



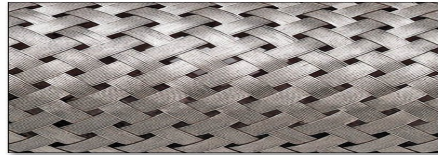
## **Stainless Steel Braid For Metal Hose     Bulletin #305**

As one of the founding companies in the metal hose industry, UMH has been the #1 choice for braided metal hose solutions since 1942 and has the capability to manufacture tubular wire braid for metal or non-metallic hose reinforcement..

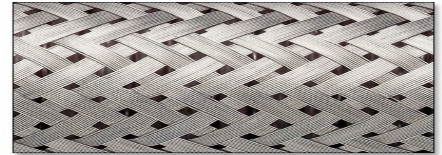
Diamond, plain and braided-braid weaves are available in a variety of materials including 304, 316 and 321 stainless as well as galvanized, bronze and other materials available upon request. Standard sizes for Universal Metal Hose weave ranges from 1/4" through 24" inside hose diameters. **UMH is one of the very few metal braid manufacturers in the U.S. who welcome orders for braid shipped in bulk.** Please contact the factory for more detailed ordering information.

### **STANDARD APPLICATIONS**

- **High pressure/ vibration hose reinforcement**
- **Compressed Air Systems - pneumatic tools, production machinery & conveyor systems**
- **Compressed Water Distribution – in-building transfer, equipment cooling and cleaning (wash down applications)**
- **Fluid Transfer Systems – storage tank transfer, cutting fluid recirculation, moving machine parts lubrication**
- **Steam handling & Transfer— product/ equipment cleaning and heating system operation**
- **Moving/ Vibrating Equipment – air compressors, pumps/ motors and misaligned pipeline connections**



Diamond Weave



Plain Weave

Life cycle expectancy for UMH braid can be significantly affected by several factors, most important are: ambient operating temperature, material of hose being reinforced and the application's effective working pressure (PSIG). Please review the following pages or consult our factory for details.

### **Temperature Correction:**

Standard assumed operating temperature is 70 degrees F. If the working conditions exceed this temperature, the working pressure ratings must be reduced by the following factors: (all temperatures Fahrenheit)

<u>Temperature</u>	<u>Correction Factor</u>	<u>Temperature</u>	<u>Correction Factor</u>
70 degrees	1.00	400 degrees	0.72
600 degrees	0.68	800 degrees	0.64
1000 degrees	0.56		





**304 Stainless Steel Braid For Metal Hose Bulletin #305**

Nominal ID	Typical Hose	*Braid Coverage	Braid Construction		Nominal ID	Typical Hose	*Braid Coverage	Braid Construction	
Part Number	OD Inches		ID	Material	Part Number	OD Inches		ID	Material
1/4" 45BT-46399	0.49"	93%	1/2"	24x6x.0126	5" 45BT-22954	6.05"	81%	6"	96x7x.025
3/8" 45BT-46400	0.69"	92%	3/4"	24x9x.0126	** (5") 45BT-46402	6.05"	95%	6"	96x(17x.020)
1/2" 45BT-46400	0.84"	97%	3/4"	24x9x.0126	6" 45BT-22956	6.94"	83%	6-3/4"	96x8x.025
5/8" 45BT-46401	1.03"	87%	1"	24x10x.0126	(6") 45BT-46650	6.94"	90%	6-3/4"	96x(17x.020)
3/4" 45BT-46005	1.23"	87%	1-1/4"	36x8x.014	8" 45BT-46403	9"	79%	9"	96x9x.028
1" 45BT-46006	1.53"	85%	1-1/2"	36x9x.014	(8") 45BT-19217	9"	89%	9"	96x(17x.025)
1-1/4" 45BT-22790	1.83"	84%	2-3/4"	48x7x.016	(10") 45BT-46653	11.25"	84%	11-1/4"	96x(29x.020)
1-1/2" 45BT-22792	2.19"	87%	3-1/4"	48x9x.016	(12") 45BT-46428	13.25"	94%	13-1/4"	96x(29x.025)
2" 45BT-22794	2.75"	92%	4-3/4"	48x10x.020	(14") 45BT-22964	14.50"	95%	14-1/2"	96x(29x.025)
2-1/2" 45BT-22796	3.17"	93%	5-3/4"	48x11x.020	(16") 45BT-22966	16.50"	92%	16-1/2"	96x(29x.025)
3" 45BT-22796	3.74"	86%	6-3/4"	48x11x.020	(18") 45BT-46230	19.00"	89%	19"	96x(29x.028)
3-1/2" 45BT-24002	4.29"	89%	7-3/4"	96x8x.020	(20") 45BT-46476	21.00"	84%	21"	96x(29x.028)
4" 45BT-24002	4.82"	87%	8-3/4"	96x8x.020	(24") 45BT-46523	25.00"	83%	25"	96x(29x.028)

**\*Braid Coverage:**

The percent of OD 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 construction enclosed in parenthesis denote (braided braid) - construction.





