

Power and Communications Market Products

HDPE Conduit Product Suite





Atkore's Comm-Line is one of the most common conduit solutions for telecommunications and fiber-optic projects across the United States. It is available in IPS (Iron Pipe Size) in diameters from ¾ to 16 inches and DIPS (Ductile Iron Pipe Size) in diameters 4 inches and up. It can be installed in existing conduit or via plow, direct burial or HDD (horizontal directional drilling) installation methods.

Comm-Line is typically identified by a solid orange or terracotta color. However, Comm-Line is available in 12 colors, and added striping can result in up to 144 variations to meet any project requirement. Special coloring or print line identification can be used to identify the product and differentiate it from other telecom companies who might be sharing the same trench. Comm-Line is available for delivery on segmented reels; separate multiple lines can be wound on a single reel for easy installation of multiple lines at the job site.

Print Line Information

Comm-Line is sequentially marked and identified along its outer length in contrasting color.

The print interval is every two feet and includes the following:

Manufacturer's Name:
United Poly Systems PRODUCT SIZE/
SDR

Production Code Date, Location,
Period SPECIFICATION

Length of Conduit (in feet)

Options

- Straight longitudinal internal ribbing is available for all pipes 2 inch diameter and below. Uniform straight internal ribbing spans the length of the pipe.
- Optional custom print lines are available and may include customer name, project name, application and lightning bolt.
- Pull tape is offered in several tensile strengths. United Poly Systems standard pull tape is 1130 lb strength. Other options include strengths from 200 to 2500 lb.
- Several colors and stripes are offered to customize the product to the customer's needs. United Poly Systems offers custom colors upon request.

HDPE conduit material definition according to ASTM F2160

Property	Range or Minimum Requirement	Units	Cell Class	Test Method
Density	0.941 - 0.955	g/cc	3	ASTM D 792 or 1505
Melt Index	< 0.25 - 0.40	g/10 minutes	3 or 4	ASTM D 1238
Flexural Modulus	110,000 - 160,000	psi	4 or 5	ASTM D 790
Tensile Strength	3000 - 4000	psi	4 or 5	ASTM D 638
Environmental Stress Crack Resistance	F20 > 192	Hours (condition C)	3 or 4	ASTM D 1693
HDB	Not Defined		0, 1, 2, 3 or 4	ASTM D 2837

These are nominal values and used as guidelines only.
This is not a product specification and does not indicate minimum or maximum operating values.



