



3:1 & 4:1
Shrink Ratio

Dimensions 3:1

EXPANDED		RECOVERED		DELIVERY UNITS			
INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS OVERALL (NOI) w	WALL THICKNESS OVERALL (NOI) w	Black Spool Length	Black & Clear Spool Length	Black Style*	Black & Clear Style*
mm	IN	mm	mm	m	m		
3.0	-	1.0	1.00	300	0	150	0
4.5	-	1.5	1.10	300	0	75	0
6.0	-	2.0	1.20	300	0	75	0
9.0	-	3.0	1.40	150	0	75	0
12.0	-	4.0	1.70	100	0	50	0
19.0	-	6.0	2.10	50	0	30	0
24.0	-	8.0	2.40	50	0	30	0
40.0	-	13.0	2.40	30	0	-	-

Dimensions 4:1

EXPANDED		RECOVERED		DELIVERY UNITS			
INTERNAL DIAMETER (MIN) D	INTERNAL DIAMETER (MAX) D	WALL THICKNESS OVERALL (NOI) w	WALL THICKNESS OVERALL (NOI) w	Black Spool Length	Black & Clear Spool Length	Black Style*	Black & Clear Style*
mm	IN	mm	mm	m	m		
4.0	-	1.0	0.40	300	0	150	0
8.0	-	2.0	0.50	150	0	75	0
12.0	-	3.0	0.50	100	0	50	0
16.0	-	4.0	0.60	50	0	-	-
24.0	-	6.0	0.60	50	0	30	0
32.0	-	8.0	0.70	50	0	30	0
52.0	-	13.0	0.70	30	0	-	-

* 0 = unfilled or ovd - = flattened

Technical Data

Physical

Property	Test Method	Typical Performance coloured	Typical Performance clear
Tensile Strength	IEC 60884-2	15.0 MPa	17.0 MPa
Elongation	IEC 60884-2	400%	450%
Longitudinal Change 3:1	ASTM D 2671	- 15% max.	- 15% max.
Longitudinal Change 4:1	ASTM D 2671	- 18% max.	- 18% max.
Specific Gravity	ASTM D 792, H1	1.25 g/cm ³	1.00 g/cm ³
Elongation after Heat Aging (168 hrs at 150°C)	IEC 811-1-2	320%	360%
Tensile Strength after Heat Aging (1.68 hrs at 150°C)	IEC 811-1-2	14 MPa	15 MPa
Elongation after Heat Shock (4 hrs at 200°C)	IEC 811-1-2	360%	380%
Tensile Strength after Heat Shock (4 hrs at 200°C)	IEC 811-1-2	15 MPa	16 MPa
Low temperature flexibility ASTM D 876 (coloured)	ASTM D 2671 Meth. C	does not break at -55°C	does not break at -55°C
Flammability	FMSS 302 (clear)	Flame retardant (colored)	pressed
Standard Colours	clear	Special Colours	On Request
Black		On Request	

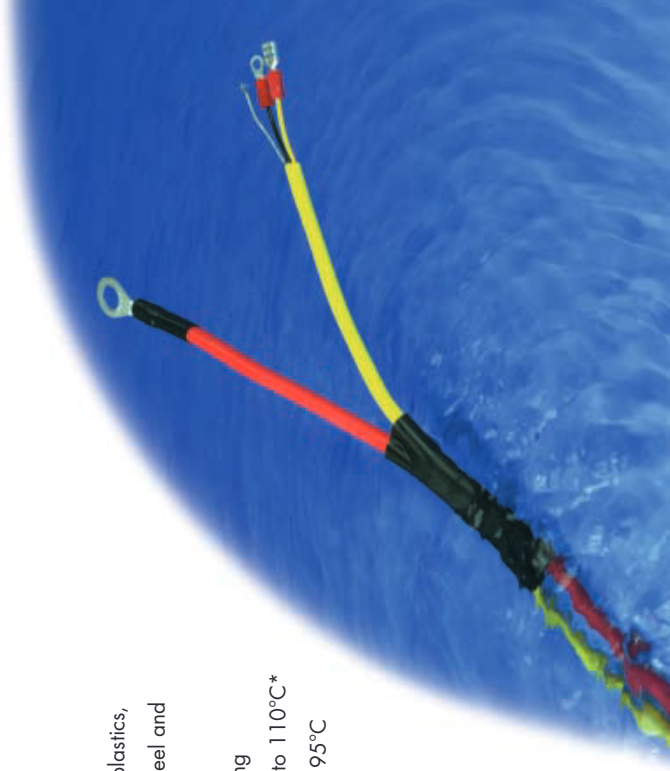
Electrical

Property	Test Method	Typical Performance coloured	Typical Performance clear
Dielectric Strength	VOE 0383 Part 2	22 kV/mm	23 kV/mm
Volume Resistivity	VOE 0383 Part 3	10 ⁻¹⁴ Ω x cm	10 ⁻¹⁴ Ω x cm

Chemical

Property	Test Method	Typical Performance coloured	Typical Performance clear
Corrosive Action	ASTM D 2671 Meth. A	non-corrosive	non-corrosive
Copper Compatibility	ASTM D 2671 Meth. B	non-corrosive	non-corrosive
Chemical Resistance		good	good
Water Absorption	VOE 0472	0.15%	0.17%
Printability	Hot Stamp	ink jet	Offset
		very good	good

Ordering: **Specify the product name** plus each of the following options: 1) Size 2) Colour 3) Total Quantity + Delivery Unit 4) Printing Options
For example: DERAY®-IAKT 3:1 12.0 mm black, 1.000 mtr., 100m-spool, unprinted



*Outer Jacket