Catalogue – flexible hoses and fittings

Complete technical catalogue: FLEXON-N, FLEXON-S, temperature factors, PČ and PO flanges, threaded fittings and weld-on ends with dimension tables.

Technical catalogue

The catalogue contains technical data for FLEXON-N and FLEXON-S hoses, temperature factors and dimension tables of all fittings: flanges, threaded fittings and weld-on ends.



FLEXON-N

Corrugated hose with normal, uncompressed parallel corrugations, DN 6 – DN 150. Material AISI 316L (1.4404) / AISI 321 (1.4541), braid AISI 304 (1.4301), temperatures –270 °C to +700 °C, lengths up to 25 m.

DN	d (mm)	d1 (mm)	R_{min} static	R_{min} dynamic	Unbraided		1 braid		2 braids	
			mm	mm	P_w bar	P_t bar	P_w bar	P_t bar	P_w bar	P_t bar
6	6	9.3	25	100	4	6	100	150	160	240
10	10	14	40	150	4	6	90	135	144	216
12	13	17	50	200	3	4.5	80	120	128	192
20	20	27.2	70	200	2	3	64	96	102	153
25	26	34	90	200	2	3	50	75	80	120
32	32.5	42	110	250	1.5	2.3	40	60	64	96
40	40.8	51	130	250	1.5	2.3	30	45	48	72
50	51	63	175	350	1	1.5	28	42	44	66
65	65.3	81	200	410	1	1.5	24	36	38	57
80	80	96	205	450	1	1.5	18	27	28	42
100	100	118	230	560	0.8	1.2	16	24	26	39
125	125.5	147	280	660	0.6	0.9	12	18	20	30
150	150	172	320	815	0.6	0.9	10	15	16	24

d – inside diameter; d1 – outside diameter; R_{min} – minimum bending radius; P_w – maximum working pressure at 20 °C; P_t – test pressure.

FLEXON-S

Corrugated hose with compressed parallel corrugations and a smaller bending radius. Material AISI 316L (1.4404) / AISI 321 (1.4541), braid AISI 304 (1.4301), temperatures –270 °C to +700 °C, lengths up to 25 m.

DN	d (mm)	d1 (mm)	R_{min} static	R_{min} dynamic	Unbraided		1 braid		2 braids	
			mm	mm	P_w bar	P_t bar	P_w bar	P_t bar	P_w bar	P_t bar
6	6	9.4	19	100	4	6	100	150	160	240
10	10	14	29	115	4	6	90	135	144	216
12	12.9	17.2	34	124	3	4.5	80	120	128	192
20	19.8	27.5	53	170	2	3	64	96	102	153
25	26	34.4	64	195	2	3	50	75	80	120
32	32.3	42.5	79	225	1.5	2.3	40	60	64	96
40	40.6	51.5	98	255	1.5	2.3	30	45	48	72
50	50.8	64	120	295	1	1.5	28	42	44	66
65	65.1	82	150	345	1	1.5	24	36	38	57
80	80	97	180	390	1	1.5	18	27	28	42
100	99.8	119	218	450	0.8	1.2	16	24	26	39
125	125.2	148	255	650	0.6	0.9	12	18	20	30
150	149.7	173.5	290	815	0.6	0.9	10	15	16	24

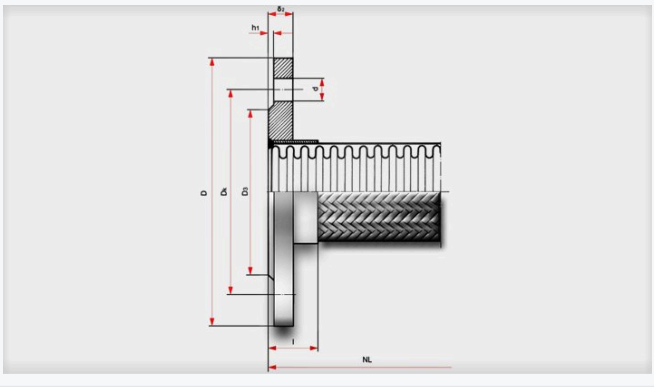
d – inside diameter; d1 – outside diameter; R_{min} – minimum bending radius; P_w – maximum working pressure at 20 °C; P_t – test pressure.

