

SENSOR COMPETENCE AN OVERVIEW



MONITORING - CONTROLLING - REGULATING - MEASURING

the **flow-captor** for liquid media

The **flow-captor** is a high-precise, compact and robust flow sensor for monitoring or measuring liquid media. It works according to the calorimetric principle. The **flow-captor** offers a high level of functionality, especially at low flow rates. The **flow-captor** is available in a large variety of different types.

metering flow switch

- insertion and inline-version
- separate adjustment of range and set-point
- high accuracy even under low flow conditions
- suitable for high temperatures
- high pressure resistance
- robust industrial design (encapsulated)
- inline-version for small diameters
- optionally with additional temperature output



flow-captor 4120.13



Inline flow-captor 4320.13

... as a stainless steel version

- robust industrial design (encapsulated)
- stable screw cap
- high class protection IP67
- standard industrial connector M12x1
- suitable for AC and DC electric power supply
- also available as inline-version for different small pipe sizes



flow-captor 4120.13M

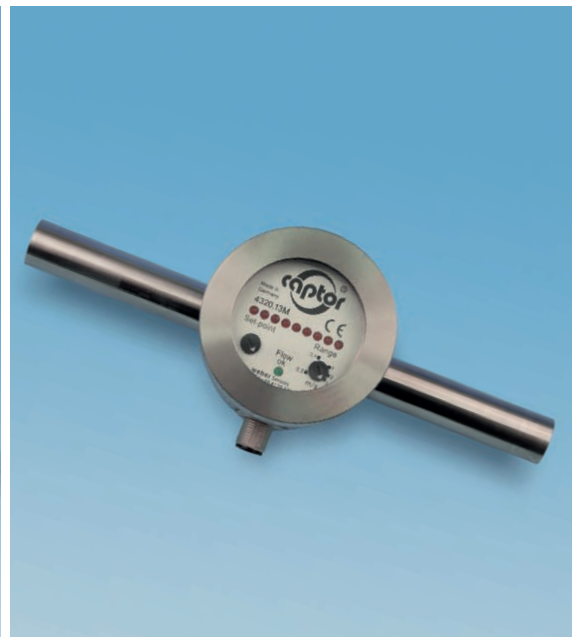
... the sensor tube

The sensor tube (length 200 mm) is made of stainless steel 316Ti.

The inline types are available with sensor tubes of the following sizes (pipe dimension in **mm**):

- 6 x 1; 8 x 1; 12 x 1
- 8 x 1,5; 18 x 1,5; 22 x 1,5

For aggressive media special sensor tube materials as Titanium and Hastelloy can be offered.



Inline flow-captor 4320.13M

flow meter - insertion type

- robust industrial design (encapsulated)
- housing and sensor head made of stainless steel
- analogue output (4-20 mA)
- high measuring accuracy even at low flow rates
- also available with analogue temperature output



flow-captor 4115.30

the smart meter for large diameters

- precise and linear flow metering even at low flow rates
- high application flexibility due to its special designed fitting
- electronic device without any moving parts
- analogue output 4-20 mA
- robust industrial design (encapsulated)



smart meter for pipes up to 24" (600 mm)

flow meter inline-version

- robust industrial design (encapsulated)
- sensor tube made of stainless steel 316Ti
- available in different pipe diameters
- high measuring accuracy even at low flow rates
- optionally with additional temperature measurement

