FLEYENDA
FLOW TECHNOLOGY

HYDRAULIC HOSE

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1. INSTALLATION

• Hose lines may be assembled and installed only by appropriately qualified personnel.
• The guidelines for handling and fitting Fleyenda hose lines must be observed. Some important points in the guidelines are highlighted below:
• No axial loads (tension or compressive buckling)
• No torsional loads (to avoid torsional loads, the longitudinal axis of the hose and the direction of motion must lie in the same plane).
• Check any separable connections for proper seating before commissioning.
• Damaged hose lines must not be installed or commissioned.
• Cover the hose lines to protect them against weld splatter and grinding dust when working on the equipment.

2. INSTALLATION REQUIREMENTS FOR METAL HOSE LINES

The following provisions must be observed in order to ensure correct handling and installation of Fleyenda metal hose lines:

2.1 CORRECT ROLLING UP AND ROLLING OUT

Pulling on the ends of rolled-out hose lines must be avoided in order not to subject them to damaging torsional loads. In addition, the radius of the hose line must not be smaller than its smallest permissible bending radius. These mistakes can be avoided by rolling up and rolling out the hose lines correctly.

2.2 CORRECT LENGTH

If the length of the hose is too short, hose lines become kinked at the connection points. A straight length of at least 1 x DN per connection point must be added to the length calculated from the bending radius.

2.3 APPROPRIATE BENDING

The incorrect installation of hose lines can lead to excessive bending of the hose lines at the connections. This mistake can be avoided by the use of pipe bends.



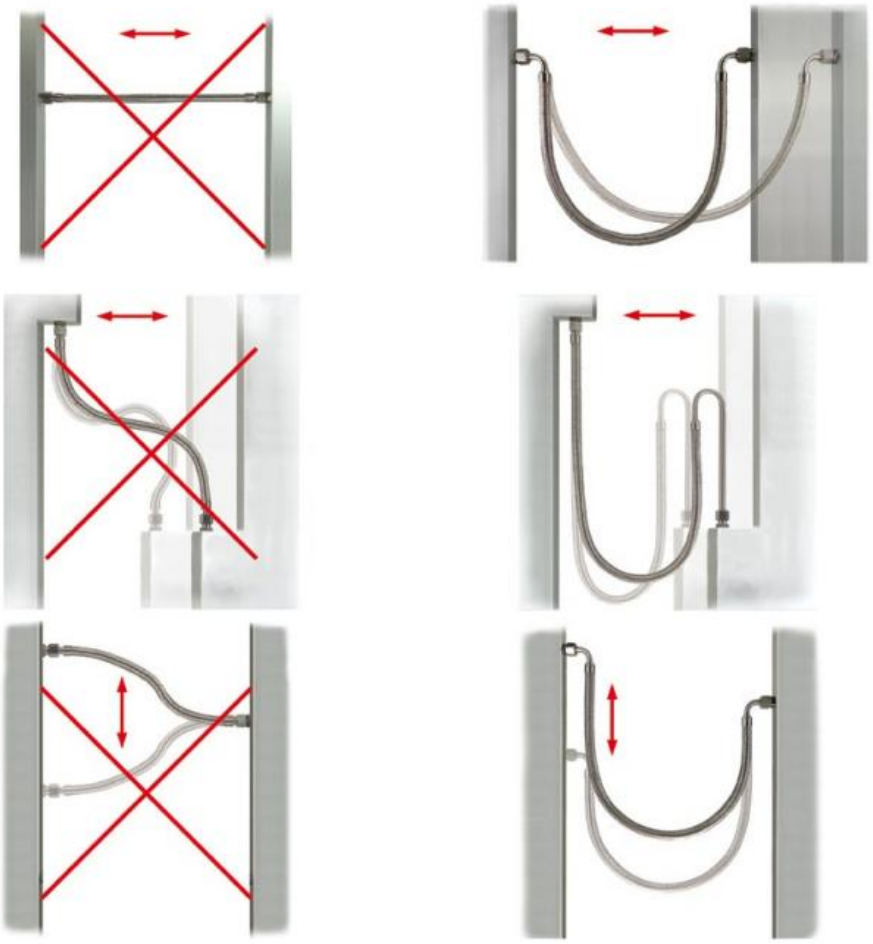



2.4 PREVENTION OF KINKS

Laying the hose line over a saddle or a roller of the appropriate diameter prevents the hose line from kinking.

