



# Data Sheet

**Miniature Cavity Temperature Sensors with Flexible Quick Disconnect and Quick Disconnect Cable for Standard Variants & Variants for Floating Mold Inserts**



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# 1 Product Description

## 1.1 Flexible Quick Disconnects

In addition to the cavity pressure, the cavity temperature plays an essential role in monitoring and controlling the injection molding process. Here, the melt front is automatically detected when the temperature sensor is reached and used for control and regulation tasks. In order to be able to react to this event as quickly as possible, the response time of the sensors in particular was optimized.

Numerous injection molded parts are not directly produced in the mold platen, but with the help of mold inserts. This facilitates the manufacture of the cavities and the handling at servicing. The insertion of cavity pressure and cavity temperatures sensors often set boundaries because of lack of space. Furthermore, by mounting and dismounting the mold inserts the handling of the sensor cable with a fixed installation point is not suitable for these applications.

Flexible quick disconnects for cavity temperature sensors allow mold inserts to be installed and removed by a simple plug-in connection, while the sensors themselves remain in the mold insert. This method is very reliable in operation above all because the sensors do not remain as „bolts“ in the mold platen and can be damaged, but are installed safely packed in the mold insert even after removal. Hence sensors can be inserted without mounting problems in interchangeable molds which are changed on the machine.

The decisive advantage of this system is that different mold inserts with different sensor positions can be used without changing the position of the quick disconnect. In contrast to a sensor installed in the mold platen itself, the sensor position can still be selected very flexibly according to the molded part, whereby the size of the mold insert is irrelevant.

## 1.2 Floating Disconnects

Mold inserts are often installed floating to allow standardization when replacing a defective mold insert. This means that they are no longer fitted exactly into the mold plate, but are provided with a generous tolerance. This is also referred to as „floating mold inserts“.

For this installation situation, we have developed a special quick disconnect system that automatically compensates for the lateral displacement of the mold inserts. This is made possible by the fact that the two quick disconnects automatically „find each other“ during installation, which would inevitably lead to a collision in a rigid coupling design.

Floating quick disconnects simplify the exchange of mold inserts, which is a prerequisite for the standardization of mold components, especially in the global environment.



## 1.3 Summary

Miniature Cavity Temperature Sensors	Flexible Quick Disconnects
<ul style="list-style-type: none"> <li>• Optimized for use in injection molds</li> <li>• Very small dimension</li> <li>• Extremely short response time</li> <li>• Waterproof design</li> <li>• Optionally available with hardened sensor front</li> </ul>	<ul style="list-style-type: none"> <li>• Sensor and disconnect position can be different</li> <li>• Beneficial for mold inserts with different sensor positions</li> <li>• Variable cable lengths</li> <li>• Floating variant with generous installation tolerance</li> </ul>

## 1.4 Technical Data Miniature Cavity Temperature Sensors

Properties	Specification
Operating temperature range of cable	0 ... 200 °C
Standard operating temperature of sensor front	max. 600 °C
Operating pressure range	0 ... 2'000 bar
Thermocouple (not ground isolated)	Type N
Class	1
Max. deviation according to IEC 584-3 (-40 °C ... 1000 °C)	dT: $\pm 0.004 \times T$ or $\pm 1.5$ K
Colors / polarity according to IEC 584-3	pink (NiCrSi): plus white (NiSi): minus
Response time switchover to holding pressure and sequential control with PRIAMUS amplifier	4 ms

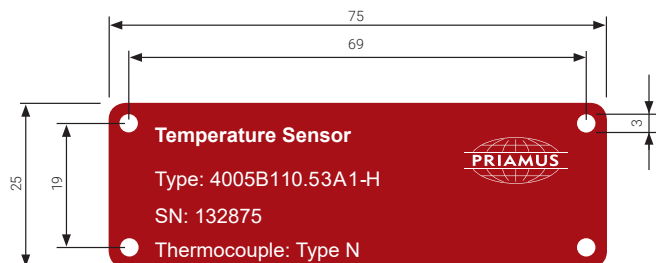
## 1.5 Marking Example Miniature Cavity Temperature Sensor

The type number of our miniature cavity temperature sensors consists of the following elements::

	4103Fx.xx-H
4103	Sensor type
F	Index
x.xx	Cable length (in m)
H	Hardened sensor front

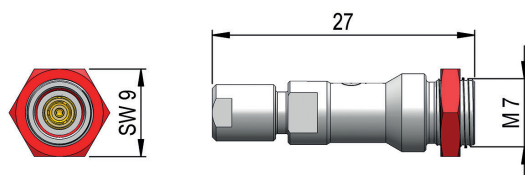
## 1.6 Identification Plate

All cavity temperature sensors are tested and provided with a serial number. Thus, all test results and all sensors are traceable. This data is located on the identification plate, which can be attached to the mold.



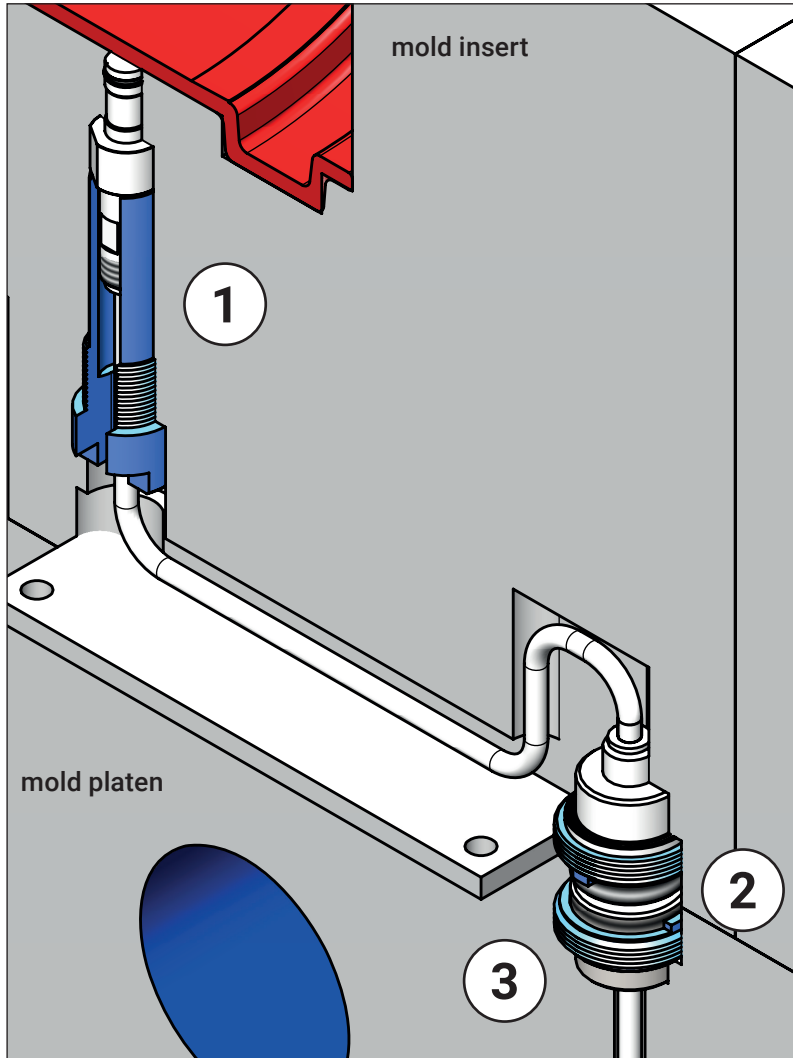
## 1.7 Connectors

All quick disconnect cables have a Fischer connector type KBE 101 negative TRIAX.



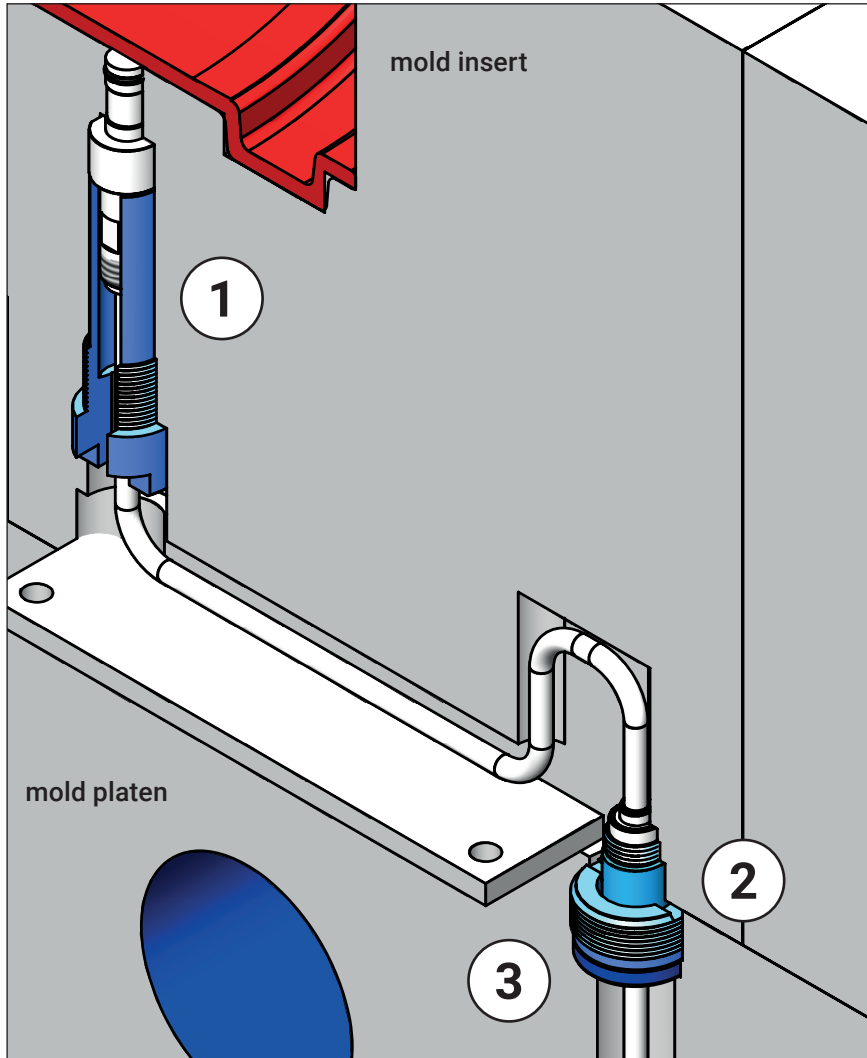
## 1.8 Mounting Situation Standard Variants

Lower picture shows a sensor **1** with flexible quick disconnect **2** (standard variant). The quick disconnect cable **3**, which also has a flexible quick disconnect, is installed in the mold platen.