HDPE Conduit IP Sizes

IPS Size	Avg. OD	SDR PSI	7 335	7.3 320	9 250	11 200	13.5 160	15.5 139	17 130	19 110	21 100	26 80	32.5 65
1/2	0.84	Min Wall Avg ID Weight lb/ft	- - -	- - -	0.093 0.648 0.092	0.076 0.683 0.077	0.062 0.712 0.064	- - -	- - -	- - -	- - -	- - -	- - -
3/4	1.05	Min Wall Avg ID Weight lb/ft	0.150 0.732 0.180	- - -	0.117 0.802 0.150	0.095 0.849 0.120	0.078 0.885 0.100	- - -	- - -	- - -	- - -	- - -	- - -
1	1.315	Min Wall Avg ID Weight lb/ft	0.188 0.916 0.288	0.180 0.933 0.278	0.146 1.005 0.230	0.120 1.061 0.200	0.097 1.109 0.160	- - -	- - -	- - -	- - -	- - -	- - -
1 1/4	1.66	Min Wall Avg ID Weight lb/ft	0.237 1.157 0.459	0.227 1.178 0.442	0.184 1.292 0.370	0.151 1.358 0.310	0.123 1.414 0.250	0.107 1.446 0.224	0.107 1.465 0.206	- - -	- - -	- - -	- - -
1 1/2	1.90	Min Wall Avg ID Weight lb/ft	0.271 1.325 0.600	0.260 1.348 0.580	0.211 1.478 0.480	0.173 1.554 0.400	0.141 1.618 0.330	0.123 1.654 0.295	0.112 1.676 0.270	- - -	- - -	- - -	- - -
2	2.375	Min Wall Avg ID Weight lb/ft	0.339 1.656 0.939	0.325 1.685 0.906	0.264 1.815 0.760	0.213 1.917 0.640	0.176 2.002 0.530	0.153 2.069 0.458	0.140 2.078 0.430	0.125 2.110 0.390	0.113 2.135 0.350	- - -	- - -
2 1/2	2.875	Min Wall Avg ID Weight lb/ft	0.411 2.004 1.377	0.394 2.040 1.329	0.319 2.198 1.109	0.262 2.351 0.930	0.213 2.449 0.764	0.213 2.424 0.771	0.169 2.516 0.622	- - -	- - -	- - -	- - -
3	3.50	Min Wall Avg ID Weight lb/ft	0.500 2.44 2.040	0.479 2.484 1.968	0.389 2.675 1.660	0.318 2.826 1.390	0.259 2.951 1.150	0.226 3.048 0.997	0.206 3.063 0.932	0.184 3.110 0.840	0.167 3.146 0.770	0.135 3.214 0.63	0.1076 3.285 0.494
4	4.50	Min Wall Avg ID Weight lb/ft	0.643 3.137 3.372	0.616 3.193 3.253	0.500 3.440 2.740	0.409 3.633 2.290	0.333 3.794 1.900	0.290 3.920 1.645	0.265 3.938 1.514	0.237 3.998 1.390	0.214 4.046 1.260	0.173 4.133 1.03	0.138 4.207 0.83
5	5.563	Min Wall Avg ID Weight lb/ft	0.795 3.878 5.170	0.762 3.947 4.975	0.618 4.253 4.180	0.506 4.490 3.510	0.412 4.690 2.910	0.359 4.844 2.517	0.327 4.870 2.352	0.293 4.942 2.120	0.265 5.001 1.930	0.214 5.109 1.57	0.171 5.20 1.27
6	6.625	Min Wall Avg ID Weight lb/ft	0.946 4.619 7.330	0.908 4.701 7.059	0.736 5.065 5.930	0.602 5.349 4.970	0.491 5.584 4.130	0.427 5.771 3.566	0.390 5.798 3.340	0.349 5.885 3.010	0.315 5.957 2.730	0.255 6.084 2.23	0.204 6.193 1.781
7	7.125	Min Wall Avg ID Weight lb/ft	- - -	- - -	- - -	- - -	- - -	- - -	0.419 6.236 3.821	0.375 6.330 3.442	0.339 6.406 3.128	0.274 6.544 2.553	0.219 6.660 2.057
8	8.625	Min Wall Avg ID Weight lb/ft	1.232 6.013 12.385	1.182 6.120 11.963	0.958 6.593 9.988	0.784 6.963 8.359	0.639 7.271 6.939	0.556 7.445 6.100	0.507 7.549 5.597	0.454 7.663 5.044	0.411 7.754 4.591	0.332 7.922 3.744	0.265 8.062 3.012
10	10.75	Min Wall Avg ID Weight lb/ft	1.536 7.494 19.245	1.473 7.628 18.581	1.194 8.218 15.515	0.977 8.678 12.983	0.796 9.062 10.774	0.694 9.280 8.490	0.632 9.409 8.695	0.566 9.551 7.838	0.512 9.665 7.128	0.413 9.873 5.805	0.331 10.049 4.689
12	12.75	Min Wall Avg ID Weight lb/ft	1.821 8.889 27.062	1.747 9.047 26.138	1.417 9.747 21.837	1.159 10.293 18.267	0.944 10.748 15.155	0.823 11.006 13.348	0.750 11.160 12.238	0.671 11.327 11.021	0.607 11.463 10.023	0.490 11.710 8.169	0.392 11.918 6.587
14	14.00	Min Wall Avg ID Weight lb/ft	2.000 9.760 32.635	1.918 9.934 31.511	1.556 10.702 26.329	1.273 11.302 22.030	1.037 11.801 18.279	0.903 12.085 16.082	0.824 12.254 14.763	0.737 12.438 13.292	0.667 12.587 12.093	0.538 12.858 9.848	0.431 13.087 7.952
16	16.00	Min Wall Avg ID Weight lb/ft	2.286 11.154 42.629	2.192 11.353 41.157	1.778 12.231 34.384	1.455 12.916 28.777	1.185 13.487 23.872	1.032 13.812 21.005	0.941 14.005 19.269	0.842 14.215 17.355	0.762 14.385 15.789	0.615 14.695 12.866	0.492 14.956 10.37
18	19.5	Min Wall Avg ID Weight lb/ft	2.786 13.594 63.318	2.671 13.837 61.123	2.167 14.907 51.074	1.773 15.742 42.738	1.444 16.438 35.453	1.258 16.833 31.205	1.147 17.068 28.625	1.026 17.324 25.774	0.929 17.531 23.460	0.750 17.910 19.122	0.600 18.228 15.420
20	21.6	Min Wall Avg ID Weight lb/ft	3.086 15.058 77.690	2.959 15.327 75.004	2.400 16.512 62.659	1.964 17.437 52.440	1.600 18.208 43.513	1.394 18.646 38.301	1.271 18.906 35.134	1.137 19.190 31.637	1.029 19.419 28.783	0.831 19.839 23.469	0.665 20.191 18.931
24	25.8	Min Wall Avg ID Weight lb/ft	3.686 17.986 112.970	3.534 18.307 109.056	2.867 19.723 91.123	2.345 20.828 76.229	1.911 21.748 63.270	1.665 22.271 55.693	1.518 22.583 46.002	1.358 22.921 41.852	1.229 23.195 34.107	0.992 23.696 27.517	0.794 24.117 21.517

