



# jaguar industries inc

• WIRE • CABLE • TUBING

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## SHRINK TUBING J-221

## MIL-I-23053/5

**DESCRIPTION:** JAGUAR J-221 SHRINK TUBING IS AN ELECTRICAL GRADE POLYOLEFIN PRODUCT RATED FOR -55°C TO 135°C CONTINUOUS OPERATION AND CAN STAND ELEVATED TEMPERATURES OF 300°C FOR SHORT PERIODS. IT IS TYPICALLY USED AS A SHRINK FIT WIRE HARNESS COVER AND INSULATOR OVER SPLICES AND TERMINATIONS. MINIMUM SHRINK TEMPERATURE IS 121°C.

**SPECIFICATIONS:** MIL-I-23053/5, CLASS 1, 2; AMS-3636; AMS-3637; UL; CSA.

**MATERIAL:** POLYOLEFIN, SHRINK RATIO 2:1, UNPRINTED.†

**TEMPERATURE RATING:** -55°C TO 135°C.

**STANDARD COLORS:** (CLASS 1, FLAME RETARDANT) 3/64" - 4" BLACK, WHITE, RED, BLUE, YELLOW, OTHER COLORS AVAILABLE. 5" BLACK ONLY. (CLASS 2, NON-FLAME RETARDANT) 3/64" - 5" CLEAR.

**PACKAGING:** 4 FOOT LENGTHS AND REELS.\*

**ORDERING INFORMATION:** SPECIFY JAGUAR CATALOG NO., PACKAGING AND COLOR CODE.

| CATALOG NO.<br>4 FT LENGTHS | CATALOG NO.<br>REELS | ORDER SIZE |  | EXPANDED I.D.<br>(MINIMUM) |          | RECOVERED I.D.<br>(MAXIMUM) |         | RECOVERED WALL<br>(NOMINAL) |        |
|-----------------------------|----------------------|------------|--|----------------------------|----------|-----------------------------|---------|-----------------------------|--------|
|                             |                      | in.        |  | in.                        | (mm)     | in.                         | (mm)    | in.                         | (mm)   |
| J-221 LU 3/64               | J-221 RU 3/64        | 3/64       |  | .046                       | (1,17)   | .023                        | (0,58)  | .016                        | (0,41) |
| J-221 LU 1/16               | J-221 RU 1/16        | 1/16       |  | .063                       | (1,60)   | .031                        | (0,79)  | .017                        | (0,43) |
| J-221 LU 3/32               | J-221 RU 3/32        | 3/32       |  | .093                       | (2,36)   | .046                        | (1,17)  | .020                        | (0,51) |
| J-221 LU 1/8                | J-221 RU 1/8         | 1/8        |  | .125                       | (3,18)   | .062                        | (1,57)  | .020                        | (0,51) |
| J-221 LU 3/16               | J-221 RU 3/16        | 3/16       |  | .187                       | (4,75)   | .093                        | (2,36)  | .020                        | (0,51) |
| J-221 LU 1/4                | J-221 RU 1/4         | 1/4        |  | .250                       | (6,35)   | .125                        | (3,18)  | .025                        | (0,64) |
| J-221 LU 3/8                | J-221 RU 3/8         | 3/8        |  | .375                       | (9,53)   | .187                        | (4,75)  | .025                        | (0,64) |
| J-221 LU 1/2                | J-221 RU 1/2         | 1/2        |  | .500                       | (12,70)  | .250                        | (6,35)  | .025                        | (0,64) |
| J-221 LU 3/4                | J-221 RU 3/4         | 3/4        |  | .750                       | (19,05)  | .375                        | (9,53)  | .030                        | (0,76) |
| J-221 LU 1                  | J-221 RU 1           | 1          |  | 1.000                      | (25,40)  | .500                        | (12,70) | .035                        | (0,89) |
| J-221 LU 1 1/2              | J-221 RU 1 1/2       | 1 1/2      |  | 1.500                      | (38,10)  | .750                        | (19,05) | .040                        | (1,02) |
| J-221 LU 2                  | J-221 RU 2           | 2          |  | 2.000                      | (50,80)  | 1.000                       | (25,40) | .045                        | (1,14) |
| J-221 LU 3                  | J-221 RU 3           | 3          |  | 3.000                      | (76,20)  | 1.500                       | (38,10) | .050                        | (1,27) |
| J-221 LU 4                  | J-221 RU 4           | 4          |  | 4.000                      | (101,60) | 2.000                       | (50,80) | .055                        | (1,40) |
| J-221 LU 5                  | J-221 RU 5           | 5          |  | 5.000                      | (127,00) | 2.500                       | (63,50) | .060                        | (1,52) |

† PRINTING IS AVAILABLE, CONSULT FACTORY IF REQUIRED.

\* ALSO AVAILABLE AS CUT PIECES, CONSULT FACTORY.

## TYPICAL PROPERTIES

### PHYSICAL

TENSILE STRENGTH 2400 PSI  
 ULTIMATE ELONGATION 400%  
 LONGITUDINAL CHANGE ± 5%  
 SECANT MODULUS (2%) 1.7X10<sup>4</sup> PSI  
 SPECIFIC GRAVITY 1.3 (BLACK)  
 .93 (CLEAR)  
 HEAT AGING ELONGATION (336 HRS. @ 175° C) 175%

HEAT SHOCK (4 HRS @ 250° C) NO DRIPPING OR CRACKING  
 PASSES MANDREL WRAP TEST  
 LOW TEMPERATURE FLEXIBILITY (4 HRS @ -55° C) NO CRACKING  
 FLAMMABILITY SELF EXTINGUISH  
 MEETS UL 224 ALL-TUBING  
 FLAME TEST (CLASS 1 ONLY)

### ELECTRICAL

DIELECTRIC STRENGTH 900 V/MIL  
 VOLUME RESISTIVITY 10<sup>15</sup> OHM-CM  
**CHEMICAL**  
 CORROSIVE EFFECT NON-CORROSIVE  
 SOLVENT RESISTANCE  
 TENSILE STRENGTH 1000 PSI  
 DIELECTRIC STRENGTH 400 V/MIL  
 WATER ABSORPTION 0.2%  
 FUNGUS RESISTANCE NON-NUTRIENT

PROPERTIES INFORMATION IS TYPICAL DATA ONLY AND SHOULD NOT BE USED FOR SPECIFICATION REQUIREMENTS.