

LUTZE DRIVEFLEX® XLPE (C) PVC, Shielded

Flexible VFD Cable Type RHW-2 with UL/TC-ER-JP/WTTC/CE Approvals



Application

- Shielded multi-conductor cable for VFD and Motor applications to connect power from drives to motors
- Cable design for harsh industrial environments and operating conditions with high noise levels
- Thermoset XLPE insulation offering superior overload and short-circuit temperature
- Increased wall thickness insulation type RHW-2, offering lower capacitance and higher impedance making it ideal for applications with **high voltage spikes and long cable runs**
- Compliant with **NFPA 79** for wiring of industrial machinery
- **TC-ER-JP** for use with cable trays **without conduit**, which can reduce material and labor costs
- WTTC – wind turbine tray cable rating for use in wind power generation
- Dry, damp or wet conditions

Characteristics

- Flexible XLPE conductor design
- Non-wicking fillers
- Effective dual layer shield for EMC compliance
- Specially formulated jacket for oil resistance and easy strip design
- Low capacitance cable
- Sunlight resistant
- Direct burial
- Talc and Silicone free

Technical Data

Voltage	600V 90C UL TC-ER-JP 1000V 90C Flexible VFD Servo Cable, 1000V 105C AWM 1000V WTTC
Temperature	-40°C - +105°C static
Bending radius	6 x cable OD
Conductor marking	Black with white numbers and one green/yellow ground
Oil resistance	Oil Res II
Approvals	UL Type Flexible VFD Servo Cable, TC-ER-JP*, WTTC, DP-1 Class I, II Div. 2 per NEC Art. 336, 392, 501, 502 Joist Pull per NEC 336.10(9)* AWM 20886 Submersible Pump (≥AWG14) c(UL) TC, CIC FT4 UL 1277 Wet/Dry P-07-KA130021-MSHA RoHS, REACH

Construction

- AWG conductor
- Flexible fine wire stranded tinned copper conductors for improved electrical characteristics and reduced oxidation
- XLPE insulation RHW-2, Wet/Dry
- Shielded with foil tape, tinned copper braid with ≥ 80% optical coverage, and drain wire
- Oil resistant PVC jacket
- Black jacket RAL 9005

Specifications are subject to change without prior notice
* JP starting productions 3/2017



Part No.	Description No. of conductors incl. ground	OD / Ø ca. mm	OD / Ø inches	Weight Lbs/Mft	Copper Lbs/Mft
AWG 16 (26/30)					
A2161604	AWG16/04C	12.4	0.490	149	57
AWG 14 (41/30)					
A2161404	AWG14/04C	14.2	0.560	200	80
AWG 12 (65/30)					
A2161204	AWG12/04C	15.6	0.615	262	128
AWG 10 (105/30)					
A2161004	AWG10/04C	17.8	0.700	359	186
AWG 8 (168/30)					
A2160804	AWG8/04C	23.5	0.925	603	295
AWG 6 (266/30)					
A2160604	AWG6/04C	25.7	1.010	763	425
AWG 4 (413/30)					
A2160404	AWG4/04C	29.3	1.155	1,126	632
AWG 2 (665/30)					
A2160204	AWG2/04C	34.2	1.345	1,559	997

"RHW-2 insulated VFD cable offering optimal capacitance and impedance values. Great for applications with long cable runs".



LUTZE Technical Overview

Simplified Motor, VFD and Servo Cable Selection by Horsepower (HP)

Part#		Amps	AWG (POWER)	230V-3 Ø	460V-3 Ø	575V-3 Ø
A2161604	4C	18	16 AWG	N/A	N/A	N/A
A2161404	4C	25	14 AWG	5 HP	10 HP	15 HP
A2161204	4C	30	12 AWG	7.5 HP	15 HP	20 HP
A2161004	4C	40	10 AWG	10 HP	20 HP	30 HP
A2160804	4C	55	8 AWG	15 HP	30 HP	40 HP
A2160604	4C					
A2190603	3C	75	6 AWG	20 HP	40 HP	50 HP
A2200603	3C					
A2160404	4C					
A2190403	3C	95	4 AWG	25 HP	50 HP	60 HP
A2200403	3C					
A2160204	4C					
A2190203	3C	130	2 AWG	40 HP	75 HP	100 HP
A2200203	3C					
A2190103	3C	145	1 AWG	40 HP	75 HP	100 HP
A2200103	3C					
A2191/003	3C	170	1/0	50 HP	100 HP	125 HP
A2201/003	3C					
A2192/003	3C	195	2/0	60 HP	125 HP	150 HP
A2202/003	3C					
A2193/003	3C	225	3/0	60 HP	150 HP	150 HP
A2203/003	3C					
A2194/003	3C	260	4/0	75 HP	150 HP	200 HP
A2204/003	3C					
A22025003	3C	290	250 kcmil	75 HP	150 HP	200 HP
A22035003	3C	350	350 kcmil	100 HP	200 HP	250 HP
A22050003	3C	430	500 kcmil	125 HP	250 HP	350 HP

Number of current carrying conductors is three (3) + green/yellow ground(s)

Part#		Amps	AWG (POWER)	230V-3Ø	460V-3 Ø	575V-3 Ø
A2171604	4C+1TSP	14	16 AWG	N/A	N/A	N/A
A2171404	4C+1TSP	20	14 AWG	5 HP	10 HP	10 HP
A2171204	4C+1TSP	24	12 AWG	5 HP	10 HP	15 HP
A2171004	4C+1TSP	32	10 AWG	7.5 HP	15 HP	20 HP
A2170804	4C+1TSP	44	8 AWG	10 HP	25 HP	30 HP
A2170604	4C+1TSP	60	6 AWG	15 HP	30 HP	40 HP
A2170404	4C+1TSP	76	4 AWG	20 HP	40 HP	50 HP
A2170204	4C+1TSP	104	2 AWG	30 HP	60 HP	75 HP

Number of current carrying conductors is five (5) + 1 green/yellow ground

Part#		Amps	AWG (POWER)	230V-3Ø	460V-3 Ø	575V-3 Ø
A2181604	4C+2TSP	12.5	16 AWG	N/A	N/A	N/A
A2181404	4C+2TSP	17.5	14 AWG	3 HP	10 HP	10 HP
A2181204	4C+2TSP	21	12 AWG	5 HP	10 HP	10 HP
A2181004	4C+2TSP	28	10 AWG	7.5 HP	15 HP	20 HP
A2180804	4C+2TSP	38.5	8 AWG	10 HP	20 HP	25 HP

Number of current carrying conductors is seven (7) + 1 green/yellow ground

Notes:

Type of Motor is design B

Class of Service is continuous

Duty-Cycle Service is continuous

Conductor is copper 90°C

Ambient temperature is 26-30°C

Values are based on 2017 NEC 430.250 multiplied x 1.25

Ampacities are based on 2017 NEC 310.15 (B)(16) 90°

Cables with Signal pair(s) have been de-rated in accordance to 2017 NEC 310.15(B)(3)(a)

*All values given are calculated based on 2017 NEC. For actual amperage consult your Motor/Drive manual and your local code restrictions. This guideline is simplified in order to select cable sizes. This document has no legal meaning, the interpretation of the NEC code has to be verified by the Authority Having Jurisdiction (AHJ).