

Types 11xxAxx

Connecting cable for cavity temperature sensors

- For PRIAMUS cavity temperature sensors
- For single and multi channels

Description

There are two possibilities to connect PRIAMUS cavity temperature sensors to amplifiers:

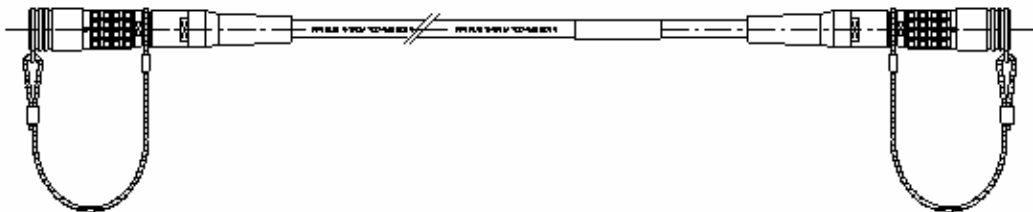
Single connection:

If a mold has one individual or only a few temperature sensors, the sensors are being connected separately to the amplifier, i.e. for each sensor one connecting cable (1-pair compensation lead). This is also the case if the temperature amplifiers have only single inputs (LEMO).

PRIAMUS cavity temperature sensors with integrated cable are therefore available with female connector as well as with open wires.

For single connections sensors with female connectors are being used. For mounting, the female connector is set back in the mold and the 1-pair compensation lead will then be connected with the female connector.

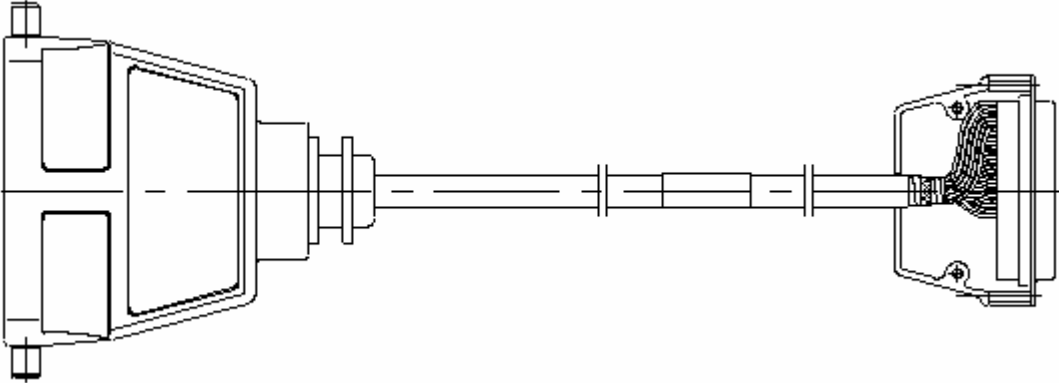
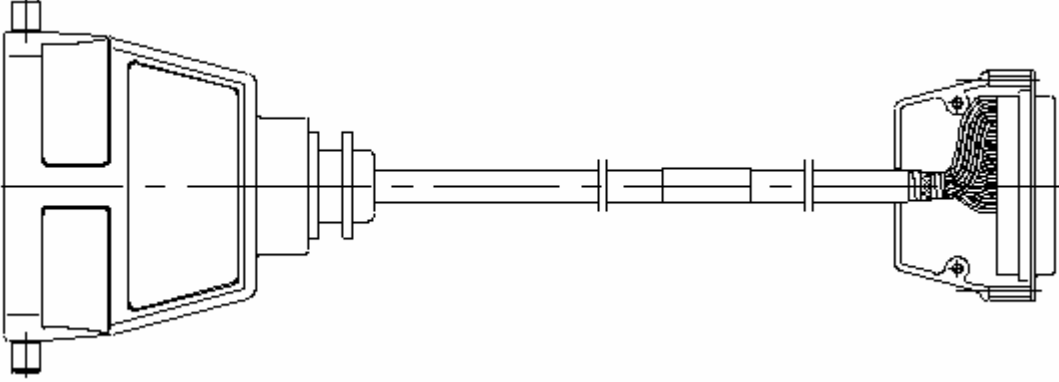
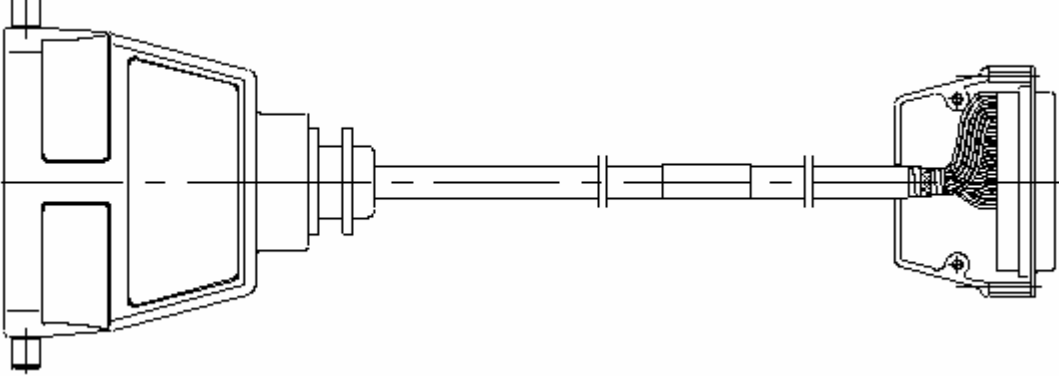
| Type | Sensor side | Amplifier side | Type of cable | Length |
|---------|-----------------|-----------------|---------------|--------|
| 1100A2 | Lemo 2-pin male | Lemo 2-pin male | Silicon | 2 m |
| 1100A5 | Lemo 2-pin male | Lemo 2-pin male | Silicon | 5 m |
| 1100A10 | Lemo 2-pin male | Lemo 2-pin male | Silicon | 10m |



