

Catalog of equipment produced by Design Bureau "Fizelektronpribor"

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Item No.	Description, design version	Application, materials controlled	Sensor design
Bulk material moisture analyzers (moisture meters)			
1	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.41	Powdered, granular, bulk materials in a hopper, pipe or collecting duct above the conveyor belt (including sawdust and wood chips, wafers, grain, etc.)	Probe made as a straight rod (diameter 14 mm, length 0.6 m, stainless steel AISI 321) with a set of coupling holders
2	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.43	Bulk materials (wood chip waste, sawdust, pulp, etc.) in a screw or pipe	Probe made a radially bent rod (diameter 14 mm, stainless steel AISI 321) with a set of coupling holders
3	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.4	Bulk materials (sand, crushed stone, gravel, ore, grain, etc.) in a hopper, dispenser, including materials that adhere on a probe and walls	Probe made as a straight rod (cross section 27 mm, length up to 1.0 m, stainless steel AISI 321) with a set of coupling holders
4	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.42	Ore and other bulk materials on a belt conveyor. Sensor feature: the probe is removable to enable its replacement during the operation.	Probe made as a straight rod (cross section 27 mm, length up to 1.0 m, material - corrosion-resistant steels AISI 321, AISI 420, etc.).
5	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.5	Crushed stone, ore, etc. on a conveyor belt	Plate probe specially shaped with a 14 mm thickness, mounted lengthwise the material flow above a conveyor belt
6	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.6	Powdered, granular, bulk materials in a hopper or in-line on a conveyor belt (silicate mixture, sand, crushed stone, grain, etc.)	Made as a panel with couplings and flat-topped probe

7	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -10.16	Powdered, granular, bulk materials in a hopper or in-line on a conveyor belt (coal, iron ore and other bulk materials featuring high conductivity)	Made as a panel with couplings and flat-topped probe
8	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -11.3	Powdered, granular and bulk materials in a hopper, mixer, silo and on a conveyor belt	Sensor with a two-pinned probe. To be permanently installed on a 1" pipe, can also be fixed directly to a hopper wall or a panel installed along a conveyor belt
9	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -11.4	Liquid and bulk materials as well as for soil moisture control	Sensor with a two-pinned probe. Probe is equipped with a tip to immerse the sensor in a dense controlled material, e.g. soil
Moisture analyzers (moisture meters) for concrete mixture, coal, iron-ore concentrate and other bulk and paste-like materials (The moisture meter can be supplied in an explosion-proof version 0ExialIBT5)			
10	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -17 (-70)	Control of water content in concrete mixture inside concrete mixing machines, control of material moisture inside hoppers	Sensor of 108 mm diameter (supplied with a fixing set)
11	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -17.1 (-71)	Control of water content in concrete mixture inside concrete mixing machines, control of material moisture inside hoppers	Sensor of 80 mm diameter (supplied with a fixing set)
12	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -17.2 (-72)	Measurements of bulk, paste-like materials in cylindrical sampling systems	Sensor of 80 mm diameter (supplied with a fixing set)
In-line moisture analyzers (moisture meters) for liquid materials (The moisture meter can be supplied in an explosion-proof version 0ExialIBT5)			
13	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.4	Liquid materials in a DN50 pipeline, pressure up to 10 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN50 PN10 pipe section; flanges ver. 1-50-10 GOST 12820-80; complete with AISI 1020 steel mating flanges
14	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.5	Liquid materials in a DN50 pipeline, pressure up to 25 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN50 PN25 pipe section; flanges ver. 1-50-25 GOST 12820-80; complete with AISI 1020 steel mating flanges