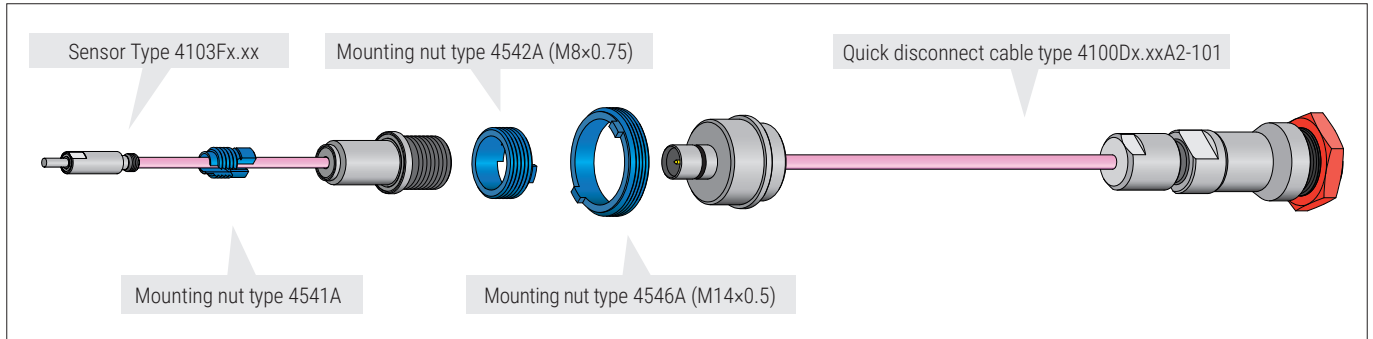
## 1.9 Mounting Situation Floating Variants

Lower picture shows a sensor **1** with flexible quick disconnect **2** (floating variant). The quick disconnect cable **3**, which also has a flexible quick disconnect, is installed in the mold platen.

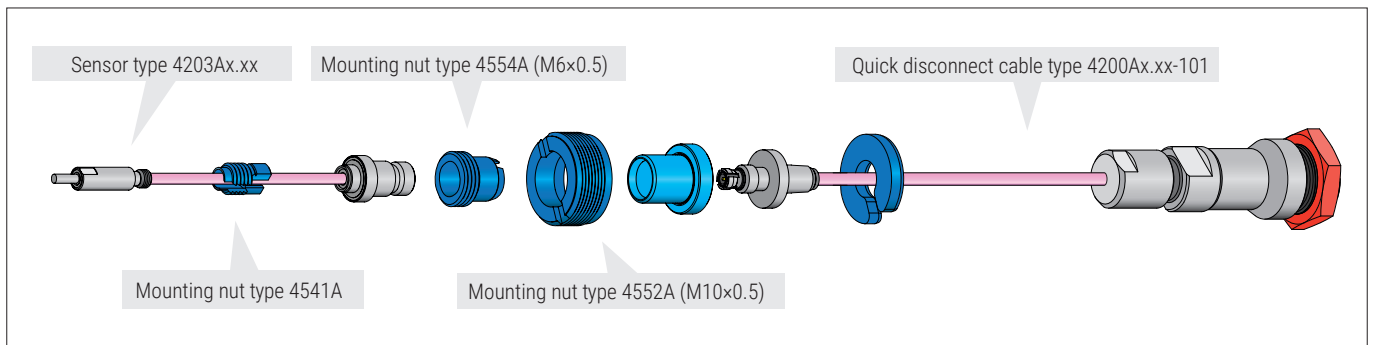


## 1.10 Measuring Chains

### 1.10.1 Standard Variant with Quick Disconnect Cable



### 1.10.2 Floating Variant with Quick Disconnect Cable



## 1.11 Type Overview

This section lists all available versions of our miniature cavity temperature sensors with the associated quick disconnect cables. In addition to the standard variants (type number starting with 41), the floating variants (type number starting with 42) are also described.

x.xx = Total length (sensor + cable + quick disconnect) in [m] must be specified when ordering.

	4103Fx.xx	4103Ex.xx-H	4105Ex.xx	4105Dx.xx-H	4107Ex.xx	4107Dx.xx-H	4109Cx.xx	4111Dx.xx	4115Bx.xx-H	4117Bx.xx-H	4203Ax.xx	4203Ax.xx-H	4205Ax.xx	4205Ax.xx-H	4207Ax.xx	4207Ax.xx-H	4209Ax.xx	4211Ax.xx	4215Ax.xx-H	4217Ax.xx-H
<b>Sensor front:</b>																				
Machinable			•	•									•	•						
Non-machinable	•	•			•	•	•	•	•	•	•	•			•	•	•	•	•	•
Hardened		•		•		•			•	•		•		•		•			•	•
Stepped front diameter								•		•								•		•
<b>With sensor:</b>																				
Type 4003D	•										•									
Type 4003C-H		•										•								
Type 4005C			•										•							
Type 4005B-H				•										•						
Type 4007C					•										•					
Type 4007B-H						•										•				
Type 4009B							•										•			
Type 4011B								•										•		
Type 4015A-H									•										•	
Type 4017A-H										•										•

## 1.12 Cable

x.xx indicates the cable length (total length with sensor and quick disconnect) in [m] and must be specified when ordering. The following points should be particularly noted with regard to cable length:

- When designing, make sure that the cable length on the mold insert side is not too short and not too long so that the sensor with quick disconnect can still be mounted.
- The cable must be long enough to accommodate the remaining cable length in the bore (keywords: volume and stiffness).
- The shorter the cable, the stiffer it is and the more difficult it is to accommodate in the bore.
- The cable must be long enough so that the sensor can still be mounted. The flexible quick disconnect is located laterally outside the bore.
- When using multi-channel connector boxes, the cables must be long enough to be plugged in when the cover of the connector box is removed.

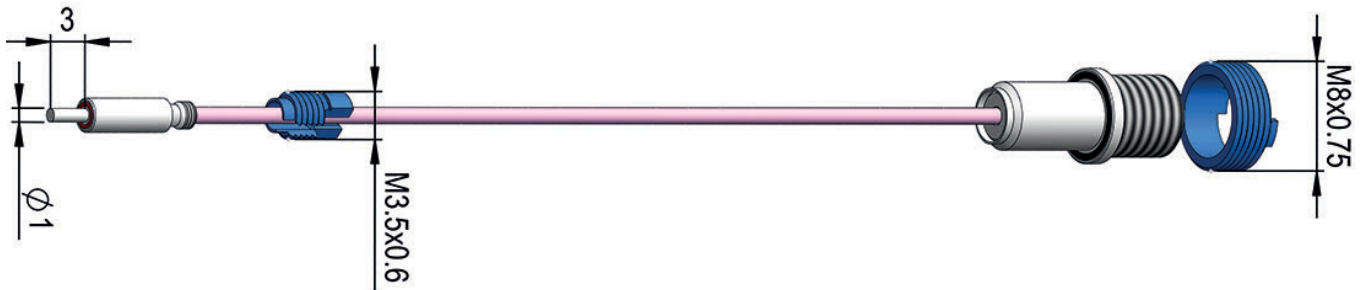
The following manufacturing tolerances apply to the cables:

Sensor with quick disconnect (min. length: 0.10 m)		Quick disconnect cable (min. length: 0.10 m)	
Cable length [m]	Tolerance + .../-0 mm	Cable length [m]	Tolerance + .../-0 mm
< 0.50 m	5 mm	< 0.50 m	5 mm
> 0.51 m ... 1.00 m	10 mm	> 0.51 m ... 1.00 m	10 mm
		> 1.01 ... 5.00	20 mm