Temperature correction factor K_t

$$P_{rt} = P_r \times K_t$$

Temperature (°C)	-200	-150	-100	-50	0	20	50	100	150	200	250	300	350	400	450	500	550	600	650	700
K_t	1	1	1	1	1	1	0.95	0.83	0.75	0.69	0.65	0.61	0.58	0.56	0.54	0.53	0.52	0.34	0.19	0.1

PČ – Fixed flange



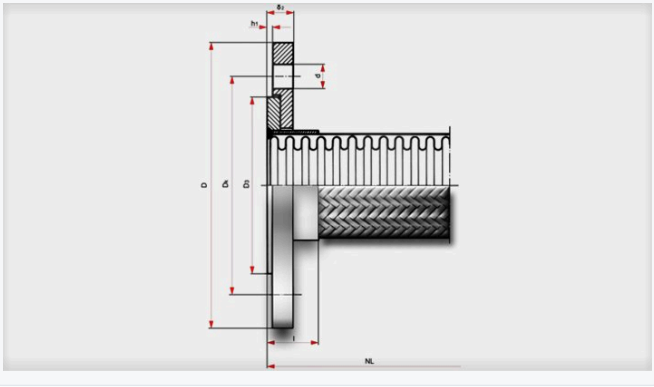
PN – nominal pressure (bar); D – flange outside diameter; Dk – bolt circle diameter; d – bolt hole diameter; other dimensions per drawing (mm).

Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

DN	PN	D	D3	Dk	Holes	d	h1	d2	l
15	2,5;6	80	40	55	4	11,5	2	12	20
〃	10;16	95	45	65	4	14	2	14	20
〃	25;40	95	45	65	4	14	2	16	20
20	2,5;6	90	50	65	4	11,5	2	14	20
〃	10;16	105	58	75	4	14	2	16	20
〃	25;40	105	58	75	4	14	2	18	20
25	2,5;6	100	60	75	4	11,5	2	14	20
〃	10;16	115	68	85	4	14	2	16	20
〃	25;40	115	68	85	4	14	2	18	20
32	2,5;6	120	70	90	4	14	2	14	25
〃	10;16	140	78	100	4	18	2	16	25
〃	25;40	140	78	100	4	18	2	18	25
40	2,5;6	130	80	110	4	14	3	14	25
〃	10;16	150	88	110	4	18	2;3	16	25
〃	25;40	150	88	110	4	18	3	18	25
50	2,5;6	140	90	110	4	14	3	14	25
〃	10;16	165	102	125	4	18	3	18	25
〃	25;40	165	102	125	4	18	3	20	25
65	2,5;6	160	110	130	4	14	3	14	30

PO – Swivel (loose) flange



PN – nominal pressure (bar); D – flange outside diameter; Dk – bolt circle diameter; d – bolt hole diameter; other dimensions per drawing (mm).

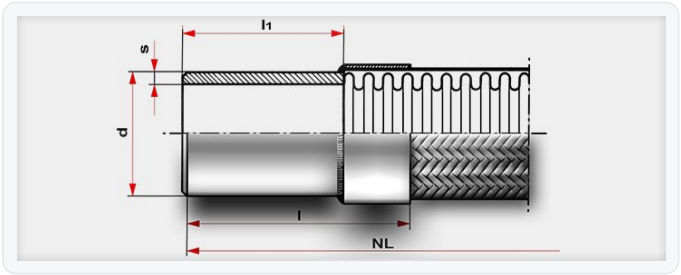
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

DN	PN	D	D3	Dk	Holes	d	h1	d2	l
15	2,5;6	80	40	55	4	11,5	2	12	20
〃	10;16	95	45	65	4	14	2	14	20
〃	25;40	95	45	65	4	14	2	16	20
20	2,5;6	90	50	65	4	11,5	2	14	20
〃	10;16	105	58	75	4	14	2	16	20
〃	25;40	105	58	75	4	14	2	18	20
25	2,5;6	100	60	75	4	11,5	2	14	20
〃	10;16	115	68	85	4	14	2	16	20
〃	25;40	115	68	85	4	14	2	18	20
32	2,5;6	120	70	90	4	14	2	14	25
〃	10;16	140	78	100	4	18	2	16	25
〃	25;40	140	78	100	4	18	2	18	25
40	2,5;6	130	80	110	4	14	3	14	25
〃	10;16	150	88	110	4	18	2;3	16	25
〃	25;40	150	88	110	4	18	3	18	25
50	2,5;6	140	90	110	4	14	3	14	25
〃	10;16	165	102	125	4	18	3	18	25
〃	25;40	165	102	125	4	18	3	20	25

