

Contact elements

for injection molds

Type 1712B..., 1714B...

These elements for installing Kistler single-wire sensors in molds with mold inserts or exchangeable modules offer the following advantages:

- Mold insert change without dismounting sensor
- Connector for 1 or 4 sensors
- Prevents cable damage during mold servicing

Description

Single-channel system Type 1712B0 consists of two elements allowing connection of any Kistler single-wire sensor between a mold insert and its frame or mold plate. A spring-loaded contact is used in positive element Type 1712B1 and negative element Type 1712B2 is not guided to allow an axial offset. Four-channel contact element Type 1714B0 allows connection of up to four sensors at the same time. The two contact elements are, however, guided to ensure reliable charge transfer. The single-wire cables have crimped contacts and can be removed.

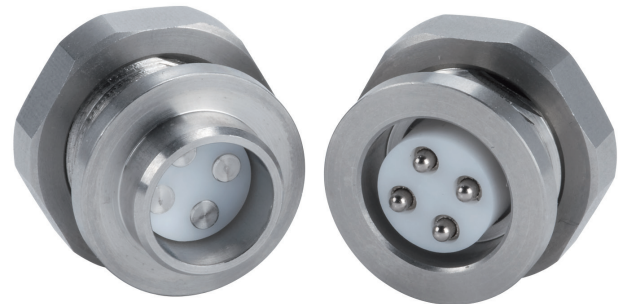
Applications

The contact elements make an electrical connection between cables and sensors in different mold modules. They are therefore suitable for installation in molds with inserts. Contact is made automatically as soon as the insert is introduced into the mold plate. The contact elements of Type 1712B0 can be used for a single-channel and those of Type 1714B0 for a 4-channel sensor connection. During disassembly the sensors remain in the insert or module and prevent cable damage.

Depending on the number of sensors, the connection of the contact elements can be taken to either 4-channel connector Type 1722A4... or 8-channel connector Type 1722A8.... This allows the use of ComoNeo Type 5887A... for production monitoring.



Set Type 1712B0



Set Type 1714B0

Technical data

Type	Type 1712B1/A2	Type 1714B1/A2
Number of channels	1	4
Installation dimensions	M8x5,2 mm (each element)	ø12x9,5 mm (each element)
Axial offset	max. 0,3 mm	(keyed connection)
Operating temperature	0 ... 200 °C	0 ... 200 °C

1712B_000-721e-04.17

Dimensional drawing

The following diagrams show key external dimensions of the contact elements.

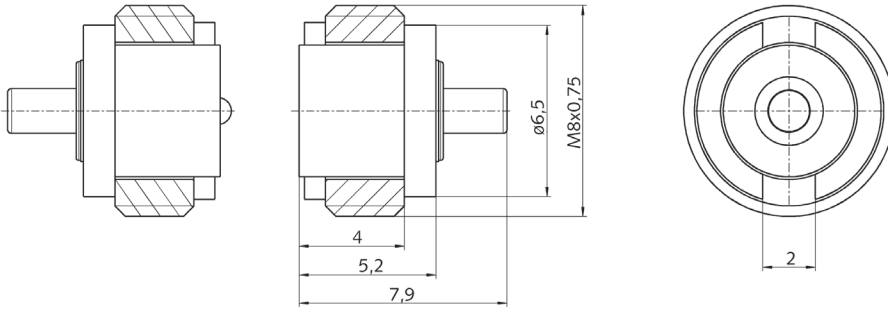


Fig. 1: Type 1712B0 with positive Type 1712B1 (left) and negative contact element Type 1712A2 (right)

