

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-Keytone (PEEK) polymer making it one of the most advanced flame restistant 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 ultralow 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 392°F and being inert to steam, strong bases, fuels, and acids.

SIZING CHART

Nominal	Part #	Min	Min Max		*Put-Ups		Lbs/
Size	rail#	Expansion	Expansion	M	L	Colors	100'
1/8"	PKRY0.13	3/32"	1/4"	225'	1,000'	2	0.11
1/4"	PKRY0.25	1/8"	3/8"	200'	1,000	2	0.29
3/8"	PKRY0.38	³ / ₁₆ "	3/4"	125'	500'	2	0.43
1/2"	PKRY0.50	1/4"	7/8"	100'	500'	2	0.57
3/4"	PKRY0.75	1/2"	13/8"	75'	250'	2	0.91
1¼"	PKRY1.25	5/8"	1¾"	50'	250'	2	1.22
1¾"	PKRY1.75	3/4"	2¼"	50'	250'	2	2.13
2"	PKRY2.00	1½"	2¼"	50'	200'	2	3.00
2½"	PKRY2.50	1%"	3"	50'	200'	2	3.30

^{*}Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



FEATURES

Material	Polyethylene Sulphide / Polyetheretherketone
Grade	PKRY
Monofilament Diameter	PPS .008" / PEEK .010"
Drawing Number	TF001PKRY-WD
Cutting	Hot Knife

COLORS



Natural (NT), Black (BK)

CERTIFICATIONS









ADVANCED ENGINEERING Technical Data Sheet



ABRASION

Abrasion Resistance	MEDIUM
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	71°F
Humidity	44%
Several Broken Strands	200 Test Cycles
Wear Continues	400 Test Cycles
Material Destroyed	550 Test Cycles
Pre-Test Weight	3.92 g
Post-Test Weight	3.48 g
Test End Loss Of Mass Point Of Destruction	0.44 g

PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	.008" & .010"
Flammability Rating	UL94V-0
Recommended Cutting	Hot Knife
Colors	2
Wall Thickness	.02"
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	.39
CVCM	.00
WVR	.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-l-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

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