DN	PN	D	D3	Dk	Holes	d	h1	d2	l
65	2,5;6	160	110	130	4	14	3	14	30
〃	10;16	185	122	145	4	18	3	18	30
〃	25;40	185	122	145	8	18	3	22	30
80	2,5;6	190	128	150	4	18	3	16	30
〃	10	200	138	160	4	18	3	20	30
〃	16	200	138	160	8	18	3	20	30
〃	25;40	200	138	160	8	18	3	24	30
100	2,5;6	210	148	170	4	18	3	16	30
〃	10;16	220	158	180	8	18	3	20	30
〃	25;40	235	162	190	8	22	3	24	30
125	2,5;6	240	178	200	8	18	3	18	40
〃	10;16	250	188	210	8	18	3	22	40
150	2,5;6	265	202	225	8	18	3	18	40
〃	10;16	285	212	240	8	22	3	22	40

NC - Weld-on end for welding



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

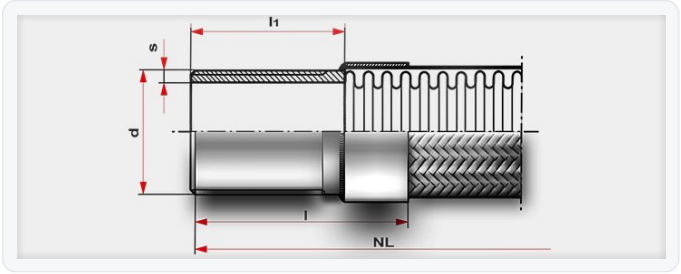
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

NC

DN	d	l1	l	s
6	13,5	30	50	1,6
10	17,2	30	50	1,8
12	21,3	30	50	2
15	21,3	40	60	2
20	26,9	40	60	2,3
25	33,7	40	60	2,6
32	42,4	50	75	2,6
40	48,3	50	75	2,6
50	60,3	50	75	2,9
65	76,1	60	90	2,9
80	89,9	60	90	3,2
100	114,3	60	90	3,6
125	139,7	60	100	4
150	168.3	60	100	4,5

NCS - Weld-on end with male thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

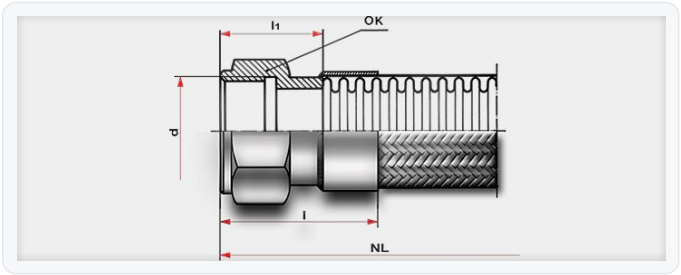
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

NCS

DN	d	l1	l
6	R1/4	15	35
10	R3/8	20	40
12	R1/2	25	45
15	R5/8	25	45
20	R3/4	30	50
25	R1	35	55
32	R1 1/4	35	60
40	R1 1/2	40	65
50	R2	45	70
65	R2 1/2	50	80
80	R3	50	80
100	R4	55	85
125	R5	60	100
150	R6	70	110

PČU - Threaded fitting, fixed, female thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

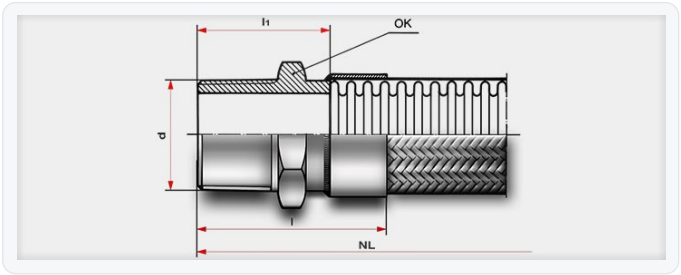
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

PČU

DN	d	OK	l1	l
6	Rp 1/4	17	19	39
10	Rp 3/8	22	20	40
12	Rp 1/2	27	23	43
15	Rp 1/2	27	23	43
20	Rp 3/4	32	27	47
25	Rp 1	41	32	52
32	Rp 1 1/4	46	35	60
40	Rp 1 1/2	55	37	62
50	Rp 2	65	39	64