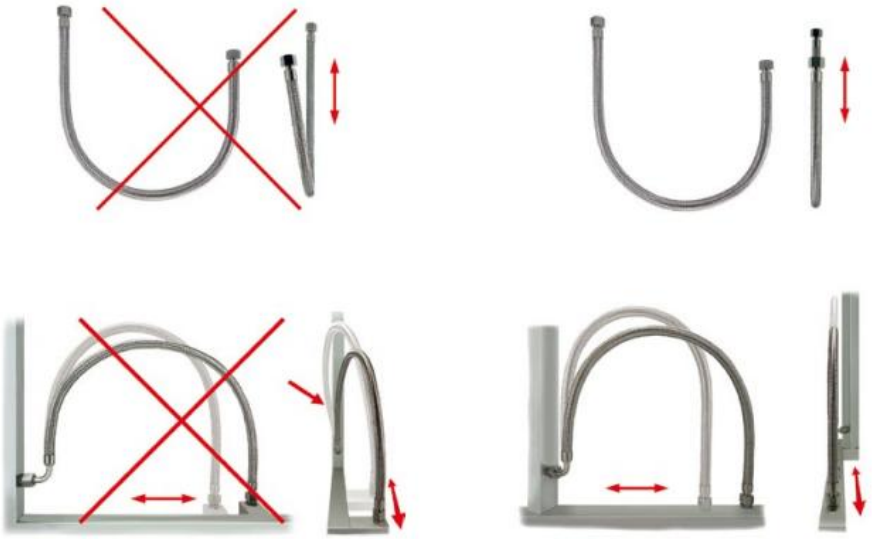

2.5 PREVENTION OF BUCKLING

Incorrect installation can lead to compression of the hose on its longitudinal axis. This mistake can occur as a result of poor installation or the movement of the hose line and leads to the braiding separating from the hose. Once this happens, the pressure resistance of the hose cannot be guaranteed. Hose lines with braiding are therefore not suitable as a means of compensating for axial expansion. Axial expansion can be accommodated by hose lines installed in a U-shape.



2.6 TORSIONAL MOVEMENT

The greatest mistake during installation is to end up with the hose line twisting during operation. Torsional movement leads to early failure of the hose line. Ensure that the pipe and hose axes and the direction of movement lie in the same plane.



3. WIRE BRAIDED METAL HOSE

Fleyenda metal hose assemblies are designed for applications where chemicals and temperature extremes, either from media or atmosphere, are present.

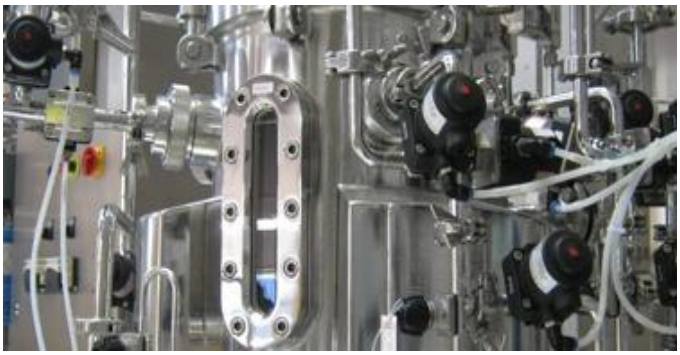
3.1 Product Features

• Sizes 1/4” I.D. up to 14” I.D.
• Excellent chemical and corrosion resistance
• Excellent flexibility, high pressure, long life span
• Proprietary Core Tube Manufacturing Process - Yields a uniform wall thickness, promoting even distribution of stress during flexing and reduces concentrated residual stress
• Full Vacuum - Maintains its shape under full vacuum, other hose types collapse
• Maintains its integrity up to 1200°F(648^{0}C)
• Working pressure: 15--25bar (217psi---362psi)
• Zero permeation
• Leak-free fitting weld connection

3.2 Application

• Aerospace, petroleum, chemical, metallurgy, electric power, papermaking, woodworking, textile, construction, pharmaceuticals, food, tobacco industry, transportation, etc.

1. Conveying corrosive chemical medium or organic solvent.
2. Conveying high temperature gas, hot oil and other high temperature media. (e.g. hot steam, heat transfer oil, etc.)
3. Conveying low temperature medium. (e.g. liquid nitrogen)
4. Conveying water, steam, oil and other media in high temperature environment. (e.g. water vapor system and hydraulic system in coking, steelmaking and continuous casting equipment)
5. Pipelines that need shock absorption or noise elimination. (e.g. pump inlet and outlet)



Fleyenda metal hose assemblies are leak-free, full vacuum hose solutions.

4. WIRE BRAIDED RUBBER HOSE

4.1 Product Features

• Excellent chemical resistance

• Sizes 1/4” I.D. up to 6” I.D.

