



IN Sensor with magnetic base „S“

Main features:

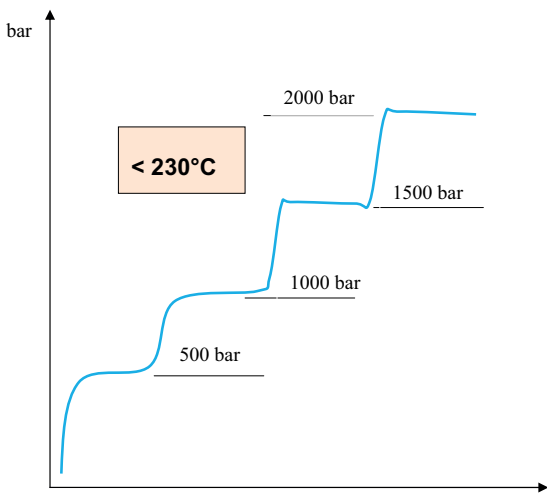
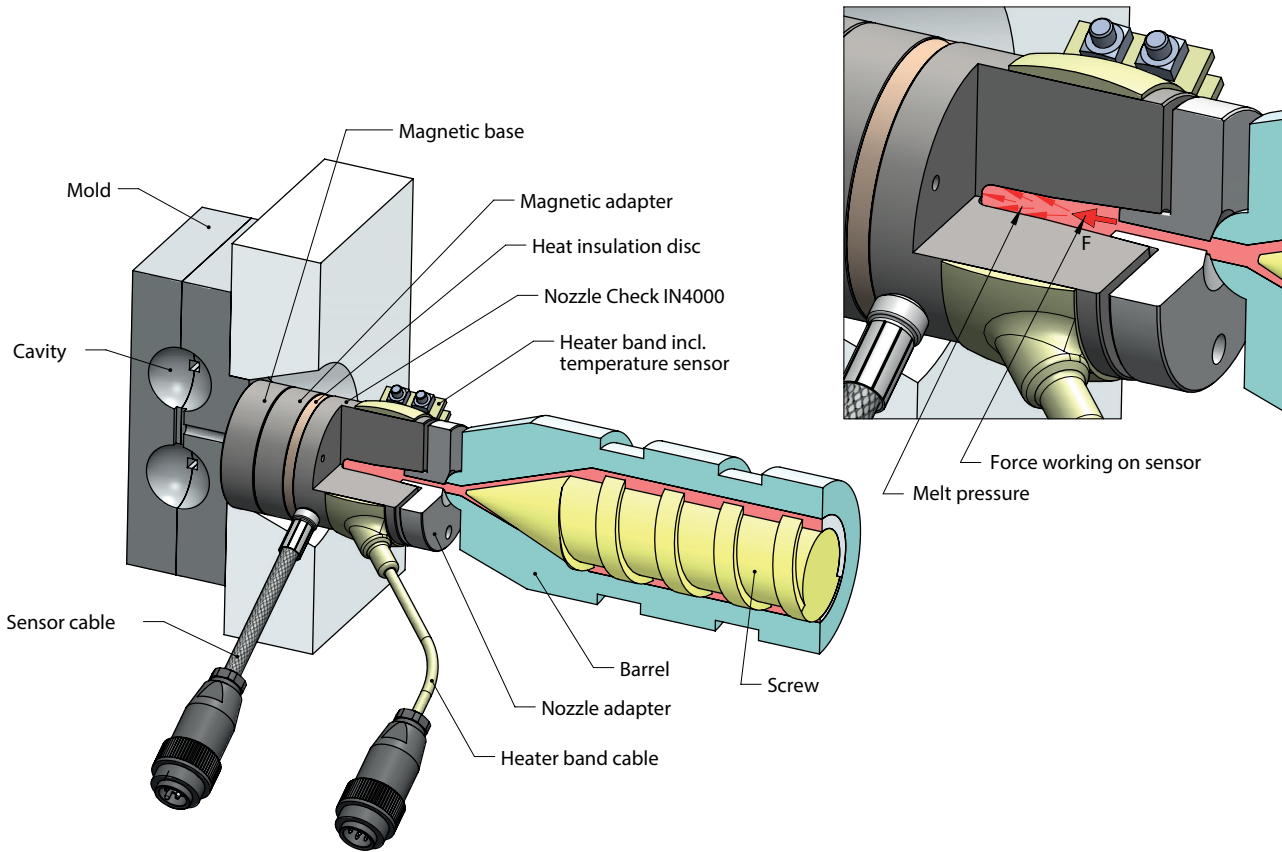
- Measurements up to 4000bar nozzle pressure and melt temperature of 400°C.
- Multishot measurements at temperatures <230°C with different levels of pressure.
- Simple magnetic installation without screws.
- Combine the IN Sensor together with the Nozzle touch force sensor.
- Ideal for service and development (measurements during operation are not possible).
- Scope of delivery: IN Sensor, Controle and display device, Heater band, Nozzle adapter, Magnetic adapter, Magnetic base and carrying case.