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HDPE Conduit SCH 40 and SCH 80 Sizes

SCH	SIZE OD	3/4 1.05	1 1.31	1 1/4 1.66	1 1/2 1.90	2 2.37	2 1/2 2.87	3 3.50	4 4.50	5 5.56	6 6.62
40	Min Wall Avg ID Weight lb/ft	0.113 0.804 0.215	0.133 1.030 0.145	0.140 1.360 0.291	0.145 1.590 0.349	0.154 2.047 0.469	0.203 2.445 0.744	0.216 3.042 0.973	0.237 3.998 1.387	0.258 5.016 1.882	0.280 6.031 2.443
80	Min Wall Avg ID Weight lb/ft	0.154 0.722 0.188	0.179 0.936 0.277	0.191 1.255 0.383	0.200 1.476 0.465	0.218 1.913 0.644	0.276 2.290 0.982	0.300 2.864 1.315	0.337 3.786 1.923	0.375 4.768 2.668	0.432 5.709 3.669

Note: 4" sch 40, 5" sch 40 & 6" sch 40 & sch 80 are NON COILABLE items due to thin walls

Part Number Builder

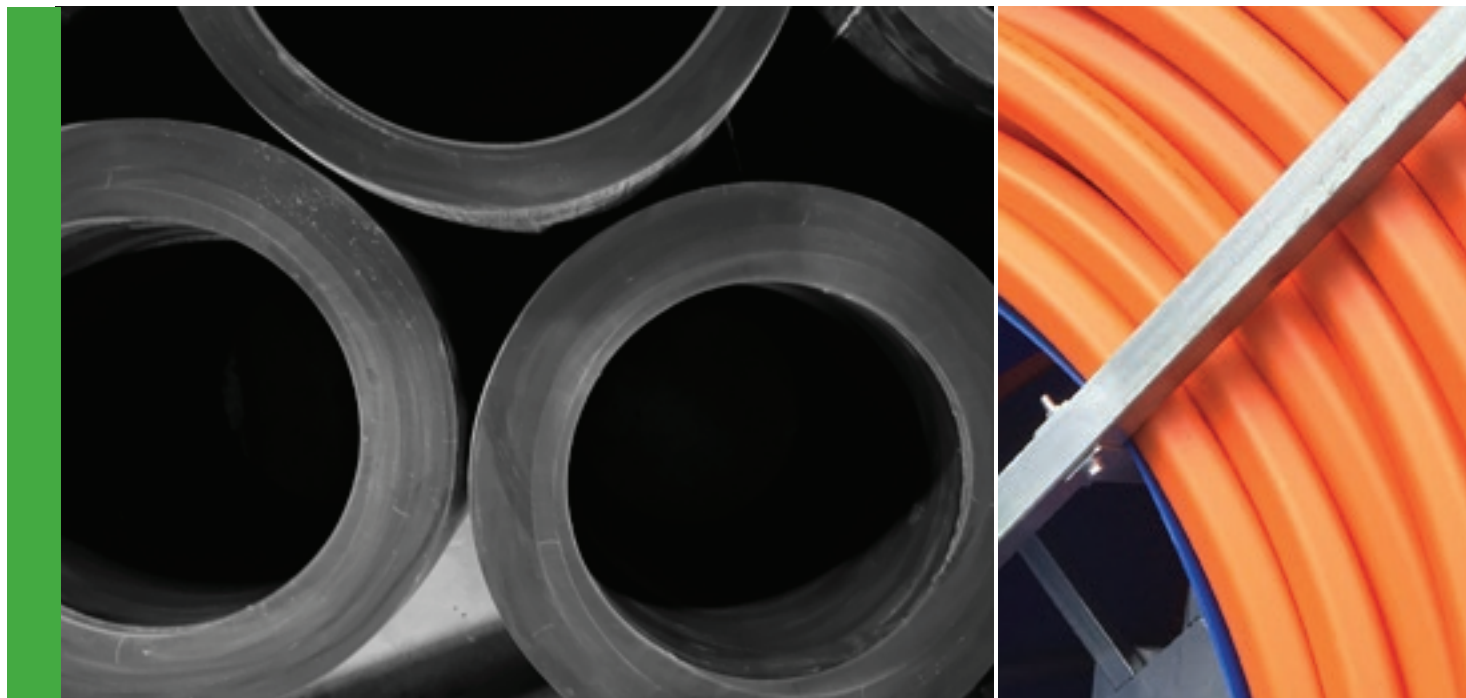
Atkore part numbers are created using ten different values describing the attributes that make up each product and is used to easily identify each products characteristics.

