

Stainless steel hoses ES01



Description:

Stainless steel hoses are used for conveying liquids and gases as flexible connecting elements in pressure and vacuum lines, absorbing movement, vibrations and heat expansions.

Features:

- Suitable for media like for example compressed air, water, steam, thermos oil and aggressive media
- Made of stainless steel pipes with lengthwise welds
- Special tools are used to mould hydraulics convolutions into the pipes which achieves the desired moveability and pressure resistance
- The braid prevents the hose from expanding, absorbs tensile forces and also serves as a protective hose.

Diameter*:

DN6 – DN200

Length:

500 and 1000 mm

Options:

Single braid and double braid

Pressure:

0 – 40 bar
depending on design

*The nominal diameter of a hose corresponds to the inside diameter

Connections:

Welding ends

Swivel flanges EN 1092-01 type 02 with collar

Fixed flanges EN 1092-01 type 11

Material hose:

Stainless steel 1.4404

Material mesh:

Stainless steel 1.4301

Material weld ends:

Stainless steel 1.4571

Material flange:

Stainless steel 1.4571

Material collar:

Stainless steel 1.4571

Temperature:

Max. 600 °C only for depressurised use (further temperature details see table operating pressure-temperature-table)

Operating pressure-temperature-table:

	temperature in °C												
PN	20	50	100	150	200	250	300	350	400	450	500	550	600
10	10,00	8,80	7,30	6,60	6,00	5,60	5,20	5,00	4,80	4,70	4,60	4,20	0,00
16	16,00	14,08	11,68	10,56	9,60	8,96	8,32	8,00	7,68	7,52	7,36	6,72	0,00
40	40,00	35,20	29,20	26,40	24,00	22,40	20,80	20,00	19,20	18,80	18,40	16,80	0,00

Operating pressure in bar

Max. operating pressure for temperature 20°C & minimum bending radius:

DN	Version	Max. operating pressure	Min. bending radius		Hose weight (kg/m)
			Dynamic load	Static load	
6	Single braid	40	100 mm	18 mm	0,28
	Double braid	40	100 mm	21 mm	0,40
12	Single braid	40	125 mm	36 mm	0,50
	Double braid	40	125 mm	42 mm	0,71
20	Single braid	40 (PN40)	150 mm	60 mm	0,62
	Double braid	40 (PN40)	150 mm	70 mm	0,90
25	Single braid	40 (PN40)	175 mm	75 mm	0,80
	Double braid	40 (PN40)	175 mm	88 mm	1,10
32	Single braid	35 (PN40)	200 mm	96 mm	1,20
	Double braid	35 (PN40)	200 mm	112 mm	1,70
40	Single braid	30 (PN40)	250 mm	120 mm	1,50
	Double braid	30 / 40* (PN40)	250 mm	140 mm	2,20
50	Single braid	30 / 16** (PN16)	350 mm	150 mm	2,10
	Double braid	30 / 40* (PN40)	350 mm	175 mm	3,10
65	Single braid	25 / 16*** (PN16)	508 mm	203 mm	2,80
	Double braid	25 (PN40)	508 mm	203 mm	3,80
80	Single braid	16 (PN16)	559 mm	229 mm	3,00
	Double braid	25 (PN40)	559 mm	229 mm	4,20
100	Single braid	10 (PN16)	686 mm	330 mm	4,00
	Double braid	16 (PN16)	686 mm	330 mm	5,50
125	Single braid	10 (PN16)	787 mm	457 mm	5,60
	Double braid	16 (PN16)	787 mm	457 mm	7,40
150	Single braid	6 (PN10)	914 mm	483 mm	7,10
	Double braid	10 (PN10)	914 mm	483 mm	9,00
200	Single braid	6 (PN10)	1016 mm	508 mm	14,10
	Double braid	10 (PN10)	1016 mm	508 mm	19,90

*Operating pressure for connection with welding ends 30 bar and for connection with flanges 40 bar (PN40)

