

BO INSTRU WTR49 FIRE OS-SWA RE-2X(St)HSAH -40°C to +90°C

MGT+XLPE/OS/LSZH/SWA/LSZH

Wide temperature range -40° to +90°C



Image for illustration only

Conductor:	Plain bare copper stranded conductors acc. to IEC 60228 class 2																																															
Insulation:	MICA GLASS TAPE (MGT) XLPE (2X) compound - TS EN 50290-2-29																																															
Colour Code:	Pairs: Black - White (each numbered) Triples: Black -White-Red (each numbered)																																															
Wrapping:	Cores twisted to form a pair (or triples)																																															
Laying:	Pairs/Triples stranded in layers, PET tape wrapped																																															
Screen (-OS):	Applied over total assembly will be wrapped with polyester tape and shielded with Aluminium/Mylartape100% coverage and 25% overlap with metal side in contact with a tinned copper drain wire 7x0,30 size 0,5sqmm.																																															
Inner sheath:	HFFR (LSZH) Compound - TS EN 50290-2-27																																															
Armour:	SWA= Galvanized steel round wire																																															
Outer Sheath:	LSZH - M16 LSZH extruded compound Black (xx=BK), Blue (xx=BL), grey (xx=GY), or on request																																															
Cable Printing:	Botec Kabel GmbH BO-INSTRU WTR49 FIRE OS-SWA RE-2X(St)HSAH 500V section P/N (-40°C - +90°C) IEC 60332-1 / IEC 60754-1 -CE- Y/M MM																																															
Technical Data & Standard References	Flame retardant according to IEC 60332-3-24, CEI 20-22/3 Low smoke and Halogen free as per IEC 60754-2, CEI 20-37/2 Low smoke density emiss. IEC 61034 1/2 Hydrocarbon and UV resistant Fire resistant IEC 60331																																															
<table><tr><td>Cross section (mm2)</td><td>0,50</td><td>0,75</td><td>1,00</td><td>1,3</td><td>1,5</td><td>2,50</td></tr><tr><td>Conductor IEC 60228 class 2</td><td>7x0,30</td><td>7x0,37</td><td>7x0,43</td><td>7x0,50</td><td>7x0,52</td><td>7x0,67</td></tr><tr><td>Conductor resistance max.(Ω/km)</td><td>36,0</td><td>24,5</td><td>18,1</td><td>14,5</td><td>12,1</td><td>7,41</td></tr><tr><td>Insulation thickness min.(mm)</td><td>0,44</td><td>0,44</td><td>0,44</td><td>0,44</td><td>0,44</td><td>0,53</td></tr><tr><td>Insulation thickness nom.(mm)</td><td>0,60</td><td>0,60</td><td>0,60</td><td>0,60</td><td>0,60</td><td>0,70</td></tr><tr><td>L/R Ratio (μH/Ω)</td><td>25,0</td><td>25,0</td><td>25,0</td><td>40,0</td><td>40,0</td><td>60,00</td></tr></table>							Cross section (mm2)	0,50	0,75	1,00	1,3	1,5	2,50	Conductor IEC 60228 class 2	7x0,30	7x0,37	7x0,43	7x0,50	7x0,52	7x0,67	Conductor resistance max.(Ω/km)	36,0	24,5	18,1	14,5	12,1	7,41	Insulation thickness min.(mm)	0,44	0,44	0,44	0,44	0,44	0,53	Insulation thickness nom.(mm)	0,60	0,60	0,60	0,60	0,60	0,70	L/R Ratio (μH/Ω)	25,0	25,0	25,0	40,0	40,0	60,00
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Electrical & Mechanical Data	Operating temperature -40 +90°C (laying temperature up to 0°C) max. Conductor temperature +90 °C Rated Voltage 500 V Test voltage 2,0 kV AC 1 min.																																															

	Insulation resistance min. 1000 MΩ.km Capacitance (nF/km) max. 170 nF/km Bending Radius 16 x D
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TECHNICAL DATA AND PRODUCT FEATURES

	TEMPERATURE RANGE -40°C +90°C (laying temperature up to 0°C)
	WORKING VOLTAGE 500 V
	TEST VOLTAGE 2000 V
	INSULATION RESISTANCE min. 1000 MΩ. km
	HALOGEN FREE IEC 60754-1
	FIRE RESISTANCE IEC 60331
	BENDING RADIUS 16 X D

Application: In Instrumentation and control engineering analog and digital signal transmission, in chemistry industry, Petrochemical industry, Power plants, Indoors and outdoors, dry, damp and wet environments, Gas Stations... Suitable for outdoor and underground use.

P/N	Number of cores x cross section	Copper weight (kg/km)	Approx. under armour (mm) +/-10%	Armour wire diam. (mm)	Approx overall diam. (mm) +/-10%	Approx. weight (kg/km)
463920102100xx	1x2x1,0	19	9,10	0,9	13,20	260
463920202100xx	2x2x1,0	38	13,00	0,9	18,00	340
463920103100xx	1x3x1,0	29	10,00	0,9	14,00	300
463920203100xx	2x3x1,0	58	16,00	0,9	20,00	550
463920102150xx	1x2x1,5	29	9,20	0,9	13,50	175
463920202150xx	2x2x1,5	58	14,6	0,9	19,60	241
463920402150xx	4x2x1,5	115	19,00	0,9	23,00	750
463920103150xx	1x3x1,5	43	10,30	0,9	14,30	330
463920203150xx	2x3x1,5	86	19,50	0,9	23,50	680