15	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.51	Liquid materials in a DN50 pipeline, pressure up to 25 bar. Working temperature range: -20 ... +145°C.	Straight-flow sensor made as a DN50 PN25 pipe section; flanges ver. 1-50-25 GOST 12820-80; complete with AISI 1020 steel mating flanges
16	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.6	Liquid materials in a DN80 pipeline, pressure up to 16 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN80 PN16 pipe section; flanges ver. 1-80-16 GOST 12820-80; complete with AISI 1020 steel mating flanges
17	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.61	Liquid materials in a DN80 pipeline, pressure up to 16 bar. Working temperature range: -20 ... +145°C.	Straight-flow sensor made as a DN80 PN16 pipe section; flanges ver. 1-80-16 GOST 12820-80; complete with AISI 1020 steel mating flanges
18	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.7	Liquid materials in a DN80 pipeline, pressure up to 25 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN80 PN25 pipe section; flanges ver. 1-80-25 GOST 12820-80; complete with AISI 1020 steel mating flanges
19	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.71	Liquid materials in a DN80 pipeline, pressure up to 25 bar. Working temperature range: -20 ... +145°C.	Straight-flow sensor made as a DN80 PN25 pipe section; flanges ver. 1-80-25 GOST 12820-80; complete with AISI 1020 steel mating flanges
20	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.8	Liquid materials in a DN50 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN50 PN40 pipe section; weld neck flanges ver. 2-50-40 and ver. 3-50-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
21	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.9	Liquid materials in a DN80 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN80 PN40 pipe section; weld neck flanges ver. 2-80-40 and ver. 3-80-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
22	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.10	Liquid materials in a DN125 pipeline, pressure up to 6 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN125 PN6 pipe section; flanges ver. 1-125-6 GOST 12820-80 (complete with AISI 1020 steel mating flanges)

23	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.11	Liquid materials in a DN50 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN50 PN63 pipe section; weld neck flanges ver. 2-50-63 and ver. 3-50-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
24	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.12	Liquid materials in a DN80 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN80 PN63 pipe section; weld neck flanges ver. 2-80-63 and ver. 3-80-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
25	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.14	Liquid materials in a DN100 pipeline, pressure up to 6 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN100 PN6 pipe section; flanges ver. 1-100-6 GOST 12820-80; complete with AISI 1020 steel mating flanges
26	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.15	Liquid materials in a DN80 pipeline, pressure up to 100 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN80 PN100 pipe section; weld neck flanges ver. 2-80-100 and ver. 3-80-100 GOST 12821-80; complete with AISI 1020 steel mating flanges
27	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.16	Liquid materials in a DN100 pipeline, pressure up to 16 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN100 PN16 pipe section; flanges ver. 1-100-16 GOST 12820-80; complete with AISI 1020 steel mating flanges
28	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.17	Liquid materials in a DN100 pipeline, pressure up to 25 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN100 PN25 pipe section; flanges ver. 1-100-25 GOST 12820-80; complete with AISI 1020 steel mating flanges
29	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.18	Liquid materials in a DN50 pipeline, pressure up to 160 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN50 PN160 pipe section; weld neck flanges ver. 2-50-160 and ver. 3-50-160 GOST 12821-80; complete with AISI 1020 steel mating flanges
30	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.65	Liquid materials in a DN65 pipeline, pressure up to 160 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN65 PN160 pipe section; weld neck flanges ver. 7-65-160 GOST 12821-80; complete with AISI 1020 steel mating flanges

