



## HELIX2

### ULTRA LIGHT-WEIGHT · HIGH-TEMP TOLERANT VIRTUALLY IMPERVIOUS TO CHEMICAL DEGRADATION

HELIX2 (PKRY) - one highly advanced flame resistant expandable sleeving engineered with two highly advanced materials. HeliX2's unique braid is comprised of 8 mil flame resistant PolyPhenylene Sulfide (PPS) monofilament fibers and 10 mil filaments of pure, unfilled PolyEtherEther-Keystone (PEEK) polymer making it one of the most advanced flame resistant braided sleeves on the market. HeliX2 (PKRY) is the perfect choice when high temperature, flame resistant wire harnessing and cable assemblies are imperative. It is lightweight, resistant to high heat, and essentially immune to chemicals and solvents. HeliX2 (PKRY) meets or exceeds many engineering standards including Chemical resistance, high temperature stability, zero moisture absorption, dimensional stability, and ultra-low wear – making it ideal for aerospace, telecom, and military applications. This exclusive construction offers the broadest resistance to chemicals of any of our advanced engineering products resulting in resistance to all known solvents below 200°C and being inert to steam, strong bases, fuels, and acids.

#### SIZING CHART

Nominal Size	Part #	Wall Thickness	Min Expansion	Max Expansion	*Put-Ups		Available Colors	Kgs/100m
					M	L		
3,2mm	PKRY0.13	0,51mm	2,4mm	6,4mm	68,6m	304,8m	2	0,16
6,4mm	PKRY0.25	0,51mm	3,2mm	9,5mm	61,0m	304,8m	2	0,43
9,5mm	PKRY0.38	0,51mm	4,8mm	19,1mm	38,1m	152,4m	2	0,64
12,7mm	PKRY0.50	0,51mm	6,4mm	22,2mm	30,5m	152,4m	2	0,85
19,1mm	PKRY0.75	0,51mm	12,7mm	34,9mm	22,9m	76,2m	2	1,35
31,8mm	PKRY1.25	0,51mm	15,9mm	44,5mm	15,2m	76,2m	2	1,82
44,5mm	PKRY1.75	0,51mm	19,1mm	57,2mm	15,2m	76,2m	2	3,17
50,8mm	PKRY2.00	0,51mm	38,1mm	57,2mm	15,2m	61,0m	2	4,46
63,5mm	PKRY2.50	0,51mm	47,6mm	76,2mm	15,2m	61,0m	2	4,91

\*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool

#### FEATURES

Material	Polyethylene Sulphide / Polyetheretherketone
Grade	PKRY
Monofilament Diameter	PPS 0,2mm / PEEK 0,25mm
Drawing Number	TF001PKRY-WD
Cutting	Hot Knife

#### COLORS



Natural (NT), Black (BK)

#### CERTIFICATIONS





## ABRASION

Abrasion Resistance	<b>MEDIUM</b>
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	71°F / 22°C
Humidity	44%
Several Broken Strands	200 Test Cycles
Wear Continues	400 Test Cycles
Material Destroyed	550 Test Cycles
Pre-Test Weight	3,92g
Post-Test Weight	3,48g
Test End Loss Of Mass Point Of Destruction	0,44g

## PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	0,2mm & 0,25mm
Flammability Rating	UL94V-0
Recommended Cutting	Hot Knife
Colors	2
Wall Thickness	0,51mm
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	
Specific Gravity (ASTM D-792)	
Moisture Absorption % (ASTM D-570)	
Hard Vacuum Data (ASTM E-595 at 10-5 torr)	
TML	0,39
CVCM	0,00
WVR	0,27
Smoke D-Max (ASTM E-662)	2,3
Outgassing	Low
Oxygen Index (ASTM D-2863)	37

## FLAMMABILITY

Rating	UL94V-0
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## OPERATING TEMPERATURES

Melt Point (ASTM D-2117)	545°F / 285°C
Maximum Continuous (Mil-I-23053)	392°F / 200°C
Minimum Continuous (Mil-I-23053)	-94°F / -70°C

## CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	1
Aliphatic Solvents	1
Chlorinated Solvents	1
Weak Bases	1
Salts	1
Strong Bases	2
Salt Water (0-S-1926)	1
Hydraulic Fluid (MIL-H-5606)	1
Lube Oil (MIL-L-7808)	1
De-Icing Fluid (MIL-A-8243)	1
Strong Acids	1
Strong Oxidants	1
Esters/Ketones	1
UV Light	1
Petroleum	1
Fungus (ASTM G-21)	1
Halogen Free	Yes
RoHS	Yes
SVHC	None