D12505AORNN2NSTS

Part No. Sections	Product	Size	SDR (SIDR)	Segmented	Color	Strip	Pull Tape	Lube	Ribbing	Market
Sample Section Value	Conduit/Duct	1.25"	13.5	Single way reel	Orange	None	1130#	None	Smooth	Smooth
Sample Value Code	D	1250	5	A	OR	NN	2	N	S	TS
Code Finder	Conduit/Duct = D UL Listed = U	3/4" = 0750 1" = 1000 1.25" = 1250 1.5" = 1500 2" = 2000 2.5" = 2500 3" = 3000 4" = 4000 5" = 5000 6" = 6000	SDR 7 = 1 SDR 9 = 2 SDR 11 = 3 SDR 11.5 = 4 SDR 13.5 = 5 SDR 15.5 = 6 SDR 17 = 7 SDR 19 = 8 SDR 21 = 9 SDR 32.5 = 10 SDR 40 = 11 SDR 80 = 12 SDR 5 = 13 SDR 26 = 16	Single way reel = A 2way reel = B 3way reel = C 4way reel = D	None = NN Black = BK Red = RD Orange = OR Tan = TN Purple = VT Slate = ST Gray = GY Purple = PR None = NS White = WT Green = GN Blue = BL Pink = PK White = WH Terra Cotta = TC Lime = LM Brown = BN Lilac = LC	None = NN Black = BK Red = RD Orange = OR Tan = TN Purple = VT Slate = ST Gray = GY Purple = PR None = NS White = WT Green = GN Blue = BL Pink = PK White = WH Terra Cotta = TC Lime = LM Brown = BN Lilac = LC	None = N 200# = 1 1130# = 2 1250# = 3 1800# = 4 2500# = 5 2500# Detectable = 6 1250# Detectable = 7 1800# Detectable = 8 4000# = 9	None = N Lubricated = Y	Smooth = S Ribbed = R	Conduit (Telco/Power) = TS UL 651a Listed = US



Product Portfolio



Throughout the last year, Atkore has been focused on investing in and expanding our HDPE pipe and conduit product portfolio while broadening our distribution range to meet the growing demands resulting from the expansion of 5G wireless networks, Fiber to the Home (FTTH), and electrical grid hardening projects throughout the U.S. This year has seen the acquisition of several industry leaders, including **Four-Star Industries, United Poly Systems, Cascade Poly Pipe + Conduit, and Elite Polymer Solutions**. In early 2023, we will be opening our newest HDPE facility in Dallas, Texas. Our investments in new manufacturing capacity will allow us to be a growth partner and to lead the expansion of the market segment.

HDPE Portfolio

We offer a full product portfolio of conduit products from ½” through 16”. With 12 colors and numerous striping options, combined we have over 144 different variations to meet any project requirements.

The following factors are pertinent to new and existing customers considering Atkore branded HDPE Conduit:

- Atkore conduit products are available with independent NSF certification to the strict requirements of the relevant safety standard (UL651A). Additional Atkore locations are in the process of obtaining this certification
- NSF certification indicates that the manufacturing site has been audited by the testing agency and meets follow-up inspections for verification of continued conformance to the UL standard

- NSF International is one of several Agencies classified as a Nationally Recognized Testing Laboratory (NRTL). A NRTL is an independent laboratory recognized by the Occupational Safety and Health Administration (OSHA) to test products to the specifications of applicable product safety standards such as UL or ANSI. The function of a NRTL is to provide independent evaluation, testing, and certification of products to their respective product safety standard. NSF, ETL and UL are all Nationally Recognized Testing Laboratories
- Atkore conduit can be supplied and marked with multiple Legacy brands, including Eastern Wire + Conduit, Four-Star Industries, United Poly Systems. All Legacy brands were brought under the Atkore umbrella as a result of various acquisitions.

Systems Update

Atkore recently installed and implemented a new computer system requiring us to consolidate and standardize data management for the entire HDPE Business Unit. Legacy part numbers from each individual company acquired were not entered and will not be maintained within the new system.