31	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.19	Liquid materials in a DN150 pipeline, pressure up to 10 bar. Working temperature range: -20 ... +120°C.	Straight-flow sensor made as a DN150 PN10 pipe section; flanges ver. 1-150-10 GOST 12820-80; complete with AISI 1020 steel mating flanges
32	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.20	Liquid materials in a DN100 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN100 PN40 pipe section; weld neck flanges ver. 2-100-40 and ver. 3-100-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
33	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.21	Liquid materials in a DN100 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN100 PN63 pipe section; weld neck flanges ver. 2-100-63 and ver. 3-100-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
34	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -20.22	Liquid materials in a DN100 pipeline, pressure up to 100 bar. Working temperature range: -20 ... +120 (145)°C.	Straight-flow sensor made as a DN100 PN100 pipe section; weld neck flanges ver. 2-100-100 and ver. 3-100-100 GOST 12821-80; complete with AISI 1020 steel mating flanges
35	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -21.01	Liquid materials in a pipeline with a diameter of 150 mm or more, pressure up to 6.0 bar. Working temperature range: -20 ... +120°C.	Full-flow sensor contains a probe mounted on a flange ver. 1-100-6 GOST 12820-80. The sensor is installed using a flanged nozzle welded to the pipeline wall.
36	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -21.02	Liquid materials in a pipeline with a diameter of 150 mm or more, pressure up to 16 bar. Working temperature range: -20 ... +120°C.	Full-flow sensor contains a probe mounted on a flange ver. 1-100-16 GOST 12820-80. The sensor is installed using a flanged nozzle welded to the pipeline wall.
37	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -21.03	Liquid materials in a pipeline with a diameter of 150 mm or more, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Full-flow sensor contains a probe mounted on a flange ver. 2-100-40 GOST 12821-80. The sensor is installed using a nozzle (with a mating flange ver. 3-100-40) welded to the pipeline wall.
38	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -21.04	Liquid materials in a pipeline with a diameter of 150 mm or more, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Full-flow sensor contains a probe mounted on a flange ver. 2-100-63 GOST 12821-80. The sensor is installed using a nozzle (with a mating flange ver. 3-100-63) welded to the pipeline wall.

39	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -21.05	Liquid materials in a pipeline with a diameter of 150 mm or more, pressure up to 100 bar. Working temperature range: -20 ... +120 (145)°C.	Full-flow sensor contains a probe mounted on a flange ver. 2-100-100 GOST 12821-80. The sensor is installed using a nozzle (with a mating flange ver. 3-100-100) welded to the pipeline wall.
40	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -22.6	Liquid materials in a DN80 pipeline, pressure up to 16 bar. Working temperature range: -20 ... +120°C.	Sensor made as a DN80 PN16 U-pipe section (bypass); flanges ver. 1-80-16 GOST 12820-80; complete with AISI 1020 steel mating flanges
41	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -22.8	Liquid materials in a DN50 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN40 U-pipe section (bypass); weld neck flanges ver. 2-50-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
42	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -22.9	Liquid materials in a DN80 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN40 U-pipe section (bypass); weld neck flanges ver. 2-80-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
43	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -22.11	Liquid materials in a DN50 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN63 U-pipe section (bypass); weld neck flanges ver. 2-50-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
44	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -22.12	Liquid materials in a DN80 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN63 U-pipe section (bypass); weld neck flanges ver. 2-80-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
45	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.8	Liquid materials in a DN50 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN40 L-pipe section (angle); weld neck flanges ver. 2-50-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
46	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.9	Liquid materials in a DN80 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN40 L-pipe section (angle); weld neck flanges ver. 2-80-40 GOST 12821-80; complete with AISI 1020 steel mating flanges

47	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.11	Liquid materials in a DN50 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN63 L-pipe section (angle); weld neck flanges ver. 2-50-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
48	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.12	Liquid materials in a DN80 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN63 L-pipe section (angle); weld neck flanges ver. 2-80-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
49	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.20	Liquid materials in a DN100 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN100 PN40 L-pipe section (angle); weld neck flanges ver. 2-100-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
50	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -24.21	Liquid materials in a DN100 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN100 PN63 L-pipe section (angle); weld neck flanges ver. 2-100-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
51	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.8	Liquid materials in a DN50 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN40 Z-pipe section; weld neck flanges ver. 2-50-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
52	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.9	Liquid materials in a DN80 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN40 Z-pipe section; weld neck flanges ver. 2-80-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
53	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.11	Liquid materials in a DN50 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN63 Z-pipe section; weld neck flanges ver. 2-50-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
54	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.12	Liquid materials in a DN80 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN80 PN63 Z-pipe section (angle); weld neck flanges ver. 2-80-63 GOST 12821-80; complete with AISI 1020 steel mating flanges

