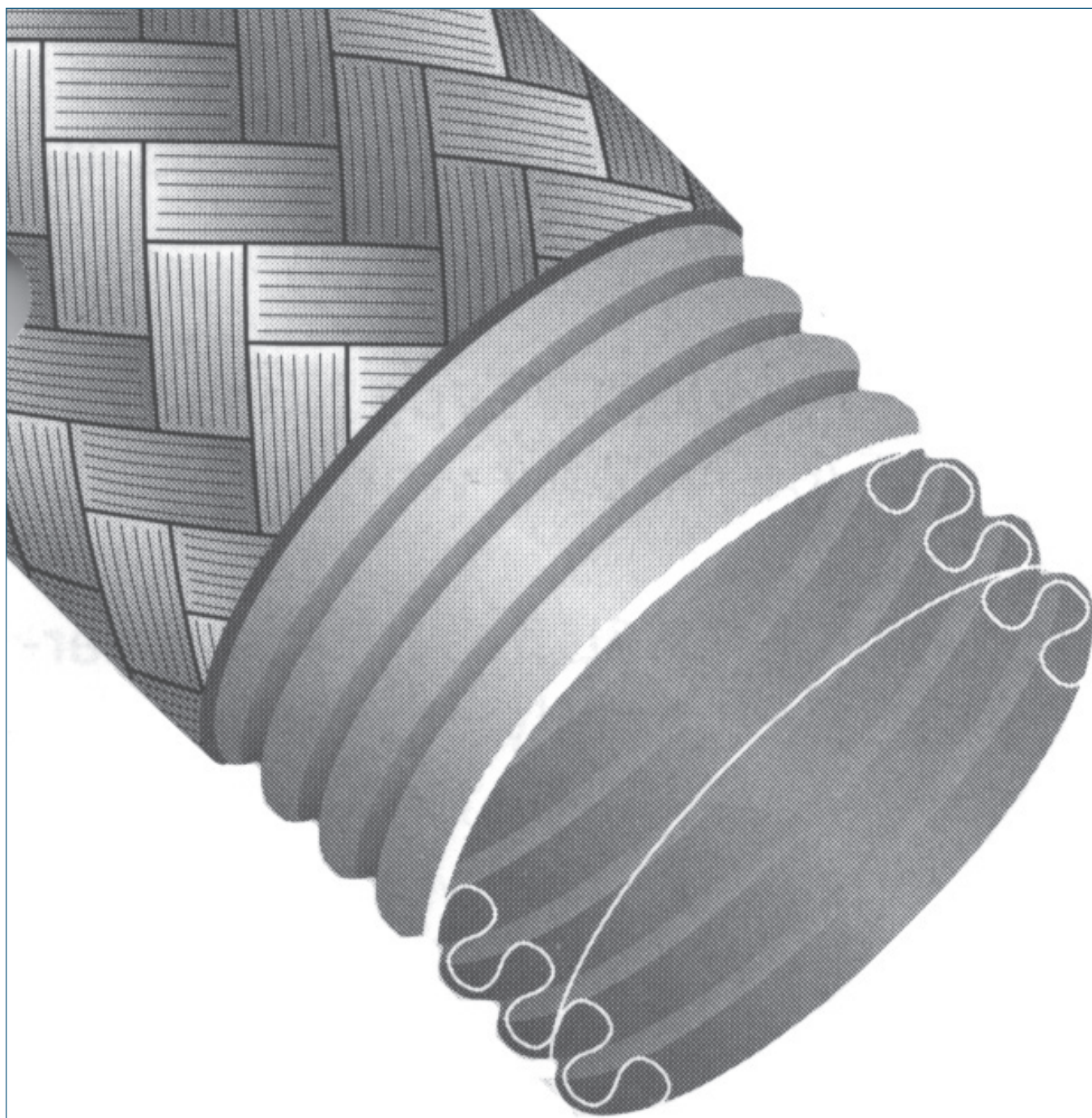


METAL HOSE INOFLEX NP-SERIES



METAL HOSE INOFLEX NP-SERIES

Description	Stainless steel or nickel alloy flexible hose. Hydroformed. Annular corrugated. Narrow pitch. Conforming to EN ISO 10380 Standard.
Characteristics	High reliability, good flexibility, resistant to corrosion and static/pulsating pressure, absence of permeability, excellent absorption of vibrations. Solution for overcoming all problems related to static or dynamic offsets.
Size range	From DN10 to DN300.
Fittings	In any material or type by TIG welding, silver brazing, or by mechanical fixing. Braid ferrules available for optimal attachment of end connectors.
Materials	Material core: Stainless steel 1.4404 EN10028-7 (AISI 316L) Material braid: Stainless steel 1.4301 EN10088-3 (AISI 304) ON REQUEST: other grades like 321SS or C22
Profile	
Construction	Hydroforming of a longitudinally butt-welded tube.
Types	NP0 = without braid NP1 = with single braid NP2 = with double braid ON REQUEST, specific pressure/temperature configurations. Metal hose INOFLEX CORE MATERIAL type 316L if applicable, with braid stainless steel AISI 304
Coverings	NP1 316L with one braid in St. St. 1.4301 EN10088-3 (AISI 304) and additional sleeve in silicone coated fibreglass. Available for hose assembly only, not for bulk hoses.
Use	Delivery under pressure or vacuum of all liquid or gaseous fluids compatible with stainless steel under severe environmental conditions, combined with aggressive chemicals, high temperature, high pressure, frequent movements, static or dynamic offsets, vibrations.

Applications, pressure, temperature and product code

Applications	Cryogenic and technical gasses, industrial and aeronautical refrigeration, exhaust gas systems, air bleed and oil breather in aircrafts, inflammable fluids on board of ships, gas turbines, solar energy systems, transformers, compressors, gas and LPG hoses and connectors, blast furnaces, converters.
Working pressure	Depending on hose size, material and number and type of braids. See technical table.