## 1.13 Sensors Standard Variant

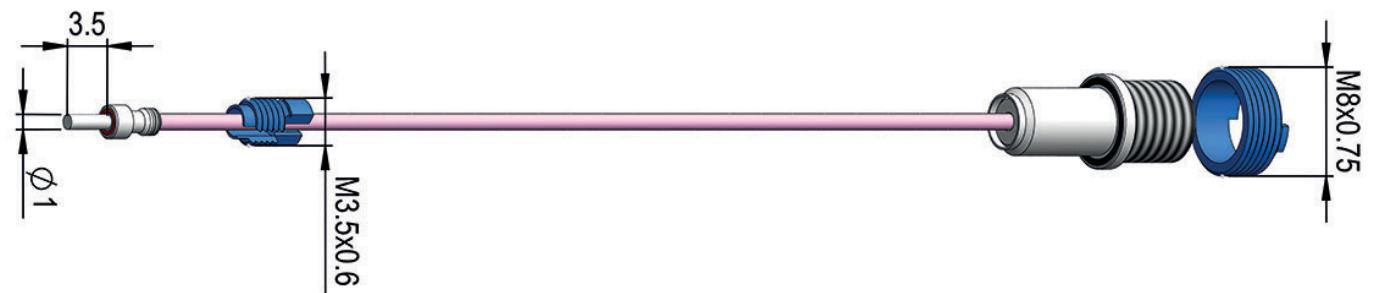
Types 4103Fx.xx, 4103Ex.xx-H

Smallest bending radius: 5 mm



Types 4105Ex.xx, 4105Dx.xx-H

Smallest bending radius: 5 mm



**Types 4107Ex.xx, 4107Dx.xx-H**

Smallest bending radius: 5 mm



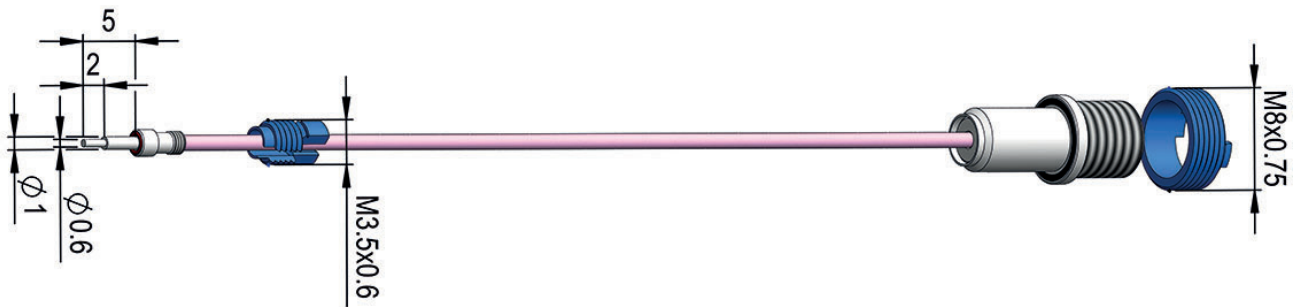
**Type 4109Cx.xx**

Smallest bending radius: 5 mm



**Type 4111Dx.xx**

Smallest bending radius: 5 mm





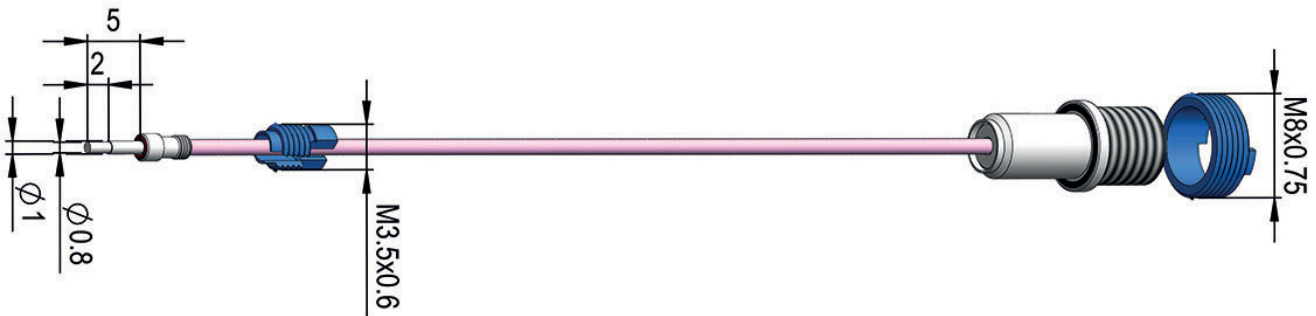
**Type 4115Bx.xx-H**

Smallest bending radius: 5 mm



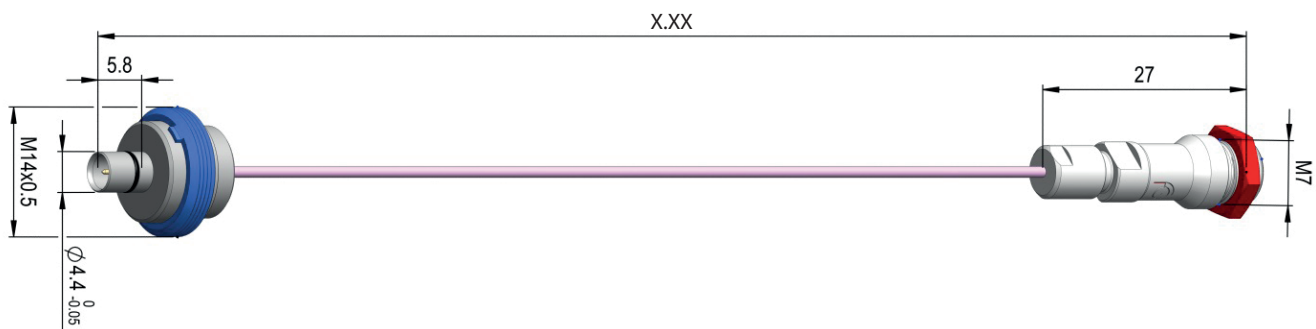
**Type 4117Bx.xx-H**

Smallest bending radius: 5 mm



**1.13.1 Quick Disconnect Cable Type 4100Dx.xxA2-101 for Standard Variants**

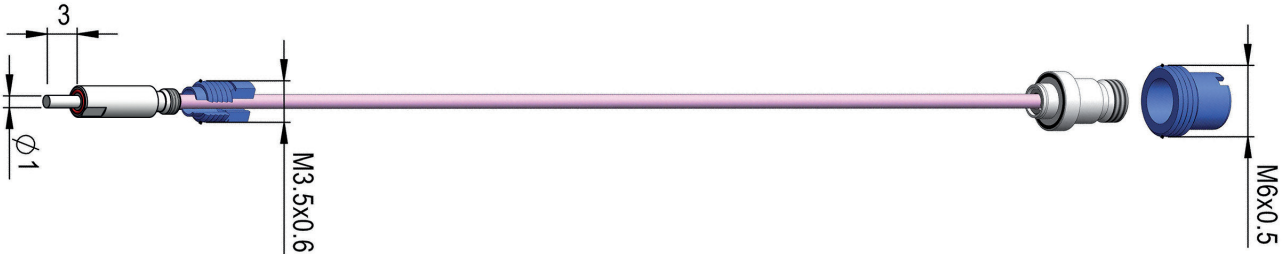
Smallest bending radius: 5 mm



### 1.13.2 Sensors Floating Variant

Types 4203Ax.xx, 4203Ax.xx-H

Smallest bending radius: 5 mm



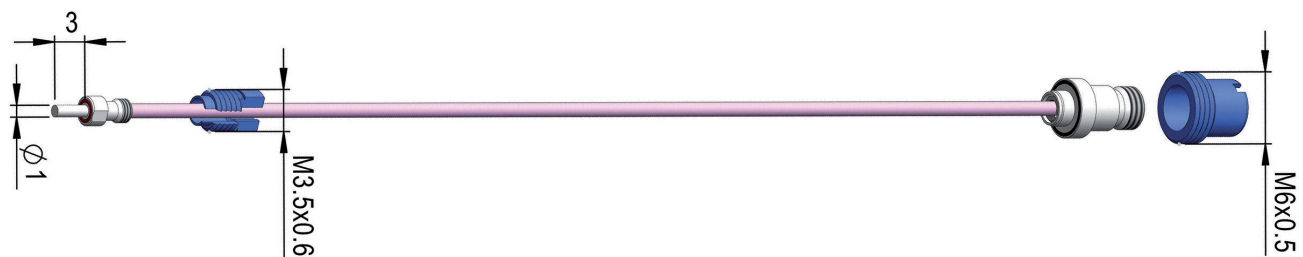
Types 4205Ax.xx, 4205Ax.xx-H

Smallest bending radius: 5 mm



Types 4207Ax.xx, 4207Ax.xx-H

Smallest bending radius: 5 mm



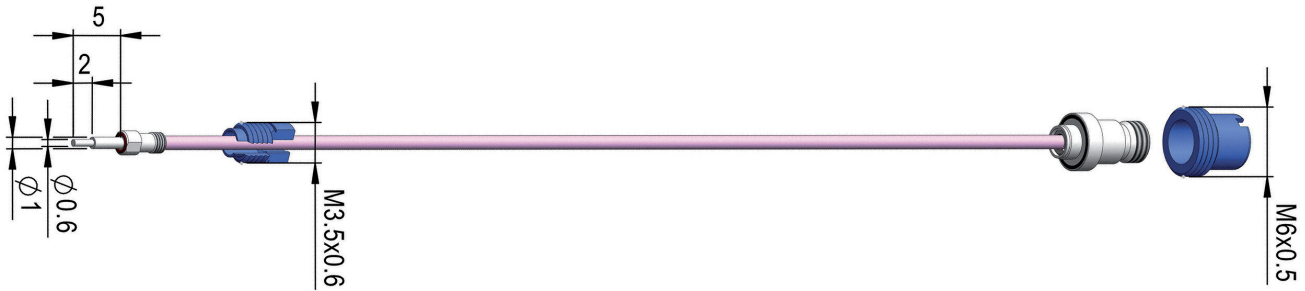
Type 4209Ax.xx

Smallest bending radius: 5 mm



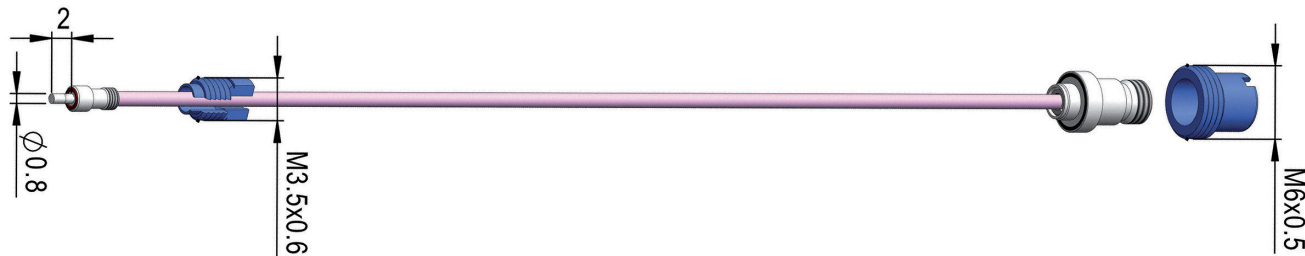
**Type 4211Ax.xx**

Smallest bending radius: 5 mm



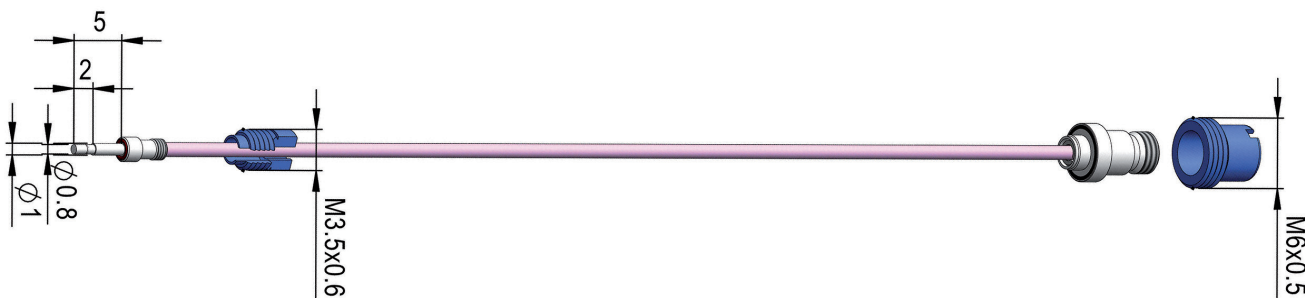
**Type 4215Ax.xx-H**

Smallest bending radius: 5 mm



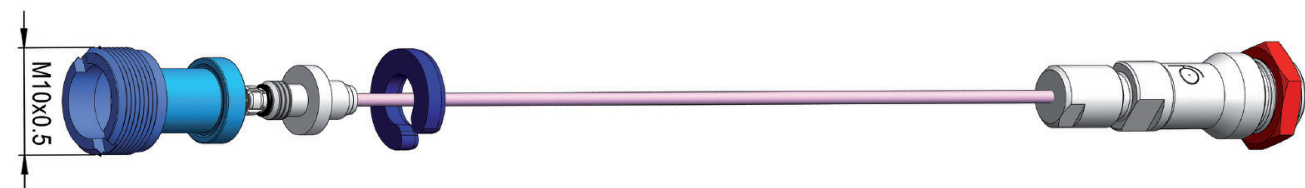
**Type 4217Ax.xx-H**

Smallest bending radius: 5 mm



**1.13.3 Quick Disconnect Cable Type 4200Ax.xx-101 for Floating Variants**

Smallest bending radius: 5 mm



## 2 Mounting

### 2.1 Mounting Places

Cavity temperature sensors are installed at the flow path end in most applications, for example for mold filling detection and automatic hot runner balancing.

For special applications such as sequential control, cavity temperature sensors are also placed at the points where corresponding functions are to be triggered by the measurement signal. In order to place the sensors in the best possible way, defect images of the parts and filling studies are used for existing molds, while filling simulations are helpful for new projects.

The list shows applications and recommendations for installation location. We will be happy to advise you on the selection and placement of the sensors in your specific application.

Application	Recommended mounting place
Automatic, viscosity-independent switchover to holding pressure	just before the end of the flow path
Automatic hot runner balancing and controlling	
Fill time and balancing time monitoring	
Automatic venting control	just before the venting mechanism
Automatic valve gate nozzle control and balancing (e. g. LSR)	shortly before the switch event
Mold filling monitoring („Short Shots“)	at the absolute end of the flow path at particularly thin-walled transitions
Monitoring and controlling of the viscosity	after the cavity pressure sensor
Cavity temperature control	in any order
Core pull control	shortly before the switch event
Control of coining, gas-water-injection etc.	
Melt front depending cascade control	before the valve gate nozzles
Monitoring and control of the shrinkage	near the pressure sensor

### 2.2 Preparations

The basic prerequisite for accurate and problem-free measurement is a perfectly manufactured sensor bore. If the specified tolerances are not observed, large measuring errors, discontinuities in the measuring signal, extreme imprints on the molded part and defective sensors are possible as a result. To obtain a correspondingly fast temperature signal, the sensor front must be installed flush with the cavity wall.

