

HYDROFLEX®

METAL HOSE

CONVOLUTED METAL HOSES OF
STAINLESS STEEL



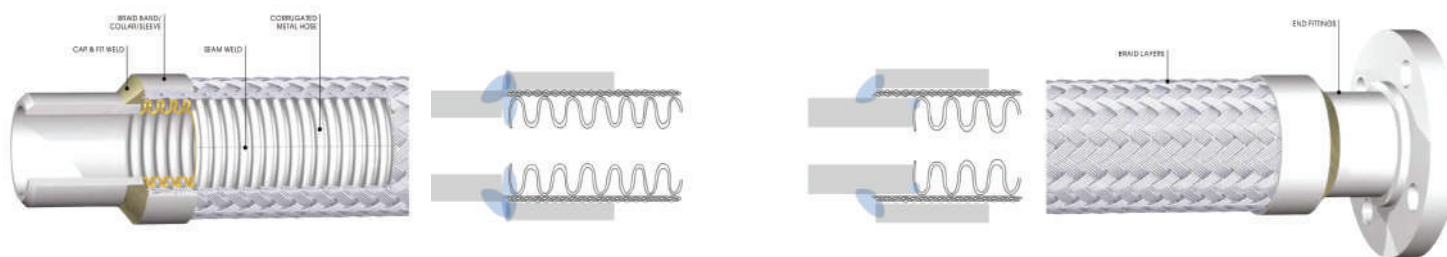
PRODUCT RANGE

Our complete range of corrugated, metal braided hose includes a wide range of versatile products that can be used with chemicals, gases, and foodstuff. Furthermore, our products perform under extreme temperatures and offer features such as non-stick, anti-kink and anti-aging.

Our experienced team of engineers and master fabricators, will benefit clients from the highest standards of customer care at every level of their project. We work with customers to provide a bespoke product that meets the exact requirements demanded.

Upon customers request our company can offer products in a range of **Monel®**, **Inconel®625**, and **Hastelloy®C276**. Contact us to find out more about our bespoke solutions.

PRODUCTS



METALLIC CORRUGATED / BRAIDED HOSE

HYDROFLEX® metal corrugated braided hose is suitable for a wide range of applications where rubber hoses are not functional. In applications with high corrosive fluids and extreme temperatures, flexible metal hoses prove durable and versatile.

The most common material available are **SS316L** grade which is the ideal material in coastal and marine application by providing a better corrosion performance due to the added molybdenum in the steel. **Monel® 400** provides even a better corrosion resistance for seawater and chlorine transfer applications. For applications where continuous temperature greater than 550°C are required **Inconel®625** and **Hastelloy®C276** are particularly suitable.

Our hoses are produced according to **ISO 10380** and are able to withstand temperatures ranging between -250°C to 550°C, without any effect on pressure performance.

Due to the corrugated design of **HYDROFLEX®** metal hoses, provide enhanced anti-collapse properties that makes them ideal for submerged applications with vacuum pressure. Depending on the design and size the working pressure could range from vacuum to 800 bar.

Features

The key benefits of choosing Amnitech corrugated/braided metallic hose:



Operating Pressures



Cryogenic Applications



Temperature Range



Suitable for Gases



Long Lifespan



Meets Standards



Aggressive / Corrosive Fluids



Suitable for Liquids



STAINLESS STEEL EXPANSION JOINTS / BELLOWS

HYDROFLEX® metal stainless steel expansion joints are used in a wide range of applications. Metallic Bellows are relatively light compared to the rubber bellow alternatives available in the market. They are constructed without braiding and can withstand high pressures and temperatures as well as absorb movements in axial, lateral and angular directions.

Stainless Steel material bellows can withstand variations in temperatures from very low to as high as 600°C. Stainless steel has exceptional chemical resistance and physical strength.

HYDROFLEX® metal bellows and expansion joints are generally available in sizes of 1.1/2"(40mm) to 20"(500mm).

HYDROFLEX® Stainless Steel Bellows can be used in static and flexible applications and installed for use in places with constant vibration and flexing.



EXHAUST GASES

In flue or exhaust systems in ships applications that require higher temperature, minimal vibrations and low pressures, **HYDROFLEX®** metal bellows offers two options - Weld Ends or Flanged Ends.

HVAC

There is a vast range of Bellow and Expansion joints used in the HVAC industry. We keep several of the most common types in stock for same day delivery. Some of the common types are welding ends, female thread, press fittings or flanged or grooved ends.