** Operating pressure for connection with welding ends 30 bar and for connection with flanges 16 bar (PN16)

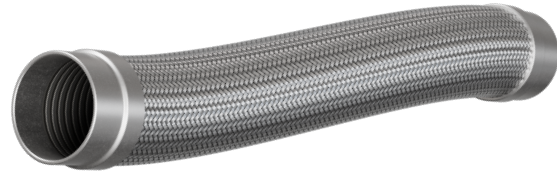
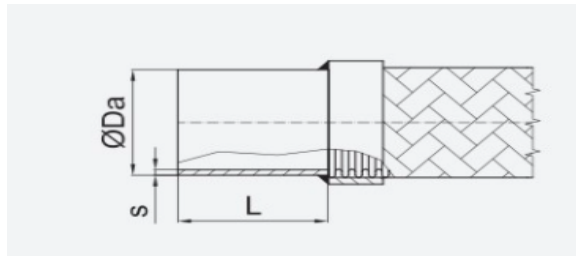
*** Operating pressure for connection with welding ends 25 bar and for connection with flanges 16 bar (PN16)

Important: PN-value only applies to the variants with flange

Further options on request:

- Stainless steel hoses without braid
- Stainless steel hoses with screws, sockets and nipple
- Stainless steel hoses with connections made of black steel
- Double-walled hoses
- Rubber hoses
- PTFE-Inliner
- Diameter DN10, DN16

Dimensions welding ends:



DN	ØDa	s	L*
6	15	1,5	35,0 - 50,0
12	21,3	1,5	35,0 - 50,0
20	26,9	2,0	35,0 - 50,0
25	38 / 33,7**	1,5 / 2,6 ***	35,0 - 50,0
32	42,4	2,6	35,0 - 50,0
40	48,3	2,6	35,0 - 50,0
50	60,3	3,0 / 2,0 ****	35,0 - 50,0
65	76,1	3,0	35,0 - 50,0
80	88,9	3,2	35,0 - 50,0
100	114,3	3,6	35,0 - 50,0
125	139,7	4,0	35,0 - 50,0
150	168,3	4,0	35,0 - 50,0
200	219,1	4,0	35,0 - 50,0

* The length (L) for the welding ends can vary and have a value between 35 and 50 mm

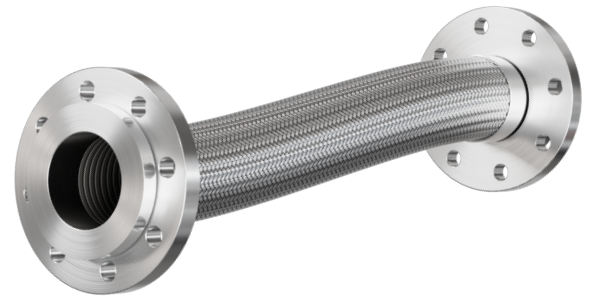
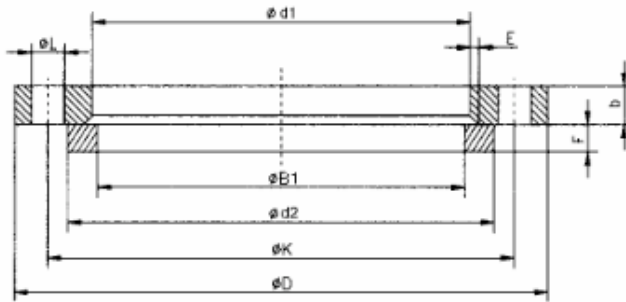
** For variant with hose length 500 mm: External diameter (ØDa) 38 mm