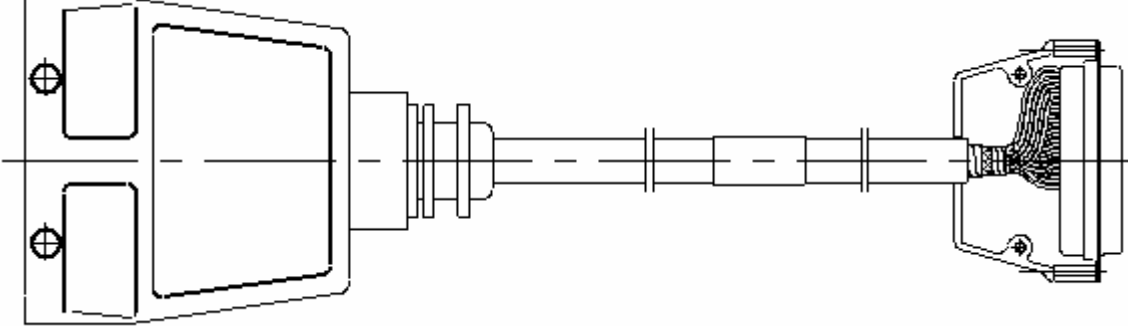
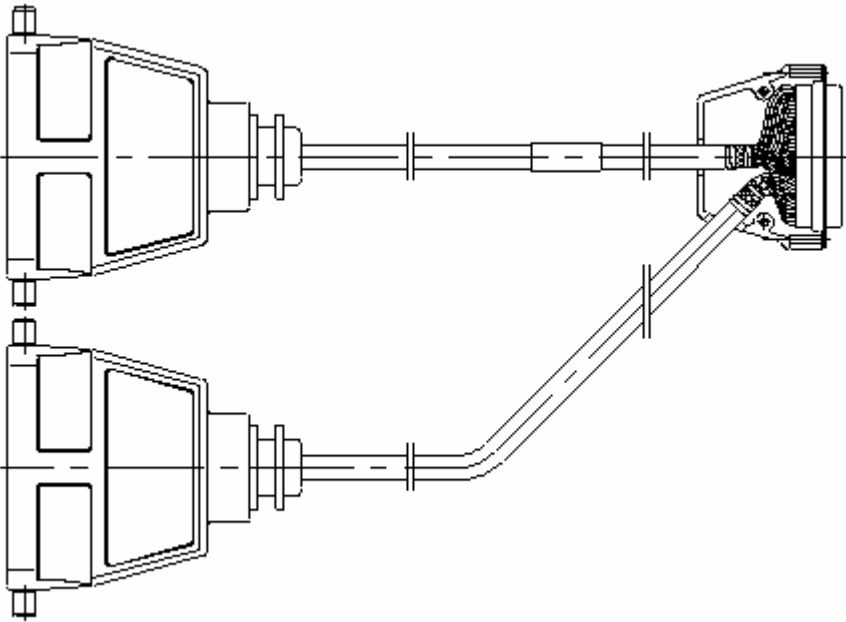
Multiple connections:

If in a mold several cavity temperature sensors are being connected to a multiple amplifier (i.e. PRIAMUS eDAQ™), various multi pair compensation leads are available. Apart from the advantage that only one cable has to be connected, a mix up of the different channels is impossible. From an economical point of view it makes sense to use a multi pair compensation lead from 4 channels upwards.

For multiple connections sensors with open wires are used. They are clamped to a multiple female connector (connector on the mold side: type 1186Axx) which is mounted to the mold in a way that the sensor cables do not go outside of the mold (see drawing on page 6). The multi pair compensation lead type 1151AxxxAxx, which conducts the measuring signals to the amplifier, will be connected to the multiple female connector.

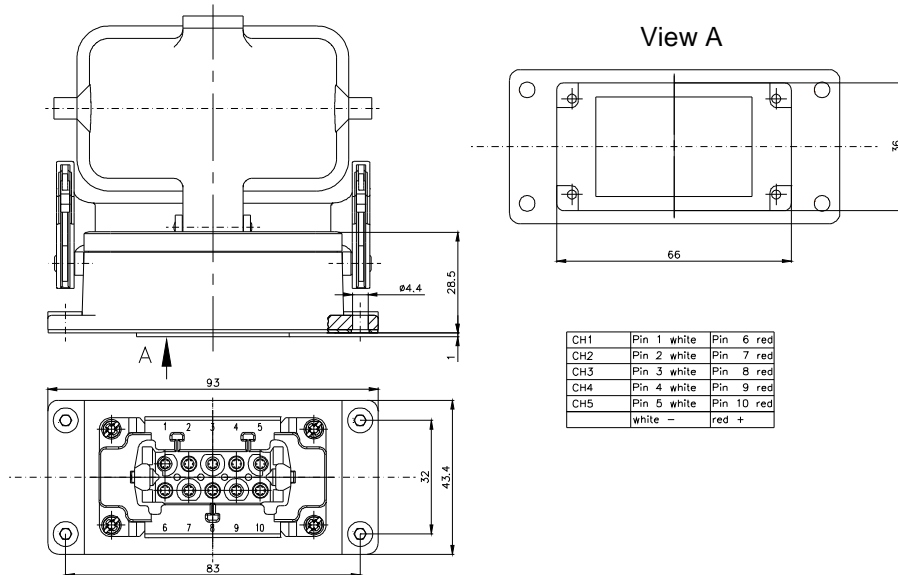
| Type | Number of channels | Sensor side | Amplifier side | Type of cable |
|--------------------------------------------------------------------------------------|--------------------|------------------------------------|---------------------|---------------|
| 1151A004A5 | 1 x 4 | Multi pin connector 10-pin male | D.Sub 37-pin female | Silicon |
|  | | | | |
| 1151A008A5 | 1 x 8 | Multi pin connector 16-pin male | D.Sub 37-pin female | Silicon |
|  | | | | |
| 1151A012A5 | 1 x 12 | Multi pin connector 24-pin male | D.Sub 37-pin female | Silicon |
|  | | | | |