STAINLESS STEEL PUMP CONNECTORS

Stainless Steel Pump connectors are most commonly used in thermal oil pipe systems to absorb vibrations. We offer them in welding ends and fixed flanged ends.

INDUSTRIES

The industries we supply include marine, refrigeration, petrochemical, cryogenic, power generation and industrial.

PETROCHEMICAL

Designed to work in conditions of high chemical resistance, our metal hose assemblies are tested for this demanding sector. Our experience in working within the Petrochemical industry, and high-performance flexible metal hose assemblies will ensure we are the supplier of choice.

MARINE

The product applications within the marine sector varies and are often extreme conditions. Our products can withstand high temperature applications, suitable for use in corrosive media, and offer anti-collapse strength.

REFRIGARATION

In both domestic and industrial sectors, we provide cost effective and reliable solution. Our products can withstand and provide exceptional performance in very low temperature conditions.

CRYOGENIC

Our products are designed to withstand conditions of cryogenic industry. Our Metal hose assemblies are ideal for conveying liquid nitrogen, liquid helium, liquid hydrogen and other cryogenic fluids.

POWER GENERATION

Our Stainless Steel Hose assemblies are not only designed for fluid transfer but also to be durable and flexible to withstand extreme conditions in the Power Generation sector.

INDUSTRIAL

Every demanding application required robust and long-lasting products. With our Flexible Hose assemblies capable of fatigue lifespan of over 35,000, our SS Metalic hose will exceed the demands of the industrial applications.



SERIES A 100

ISO 10380 QUALIFIED

Mechanical Formed Hoses

Series A100 - Annular, Stainless Steel & Standard Pitch Hose

Nominal Hose Size (in.)	Hydroflex Part Number	Braid Layers	Nominal Outside Diameter	Nominal Inside Diameter	Minimum Centerline Bend Radius (mm)		Pressure Rating at ° 23C (kg/cm²)			Weight (kg/mtr.)	Typical Length mtrs
					Static	Dynamic	Working	Max Test	Nominal Burst		
1/4"	A10016006	0	9.6				12	18	140	0.076	
	A100161401006	1	10.8	6.2	25	85	120	180	480	0.150	50
	A100162401006	2	12.0				192	288	768	0.240	
5/16"	A10016008	0	12.1				10	15	120	0.087	
	A100161401008	1	13.3	8.2	32	125	100	150	400	0.167	50
	A100162401008	2	14.5				160	240	640	0.260	
3/8"	A10016010	0	14.3				9	14	100	0.112	
	A100161401010	1	15.5	10.3	38	140	90	135	360	0.215	50
	A100162401010	2	16.7				144	216	576	0.333	
1/2"	A10016012	0	16.7				9	14	90	0.118	
	A100161401012	1	17.9	12.2	45	140	80	128	320	0.240	50
	A100162401012	2	19.1				128	192	512	0.379	
5/8"	A10016016	0	21.6				8	12	85	0.195	
	A100161401016	1	23.0	16.2	58	160	70	105	280	0.400	50
	A100162401016	2	24.4				112	168	448	0.630	
3/4"	A10016020	0	26.8				4	6	65	0.250	
	A100161401020	1	28.3	20.2	70	170	64	96	256	0.495	50
	A100162401020	2	29.8				102	154	410	0.765	
1"	A10016025	0	32.2				3	5	55	0.355	
	A100161401025	1	33.7	25.4	85	190	50	75	200	0.630	50
	A100162401025	2	35.2				80	120	320	0.930	
1 1/4"	A10016032	0	41.1				2	3	50	0.445	
	A100161401032	1	42.7	34.3	105	260	40	60	160	0.847	50
	A100162401032	2	44.3				64	96	256	1.281	
1 1/2"	A10016040	0	49.5				1	2	45	0.682	
	A100161401040	1	51.1	40.1	130	300	35	53	140	1.172	50
	A100162401040	2	52.7				56	84	224	1.694	
2"	A10016050	0	60.3				1	2	45	0.880	
	A100161401050	1	62.3	50.3	160	320	30	45	120	1.606	50
	A100162401050	2	64.3				48	72	192	2.383	

Hose-On-Reel

The working Pressure with Single / Double wire Braid is based on Braiding specification of Series 1101

Advantages of reeling

- *Braided Hose-On-Reel is segmented into a continuous length to reduce scrap
- * Convenient handling, storage and Inventory Control
- * Reduces shelf space

