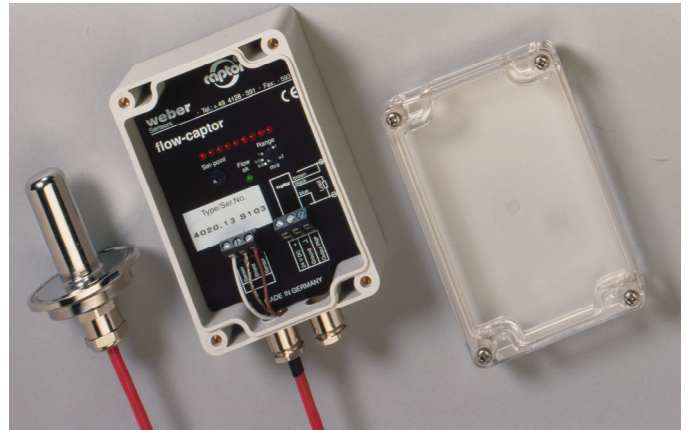


## flow-captor 4120 S103 + 4020.1x S103

The flow-captor type 4120 S103 + 4020.1x S103 is ideally suited for use in automation processes in the food industry where liquid media must be monitored.

Application under EHEDG conditions - see additional text.

The sensor was specially designed for Tri-Clamp® connections. It operates according to the calorimetric measuring principle, fully electronically and without mechanically moving parts. The sensor detects the flow velocity of the medium and converts it into an electrical signal.



- **EHEDG certified TYPE EL CLASS I** April 2019
- 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“
- analog display of actual flow rate and display of adjusted set-point value
- LED display for output status
- provided for TRI-CLAMP® -System
- **ISO 9001 : 2015**



### Technical data

Type	4120 S103 + 4020.1x S103
Medium	water-based

### Sensor data

Measuring range	0 - 20 cm/s bis 0 - 300 cm/s, continuous adjustable <sup>1)</sup>
Medium temperature	-20 °C bis +135 °C / -4 °F to +275 °F
Ambient temperature	-20 °C to +70 °C / -4 °F to +158 °F
Set-point range	approx. 15 % - 90 % of range setting
Pressure	up to 100 bar
Response time	2 sec. - 10 sec., according to range setting
Linearity deviation	< 5 % <sup>1)</sup>
Repeatability	< 2 %
Hysteresis	approx. 10 %
Temperature drift	< 0.3 % / K

### Mechanical data

Protection class	sensor head IP67 / housing IP65
Housing	Macrolon
Sensor head	Stainless Steel AISI 316L, other material on request
Pipe connection	closing D50.5 mm / D64.0 mm
Cable connection	encapsulated silicone cable (2m)

