



JUMO tecLine Lf-GT Electrolytic Conductivity Cells Industrial Version with graphite electrodes

202925 Series

- 2-electrode system
- cell constant $K=1.0$; 3.0 or 10.0
- for ranges up to 200mS/cm
- different process connections enable optimal adaptation to process conditions

Brief description

Conductivity cells are used in conjunction with conductivity transmitters to determine the electrolytic conductivity of liquids. The materials used are physiologically harmless and conform to FDA requirements.

JUMO 202925 Series conductivity cells can be employed in areas such as:

- $K = 1.0/3.0$
- media separation
 - drinking water purification
 - wastewater checks/treatment
- $K = 10.0$
- wastewater checks/treatment
 - concentrate monitoring
 - domestic water treatment



Principle of operation

202925 Series measuring cells are 2-electrode cells. 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.

Technical data

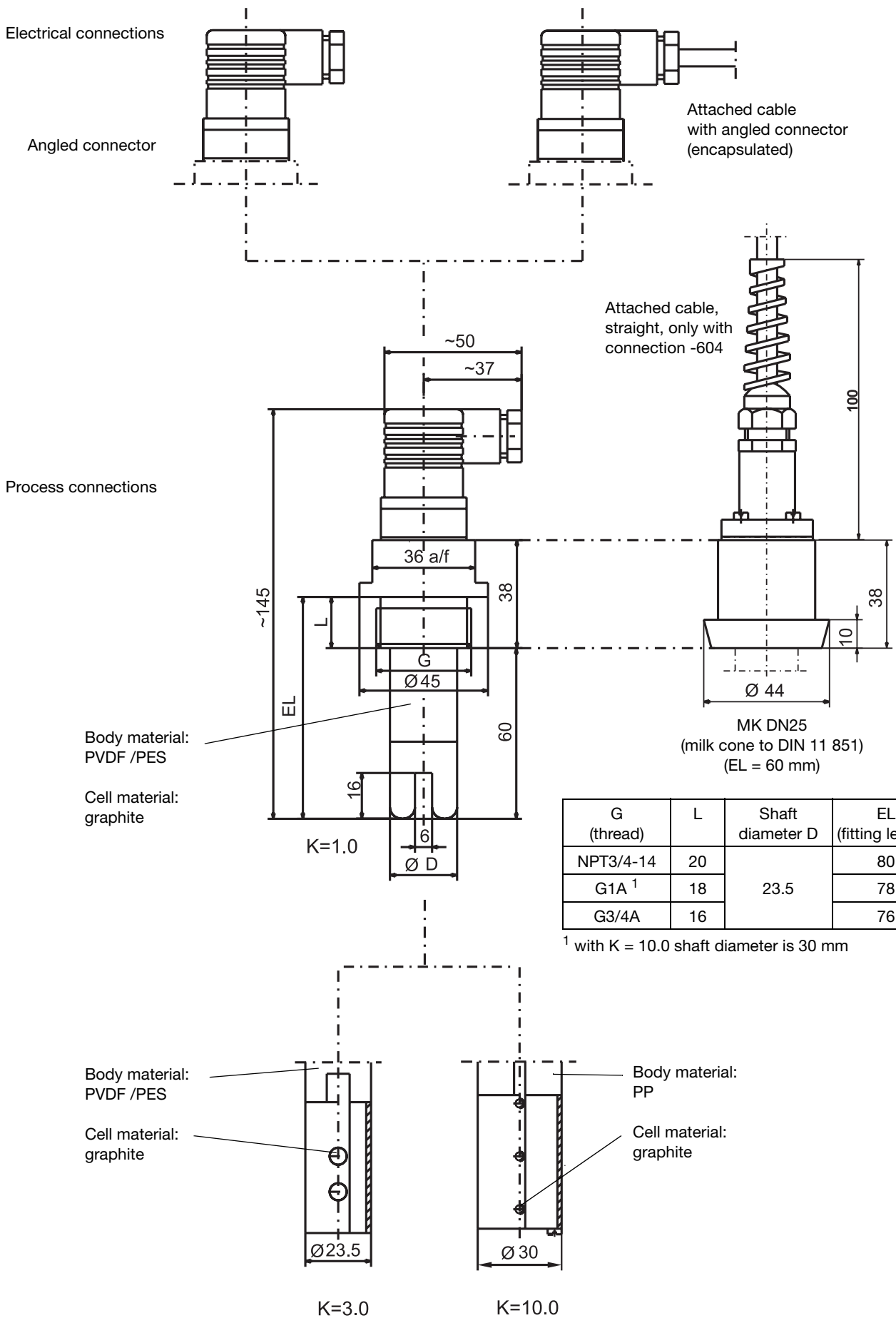
Cell constant ¹	$K = 1.0$ or $K = 3.0$ or $K = 10.0$
Typical measuring ranges ²	10 $\mu\text{S/cm}$ — 15 mS/cm (for $K = 1.0$) 0.1 — 30 mS/cm or 200 mS/cm (for $K = 3.0 / 10.0$)
Temperature compensation	with Pt100 or Pt1000
Process connection	standard: G3/4A optional: G1A or NPT3/4-14 or taper connection DIN 11851-DN25 (milk cone)
Body material	PVDF for $K = 1.0$ and $K = 3.0$ PP for $K = 10.0$
Cell material	graphite / PES
Electrical connection	angled connector (Hirschmann connector) to DIN 43 650; protected to IP65 10 m fixed cable, other cable lengths on request
Maximum pressure	16 bar at 25°C or 9 bar at 60°C
Maximum temperature	PVDF 130°C / PP 80°C

