

# Flow meter for TRI-Clamp® System / EHEDG certified



## flow-captor 4115 S103 + 4015.3x S103

The flow-captor 4115 S103 + 4015.3x S103; ideal for all measurement and control tasks within automation processes in the food industry in order to control liquid media.

Application under EHEDG conditions - see additional text.

The sensor has been specially designed for Tri-Clamp® connection systems. It works according to the calorimetric measuring principle, which allows the adjustment of the measuring range to a large quantity spectrum. The flow-captor works fully electronically and without mechanically moved parts.

- **EHEDG certified Type EL CLASS I** April 2019
- precise flow measurement
- adjustable measuring range
- analog current or voltage output
- for medium temperature up to max. 275 °F (135 °C)
- robust stainless steel construction (special encapsulation)
- **ISO 9001 : 2015**



Technical data		4115 S103 + 4015.3x S103	4115 S103 + 4015.3x S103 S115/x
Type			
Medium		water-based	oil-based
Sensor data			
Measuring range		cont. adjustable from 0 - 20 cm/s to 0 - 200 cm/s <sup>1)</sup> other range on request	cont. adjustable from 0 to 200 cm/s <sup>2)</sup>
Adjustability		stepless from 10 % - 100 % by means of zero point and measuring range potentiometer	
Medium temperature		max. 275 °F (135 °C)	
Pressure		max. 30 bar	
Response time		2 - 10 sec. depends on measuring conditions	
Linearity deviation		< 5 % most favourable straight line related to the final value	
Repeatability		< 2 %	
Temperature drift		< 0.3 % K	
Mechanical data			
Protection class		IP65	
Material housing electronics		Makrolon®	
Material housing / sensor		stainless steel AISI 303	
Material of sensor head		stainless steel AISI 316L (electro-polished)	
Material TC - closure		stainless steel AISI 316L (electro-polished)	
TC closure size		Ø50.5 mm or Ø64.5 mm	
Sensor cable		2 m encapsulated, shielded silicone cable 3 x 0,5 mm <sup>2</sup>	
Electrical connection		terminal block	
Housing dimensions		see drawings (other versions on request)	
Electrical data			
Operating voltage		24 VDC ±10 %	
Power consumption		approx. 100 - 200 mA (at max. flow)	
Ready for operation		approx. 10 sec. after power connection	
Output	4015.30	4 - 20 mA	
Load	4015.30	max. 600 Ω	
Output	4015.31	0.1 - 10 V	
Load	4015.31	≥ 100 KΩ	
Protection circuit		reverse polarity & short circuit / overload protected up to max. 30 VDC only	
Output display		green LED	

<sup>1)</sup> data relate to water <sup>2)</sup> calibrated with insulation oil type "Shell Diala S4 ZX-I"

