

HELUDATA® PLTC UL13 PVC/PVC IOS 300

Instrumentation cable, PVC/IS/OS/PVC



Technical data

- Instrumentation cable acc. to
 - UL 13 PLTC
 - NEC Art. 725 (PLTC)
 - NEC Art. 727 (ITC)
 - ASTM D1239

• Temperature range

flexing -5°C to +50°C
fixed -30°C to +80°C

• Permissible operating temperature of the conductor

-30°C to +105°C

• Nominal voltage

U 300 V

• Test voltage

core/core 2000 V
core/screen 2000 V

• Minimum bending radius

8x Outer-Ø

Approvals

- for class 1 and 2 Div. 2 explosive environments acc. to NEC Art. 501

Cable structure

- Copper wire bare,
finely stranded acc. to ASTM B3
- Core insulation: heat resistant PVC
- Core identification:
pairs: wh, bk
triads: wh, bk, rd
white cores with consecutive labeling in black digits
- Cores stranded in pairs / triads, cores stranded in cable elements with optimal lay lengths
- Individual screen: pairs / triads, indiv. screened with AL/PET tape over tinned copper stranded drain wire
- Cable elements are stranded with optimal lay length
- Overall screen: AL/PET tape over tinned copper stranded drain wire
- Outer sheath: PVC
- Outer sheath colour: black or blue
- Length marking: in metres

Properties

- Low Smoke Low Halogen (LSLH)
- resistant to hydrocarbons
- low level of line attenuations and low mutual capacitances enable long transmission distances
- cable elements are produced of non-hygroscopic materials

Tests

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2 / UL VW-1 / UL 1581 sec. 1060 (FT1)
- bundle fire test acc. to DIN VDE 0482-332-3-22 / DIN EN 60332-3-22 / IEC 60332-3-22 (Cat. A, 40 min.)
- bundle fire test acc. to UL 1685 FT4 / IEEE 1202
- low amount of halogen acid gas acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1 (max. 1.3 %)
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- Limiting Oxygen Index (LOI) acc. to ISO 4589-2 (min. 30 %)
- smoke density acc. to DIN VDE 0482-1034-1 / DIN EN 61034-1 / IEC 61034-1
- oil-resistant acc. to ICEA S-73-532 / NEMA WC 57 / IRAM IAP
- sunlight resistant / UV-resistant acc. to UL 1581 sec. 1200
- Installation in explosion-endangered areas acc. to IEC 60079-14 Annex E, but only with the correct ATEX conform accessories

Note

- alternative denomination:
RE-Y(St)Y PiMF
- not suitable for direct burial
- we also offer cable glands:
HELUTOP® HT-MS-EX-d

Application

For the transmission of digital and analog signals in harsh environments like oil, gas and petrochemical industries.
The cables are suitable for fixed installation in dry and damp locations, open spaces and in underground networks.

CE = Product conforms with Low-Voltage Directive 2014/35/EU.

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Part no. Sheath colour BK	Sheath colour BU	No.pairs x cross-sec. AWG-no.	Outer Ø app. mm	Copper weight kg / km	Weight app. kg / km
11017150	11011211	2 x 2 x 18	8,6	37,1	111,0
11017156	11011212	3 x 2 x 18	9,0	54,8	145,0
11017157	11011213	4 x 2 x 18	13,7	72,5	314,0
11011814	11011214	5 x 2 x 18	14,6	90,3	360,0
11011815	11011215	6 x 2 x 18	15,5	108,0	407,0
11018975	11011216	7 x 2 x 18	15,5	125,7	437,0
11011816	11011217	8 x 2 x 18	16,7	143,4	488,0
11011817	11011218	10 x 2 x 18	18,7	178,8	584,0
11011818	11011219	12 x 2 x 18	19,2	214,2	655,0
11011819	11011220	16 x 2 x 18	20,9	285,1	805,0
11011820	11011221	19 x 2 x 18	21,9	338,2	913,0
11011821	11011222	24 x 2 x 18	25,6	426,8	1161,0
11011822	11011223	36 x 2 x 18	28,8	639,3	1585,0
11011823	11011224	2 x 3 x 18	13,7	53,1	279,0
11011824	11011225	3 x 3 x 18	14,3	78,9	332,0
11011825	11011226	4 x 3 x 18	15,3	104,6	394,0
11011826	11011232	6 x 3 x 18	17,6	156,0	520,0
11011827	11011361	8 x 3 x 18	19,0	207,5	631,0
11011828	11011362	12 x 3 x 18	22,0	310,3	857,0
11011829	11011363	16 x 3 x 18	24,1	413,2	1067,0
11011830	11011364	2 x 2 x 16	9,5	55,9	141,0
11011836	11011365	3 x 2 x 16	13,8	83,0	321,0
11011837	11011366	4 x 2 x 16	14,8	110,0	381,0
11011838	11011367	5 x 2 x 16	15,8	137,1	441,0
11011965	11011368	6 x 2 x 16	16,9	164,2	503,0
11011966	11011369	7 x 2 x 16	16,9	191,3	545,0
11011967	11011370	8 x 2 x 16	18,3	218,4	611,0
11011968	11011371	10 x 2 x 16	20,6	272,6	735,0
11011969	11011372	12 x 2 x 16	21,1	326,7	831,0
11011970	11011373	16 x 2 x 16	23,1	435,1	1033,0
11011971	11011374	19 x 2 x 16	24,2	516,3	1179,0
11011972	11011375	24 x 2 x 16	28,4	651,8	1498,0
11011973	11011376	36 x 2 x 16	32,0	976,8	2074,0
11011974	11011377	2 x 3 x 16	14,8	81,3	336,0
11011975	11011383	3 x 3 x 16	15,5	121,1	409,0
11011976	11011384	4 x 3 x 16	16,7	160,8	492,0
11011977	11011385	6 x 3 x 16	19,3	240,4	660,0
11011978	11010654	8 x 3 x 16	20,9	319,9	813,0
11011979	11010655	12 x 3 x 16	24,4	479,1	1121,0
11011980	11010656	16 x 3 x 16	27,3	638,2	1451,0
11011981	11010657	2 x 2 x 14	15,1	84,6	348,0
11011987	11010658	3 x 2 x 14	15,8	128,8	425,0
11011988	11010659	5 x 2 x 14	18,3	213,5	598,0
11011989	11018818	2 x 3 x 14	17,0	127,1	442,0
11011210	11018819	3 x 3 x 14	17,9	189,7	553,0

Dimensions and specifications may be changed without prior notice.