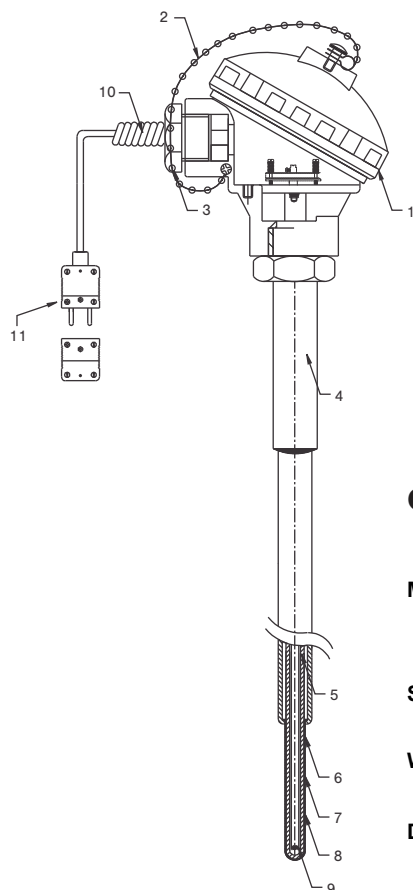


Simplex Fore Hearth and Distributor

In Distributor & in Fore-Hearths rear and middle zone most of the glass companies use this simplex small thimble thermocouple. This is the substitute of fibre optic pyrometer. With Pyrometer customer can get only glass surface temperature but using this thermocouple, customer can get immersion temperatures. It is commonly used in all container glass industries. When conditioning zone trilevels & rear /Middle zone simplex Thermocouple are manufactured with same batch element, Customer can get relative temperatures.

Measuring range	100 to 1600°C
Sensor type	R / S / B. At 3 levels at B-Bottom, M-Middle, T-Top
Protection sheathing	Recrystallised alumina KER-710 (C-799) tube with hole at one end. Special hardened platinum / PT alloy thimble
Application	Fore hearth and distributor glass immersion



No	Description
1	SS/ Aluminium connection head IP-67
2	SS chain
3	1/2" NPT (M) Cable gland
4	Holding Tube : Inconel 600 / SS310
5	Recrystallized alumina tube : OD x ID to be specified
6	Inner Tube suitable to outer tube
7	2 bore recrystallized alumina insulating tube
8	Hardened PT/PT alloy thimble : OD x thk. Suitable to inner dimension
9	PT-RHPT thermocouples element - R / S / B type
10	Ceramic fibre insulated compensating cable 3 / 6 meters long with overall ceramic fiber sleeve
11	Quick release compensated connectors - R / S / B