It is therefore essential to observe both the dimensions and the shape and position tolerances described in this chapter. The cable channel respectively the bore must also be sufficiently dimensioned so that the cable can be inserted with a loop. Please note in general that the function of the sensor can no longer be guaranteed if the sensor cables are damaged or if the connectors are contaminated or damaged.

Before you start with the sensor installation, the following instructions must be followed:

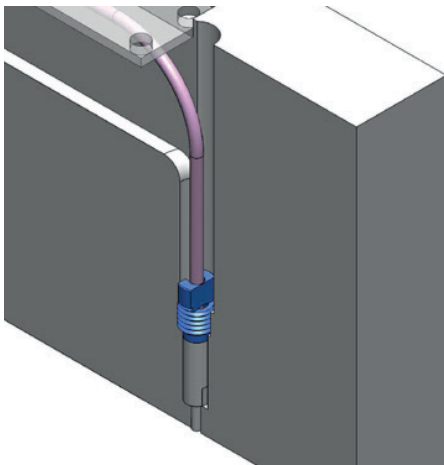
- Only use mounting and extracting tools from PRIAMUS.
- The dimensions and tolerances specified in the bore drawings must be observed.
- All channels and bores must be cleaned free of chips & burrs.
- All contact surfaces must be flat and level.
- The angles in the mold, around which the cables are placed, must be added with a chamfer (3 x 45°) or a radius (R2), therewith the cable will not be damaged.
- All open cable channels must be covered.
- Do not pull on the sensor cable, the flexible quick disconnect and the quick disconnect cable.
- The sensor cable must not be crushed or kinked during installation.
- The quick disconnect must not be contaminated. Therefore, if possible, do not position the quick disconnect in the immediate vicinity of a grinding area.
- For the standard variants, pre-centering of the inserts with two alignment pins for the quick disconnect is necessary. The fit of the pre-centering should be H7/g6 fitment and the length should be at least 10 mm. Usually alignment pins with collar and two fitment diameters are used for this purpose for easy assembly.
- With the floating variant, an eccentricity or deviation of max. 0.2 mm can be absorbed by the floating disconnects.
- Pay attention to the appropriate cable length: The cable should be able to be accommodated in the bore or cable channel without any problems.
- When installing floating disconnects, ensure that the mold platens meet parallel to each other to guarantee the functionality of the disconnects.
- The protecting cap has to be fixed on the mounting plate of the connector and should not be placed too close to the junction of the mold therewith the connector doesn't get crushed by the mold closing.

## 2.3 Mounting Variants

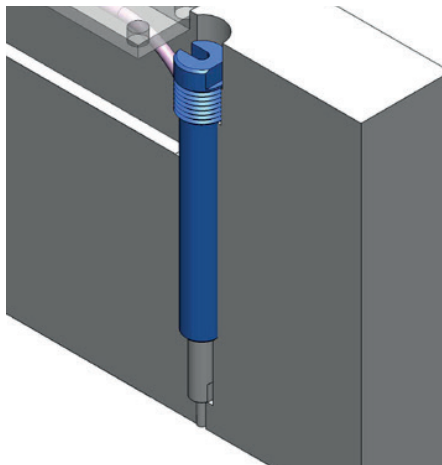
There are three different ways of installing miniature cavity temperature sensors in the mold platen. These installation variants apply to both the standard and the floating variants:

- with mounting nut (see „2.3.2 Mounting Variant with Mounting Nut“ on page 19)
- with PRIAFIT® mounting sleeve (see „2.3.3 Mounting Variant with PRIAFIT® Mounting Sleeve“ on page 20)
- or with a distance sleeve (see „2.3.4 Mounting Variant with Distance Sleeve“ on page 23)

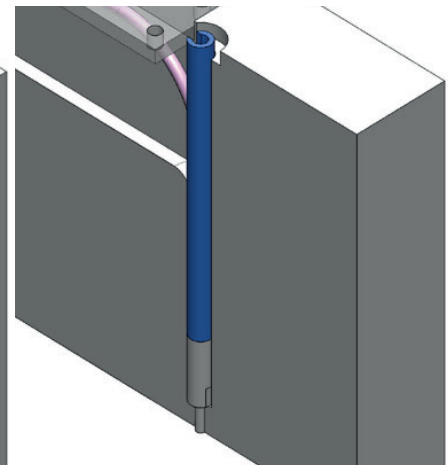
**Mounting with mounting nut  
types 4541A or 4543A**



**Mounting with PRIAFIT® mounting  
sleeve type 4530A**



**Mounting with distance sleeve  
type 4521A or 4522A**



### 2.3.1 Mounting the Sensor Head

For all three installation variants, the sensor head must first be mounted in the bore. The bore dimensions can be found in the bore drawings of the corresponding mounting variant.

#### Notice

The sensor front must be flush with the mold wall (cavity). Rework the bore if necessary.

