

DOC053.52.00015.Okt04

3400 sc Series Sensors

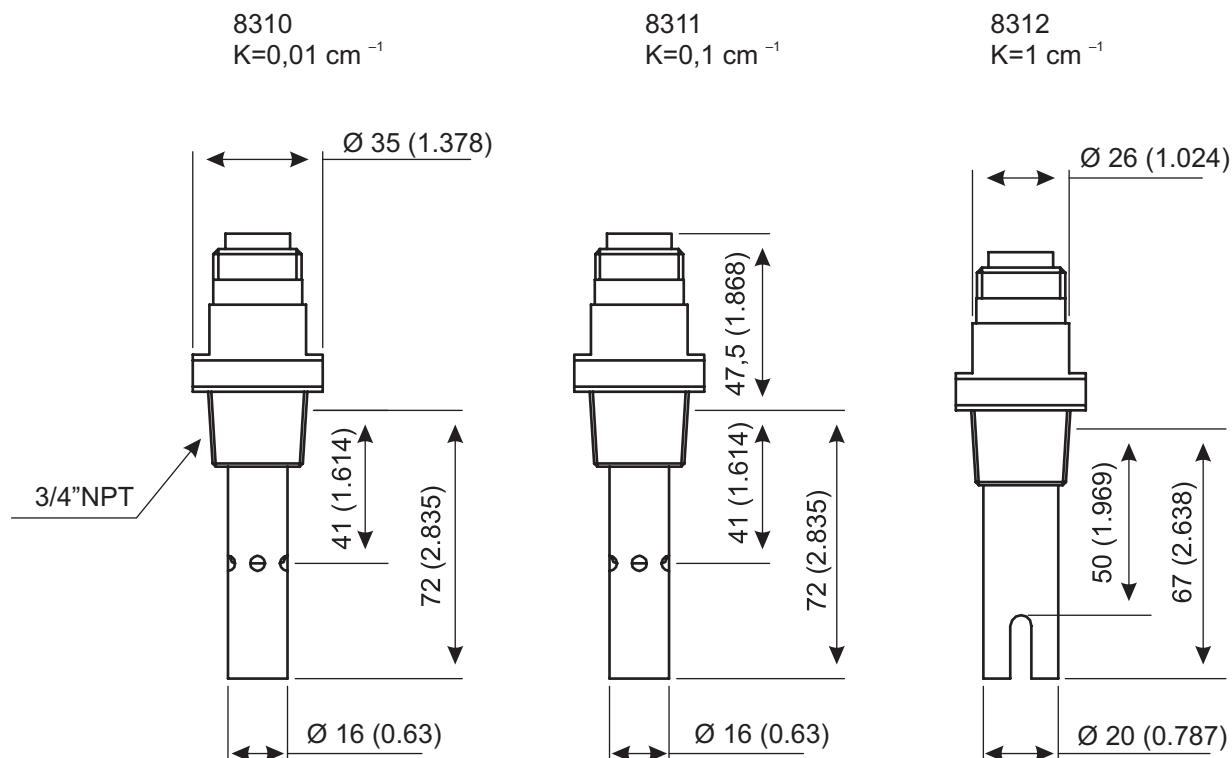
Technical Data

Technical data 3410 ...3412 series sensors

A digital sensor 3410 ... 12 consists of an analogous sensor 8310 ... 12, a digital gateway ([6120700.99](#)) and fitting cables ([Z08319=A=1115](#) and [6122400](#)).

