F-CY-JZ / F-CY-OZ / F-DY-OZ

EMC-preferred type



TECHNICAL DATA

PVC control and connection cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

Temperature range	flexible -10°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U_0/U 300/500 V
Test voltage core/core	4000 V
Test voltage core/screen	2000 V
Breakdown voltage	8000 V
Mutual capacitance core/core	at 800 Hz 0.5 - 2.5 mm²: approx. 150 pF/m
Mutual capacitance core/screen	at 800 Hz 0.5 - 2.5 mm²: approx. 270 pF/m
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: PVC, compound type Z 7225
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores,
  G = with protective conductor GN-YE, in the outer layer,
  x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- Foil wrapping
- Screen:
  1 core(s): helically wound tinned copper wires, approx. coverage 85 %
  2 - 100 core(s): braided screen of tinned copper wires, approx. coverage 85 %
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7001)
- 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
- certifications and approvals:
  2 - 100 core(s): EAC
  2 - 100 core(s): VDE-Reg.-No. 7034, valid for temperature range up to +70°C

APPLICATION

For flexible use with free movement without tensile stress or forced movements in dry, moist and wet rooms but not outside; to be used as control and connecting cable in control and regulation technology, in the tool and machine building industry, in computer systems, as well as a signal cable in the electronic industry. A stabilizing foil separator between wire bound and braid reduces the outer diameter essentially and allows for smaller bending radius as well as lower weights. The disturbance free transmission of signals and impulses is ensured due to the high degree of screening. 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
- please note "cleanroom qualification" in your order

F-DY-OZ, helically wound tinned copper wires

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16531	1 x 0.5	20	4.0	15.0	41.0
16557	1 x 0.75	19	4.3	19.0	44.0
16050	1 x 1	18	4.4	21.0	47.0
16074	1 x 1.5	16	4.7	27.0	70.0
16097	1 x 2.5	14	5.5	39.0	50.0

F-CY-JZ / F-CY-OZ, braided screen of tinned copper wires

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16320	2 x 0.5	20	5.7	35.0	45.0
16321	3 G 0.5	20	6.0	42.0	55.0

