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JUMO tecLine CR-GT

Conductive 2-Electrode Conductivity Sensor Industrial Version with graphite electrodes

Series 202925



- 2-electrode system
- cell constant K = 1.0
- measuring range 10 µS/cm to 15 mS/cm
- different process conecctions enable optimal adaption to process conditions

Brief description

Conductivity sensors are used in conjunction with suitable transmitters to determine the electrolytic conductivity of liquids.

JUMO 202925 Series conductivity sensors can be employed in areas such as:
- media separation
- drinking water purification
- check and treatment of wastewater and domestic water

When conductivity measurements are required in ranges above 10 mS/cm, we recommend use of the state-of-the-art 4-pole measuring technique or inductive conductivity measurement technology.

Principle of operation

202925 Series conductivity cells are 2-electrode conductivity sensors. An a.c. voltage is applied through the transmitter. The current flowing through the liquid and the electrodes is determined by the conductivity of the liquid.

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Technical data

Cell constant[a]	K = 1.0
Typical measuring ranges[b]	10 µS/cm to 15 mS/cm
Temperature compensation	with Pt100 or Pt1000
Process connection	standard: G 3/4A optional: G 1A oder NPT3/4-14 or taper connection DIN 11851 - DN 25 (milk cone)
Body material	PVDF
Cell material	graphite/PES
Maximaler pressure	16 bar at 25 °C or 9 bar at 60 °C; at 130 °C max. 1 bar
Maximale temperature	PVDF 130 °C
Electrical connection	angled connector (Hirschmann connector) to DIN 43650, protected to IP65, 10 m fixed cable 10 m, other cable lengths on request

[a] Depending on the production conditions, the cell constant can deviate by ±10 % from the nominal value. This deviation can be compensated at the transmitter.

[b] The measuring range also depends on the transmitter used.
When used for a wider range than the typical one, measurement errors caused by polarization may occur.

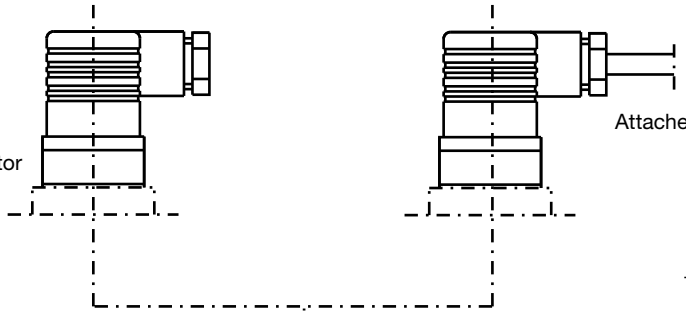
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Dimensions/overview of types