Subject to technical amendments

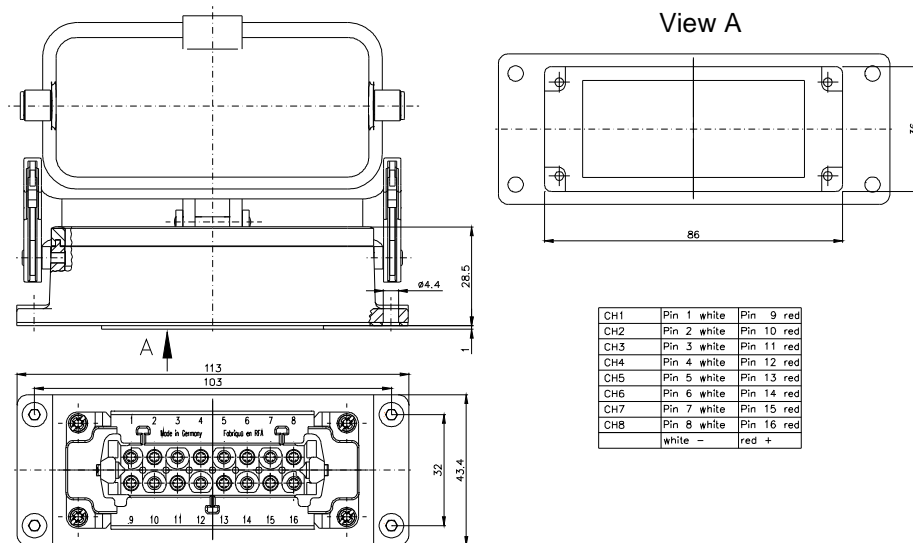
| Type | Number of channels | Sensor side | Amplifier side | Type of cable |
|-------------------------------------------------------------------------------------|--------------------|----------------------------------------|---------------------|---------------|
| 1151A016A5H16 | 1 x 16 | Multi pin connector 32-pin male | D-Sub 37-pin female | Silicon |
|  | | | | |
| 1151A016A5H88 | 2 x 8 | Multi pin connector 2 x 16-pin male | D-Sub 37-pin female | Silicon |
|  | | | | |

Female connector on the mold side for temperature connecting cable 1151Axxx

| Female connector on the mold side, type | Number of channels | for connecting cable |
|-----------------------------------------|--------------------|----------------------|
| 1186A10 | 4 | 1151A004A5 |



| Female connector on the mold side, type | Number of channels | for connecting cable |
|-----------------------------------------|-----------------------|-------------------------------------------|
| 1186A16 2 x 1186A16 | 8 16 | 1151A008A5 1151A016A5H88 |

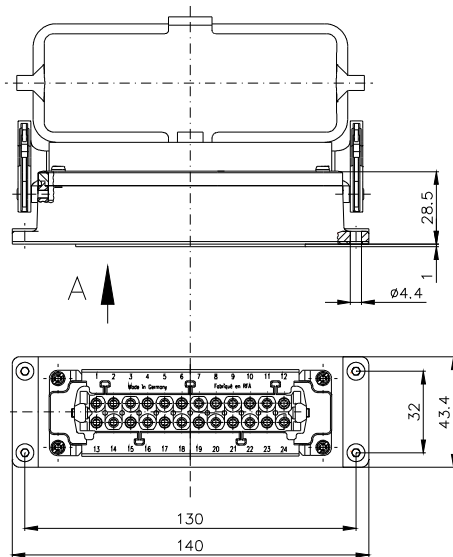


| Female connector on the mold side, type | Number of channels | for connecting cable |
|-----------------------------------------|--------------------|----------------------|
|-----------------------------------------|--------------------|----------------------|

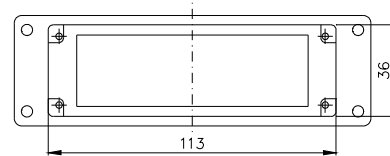
1186A24

12

1151A012A5



View A

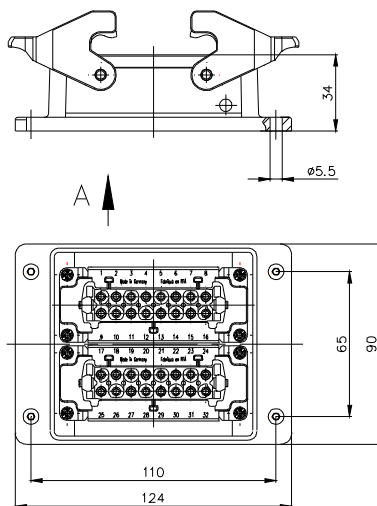


| | | |
|------|--------------|------------|
| CH1 | Pin 1 white | Pin 13 red |
| CH2 | Pin 2 white | Pin 14 red |
| CH3 | Pin 3 white | Pin 15 red |
| CH4 | Pin 4 white | Pin 16 red |
| CH5 | Pin 5 white | Pin 17 red |
| CH6 | Pin 6 white | Pin 18 red |
| CH7 | Pin 7 white | Pin 19 red |
| CH8 | Pin 8 white | Pin 20 red |
| CH9 | Pin 9 white | Pin 21 red |
| CH10 | Pin 10 white | Pin 22 red |
| CH11 | Pin 11 white | Pin 23 red |
| CH12 | Pin 12 white | Pin 24 red |
| | white - | red + |

