



PROUDLY MADE



IN THE USA



## Metal Braid For Aerospace Applications



### UNIVERSAL METAL HOSE COMPANY—SINCE 1942 AND GOING STRONG

#### STANDARD APPLICATIONS

- ◆ *Plain Weave or Diamond Weave (braided braid)*
- ◆ *Lightweight to Heavy Duty (many materials to Choose from)*
- ◆ *Control Cable/ Wire Assembly Protection*
- ◆ *Ethernet Communication Protection*
- ◆ *NDT—Non Destructive Testing*
- ◆ *High Pressure Air & Fluid Transfer Hose Protection*
- ◆ *Flat Braid for Power/ Ground Bonding Leads*
- ◆ *EMI Wire & Cable Protection*
- ◆ *Air-to-Air Refueling Hose*

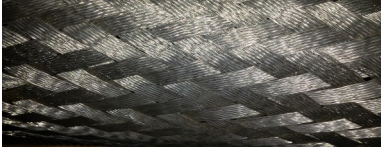
Single braid, double braid (braided braid), plain weave or diamond weave Universal Metal Hose has been manufacturing the highest quality metal braid product for the aerospace market for a very long time.

Most common wire materials used by our customers in the aerospace industry to make metal braid includes Monel, Inconel 625, 718, a variety of stainless steel wire (304, 316, 309, 321, 310 & others), galvanized steel wire, bare copper and tin plated copper, aluminum and brass over carbon steel wire. If you have questions regarding other types of braid (metal or other) please call our factory to inquire about availability.

UMH braid ID sizes range from 1/8" all the way to 30" and we are one of the very few braid manufacturers in the country who welcome orders for just bulk braid only. The most common wire asked for by our customers is S304, please refer to the back side of this bulletin for available braid ID's, part numbers, wire coverage and construction. Since there is such a wide variety of wire/ braid material requests we could not possibly include them all in one brochure.

UMH manufactures both flat and tubular braid. Flat braid part numbers, materials, sizes and construction configurations are on page 4 of this brochure.

Please call the factory or your local representative with specific questions regarding your application.



**304 Stainless Steel Tubular Braid for Metal Hose & Aerospace Bulletin 305Aerospace**

<u>Nominal ID</u>	<u>Part Number</u>	<u>Typical Hose OD/ Inches</u>	<u>*Braid Coverage</u>	<u>Braid ID</u>	<u>Braid Construction</u>
1/8"	45BT-09438	0.24"	93%	1/4"	16x4x.005"
1/4"	45BT-46399	0.49"	93%	1/2"	24x6x.0126"
3/8"	45BT-46400	0.69"	92%	3/4"	24x9x.0126"
1/2"	45BT-46400	0.84"	97%	3/4"	24x9x.0126"
5/8"	45BT-46401	1.03"	87%	1"	24x10x.0126"
3/4"	45BT-46005	1.23"	87%	1-1/4"	36x8x.014"
1"	45BT-46006	1.53"	85%	1-1/2"	36x9x.014"
1-1/4"	45BT-22790	1.83"	84%	1-3/4"	48x7x.016"
1-1/2"	45BT-22792	2.19"	87%	2-1/4"	48x9x.016"
2"	45BT-22794	2.75"	92%	2-3/4"	48x10x.020"
2-1/2"	45BT-22796	3.17"	93%	3"	48x11x.020"
3"	45BT-24000	3.74"	86%	3-3/4"	48x11x.020"
3-1/2"	45BT-24002	4.29"	89%	4-3/4"	96x8x.020"
4"	45BT-24002	4.82"	87%	4-3/4"	96x8x.020"
5"	45BT-22954	6.05"	81%	6"	96x7x.025"
**5)	45BT-46402	6.05"	95%	6"	96x(17x.020")



**304 Stainless Steel Tubular Braid for Metal Hose & Aerospace Bulletin 305Aerospace**

<u>Nominal ID</u>	<u>Part Number</u>	<u>Typical Hose OD/ Inches</u>	<u>*Braid Coverage</u>	<u>Braid ID</u>	<u>Braid Construction</u>
6"	45BT-22956	6.94"	83%	6-3/4"	96x8x.025"
** (6")	45BT-46650	6.94"	90%	6-3/4"	96x(17x.020")
8"	45BT-46403	9"	79%	9"	96x9x.028"
** (8")	45BT-19217	9"	89%	9"	96x(17x.025")
** (8")	45BT-19217	9"	89%	9"	96x(17x.025")
** (10")	45BT-46653	11.25"	84%	11-1/4"	96x(29x.020")
** (12")	45BT-46428	13.25"	94%	13-1/4"	96x(20x.025")
** (14")	45BT-22964	14.50"	95%	14-1/2"	96x(29x.025")
** (16")	45BT-22966	16.50"	92%	16-1/2"	96x(29x.025")
** (18")	45BT-46230	19.00"	89%	19"	96x(29x.028")
** (20")	45BT-46476	21.00"	84%	21"	96x(29x.028")
** (24")	45BT-46523	25.00"	83%	25"	96x(29x.028)

**\*Braid Coverage:**

The percent of the OD of the hose area covered by the braided wire compared to the surface area calculated based on the braid inside diameter

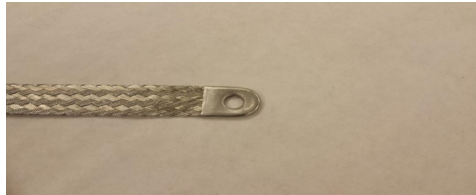
**\*\*Braid Construction:**

All nominal hose sizes and constructions enclosed in parenthesis denote (double braid) construction.

UMH Braid can be manufactured up to 30" ID and is available in a very large variety of materials. Please contact our sales team for part numbers and materials not found on this product brochure.



**Bulletin 305Aerospace**



**Flat Braid for Aerospace Applications—Various Materials**

**SS300 Series/ SS400 Series/ Galvanized Steel/ Tin Plate Copper/ Brass over Carbon Steel**

<u>Size/ Width</u>	<u>Part Number</u>	<u>Construction</u>	<u>Material</u>
.0625"	45BF-46205	9x2x.006"	Tin Plated Copper
0.125"	45BF-46191	9x3x.008"	Tin Plated Copper
0.155"	45BF-46051	13x6x.005"	Tin Plated Copper
0.250"	45BF-46509	13x4x.010"	Tin Plated Copper
0.375"	45BF-09354	13x5x.0135"	Aluminum
0.875"	45BF-09589	21x9x.0135"	Aluminum
1.250"	45BF-46086	21x20x.0135"	Aluminum

Please contact factory for a full list of available sizes and materials.

[www.universalmetalhose.com](http://www.universalmetalhose.com)