

## HMS-M Heat Shrink Marker Sleeve

**Description** HMS-M markers are used to identify wires and cables where exposure to organic fluids, especially oils, for long periods at elevated temperatures.

**Standard** HMS-M meets AMS-DTL-23053/6 Class 1, NF F 00608 Categories A&H, SAE-AS 81531, MIL-STD-202F/Method 215J, UL224, RoHS etc

### Features

|                              |  |
|------------------------------|--|
| Material                     | The sleeving shall be fabricated from irradiated, thermally stabilized and flame retarded modified polyolefin compound |
| Application range            | Military industry; Aerospace & defense; Marine;  |
| Operating temperature range  | -55---+135℃  |
| Minimum recovery temperature | +120℃  |
| Maximum storage temperature  | +50℃   |
| Shrink ratio                 | 2:1, 3:1   |
| Color                        | White, Yellow, other color is available if ordered   |
| Printing mode                | Single sided printing and Double sided printing formats available  |
| Supplied mode                | Either Continuous type or Ladder format type is available  |
| Recommended Printers         | Either Thermal transfer printer or Laser printer is OK.  |
| Recommended Ribbons          | N85 resin ribbon, Black, 100mm(width)*300m(length)   |

### Product dimensions

Shrink ratio-2X

| Part Number   | As Supplied (mm) |                  |                       | After Recovery(mm) |                       |
|---------------|------------------|------------------|-----------------------|--------------------|-----------------------|
|               | ID(D)            | Flatten Width(w) | Double Wall Thickness | ID(d)              | Single Wall Thickness |
| HMS-M-2X-1.6- | 2.00±0.20        | 3.7±0.3          | 0.48±0.10             | ≤0.79              | 0.45±0.06             |
| HMS-M-2X-2.4- | 2.79±0.20        | 5.0±0.3          | 0.48±0.10             | ≤1.18              | 0.49±0.06             |
| HMS-M-2X-3.2- | 3.64±0.23        | 6.3±0.4          | 0.48±0.10             | ≤1.59              | 0.51±0.06             |
| HMS-M-2X-4.8- | 5.26±0.25        | 8.9±0.4          | 0.49±0.10             | ≤2.36              | 0.54±0.06             |
| HMS-M-2X-6.4- | 6.92±0.28        | 11.5±0.4         | 0.50±0.10             | ≤3.18              | 0.56±0.06             |
| HMS-M-2X-9.5- | 10.2±0.32        | 16.7±0.5         | 0.51±0.11             | ≤4.75              | 0.59±0.06             |
| HMS-M-2X-12.7 | 13.5±0.36        | 21.8±0.6         | 0.52±0.11             | ≤6.35              | 0.60±0.07             |
| HMS-M-2X-19-  | 20.1±0.40        | 32.2±0.6         | 0.53±0.11             | ≤9.53              | 0.62±0.07             |
| HMS-M-2X-25-  | 26.7±0.45        | 42.5±0.7         | 0.55±0.12             | ≤12.7              | 0.63±0.07             |
| HMS-M-2X-38-  | 39.8±0.51        | 63.2±0.8         | 0.57±0.12             | ≤19.1              | 0.64±0.07             |
| HMS-M-2X-51-  | 53.0±0.56        | 83.9±0.9         | 0.58±0.13             | ≤25.4              | 0.64±0.08             |
| HMS-M-2X-76-  | 79.4±0.56        | 125.3±1.0        | 0.59±0.13             | ≤38.1              | 0.64±0.09             |

Shrink ratio-3X

| Part Number   | As Supplied (mm) |                  |                       | After Recovery(mm) |                       |
|---------------|------------------|------------------|-----------------------|--------------------|-----------------------|
|               | ID(D)            | Flatten Width(w) | Double Wall Thickness | ID(d)              | Single Wall Thickness |
| HMS-M-3X-1.6- | 2.00±0.20        | 3.7±0.3          | 0.47±0.10             | ≤0.53              | 0.52±0.06             |
| HMS-M-3X-2.4- | 2.79±0.20        | 5.0±0.3          | 0.47±0.10             | ≤0.79              | 0.57±0.06             |

