

HELUDATA® PLTC UL13 PVC/PVC IOSA 300

Instrumentation cable, PVC/IS/OS/PVC/SWA/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**
14x 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
- Inner sheath: PVC
- Inner sheath colour: like outer sheath
- Armouring: single layer of galvanised round steel wires (GSWA)
- 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)YRY PiMF
- suitable for direct burial
- we also offer cable glands:
HELUTOP® HT-MS-EX-d / e4
PEPPERS UL-C

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.

Continuation ►

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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
11013670		11012410	2 x 2 x 18	16,2	37,1	490,0
11013671		11012411	3 x 2 x 18	16,7	54,8	539,0
11013672		11012412	4 x 2 x 18	18,0	72,5	634,0
11013673		11012413	5 x 2 x 18	18,9	90,3	701,0
11013679		11012414	6 x 2 x 18	19,9	108,0	770,0
11013680		11012415	7 x 2 x 18	19,9	125,7	800,0
11013681		11012416	8 x 2 x 18	21,0	143,4	879,0
11012950		11012417	10 x 2 x 18	24,2	178,8	1183,0
11012951		11012418	12 x 2 x 18	24,8	214,2	1268,0
11012952		11012419	16 x 2 x 18	27,0	285,1	1514,0
11012953		11012420	19 x 2 x 18	27,9	338,2	1652,0
11012954		11012426	24 x 2 x 18	32,3	426,8	2187,0
11012955		11012427	36 x 2 x 18	36,8	639,3	3009,0
11012956		11012542	2 x 3 x 18	18,1	53,1	600,0
11012957		11012543	3 x 3 x 18	18,7	78,9	668,0
11012958		11012544	4 x 3 x 18	19,7	104,6	751,0
11012959		11012545	6 x 3 x 18	22,6	156,0	1042,0
11012960		11012546	8 x 3 x 18	24,5	207,5	1238,0
11012961		11012547	12 x 3 x 18	28,8	310,3	1748,0
11012962		11012548	16 x 3 x 18	30,9	413,2	2037,0
11012963		11012549	2 x 2 x 16	17,1	55,9	549,0
11012964		11012550	3 x 2 x 16	18,2	83,0	646,0
11012970		11012551	4 x 2 x 16	19,1	110,0	726,0
11012971		11012552	5 x 2 x 16	20,2	137,1	811,0
11013086		11012553	6 x 2 x 16	21,3	164,2	898,0
11013087		11012554	7 x 2 x 16	21,3	191,3	939,0
11013088		11012555	8 x 2 x 16	23,3	218,4	1153,0
11013089		11012556	10 x 2 x 16	26,6	272,6	1431,0
11013090		11012562	12 x 2 x 16	27,2	326,7	1544,0
11013091		11012563	16 x 2 x 16	29,9	435,1	1965,0
11013092		11015957	19 x 2 x 16	31,0	516,3	2153,0
11013093		11015958	24 x 2 x 16	36,4	651,8	2902,0
11013094		11015959	36 x 2 x 16	40,0	976,8	3648,0
11013095		11015960	2 x 3 x 16	19,2	81,3	683,0
11013096		11015961	3 x 3 x 16	19,9	121,0	772,0
11013097		11015962	4 x 3 x 16	21,0	160,8	881,0
11013098		11015963	6 x 3 x 16	24,8	240,4	1276,0
11013099		11015964	8 x 3 x 16	27,0	319,9	1519,0
11013100		11015965	12 x 3 x 16	31,1	479,1	2101,0
11013106		11015966	16 x 3 x 16	34,0	638,2	2543,0
11013107		11015967	2 x 2 x 14	19,4	86,4	700,0
11012406		11015968	3 x 2 x 14	20,1	128,8	793,0
11012407		11015969	5 x 2 x 14	23,3	213,5	1141,0
11012408		11015975	2 x 3 x 14	21,4	127,1	840,0
11012409		11015976	3 x 3 x 14	22,9	189,7	1086,0

Dimensions and specifications may be changed without prior notice.