PČS - Threaded fitting, fixed, male thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

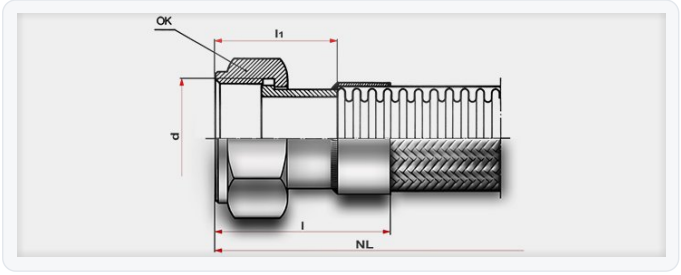
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C
Malleable cast iron (TeL)	300 °C

PČS

DN	d	OK	l1	l
6	Rp 1/4	17	20	40
10	Rp 3/8	22	23	43
12	Rp 1/2	27	28	48
15	Rp 1/2	27	28	48
20	Rp 3/4	32	33	53
25	Rp 1	41	40	60
32	Rp 1 1/4	50	43	68
40	Rp 1 1/2	55	47	72
50	Rp 2	70	50	75
65	Rp 2 1/2	85	55	85
80	Rp 3	100	65	95

PORU - Threaded fitting, swivel, flat-face seal, female thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

Joining method: welding

PORU.R

DN	d	OK	l1	l
6	G 1/4	17	38	58
10	G 3/8	22	38	58
12	G 1/2	27	40	60
15	G 1/2	30	40	60
20	G 3/4	32	44	64
25	G 1	41	47	67
32	G 1 1/4	46	50	75

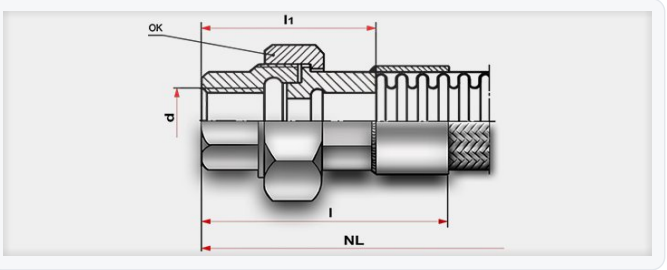
Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C

DN	d	OK	l1	l
40	G 1 1/2	55	50	75
50	G 2	65	52	77
65	G 2 1/2	80	55	85
80	G 3	95	55	85

PORU.M (metric thread)

DN	d	OK	l1	l
6	M 14×1,5	17	38	58
10	M 18×1,5	22	38	58
12	M 22×1,5	27	40	60
15	M 26×1,5	32	40	60
20	M 30×1,5	36	44	64
25	M 38×1,5	46	47	67
32	M 45×1,5	55	50	75
40	M 52×1,5	60	50	75
50	M 62×1,5	75	52	77

PORU 2 - Threaded fitting, swivel union, flat-face seal, female thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

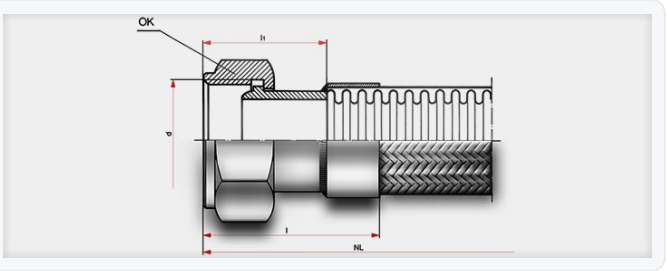
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C
Malleable cast iron (TeL)	300 °C

PORU 2

DN	d	OK	l1	l
6	Rp 1/4	32	38	58
10	Rp 3/8	32	45	65
12	Rp 1/2	46	48	68
15	Rp 1/2	46	48	68
20	Rp 3/4	50	52	72
25	Rp 1	55	58	78
32	Rp 1 1/4	70	65	90
40	Rp 1 1/2	75	70	95
50	Rp 2	90	78	103