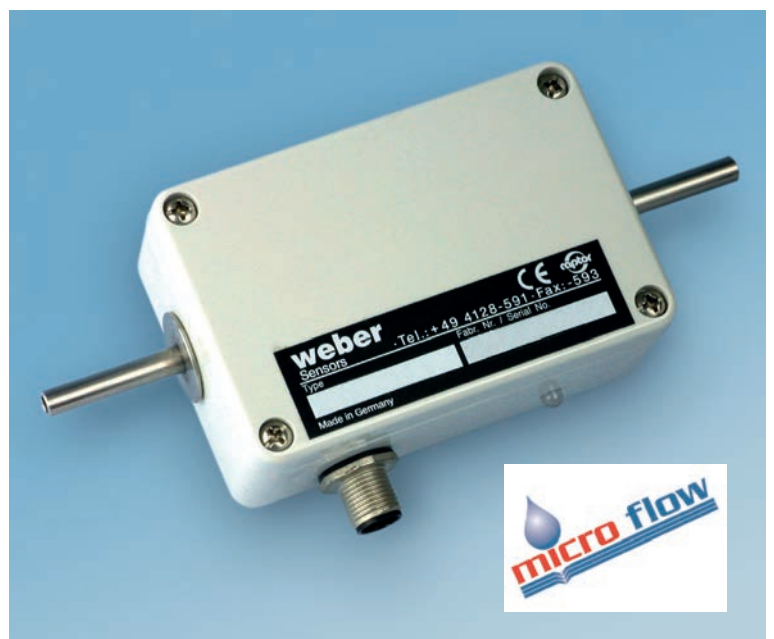


Inline flow-captor 4311.30

micro flow-captor for very small flow rates

The micro flow-captor is an inline flow meter for very small flow rates up to < 0,1 ml/min resolution.

- very small sensor pipes 4x1 (ID2), 6x1 (ID4)
- without impairment of the flow rate
- detection of smallest flow rates
- electronic device without any moving parts



flow-captor 4511.30/6

the **vent-captor** for air and other gases

The **vent-captor** is a compact, electronic sensor for monitoring or measuring air and other gaseous media. It works according to the calorimetric principle. The **vent-captor** offers a high level of functionality, especially at low flow rates. It is available in a large variety of different types.

flow switch / flow meter

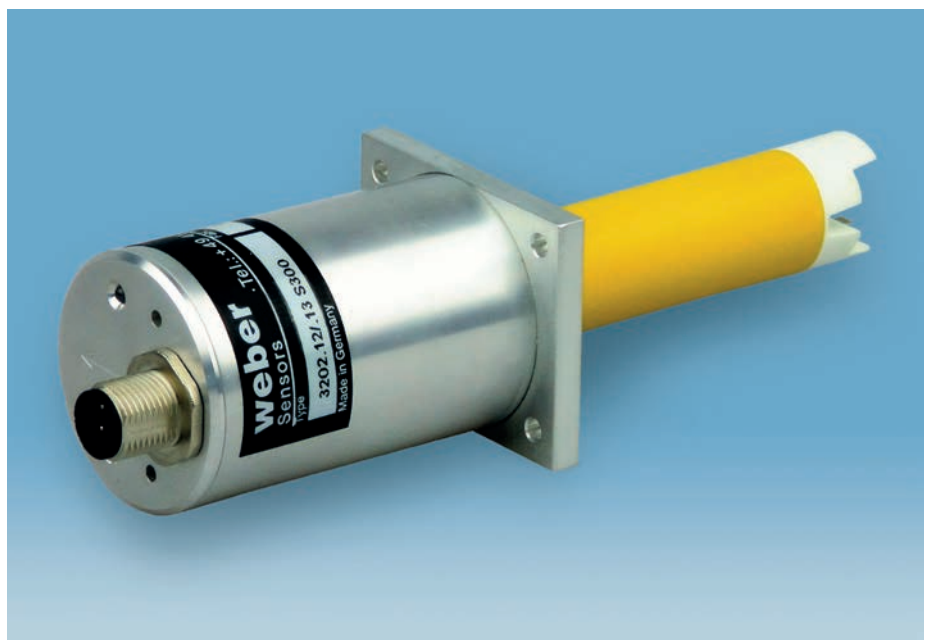
- robust industrial design (encapsulated)
- measuring range from 0-5 m/s to 0-50 m/s
- insertion and inline-version
- detection of lowest flow rates
- high accuracy and repeatability
- for high temperature available as a remote system



vent-captor 3202.03

air flow monitor with 2 set-points

- 2 independent set points
PNP n. c. / PNP n. o.
- measuring range from
0-30 m/s



vent-captor 3202.12/13 S300

sensor for compressed air up to 10 bar

The **vent-captor** is a mass flow-meter. It measures the norm volume flow (Nm³). Corrections for pressure fluctuations are unnecessary.