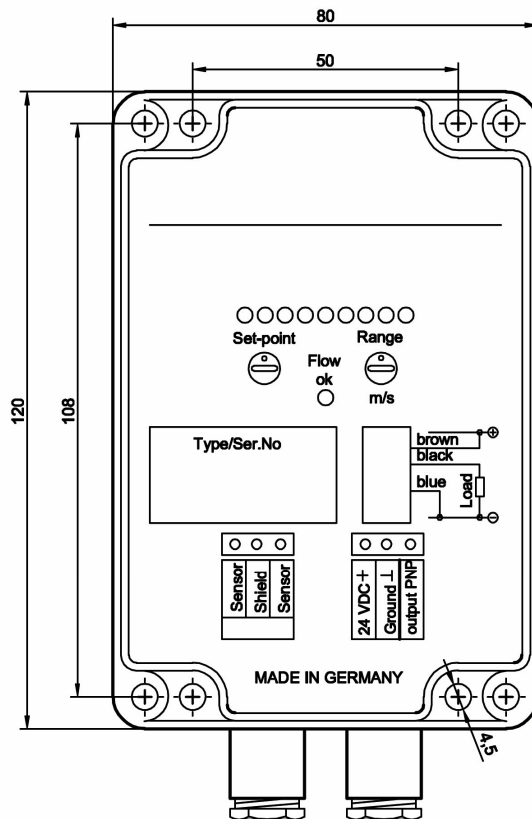
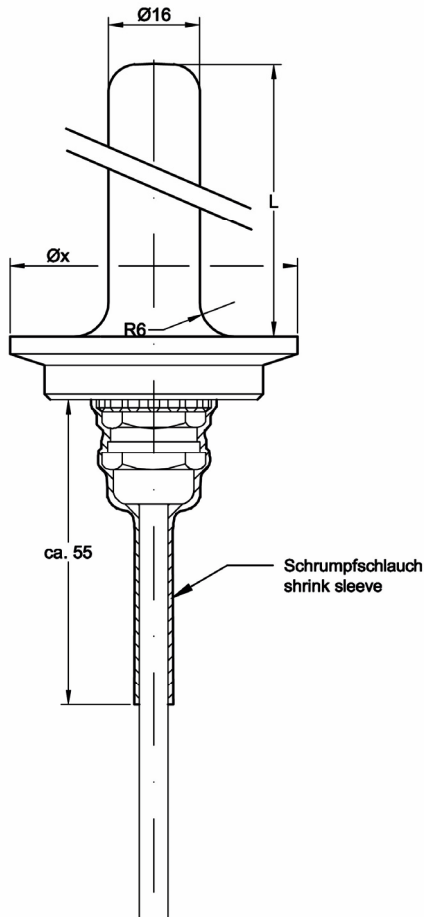
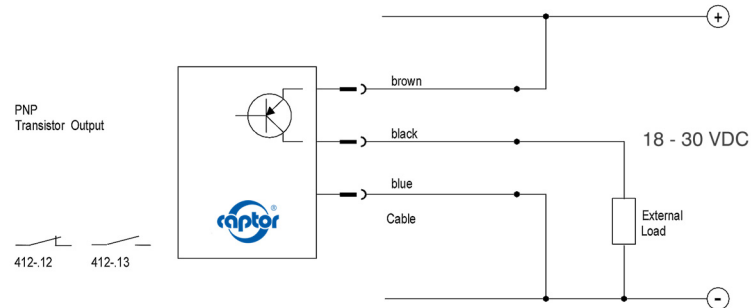
### Electrical data ( Electronic unit )

Operating voltage	18 to 30 VDC, incl. residual ripple
Current consumption	max. 150 mA (pulsed)
Power consumption	approx. 1 W
Switching current	≤ 400 mA
Circuit protection	reverse polarity, short circuit and overload
Voltage drop	< 2.5 V at max. load
Initial operation	approx. 10 sec. after connection of power
Electrical output without flow:	4120.12 PNP n.c. (opener) current-carrying 4120.13 PNP n.o. (closer) currentless

<sup>1)</sup> relate to water

flow-captor 4120 S103 + 4020.1x S103

Connection diagram:

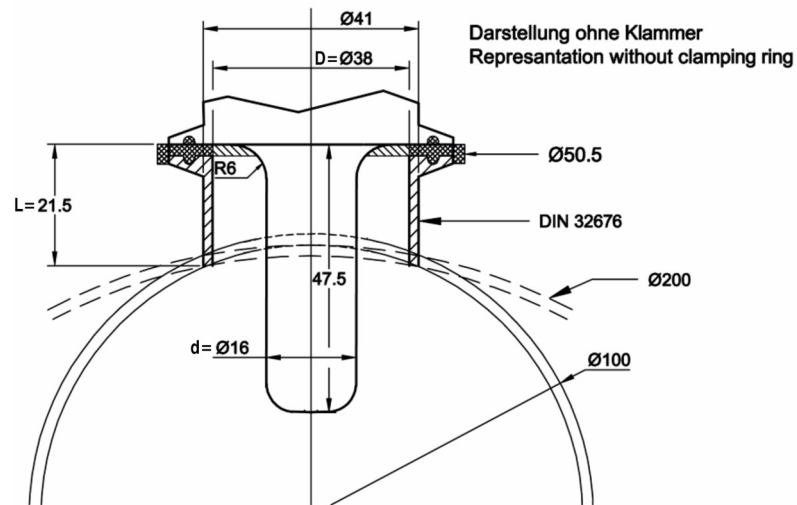


Edelstahl WN 1.4404  
 Material of housing and flange:  
 stainless steel AISI 316L  
 Silikon - Kabel, 2 adrig, geschirmt L = 2 m  
 Material and length of cable:  
 2 wire shielded silicone L = 2 m

Dx	L
50.5	47.5
64	47.5
50.5	67

## flow-captor 4120 S103 + 4020.1x S103

Zusatztext für die Anwendung unter EHEDG - Bedingungen  
Additional text for the application under EHEDG conditions



DIN Klemmstutzen, kurz, DIN 32676 (DN 40 (siehe Zeichnung) oder DN 50)  
DIN Clamp ferrule, short, DIN 32676 (DN 40 (see drawing) or DN 50)

### Hinweis für den Einsatz des Sensors nach EHEDG

(European Hygienic Engineering and Design Group)

Der Sensor ist EHEDG zertifiziert. Diese Zertifizierung gilt NUR bei Verwendung von EHEDG zertifizierten Adaptern und Dichtungen.

Zur Vermeidung von Toträumen nur DIN Klemmstutzen, kurz (DN 40 oder DN 50), DIN 32676, verwenden.

Bei Verwendung von Prozessanschlüssen anderer Hersteller, ist der Einbauort und die Einbaumgebung zu beachten. Es ist auf eine EHEDG-konforme Einbindung in das System zu achten, dabei gilt folgende Bedingung:  $L < (D-d)$ ! Tri-Clamp erfüllt nur mit Combifit Dichtungen die EHEDG Zulassung (verfügbar auf der EHEDG Webseite [www.ehedg.org](http://www.ehedg.org)).

### Wartung und Reinigung

Vor dem Einbau und/oder bei der Wartung des Systems, ist der Sensorkopf, der Einbauadapter und die Dichtung mit geeigneten Methoden zu reinigen, damit die Dichtigkeit und Totraumfreiheit weiterhin gewährleistet ist. Der Sensor ist CIP (cleaning in place) fähig und kann ohne Demontage zusammen mit der Rohrleitung gereinigt werden.

### Note for the use of the sensor according to EHEDG

(European Hygienic Engineering and Design Group)

The sensor is EHEDG certified. This certification ONLY applies when using EHEDG certified adapters and gaskets.

To avoid dead legs only use DIN clamp ferrule, short (DN 40 or DN 50), DIN 32676.

When using process connections from other manufacturers, the installation location and the installation environment must be observed. EHEDG-compliant integration into the system must be ensured! The following condition applies:  $L < (D-d)$ .

Tri-Clamp meets the EHEDG approval only with Combifit seals (available on the EHEDG website [www.ehedg.org](http://www.ehedg.org)).

### Maintenance and cleaning

Before installing and/or maintaining the system, the sensor head, the installation adapter and the seal must be cleaned using approved methods to ensure that the system remains leakproof and free of dead space. The sensor is CIP (cleaning in place) capable and can be cleaned together with the piping without disassembly.

## **weber**

Sensors GmbH Strohdreich 32

Sensors Ltd. 66 Eastbourne Road, Southport

Sensors LLC. 4462 Bretton Court, Building 1, Suite 7

DE-25377 Kollmar, Germany

Merseyside PR8 4DU, UK

Acworth, Georgia 30101, USA

Tel.: +49 (0)4128 - 591 · Fax: - 593

Tel.: +44 (1704) - 551684 · Fax: - 551297

Tel.: +1 (770) 592 - 6630 · Fax: - 592 6640

**www.captor.de**

info@captor.de

sales@captor.co.uk

sales@captor.com