POKU - Threaded fitting, swivel, spherical seat seal, female thread



POKU.R

DN	d	OK	l1	l
6	G 1/4	17	38	58
10	G 3/8	22	38	58
12	G 1/2	27	40	60
15	G 1/2	30	40	60

d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

Joining method: welding

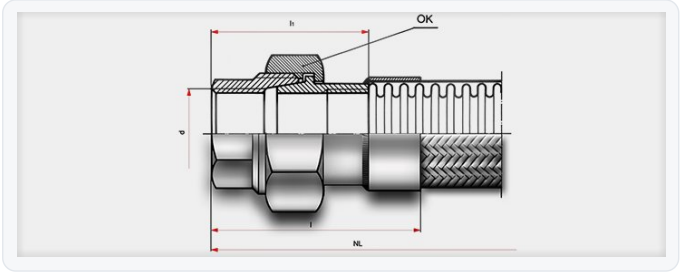
Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C

DN	d	OK	l1	l
20	G 3/4	32	44	64
25	G 1	41	47	67
32	G 1 1/4	46	50	75
40	G 1 1/2	55	50	75
50	G 2	65	52	77
65	G 2 1/2	80	55	85
80	G 3	95	55	85

POKU.M (metric thread)

DN	d	OK	l1	l
6	M 14×1,5	17	38	58
10	M 18×1,5	22	38	58
12	M 22×1,5	27	40	60
15	M 26×1,5	32	40	60
20	M 30×1,5	36	44	64
25	M 38×1,5	46	47	67
32	M 45×1,5	55	50	75

POKU 2 – Threaded fitting, swivel union, cone seat seal, female thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

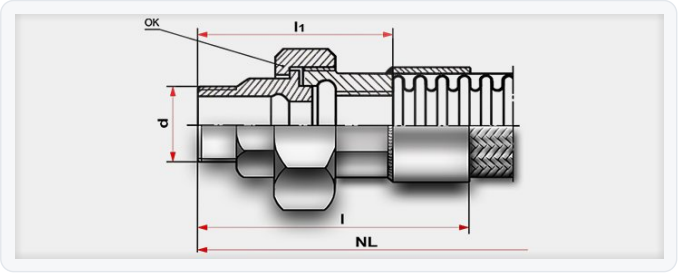
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C
Malleable cast iron (TeL)	300 °C

POKU 2

DN	d	OK	l1	l
6	Rp 1/4	32	38	58
10	Rp 3/8	32	45	65
12	Rp 1/2	46	48	68
15	Rp 1/2	46	48	68
20	Rp 3/4	50	52	72
25	Rp 1	55	58	78
32	Rp 1 1/4	70	65	90
40	Rp 1 1/2	75	70	95
50	Rp 2	90	78	103

PORS - Threaded fitting, swivel union, flat-face seal, male thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

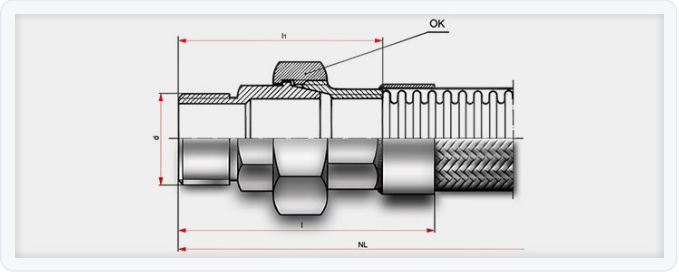
Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C
Malleable cast iron (TeL)	300 °C

PORS

DN	d	OK	l1	l
6	Rp 1/4	32	42	62
10	Rp 3/8	32	58	78
12	Rp 1/2	46	66	86
15	Rp 1/2	46	66	86
20	Rp 3/4	50	72	92
25	Rp 1	55	80	100
32	Rp 1 1/4	70	90	115
40	Rp 1 1/2	75	95	120
50	Rp 2	90	106	131

POKS - Threaded fitting, swivel union, cone seat seal, male thread



d – thread or outside diameter; OK – spanner size; l1, l – lengths per drawing; s – wall thickness (mm). NL – nominal length of the hose assembly.

Joining method: welding

Fitting material	Permissible working temperature
Steel	400 °C
Stainless steel	600 °C
Brass	250 °C
Malleable cast iron (TeL)	300 °C

POKS

DN	d	OK	l1	l
6	Rp 1/4	32	42	62
10	Rp 3/8	32	58	78
12	Rp 1/2	46	66	86
15	Rp 1/2	46	66	86
20	Rp 3/4	50	72	92
25	Rp 1	55	80	100
32	Rp 1 1/4	70	90	115
40	Rp 1 1/2	75	95	120
50	Rp 2	90	106	131