**weber**

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

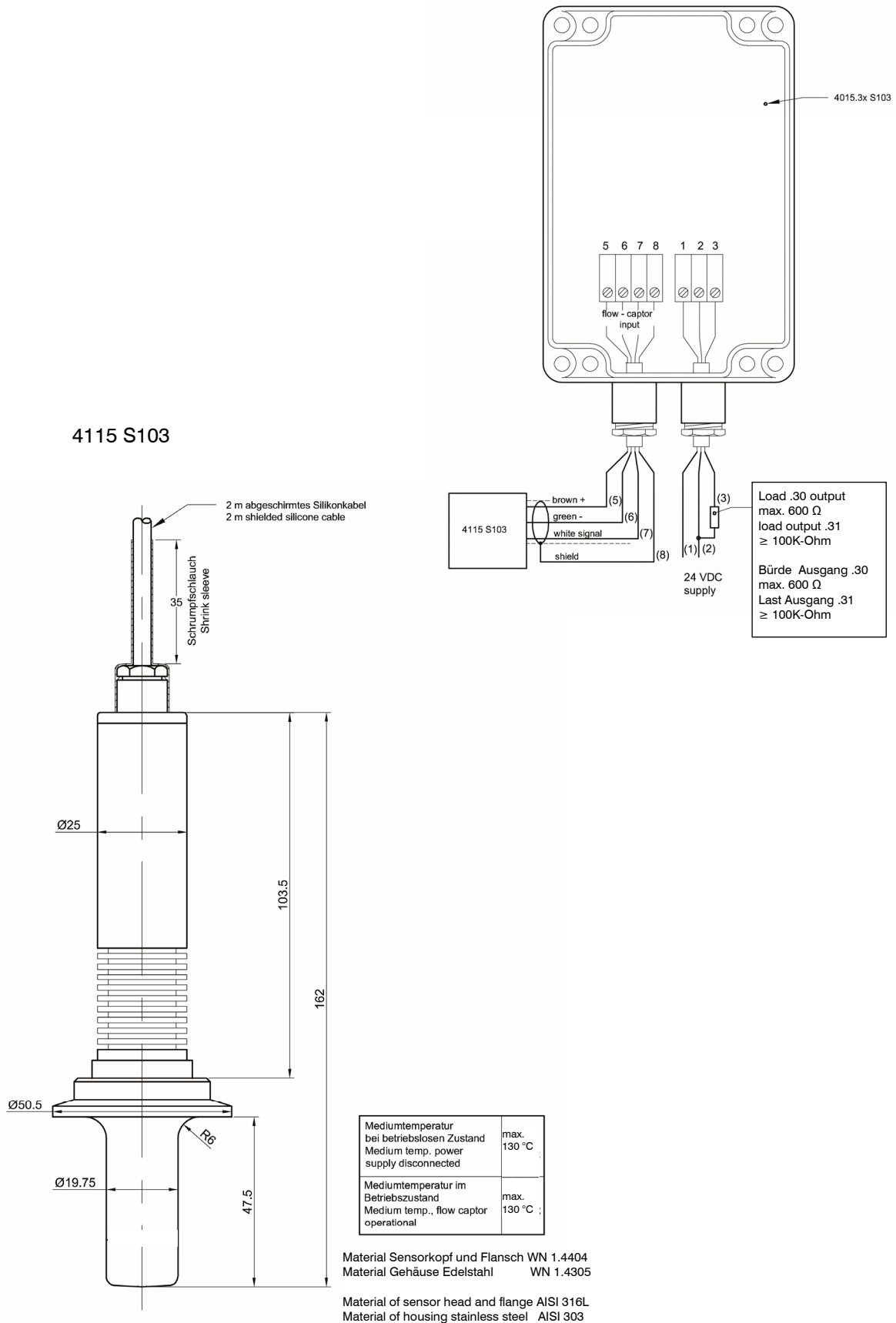
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## flow-captor 4115 S103 + 4015.3x S103



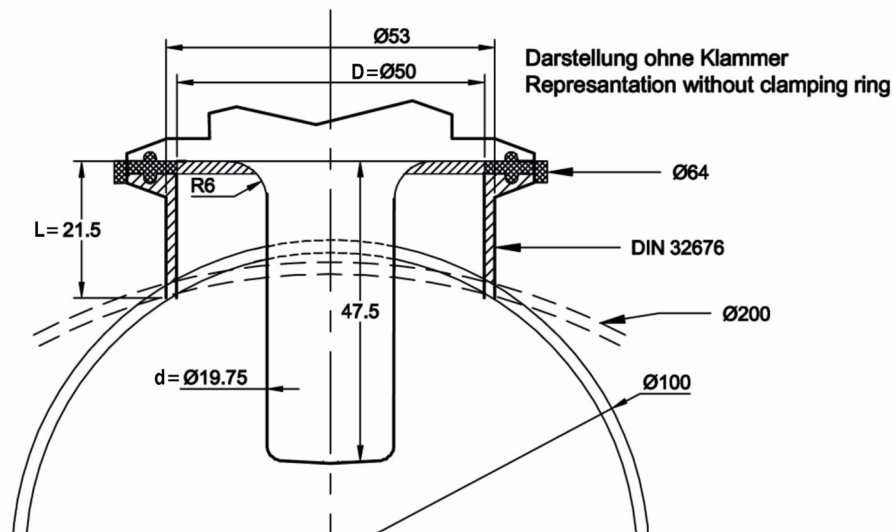
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Zusatztext für die Anwendung unter EHEDG - Bedingungen  
Additional text for the application under EHEDG conditions



DIN Klemmstutzen, kurz DIN 32676 (DN 50)  
DIN Clamp ferrule, short DIN 32676 (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 Einbauumgebung 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.