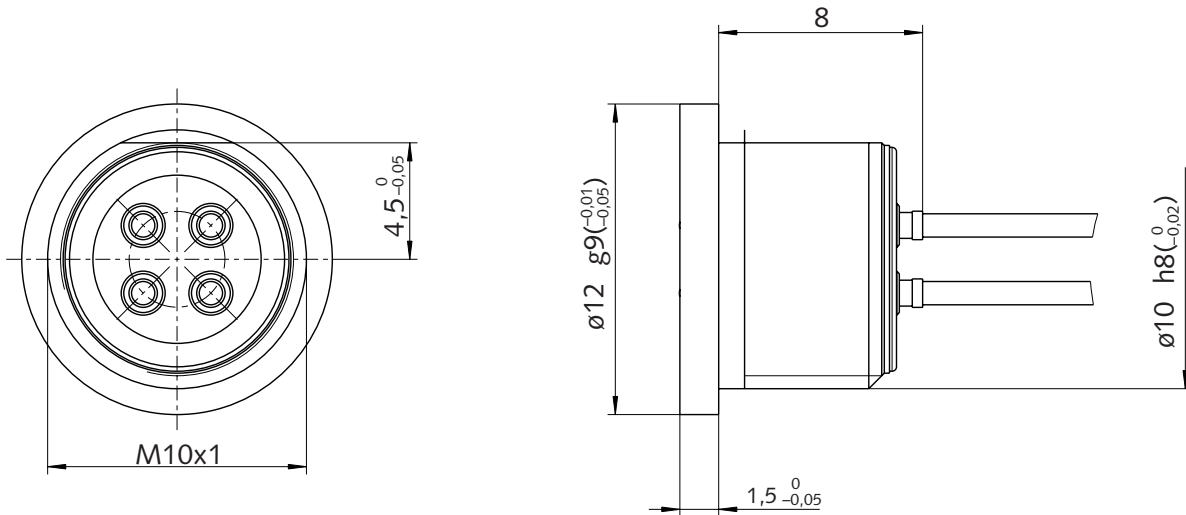


Fig. 2: Positive contact element Type 1714B1 of Type 1714B0 for installation in mold insert

1712B_000-721e-04.17

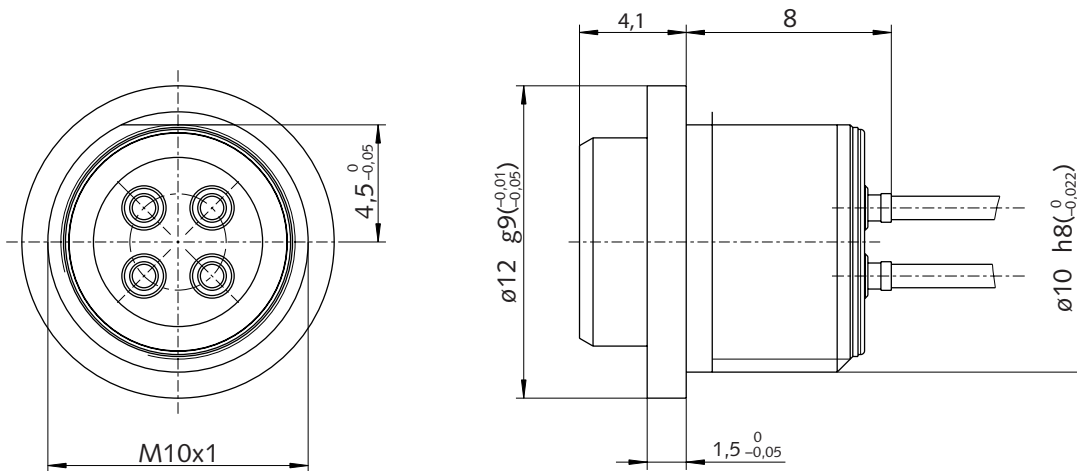


Fig. 3: Negative contact element Type 1714B2 of Type 1714B0 for installation in mold platen

