



# HELUDATA® PLTC UL13 PVC/PVC IOS 300

Instrumentation cable, PVC/IS/OS/PVC



HELUDATA® PLTC UL13 PVC/PVC IOS 300 CE

## 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.



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