The IN Sensor measure in the injection moulding machine the nozzle pressure compare to the injection pressure. This is especially important in processes according to ISO9000. The Nozzle pressure sensor is mounted with magnetic force.

The nozzle injector of the injection moulding machine press directly on the nozzle adapter which protects the sensor against damage. After that the IN Sensor will be loaded with the melt of the injection pressure. The Heater band warms the IN Sensor up to 230°C so that the melt in the conical chamber remains liquide. This allows multiple measurements with different injection pressure.

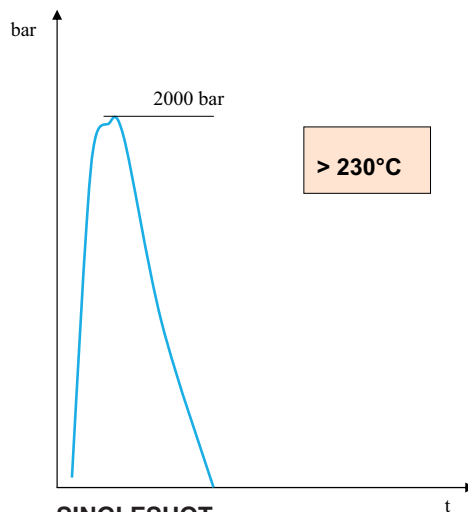
| TECHNICAL DATA | |
|----------------------------|---|
| Strain gauge type | Foil |
| Measuring range | 4000bar |
| Maximum touch force | 300kN (@ 60 mm diameter) |
| Sensitivity | 1.5 mV/V (nominal) |
| Combined error | < ± 1% FS |
| Linearity | < ± 0.5% FS |
| Hysteresis | < ± 0.1% FS |
| Repeatability | < ± 0.1% FS |
| Operating temperatur range | 10°...+230°C (up to 400°C with singleshot application) |
| Storage temperatur range | -20°...+70°C |
| Protection class | IP65 |
| Case material | Stainless steel (high grade) |

APPLICATION



MULTISHOT

- Measure melt pressures up to 230°C and 4000bar
- Plastic does NOT solidify during pressure steps
- Nozzle pressure is transmitted through plastic onto the measuring element



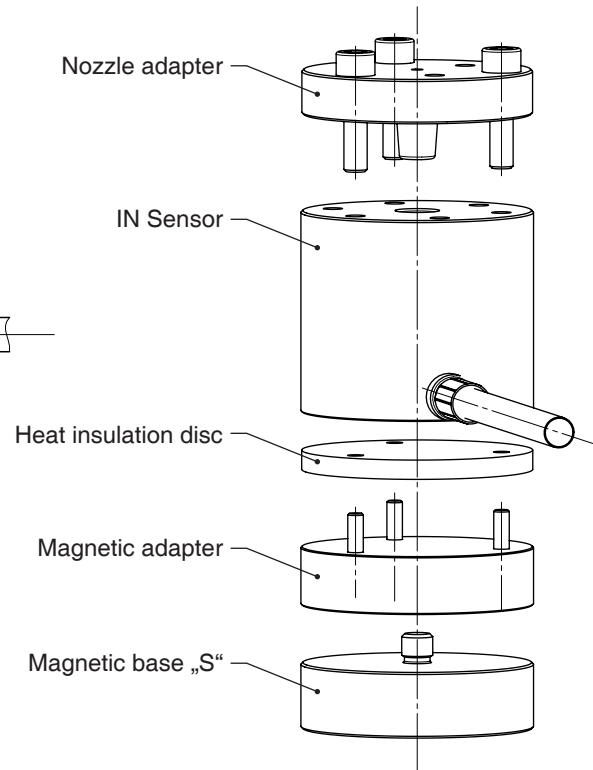
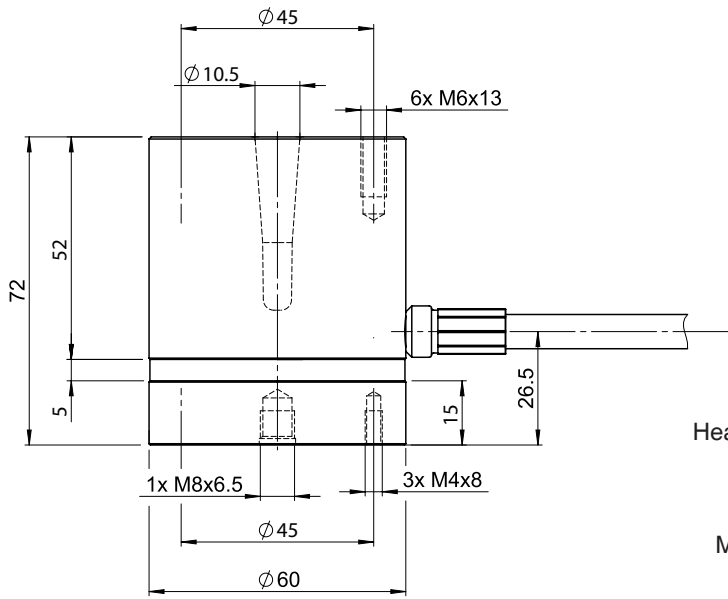
SINGLESOT