¹ Any deviation from the cell constant can be adjusted on the transmitter.


² The measuring ranges also depend on the transmitter used.

When used for wider ranges than the typical ones, measurement errors caused by polarization may occur.

Dimensions / overview of types



Electrical connection

Connection for	Connector	Attached cable
Outer electrode		white
Inner electrode	2	brown
Temperature com*	1 3	yellow green

*option

Order details

(1) Basic type

202925 Conductivity cells with graphite electrodes

(2) Cell constant

0100	K = 1.0 (range 10 µS/cm – 15 mS/cm)
0300	K = 3.0 (range 0.1 mS/cm – 30 mS/cm)
1000	K = 10.0 (range 0.1 mS/cm – 200 mS/cm)

(3) Temperature sensor

x o o	0000	none
x o o	1003	Pt100
o - -	1005	Pt1000

(4) Process connection

x x -	105	thread G3/4A
o o x	106	thread G1A
o - -	145	3/4-14 NPT
o - -	604	taper connection DIN 11 851-DN25 (milk cone)

(5) Electrical connection

x x x	37	angled connector to DIN 43 650 (Hirschmann connector)
o o o	17	attached cable connection, cable length 10 m

(6) Body material

- - x	87	PP
x x -	88	PVDF (standard)

(7) Cell material

x x x	84	graphite (standard)
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x = combination is standard

o = combination is optional

- = combination cannot be supplied

Order code (1) (2) (3) (4) (5) (6) (7)
 202925 / - - - - - -

Order example 202925 / 0100 - 1003 - 105 - 37 - 88 - 84

Stock items

Sales No.	Type	Brief description
20/00300200	202925/0100-1003-105-37-88-84	K = 1.0 / Pt100 / G3/4A
20/00300201	202925/0100-0000-105-37-88-84	K = 1.0 / G3/4A
20/00089385	202925/0100-1003-106-37-88-84	K = 1.0 / Pt100 / G1A

Non-stock items

Sales No.	Type	Brief description
20/00089381	202925/0300-1003-105-37-88-84	K = 3.0 / Pt100 / G3/4A
20/00305206	202925/1000-1003-106-37-88-84	K = 10.0 / Pt100 / G1A