



Purpose

Cartridge sucker-rod pump filter CSRPF is designed to improve the operational reliability of sucker-rod pumps by filtering the produced oil-well fluid from mechanical impurities.

Composition

The filter is a prefabricated structure consisting of a filter base, with a freely moving spool piece therein, wherein one spiral-slot filter element and a perforated tube are fixed by means of a socket and a retention screw.

If necessary, the filter design allows multiple filters to be assembled into one. For this purpose, unscrew the retention screws securing the adapter and the base. Then connect the free end of one filter pipe to the socket of the other filter. Thus, up to 10 filters can be combined.

Principle of operation

The fluid coming to the pump intake from the well is purified from mechanical particles by a filtering element made of triangular stainless-steel profile of AISI 316 grade, which is spirally wound with a certain pitch on stringers and provides a rigid screen with longitudinal slots of strictly defined clearance. In the lower part of the filter, in the filter housing recess, there is a spool piece, which comes into operation in case of heavy clogging of the filter element. Due to the pressure difference inside the filter housing and in the plug under the spool piece, the spool piece moves upward until the hole is aligned with the slot in the spool piece.

The reciprocation of the spool piece, caused by the movement of the produced fluid, ensures the self-purification of the filter.

Technical features

Name	Outer diameter D, in.	Length of filter assembly L, in.	Length of perforation L1, in.	Thread type	Slot width, in.
Filter CSRPF	1.26	18.7	11.81	G 3/4"	0.01-0.05
Filter CSRPF	1.65	18.7	11.81	G 1"	0.01-0.05
Filter CSRPF	2.17	18.7	11.81	G1 1/4"	0.01-0.05

