

UE/STO-SB(N)/TC LF

For tray cable, race way and electronic equipment power supply code

- Heat resistance ★★★★★
 - Oil resistance ★★★★★
 - Noise resistance ★★★★★
 - Flame resistance ★★★★★
 - Flexibility ★★★★★
 - non-migratory ★★★★★
 - Transport property ★★★★★
- ※The characteristic is an aim.

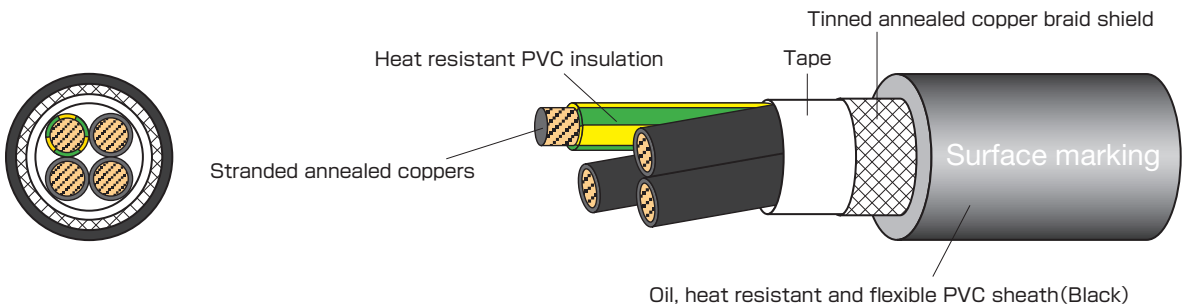
Application

- Multi cable for North America.
- Electric equipment cable with UL and cUL at 600V, 105°C. (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.
- CE marking (TÜV recognition product). (※It is recognized as a cable with the cover based on H05VV-F.) (Certificate of TÜV No.J2050492)

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

(1)2 cores

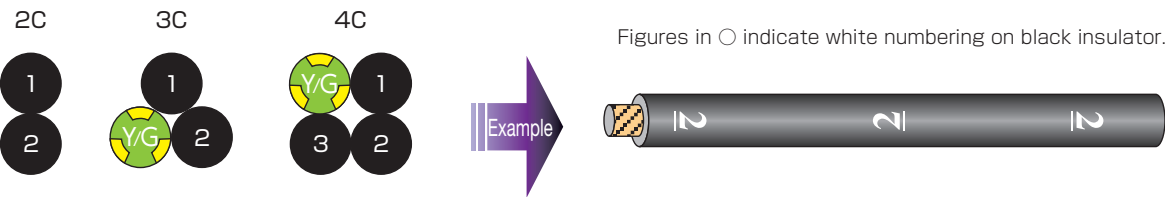
E209288(UL) TC 90°C DRY 75°C WET or MTW FLEXING VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO △ CE 05VV-F 300/500V <PS>E ** LF R15

(2)3 cores or more

E209288(UL) TC-ER 90°C DRY 75°C WET or MTW FLEXING VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO △ CE 05VV-F 300/500V <PS>E ** LF R15

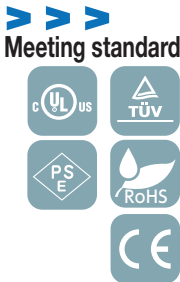
※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

Identification



※Y/G indicates green core with yellow stripe(30~50%).