• Proprietary Core Tube Manufacturing Process - Yields a uniform wall thickness, promoting even distribution of stress during flexing and reduces concentrated residual stress

• Full Vacuum - Maintains its shape under full vacuum, other hose types collapse

• Maintains its integrity from -104°F(-40°C) up to 248°F(120°C)

• Working pressure can be up to 100mpa.

• Multi-layers of steel wire braid: 1, 2, 3layers for option, and multi-layers of steel wire winding: 2, 4, 6layers for option.

• Zero permeation

• Leak-free fitting weld connection

• Customized different material to meet different applications of water, gas, air, hydraulic oil, acid and alkali resistance, ultra-low or ultra-high temperature.

4.2 Product dimension and working pressure

Inner Diameter		working pressure							
Inch	MM	1 wire braid layer		2 wire braid layers		3 wire braid layers		4 wire braid layers	
		kg	psi	kg	psi	kg	psi	kg	psi
1/4"	6mm	265	3769	420	5974	480	6827	545	7752
5/16"	8mm	240	3414	350	4978	408	5803	449	6386
3/8"	10mm	220	3129	300	4267	381	5419	421	5988
1/2"	13mm	190	2702	340	4836	367	5220	570	8107
5/8"	16mm	143	2034	272	3869	297	4224	530	7538
3/4"	19mm	122	1735	217	3086	245	3485	460	6543
7/8"	22mm	110	1565	190	2702	217	3086	410	5831
1"	25mm	95	1351	178	2532	204	2901	350	4978
1.2"	32mm	60	853	150	2133	163	2318	320	4551

4.3 More detailed technical data

1 Wire Braid Layer										
内径 ID (mm)	钢丝层直径 Reinforcement Diameter(mm)	外径 OD (mm)	工作压力 Working Pressure		试验压力 Proof pressure		爆破压力 Burst Pressure		最小弯曲半径 Mini. Bending Radius(mm)	参考重量 kg/m
			Mpa	Psi	Mpa	Psi	Mpa	Psi		
5	9.5	14	21	3043	31.50	4564	63	9129	90	0.25
6	11.7	16	20	2898	30.00	4347	60	8694	100	0.34
8	13.7	18	17.5	2536	26.25	3804	52.5	7607	115	0.41
10	15.7	20	16	2318	24.00	3478	48	6955	130	0.47
13	19.7	24	14	2028	21.00	3043	42	6086	180	0.62
16	22.7	27	12	1739	18.00	2608	36	5216	205	0.65
19	25.7	30	10	1449	15.00	2174	30	4347	240	0.80
22	28.7	33	9	1304	13.50	1956	27	3912	280	0.91
25	32.2	37	8	1159	12.00	1739	24	3478	300	1.09
32	39.2	44	6	869	9.00	1304	18	2608	420	1.20
38	45.2	50	5	725	7.50	1087	15	2174	500	1.80
51	58.2	63	4	579	6.00	869	12	1739	630	2.30
64	71	77	3	435	4.50	652	9	1304	770	3.09
76	84	90	2	290	3.00	435	6	869	930	4.04
89	97	104	1	144.9	1.50	217	3	435	1100	4.95
102	110	116	1	144.9	1.50	217	3	435	1250	5.24

2 Wire Braid Layers

内径 ID (mm)	钢丝层直径 Reinforcement Diameter(mm)	外径 OD (mm)	工作压力 Working Pressure		试验压力 Proof pressure		爆破压力 Burst Pressure		Mini. Bending Radius(mm)	参考重量 kg/m
			Mpa	Psi	Mpa	Psi	Mpa	Psi		
5	11.2	15	60	8694	90	13041	150	21735	90	0.40
6	13.5	18	60	8694	90	13041	150	21735	100	0.45
8	15.5	20	50	7245	75	10868	125	18113	115	0.62
10	17.5	22	40	5796	60	8694	100	14490	130	0.71
9.7	16.5	21.4	53	7680	79.5	11520	132	19127	130	0.71
13	21.5	26	30	4347	45	6521	90	13041	180	0.93
16	24.5	29	21	3043	31.5	4564	63	9129	205	1.00
16	24.5	29	34	4926	51	7390	85	12317	205	1.00
19	27.5	32	18	2608	27	3912	54	7825	240	1.23
19	27.5	32	34	4926	51	7390	85	12317	240	1.23
22	30.5	35	16	2318	24	3478	48	6955	280	1.38
25	34	39	14	2029	21	3043	42	6086	300	1.54
32	41	46	12	1739	18	2608	36	5216	420	1.82
38	47	52	11	1594	16.5	2391	33	4782	500	2.44
51	60	65	8	1159	12	1789	24	3478	630	3.18
64	74	79	5	725	7.5	1087	15	2174	790	3.74
76	86	90	4	580	6	869	12	1789	920	4.77
89	99	106	3	435	4,5	652	9	1304	1060	5.73
102	112	118	3	435	4.5	652	9	1304	1200	6.16
127	137	143	2	290	3	448	6	869	1450	7.32

