

# DYDEN CORPORATION

ELECTRIC WIRES  
& CABLES PRODUCTS

DATE Jul, 12, 2016

SPEC. No.FSC15-429A

## SPECIFICATION

FOR

FEP INSULATED  
AND PVC JACKETED CABLE WITH SHIELD

(RM-MIII (20276))

RoHS correspondence



signed by S. Maeda  
S. MAEDA

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1. SCOPE

This specification covers the construction, cable use to MECHATROLINK-III.  
( The maximum wiring length: 50m )

2. SYMBOL, SIZE

The symbol and size of the cable shall be  
" RM-MIII (20276) AWG22/4C "

3. UL STANDARD

RECONGNIZED by UNDERWRITERS LABORATORIES Inc.

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

" 一耐屈曲・耐油 MECHATROLINK-III DYDEN E91337  AWM 20276 80C 30V VW-1 -LF- MECHATROLINK-III 一 "

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Table 1 Construction

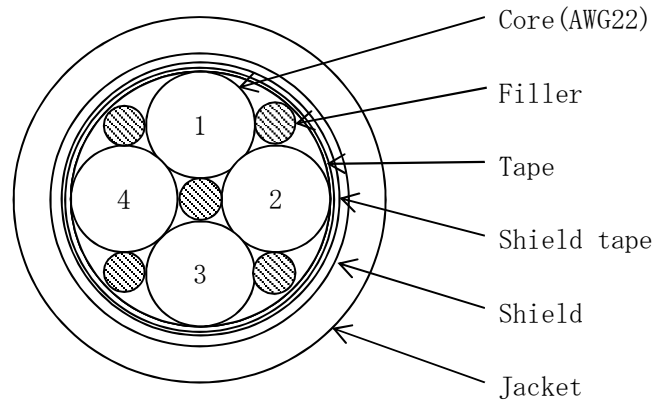
| I T E M               |                        | V A L U E                                  |
|-----------------------|------------------------|--|
| Symbol                |                        | RM-MIII (20276)                            |
| Size                  | AWG                    | 22   |
| Conductor             | Material               | Annealed Copper                            |
|                       | Construction (No./mm)  | 68/0.08                                    |
|                       | Dia. (approx. mm)      | 0.76                                       |
| Insulation            | Material               | FEP  |
|                       | Thickness (approx. mm) | 0.35                                       |
|                       | Dia. (approx. mm)      | 1.46                                       |
| Stranding             | Center layer           | 4 C  |
| Tape                  | —                      | Binder tape                                |
| Shield tape           | Material               | Copper polyester tape                      |
| Shield (Braid)        | Material               | Tinsel Wire                                |
|                       | Thickness (approx. mm) | 0.25                                       |
| Jacket                | Material (color)       | Flame retardant • Oil resistant PVC (Blue) |
|                       | Thickness (approx. mm) | 0.9  |
| Overall diameter (mm) |                        | 6.2 (±0.3)                                 |
| Approx. mass (kg/km)  |                        | 55   |

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 ( $\Omega$ /km) | 62.1                      |
| Min. insulation resistance ( $M\Omega$ -km)     | 1000                      |
| Dielectric strength (V/min)                     | AC 500                    |
| Characteristic impedance. ( $\Omega$ )          | 85~115 (at 1~100MHz)      |

# 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       | Orange |
| 2       | White  |
| 3       | Yellow |
| 4       | Blue   |

NOT TO SCALE

## Revision process

| Revised Date             | Rivised Items   |
|--------------------------|---|
| 2015, 9,16               | The first edition   |
| 2015, 11,11<br>Edition A | Change the notation of Shield : Wire diameter(approx. mm) → Thickness(approx. mm)<br>Change of Cable Marking : (addition of “耐屈曲・耐油”)<br>Min.insulation resistance : (100MΩ/km → 1000MΩ/km) |