Series	3410	3411	3412
Max. sample temperature	125 °C at 10 bar		
Max. sample pressure	10 bar at 125 °C		
Cell constant K *	0,01 cm ⁻¹	0,1 cm ⁻¹	1 cm ⁻¹
* Accuracy of cell constant ± 2 %	0 μS/cm ... 20 μS/cm	0 μS/cm ... 200 μS/cm	0 μS/cm ... 2000 μS/cm
Material			
Body	Polyester black		Polyester black
Inner electrode	SST316L		Graphite
Outer electrode	SST316L		Graphite
Isolator	PES		PES
Connector	Glassfibre reinforced Polyester / IP 65		Glassfibre reinforced Polyester / IP 65
Mounting	3/4" NPT thread		

Figure 1 Sensor dimensions 8310 ... 8312

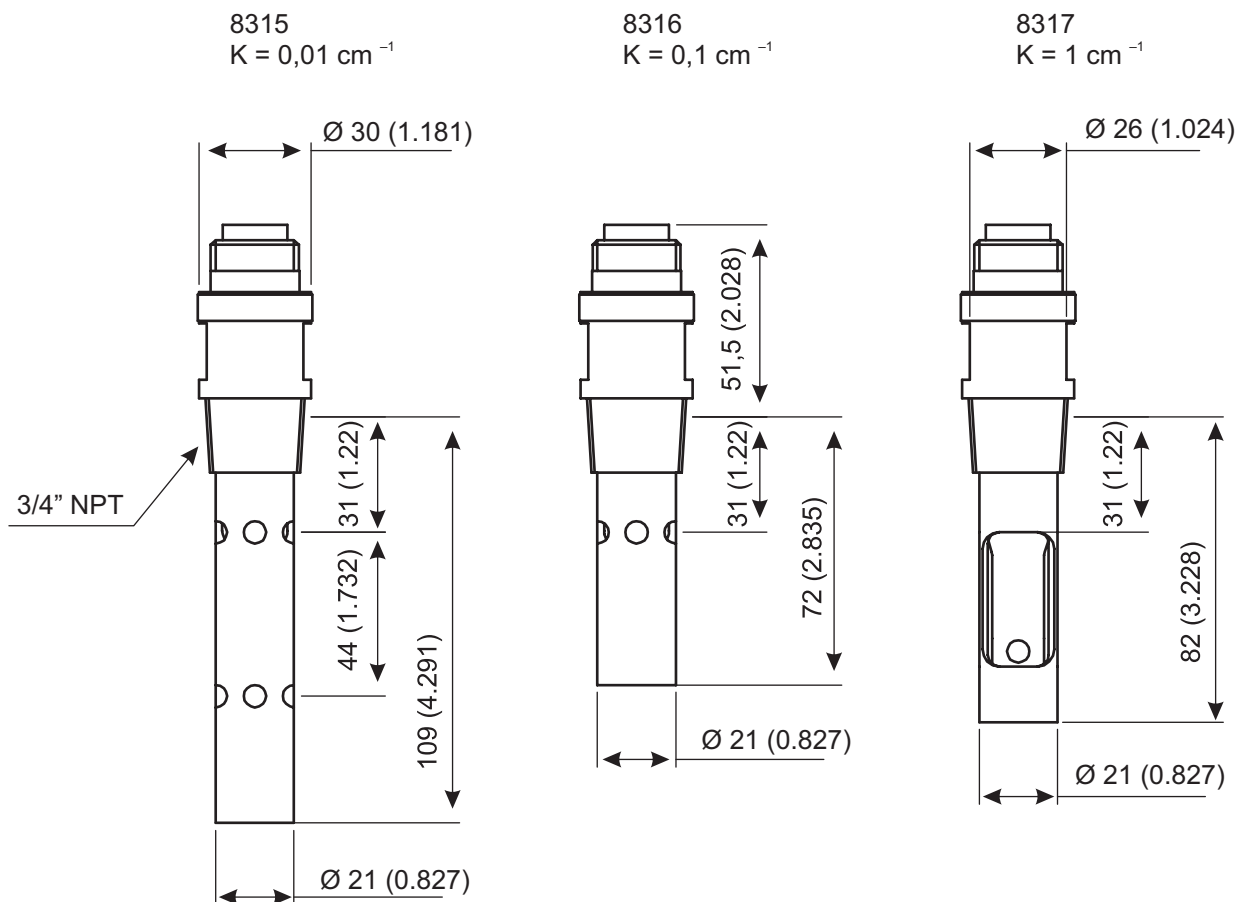


Technical Data 3415 ... 3417 series sensors

A digital sensor 3415 ... 17 consists of an analogous sensor 8315 ... 17, a digital gateway (6120700.99) and fitting cables (Z08319=A=1115 and 6122400).