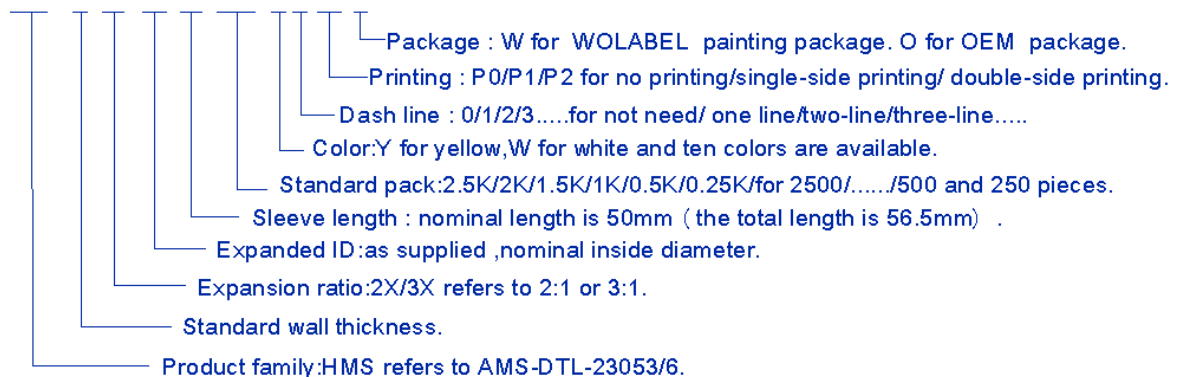
|               |           |           |           |       |           |
|---------------|-----------|-----------|-----------|-------|-----------|
| HMS-M-3X-3.2- | 3.64±0.23 | 6.3±0.4   | 0.48±0.10 | ≤1.06 | 0.61±0.06 |
| HMS-M-3X-4.8- | 5.26±0.25 | 8.9±0.4   | 0.49±0.10 | ≤1.59 | 0.67±0.06 |
| HMS-M-3X-6.4- | 6.92±0.28 | 11.5±0.4  | 0.50±0.10 | ≤2.36 | 0.71±0.06 |
| HMS-M-3X-9.5- | 10.2±0.32 | 16.7±0.5  | 0.52±0.11 | ≤3.18 | 0.77±0.06 |
| HMS-M-3X-12.7 | 13.5±0.36 | 21.8±0.6  | 0.53±0.11 | ≤4.75 | 0.80±0.07 |
| HMS-M-3X-19-  | 20.1±0.40 | 32.2±0.6  | 0.55±0.11 | ≤6.35 | 0.84±0.07 |
| HMS-M-3X-25-  | 26.7±0.45 | 42.5±0.7  | 0.56±0.12 | ≤8.47 | 0.86±0.07 |
| HMS-M-3X-38-  | 39.8±0.51 | 63.2±0.8  | 0.57±0.12 | ≤12.9 | 0.89±0.07 |
| HMS-M-3X-51-  | 53.0±0.56 | 83.9±0.9  | 0.57±0.1  | ≤17.2 | 0.90±0.08 |
| HMS-M-3X-76-  | 79.4±0.56 | 125.3±1.0 | 0.57±0.13 | ≤25.8 | 0.92±0.09 |

### Package information

| Ordering Size<br>(HMS-M-2X/3X) | Ladder Format Type              | Continuous Type               |                                |
|--------------------------------|---------------------------------|-------------------------------|--------------------------------|
|                                | A&B-Small Box Packing (PCS/Box) | A-Paper reel Packing (m/reel) | B-Plastic reel Packing(m/reel) |
| Φ 1.6                          | 2500                            | 50                            | 25                             |
| Φ 2.4                          | 2500                            | 50                            | 25                             |
| Φ 3.2                          | 2000                            | 100                           | 25                             |
| Φ 4.8                          | 2000                            | 100                           | 25                             |
| Φ 6.4                          | 2000                            | 100                           | 25                             |
| Φ 9.5                          | 1000                            | 100                           | 25                             |
| Φ 12.7                         | 1000                            | 100                           | 25                             |
| Φ 19                           | 500                             | 100                           | 25                             |
| Φ 25                           | 500                             | 100                           | 25                             |
| Φ 38                           | 500                             | 50                            | 25                             |
| Φ 51                           | 250                             | 50                            | 25                             |
| Φ 76                           | 250                             | 50                            | —                              |

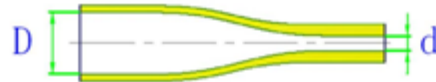
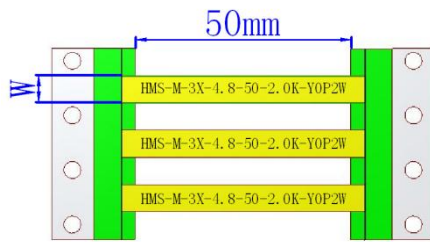
### Part Numbering System

HMS-M-3X-4.8-50-2.0K-Y 0 P2 W



| Color code | BL    | Br    | R   | Or     | Y      | G     | Blu  | V      | Gr   | W     |
|------------|-------|-------|-----|--------|--------|-------|------|--------|------|-------|
| Color      | Black | Brown | Red | Orange | Yellow | Green | Blue | Violet | Grey | White |

Note: Yellow and white are standard, other color is available if ordered.



Ladder Type A



Ladder Type B



Ladder Type B



Ladder Type A