

STOOW (A) /TC-ER LF

For electronic equipment power supply code

- Heat resistance ★★★★★
 - Oil resistance ★★★★★
 - Noise resistance ★
 - Flame resistance ★★★★★
 - Flexibility resistance ★★★
 - Non-migratory ★★★★★
 - Cable carrier ★★
- ※The characteristic is an aim.

Meeting standard

Certification	UL STOOW	cUL STOOW	UL TC	Electrical Appliance and Material Safety Law (18~10AWG)	Electrical Appliance and Material Safety Law (8~2AWG)
Applicable standard	UL 62	CSA C22.2 No.49	UL 1277	Departmental order to determine a technical standard of the electrical equipment	Departmental order to determine a technical standard of the electrical equipment
Official symbol	STOOW	STOOW	TC	Vinyl cab tire cord	Vinyl cab tire cord
Voltage rating	600V	600V	600V	300V	600V
Temperature rating	105°C	105°C	DRY90°C WET75°C	60°C	60°C
Conductor	UL 62	CSA C22.2 No.49	UL 1277	JIS C 3102	JIS C 3102
Flame rating	VW-1	FT1	Vertical-Tray Flame Test	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)



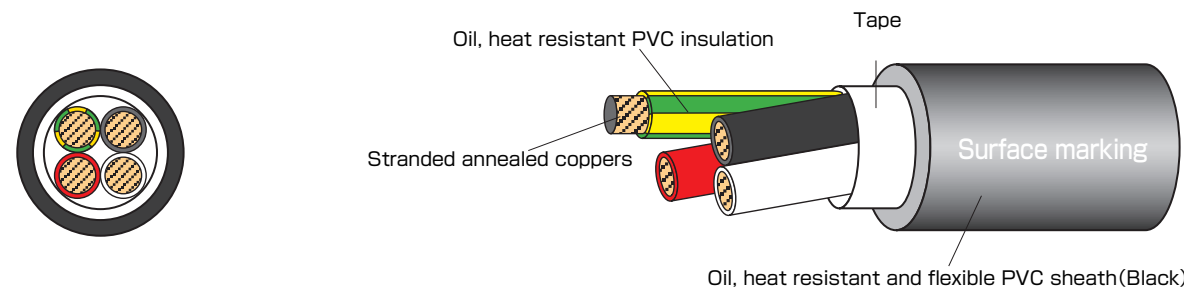
Application

- It is possible to use it for a moist place.
- Standard UL, cUL, (Category ZJCZ, ZJCZ7, QPOR)
- Obtaining UL Listed STOW, this cable compliants to NFPA 70 and 79.
- Suits the TC-ER attestation.
※2core product is excluded.(not“-ER”)

Feature

- Oil and heat resistant PVC used for 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

TC

E209288 (UL) TC 90°C DRY 75°C WET or STOOW 105°C 600V VW-1 number × □□ AWG WATER RESISTANT
c (UL) STOOW 105°C 600V number × □□ AWG (○ ○ mm²) FT1 WATER RESISTANT TAIYO <PS>E ** LF R15

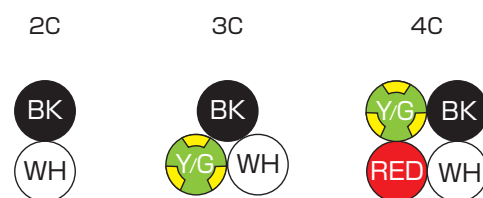
(2) 3 cores or more

TC-ER

E209288 (UL) TC-ER 90°C DRY 75°C WET or STOOW 105°C 600V VW-1 number × □□ AWG WATER RESISTANT
c (UL) STOOW 105°C 600V number × □□ AWG (○ ○ mm²) FT1 WATER RESISTANT TAIYO <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%).

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					0.366	9.3	64(95)
3C	18	33/0.18	1.2	0.114	2.9	0.382	9.7	77(115)
4C	18	(33/7.1mil)	(47mil)			0.413	10.5	91(135)
2C	16					0.390	9.9	77(115)
3C	16	53/0.18	1.5	0.126	3.2	0.413	10.5	91(135)
4C	16	(53/7.1mil)	(59mil)			0.445	11.3	111(165)
2C	14					0.531	13.5	138(205)
3C	14	84/0.18	1.9	0.173	4.4	0.559	14.2	165(245)
4C	14	(84/7.1mil)	(75mil)			0.602	15.3	195(290)
2C	12					0.602	15.3	185(275)
3C	12	65/0.254	2.4	0.193	4.9	0.634	16.1	222(330)
4C	12	(65/10mil)	(94mil)			0.681	17.3	269(400)
2C	10					0.657	16.7	232(345)
3C	10	104/0.254	3.1	0.220	5.6	0.693	17.6	286(425)
4C	10	(104/10mil)	(122mil)			0.748	19.0	353(525)
3C	8	7/24/0.255	4.2	0.299	7.6	0.898	22.8	467(695)
4C	8	(7/24/10mil)	(165mil)			1.004	25.5	605(900)
2C	6					0.969	24.6	521(775)
3C	6	7/39/0.254	5.3	0.343	8.7	1.020	25.9	652(970)
4C	6	(7/39/10mil)	(209mil)			1.142	29.0	840(1250)
3C	4	7/61/0.254	6.6	0.394	10.0	1.165	29.6	901(1340)
4C	4	(7/61/10mil)	(260mil)			1.295	32.9	1163(1730)
3C	2	19/35/0.254	8.4	0.472	12.0	1.366	34.7	1277(1900)
4C	2	(19/35/10mil)	(331mil)			1.508	38.6	1613(2400)

※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 (MΩkm15°C)	Electrical strength (V/1min.)	Allowable ampacity (A)	
				a	b
18	less than 22.1	more than 52	2000	7	10
16	less than 13.7	more than 45	2000	10	13
14	less than 8.64	more than 50	3000	15	18
12	less than 5.42	more than 40	3000	20	25
10	less than 3.42	more than 34	3000	25	30
8	less than 2.14	more than 34	4000	35	40
6	less than 1.34	more than 29	4000	45	55
4	less than 0.848	more than 24	4000	60	70
2	less than 0.533	more than 20	4000	80	95

※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

Make-to-order Products.
(Please contact us about production lot.)