

PAAR-TRONIC

colour code DIN 47100



HELUKABEL® PAAR-TRONIC 5x2x0,25 QMM / 19038 CE

TECHNICAL DATA

PVC data cable in alignment with DIN VDE 0812

Temperature range	flexible -5°C to +80°C fixed -30°C to +80°C
Peak operating voltage	350 V (not for high power current installation purposes)
Test voltage core/core	1200 V
Breakdown voltage	2400 V
Mutual capacitance core/core	at 800 Hz 0.14 - 0.25 mm ² : approx. 100 pF/m 0.34 - 0.75 mm ² : approx. 150 pF/m
Capacitive coupling k_c	at 800 Hz, max. 300 pF/100m
Characteristic impedance	78 Ohm (approx. value)
Inductance	approx. 0.65 mH/km
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths, Pairs stranded in layers with optimal lay lengths
- Foil wrapping
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7032)
- Length marking: in metres

PROPERTIES

- largely resistant to: oil, for details, see "Technical Information"
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

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

APPLICATION

Suitable for flexible applications with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use. Used as a control and signal cable in electronic engineering, measurement and control technology and wherever wiring must be executed using the smallest possible outside diameter, with consideration of electronic possibilities, e.g. computer systems, signal technology, scales etc.

NOTES

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

CABLE STRUCTURE

- Copper wire bare, 0.5 - 0.75 mm²: finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Wire structure:
0.14 mm²: approx. 18 x 0.10 mm
0.25 mm²: approx. 14 x 0.15 mm
0.34 mm²: 7 x 0.25 mm
- Core insulation: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type T12)
- Core identification acc. to DIN 47100 (paired stranding), colour coded

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
19001	1 x 2 x 0.14	26	3.6	2.7	20.0
19002	2 x 2 x 0.14	26	5.2	5.0	25.0
19003	3 x 2 x 0.14	26	5.5	8.0	31.0
19004	4 x 2 x 0.14	26	6.0	11.0	38.0
19005	5 x 2 x 0.14	26	6.7	13.0	45.0
19006	6 x 2 x 0.14	26	7.2	16.0	50.0
19007	7 x 2 x 0.14	26	7.3	19.0	57.0
19008	8 x 2 x 0.14	26	8.2	22.0	64.0
19009	10 x 2 x 0.14	26	9.2	27.0	78.0
19010	11 x 2 x 0.14	26	9.3	30.0	86.0
19011	12 x 2 x 0.14	26	9.5	32.0	94.0
19012	14 x 2 x 0.14	26	10.1	38.0	105.0
19013	15 x 2 x 0.14	26	10.7	40.0	108.0
19014	16 x 2 x 0.14	26	10.8	43.0	110.0
19015	18 x 2 x 0.14	26	11.2	48.0	119.0
19016	20 x 2 x 0.14	26	11.8	54.0	130.0
19017	22 x 2 x 0.14	26	12.6	59.0	150.0
19018	24 x 2 x 0.14	26	13.2	65.0	170.0
19019	25 x 2 x 0.14	26	13.3	67.0	180.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
19020	26 x 2 x 0.14	26	13.4	70.0	184.0
19021	27 x 2 x 0.14	26	13.5	73.0	188.0
19022	28 x 2 x 0.14	26	14.2	75.0	192.0
19023	30 x 2 x 0.14	26	14.3	81.0	200.0
19024	32 x 2 x 0.14	26	14.7	86.0	224.0
19025	34 x 2 x 0.14	26	15.2	91.0	247.0
19026	36 x 2 x 0.14	26	15.3	97.0	260.0
19027	38 x 2 x 0.14	26	16.2	102.0	272.0
19028	40 x 2 x 0.14	26	16.3	108.0	294.0
19029	44 x 2 x 0.14	26	17.4	118.0	334.0
19030	45 x 2 x 0.14	26	17.5	121.0	342.0
19031	50 x 2 x 0.14	26	18.3	134.0	387.0
19032	52 x 2 x 0.14	26	18.4	140.0	403.0
19033	55 x 2 x 0.14	26	18.9	148.0	427.0
19034	1 x 2 x 0.25	24	4.0	5.0	32.0
19035	2 x 2 x 0.25	24	5.8	10.0	37.0
19036	3 x 2 x 0.25	24	6.2	15.0	47.0
19037	4 x 2 x 0.25	24	6.9	20.0	58.0
19038	5 x 2 x 0.25	24	7.5	25.0	70.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
19039	6 x 2 x 0.25	24	8.4	30.0	80.0
19040	7 x 2 x 0.25	24	8.5	35.0	89.0
19041	8 x 2 x 0.25	24	9.5	40.0	99.0
19042	10 x 2 x 0.25	24	10.9	50.0	114.0
19043	11 x 2 x 0.25	24	11.0	55.0	126.0
19044	12 x 2 x 0.25	24	11.5	60.0	137.0
19045	14 x 2 x 0.25	24	11.8	70.0	161.0
19046	15 x 2 x 0.25	24	12.6	75.0	174.0
19047	16 x 2 x 0.25	24	12.7	80.0	187.0
19048	18 x 2 x 0.25	24	13.3	90.0	212.0
19049	20 x 2 x 0.25	24	14.2	100.0	234.0
19050	22 x 2 x 0.25	24	14.9	110.0	250.0
19051	24 x 2 x 0.25	24	15.8	120.0	280.0
19052	25 x 2 x 0.25	24	15.9	125.0	300.0
19053	26 x 2 x 0.25	24	15.9	130.0	320.0
19054	27 x 2 x 0.25	24	16.1	135.0	330.0
19055	28 x 2 x 0.25	24	16.9	140.0	345.0
19056	30 x 2 x 0.25	24	17.0	150.0	370.0
19057	32 x 2 x 0.25	24	17.5	160.0	410.0
19058	34 x 2 x 0.25	24	18.3	170.0	425.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
19059	36 x 2 x 0.25	24	18.4	180.0	440.0
19060	38 x 2 x 0.25	24	19.0	190.0	480.0
19061	40 x 2 x 0.25	24	19.1	200.0	530.0
19062	44 x 2 x 0.25	24	20.7	220.0	580.0
19063	45 x 2 x 0.25	24	20.8	225.0	600.0
19064	50 x 2 x 0.25	24	21.6	250.0	650.0
19065	52 x 2 x 0.25	24	21.7	260.0	670.0
19066	55 x 2 x 0.25	24	22.5	275.0	790.0
19067	1 x 2 x 0.34	22	4.6	6.5	36.0
19068	2 x 2 x 0.34	22	6.7	13.0	42.0
19069	3 x 2 x 0.34	22	7.1	20.0	50.0
19070	4 x 2 x 0.34	22	7.7	26.0	61.0
19071	1 x 2 x 0.5	20	4.9	9.6	42.0
19072	2 x 2 x 0.5	20	7.2	19.2	51.0
19073	3 x 2 x 0.5	20	7.8	28.8	62.0
19074	4 x 2 x 0.5	20	8.6	38.4	73.0
19075	1 x 2 x 0.75	19	5.6	14.0	47.0
19076	2 x 2 x 0.75	19	8.2	29.0	59.0
19077	3 x 2 x 0.75	19	8.7	43.0	74.0
19078	4 x 2 x 0.75	19	9.7	58.0	93.0