Temperature	-200° ÷ 550°C. For a temperature range 50° ÷ 550°C working pressure must be reduced by applying the relevant coefficients. See document "NP-series derating factors".

METAL HOSE INOFLEX core material type 1.4404 (AISI 316L)

DN	ID mm	ID Tol. mm	NP braids	OD mm	OD Tol. mm	PN bar	BR static mm	BR dynamic mm	Wt. g/m ±10%
3/8" - DN10	10,6	±0.3	0	15,5	±0.6	5	5	5	110
3/8" - DN10	10,6	±0.3	1	17,0	±0.8	75	35	190	250
3/8" - DN10	10,6	±0.3	2	18,5	±1.0	105	35	205	400
1/2" - DN15	12,2	±0.3	0	18,0	±0.6	5	35	140	115
1/2" - DN15	12,2	±0.3	1	19,5	±0.8	70	35	210	290
1/2" - DN15	12,2	±0.3	2	21,0	±1.0	100	35	225	470
5/8"	15,8	±0.4	0	23,5	±0.8	4	45	190	175
5/8"	15,8	±0.4	1	25,0	±1.0	65	45	285	370
5/8"	15,8	±0.4	2	26,5	±1.2	90	45	305	580
3/4" - DN20	19,6	±0.4	0	28,5	±0.8	3	55	215	260
3/4" - DN20	19,6	±0.4	1	30,0	±1.0	50	55	310	500
3/4" - DN20	19,6	±0.4	2	31,5	±1.2	75	55	330	760
1" - DN25	25,5	±0.4	0	34,5	±0.8	3	70	250	320
1" - DN25	25,5	±0.4	1	36,0	±1.0	40	70	375	640
1" - DN25	25,5	±0.4	2	37,5	±1.2	60	70	385	960
1"1/4 - DN32	32,7	±0.4	0	43,5	±0.8	3	80	270	500
1"1/4 - DN32	32,7	±0.4	1	45,5	±1.0	35	80	405	1000
1"1/4 - DN32	32,7	±0.4	2	47,5	±1.2	50	80	415	1520
1"1/2 - DN40	39,7	±0.5	0	52,0	±1.0	2	100	320	630
1"1/2 - DN40	39,7	±0.5	1	54,0	±1.2	30	100	480	1200
1"1/2 - DN40	39,7	±0.5	2	56,0	±1.4	40	100	490	1770
2" - DN50	51,4	±0.5	0	65,5	±1.0	1	130	360	810
2" - DN50	51,4	±0.5	1	67,5	±1.2	25	130	550	1540
2" - DN50	51,4	±0.5	2	69,5	±1.4	32	130	570	2300
2"1/2 - DN65	66,3	±0.6	0	85,4	±1.2	1	175	450	1380
2"1/2 - DN65	66,3	±0.6	1	87,9	±1.4	20	175	675	2550
2"1/2 - DN65	66,3	±0.6	2	90,4	±1.6	25	175	685	3800
3" - DN80	76,5	±0.6	0	97,5	±1.2	1	200	500	1520
3" - DN80	76,5	±0.6	1	100,0	±1.4	18	200	750	2900
3" - DN80	76,5	±0.6	2	102,5	±1.6	22	200	770	4350
4" - DN100	102,2	±1.0	0	125,0	±1.2	1	250	600	2150
4" - DN100	102,2	±1.0	1	128,0	±1.4	14	250	920	4200
4" - DN100	102,2	±1.0	2	131,0	±1.6	20	250	960	6300
5" - DN125	127,5	±1.0	0	151,5	±1.2	1	325	750	3250
5" - DN125	127,5	±1.0	1	154,5	±1.4	125	325	1160	5800
5" - DN125	127,5	±1.0	2	157,5	±1.6	18	325	1200	8400
6" - DN150	152,0	±1.0	0	177,0	±1.2	8	375	850	4100
6" - DN150	152,0	±1.0	1	180,0	±1.4	10	375	1320	6800