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F-CY-JZ / F-CY-OZ / F-DY-OZ

EMC-preferred type

F-CY-JZ / F-CY-OZ, braided screen of tinned copper wires

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16533	3 x 0.5	20	6.0	42.0	55.0
16322	4 G 0.5	20	6.5	47.0	61.0
16534	4 x 0.5	20	6.5	47.0	61.0
16323	5 G 0.5	20	6.9	56.0	74.0
16535	5 x 0.5	20	6.9	56.0	74.0
16324	6 G 0.5	20	7.6	67.0	89.0
16536	6 x 0.5	20	7.6	67.0	89.0
16325	7 G 0.5	20	7.6	69.0	98.0
16537	7 x 0.5	20	7.6	69.0	98.0
16326	8 G 0.5	20	8.2	80.0	117.0
16538	8 x 0.5	20	8.2	80.0	117.0
16327	10 G 0.5	20	9.5	94.0	135.0
16539	10 x 0.5	20	9.5	94.0	135.0
16328	12 G 0.5	20	9.8	108.0	157.0
16540	12 x 0.5	20	9.8	108.0	157.0
16329	14 G 0.5	20	10.4	116.0	190.0
16541	14 x 0.5	20	10.4	116.0	190.0
16330	16 G 0.5	20	10.9	129.0	210.0
16542	16 x 0.5	20	10.9	129.0	210.0
16331	18 G 0.5	20	11.4	145.0	217.0
16543	18 x 0.5	20	11.4	145.0	217.0
16332	20 G 0.5	20	12.2	172.0	240.0
16544	20 x 0.5	20	12.2	172.0	240.0
16333	21 G 0.5	20	12.2	188.0	250.0
16545	21 x 0.5	20	12.2	188.0	250.0
16334	24 G 0.5	20	13.7	235.0	300.0
16546	24 x 0.5	20	13.7	235.0	300.0
16335	25 G 0.5	20	13.7	240.0	314.0
16547	25 x 0.5	20	13.7	240.0	314.0
16336	30 G 0.5	20	14.4	295.0	360.0
16548	30 x 0.5	20	14.4	295.0	360.0
16337	32 G 0.5	20	15.1	301.0	425.0
16549	32 x 0.5	20	15.1	301.0	425.0
16165	34 G 0.5	20	15.6	312.0	433.0
16550	34 x 0.5	20	15.6	312.0	433.0
16338	36 G 0.5	20	15.6	318.0	446.0
16551	36 x 0.5	20	15.6	318.0	446.0
16339	40 G 0.5	20	17.0	343.0	475.0
16552	40 x 0.5	20	17.0	343.0	475.0
16490	41 G 0.5	20	17.0	348.0	486.0
16340	50 G 0.5	20	18.4	406.0	573.0
16553	50 x 0.5	20	18.4	406.0	573.0
16341	61 G 0.5	20	19.6	508.0	653.0
16554	61 x 0.5	20	19.6	508.0	653.0
16342	80 G 0.5	20	22.5	680.0	784.0
16555	80 x 0.5	20	22.5	680.0	784.0
16343	100 G 0.5	20	25.0	804.0	995.0
16556	100 x 0.5	20	25.0	804.0	995.0
16344	2 x 0.75	19	6.2	40.0	59.0
16345	3 G 0.75	19	6.6	52.0	66.0
16559	3 x 0.75	19	6.6	52.0	66.0
16346	4 G 0.75	19	7.1	60.0	77.0
16560	4 x 0.75	19	7.1	60.0	77.0
16347	5 G 0.75	19	7.8	71.0	93.0
16561	5 x 0.75	19	7.8	71.0	93.0
16348	6 G 0.75	19	8.4	80.0	113.0
16562	6 x 0.75	19	8.4	80.0	113.0
16349	7 G 0.75	19	8.4	91.0	130.0
16563	7 x 0.75	19	8.4	91.0	130.0
16350	8 G 0.75	19	9.2	110.0	145.0
16564	8 x 0.75	19	9.2	110.0	145.0
16351	10 G 0.75	19	10.7	137.0	180.0