55	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.18	Liquid materials in a DN50 pipeline, pressure up to 160 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN50 PN160 Z-pipe section; weld neck flanges ver. 7-50-160 GOST 12821-80; complete with AISI 1020 steel mating flanges
56	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.20	Liquid materials in a DN100 pipeline, pressure up to 40 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN100 PN40 Z-pipe section; weld neck flanges ver. 2-100-40 GOST 12821-80; complete with AISI 1020 steel mating flanges
57	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -25.21	Liquid materials in a DN100 pipeline, pressure up to 63 bar. Working temperature range: -20 ... +120 (145)°C.	Sensor made as a DN100 PN63 Z-pipe section; weld neck flanges ver. 2-100-63 GOST 12821-80; complete with AISI 1020 steel mating flanges
Additional option for analyzer versions -20, -21, -22, -24 and -25: probe design with an extended range of working medium temperatures up to +145°C			
Additional option for analyzer versions -20, -21, -22, -24 and -25: probe design with an extended range of working medium temperatures up to +300°C			
58	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -12	Liquid materials in tanks, including diesel oil emulsion, sludge, etc. Working temperature range: -20 ... +90°C.	Probe sensor contains a center pin and 4 perimeter-wise pins, installed inside a tank and fixed to a 1" or 2" pipe (The moisture meter can be supplied in an explosion-proof version)
59	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -14	Water and sand pulp and other liquid, paste-like materials in a pipeline with a diameter of 200-800 mm, working pressure – up to 6.0 bar.	In-line probe sensor with one pin installed along the pipeline diameter. Attachment - to a nozzle (with a mating flange) welded to a pipeline.
60	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -23.01	Steam-water environment, liquid materials in a DN50 pipeline, pressure up to 160 bar. Working temperature range: 0 ... +320°C.	Straight-flow sensor made as a DN50 PN160 pipe section; weld neck flanges ver. 2-50-160 and ver. 3-50-160 GOST 12821-80; complete with AISI 321 stainless steel mating flanges
Laboratory moisture analyzers (moisture meters)			
61	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -30.1	Laboratory measurements mostly of liquid materials and measurements in tanks at different depths. Sensor is equipped with a coupling for mounting on the rod with 3/4" male thread.	Sensor contains a 46 mm diameter probe to make measurements in a standard 500 ml measuring cylinder (included in the scope of supply). Volume of controlled sample – 450 ml.

62	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -30.11	Laboratory measurements mostly of liquid materials and measurements in tanks at different depths. Sensor is equipped with a coupling for mounting on the rod with 1" male thread.	Sensor contains a 46 mm diameter probe to make measurements in a standard 500 ml measuring cylinder (included in the scope of supply). Volume of controlled sample – 450 ml.
63	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -30.2	Laboratory measurements of bulk materials mostly (can also be used for control of liquid materials).	Sensor contains a rectangular measuring cell (220 x 100 x 100 mm) with a probe. Volume of controlled sample – 1.8 l.
64	Moisture analyzer FIZEPR-SW100 VIGT.415210.100 -30.3	Laboratory measurements of liquid materials	Sensor contains a 17 mm diameter probe with a length of 190 mm for P1-21-200 or P2-21-200 test tubes. Volume of controlled sample – 15 ml.
Microwave barrier level measurement			
65	Microvawe barrier for level SIUR-03V2.2 VIGT.407629.022	Non-contact point level detection in solids with free space radar sensors. Control of burning fuel level in wood waste boilers Allowable temperature of alarm unit housings: - 25...+85°C.	Alarm consists of two units installed on the opposite boiler walls using the mounting plates (included in the scope of supply)
66	Microvawe barrier for level SIUR-03V2.3 VIGT.407629.023	Non-contact point level detection in solids with free space radar sensors. Control of filling level limit of silos, hoppers with bulk materials Allowable temperature of alarm unit housings: - 25...+85°C.	Alarm consists of two units installed on the opposite silo walls and mounted with 1" sleeves welded on to walls (sleeves can be included in the scope of supply as options on request). Electronic units are connected using sealed 2RMG-type connectors.
67	Microvawe barrier for level SIUR-03V2.4 VIGT.407629.024	Non-contact point level detection in solids with free space radar sensors. Control of filling level limit of silos, hoppers with bulk materials Allowable temperature of alarm unit housings: - 25...+85°C.	Alarm consists of two units installed on the opposite silo walls and mounted with 1" sleeves welded on to walls (sleeves can be included in the scope of supply as options on request). Electronic units are connected using sealed cable lead-ins.