METAL HOSE INOFLEX material type 1.4404 (AISI 316L)

DN	ID mm	ID Tol. mm	NP braids	OD mm	OD Tol. mm	PN bar	BR static mm	BR dynamic mm	Wt. g/m ±10%
6" - DN150	152,0	±1.0	2	183,0	±1.6	15	375	1400	9600
8" - DN200	203,0	±1.0	0	229,6	±1.0	8	460	740	7300
8" - DN200	203,0	±1.0	1	232,6	±1.6	6	460	740	11000
8" - DN200	203,0	±1.0	2	235,6	±2.0	9	460	740	15000
8" - DN200	203,0	±1.0	1	237,0	±1.6	172	460	740	12200
8" - DN200	203,0	±1.0	2	244,0	±1.6	248	460	740	17150
10" - DN250	254,0	±1.0	0	288,0	±1.0	6	535	865	11100
10" - DN250	254,0	±1.0	1	291,0	±1.6	35	535	865	15400
10" - DN250	254,0	±1.0	2	294,0	±2.0	5	535	865	19700
10" - DN250	254,0	±1.0	1	294,0	±1.6	12	535	865	16500
10" - DN250	254,0	±1.0	2	300,0	±1.6	213	535	865	21800
12" - DN300	305,0	±1.0	0	341,6	±1.0	5	690	1120	16400
12" - DN300	305,0	±1.0	1	344,6	±2.0	2	690	1120	21300
12" - DN300	305,0	±1.0	2	347,6	±3.0	3	690	1120	26200
12" - DN300	305,0	±1.0	1	349,0	±2.0	127	690	1120	24900

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Derating factors core material 1.4404 (AISI 316L)

Depending on the working temperature, the working pressure must be adjusted accordingly, applying the following derating factor k1.

T °C	k1 NP-series metal hose in 1.4404 EN10028-7 (AISI 316L) Braid in 1.4301 EN10088-3 (AISI 304)
-200 to 20	1
50	0,90
100	0,74
150	0,67
200	0,62
250	0,58
300	0,54
350	0,51
400	0,50
450	0,48
500	0,47
550	0,47
PN × k1 ≥ Working pressure	
Where:	
PN = Nominal pressure	
T = Working temperature	
k1 = Derating factor	

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