Series	3415	3416	3417
Max. sample temperature	150 °C (at 25 bar)		
Max. sample pressure	25 bar (at 150 °C)		
Cell constant K*	0,01 cm ⁻¹	0,1 cm ⁻¹	1 cm ⁻¹
* Accuracy of cell constant ± 2 %	0 μS/cm ... 20 μS/cm	0 μS/cm ... 200 μS/cm	0 μS/cm ... 2000 μS/cm
Material			
Body	SST 316 L	SST 316 L	SST 316 L
Inner electrode*	SST 316 L	SST 316 L	Graphite
Outer electrode*	SST 316 L	SST 316 L	Graphite
Isolator *	PES	PES	PES
O-rings *	VITON **	VITON **	VITON **
Connector	Glassfibre reinforced Polyester / IP 65		Glassfibre reinforced Polyester / IP 65
* in contact with sample			
** Viton is a trademark of DUPONT DE NEMOURS			
Mounting	3/4" NPT thread		

Figure 2 Sensor dimensions 8315 ... 8317

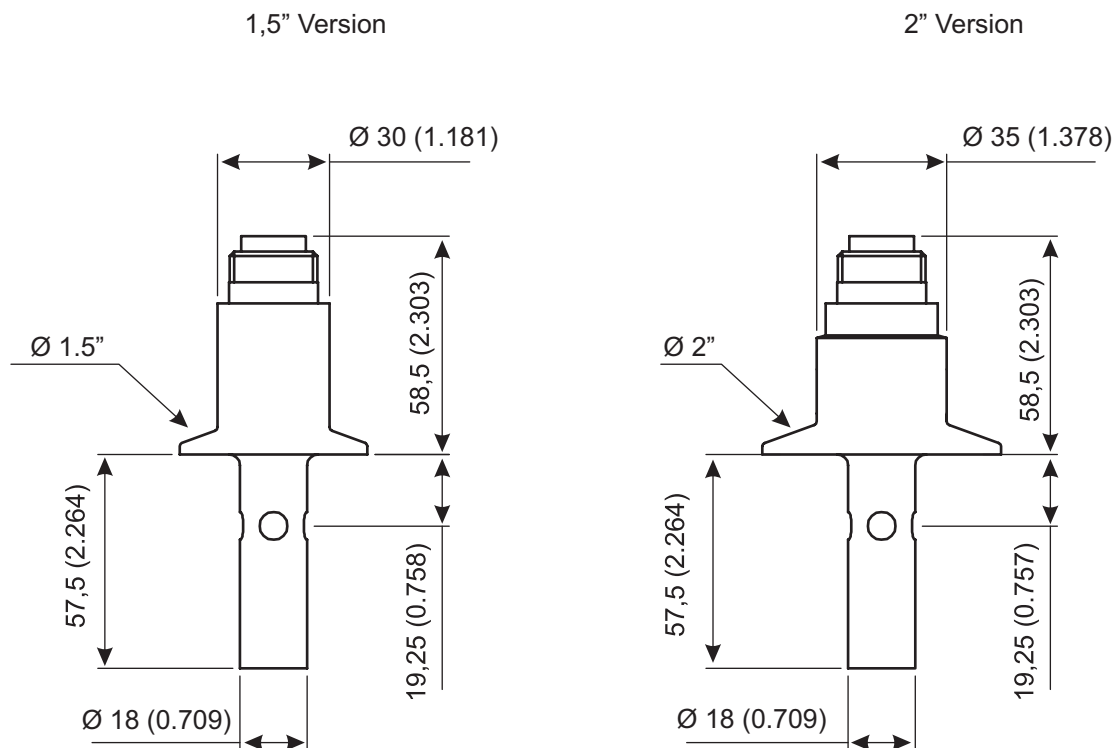


Technical data 3494 series sensors

A digital sensor 3494 consists of an analogous sensor 8394, a digital gateway (6120700.99) and fitting cables (Z08319=A=1115 and 6122400).