68	Microwave barrier for level SIUR-03V2.41 VIGT.407629.024-01	Non-contact point level detection in solids with free space radar sensors. Control of filling level limit of silos, hoppers with bulk materials Allowable temperature of alarm unit housings: -45...+85°C.	Alarm consists of two units installed on the opposite silo walls and mounted with 1” sleeves welded on to walls (sleeves can be included in the scope of supply as options on request). Electronic units are connected using sealed cable lead-ins.
69	Microwave barrier for level SIUR-03V2.6 VIGT.407629.026	Non-contact point level detection in solids with free space radar sensors. Control of bulk material levels at high temperatures. Antennas are inserted inside the controlled volume. Allowable temperature of antennas: +200°C. Allowable temperature of alarm unit housings: -25...+85°C.	Alarm consists of two units installed on the opposite silo walls and mounted with 1” sleeves welded on to walls (sleeves can be included in the scope of supply as options on request). Alarm is equipped with 300 mm long antennas covered with ceramic plugs to enable leading antennas directly into the area with temperatures up to +200°C. Electronic units are connected using sealed cable lead-ins.
Additional equipment			
70	Electron paramagnetic resonance spectrometer FIZEPR-ESR12 VIGT.421400.012	The electron paramagnetic resonance (ESR) spectrometer is designed to measure the microwave absorption dependence of material containing paramagnetic particles on a magnetostatic field induction. The spectrometer allows registering the presence of paramagnetic centers in the material, as well as determining their concentration. In particular spectrometer can be used to measure the concentration of free radicals in solutions and dry material samples.	
71	Control cabinet VIGT.301413.010 (with digital indicator)	For discrete control of external devices depending on moisture measurement results	Instrument cabinet 400x300x150 mm, IP54, with an installed and connected electronic unit. Supplied with: - measuring and regulating device TRM-201; - supply unit BP30B-D3-24; - RS485-USB interface converter AC-4

Table showing design versions of in-line moisture meters for liquid materials

Sensor design versions: - 20 - straight-flow (with two flanges on the same axis); - 22 - U-type (bypass, two flanged branches on one side of the sensor); - 23 - straight-flow , for extreme temperatures and pressures; - 24 - L-type (angle, twp flanges at 90°); - 25 - Z-type (two flanged branches on the sensor side, turned at 90° or 180°)							Sensor design version: -21 - immersion, full-flow , with one flange
PN, bar	DN, mm						DN ≥ 150 mm
	50	65	80	100	125	150	
6				20.14	20.10		21.01
10	20.4					20.19	21.02
16			20.6 22.6	20.16			
25	20.5 22.5 24.5 25.5		20.7	20.17			21.03
40	20.8 22.8 24.8 25.8		20.9 22.9 24.9 25.9	20.20 24.20 25.20			
63	20.11 22.11 24.11 25.11		20.12 22.12 24.12 25.12	20.21 24.21 25.21			21.04
100			20.15	20.22			21.05
160	20.18 23.01 25.18	23.65 20.65					
200	23.02						