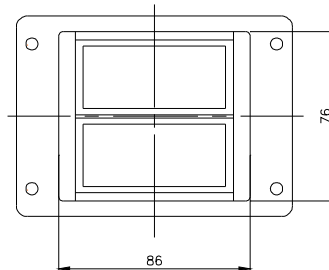
1186A32

16

1151A016A5H16



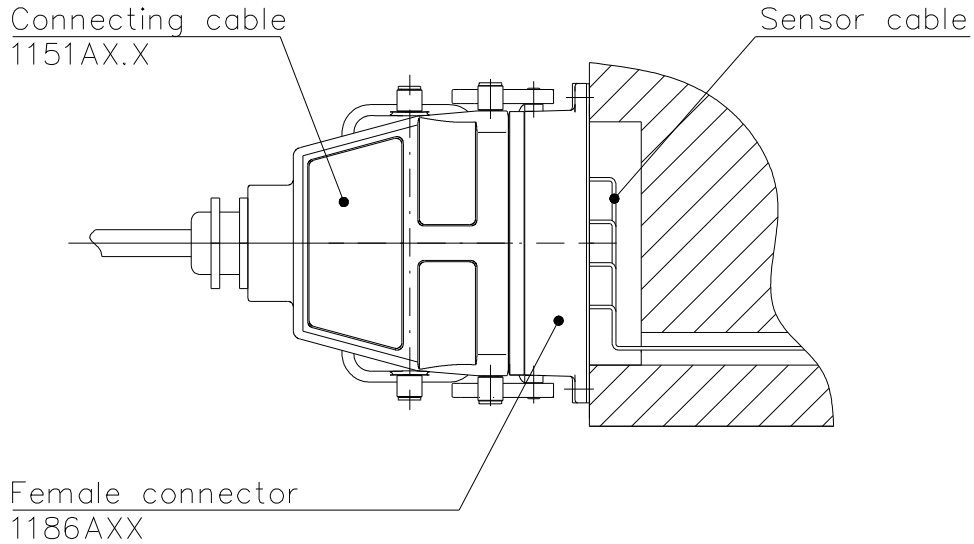
View A



| | | |
|------|--------------|------------|
| CH1 | Pin 1 white | Pin 9 red |
| CH2 | Pin 2 white | Pin 10 red |
| CH3 | Pin 3 white | Pin 11 red |
| CH4 | Pin 4 white | Pin 12 red |
| CH5 | Pin 5 white | Pin 13 red |
| CH6 | Pin 6 white | Pin 14 red |
| CH7 | Pin 7 white | Pin 15 red |
| CH8 | Pin 8 white | Pin 16 red |
| CH9 | Pin 17 white | Pin 26 red |
| CH10 | Pin 18 white | Pin 26 red |
| CH11 | Pin 19 white | Pin 27 red |
| CH12 | Pin 20 white | Pin 28 red |
| CH13 | Pin 21 white | Pin 29 red |
| CH14 | Pin 22 white | Pin 30 red |
| CH15 | Pin 23 white | Pin 31 red |
| CH16 | Pin 24 white | Pin 32 red |
| | white - | red + |

Subject to technical amendments

Multiple connection



Technical data

| | | | |
|----------------------------------|---------------|------------|-----------|
| Compensation lead Identification | Type Color | | N pink |
| Lead resistance | at 20 °C | Ω/m | < 50 |
| Temperature range | | °C | 200 |
| Type of cable | | | Silikon |
| Cable diameter | 1 - pair | mm | 4 |
| | 4 - pair | mm | 7,5 |
| | 8 - pair | mm | 9,5 |
| | 16 - pair | mm | 12,6 |
| Minimal bending radius | 1 - pair | mm | 10 |
| | 4 - pair | mm | 15 |
| | 8 - pair | mm | 20 |
| | 16 - pair | mm | 25 |