- For melt temperatures > 230°C (up to 400°C)
- One shot only, then solidification
- Plastic has to be removed every shot

DIMENSION

IN Sensor with heat insulation disc and magnetic adapter

Exempel: Assembly drawing



Dimensions in mm

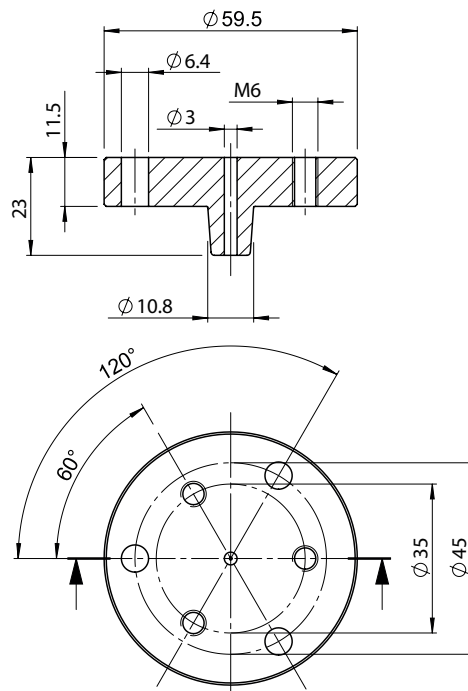
STANDARD ASSESSORIES

Nozzle adapter NA-IN-2

The nozzle adapter protects the IN Sensor and the tip of the nozzle can be optimally adapted.

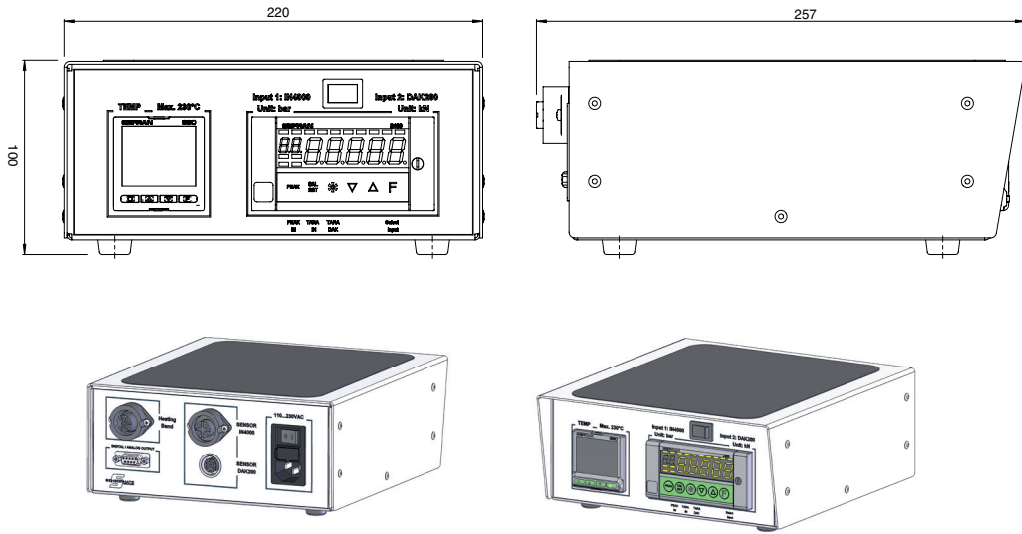
The nozzle adapter is by the customers themselves adapted to the respective nozzle tip of the injection molding machine.

The raw diameter is 3mm.



