



Cryomaster composite hose for refrigerated conveyants

Applications

Cryomaster composite hoses are designed specifically for use with fully refrigerated conveyants with temperatures down to -50°C on ships, barges and in marine terminals. This application is including the following media:

Ammonia, Acetaldehyde, Butadiene, Butane, Propane, Butylenes, Dimethylamide, Ethylamine, Ethyl Chloride, Methyl Acetylene, Methyl Bromide Propane, Propadiene, Propylene, Vinyl Chloride, and Refrigerant Gases.

The Cryomaster hose is also suitable for:
Liquid Ethylene at -105°C , Liquid Ethane at -88°C .

Construction

Inner wire	Stainless steel 316
Lining/carass	Polyamide films, fabrics and BOPP
Outer wire	Galvanized- or Stainless steel 316

Temperature range -50°C to 50°C

Safety factor Working pressures based on safety factor 5:1.

Construction

CTS composite hoses are internally and externally supported by selected wires in stainless steel or galvanised mild steel, aluminium or polypropylene coated steel. Their thermoplastic layers range from polypropylene fabric or film to PTFE, PVC coated polyester fabric and polypropylene coated polypropylene fabric. The covers are distinctively coloured for identification.

Safety

CTS composite hoses comply with international standards such as BS 5842, American Coastguard and IMO etcetera. Depending on the maximum working pressure, their design safety factor is 5.1. Electrical continuity is guaranteed by connecting the internal and external helix to the fittings during swaging.

Hose identification:

To facilitate hose identification a longitudinal tape is applied to the outside of the hose, under the external helix. This tape will also avoid twisting the hose. The identification used is as follows:

7 bar, light duty	printed tape displaying	7 bar -100 PSI
10,5 bar,- standard duty	printed tape displaying	10,5 bar - 150 PSI
14 bar, heavy duty	printed tape displaying	14 bar - 200 PSI

Customer name or application tapes are available to requirement.

Temperature

CTS composite hoses can withstand -20°C to 100°C depending on the product to be transported and the operational pressure where our cryogenic hoses are constructed to withstand -50°C to 50°C. Alternative special high temperature construction hoses are also laid down in our specification.

Tests

CTS composite hoses undergo tests at various stages with respect to their:

- pre-test length
- length during the test (1,5 times working pressure)
- post-test length
- electrical continuity

Production batch testing is regularly carried out to ensure performance criteria are achieved.

Cryomaster hose specifications, white - cryogenics service, FS-line

Bore diameter		Max. working Pressure		Bend radius		Weight		Maximum length	
(inches)	(mm)	(psi)	(bar)	(inches)	(mm)	(lbs/ft)	(kg/m)	(ft)	(m)
1,5	40	300	21	6,3	160	1,1	1,60	65	20
2	50	300	21	8,1	205	1,6	2,40	65	20
2,5	65	300	21	9,1	230	2,1	3,20	65	20
3	80	300	21	12,8	325	3,3	4,90	65	20
4	100	300	21	17,1	435	6,0	9,00	65	20
6	150	300	21	24,2	615	8,4	12,60	20	20
8	200	200	14	30,5	775	13,5	20,10	20	20
10	250	150	10,5	38,4	975	16,0	23,90	40	12
12	300	150	10,5	52,2	1325	24,1	36,00	32	10

Cryomaster hose specifications, white - cryogenics service, LS-line

Bore diameter		Max. working Pressure		Bend radius		Weight		Maximum length	
(inches)	(mm)	(psi)	(bar)	(inches)	(mm)	(lbs/ft)	(kg/m)	(ft)	(m)
1,5	40	360	25	6,5	165	1,3	1,90	65	20
2	50	360	25	8,5	215	1,7	2,50	65	20
2,5	65	360	25	9,4	240	2,2	3,30	65	20
3	80	360	25	13,2	335	3,6	5,30	65	20

All our product information and specifications are drafted with extreme care but can be subject to change. We do reserve the right to change product specifications.