The following mounting and extracting tools are used to mount the sensors:

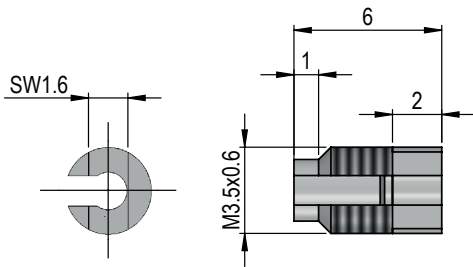
Mounting and extracting tool	Sensor types
Type 4561B	4103, 4105, 4107, 4203, 4205, 4207
Type 4567A	4109, 4111, 4115, 4117, 4209, 4211, 4215, 4217

### 2.3.2 Mounting Variant with Mounting Nut

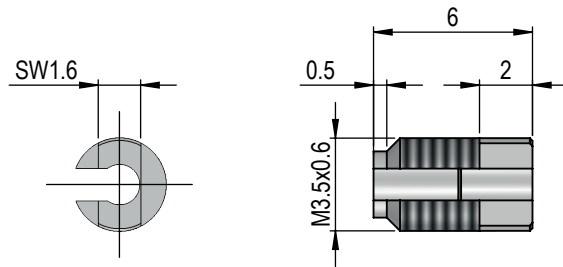
Two different mounting nuts are used for installation, depending on the sensor type. The following assignments and tightening torques apply to the mounting nuts:

Mounting nut	Sensor types	Assembly tool	Tightening torques
Type 4541A	4103, 4105, 4107, 4203, 4205, 4207	4562B	1.0 Nm
Type 4543A	4109, 4111, 4115, 4117, 4209, 4211, 4215, 4217		1.0 Nm

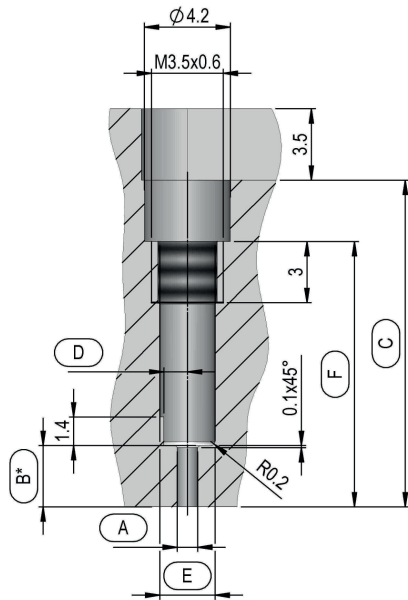
Mounting nut type 4541A



Mounting nut type 4543A

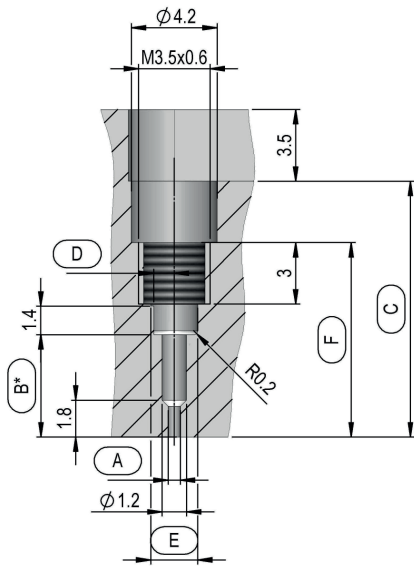


#### 2.3.2.1 Bore Drawings Mounting Variant with Mounting Nut



Type	A <sup>+0.005/+0.01</sup>	B*	C min.	D <sup>0.05/0</sup>	E	F
4103Fx.xx	1	3	16	1.15	2.7	13
4103Ex.xx-H	1	3	16	1.15	2.7	13
4105Ex.xx	1	3.1 - 3.5	11	1.15	2.7	8
4105Dx.xx-H	1	3.1 - 3.5	11	1.15	2.7	8
4107Ex.xx	1	3	10.5	1.15	2.7	7.5
4107Dx.xx-H	1	3	10.5	1.15	2.7	7.5
4109Cx.xx	0.6	2	9.5	1	2.3	6.5
4115Bx.xx-H	0.8	2	9.5	1	2.3	6.5
4203Ax.xx(-H)	1	3	16	1.15	2.7	13
4205Ax.xx(-H)	1	3.1 - 3.5	11	1.15	2.7	8
4207Ax.xx(-H)	1	3	10.5	1.15	2.7	7.5
4209Ax.xx	0.6	2	9.5	1	2.3	6.5
4215Ax.xx-H	0.8	2	9.5	1	2.3	6.5

\* Adjust dimensions



Type	A <sup>+0.005/+0.01</sup>	B*	C min.	D <sup>0.05/0</sup>	E	F
4111Dx.xx	0.6	5	12.5	1	2.3	9.5
4117Bx.xx-H	0.8					
4211Ax.xx	0.6					
4217Ax.xx-H	0.8					

\* Adjust dimensions

### 2.3.3 Mounting Variant with PRIAFIT® Mounting Sleeve

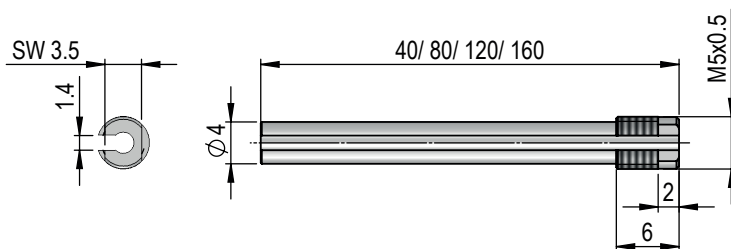
#### Notice

Shorten the PRIAFIT® mounting sleeve on the sensor side, turn over and grind over the surface. Then deburr and break the edges.



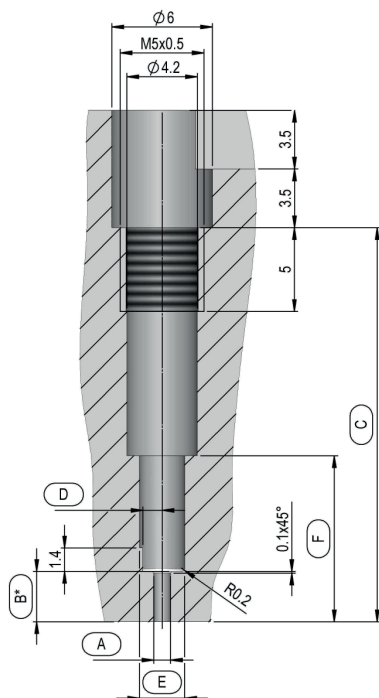
The PRIAFIT® mounting sleeve type 4530A is mounted with the assembly tool type 4575BA and a tightening torque of 1.0 Nm.

#### Mounting Sleeve Type 4530A



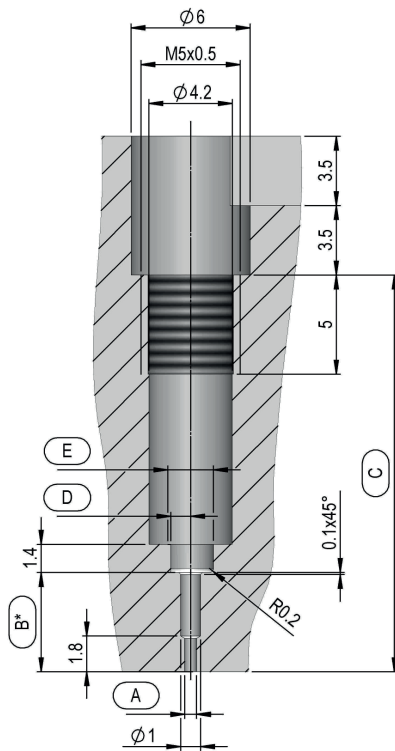


### 2.3.3.1 Bore Drawings Mounting Variant with PRIAFIT® Mounting Sleeve



Type	A <sup>+0.005/+0.01</sup>	B*	C 4530A	C 4530A0.08	C 4530A0.12	C 4530A0.16	D <sup>0.05/0</sup>	E	F
4103Fx.xx	1	3	23.5 - 48	23.5 - 88	23.5 - 128	23.5 - 168	1.15	2.7	9.9
4103Ex.xx-H	1	3	23.5 - 48	23.5 - 88	23.5 - 128	23.5 - 168	1.15	2.7	9.9
4105Ex.xx	1	3.1 - 3.5	18.5 - 43	18.5 - 83	18.5 - 123	18.5 - 163	1.15	2.7	B + 1.4
4105Dx.xx-H	1	3.1 - 3.5	18.5 - 43	18.5 - 83	18.5 - 123	18.5 - 163	1.15	2.7	B + 1.4
4107Ex.xx	1	3	18 - 42.5	18 - 82.5	18 - 122.5	18 - 162.5	1.15	2.7	4.4
4107Dx.xx-H	1	3	18 - 42.5	18 - 82.5	18 - 122.5	18 - 162.5	1.15	2.7	4.4
4109Cx.xx	0.6	2	17 - 41.5	17 - 81.5	17 - 121.5	17 - 161.5	1	2.3	3.4
4115Bx.xx-H	0.8	2	17 - 41.5	17 - 81.5	17 - 121.5	17 - 161.5	1	2.3	3.4
4203Ax.xx(-H)	1	3	23.5 - 48	23.5 - 88	23.5 - 128	23.5 - 168	1.15	2.7	9.9
4205Ax.xx(-H)	1	3.1 - 3.5	18.5 - 43	18.5 - 83	18.5 - 123	18.5 - 163	1.15	2.7	B + 1.4
4207Ax.xx(-H)	1	3	18 - 42.5	18 - 82.5	18 - 122.5	18 - 162.5	1.15	2.7	4.4
4209Ax.xx	0.6	2	17 - 41.5	17 - 41.5	17 - 121.5	17 - 161.5	1	2.3	3.4
4215Ax.xx-H	0.8	2	17 - 41.5	17 - 41.5	17 - 121.5	17 - 161.5	1	2.3	3.4

\* Adjust dimensions



Type	A <sup>+0.005/+0.01</sup>	B*	C 4530A	C 4530A0.08	C 4530A0.12	C 4530A0.16	D <sup>0.05/0</sup>	E
4111Dx.xx	0.6	5	17 - 44	17 - 84	17 - 124	17 - 164	1	2.3
4117Bx.xx-H	0.8							
4211Ax.xx	0.6							
4217Ax.xx-H	0.8							

\* Adjust dimensions

### 2.3.4 Mounting Variant with Distance Sleeve

**Notice**

The distance sleeve must not be shortened on the sensor side (recognizable by the flat surface). Also observe possible pretension when cutting to length (max. 0.02 mm). Deburr and break the edges afterwards.

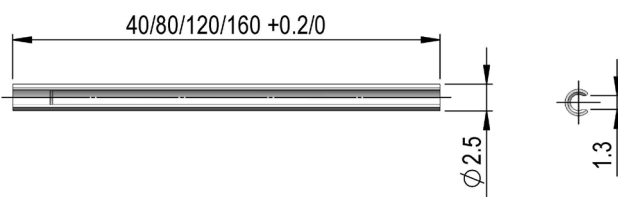
**Notice**

In order to simplify the removal of the distance sleeve, we recommend making a clearance at the bore.

