

AIS Series (American Iron & Steel Compliant Hose & Braid)

Penflex offers a line of flexible metal hose and braid compliant with American Iron & Steel (AIS) requirements for projects that require domestically sourced raw materials. Manufactured at our Gilbertsville, PA facility using stainless steel strip and wire melted and produced in the United States, AIS hose and braid provide the same proven geometry and performance characteristics as our standard P4 and 700 Series products.

AIS Bare Hose in Boxes

Nom.I.D. (in.)	Part Number	Ft/Box	Nom.O.D. (in.)	Maximum Pressure @70°F (PSIG) ^a	Bend Radius (in.)		Weight per Foot (LB.)
					Dynamic	Static	
3/4"	4016-012-AIS	100	1.21	70	8	2.25	0.39
1"	4016-016-AIS	100	1.51	40	9	2.75	0.53
1-1/2"	4016-024-AIS	100	2.19	20	12	4	0.84
2"	4016-032-AIS	50	2.61	15	15	5	0.90
3"	4016-048-AIS	20-25	3.78	10	22	9	1.21
4"	4016-064-AIS	20-25	4.85	8	27	13	1.69
6"	716-096-AIS	20-25	6.87	5	36	19	3.47
8"	716-128-AIS	20-25	9.12	6	40	20	5.56
10"	716-160-AIS	10-20	11.18	5	50	25	6.8
12"	716-192-AIS	10-20	13.17	3	60	30	9.02

AIS Loose Braid in Boxes

Nom.I.D. (in.)	Part Number	Ft/Box	Braid Construction	Weight per Foot (LB.)
3/4"	P4-B4004-012-AIS	110	36 x 9 x .014	0.23
1"	P4-B4004-016-AIS	110	36 x 10 x .014	0.26
1-1/2"	P4-B4004-024-AIS	110	48 x 10 x .016	0.45
2"	P4-B4004-032-AIS	110	48 x 10 x .020	0.71
3"	P4-B4004-048-AIS	110	72 x 9 x .020	0.79
4"	P4-B4004-064-AIS	110	72 x 11 x .020	0.99
6"	1SB-096-DOM*	100-110	96 x 12 x .020	1.28
8"	1SB-128-DOM*	100-110	96 x (21 x .024)	3.88
10"	1SB-160-DOM*	110	96 x (25 x .028)	6.1
12"	1SB-160-DOM*	110	96 x (25 x .028)	5.81

*These part numbers, while made with US-sourced materials, are not AIS-compliant due to manufacturing location.

AIS Single Braided Hose on Reels

Nom.I.D. (in.)	Part Number	Ft/Reel	Braid Construction	Braid Coverage (%)	Nom.O.D. (in.)	Maximum Pressure @70°F (PSIG) ^a		Bend Radius (in.)		Weight per Foot (LB.)
						Working ^b	Nominal Burst	Dynamic	Static	
3/4"	P4-H4016-B4004-012-AIS	500	36 x 9 x .014	95	1.28	940	3,760	8	2.25	0.62
1"	P4-H4016-B4004-016-AIS	450	36 x 10 x .014	92	1.58	630	2,520	9	2.75	0.79
1-1/2"	P4-H4016-B4004-024-AIS	350	48 x 10 x .016	93	2.28	500	2,000	12	4	1.29
2'	P4-H4016-B4004-032-AIS	250	48 x 10 x .020	95	2.73	532	2,128	15	5	1.61
3"	P4-H4016-B4004-048-AIS	200	72 x 9 x .020	93	3.88	400	1,600	22	9	2.00
4"	P4-H4016-B4004-064-AIS	150	72 x 11 x .020	91	4.98	300	1,200	27	13	2.68

a. Pressures listed have been reduced to account for welding as the method of attachment. Other methods such as brazing, neck-down designs or crimping will result in different pressures. Contact the factory for details.

b. Test pressure is 1.5x the Maximum Allowable Working Pressure (MAWP) for single braid layer and 1.1x MAWP for multiple braid layers.