### DERAY<sup>®</sup>-KY 175

Semi-rigid thin wall Kynar®

Clear, thin wall Kynar<sup>®</sup> heat shrink tubing ideal for electronic, automotive and military applications requiring protection and see through inspection in aggressive environments.



#### Features and Benefits

- Highly flame retardant
- Semi-rigid
- High withstand to abrasion and cut-through
- Excellent chemical and solvent resistance
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 175°C
- Shrink temperature: 175°C min.

#### **Standards**

- UL 224 125C VW-1 UL file # E107857
- CSA 22.2 No 198.1 125C -CSA file # 065789\_0\_000
- DEF STAN 59-97 Type 3
- BS G198 Part 4 Type 20
- VG 95343 Part 5 Type F
- · QPL SAE AS23053/8
- · PAN 6491

- · VW 60360-3
- CNES approved and listed
  in Matrex database
- ECSS-Q-ST-70-02

#### **Typical Applications**

- Strain relief and insulation of high temperature wires
- Excellently suitable for applications where high chemical and abrasion resistance is required
- All areas where outstanding electrical insulation is required

# 2:1

Shrink ratio

# -55°C - 175°C (-67°F to 347°F)

#### Continuous operating temperature

#### Markets:

Automotive, Industrial, Aerospace, Defense, Mass Transit

#### Standards:



Kynar® is a registered trademark of ATOFINA



# DERAY®-KY 175

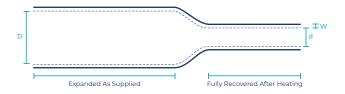
ORDER NUMBER	EXPANDED	RECOVERED		DELIVERY UNITS	
	INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	TOTAL WALL THICKNESS (NOM) W	SPOOL*	LENGTHS
	mm (in)	mm (in)	mm (in)	m (ft)	1.22 m (48 in)
0047	1.2 (3/64)	0.6 (0.024)	0.24 (0.009)	300 (984)	25
0063	1.6 (1/16)	0.8 (0.031)	0.24 (0.009)	300 (984)	25
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
0750	19.0 (3/4)	9.5 (0.374)	0.40 (0.016)	50 (164)	10
1000	25.4 (1)	12.7 (0.500)	0.50 (0.020)	50 (164)	10

#### 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)
  - Approval: Standard, VG or QPL
- Please specify the product name, order number and options you require:
- Example: DERAY®-KY 175, 0125 or 1/8 in, clear, VG

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



We advise that customers should separately evaluate the suitability of our products for their particular application. Our responsibilities are only those listed in our Standard Terms and Conditions of Sale for these products. Please ask for the latest version of this data sheet. Subject to modification without prior notice.

#### For further information, please contact:

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



## DERAY®-KY 175

#### **Technical data**

PROPERTY	CURRENT VALUES	TEST METHODS				
MATERIAL						
Material	PVDF, modified; free of lead and cadmium	n/a				
Surface	smooth	n/a				
Specific gravity	1.80 g/cm³ max.	ASTM-D 792, A-I				
Shrink ratio	2:1	n/a				
Longitudinal shrinkage	-6% max.	ASTM-D 2671				
	MECHANICAL					
Tensile strength	37 MPa	ASTM-D 2671				
Elongation	450%	ASTM-D 2671				
Secant modulus	750 MPa max.	ASTM-D 882				
THERMAL						
Tensile strength after thermal ageing (168 h at 200°C)	45 MPa	IEC 811-1-2				
Elongation after thermal ageing (168 h at 200°C)	230%	IEC 811-1-2				
Tensile strength after thermal shock (4 h at 250°C)	48 MPa	IEC 811-1-2				
Elongation after thermal shock (4 h at 250°C)	300%	IEC 811-1-2				
Cold bend test	does not break at -55°C	ASTM-D 2671 Meth. C				
Flammability	selfextinguishing	UL 224 VW-1				
Shrink temperature	175°C min.	n/a				
Storage temperature	40°C max.	n/a				
Continuous operating temperature	-55°C to 175°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	very good	n/a				
Water absorption	0.07% max.	VDE 0473				
Resistance against fungus	does not promote fungus growth	ISO 846				
	ELECTRICAL					
Dielectric strength	31.5 kV/mm	VDE 0303 Part 2				
Spec. volume resistivity	10 <sup>13</sup> Ω x cm	VDE 0303 Part 3				

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