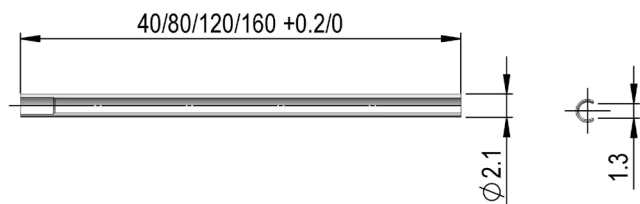
The distance sleeves are assigned to the following sensors:

Distance sleeve	Sensor types
Type 4521A	4103, 4105, 4107, 4203, 4205, 4207
Type 4522A	4109, 4111, 4115, 4117, 4209, 4211, 4215, 4217

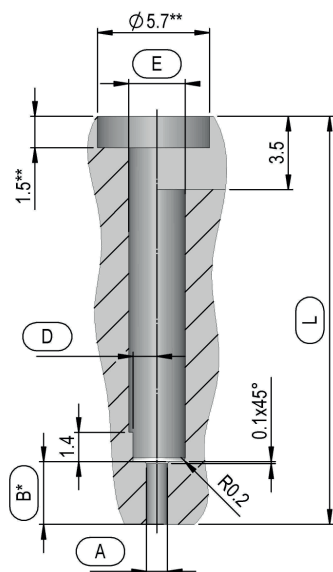
**Distance sleeve type 4521A**



**Distance sleeve type 4522A**



### 2.3.4.1 Bore Drawings Mounting Variant with Distance Sleeve

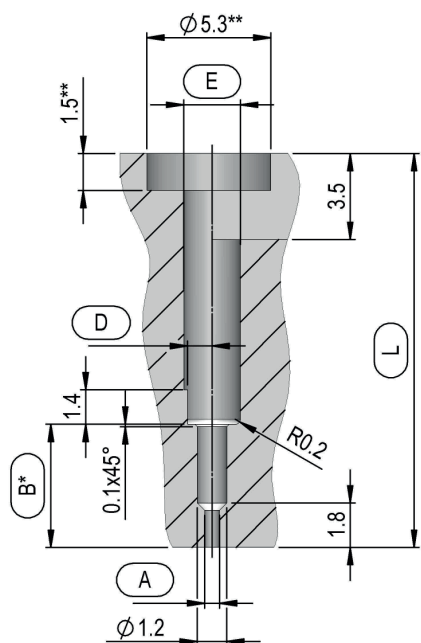


Type	A <sup>+0.005/+0.01</sup>	B*	L 4521A	L 4521A0.08	L 4521A0.12	L 4521A0.16	D 0.05/0	E
4103Fx.xx	1	3	16 - 50	16 - 90	16 - 130	16 - 170	1.15	2.7
4103Ex.xx-H		3	16 - 50	16 - 90	16 - 130	16 - 170		
4105Ex.xx		3.1 - 3.5	11 - 45	11 - 85	11 - 125	11 - 165		
4105Dx.xx-H		3.1 - 3.5	11 - 45	11 - 85	11 - 125	11 - 165		
4107Ex.xx		3	10.5 - 44.5	10.5 - 84.5	10.5 - 124.5	10.5 - 164.5		
4107Dx.xx-H		3	10.5 - 44.5	10.5 - 84.5	10.5 - 124	10.5 - 164.5		
4203Ax.xx(-H)		3	16 - 50	16 - 90	16 - 130	16 - 170		
4205Ax.xx(-H)		3.1 - 3.5	11 - 45	11 - 85	11 - 125	11 - 165		
4207Ax.xx(-H)		3	10.5 - 44.5	10.5 - 84.5	10.5 - 124.5	10.5 - 164.5		

Type	A <sup>+0.005/+0.01</sup>	B*	L 4522A	L 4522A0.08	L 4522A0.12	L 4522A0.16	D 0.05/0	E
4109Cx.xx	0.6	2	9.5 - 43.5	9.5 - 83.5	9.5 - 123.5	9.5 - 163.5	1	2.3
4115Bx.xx	0.8							
4209Ax.xx	0.6							
4215Ax.xx-H	0.8							

\* Adjust dimensions

\*\* For the disassembly of the distance sleeve, we recommend machining a recess.



Type	A <sup>+0.005/+0.01</sup>	B*	L 4522A	L 4522A0.08	L 4522A0.12	L 4522A0.16	D <sup>0.05/0</sup>	E
4111Dx.xx	0.6	5	12.5 - 46.5	12.5 - 86.5	12.5 - 126.5	12.5 - 166.5	1	2.3
4117Bx.xx-H	0.8							
4211Ax.xx	0.6							
4217Ax.xx-H	0.8							

\* Adjust dimensions

\*\* For the disassembly of the distance sleeve, we recommend machining a recess.

## 2.4 Mounting the Flexible Quick Disconnect

Flexible quick disconnects are available as standard variants or as floating variants. The installation of these two variants differs fundamentally, which is why we describe each variant in a separate chapter:

- Chapter „2.4.1 Mounting the Flexible Quick Disconnect (Standard Variant)“ on page 26
- Chapter „2.4.2 Mounting Flexible Quick Disconnect (Floating Variant)“ on page 28

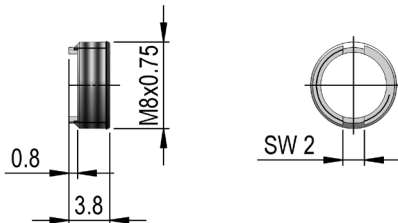
### 2.4.1 Mounting the Flexible Quick Disconnect (Standard Variant)

The flexible quick disconnect is installed on two sides: In the mold insert and in the mold platen.

#### 2.4.1.1 Mounting the Flexible Quick Disconnect in the Mold Insert

The flexible quick disconnect of the standard variants is installed in the mold insert with mounting nut type 4542A, mounting tool type 4563A and a tightening torque of 1.5 Nm.

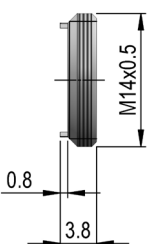
##### Mounting nut type 4542A



#### 2.4.1.2 Mounting the Flexible Quick Disconnect in the Mold Platen

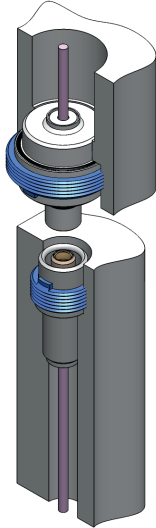
The flexible quick disconnect of the standard variants is installed in the mold platen with mounting nut type 4546A, mounting tool type 4577B and a tightening torque of 3.5 Nm.

##### Mounting nut type 4546A

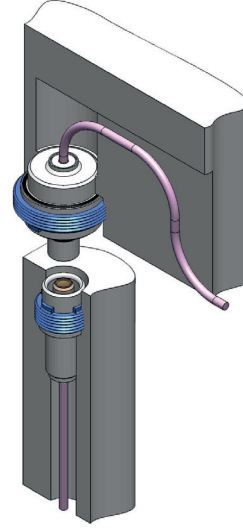


### 2.4.1.3 Bore Drawings Flexible Quick Disconnect

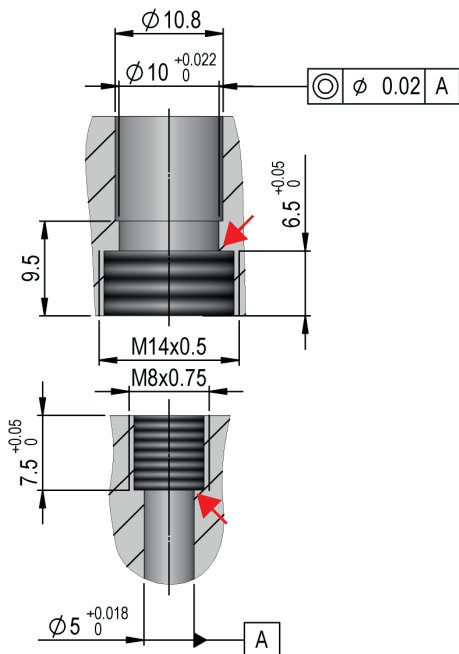
Mounting in bore



Mounting in cable channel



Mounting in bore

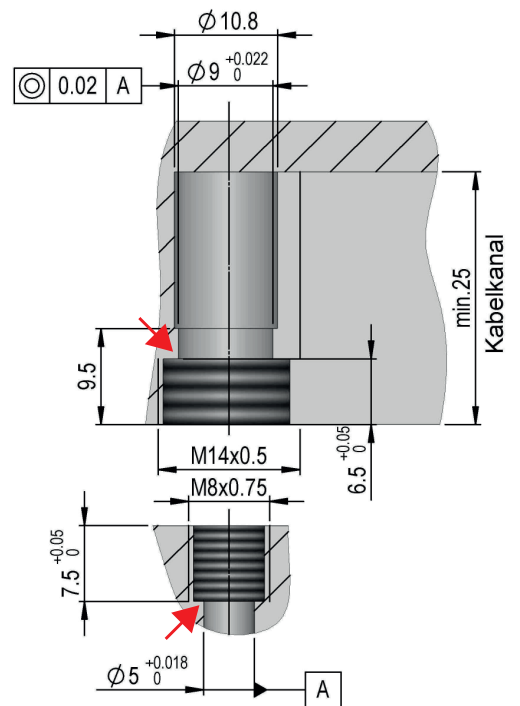


Mold platen

Mold insert

→ Contact surface

Mounting in cable channel



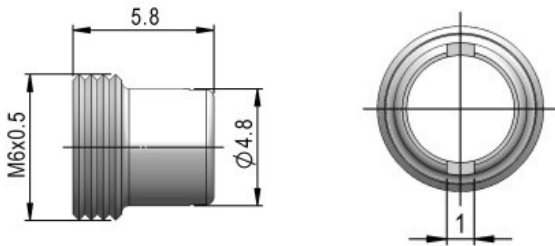
## 2.4.2 Mounting Flexible Quick Disconnect (Floating Variant)

The flexible quick disconnect of the floating variant is installed on two sides: In the mold insert and in the mold platen.