16565	10 x 0.75	19	10.7	137.0	180.0
16353	12 G 0.75	19	11.1	142.0	202.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16566	12 x 0.75	19	11.1	142.0	202.0
16354	14 G 0.75	19	11.5	180.0	225.0
16567	14 x 0.75	19	11.5	180.0	225.0
16355	16 G 0.75	19	12.3	200.0	275.0
16568	16 x 0.75	19	12.3	200.0	275.0
16356	18 G 0.75	19	12.9	212.0	292.0
16569	18 x 0.75	19	12.9	212.0	292.0
16447	19 G 0.75	19	12.9	230.0	308.0
16570	19 x 0.75	19	12.9	230.0	308.0
16357	20 G 0.75	19	13.9	238.0	320.0
16571	20 x 0.75	19	13.9	238.0	320.0
16358	21 G 0.75	19	13.9	246.0	378.0
16572	21 x 0.75	19	13.9	246.0	378.0
16359	24 G 0.75	19	15.4	270.0	435.0
16573	24 x 0.75	19	15.4	270.0	435.0
16360	25 G 0.75	19	15.4	281.0	415.0
16574	25 x 0.75	19	15.4	281.0	415.0
16361	27 G 0.75	19	15.4	304.0	435.0
16575	27 x 0.75	19	15.4	304.0	435.0
16362	30 G 0.75	19	16.4	320.0	450.0
16576	30 x 0.75	19	16.4	320.0	450.0
16363	32 G 0.75	19	17.0	342.0	484.0
16577	32 x 0.75	19	17.0	342.0	484.0
16166	34 G 0.75	19	17.8	345.0	502.0
16578	34 x 0.75	19	17.8	345.0	502.0
16364	36 G 0.75	19	17.8	350.0	535.0
16579	36 x 0.75	19	17.8	350.0	535.0
16448	37 G 0.75	19	17.8	361.0	592.0
16580	37 x 0.75	19	17.8	361.0	592.0
16365	40 G 0.75	19	19.1	369.0	610.0
16581	40 x 0.75	19	19.1	369.0	610.0
16491	41 G 0.75	19	19.3	400.0	622.0
16366	50 G 0.75	19	20.9	461.0	777.0
16582	50 x 0.75	19	20.9	461.0	777.0
16367	61 G 0.75	19	22.3	540.0	900.0
16583	61 x 0.75	19	22.3	540.0	900.0
16368	80 G 0.75	19	25.7	711.0	1210.0
16584	80 x 0.75	19	25.7	711.0	1210.0
16369	100 G 0.75	19	28.5	900.0	1445.0
16585	100 x 0.75	19	28.5	900.0	1445.0
16370	2 x 1	18	6.5	50.0	65.0
16371	3 G 1	18	6.9	60.0	80.0
16052	3 x 1	18	6.9	60.0	81.0
16372	4 G 1	18	7.6	71.0	98.0
16053	4 x 1	18	7.6	71.0	98.0
16373	5 G 1	18	8.2	88.0	127.0
16054	5 x 1	18	8.2	88.0	127.0
16374	6 G 1	18	9.0	97.0	144.0
16055	6 x 1	18	9.0	97.0	144.0
16375	7 G 1	18	9.0	111.0	158.0
16056	7 x 1	18	9.0	111.0	158.0
16376	8 G 1	18	9.7	127.0	197.0
16057	8 x 1	18	9.7	127.0	197.0
16377	10 G 1	18	11.3	150.0	232.0
16058	10 x 1	18	11.3	150.0	232.0
16378	12 G 1	18	11.9	184.0	260.0
16059	12 x 1	18	11.9	184.0	260.0
16379	14 G 1	18	12.4	196.0	302.0
16060	14 x 1	18	12.4	196.0	302.0
16380	16 G 1	18	13.0	209.0	346.0
16061	16 x 1	18	13.0	209.0	345.0
16381	18 G 1	18	14.0	260.0	380.0
16062	18 x 1	18	14.0	260.0	380.0
16352	19 G 1	18	14.0	280.0	412.0

