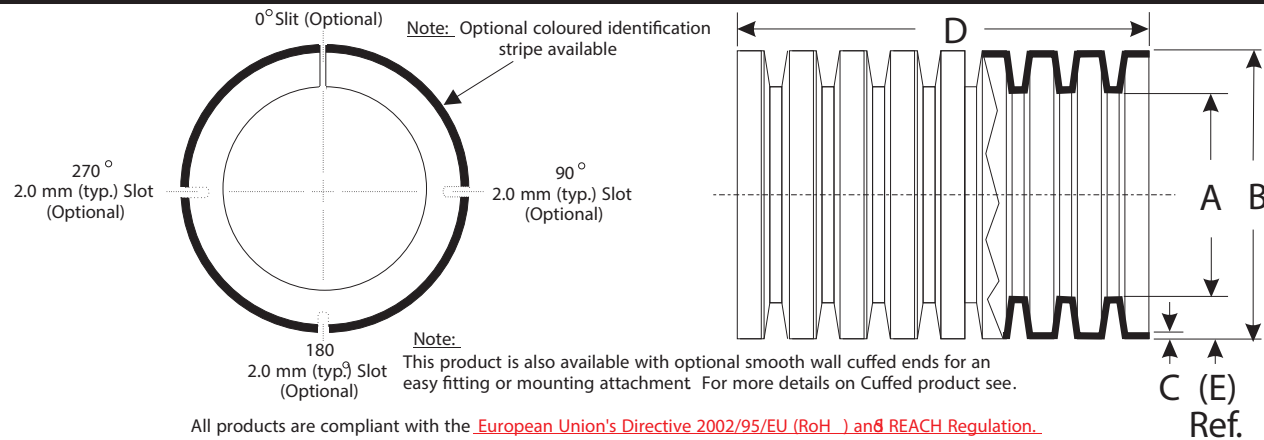




All products are compliant with the [European Union's Directive 2002/95/EU \(RoH \)](#) and [REACH Regulation](#).

Product Specifications

[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 - Operating Temperature -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
② VO	TD-014						UL-94 V0	No	Good	Good	Excellent
SE	TD-002		ESB-M4D152-A					No	Good	Good	Excellent

Nylon - Operating Temperature -40 to +149C (-40 to +300F)

ND	TD-005							No	Good	Good	Good
NF	TD-007		WSS-M4D933-A1 ES-XU5T-14A099-AA		MS-DB41 CPN 4059	D4066PA283	FMVSS 302	No	Good	Good	Good
③ NN	TD-022						UL-94 V1 FMVSS 302	Yes	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

Polypropylene - Operating Temperature -40 to +135C (-40 to +275F)

FP	TD-023						DR-006-SE	No	Good	Good	Excellent
PP	TD-009							No	Excellent	Good	Good
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 - Operating Temperature -40 to +160C (-40 to 320F)

PT	TD-001	M-2373						No	Excellent	Excellent	Excellent
----	--------	--------	--	--	--	--	--	----	-----------	-----------	-----------

Notes:

① Designates preliminary dimensions of a new or modified product derived from initial statistical studies only and will be verified after further production runs.

② The "V0" product is designated [non-Halogenated product](#).

③ This product is manufactured with a "UV inhibitor" additive.

④ All "UL" and FMVSS 302 flame ratings are for the resin used to manufacture our product, not for our end product.

The ratings are created by testing standard "UL" or FMVSS plaque specimens, not tubing samples.

This document and the information contained herein is proprietary to Drossbach N.A. Inc. It shall not be reproduced copied or disclosed in whole or part, nor can it be used for manufacturing or any other purpose without the written permission of Drossbach N.A. Inc.