Certification	UL ST0.cUL ST0	UL TC	UL MTW	TÜV.CE marking	Electrical Appliance and Material Safety Law
Applicable standard	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN50525-2-11	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	TC	MTW	Equivalent of H05VV-F	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V
Temperature rating	105°C	DRY90°C WET75°C	DRY90°C WET60°C	70°C	60°C
Conductor	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN60228	JIS C 3102
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)



Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)	
2C	18	33/0.18	1.2	0.114	2.9	0.394	10.0	87(130)
3C	(0.824mm)	(33/7.1mil)	(47mil)			0.409	10.4	97(145)
4C						0.441	11.2	114(170)
2C	16	53/0.18	1.5	0.126	3.2	0.417	10.6	97(145)
3C	(1.31mm)	(53/7.1mil)	(59mil)			0.441	11.2	118(175)
4C						0.472	12.0	138(205)
2C	14	41/0.254	1.9	0.173	4.4	0.559	14.2	168(250)
3C	(2.08mm)	(41/10mil)	(75mil)			0.587	14.9	195(290)
4C						0.634	16.1	234(350)
2C	12	65/0.254	2.4	0.193	4.9	0.634	16.1	225(335)
3C	(3.31mm)	(65/10mil)	(94mil)			0.665	16.9	265(395)
4C						0.713	18.1	316(470)

※Partial conductor construction is changed from production in August 2022.
For details,please contact our sales representative or the place of purchase.
※3, 4 core has the [Y/G] earth cable of an equal size.

Allowable ampacity

- Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30°C.
- For the current correction factor, please refer to the Technical document page.
- For please confirm the NFPA70(National Electrical cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

Electrical property

Size (AWG)	Conductor resistance (Ω/km20°C)	Insulation resistance (MΩkm20°C)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A)	
				a	b
18	less than 22.1	more than 60	2000	7	10
16	less than 13.7	more than 60	2000	10	13
14	less than 8.64	more than 60	3000	15	18
12	less than 5.42	more than 50	3000	20	25

- *1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.
- *2 Allowable ampacity By National Electrical Code(NEC)
a:Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.
b:Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

100m

UE/STO-SB(N)/TC LF

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- Heat resistance ★★★★★
 - Oil resistance ★★★★★
 - Noise resistance ★★★
 - Flame resistance ★★★★★
 - Flexibility ★★★
 - non-migratory ★★★★★
 - Transport property★★★
- ※The characteristic is an aim.

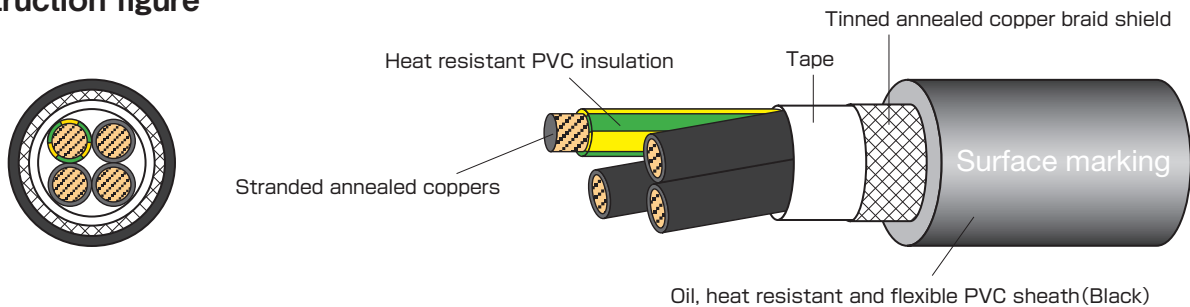
Application

- Multi cable for North America and EU.
- Electric equipment cable with UL and cUL at 600V, 105°C. (Category QPOR, ZJCZ, ZKHZ, ZJCZ7)
- Obtaining UL Listed STO, TC and MTW, this cable compliants to NFPA 70 and 79.
- CE marking.

Feature

- Heat resistant PVC material is used to insulation.
- Oil, heat resistant and Flexible PVC sheath material is used.
- It passes Vertical-Tray Flame Test of UL.