3 Wire Braid Layers

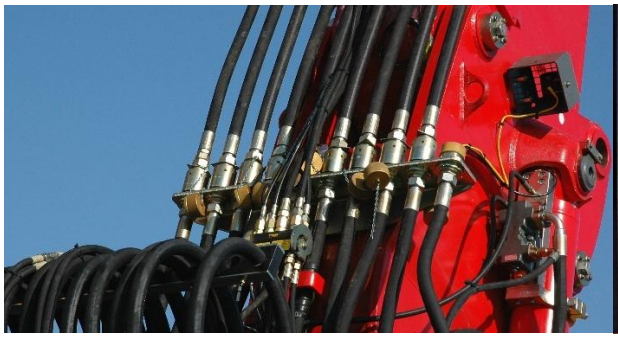
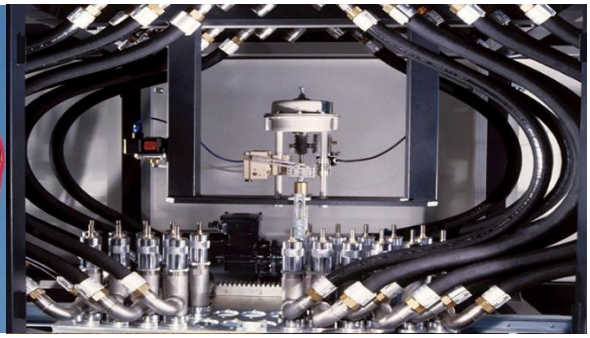
内径 ID (mm)	钢丝层直径 Reinforcement Diameter(mm)	外径 OD (mm)	工作压力 Working Pressure		试验压力 Proof pressure		爆破压力 Burst Pressure		Mini. Bending Radius(mm)	参考重量 kg/m
			Mpa	Psi	Mpa	Psi	Mpa	Psi		
5	13.2	17	72	10433	108	15649	180	26082	120	0.5
6	15	19	68	9853	102	14780	170	24633	140	0.56
8	17.5	22	54	7825	81	11737	120	17388	160	0.83
10	19.5	24	44	6376	66	9563	110	15939	180	0.95
13	23.5	28	36	5200	54	7800	108	15650	240	1.22
16	26.5	31	32	4625	48	7000	96	13900	300	1.3
19	29.5	34	28	4050	42	6010	84	12150	330	1.62
22	32.5	37	26	3750	35	5650	78	11300	380	1.81
25	36	41	24	3500	36	5200	72	10500	400	1.99
32	43	48	13	1884	19.5	2826	39	5651	450	2.46
38	49	54	12	1789	18	2608	36	5216	500	3.08
51	62	67	10	1449	15	2174	30	4347	630	3.96
64	75	80	6	869	9	1304	18	2608	790	4.72
76	88	92	5	725	7.5	1087	15	2174	960	5.69
89	101	107	4	580	6	869	12	1789	1100	6.8
102	114	120	3.5	507	5.25	761	10.5	1521	1280	7.34
127	139	145	3	435	4.5	652	9	1304	1560	8.45

4.4 Application

The hoses are mainly used in mine hydraulic support and oil field exploitation, and are suitable for engineering construction, hoisting and transportation, metallurgical forging, mining equipment, ships, injection molding machinery, agricultural machinery and various machine tools. And it is used to transport petroleum base (such as mineral oil, soluble oil, hydraulic oil, fuel oil, lubricating oil) and water-based liquid (such as emulsion, oil-water emulsion, water) with certain pressure (higher pressure) and temperature in the mechanical and automatic hydraulic system of various industrial departments.





4.5 Fittings

Full range of Fittings, Adaptors and Quick Release Couplings with difference materials of 45# steel, Carbon steel, stainless steel.

Different types of sealing including Plain(A type), Flared (C type), Ball (D type), Double Ferrule, JIC, K type, male thread, F type, Flange, etc.

Welcome to send inquiry to us to get the completed fittings catalogue.

4.6 Quality Assurance

All hoses are manufactured based on our professional reliable factory and quality management.
The hoses are inspected layer by layer in our workshop, then we do inspection for the whole hoses;
The fittings are inspected in the machining workshop;
We do pressure test for the finished hoses with fittings, and overall QC inspection before delivery.