



Product Dimensions

| Nominal ID Diameter | Dia. Code | Units | Dimension "A" | | Dimension "B" | | Dim. "C" Wall Min | Dim. (E) Corr Ht. Ref. |
|------------------------|-----------|-------|---------------|-------|---------------|--------|-------------------------|------------------------------|
| | | | ID Min | Max. | OD Min | Max. | | |
| 1/4" (6 mm) | 014 | mm | 6.02 | 6.76 | 9.45 | 10.16 | 0.11 | 1.71 |
| 1/4" (7 mm) | 07L | mm | 6.50 | 7.01 | 9.47 | 10.11 | 0.11 | 1.52 |
| 3/8" (9 mm) | 038 | mm | 8.66 | 9.65 | 12.59 | 13.36 | 0.12 | 1.91 |
| 3/8" (9 mm) | 09L | mm | 8.34 | 0.380 | 0.496 | 0.526 | 0.005 | 0.075 |
| 3/8" (9 mm) | 09L | mm | 9.35 | 10.11 | 12.56 | 13.32 | 0.12 | 1.61 |
| 7/16" (10 mm) | 716 | mm | 10.13 | 11.10 | 14.46 | 15.16 | 0.12 | 2.10 |
| 1/2" (13 mm) | 13L | mm | 11.97 | 13.07 | 16.39 | 17.31 | 0.12 | 2.17 |
| 1/2" (13 mm) | 012 | mm | 12.01 | 13.11 | 16.87 | 17.78 | 0.12 | 2.38 |
| 5/8" (16 mm) | 16L | mm | 15.11 | 16.08 | 18.59 | 19.56 | 0.12 | 1.74 |
| 5/8" (16 mm) | 058 | mm | 0.595 | 0.633 | 0.732 | 0.770 | 0.005 | 0.069 |
| 5/8" (17 mm) | 17F | mm | 16.40 | 16.60 | 21.50 | 22.00 | 0.22 | 2.63 |
| 5/8" (17 mm) | 17L | mm | 0.646 | 0.654 | 0.846 | 0.866 | 0.009 | 0.103 |
| 5/8" (17 mm) | 17L | mm | 16.25 | 17.15 | 20.42 | 21.32 | 0.12 | 2.09 |
| 5/8" (18 mm) | 18L | mm | 0.640 | 0.675 | 0.804 | 0.839 | 0.005 | 0.082 |
| 5/8" (18 mm) | 18L | mm | 16.73 | 17.75 | 21.69 | 22.59 | 0.12 | 2.45 |
| 3/4" (19 mm) | 034 | mm | 0.659 | 0.699 | 0.854 | 0.889 | 0.005 | 0.096 |
| 3/4" (19 mm) | 19L | mm | 17.96 | 19.28 | 24.13 | 25.12 | 0.12 | 3.00 |
| 3/4" (19 mm) | 19L | mm | 0.707 | 0.759 | 0.950 | 0.989 | 0.005 | 0.118 |
| 3/4" (19 mm) | 19L | mm | 18.97 | 19.86 | 23.10 | 23.86 | 0.12 | 2.03 |
| 7/8" (22 mm) | 078 | mm | 0.747 | 0.782 | 0.909 | 0.939 | 0.005 | 0.080 |
| 1" (25 mm) | 100 | mm | 21.54 | 22.81 | 28.12 | 29.24 | 0.13 | 3.25 |
| 1" (25 mm) | 23L | mm | 0.848 | 0.898 | 1.107 | 1.151 | 0.005 | 0.128 |
| 1" (25 mm) | 100 | mm | 22.78 | 24.10 | 27.36 | 28.17 | 0.15 | 2.16 |
| 1" (25 mm) | 100 | mm | 0.897 | 0.949 | 1.077 | 1.109 | 0.006 | 0.085 |
| 1" (25 mm) | 100 | mm | 25.91 | 27.16 | 31.78 | 33.13 | 0.15 | 2.96 |
| 1 1/8" (29 mm) | 118 | mm | 1.020 | 1.069 | 1.251 | 1.304 | 0.006 | 0.117 |
| 1 1/8" (29 mm) | 118 | mm | 28.50 | 29.86 | 34.58 | 35.88 | 0.15 | 3.03 |
| 1 1/4" (30 mm) | 114 | mm | 1.122 | 1.176 | 1.361 | 1.413 | 0.006 | 0.119 |
| 1 1/4" (30 mm) | 114 | mm | 30.45 | 31.93 | 36.73 | 38.10 | 0.15 | 3.11 |
| 1 1/4" (30 mm) | 114 | mm | 1.199 | 1.257 | 1.446 | 1.500 | 0.006 | 0.123 |
| 1 1/2" (40 mm) | 112 | mm | 1.566 | 1.647 | 1.867 | 1.947 | 0.006 | 0.150 |
| 1 1/2" (40 mm) | 112 | mm | 39.78 | 41.83 | 47.42 | 49.45 | 0.15 | 3.82 |
| 2" (51 mm) | 200 | mm | 1.566 | 1.647 | 1.867 | 1.947 | 0.006 | 0.150 |
| 2" (51 mm) | 200 | mm | 50.01 | 51.77 | 58.04 | 60.66 | 0.28 | 4.23 |
| 2 1/2" (64 mm) | 212 | mm | 1.969 | 2.038 | 2.285 | 2.388 | 0.011 | 0.167 |
| 2 1/2" (64 mm) | 212 | mm | 62.15 | 63.90 | 70.39 | 73.01 | 0.28 | 4.34 |
| 3 1/2" (89 mm) | 312 | mm | 2.447 | 2.516 | 2.771 | 2.874 | 0.011 | 0.171 |
| 3 1/2" (89 mm) | 312 | mm | 88.41 | 90.41 | 97.00 | 100.00 | 0.28 | 4.55 |
| 3 1/2" (89 mm) | 312 | mm | 3.481 | 3.559 | 3.819 | 3.937 | 0.011 | 0.179 |