- for pressure up to 10 bar
- housing made of stainless steel 303
- cooling version available for higher temperature (max. 100° C / 212° F)

vent-captor 3205.30/xx

vent-captor 3205.30/xx S102
for medium temperature up to 100° C / 212° F



Inline-types for small pipe diameters

- detection of low flow rates
- sensor tube made of stainless steel 316Ti
- standard sensor pipe sizes (pipe dimension in mm):
8 x 1; 12 x 1; 18 x 1,5
22 x 1,5; 28 x 1,5
- practically no adverse effects on the cross-section
- switch version or with analogue output 4-20mA
- available with separate process displays

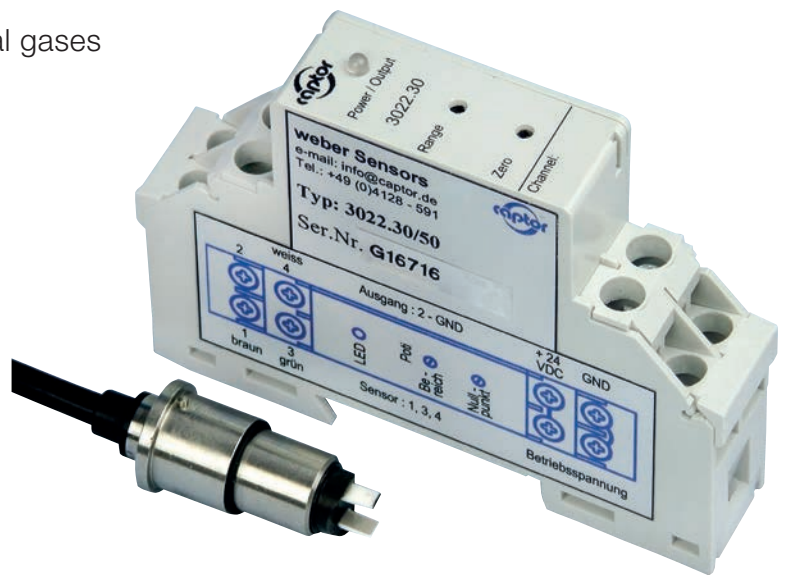


vent-captor 3302.30/xx

the mini vent-captor for small pipes

from ID10 to ID15 (vent-captor system 3505 + 3022.30/xx)
from ID19 to ID25 (vent-captor system 3506 + 3022.30/xx)

- for consumption measurement of medical gases
- for monitoring of clean room ventilations
- detection of low flow-rates (0-10 m/s)
- temperature compensated measurement
- linear current output 4-20 mA
- rugged industrial version
- LED for range control



Process input meters with digital displays

The process meters convert the analogue output signal of flow and vent-captor units into a digital value.

PAX P

One universal input signal

PAX DP

Two input signals

DA9602R

One universal input signal
(simple design with only basic functions)



More information on request

the **foto-captor** for the steel industry

The **foto-captor** is a hot metal detector (HMD) which operates properly and reliable even under rough working conditions. The **foto-captor** is available in many different versions especially with regard to minimum temperature response, optical data, design and electrical data.

