General

Model WU11

Specifications Interconnection/Extension Cable for SENCOM® Products

The WU11 interconnection and extension cable is specified for reliable transfer of digital signals between the SENCOM products and Yokogawa FLXA analyzer.

It is especially designed to be installed in a heavy industrial environment.

The cable is water proof, allowing it to be submerged as a whole. (Suffix -V is for FU20F, FU24F and SC25F / Suffix -S is for SENCOM SA11, BA11 and IB100.)

The cable has a wide temperature operation range which is sufficient for most of the applications.

The materials used for the cable are flame retardant to resist the spread of fire.

Features

- · Double shielding to protect connected devices for interference from high voltages and currents
- Available in different lengths. Long cable runs up to 100 m (328 ft) are possible
- Easy connection to a SENCOM Sensor by one 5- pins molded connector, and to the analyzer by 5 wired pins
- Easy extension with the sufix -CN straight connector M9 male/ female
- Flame retardant recognized by UL (fileno. E124763) and CSA (fileno. LL105324)
- IP67
- Operating temperature from 20°C up to + 85°C (-4°F up to +185°F)

GENERAL SPECIFICATIONS WU11

Cable materials

Twisted pair cables : Tinned copper conductors 0.25 mm²

(24 AWG)

Outside shield : Foil shield with drain wire, 125%

coverage. Braid, tinned copper 0.008 mm² (38 AWG), 95% coverage

Insulator : Polyethylene for the twisted pair

cables

Color twisted pair #1: green / yellow Color twisted pair #2: brown / white

Polyvinylchloride for the outside

jacket, solid extrusion

Color black



Connector materials

: Polybutylene terephthalate UL94V-0, Housing

color: black

: Nitrilbutadieenrubber, color: black O-ring

Nut : Brass Contact finishing : Gold plated

Electrical specifications

Twisted pair cables : Capacity < 50 pF/m

> Resistance < 100 Ω /km Characteristic Impedance 120 Ω

Connector : Maximum rated current 5 A

Maximum voltage 125 V

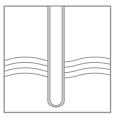
Operational specifications

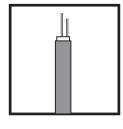
: - 20 up to + 85° C (-4 up to + 185° F) Temperature

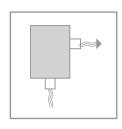
Water Proof : IP67 (conform IEC60529)

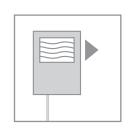
Flame retardant : refer to UL 758

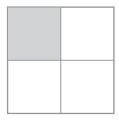
System configuration











Cables Sensors

Fittings

Transmitters

Accessories

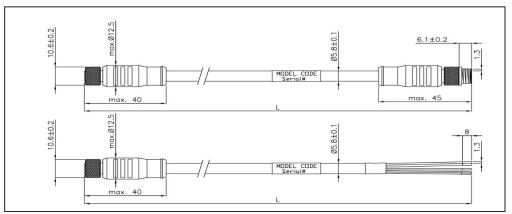


Figure 1:

Dimensions of WU11 cable suffix -V

: 2, 3, 5, 10, 20 and 30m (6.6, 9.8, 16.4,

32.8, 65.6, 98.4 ft)

Diameter connector (D) : $10.6 \pm 0.2 \text{ mm} (4.17 \pm 0.08 \text{ inch})$ Diameter cable (d) $: 5.8 \pm 0.1 \text{ mm} (2.28 \pm 0.04 \text{ inch})$ Wire pins : 8 x 1.3 mm (3.1 x 0.5 inch)

Dimensions of WU11 cable suffix -S

Length (L) : 1,2, 3, 5, 10, 20, 30 and 100m (6.6, 9.8,

16.4, 32.8, 65.6, 98.4, 328 ft)

Dia. connector (D) : $12.5 \pm 0.2 \text{ mm}$

 $(0.471 \pm 0.008 inch)$

Dia. cable (d) $: 5.8 \pm 0.1 \text{ mm}$

 $(0.228 \pm 0.004 inch)$

Wire pins : 8 x 1.3 mm

(0.31 x 0.05 inch)

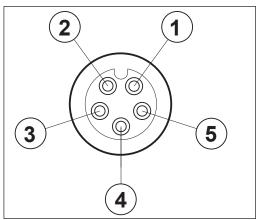


Figure 2: Front view cable female connector with gold plated contacts

CONNECTOR LAYOUT

Definition connector pin to cable

Pin #	Twisted	Wire	Wire
	pair #	color	number
1	1	yellow	83
2	1	green	84
3	2	brown black	87 82
4	drain		
5	2	white	86

Connection cable to FLXA analyzer

Signal	Wire	Wire	FLXA	
Description	color	number	terminal	
Supply +	brown	87	87	
Supply Gnd	white	86	86	
Data +	green	84	84	
Data -	yellow	83	83	
Shield	black	82	82	

Model and Suffix Codes

Model	Suf	fix Description		
WU11			SENCOM cable	
Conn. type	-M9		M9 female conn. for sensor connection	
Cable length -001		01	1 meter (only available with WP finishing with suffix -S)	
	-0	02	2 meter (only available with CN finishing)	
-003		03	3 meter (only available with WP finishing)	
-005		05	5 meter	
-010		10	10 meter	
	-020 -030		20 meter 30 meter	
-100		00	100 meter* (only available with suffix -S)	
Finishing		-WP	Wire pin for terminal connection	
		-CN	Straight connector M9 male	
Jacket material -V		-V	PVC	
		-S	PVC, shielded connector(s)	

^{*} Non-stock item, therefore long lead time.

Suffix -V is for FU20F, FU24F and SC25F Note: Suffix -S is for SENCOM SA11, BA11 and IB100

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