*** For variant with hose length 500 mm: Wall thickness (s) 1,5 mm

****For variant double braid: Wall thickness (s) 2 mm

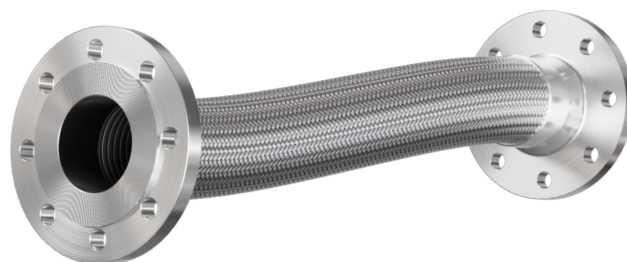
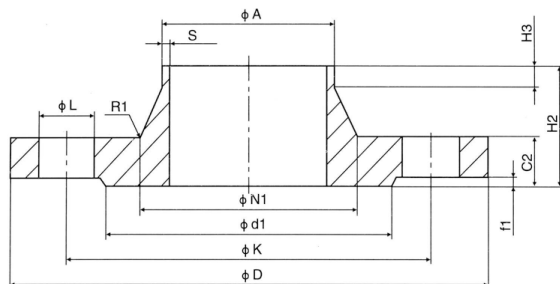
Dimensions flanges:

Swivel flange EN 1092-01 type 02:



Connection		Collar eype 32			Swivel flange EN1092-01 type 02					Screws		
DN	PN	d2	B1	F	D	d1	b	K	E	Amount	Thread	L
20	PN40	58	27,5	14	105	31	16	75	4	4	M12	14
25	PN40	68	34,5	14	115	38	16	85	4	4	M12	14
32	PN40	78	43,5	14	140	47	18	100	5	4	M16	18
40	PN40	88	49,5	14	150	53	18	110	5	4	M16	18
50	PN16	102	61,5	16	165	65	20	125	5	4	M16	18
	PN40	102	61,5	16	165	65	20	125	5	4	M16	18
65	PN16	122	77,5	16	185	81	20	145	6	4	M16	18
	PN40	122	77,5	16	185	81	22	145	6	4	M16	18
80	PN16	138	90,5	16	200	94	20	160	6	8	M16	18
	PN40	138	90,5	18	200	94	24	160	6	8	M16	18
100	PN16	158	116	18	220	120	22	180	6	8	M16	18
125	PN16	188	141,5	18	250	145	22	210	6	8	M16	18
150	PN16	212	170,5	20	285	174	24	240	6	8	M20	22
200	PN10	268	221,5	20	340	226	24	295	6	8	M20	22

Fixed flange EN 1092-01 type 11:



DN	PN	A	D	C2	K	H2	N1	S	R1	H3	d1	f1	Amount	Thread	L
20	PN40	26,9	105	18	75	40	40	2,3	4	6	58	2	4	M12	14
25	PN40	33,7	115	18	85	40	46	2,6	4	6	68	2	4	M12	14
32	PN40	42,4	140	18	100	42	56	2,6	6	6	78	2	4	M16	18
40	PN40	48,3	150	18	110	45	64	2,6	6	7	88	3	4	M16	18
50	PN16	60,3	165	18	125	45	74	2,9	6	8	102	3	4	M16	18
	PN40	60,3	165	20	125	48	75	2,9	6	8	102	3	4	M16	18
65	PN16	76,1	185	18	145	45	92	2,9	6	10	122	3	4	M16	18
	PN40	76,1	185	22	145	52	90	2,9	6	10	122	3	8	M16	18
80	PN16	88,9	200	20	160	50	105	3,2	6	10	138	3	8	M16	18
	PN40	88,9	200	24	160	58	105	3,2	8	12	138	3	8	M16	18
100	PN16	114,3	220	20	180	52	131	3,6	8	12	158	3	8	M16	18
125	PN16	139,7	250	22	210	55	156	4,0	8	12	188	3	8	M16	18
150	PN16	168,3	285	22	240	55	184	4,5	10	12	212	3	8	M20	22
200	PN10	219,1	340	24	295	62	234	6,3	10	16	268	3	8	M20	22

Total weight for version with welded ends:

DN	Length mm	Version	Total weight in kg
6	500	Single braid	0,15
6	1000	Single braid	0,30
6	500	Double braid	0,20
6	1000	Double braid	0,40
12	500	Single braid	0,25
12	1000	Single braid	0,50
12	500	Double braid	0,35
12	1000	Double braid	0,70
20	500	Single braid	0,30
20	1000	Single braid	0,60
20	500	Double braid	0,45
20	1000	Double braid	0,90
25	500	Single braid	0,40
25	1000	Single braid	0,80
25	500	Double braid	0,55
25	1000	Double braid	1,10
32	500	Single braid	0,65
32	1000	Single braid	1,20
32	500	Double braid	0,85
32	1000	Double braid	1,70
40	500	Single braid	0,75
40	1000	Single braid	1,50
40	500	Double braid	1,10
40	1000	Double braid	2,20
50	500	Single braid	1,05
50	1000	Single braid	2,10
50	500	Double braid	1,50
50	1000	Double braid	3,00
65	500	Single braid	1,30
65	1000	Single braid	2,60
65	500	Double braid	1,95
65	1000	Double braid	3,90
80	500	Single braid	1,55
80	1000	Single braid	3,10
80	500	Double braid	2,25
80	1000	Double braid	4,50
100	500	Single braid	2,05
100	1000	Single braid	4,10
100	500	Double braid	3,00
100	1000	Double braid	6,00
125	500	Single braid	3,20
125	1000	Single braid	6,40
125	500	Double braid	4,50
125	1000	Double braid	9,00
150	500	Single braid	3,90
150	1000	Single braid	7,80
150	500	Double braid	5,75
150	1000	Double braid	11,50
200	500	Single braid	5,00
200	1000	Single braid	10,00
200	500	Double braid	7,50
200	1000	Double braid	15,00

Total weight for version with flanges:

DN	Length mm	Version	Total weight in kg
20	500	Single braid	2,30
20	1000	Single braid	2,60
20	500	Double braid	2,45
20	1000	Double braid	2,90
25	500	Single braid	2,60
25	1000	Single braid	3,00
25	500	Double braid	2,75
25	1000	Double braid	3,30
32	500	Single braid	4,29
32	1000	Single braid	4,84
32	500	Double braid	4,49
32	1000	Double braid	5,34
40	500	Single braid	4,91
40	1000	Single braid	5,66
40	500	Double braid	5,26
40	1000	Double braid	6,36
50	500	Single braid	6,51
50	1000	Single braid	7,56
50	500	Double braid	6,96
50	1000	Double braid	8,46
65	500	Single braid	7,62
65	1000	Single braid	8,92
65	500	Double braid	8,91
65	1000	Double braid	10,86
80	500	Single braid	8,75
80	1000	Single braid	10,30
80	500	Double braid	10,87
80	1000	Double braid	13,12
100	500	Single braid	10,83
100	1000	Single braid	12,88
100	500	Double braid	11,78
100	1000	Double braid	14,78
125	500	Single braid	14,02
125	1000	Single braid	17,22
125	500	Double braid	15,32
125	1000	Double braid	19,82
150	500	Single braid	18,10
150	1000	Single braid	22,00
150	500	Double braid	19,95
150	1000	Double braid	25,70
200	500	Single braid	23,00
200	1000	Single braid	28,00
200	500	Double braid	25,50
200	1000	Double braid	33,00

Article number:

Type	Version	Connection	Diameter	Length
ES01	00 – single braid	00 – Weld ends	00 – DN6*	.500 – 500 mm
	01 – double braid	01 – Swivel flange	02 – DN12*	.1000 – 1000 mm
		02 – Fixed flange	04 – DN20	
			05 – DN25	
			06 – DN32	
			07 – DN40	
			08 – DN50	
			09 – DN65	
			10 – DN80	
			11 – DN100	
			12 – DN125	
			13 – DN150	
			14 – DN200	

Example No. ES01000105.500

ES01 | 00 | 01 | 05 | .500

Stainless steel flange
Version: single braid
Connection: Swivel flange
Diameter: DN25
Length: 500 mm

*flange version only on request

Image similar, subject change without notice