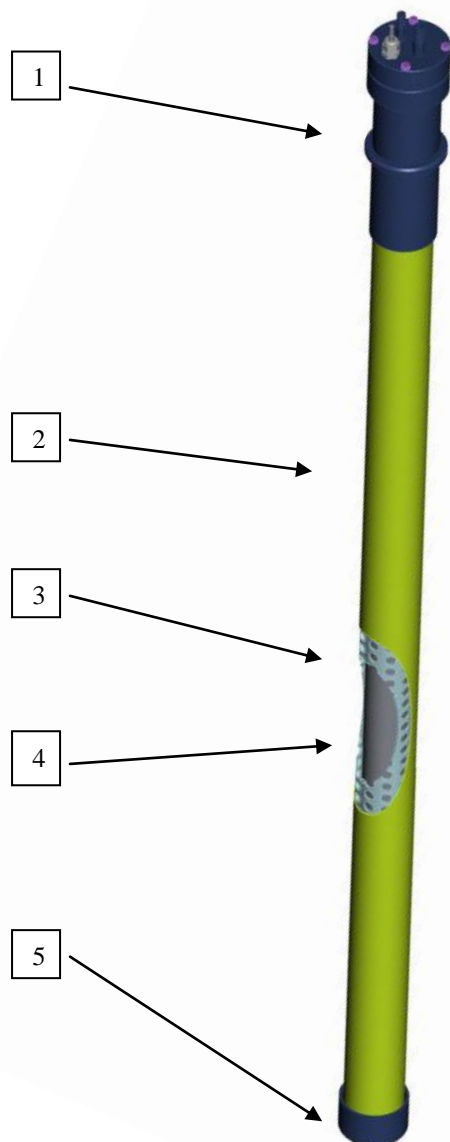


## Tubular electrophoretic cell EFC-V3

**Application:** Electrophoretic painting – cataphoresis

**Description:** Electrophoretic cell with the ion-exchange membrane is connected as an anode and serves as a counter-electrode and for maintaining a concentration balance in the paint bath

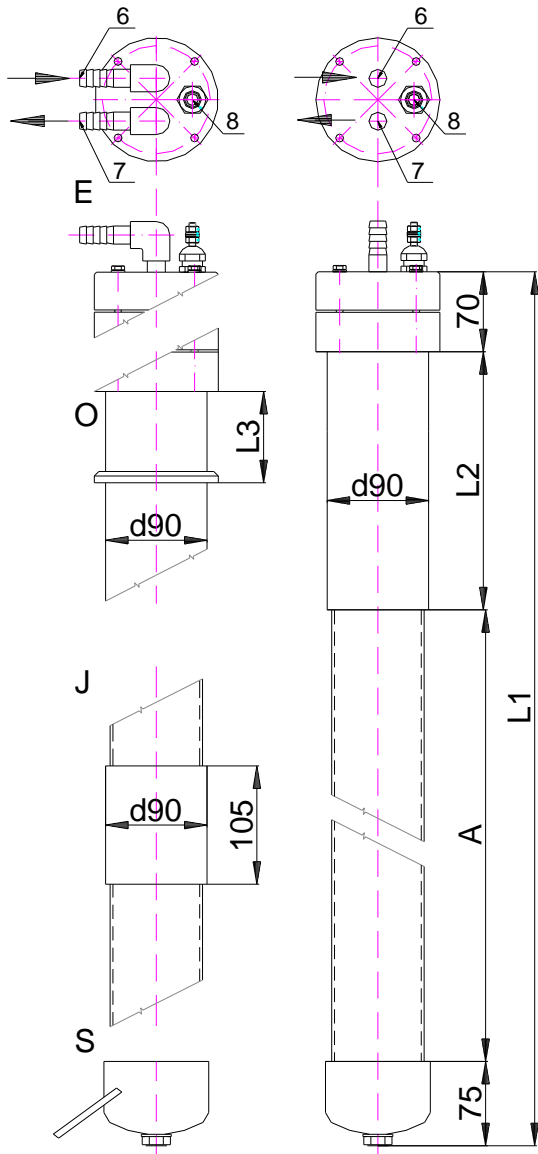
**Structure:**



Index	Item
1	<b>Top head</b> The construction of top head guarantees desired tightness of entire system and of areas for fixing to the wall of the cataphoretic bath. The design of the top head enables required circulation of the anolyte with inlet in the center of the anode for more effective oxygen escape arising from electrochemical reaction at the anode surface. This component includes also the electrical connection.
2	<b>Ion-exchange RALEX®</b> Anion-exchange membrane RALEX of this type in a tubular form is installed around the anode by fixing in the bottom cap and top head and strengthened by perforated PP tube.
3	<b>Perforated PP tube</b> The perforated tube delimits a space between the membrane and electrode for effective flow of the anolyte while its sufficient free surface allows required passage of electric current.
4	<b>Anode</b> The anode is positioned inside the EFC cell in such a way that the design of the bottom cap and top head guarantee its proper centring.
5	<b>Bottom cap</b> The design of the bottom cap also guarantees desired tightness of entire system and of areas for fixing to the wall of the cataphoretic bath.

**Operation limits of EFC:**

Current load of the ion-exchange membrane	max. 70 A.m <sup>-2</sup>
Current density	max. 30 A.m <sup>-2</sup>
Anolyte flow through the EFC	approx. 100 l/h per 1 m Aef EFC
Compressive load of AMH5E-HD membrane	max. 0,4 bar
Compressive load of AMH6E-HD membrane	max. 1,0 bar



**Dimensions:**

Index	Item	Required dimensions [mm]
A	Active length of membrane	Max. 5 000
L2	Suspension length of head	According the customers' requirements
L1	Total length of cell	$A + L2 + 145$
6	Electrolyte inlet – hose end	d: 10, 12, 16 (PVC – U) d: 10, 13 ½, 17 (AISI 316)
7	Electrolyte outlet – hose end	d: 12, 16 (PVC – U) d: 10, 13 ½, 17 (AISI 316)
8	Electrical connection	Screw + nut M6

**Options:**

Index	Item
E	Hose elbow
O	O-support ring (L3)
J	Membrane joint
S	Support of the lower cup

**Recommended value of electrolyte flow**