Series	3494
Max. sample temperature	150 °C (at 10 bar)
Max. sample pressure	25 bar (at 100 °C)
Cell constant K	0,01 cm ⁻¹ , ± 2 % 0 µS/cm ...20 µS/cm, ±1 %
Temp. Sensor	± 0,15 °C
Material	
Body	SST 316 L, (Ra < 0,4 µm)
Inner electrode*	SST 316 L, (Ra < 0,4 µm)
Outer electrode*	Edelstahl 316 L, (Ra < 0,4 µm)
Isolator *	PEEK * (FDA authorized)
O-rings *	EPDM *(FDA authorized)
Connector	Glassfibre reinforced Polyester / IP 65
* contact with sample	

Figure 3 Sensor dimensions 8394



Accessories

Technical data flow chambers

Flow chamber	831x series sensors	8394 series sensors
Max. sample temperature	150 °C at 25 bar	150 °C at 10 bar
Max. sample pressure	10 bar at 125 °C	25 bar at 100 °C
Mounting	Bypass: 1/4" NPT female Sensor: 3/4" NPT female	Bypass: 1/4" NPT female
Material	SST316L	

Figure 4 Flow chambers 8394 series sensors

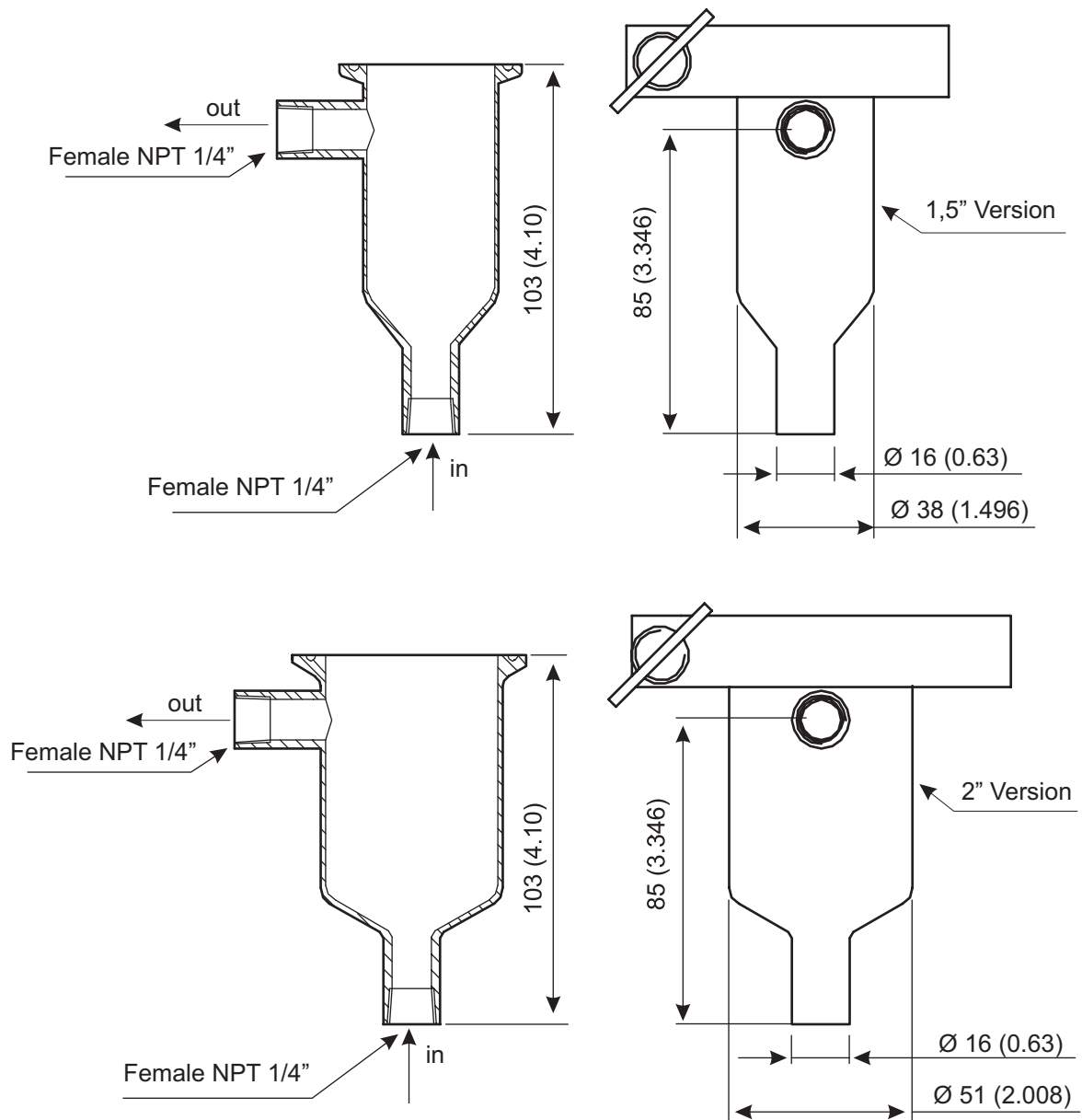


Figure 5 **Welding ferrule for 8394 series sensors**

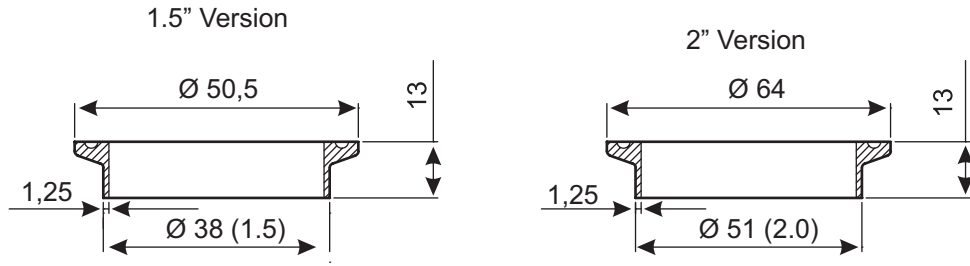


Figure 6 **Flow chambers 831x series sensors**

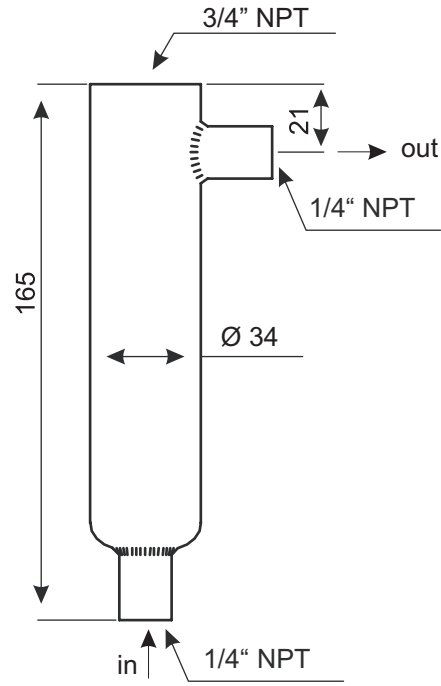


Figure 7 Gateway

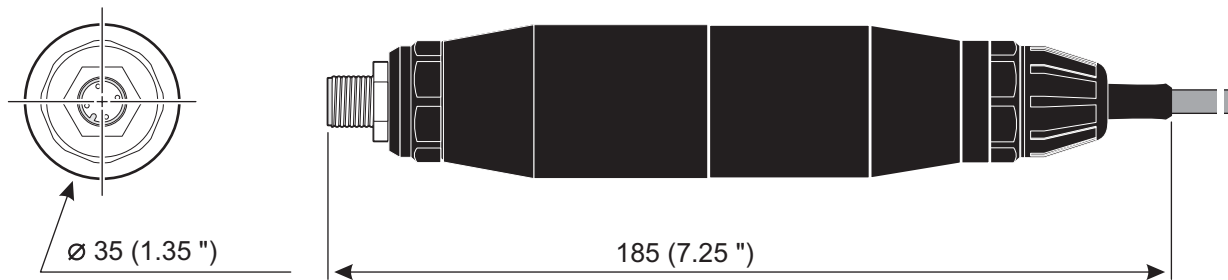


Figure 8 Connecting cable sensor / gateway

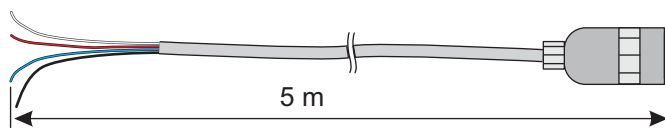
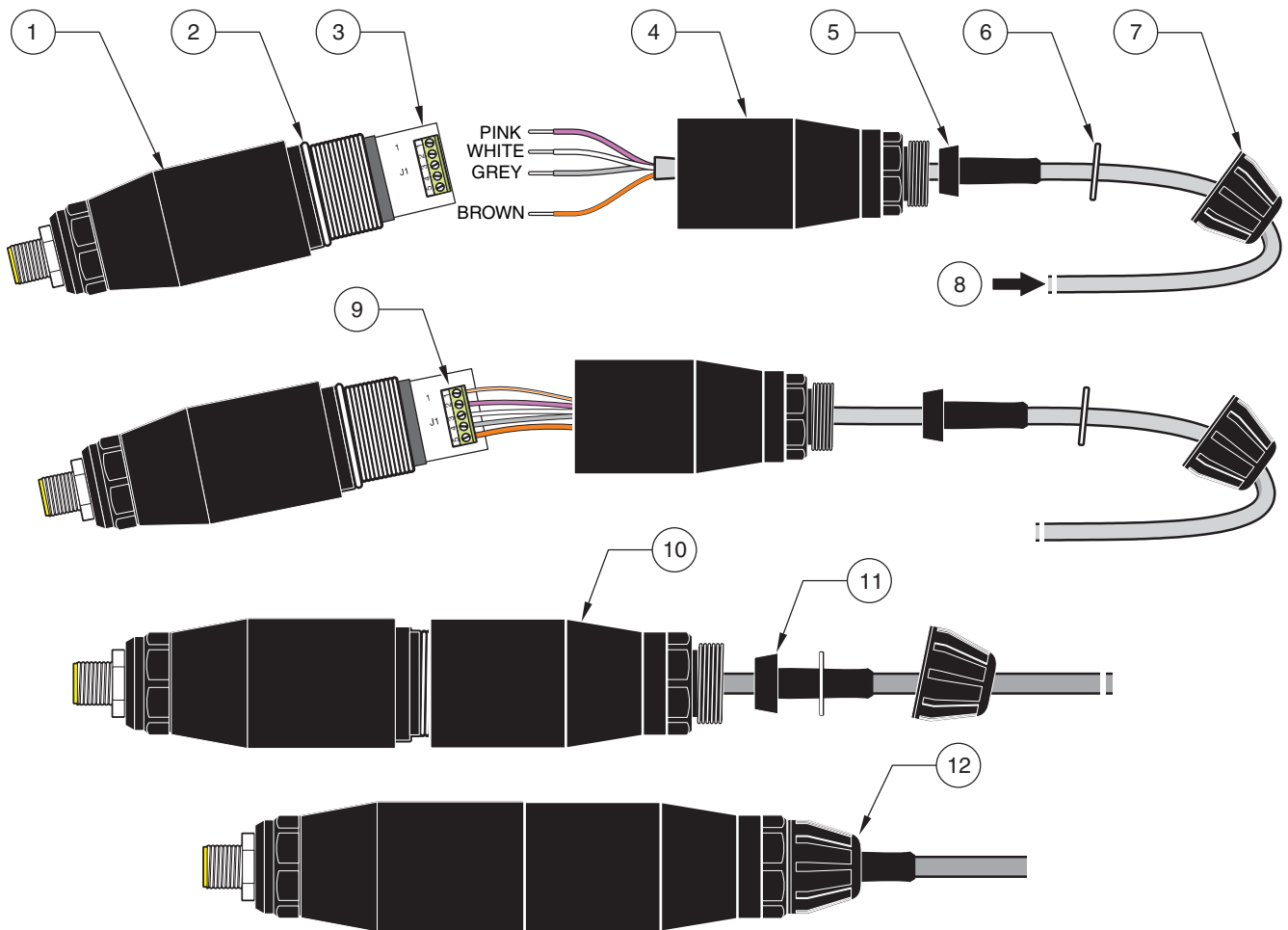