**316 Stainless Steel Braid for Metal Hose**

**Bulletin #305**

Nominal Hose ID Inches	Typical Hose OD Inches	*Braid Coverage	Braid Construction		Nominal Hose ID Inches	Typical Hose OD Inches	Braid Coverage	Braid Construction	
			ID	Material				ID	Material
1/4" 45BT-46409	0.49"	93%	1/2"	24x6x.0126	5" 45BT-45013 **(5")	6.05"	81%	6"	96x7x.025
3/8" 45BT-46410	0.69"	92%	3/4"	24x9x.0126	45BT-46412	6.05"	95%	6"	96x(17x.020)
1/2" 45BT-46410	0.84"	97%	3/4"	24x9x.0126	6" 45BT-45015 (6")	6.94"	83%	6- 3/4"	96x8x.025
5/8" 45BT-46401	1.03"	87%	1"	24x10x.0126	45BT-46652	6.94"	90%	6- 3/4"	96x(17x.020)
3/4" 45BT-45004	1.23"	87%	1- 1/4"	36x8x.014	8" 45BT-46413 (8")	9"	79%	9"	96x9x.028
1" 45BT-45005	1.53"	85%	1- 1/2"	36x9x.014	45BT-45018	9"	89%	9"	96x(17x.025)
1-1/4" 45BT-45006	1.83"	84%	1- 3/4"	48x7x.016	(10") 45BT-46655	11.25"	84%	11- 1/4"	96x(29x.020)
1-1/2" 45BT-45007	2.19"	87%	2- 1/4"	48x9x.016	(12") 45BT-46658	13.25"	94%	13- 1/4"	96x(29x.025)
2" 45BT-45008	2.75"	92%	2- 3/4"	48x10x.020	(14") 45BT-46012	14.50"	95%	14- 1/2"	96x(29x.025)
2-1/2" 45BT-45009	3.17"	93%	3"	48x11x.020	(16") 45BT-46013	16.50"	92%	16- 1/2"	96x(29x.025)
3" 45BT-45010	3.74"	86%	3- 3/4"	48x11x.020	(18") N/A	19.00"	89%	19"	96x(29x.028)
3-1/2" 45BT-45012	4.29"	89%	4- 3/4"	96x8x.020	(20") N/A	21.00"	84%	21"	96x(29x.028)
4" 45BT-45012	4.82"	87%	4- 3/4"	96x8x.020	(24") N/A	25.00"	83%	25"	96x(29x.028)

**\*Braid Coverage:**

The percent of OD 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 construction enclosed in parenthesis denote (braided braid) - construction.





**321 Stainless Steel Braid for Metal Hose**

**Bulletin #305**

Nominal ID Part Number	Typical Hose OD Inches	*Braid Coverage	Braid Construction		Nominal ID Part Number	Typical Hose OD Inches	*Braid Coverage	Braid Construction	
			ID	Material				ID	Material
1/4" 45BT-46404	0.49"	93%	1/2"	24x6x.0126	5" 45BT-22955	6.05"	81%	6"	96x7x.025
3/8" 45BT-46405	0.69"	92%	3/4"	24x9x.0126	*(5") 45BT-46407	6.05"	95%	6"	96x(17x.020)
1/2" 45BT-46405	0.84"	97%	3/4"	24x9x.0126	6" 45BT-22957	6.94"	83%	6- 3/4"	96x8x.025
5/8" 45BT-46406	1.03"	87%	1"	24x10x.0126	(6") 45BT-46651	6.94"	90%	6- 3/4"	96x(17x.020)
3/4" 45BT-46010	1.23"	87%	1- 1/4"	36x8x.014	8" 45BT-46408	9"	79%	9"	96x9x.028
1" 45BT-46011	1.53"	85%	1- 1/2"	36x9x.014	(8") 45BT-24392	9"	89%	9"	96x(17x.025)
1-1/4" 45BT-22791	1.83"	84%	1- 3/4"	48x7x.016	(10") 45BT-46654	11.25"	84%	11- 1/4"	96x(29x.020)
1-1/2" 45BT-22793	2.19"	87%	2- 1/4"	48x9x.016	(12") 45BT-46557	13.25"	94%	13- 1/4"	96x(29x.025)
2" 45BT-22795	2.75"	92%	2- 3/4"	48x10x.020	(14") 45BT-22965	14.50"	95%	14- 1/2"	96x(29x.025)
2-1/2" 45BT-22796	3.17"	93%	3"	48x11x.020	(16") 45BT-24394	16.50"	92%	16- 1/2"	96x(29x.025)
3" 45BT-24001	3.74"	86%	3- 3/4"	48x11x.020	(18") N/A	19.00"	89%	19"	96x(29x.028)
3-1/2" 45BT-24003	4.29"	89%	4- 3/4"	96x8x.020	(20") N/A	21.00"	84%	21"	96x(29x.028)
4" 45BT-24003	4.82"	87%	4- 3/4"	96x8x.020	(24") N/A	25.00"	83%	25"	96x(29x.028)

**\*Braid Coverage:**

The percent of OD 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 construction enclosed in parenthesis denote (braided braid) - construction.