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F-CY-JZ / F-CY-OZ / F-DY-OZ

EMC-preferred type

F-CY-JZ / F-CY-OZ, braided screen of tinned copper wires

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16382	20 G 1	18	14.9	317.0	440.0
16063	20 x 1	18	14.9	317.0	440.0
16383	24 G 1	18	16.5	320.0	493.0
16064	24 x 1	18	16.5	320.0	495.0
16384	25 G 1	18	16.5	349.0	534.0
16065	25 x 1	18	16.5	349.0	534.0
16439	27 G 1	18	16.5	400.0	562.0
16385	28 G 1	18	17.6	408.0	595.0
16066	28 x 1	18	17.6	408.0	595.0
16386	30 G 1	18	17.6	441.0	616.0
16067	30 x 1	18	17.6	441.0	616.0
16387	34 G 1	18	19.0	486.0	741.0
16068	34 x 1	18	19.0	486.0	741.0
16446	37 G 1	18	19.0	519.0	790.0
16388	40 G 1	18	20.4	510.0	835.0
16069	40 x 1	18	20.4	510.0	835.0
16492	41 G 1	18	20.6	531.0	843.0
16389	50 G 1	18	22.4	625.0	1025.0
16070	50 x 1	18	22.4	625.0	1025.0
16390	61 G 1	18	23.8	702.0	1205.0
16071	61 x 1	18	23.8	702.0	1200.0
16391	80 G 1	18	27.4	920.0	1445.0
16072	80 x 1	18	27.4	920.0	1440.0
16392	100 G 1	18	30.6	1120.0	1613.0
16073	100 x 1	18	30.6	1120.0	1610.0
16393	2 x 1.5	16	7.1	63.0	88.0
16394	3 G 1.5	16	7.7	80.0	100.0
16076	3 x 1.5	16	7.7	80.0	100.0
16395	4 G 1.5	16	8.3	97.0	126.0
16077	4 x 1.5	16	8.3	97.0	126.0
16396	5 G 1.5	16	9.2	119.0	160.0
16078	5 x 1.5	16	9.2	119.0	160.0
16397	7 G 1.5	16	9.9	147.0	208.0
16079	7 x 1.5	16	9.9	147.0	208.0
16398	8 G 1.5	16	10.9	170.0	244.0
16080	8 x 1.5	16	10.9	170.0	244.0
16399	10 G 1.5	16	12.7	193.0	315.0
16081	10 x 1.5	16	12.7	193.0	316.0
16400	12 G 1.5	16	13.5	267.0	338.0
16082	12 x 1.5	16	13.5	267.0	338.0
16401	14 G 1.5	16	14.1	283.0	383.0
16083	14 x 1.5	16	14.1	283.0	383.0
16402	16 G 1.5	16	15.0	315.0	424.0
16084	16 x 1.5	16	15.0	315.0	424.0
16403	18 G 1.5	16	15.7	374.0	479.0
16085	18 x 1.5	16	15.7	374.0	479.0
16449	19 G 1.5	16	15.7	386.0	508.0
16404	20 G 1.5	16	16.7	396.0	545.0
16086	20 x 1.5	16	16.7	396.0	545.0
16405	21 G 1.5	16	16.7	425.0	560.0
16406	24 G 1.5	16	18.5	458.0	690.0
16087	24 x 1.5	16	18.5	458.0	690.0
16407	25 G 1.5	16	18.5	526.0	705.0
16088	25 x 1.5	16	18.5	526.0	705.0
16450	27 G 1.5	16	18.7	531.0	774.0
16408	28 G 1.5	16	19.7	541.0	810.0
16089	28 x 1.5	16	19.7	541.0	810.0
16409	30 G 1.5	16	19.7	555.0	830.0
16090	30 x 1.5	16	19.7	555.0	830.0
11018804	31 G 1.5	16	20.8	569.0	797.0
16410	35 G 1.5	16	21.3	645.0	890.0
16091	35 x 1.5	16	21.3	645.0	890.0
16451	37 G 1.5	16	21.3	674.0	945.0
16411	40 G 1.5	16	23.1	725.0	1060.0
16092	40 x 1.5	16	23.1	725.0	1060.0
16493	41 G 1.5	16	23.1	801.0	1071.0
16412	50 G 1.5	16	25.5	885.0	1290.0
16093	50 x 1.5	16	25.5	885.0	1440.0
16413	61 G 1.5	16	27.1	1100.0	1705.0
16094	61 x 1.5	16	27.1	1100.0	1700.0
16414	80 G 1.5	16	31.1	1324.0	2010.0
16095	80 x 1.5	16	31.1	1324.0	2000.0
16415	100 G 1.5	16	34.5	1641.0	2505.0
16096	100 x 1.5	16	34.5	1641.0	2500.0
16416	2 x 2.5	14	8.5	96.0	130.0
16417	3 G 2.5	14	9.2	144.0	167.0
16099	3 x 2.5	14	9.2	144.0	167.0
16418	4 G 2.5	14	10.0	148.0	195.0
16100	4 x 2.5	14	10.0	148.0	195.0
16419	5 G 2.5	14	11.0	181.0	223.0
16101	5 x 2.5	14	11.0	181.0	223.0
16420	7 G 2.5	14	12.1	255.0	344.0
16102	7 x 2.5	14	12.1	255.0	344.0
16421	10 G 2.5	14	15.7	340.0	460.0
16438	12 G 2.5	14	16.4	441.0	570.0
16103	12 x 2.5	14	16.4	441.0	522.0
16452	18 G 2.5	14	19.3	570.0	681.0
16422	2 x 4	12	10.5	120.0	185.0
16423	3 G 4	12	11.1	174.0	240.0
16105	3 x 4	12	11.1	174.0	240.0
16424	4 G 4	12	12.3	230.0	310.0
16106	4 x 4	12	12.3	230.0	310.0
16425	5 G 4	12	13.8	273.0	385.0
16107	5 x 4	12	13.8	273.0	400.0
16426	7 G 4	12	15.1	316.0	500.0
16108	7 x 4	12	15.1	316.0	500.0
16427	2 x 6	10	11.9	173.0	268.0
16428	3 G 6	10	12.6	240.0	330.0
16110	3 x 6	10	12.6	240.0	330.0
16429	4 G 6	10	14.2	305.0	415.0
16111	4 x 6	10	14.2	305.0	415.0
16430	5 G 6	10	15.6	439.0	509.0
16112	5 x 6	10	15.6	439.0	509.0
16431	7 G 6	10	17.1	505.0	672.0
16113	7 x 6	10	17.1	505.0	672.0
16432	2 x 10	8	15.3	255.0	425.0
16433	3 G 10	8	16.5	350.0	500.0
16115	3 x 10	8	16.5	350.0	500.0
16434	4 G 10	8	18.2	535.0	783.0
16116	4 x 10	8	18.2	535.0	783.0
16435	5 G 10	8	20.0	592.0	856.0
16117	5 x 10	8	20.0	592.0	856.0
16436	7 G 10	8	22.1	810.0	1305.0
16118	7 x 10	8	22.1	810.0	1300.0
16458	3 G 16	6	19.0	585.0	795.0
16457	3 x 16	6	19.0	585.0	795.0
16440	4 G 16	6	21.0	740.0	880.0
16437	5 G 16	6	23.1	895.0	1295.0
16441	4 G 25	4	26.4	1140.0	1570.0
16442	5 G 25	4	29.0	1380.0	1965.0
16443	4 G 35	2	29.0	1576.0	2070.0
16444	5 G 35	2	32.3	1930.0	2690.0
16445	4 G 50	1	34.8	2155.0	3015.0

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