Construction figure



Surface marking

(1) 2 cores of 10AWG cables

E209288(UL) TC 90°C DRY 75°C WET or MTW FLEXING VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

(2) 3 cores or more of 10AWG cables

E209288(UL) TC-ER 90°C DRY 75°C WET or MTW FLEXING VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

(3) 2cores of 8AWG~6AWG cables

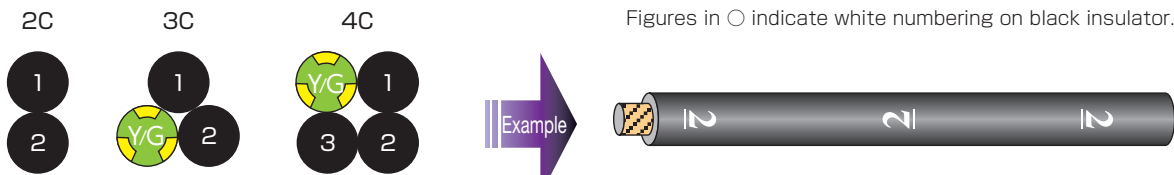
E209288(UL) TC 90°C DRY 75°C WET or MTW VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

(4) 3 cores or more of 8AWG~6AWG cables

E209288(UL) TC-ER 90°C DRY 75°C WET or MTW VW-1 or STO SHIELDED 105°C 600V VW-1 Line number×□□AWG
c(UL) STO SHIELDED 105°C 600V Line number×□□AWG(○○mm²) FT1 TAIYO CE 300/500V <PS>E ** LF R15

※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

Identification



※Y/G indicates green core with yellow stripe(30~50%).

Certification	UL STO.cUL STO	UL TC	UL MTW	CE marking	Electrical Appliance and Material Safety Law (Only 10 AWG)	Electrical Appliance and Material Safety Law (8~6AWG)
Applicable standard	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN50525-2-11	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STO	TC	MTW	Equivalent of H05VV-F	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300/500V	300V	600V
Temperature rating	105°C	DRY90°C WET75°C	DRY90°C WET60°C	70°C	60°C	60°C
Conductor	UL 62 CSA C22.2 No.49	UL 1277	UL 1063	EN60228	JIS C 3102	JIS C 3102
Flame rating	VW-1.FT1	Vertical-Tray Flame Test	VW-1	EN50264-2-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)



Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Oil, heat - resistant flexible - PVC sheath		Approx. weight (lbs/1000ft) (kg/km)
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)	
2C	10	104/0.254	3.10			0.689	17.5	274(410)
3C	(5.26mm)	(104/10mil)	(122mil)	0.220	5.6	0.724	18.4	330(495)
4C						0.780	19.8	400(600)
2C	8	7/24/0.254	4.20			0.902	22.9	467(700)
3C	(8.37mm)	(7/24/10mil)	(165mil)	0.299	7.6	0.949	24.1	560(840)
4C						1.055	26.8	707(1060)
3C	6	7/39/0.254	5.30			1.071	27.2	760(1140)
4C	(13.3mm)	(7/39/10mil)	(209mil)	0.343	8.7	1.193	30.3	960(1440)

※Partial conductor construction is changed from production in August 2022.

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Allowable ampacity

·Allowable current of this catalog NFPA70 Table 400.5(A)(1) STO ambient temperature 30°C.

·For the current correction factor, please refer to the Technical document page.

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Electrical property

Size (AWG)	Conductor resistance (Ω/km20°C)	Insulation resistance (MΩ.km20°C)	*1 Electrical strength (V/1min.)	*2 Allowable ampacity (A)	
				a	b
10	less than 3.42	more than 50	3000	25	30
8	less than 2.14	more than 50	4000	35	40
6	less than 1.34	more than 50	4000	45	55

*1 The examination of 2000V/5 minute besides the withstand voltage test on the UL standard and the CSA standard that has been described to the top is applied.

*2 Allowable ampacity By National Electrical Code(NEC)

a: Apply to 3-conductor cords and other multiconductor cords connected to utilization equipment so that only 3 conductors are current-carrying.

b: Apply to 2-conductor cords and other multiconductor cords connected to utilization equipment so that only 2 conductors are current-carrying.

Standard sales length

100m