Series A 100 Braided Annular Hose-on-Reel & Single Braid			
Nominal Hose Size (In)	Reel Qty mtrs	Reel dia mm	Reel width mm
1/4"	500	600	500
5/16"	500	600	500
3/8"	500	700	700
1/2"	500	700	700
5/8"	350	700	700
3/4"	450	1050	700
1"	400	1050	700
1 1/4"	200	1050	700
1 1/2"	150	1050	700
2"	100	1050	700

ISO 9001:2008



Series A 200 ISO 10380 QUALIFIED Hydro Formed Hoses

Series A200 - Annular, Stainless Steel & Standard Pitch Hose

Nominal Hose Size (in.)	Hydroflex Part Number	Braid Layers	Nominal Outside Diameter	Nominal Inside Diameter	Minimum Bend Radius (mm)	Centerline Static	Centerline Dynamic	Pressure Rating at 23 °C (kg/cm²)	Max Working	Max Test	Nominal Burst	Weight (kg/mtr.)	Typical Length mtrs
3/4"	A20016020	0	27.0					3	4.5	68	0.245		
	A200161401020	1	28.5	20.5	70	170		64	96	256	0.475	50	
	A200162401020	2	30.0					102	154	410	0.730		
1"	A20016025	0	34.0					3	4.5	60	0.340		
	A200161401025	1	35.5	25.6	85	190		50	75	200	0.614	50	
	A200162401025	1	37.0					80	120	320	0.915		
1 1/4"	A20016032	0	41.0					2	3	55	0.390		
	A200161401032	1	42.5	32.6	105	260		40	60	160	0.802	50	
	A200162401032	2	44.0					64	96	256	1.243		
1 1/2"	A20016040	0	51.0					2	3	50	0.470		
	A200161401040	1	52.5	40.6	130	300		35	52.5	140	1.015	50	
	A200162401040	2	54.0					56	84	224	1.590		
2"	A20016050	0	65.0					1	1.5	45	0.680		
	A200161401050	1	67.0	50.7	160	320		30	45	120	1.444	50	
	A200162401050	2	69.0					48	72	192	2.256		
2 1/2"	A20016065	0	81.0					1	1.5	40	1.064		
	A200161401065	1	83.0	65.6	180	410		24	36	96	1.984	25	
	A200162401065	2	85.0					38	58	154	2.95		
3"	A20016080	0	95.0					0.6	0.9	35	1.098		
	A200161401080	1	97.0	80.3	200	450		18	27	72	2.154	25	
	A200162401080	2	99.0					29	43	115	3.260		
4"	A20016100	0	117.0					0.5	0.75	28	1.401		
	A200161401100	1	119.0	100.8	290	560		16	24	64	3.001	25	
	A200162401100	2	121.5					26	38	102	4.665		
5"	A20016125	0	150.0					0.5	0.8	25	2.667		
	A200161401125	1	152.5	125.4	325	710		14	21.0	56	4.887	10	
	A200162401125	2	155.0					22	34	90	7.196		
6"	A20016150	0	175.0					0.3	0.45	22	3.220		
	A200161401150	1	177.5	150.8	380	815		10	15	40	5.705	10	
	A200162401150	2	180.0					16	24	64	8.289		
8"	A20016200	0	225.0					0.3	0.5	18	4.850		
	A200161401200	1	228.0	197.0	500	1015		8	12.0	32	9.150	10	
	A200162401200	2	231.0					13	19	51	13.62		
10"	A20016250	0	278.0					0.2	0.3	18	7.150		
	A200161401250	1	281.5	250.4	620	1270		7.5	11	30	13.75	10	
	A200162401250	2	285.0					12	18	48	20.550		
12"	A20016300	0	336.0					0.2	0.3	16	10.800		
	A200161401300	1	339.5	300.2	725	1525		6	9	24	18.200	10	
	A200162401300	2	343.0					9.5	14	38	25.822		

Hose-On-Reel

The working Pressure with Single / Double wire Braid is based on Braiding specification of Series 1101

Advantages of reeling

- *Braided Hose-On-Reel is segmented into a continuous length to reduce scrap
- * Convenient handling, storage and Inventory Control
- * Reduces shelf space

Series A 200 Braided Annular Hose-on-Reel & Single Braid			
Nominal Hose Size (in)	Reel Qty mtrs	Reel dia mm	Reel width mm
3/4"	450	1050	700
1"	400	1050	700
1 1/4"	200	1050	700
1 1/2"	150	1050	700
2"	75	1050	700
2 1/2"	90	1200	900
3"	75	1200	900
4"	25	Coil form	
5"	10	Straight length	
6"	10	Straight length	
8"	10	Straight length	
10"	10	Straight length	
12"	10	Straight length	