Ordering Cable

Model : - - - - -

Sensor Type : _____

Wire Size (mm) : _____

Diameter of Platinum / PT alloy Thimble : _____

Length (mm) L1 / L2 / L3 : _____

Optional : _____

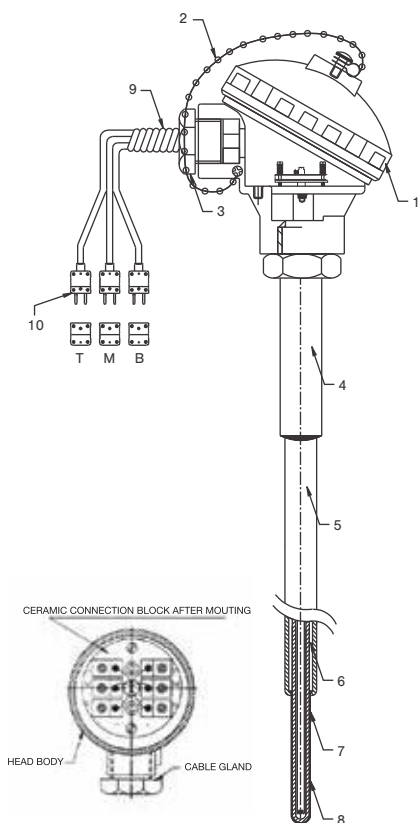
4-20mA : Transmitter 4-20 mA

Trilevel Fore Hearth/Distributor

In Distributor & Fore-Hearths temperature measurement & control is most important, the glass fore-hearth control system includes a temperature sensing system and control system. The temperature sensing system includes an arrangement of pre-positioned temperature sensors. Simplex thimble thermocouples & tri-level / triplex thermocouples consist of an assembly of a bottom, middle and top thermocouples for sensing the vertical temperature profile of the molten glass at a fixed location. The output signals from these temperature sensors are received by controllers of the system which then provide control signals & regulate the operation of the heat input devices and the cooling input devices. Thermocouple output & controller's calibration must be accurate, reliable and repeatable. The Tri-Level Thermocouples designed to achieve thermal homogeneity of the glass exiting from the fore-hearth for forming, as the homogeneity will help to get the proper distribution of Gob in moulds.

Measuring range	100 to 1600°C
Sensor type	R / S / B. At 3 levels at B-Bottom, M-Middle, T-Top
Protection sheathing	Recrystallised alumina KER-710 (C-799) tube with hole at one end. Special hardened platinum / PT alloy thimble
Application	Fore hearth and distributor glass immersion

No	Description
1	SS/ Aluminium connection head IP-67
2	SS chain
3	1/2" NPT (M) Cable gland
4	Holding Tube : Inconel 600 / SS310
5	Recrystallized alumina tube : OD x ID to be specified
6	Inner Tube suitable to outer tube
7	6 bore recrystallized alumina insulating tube
8	Hardened PT/PT alloy thimble : OD x thk. Suitable to outer dimension
9	Ceramic fibre insulated compensating cable 3 / 6 meters long with overall ceramic fiber sleeve
10	Quick release compensated connectors - R / S / B
11	a, b, c are distances from tip to bottom, middle & top sensor elements depending on the design



Ordering Cable

Model : - - - - / / -

Sensor Type : _____

Wire Size (mm) : _____

Diameter of Platinum / PT alloy Thimble : _____

Length (mm) L1 / L2 / L3 : _____

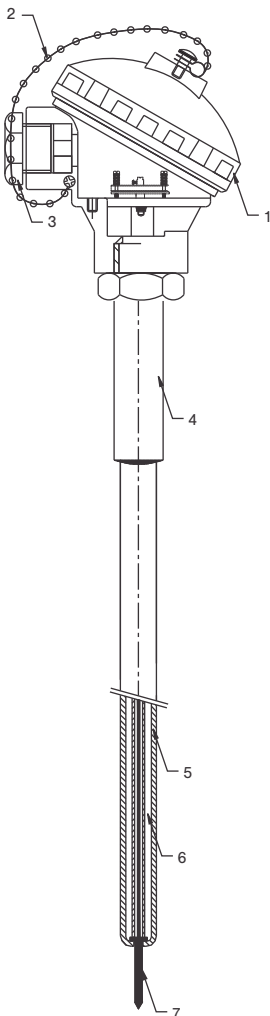
Optional : _____

4-20mA : Transmitter 4-20 mA

Glass Level Probe For Level Control

Glass level probe for glass level control is made with Pt alloy probe. Inside and outside protection is with recrystallized alumina tubes. With this, customer can replace old fashioned water cooled level probes. These probes are available in different type of hangers as per customers requirement. Service life is very good. All lengths & dia are available as per site needs.

Measuring range	Glass Contact
Sensor type	PT. or PT RH alloy electrode
Protection sheathing	Recrystallised alumina KER-710 (C-799) tube with hole at one end. With PT alloy tip for glass level sensing
Application	Fore hearth and distributor



No	Description
1	SS/ Aluminium connection head IP-67
2	SS chain
3	1/2" NPT (M) Cable gland
4	Holding Tube : Inconel 600 / SS310
5	Recrystallized alumina outer tube hole at close end : OD x 1D to be specified
6	Inner Tube suitable to outer tube
7	Pt alloy electrode

Ordering Cable

Model : - - - - / -

Sensor Type : _____

Wire Size (mm) : _____

Diameter of Platinum / PT alloy Thimble : _____

Length (mm) L1 / L2 / L3 : _____

Other Specification : _____