### 2.4.2.1 Mounting the Flexible Quick Disconnect in the Mold Insert

The flexible quick disconnect of the standard variants is installed in the mold insert with mounting nut type 4554A, mounting tool type 1320A + 1331A and a tightening torque of 1.5 Nm.

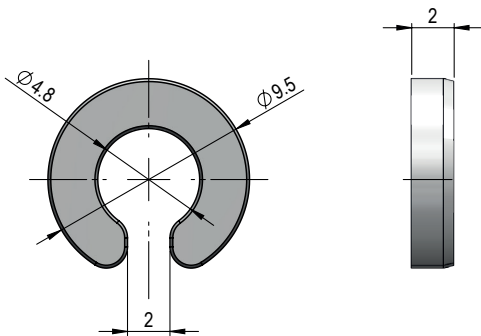
Mounting nut type 4554A



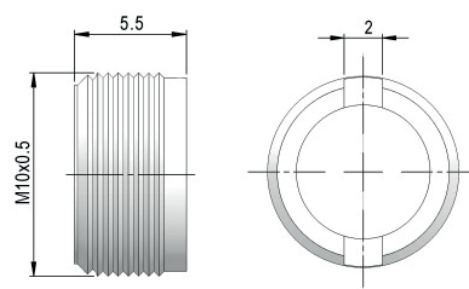
### 2.4.2.2 Mounting the Flexible Quick Disconnect into the Mold Platen

The flexible quick disconnect of the standard variants is installed in the mold insert with mounting nut type 4552A, mounting tool type 1320A + 1330A and a tightening torque of 1 Nm.

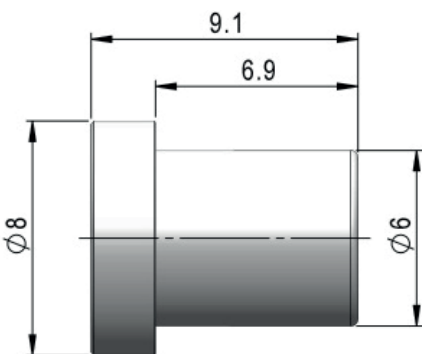
Support ring type 4551A



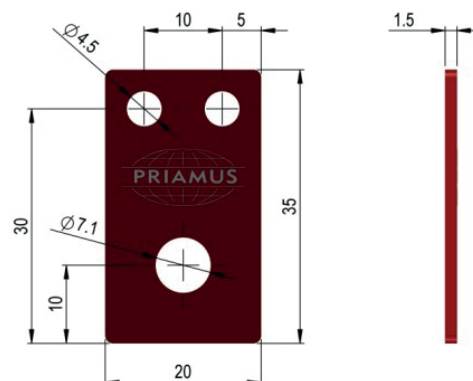
Mounting nut type 4552A



Guiding sleeve type 4553A



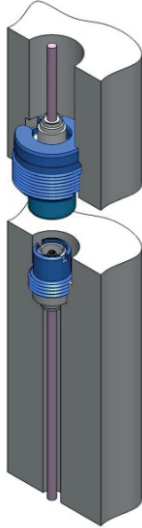
Mounting plate type 4584A



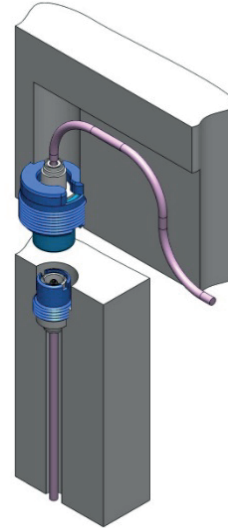


### 2.4.2.3 Bore Drawings

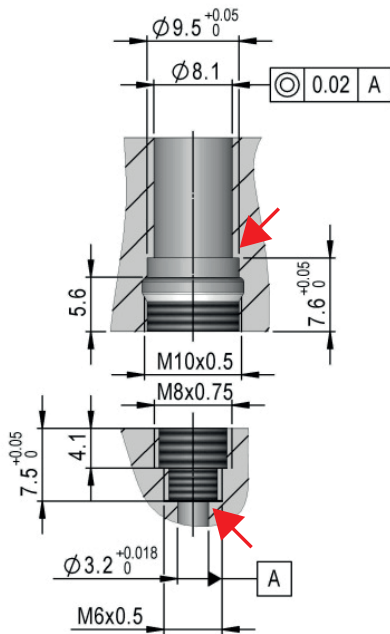
Mounting in bore



Mounting in cable channel



Mounting in bore

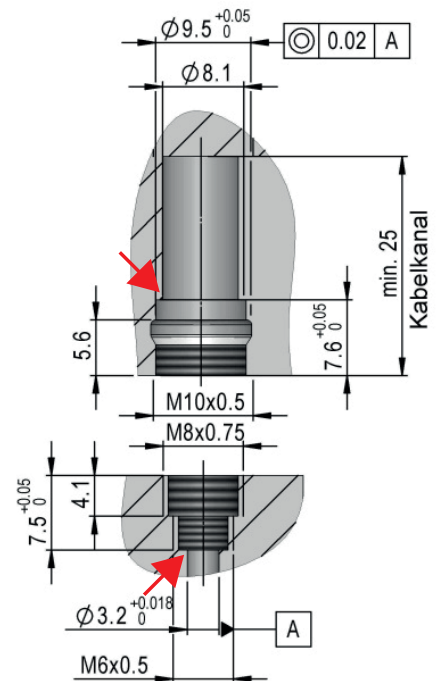


Mold platen

Mold insert

→ Contact surface

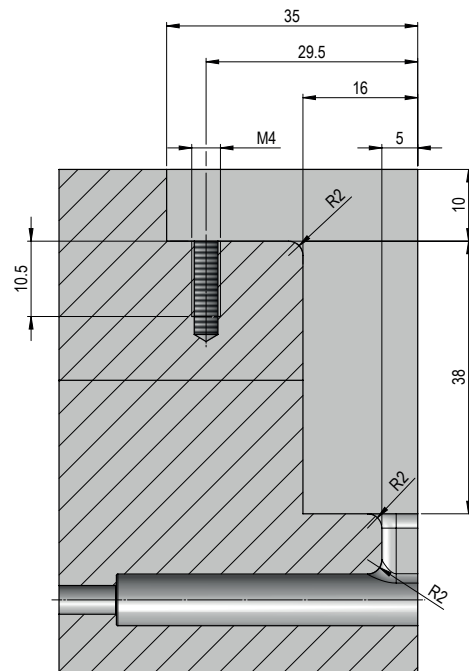
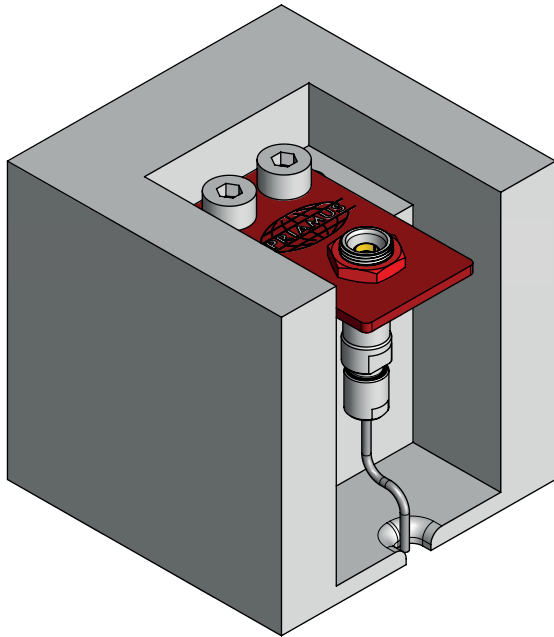
Mounting in cable channel



## 2.5 Mounting Connector on Mounting Plate

### Notice

The protective cover is attached to the mounting plate of the connector and should not be placed too close to the parting line of the mold so that it does not get between the mold halves when the mold is closed.

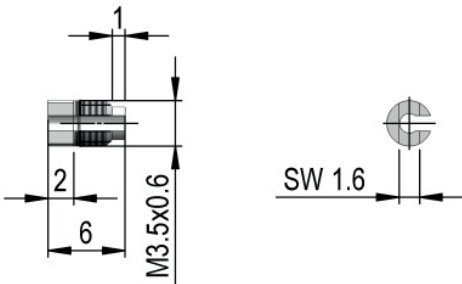


### 3 Scope of Delivery and Accessories

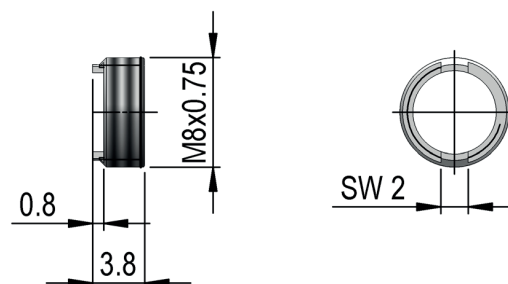
#### 3.1 Scope of Delivery Sensors with Quick Disconnect

	4103F:xx	4103Ex:xx-H	4105Ex:xx	4105Dx:xx-H	4107Ex:xx	4107Dx:xx-H	4109C:xx	4111Dx:xx	4115Bx:xx-H	4117Bx:xx-H	4203Ax:xx	4203Ax:xx-H	4205Ax:xx	4205Ax:xx-H	4207Ax:xx	4207Ax:xx-H	4209Ax:xx	4211Ax:xx	4215Ax:xx-H	4217Ax:xx-H
Protecting cap type 1301A	●	●	●	●	●	●	●	●	●	●										
Protecting cap type 1317A											●	●	●	●	●	●	●	●	●	●
Mounting nut for sensor type 4541A	●	●	●	●	●	●					●	●	●	●	●	●				
Mounting nut for sensor type 4543A							●	●	●	●							●	●	●	●
Mounting nut for quick disconnect type 4542A	●	●	●	●	●	●	●	●	●	●										
Mounting nut for quick disconnect type 4554A											●	●	●	●	●	●	●	●	●	●
Identification plate	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

