

DERAY®-KYF 190 - FLEXIBLE THIN WALL KYNAR®

High temperature Kynar® thin wall heat shrink tubing, with extreme chemical resistance ideal for protection of components in a wide range of severe temperature and harsh environments



FEATURES AND BENEFITS

- Highly flame retardant
- Flexible
- High temperature resistance
- Excellent chemical and solvent resistance
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 190°C
- Shrink temperature: 175°C min.

STANDARDS

- VW 60360-3
- UL 224 125C VW-1 UL file # E132910
- QPL SAE AS23053/18 Class 2
- CNES approved and listed in Matrex database
- ECSS-Q-ST-70-02

TYPICAL APPLICATIONS

- High temperature performance that meets or exceeds military, industrial and automotive standards
- Provides excellent electrical insulation
- High flexible and abrasion resistance requiring applications
- Protective see through covering for high temperature and aggressive chemical applications
- Protecting component for connectors and HV cable-lugs in electric vehicles

2:1

-55°C to 190°C (-67°F to 374°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial, Defense, Aerospace, Mass Transit

STANDARDS:







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DSG-CANUSA PRODUCTS

dsgcanusa.com

SHAWCOR

Flexible thin wall Kynar®

DIMENSIONS

| ORDER NUMBER | EXPANDED | | RECOVERED | | | | DELIVERY UNITS | | |
|--------------|---------------------------|-------|---------------------------|-------|------------------------------|-------|----------------|-----|--------------|
| | Internal Diameter (min) D | | Internal Diameter (max) d | | Total Wall Thickness (nom) W | | Spool | | Lengths |
| | MM | IN | MM | IN | MM | IN | М | FT | 1.22M / 48IN |
| 0047 | 1.2 | 3/64 | 0.6 | 0.024 | 0.24 | 0.009 | 300 | 984 | 25 |
| 0063 | 1.6 | 1/16 | 0.8 | 0.031 | 0.24 | 0.009 | 300 | 984 | 25 |
| 0094 | 2.4 | 3/32 | 1.2 | 0.047 | 0.24 | 0.009 | 300 | 984 | 25 |
| 0125 | 3.2 | 1/8 | 1.6 | 0.063 | 0.24 | 0.009 | 300 | 984 | 25 |
| 0187 | 4.8 | 3/16 | 2.4 | 0.094 | 0.24 | 0.009 | 300 | 984 | 25 |
| 0250 | 6.4 | 1/4 | 3.2 | 0.126 | 0.30 | 0.012 | 300 | 984 | 10 |
| 0375 | 9.5 | 3/8 | 4.8 | 0.189 | 0.30 | 0.012 | 150 | 492 | 10 |
| 0500 | 12.7 | 1/2 | 6.4 | 0.252 | 0.30 | 0.012 | 100 | 328 | 10 |
| 0591* | 15.0 | 0.591 | 6.4 | 0.252 | 0.80 | 0.031 | 100 | 328 | - |
| 0750 | 19.0 | 3/4 | 9.5 | 0.374 | 0.40 | 0.016 | 100 | 328 | - |
| 1000 | 25.4 | 1 | 12.7 | 0.500 | 0.50 | 0.020 | 50 | 164 | - |
| 1500 | 38.1 | 11/2 | 19.0 | 0.748 | 0.60 | 0.024 | 50 | 164 | - |

^{*}Size 0591 in black and clear against MOQ



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
 - Color: Clear (CL), black (BK)
 - Approval: Standard or QPL
- Please specify the product name, order number and options you require
- Example: DERAY®-KYF 190, 0125 or 1/8 in, clear, QPL

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

FOR FURTHER INFORMATION, PLEASE CONTACT:

Americas: 800 422 6872 Canada: 800 845 6808 Asia Pacific: +86 512 82280099 Europe: +49 2226 9047 355



Flexible thin wall Kynar®

| TECHNICAL DATA: DERAY®-KYF 190 | CURRENT VALUES | TEST METHODS | | | | | | | |
|---|--|---------------------|--|--|--|--|--|--|--|
| Material | | | | | | | | | |
| Material | Fluorpolymer, modified; free of lead and cadmium | n/a | | | | | | | |
| Surface | smooth | n/a | | | | | | | |
| Specific gravity | 1.8 g/cm³ max. | ASTM-D 792, A-I | | | | | | | |
| Shrink ratio | 2:1 | n/a | | | | | | | |
| Longitudinal shrinkage | -6% max. | ASTM-D 2671 | | | | | | | |
| Mechanical Mechanical | | | | | | | | | |
| Tensile strength | 30 MPa | IEC 60684-2 | | | | | | | |
| Elongation | 450% | IEC 60684-2 | | | | | | | |
| Secant modulus | 300 MPa max. | ASTM-D 882 | | | | | | | |
| Thermal | | | | | | | | | |
| Tensile strength after heat aging (168 hr at 215°C) | 20 MPa | IEC 811-1-2 | | | | | | | |
| Elongation after heat aging (168 hr at 215°C) | 300% | IEC 811-1-2 | | | | | | | |
| Tensile Strength after heat shock (4 hr at 275°C) | 20 MPa | IEC 811-1-2 | | | | | | | |
| Elongation after heat shock (4 hr at 275°C) | 250% | IEC 811-1-2 | | | | | | | |
| Cold bend test | does not break at -55°C | ASTM-D 2671 Meth. C | | | | | | | |
| Combustion behaviour | selfextinguishing | UL 224 VW-1 | | | | | | | |
| Shrink temperature | 175°C min. | n/a | | | | | | | |
| Storage temperature | 50°C max. | n/a | | | | | | | |
| Continuous operating temperature | -55°C to 190°C | IEC 216 | | | | | | | |
| Chemical | | | | | | | | | |
| Corrosive action | non-corrosive | ASTM-D 2671 Meth. A | | | | | | | |
| Compatibility with copper | non-corrosive | ASTM-D 2671 Meth. B | | | | | | | |
| Resistance against chemicals | good | n/a | | | | | | | |
| Resistance against mould | does not promote mould | ISO 846 | | | | | | | |
| Water absorption | 0.30% | VDE 0472 | | | | | | | |
| Electrical | | | | | | | | | |
| Dielectric strength | 33 kV/mm | VDE 0303 Part 2 | | | | | | | |
| Volume resistivity | 10 ¹³ Ω x cm | VDE 0303 Part 3 | | | | | | | |

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