Product Specifications

* Drossbach **IMDS submissions** are available for all products upon request.

| Material & Code | Tech. Data Sheet | Delphi (Packard) | Ford | General Motors | Chrysler | ASTM | Flame Rating (4) | UV Inhibitor | Resistance | | Flexibility |
|---|------------------|------------------|------------------------------------|------------------------------|------------------------|------------|-----------------------|--------------|------------|-----------|-------------|
| | | | | | | | | | Chemical | Abrasion | |
| Polyethylene - * Continuous Operating Temperature -40 to +85C (-40 to +185F). *Short Term -40 to 93C (-40 to +200F) | | | | | | | | | | | |
| DE | TD-013 | | | | | | | No | Good | Excellent | Excellent |
| HV | TD-015 | | | | | | | No | Good | Excellent | Excellent |
| KE | TD-018 | M-2092 | | | | | | No | Good | Good | Excellent |
| PE | TD-013 | | | | | | | No | Good | Good | Excellent |
| FE | TD-003 | | | | | | DR-006-SE | No | Good | Good | Excellent |
| VE | TD-019 | | | | | | UL-94 V2 | No | Good | Good | Excellent |
| V0 | TD-014 | | | | | | UL-94 V0 | No | Good | Good | Excellent |
| SE | TD-002 | | ESB-M4D152-A | | | | | No | Good | Good | Excellent |
| UC | TD-017 | | | | | | | Yes | Good | Good | Excellent |
| Nylon - * Continuous Operating Temperature -40 to +125C (-40 to +257F). *Short Term -40 to 149C (-40 to +300F) | | | | | | | | | | | |
| ND | TD-007 | | WSS-M4D933-A1 ES-XU5T-14A099-AA | | MS-DB41 CPN 4059 | D4066PA283 | FMVSS 302 | No | Good | Good | Good |
| NP | TD-008 | M-2170 | | GMP.PA6.003 GM 7001-M-PA6 | MS-DB41 CPN-2785 | D4066PA260 | UL-94 HB FMVSS 302 | No | Excellent | Excellent | Excellent |
| NU | TD-012 | | | | | | | Yes Note | Good | Good | Good |
| Polypropylene - * Continuous Operating Temperature -40 to +125C (-40 to +257F). *Short Term -40 to 135C (-40 to +275F) | | | | | | | | | | | |
| FP | TD-023 | | | | | | DR-006-SE | No | Good | Good | Excellent |
| PP | TD-009 | | | | | | | No | Excellent | Good | Good |
| P0 | TD-004 | | | | | | UL-94 V0 | No | Good | Good | Excellent |
| RP | TD-011 | M-2262-001 | | | MS-DB532-B CPN-2796 | | | No | Excellent | Good | Excellent |
| VP | TD-010 | | | | | | UL-94 V2 | No | Good | Good | Excellent |
| Polyester - *Continuous Operating Temperature -40 to +150C (-40 to +302F). *Short Term -40 to +170C (-40 to + 338F) | | | | | | | | | | | |
| PT | TD-001 | M-2373 | | | | | | No | Excellent | Excellent | Excellent |

* The "Continuous Operating Temperatures" for each material is considered to be a minimum of 3000 hrs at the stated temperatures. The "Short Term" Operating temperatures is considered to be minimum of 168Hrs @ the stated temperatures

All Drossbach's products are compliant with the **European Union's Directive 2002/95/EU (RoHS), REACH Regulation and Conflict Minerals Initiative**

Products Listed are standard products. Unique sizes, materials & colours are available but are special order and subject to set-up & minimum quantities costs.

Notes:

- The "V0" product is designated **non-Halogenated product**
- All UL & FMVSS 302 flame ratings are for the resin used to manufacture our product, not our end product. Testing of standard plaque not tubing.
- This product has been tested and will meet the requirements of UL 94 V0 or HB (as stated in the above chart). This product has not been certified yet By UL but Documentation is available showing test results complying to the UL test.
- Based on our "UV" stabilizer supplier recommendation, the percentage used allows for a 3-5 Year weather able product.
- This product is manufactured with a "UV inhibitor" additive. Drossbach does not claim or state any UV life or warranty for this product (see TDS-024)
- This product has limited "UV" protection created by increased amount of Carbon Black blended into it's composition (see TDS-017).

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DRAWING#: DWCS-001

REV#: 28

Dimension "D" Cut-To-Length Specifications

| | |
|--|--|
| Less than or equal to 400mm or 15.75" +/- 10mm or 0.394" | Greater than 400mm or 15.75" +/- 2.5% of target length |
|--|--|

Note:

- Product tolerances are general and are designed to encompass all available materials. Tighter tolerances may be available for a specific material.
- Product with an I.D. > 1.0 " will not meet the std. cut length tolerances listed above. Special cut length tolerance will be given on a case to case basis.

All dimensions are in both Imperial and Metric. Do Not Scale Drawing.

| | | | | | |
|-------------------------------------|------------------------|---------------------------|------------|--------------------------|--|
| | | | | Convuluted Tubing | |
| MATERIALS: N/A | FINISH: N/A | SCALE: N/A | | | |
| INTERPRET GEOMETRIC TOLERANCES PER: | N/A | Tol.: .XX --- .XXX --- | ANGLES +/- | | |
| APPROVAL: Janet Mann | APPROVAL: Neil Coleman | DATE: 06/13/16 | | | |