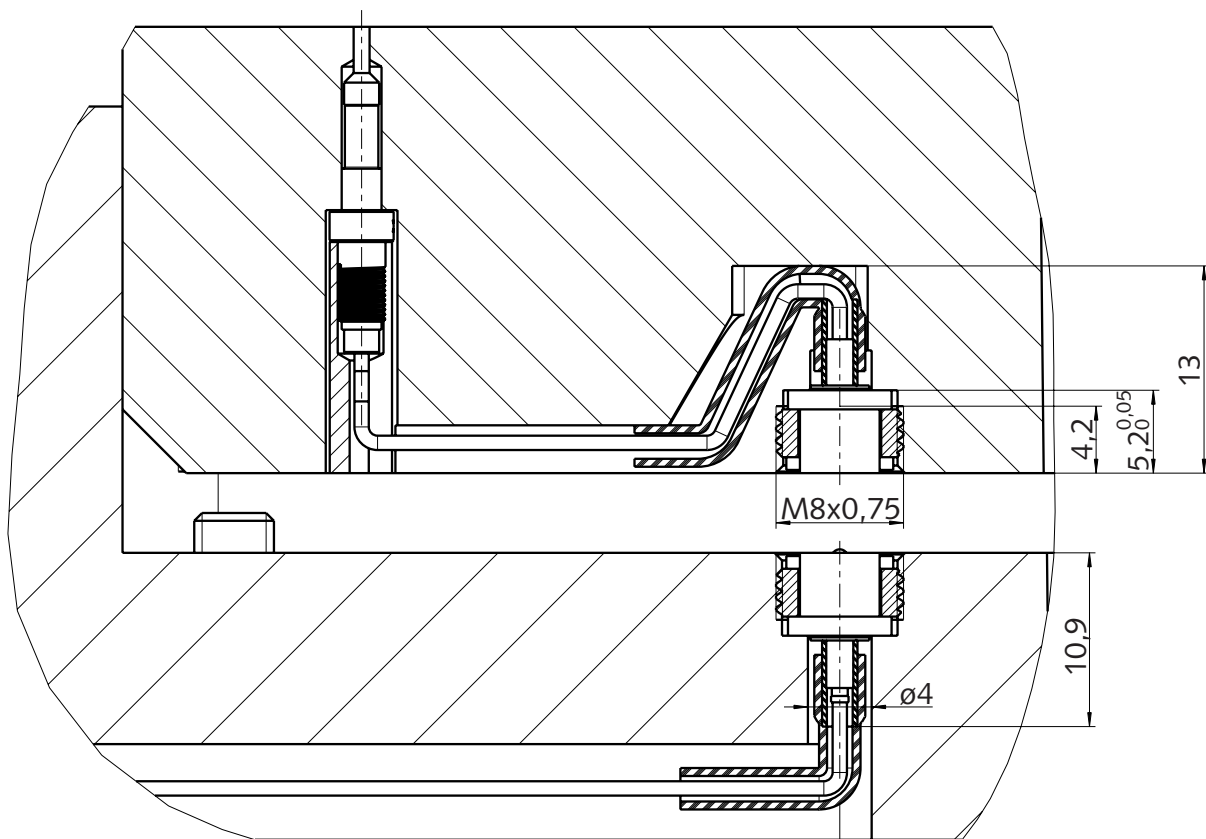
Installation examples

The negative contact elements are installed in the insert or in the exchangeable module. The required single-wire sensors are supplied by Kistler with a crimped contact. This is inserted into the negative contact element.

The sensor Types identified with the "Zsp" extension (for example Type 6183CAZsp) have to be ordered separately, specifying the required length.

Installation of single-channel Type 1712B0

The supplied mounting nut (Art. No. 3.211.349) is used to hold the contact elements of the single-channel Type 1712B0 directly in a hole tapped with an M8x0,75 mm thread in the mold insert or mold plate. The face of both elements must be flush. A maximum axial offset of 0,3 mm is allowed. Each of the exposed crimp contacts is protected with a fluoropolymer tube and covered with a silicone sheath. The positive side of the contact element should be installed in the mold and the negative side in the form platen. Thus the form platen will stand securely on the work bench without wobbling.



1712B_000-721e-04.17

Fig. 4: Installation example showing contact element Type 1712B0. Sensor Type 6183CAZsp is connected to negative contact element Type 1712B2 in mold insert

Installation of 4-channel Type 1714B0

Type 1714B0 is mounted flush in the mold as shown in the diagrams. Preferably, the negative contact element Type 1714B2 is installed in the exchangeable module. The positive contact element Type 1714B1 is mounted in the mold plate or in the base of the frame.

To ensure correct alignment, the keyed contact elements can each be held in a retaining plate Type 1419 with a M8 nut.