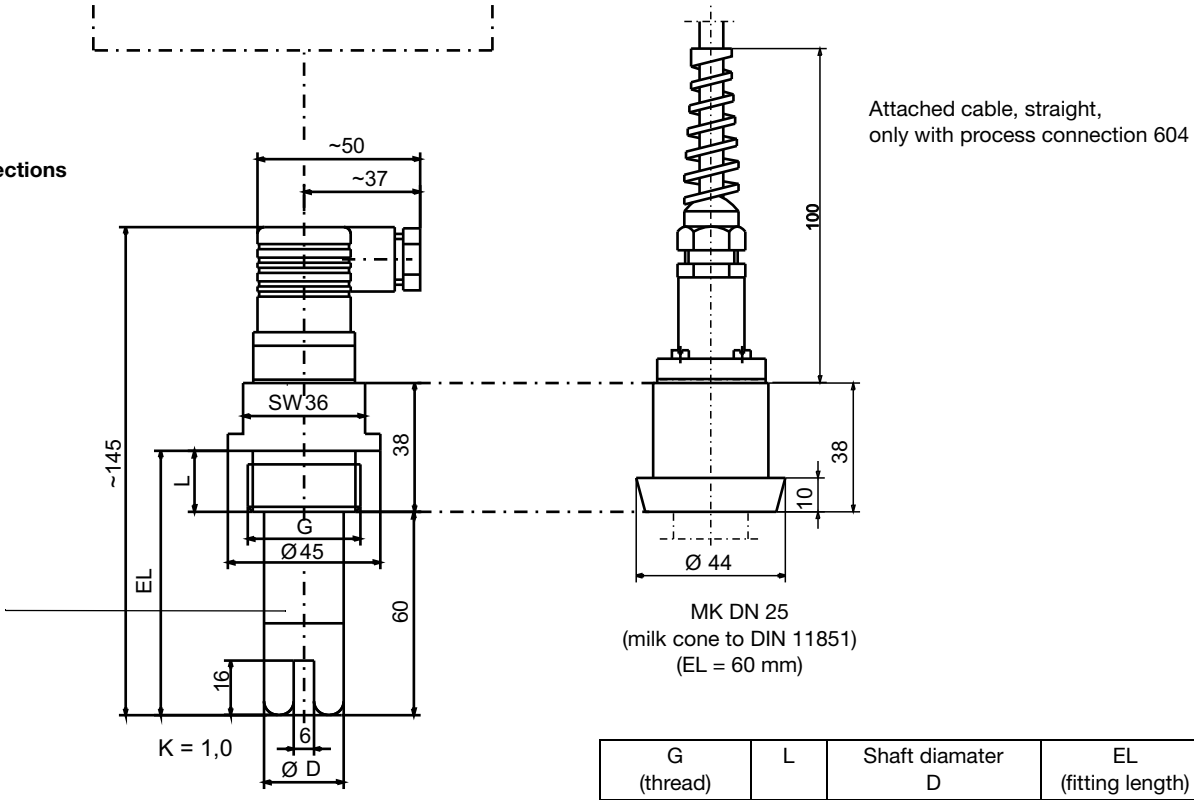
Electrical connections



Angled connector

Attached cable with angled connector (encapsulated)

Process connections



Attached cable, straight,
only with process connection 604

Body material
PVDF/PES

Cell material
graphite

MK DN 25
(milk cone to DIN 11851)
(EL = 60 mm)

G (thread)	L	Shaft diamater D	EL (fitting length)
NPT3/4-14	20	23.5	80
G 1A	18		78
G 3/4A	16		76

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Electrical connection

Connection for	Connector	Attached cable
Outer electrode	⏚	white
Inner electrode	2	brown
Temperature compensation (option)	1 3	yellow green

Order details

		(1)	**Basic type**
	202925		JUMO tecLine CR-GT - Conductive 2-Electrode Conductivity Sensor with Graphite Electrodes
		(2)	**Cell constant**
	0100		K = 1.0 (range 10 µS/cm – 15 mS/cm)
		(3)	**Temperature sensor**
x	0000		none
x	1003		Pt100
o	1005		Pt1000
		(4)	**Process connection**
x	105		thread G 3/4A
o	106		thread G 1A
o	145		3/4-14 NPT
o	604		taper connection DIN 11851 - DN 25 (milk cone)
		(5)	**Electrical connection**
x	37		angled connector to DIN 43650 (Hirschmann connector)
o	17		attached cable connection, cable length 10 m
		(6)	**Body material**
x	88		PVDF (standard)
		(7)	**Cell material**
x	84		graphite (standard)

x = standard
o = optional

	(1)		(2)		(3)		(4)		(5)		(6)		(7)
Order code		/		-		-		-		-		-	
Order example	202925	/	0100	-	1003	-	105	-	37	-	88	-	84

Stock items

Type	Brief description	Part no.
202925/0100-1003-105-37-88-84	K = 1.0/Pt100/G 3/4A	00300200
202925/0100-0000-105-37-88-84	K = 1.0/G 3/4A	00300201
202925/0100-1003-106-37-88-84	K = 1.0/Pt100/G 1A	00089385