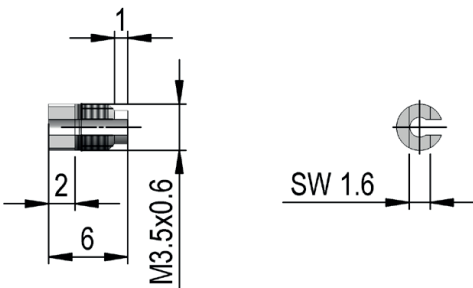
Mounting nut type 4541A



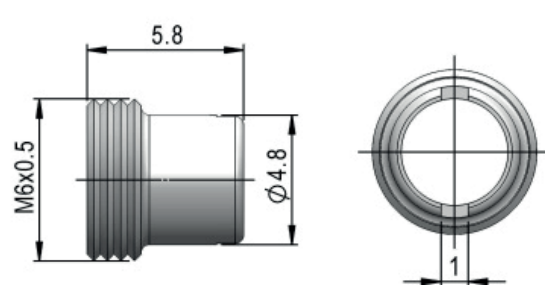
Mounting nut type 4542A



Mounting nut type 4543A



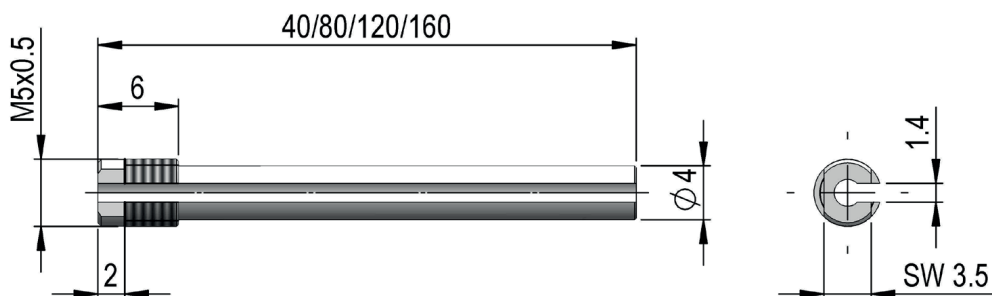
Mounting nut type 4554A



### 3.2 Accessories Sensors with Quick Disconnect

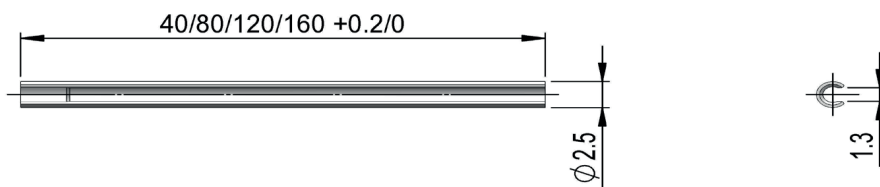
	4103Fx.xx	4103Ex.xx-H	4105Ex.xx	4105Dx.xx-H	4107Ex.xx	4107Dx.xx-H	4109Cx.xx	4111Dx.xx	4115Bx.xx-H	4117Bx.xx-H	4203Ax.xx	4203Ax.xx-H	4205Ax.xx	4205Ax.xx-H	4207Ax.xx	4207Ax.xx-H	4209Ax.xx	4211Ax.xx	4215Ax.xx-H	4217Ax.xx-H
Assembly tool for mounting nut (type 4554A) type 1320A + 1331A											●	●	●	●	●	●	●	●	●	●
Distance sleeve type 4521A	●	●	●	●	●	●					●	●	●	●	●	●				
Distance sleeve type 4522A							●	●	●	●							●	●	●	●
PRIAFIT® mounting sleeve type 4530A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mounting / extracting tool for sensor type 4561B	●	●	●	●	●	●					●	●	●	●	●	●				
Assembly tool for mounting nut (4541A, 4543A) type 4562B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Assembly tool for mounting nut (4542A) type 4563B	●	●	●	●	●	●	●	●	●	●										
Mounting / extracting tool for sensor type 4567A							●	●	●	●							●	●	●	●
Mounting / extracting tool for quick disconnect type 4571A											●	●	●	●	●	●	●	●	●	●
Mounting / extracting tool for quick disconnect type 4573A	●	●	●	●	●	●	●	●	●	●										
Assembly tool for mounting sleeve type 4575B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Quick disconnect cable for mounting in bore & cable channel type 4100Dx.xxA2-101 (standard variant)	●	●	●	●	●	●	●	●	●	●										
Quick disconnect cable for mounting in bore & cable channel type 4200Ax.xx-101 (floating variant)											●	●	●	●	●	●	●	●	●	●

**PRIAFIT® mounting sleeve type 4530A, 4530A0.08, 4530A0.12, 4530A0.16**



Available lengths	
Type 4530A	0,04 m
Type 4530A0.08	0,08 m
Type 4530A0.12	0,12 m
Type 4530A0.16	0,16 m

**Distance sleeve types 4521A, 4521A0.08, 4521A0.12, 4521A0.16**



Available lengths	
Type 4521A	0,04 m
Type 4521A0.08	0,08 m
Type 4521A0.12	0,12 m
Type 4521A0.16	0,16 m

**Distance sleeve types 4522A, 4522A0.08, 4522A0.12, 4522A0.16**



Available lengths	
Type 4522A	0,04 m
Type 4522A0.08	0,08 m
Type 4522A0.12	0,12 m
Type 4522A0.16	0,16 m

### 3.3 Scope of Delivery Quick Disconnect Cable

	4100Dx.xxA2-101	4200Ax.xx-101
Mounting nut for quick disconnect cable type 4546A	●	
Support ring type 4551A		●
Mounting nut type 4552A		●
Guiding sleeve type 4553A		●
Mounting plate type 4584A		●

### 3.5 Accessories Quick Disconnect Cable

	4100Dx.xxA2-101	4200Ax.xx-101
BlueLine multi-channel connector box type 1194A-8T	●	●
BlueLine pressure and temperature amplifier type 5070A-2p2T	●	●
BlueLine temperature amplifier type 5080A-4T	●	●
BlueLine temperature amplifier 5080A-16T	●	●
<b>Cables</b>		
Connection cable type 1141Ax, single-channel, plastic coat Both sides: Fischer connector type S 101 pos. TRIAX	●	●
Connection cable type 1144Ax, multi-channel, with plastic coat Both sides: Fischer connector type S 104 neg. 19-pin (Code 2)	●	●
Connection cable type 1145Ax, multi-channel, with plastic coat Side 1: Fischer connector type S 104 neg. 19-pin (Code 2) Side 2: Fischer connector type S 101 pos. TRIAX	●	●
Connection cable type 1147Bx, multi-channel, with plastic coat Side 1: Fischer connector type S 104 neg. 19-pin (Code 2) Side 2: 4 x Fischer connector type S 101 pos. TRIAX	●	●
Connection cable type 1149Bx, single-channel, with metal coat Both sides: Fischer connector type S 101 pos. TRIAX	●	●
Extension cable 1142Bx, single-channel, with metal coat Side 1: Fischer connector type S 101 pos. TRIAX Side 2: Fischer connector type KBE 101 neg. TRIAX	●	●

## 4 Services

### 4.1 General Terms and Conditions

The following general terms of service apply:

- A delivery for test purposes is declined.
- The customer is responsible for installing and interfacing. Installation for any of the above directly by PRIAMUS will be charged separately.
- Information on interfaces must be provided to PRIAMUS minimum 2 weeks before installation. If this information is not available, PRIAMUS has the right to refuse installation on the agreed date.
- PRIAMUS requires presence of the process/ project manager and plant electrician on the day of installation. Refusal of this support will cause additional cost and will be charged separately, as this could cause unnecessary delays for the start up.
- Waiting times caused by the customer on site will be charged separately.
- Prices for training, installation and other expenditures will be quoted and confirmed in writing.
- Unless otherwise agreed upon, brochures and catalogues are not binding. Data provided for in documentation are only binding in so far as having been expressly stipulated as such. We reserve the right to modify any specification without notice.
- Information and drawings, delivered in addition to the sales documentation, may not be transmitted to any third party. The Customer may not transmit or make use of any information regarding the design or the functionality of PRIAMUS products in any form whatsoever. Any product schematics, drawings or supplemental information are the property of PRIAMUS and considered company confidential for use by direct customer only. In the event of infringement of this clause we retain the right for claiming damages.

## 4.2 Warranty and Guarantee

Our warranty covers all defects within the agreed warranty period from the date of delivery. The warranty applies to all occurring defects that are proven to have their cause in material defects or faulty manufacturing.

The warranty is limited to replacement or repair of the defective products or components or to reimbursement of the invoice value of the products or components not replaced. Any further warranty is hereby expressly excluded. Replaced products are property of PRIAMUS. The customer is responsible for the replacement costs (i.e. removal, transportation and assembly) of defective parts.

Excluded from our guarantee and liability are all deficiencies of the goods delivered by us, which cannot be proved to have their origin in bad material, faulty design or poor workmanship, those resulting from normal wear (e.g. current consumption, recuperation, weather condition, air pollution, electromagnetic effects in excess of what is considered acceptable, improper maintenance, failure to observe the operating instructions, excessive loading, testing, use of any unsuitable material, influence of chemical or electrolytic action, or resulting from other reasons beyond the supplier's control.

All claims on the part of the Customer, irrespective on what ground they are based, which are not allowed under these general conditions, in particular any claim not expressly mentioned, such as for damages, reduction of price or withdrawal from the contract are excluded.

In no case whatsoever shall the Customer be entitled to claim damages, in particular but not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on our part, but apply to unlawful intent or gross negligence of persons employed or appointed by us to perform any of his obligations. The Customer is responsible to arrange for and pay for the return shipment to us or to our local representative.