DRAWING#:

REV#: 19

Product Dimensions

Nominal ID Diameter	Dia. Code	Units	Dimension "A" ID		Dimension "B" OD		Dim. "C" Wall	Dim. (E) Corr Ht.
			Min	Max.	Min	Max.	Min	Ref.
1/4"	014	mm	6.02	6.76	9.45	10.16	0.11	1.71
(6 mm)		Inches	0.237	0.266	0.372	0.400	0.004	0.067
1/4"	07L	mm	6.50	7.01	9.47	10.11	0.11	1.52
(7 mm)		Inches	0.256	0.276	0.373	0.398	0.004	0.060
3/8"	038	mm	8.66	9.65	12.59	13.36	0.12	1.91
(9 mm)		Inches	0.341	0.380	0.496	0.526	0.005	0.075
3/8"	09L	mm	9.35	10.11	12.56	13.32	0.12	1.61
(9 mm)		Inches	0.368	0.398	0.494	0.524	0.005	0.063
7/16"	716	mm	10.13	11.10	14.46	15.16	0.12	2.10
(10 mm)		Inches	0.399	0.437	0.569	0.597	0.005	0.083
1/2"	13L	mm	11.97	13.07	16.39	17.31	0.12	2.17
(13 mm)		Inches	0.471	0.515	0.645	0.681	0.005	0.085
1/2"	012	mm	12.01	13.11	16.87	17.78	0.12	2.38
(13 mm)		Inches	0.473	0.516	0.664	0.700	0.005	0.094
5/8"	16L	mm	15.11	16.08	18.59	19.56	0.12	1.74
(16 mm)		Inches	0.595	0.633	0.732	0.770	0.005	0.069
5/8"	058	mm	15.32	16.23	20.36	21.26	0.12	2.45
(16 mm)		Inches	0.603	0.639	0.802	0.837	0.005	0.099
5/8"	17F	mm	16.40	16.60	21.50	22.00	0.22	2.63
(17 mm)		Inches	0.646	0.654	0.846	0.866	0.009	0.103
5/8"	17L	mm	16.25	17.15	20.42	21.32	0.12	2.09
(17 mm)		Inches	0.640	0.675	0.804	0.839	0.005	0.082
5/8"	18L	mm	16.73	17.75	21.69	22.59	0.12	2.45
(18 mm)		Inches	0.659	0.699	0.854	0.889	0.005	0.096
3/4"	034	mm	17.96	19.28	24.13	25.12	0.12	3.00
(19 mm)		Inches	0.707	0.759	0.950	0.989	0.005	0.118
3/4"	19L	mm	18.97	19.86	23.10	23.86	0.12	2.03
(19 mm)		Inches	0.747	0.782	0.909	0.939	0.005	0.080
7/8"	078	mm	21.54	22.81	28.12	29.24	0.13	3.25
(22 mm)		Inches	0.848	0.898	1.107	1.151	0.005	0.128
1"	23L	mm	22.78	24.10	27.36	28.17	0.15	2.16
(23 mm)		Inches	0.897	0.949	1.077	1.109	0.006	0.085
1"	25L	mm	25.20	26.52	31.66	32.88	0.15	3.21
(25 mm)		Inches	0.992	1.044	1.246	1.294	0.006	0.126
1"	100	mm	25.91	27.16	31.78	33.13	0.15	2.96
(25 mm)		Inches	1.020	1.069	1.251	1.304	0.006	0.117
1 1/8"	118	mm	28.50	29.86	34.58	35.88	0.15	3.03
(29 mm)		Inches	1.122	1.176	1.361	1.413	0.006	0.119
1 1/4"	114	mm	30.45	31.93	36.73	38.10	0.15	3.11
(30 mm)		Inches	1.199	1.257	1.446	1.500	0.006	0.123
1 1/2"	112	mm	39.78	41.83	47.42	49.45	0.15	3.82
(40 mm)		Inches	1.566	1.647	1.867	1.947	0.006	0.150
2"	200	mm	50.01	51.77	58.04	60.66	0.28	4.23
(51 mm)		Inches	1.969	2.038	2.285	2.388	0.011	0.167
2 1/2"	212	mm	62.15	63.90	70.39	73.01	0.28	4.34
(64 mm)		Inches	2.447	2.516	2.771	2.874	0.011	0.171
3 1/2"	312	mm	88.41	90.41	97.00	100.00	0.28	4.55
(89 mm)		Inches	3.481	3.559	3.819	3.937	0.011	0.179

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: (A) Product tolerances are general and are designed to encompass all available materials. Tighter tolerances may be available for a specific material.

(B) 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: 04/06/11	