

# DYDEN CORPORATION

ELECTRIC WIRES  
& CABLES PRODUCTS

DATE Jan, 30, 2014

SPEC. No. JS98-495E

## SPECIFICATION

FOR

FOAMED POLYETHYLENE INSULATED  
AND PVC JACKETED CABLE WITH SHIELD

(HRZ F V - S B)

RoHS correspondence



signed by *K. Nishimura*  
K. NISHIMURA

Manager  
Engineering section  
Engineering dept  
Factory Automation & Robot Cable Division

1. SCOPE

This specification covers the construction, characteristics of the Foamed Polyethylene insulated and PVC jacketed cable with shield .

2. SYMBOL, SIZE

The symbol and size of the cable shall be  
" HRZFV-SB    AWG25/2C "

3. UL STANDARD

RECONGNIZED by UNDERWRITERS LABORATORIES Inc.

STYLE No.	20276 (UL 758 : AWM)
Rating TEMP.	80°C
VOLT.	30V
USE	Construction A Internal wiring or external interconnection of electronic equipment in Class 2 circuits only.

4. FLAME TESTING

The cable shall pass the vertical wire flame test (VW-1) described in UL1581, Paragraph 1080.

5. CONSTRUCTION


The construction of the cable shall conform to Table 1.

6. CHARACTERISTICS

The characteristics of the cable shall be shown in Table 2.

7. MARKING

The following information shall be indicated with a suitable method to the cable.

" DYDEN E91337  AWM 20276 80C 30V VW-1 -LF- "

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Table 1 Construction

I T E M		V A L U E
Symbol		HRZV-SB
Size	AWG(mm <sup>2</sup> )	25
Conductor	Material	Tinned Annealed Copper
	Construction(No./mm)	7/0.18
	Dia. (approx. mm)	0.54
Insulation	Material	Foamed PE
	Thickness (approx. mm)	0.40
	Dia. (approx. mm)	1.34
Stranding	Center layer	2 C
Tape	—	Binder tape
Drainwire	Material	Tinned Annealed Copper (11/0.16mm)
Shield (Braid)	Material	Tinned Annealed Copper
	Thickness (approx. mm)	0.25
Jacket	Material (color)	Heat-resistant (Black or Blue)
	Thickness (approx. mm)	0.65
Overall diameter (mm)		4.8 (±0.2)
Approx. mass (kg/km)		30

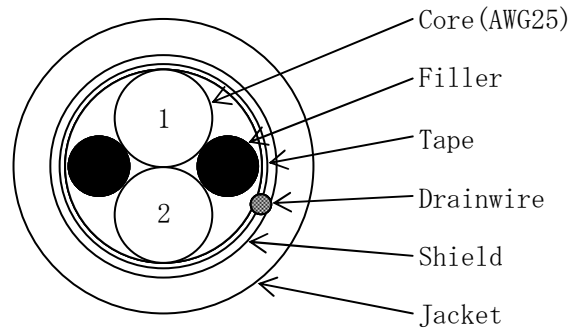
Table 2 Characteristics (at 20°C)

I T E M		S T A N D A R D V A L U E
Max. DC resistance of conductor (Ω/km)		114.4
Min. insulation resistance (MΩ-km)		100
Dielectric strength (V/min)		AC 1000
Characteristic impedance (at TDR)		※130 (differential)
Attenuation (approx. dB/km)	at 1MHz	20 (Standard)
	at 3MHz	30 (Standard)
	at 4MHz	40 (Standard)
	at 10MHz	60 (Standard)
	at 20MHz	90 (Standard)
	at 30MHz	120 (Standard)
	at 40MHz	140 (Standard)
	at 50MHz	160 (Standard)
	at 60MHz	180 (Standard)
	at 70MHz	200 (Standard)
	at 80MHz	230 (Standard)
	at 90MHz	250 (Standard)
at 100MHz	260 (Standard)	

※Standard value

# F i g 1

## C r o s s - S e c t i o n o f C a b l e



CoreNo.	Colors
1	Black
2	Red

NOT TO SCALE

## Revision process

Revised Date	Rivised Items
1999, 12, 7	The first edition
1999, 5, 6 Edition A	Addition of Standard attenuation : (1MHz, 3MHz, 10MHz)
1999, 10, 1 Edition B	Addition of Jacket color : (Blue)
2002, 8, 24 Edition C	Change of Characteristic impedance : ( 120 $\Omega$ $\rightarrow$ 130 $\Omega$ (differential) ) Addition of attenuation
2007, 8, 24 Edition D	Addition of FLAME TESTING Change of Cable Marking : (addition of "-LF-")
2009, 1, 14 Edition E	Addition of RoHS correspondence Change of Cable Marking : ( DAIDEN K. K. $\rightarrow$ DYDEN )