As such, we are requesting that you change all Atkore Legacy brand part numbers to United Poly Systems numbers. Today, we reference our individual HDPE products in literature, labeling and price sheets in two ways:

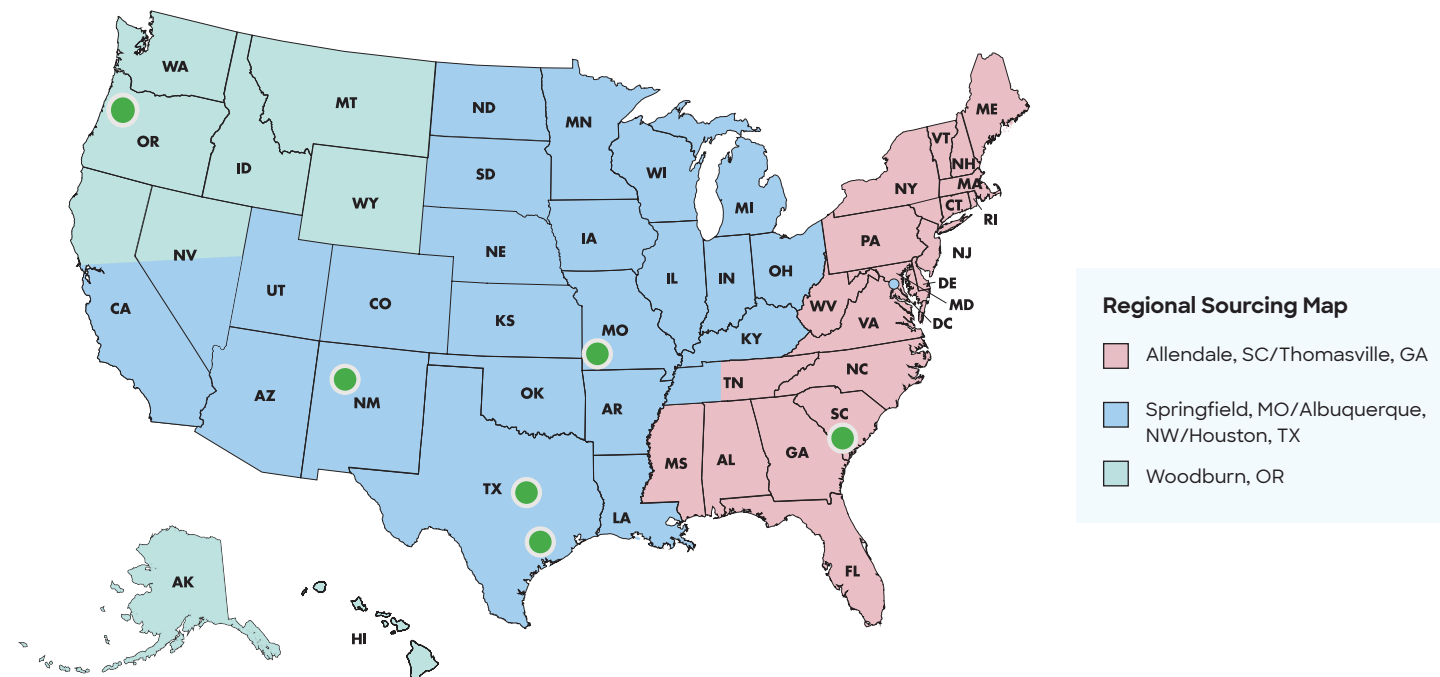
Catalog Part Number

A customer friendly and intuitive part identifier that utilizes numbers and / or letters and in many cases requires no lookup or memorization

System SKU

A 4 to 6 digit numerical only identifier

Either of these identifiers are recognizable within our system and can be effectively used for RFQ's, order entry and invoicing. Please contact your local HDPE Sales Representative if you need additional information or help with this request.





Allied Tube & Conduit ▲ AFC Cable Systems ▲ Heritage Plastics ▲ Unistrut ▲ US Tray
Unistrut Construction ▲ Marco ▲ Cii ▲ Razor Ribbon ▲ Calbond ▲ Flexicon ▲ Kaf-Tech
Power-Strut ▲ Calconduit ▲ FRE Composites ▲ United Poly Systems ▲ Sasco Strut ▲ Calbrite
Elite Polymer Solutions ▲ ACS/Uni-Fab ▲ Vergokan ▲ Columbia-MBF ▲ Calpipe Security
Northwest Polymers ▲ Cascade Poly Pipe + Conduit ▲ Queen City Plastics ▲ Cope

Learn more at [atkore.com/unitedpolysystems](https://www.atkore.com/unitedpolysystems)