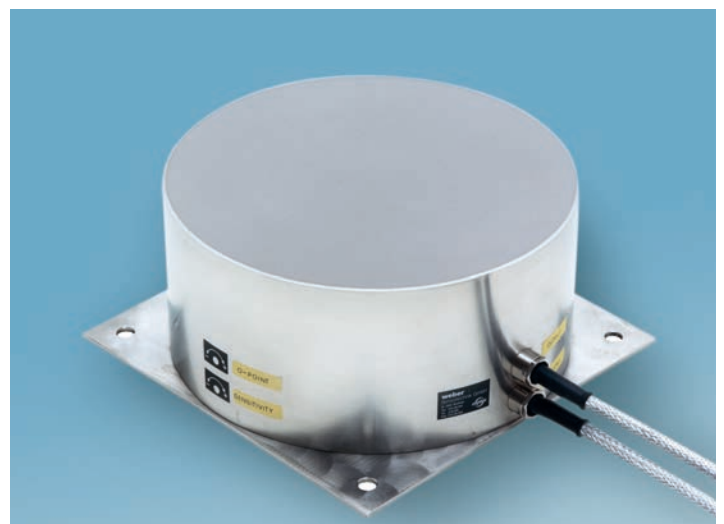
- for applications in steel mills
- suitable for a large number of different working conditions
- minimum temperature response from 270° C to 800 ° C / 518° F to 1.472° F
- rugged industrial version (encapsulated)
- electronic device without any moving parts
- compact or remote system



the **proxi-captor** proximity switch

The **proxi-captor** is an inductive proximity switch and meter for detection in the steel industry.

- for switching distances up to 250 mm
- self-adjusting or adjustable
- robust industrial design (encapsulated)
- housing made of stainless steel, aluminium or plastic material
- for high ambient temperature up to 200° C / 392° F
- compact or remote system
- individual solutions possible



proxi-captor 2610.30

Application examples

Wind energy

- for monitoring the cooling circuit in wind power
- factory set switch-points for:
 - temperature output (in 10 degree steps)
 - flow output
- simple start-up
- for liquid media
- compact unit without any moving parts
- LED-display for switching status
- maintenance-free
- versions according to the customer's requirements



flow-captor 4220.13F/.12T 80° C

Railway industry

- flow and temperature meter for use in locomotives and traction units
- for water- and oil-based media
- separate electronics
- for medium temperature up to 100° C (212° F)

Example:

Controlling the oil cooling circuit of power inverters and transformers



flow-captor 4205 + 4053.31 separate system

Coal mining

- controls the wetting of the coal face before starting the cutting process
- as flow-captor 4120.13M standard but voltage range from 10,5 to 36 VDC
- housing made of stainless steel 303
- robust industrial design (encapsulated)



flow-captor 4120.13M

Food industry

- precise switching flow monitor for water based solutions up to 100 bar
- high accuracy even under low flow conditions
- separate adjustment for “range” and “set-point”
- analogue display of actual flow rate and display of adjusted set-point value
- LED display for output status
- provided for TRI-CLAMP[®]-system
- medium temperature up to 130° C / 266° F
- compact and remote system



TRI-CLAMP[®]- system

captor worldwide



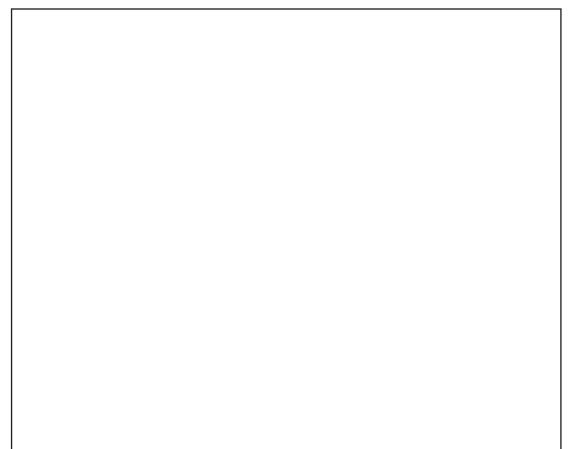
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Sales partner

For 60 years weber Sensors is represented on the sensor market worldwide. Under the trade mark captor® we develop, produce and distribute sensors for monitoring and measuring of liquid and gaseous media as well as inductive proximity switches and hot metal detectors for the steel industry.

Captor products are distributed through a dense sales network worldwide. Our competent partners on-site support you and advise you to find individual solutions for your application. Thanks to our global partner network you are guaranteed to find one of our representatives in your area!

For more information please visit www.captor.de or contact us at sales@captor.de.



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