Dimensions in mm

Monitor

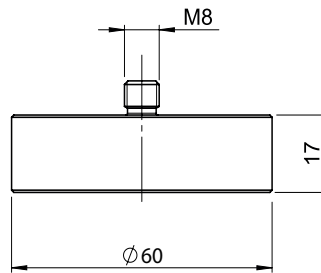


Dimensions in mm

OPTIONAL ACCESSORIES

Magnetic base „S“ 60mm

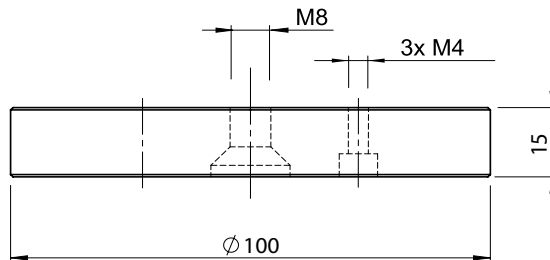
The magnetic base with \varnothing 60mm contains 1 magnet.



Dimensions in mm

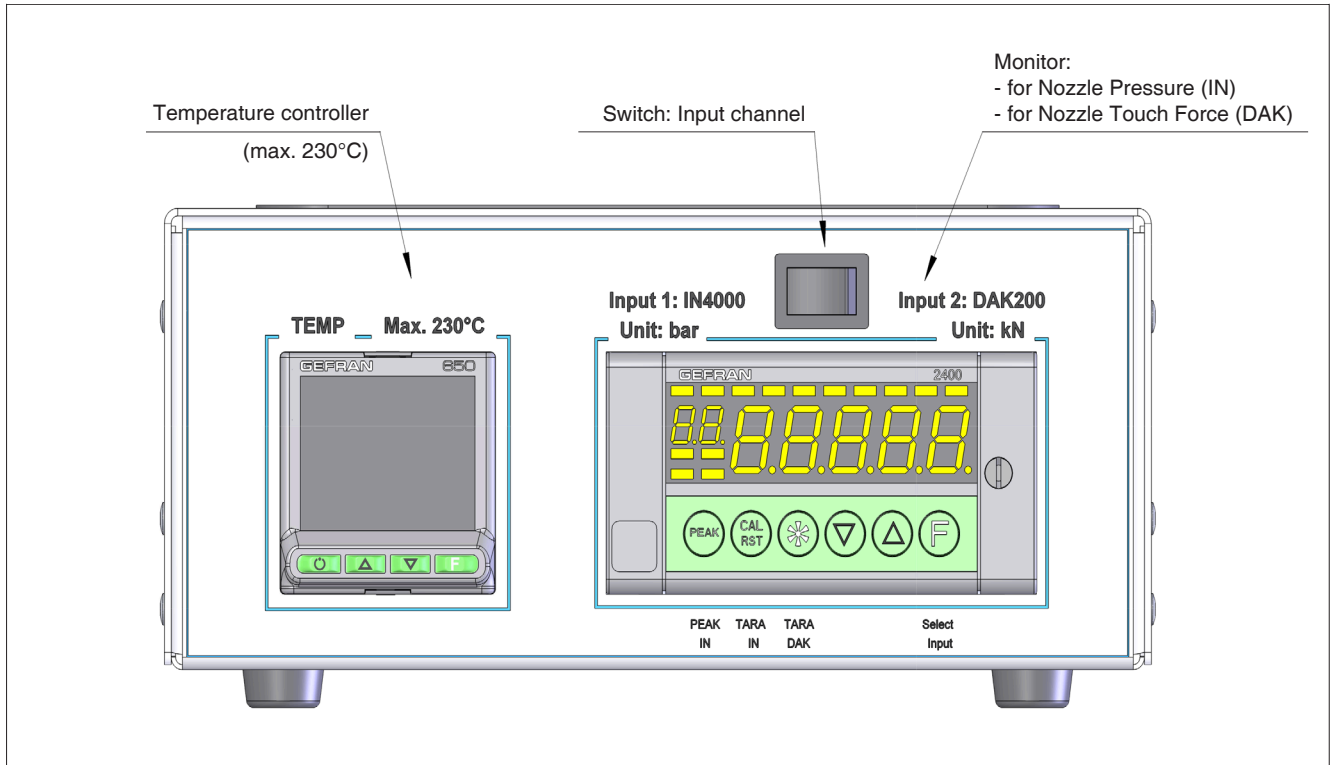
Magnetic base „H“ 100mm

The magnetic base with \varnothing 100mm contains 3 magnets. Three screws M6 helps to remove the magnetic base from the machine.



Dimensions in mm

MONITOR DESCRIPTION



ELECTRICAL CONNECTIONS

Monitor

Heating Band

DIGITAL / ANALOG OUTPUT

SENSOR IN4000

SENSOR DAK200

110...230VAC

ON/OFF

2.5A T-Type (230V)

5A T-Type (110V)

110...230VAC

IN sensor input

| CONNECTOR |
|-----------|
| 2 |
| 3 |
| 1 |
| 4 |

DAK sensor input

| CONNECTOR |
|-----------|
| 4 |
| 5 |
| 1-2 |
| 3-6 |

