

EDV-PiMF-CY

PE insulation, low capacitance, EMC-preferred type



HELUKABEL® EDV-PiMF-CY 10x2x0,75 QMM / 43536 CE

TECHNICAL DATA

PVC data cable

Temperature range	flexible -5°C to +80°C fixed -20°C to +80°C
Peak operating voltage	300 V (not for high power current installation purposes)
Test voltage core/core	2000 V
Test voltage core/screen	1000 V
Mutual capacitance core/core	at 800 Hz, approx. 75 pF/m
Characteristic impedance	at 1 kHz, 360 Ohm at 10 kHz, 125 Ohm at 100 kHz, 87 Ohm at 1000 kHz, 70 Ohm (approx. value)
Cable attenuation	at 1 kHz, 1.1 dB/km at 10 kHz, 2.7 dB/km at 100 kHz, 6.8 dB/km at 1000 kHz, 35.0 dB/km (approx. value)
Crosstalk attenuation	at 100 kHz, 60.00 dB (approx. value)
Inductance	approx. 0.40 mH/km
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PE
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor

- Cores stranded in pairs with optimal lay lengths
- Foil wrapping of the pairs
- Drain wire per pair, tinned copper
- Screening element: pairs, plastic-coated Aluminium foil (St), approx. overlap 25%
- Pairs (in metal foil) stranded in layers with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC in alignment with DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7032)
- Length marking: in metres

PROPERTIES

- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- PiMF: Pair in Metal Foil

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

APPLICATION

Used as a data cable with overall pair screening and low capacities for installed terminals in medical and data technology. Application is also suitable in tool and machine construction, rolling mills and smelters, as well as traffic and process technology. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
43553	2 x 2 x 0.5	20	9.1	50.0	101.0
43554	3 x 2 x 0.5	20	10.2	66.0	120.0
43524	4 x 2 x 0.5	20	11.1	108.0	196.0
43555	5 x 2 x 0.5	20	12.2	120.0	201.0
43525	6 x 2 x 0.5	20	14.0	148.0	260.0
43526	8 x 2 x 0.5	20	14.3	180.0	310.0
43527	10 x 2 x 0.5	20	16.0	236.0	398.0
43528	16 x 2 x 0.5	20	20.7	338.0	515.0
43529	20 x 2 x 0.5	20	23.2	394.0	688.0
43530	30 x 2 x 0.5	20	27.9	577.0	980.0
43531	40 x 2 x 0.5	20	31.0	684.0	1390.0
43532	50 x 2 x 0.5	20	34.7	834.0	1860.0
43556	2 x 2 x 0.75	19	10.5	61.0	117.0
43557	3 x 2 x 0.75	19	12.0	97.0	142.0
43533	4 x 2 x 0.75	19	12.9	141.0	240.0
43558	5 x 2 x 0.75	19	14.5	163.0	304.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
43534	6 x 2 x 0.75	19	15.8	198.0	352.0
43535	8 x 2 x 0.75	19	17.1	246.0	415.0
43536	10 x 2 x 0.75	19	19.2	305.0	505.0
43537	16 x 2 x 0.75	19	24.4	446.0	732.0
43538	20 x 2 x 0.75	19	27.3	530.0	860.0
43539	30 x 2 x 0.75	19	32.1	765.0	1210.0
43559	2 x 2 x 1	18	12.6	72.0	130.0
43560	3 x 2 x 1	18	13.7	104.0	161.0
43540	4 x 2 x 1	18	15.0	186.0	360.0
43561	5 x 2 x 1	18	16.8	231.0	412.0
43541	6 x 2 x 1	18	18.9	260.0	472.0
43542	8 x 2 x 1	18	20.7	322.0	540.0
43543	10 x 2 x 1	18	22.7	382.0	670.0
43544	16 x 2 x 1	18	29.4	578.0	982.0
43545	20 x 2 x 1	18	32.4	710.0	1240.0
43546	30 x 2 x 1	18	38.1	1050.0	1720.0

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43562	2 x 2 x 1.5	16	13.8	81.0	164.0	43549	8 x 2 x 1.5	16	22.0	448.0	696.0
43563	3 x 2 x 1.5	16	15.2	141.0	197.0	43550	10 x 2 x 1.5	16	25.6	551.0	874.0
43547	4 x 2 x 1.5	16	16.6	261.0	480.0	11009069	12 x 2 x 1.5	16	28.8	625.0	1095.0
43564	5 x 2 x 1.5	16	19.7	284.0	516.0	43551	16 x 2 x 1.5	16	32.2	838.0	1340.0
43548	6 x 2 x 1.5	16	20.9	355.0	590.0	43552	20 x 2 x 1.5	16	35.4	1030.0	1620.0