Tabelle 1 Cable assignment, digital gateway / 83xx

Sensor (cable colour)	Sensor signal	Controller connection sc100 digital gateway
-	-	J1-1
Pink	Outer electrode	J1-2
White	Temp -	J1-3
Grey	Temp +	J1-4
Brown	Inner electrode	J1-5

Figure 9 Connection digital gateway / 83xx



1. Front of housing	7. Union nut
2. O-ring	8. From the sensor
3. Sensor wire connections	9. Cable assignment as per Tabelle 1 "Cable assignment, digital gateway / 83xx" auf der Seite 7.
4. Rear of housing	10. Bolt together the housing for the digital gateway.
5. Cable sleeve	11. Slide back the cable sleeve and the washer.
6. Washer	12. Tighten the union nut.

Spare parts and accessories

A digital sensor 34xx consists of

- an analogous sensor 83xx,
- a digital gateway (6120700.99),
- a (5 m) connecting cable (Z08319=A=1115) for the connection of the sensor with the gateway and
- a (1 m) connecting cable (6122400) for the connection of the gateway with a sc-controller.

Digital Sensors

Digital-Sensor 3410	D3410.99
Digital-Sensor 3411	D3411.99
Digital-Sensor 3412	D3412.99
Digital-Sensor 3415	D3415.99
Digital-Sensor 3416	D3416.99
Digital-Sensor 3417	D3417.99
Digital-Sensor 3494, 1,5 "	D3494A.99
Digital-Sensor 3494, 2"	D3494B.99

Spare parts

Analogous-Sensor 8310	Z08310=A=0000
Analogous-Sensor 8311	Z08311=A=0000
Analogous-Sensor 8312	Z08312=A=0000
Analogous-Sensor 8315	Z08315=A=0000
Analogous-Sensor 8316	Z08316=A=0000
Analogous-Sensor 8317	Z08317=A=0000
Analogous-Sensor 8394, 1,5 " Clamp	Z08394=A=1500
Analogous-Sensor 8394, 1,5 " Clamp with material conformity certificates, roughness certificate ..	Z08394=A=1511
Analogous-Sensor 8394, 2 " Clamp	Z08394=A=2000
Analogous-Sensor 8394, 2 " Clamp with material conformity certificates, roughness certificate	Z08394=A=2011
Connecting cable sensor-gateway, 5 m/16 ft	Z08319=A=1115
Digital gateway	6120700.99
Connecting cable gateway-controller,1 m	6122400

Accessories

Flow chamber, SST, for sensor 3410 ... 3417	Z08318=A=0001
Flow chamber, SST, for sensor 3494, 1,5 "	Z08394=A=8150
Flow chamber, SST, for sensor 3494, 2 "	Z08394=A=8200
Welding ferrule, SST, for sensor 3494, 1,5 "	Z08394=A=0380
Welding ferrule, SST, for sensor 3494, 2"	Z08394=A=0510