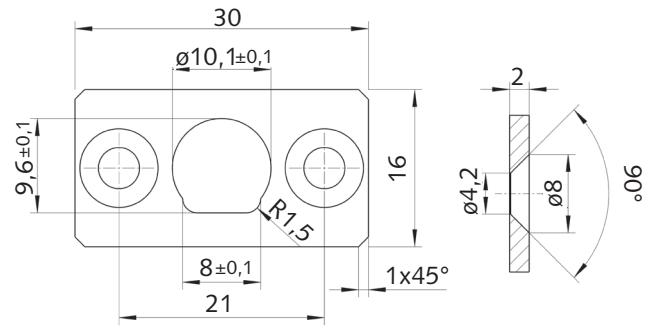


Fig. 7: Contact elements Types 1714B1 and 1714B2 can be secured with retaining plate Type 1419

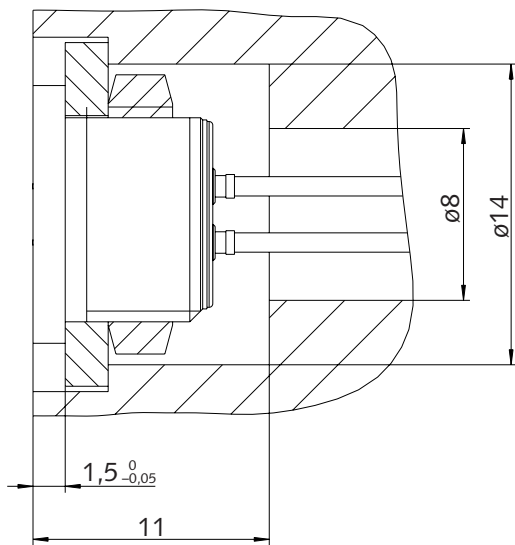


Fig. 5: Installation dimensions for positive contact element Type 1714B1 with retaining plate Type 1419 and M10 nut

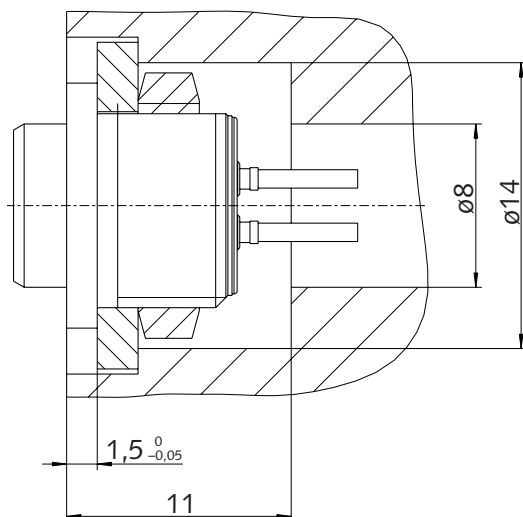


Fig. 6: Installation dimensions for negative contact element Type 1714B2 with retaining plate Type 1419 and M10 nut

1712B_000-721e-04.17

Included accessories**Type/Art. No.**

For single-channel contact element Type 1712B0

- Positive element incl.
M8 nipple,
Fluoropolymer tube
and silicone sheath 1712B1
3.211.349
3.221.510
3.221.511
- Negative element incl.
M8 nipple,
Fluoropolymer tube
and silicone sheath 1712B2
3.211.349
3.221.510
3.221.511
- One single-wire cable, l = 1,5 m
with crimped contact 1666AZ2

For 4-channel contact element Type 1714B0

- Positive element incl.
M10 nut 1714B1
3.414.539
- Negative element incl.
M10 nut 1714B2
3.414.539
- Four single-wire cables, l = 1,5 m
with crimped contact 1666AZ2
- Retaining plate with two M4 screws 1419
- Crimppin 65003747

Optional accessories**Type**

For 1-channel contact element Type 1712B...

- Mounting socket 1300A131

For 4-channel contact element Type 1714B...

- Crimpset for mounting the crimppin 1381A0
- Crimptool 1381A1
- Insert for Crimptool 1381A2
- Sheath stripper 1381A3

Ordering key**Type 1712B □**

1-channel contact element as complete kit	0
Positive contact element (for installation in mold plate)	1
Negative contact element (for installation in insert)	2

Type 1714B □

4-channel contact element as complete kit	0
Positive contact element (for installation in insert)	1
Negative contact element (for installation in mold plate)	2

Note

When ordering the contact elements the required sensor Types must be ordered separately. A crimp on the single-wire cable is required to connect the sensor to the contact element. This can either be fitted with the Crimpset type 1381A0 or the sensor is already ordered with crimped pin at the cable end. For this purpose, sensors with the extension "Zsp" can be ordered. When ordering, the desired cable length must be specified.