2mm	0.4m	Y
18042144-1	2mm	1m	Y
18000565	2mm	0.4m	N
18042144	2mm	1m	N
65005208	N/A	35m	Mounting Plate Only

## Kistler Industrial Charge Amplifier

PCS Company offers Kistler’s 4-Channel, Industrial Charge Amplifier with Ethernet Interface for multi-purpose (ICAM-B) that can be used wherever mechanical quantities are measured with piezoelectric sensors. The ICAM-B converts a very low charge signal, generated by piezoelectric sensors, such as the 9204B or 9211B pressure sensors, into a low-impedance voltage signal. It covers slow, quasi-static signals as well as dynamic processes. The charge amplifier type 5073B, with its sealed metal case, is designed for harsh industrial environments. The amplifier features a wide measuring range and a rich set of signal processing features.

### Features:

- Unit of Measure: Millimeters
- Optimizes process efficiency and ensures zero-defect production
- Quality costs cut due to early detection of deviations
- Wide adjustable measurement range:  $\pm 20 \dots \pm 1000000$  pC (Picocoulomb)
- Fast analog signal throughput with 20 kHz bandwidth
- Output signal:  $\pm 10$  V, Digital, Analog, Ethernet
- Degree of protection EN 60529, IP50
- Required to convert piezoelectric sensors to proportional voltage signals



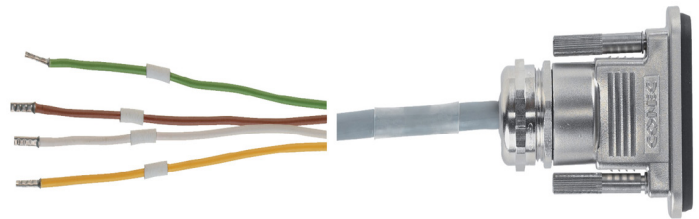
Item Number	Bandwidth	Input Connector	Output Signal	Analog Output	Digital Output
18047953	20kHz	BNC	+10/-10V	Voltage	Ethernet

## Kistler Charge Amp Connecting Power Cable

PCS Company offers Kistler Connecting Power Cable 1500A41A5 for the Industrial Charge Amplifier (ICAM-B). The D-Sub 15-pin connector is used to connect the supply voltage. Six pins on the D-sub connector are designated for analog outputs with fully flexible scaling and internal routing. The connector also accommodates pins for digital inputs and outputs for controlling industrial measurement processes.

### Features:

- Unit of Measure: Millimeters
- 5 m length
- Connecting cable with D-Sub 15-pin neg.
- Open end with 15 wires
- Degree of protection EN 60529 - IP40
- Analog and Digital input/output



Item Number	Length	Degree of Protection
18000420	5m (16.4 ft)	IP40

## Kistler Network Connection Cable

PCS Company offers Kistler's 1200A195A2 Network Connection Cable with Ethernet Interface, enabling remote access, remote configuration and monitoring, firmware update, integration with control systems, data streaming, and a web-based user interface.

### Features:

- Unit of Measure: Millimeters
- Length: 2 meters
- Shielded connection cable
- Ethernet CAT5 (IEC 11801), 100 Mbps
- Connectors: M12 4-pin D-coded straight pos. - RJ45
- Can be used with Kistler Charge Amp (ICAM-B)



Item Number	Length	Ethernet
18029024	2m (6-1/2 ft)	100 Mbps