ISO 9001:2008

Series A 700

ISO 10380 QUALIFIED

Hydro formed Hoses- Heavy Duty

* Available in 304, 321, 316L Stainless Steel

* Shipped in Mill lengths or Braided Hose-On-Reels for easy Fabrication

Series A700 - Annular & Stainless Steel Hose

Nominal Hose Size (in.)	Part Number	Braid Layers	Nominal Outside Diameter	Nominal Inside Diameter	Minimum Centerline Bend Radius (mm)		Pressure Rating at 23 °C (kg/cm ²)			Weight (kg/mtr.)	Typical Length mtrs
					Static	Dynamic	Max Working	Max Test	Nominal Burst		
3/4"	A70021020	0	28.0				4	6	-	0.320	
	A700211404020	1	29.5	20.2	58	203	65	97.5	260	0.605	50
	A700212404020	2	31.0				104	156	416	0.920	
1"	A70021025	0	38.0				3	4.5	-	0.712	
	A700211404025	1	39.5	25.4	70	230	50	75	200	1.062	50
	A700212404025	2	41.5				80	120	320	1.442	
1 1/4"	A70021032	0	46.5				2	3	-	1.043	
	A700211404032	1	48.5	32.5	90	267	45	67.5	180	1.508	50
	A700212404032	2	50.0				72	108	288	2.013	
1 1/2"	A70021040	0	55.5				2	3	-	1.120	
	A700211404040	1	58.0	40.5	102	305	38	57	152	1.720	50
	A700212404040	2	59.5				61	91	243	2.370	
2"	A70021050	0	66.0				1	1.5	-	1.350	
	A700211404050	1	68.0	50.5	127	381	38	57	152	2.320	50
	A700212404050	2	70.5				61	91	243	3.400	
2 1/2"	A70021065	0	82.0				1	1.5	-	1.600	
	A700211404065	1	84.0	65.5	203	508	28	42	112	2.700	25
	A700212404065	2	86.5				45	67	179	3.880	
3"	A70021080	0	96.0				0.6	0.9	-	1.715	
	A700211404080	1	98.5	80.1	230	560	23	34.5	92	3.025	25
	A700212404080	2	101.5				37	55	147	4.465	
4"	A70021100	0	123.0				0.5	0.8	-	2.654	
	A700211404100	1	126.0	100.8	260	620	20	30	80	4.804	25
	A700212404100	2	128.5				32	48	128	7.104	
5"	A70021125	0	150.0				0.5	0.8	-	3.815	
	A700211404125	1	153.0	125.2	330	680	14	21	56	6.265	10
	A700212404125	2	156.5				22	34	90	9.015	
6"	A70021150	0	175.0				0.3	0.5	-	4.558	
	A700211404150	1	178.0	150.7	460	790	14	21	56	8.278	10
	A700212404150	2	181.0				22	34	90	12.308	
8" *	A70021200	0	230.0				0.3	0.5	-	7.810	
	A700211403200	1	233.0	197.1	510	1020	17	26	68	13.460	10
	A700212403200	2	236.0				27	41	109	19.400	
10" *	A70021250	0	284.0				0.3	0.5	-	10.100	
	A700211403250	1	288.0	250.5	650	1300	16	24	64	19.830	10
	A700212403250	2	291.5				26	38	102	30.200	
12" *	A70021300	0	336.0				0.3	0.5	-	14.950	
	A700211403300	1	339.5	300.3	775	1550	12	18	48	25.820	10
	A700212403300	2	343.0				19	29	77	37.300	

Hose-On-Reel

The working Pressure with Single / Double wire Braid is based on Braiding specification of Series 1104

Advantages of reeling

1. Braided Hose-On-Reel is segmented into a continuous length to reduce scrap

* Convenient handling, storage and Inventory Control

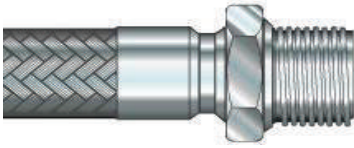
* Reduces shelf space

* Hose 8" , 10" & 12" NB are Braided braid

Series A 700 Braided Annular Hose-on-Reel & Single Braid			
Nominal Hose Size (In)	Reel Qty mtrs	Reel dia mm	Reel width mm
3/4"	150	700	700
1"	150	1050	350
1 1/4"	125	1050	500
1 1/2"	100	1050	700
2"	75	1050	700
2 1/2"	60	1200	900
3"	45	1200	900
4"	25	Coil form	
5"	10	Straight length	
6"	10	Straight length	
8" , 10" & 12"	10	Straight length	

ISO 9001:2008

Fixed nipple with external threads



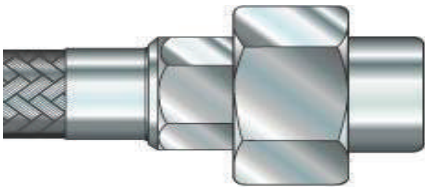
Part number	Material
16015	Steel
16012	Brass
16017	Stainless steel

Fitting with rolling nut and a conical 60 degree conus



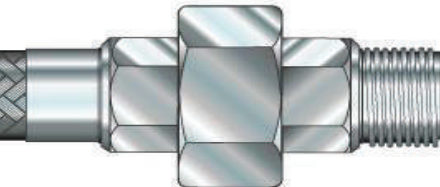
Part number	Material
16035	Steel
16037	Stainless steel

Three part internal threaded union fitting with conical sealing



Part number	Material
16055	Steel
16050	Annealed casting
16057	Stainless steel
16052	Brass

Three part external threaded union fitting with conical sealing



Part number	Material
16060	Annealed casting
16062	Brass
16067	Stainless steel

Pipe nipple, with external thread



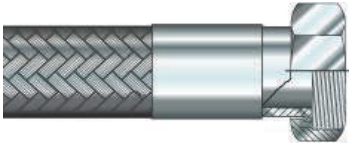
Part number	Material
16005	Steel
16007	Stainless steel

Pipe sleeve, with internal thread



Part number	Material
16025	Steel
16027	Stainless steel

Fitting with rolling nut and a flat sealing



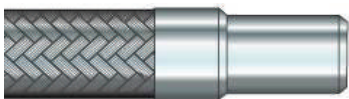
Part number	Material
16095	Steel
16092	Brass
16097	Stainless steel

Elbow -90 degree



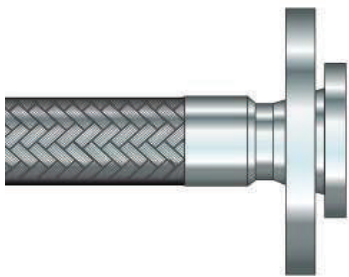
Part number	Material
33915	Steel
33912	Copper
33917	Stainless steel

Pipe



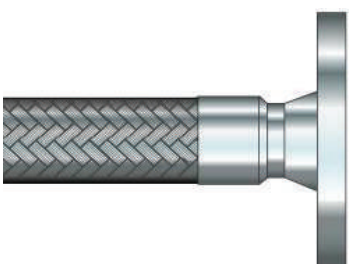
Part number	Material
16215	Steel
16213	Copper, extenal soldering
16223	Copper, internal soldering
16217	Stainless steel

Loose flange, standard PN16



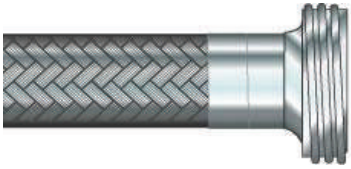
Part number	Material
16235	Steel
16237	Stainless steel
16238	Steel flange + SS collar
16239	Galvanised flange + SS collar

Fixed flange, standard PN16



Part number	Material
16255	Steel
16257	Stainless steel

SMS- nipple. (Dairy standard)



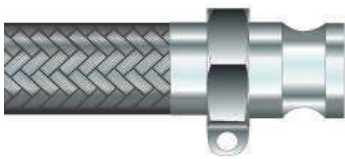
Part number	Material
0626	Stainless steel

SMS- Nut (Dairy standard)



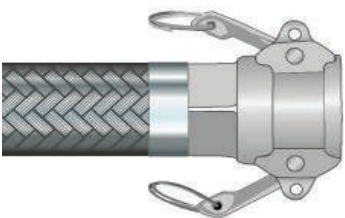
Part number	Material
0624/0623	Stainless steel

Camlock, Male



Part number	Material
SS-Male	Stainless steel
BZ-Male	Bronz, Brass

Camlock, Female



Part number	Material
SS-Female	Stainless steel
BZ-Female	Bronz, Brass

Clamp, TC



Part number	Material
5628	Stainless steel

HYDROFLEX®

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