

Convo-Flex®

PTFE- Hoses (helically convoluted)

Pressure Hoses

- Type TCMB1
- Type TCAMB1
- Type TCMB6
- Type TCAMB6

Pressure and Suction Hoses

- Type TCMW1B1
- Type TCAMW1B1
- Type TCMW1B6
- Type TCAMW1B6

Chemistry Hoses (flat inner surface)

- Chemflex (Polyethylene)
- Foodflex (NBR)
- Propharm AF (Silicon)
- Propharm CF (Silicon)
- TLCT/TLCT-AS (FEP/C-PTFE)

UPE-Hose - with even and smooth core

Proflex®

Chemflex/Chemflex-AS Pressure- and Suction-Hose

DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material
1	Hose Core	UPE Polyethylene (ultrahigh compressed)
1a	Hose Core	antistatic UPE Polyethylene (ultrahigh compressed)
2	Covering	antistatic EPDM
3	Helical Coil	Stainless Steel
4	Textile Reinforcement	Polyester



FDA Compliance with Par. 21-177.1520
D.M. dated 21/03/1973 and amendments thereof
BGA and KTW

Temperature Range: -35°C to +100°C
Purification: up to +130°C (max. 30 min)
Fabrication Length: Spools of 40 m
Application: Chemical-, Pharmaceutical-,
Textile-, Food-Industries

Chemflex / Chemflex-AS										
DN	Inch	ID	OD	Bend Radius	Burst Pressure	Vacuum	p _{max}	t _{max}	kg/m	
15	½"	13	23	80	3.0	10	1.6	80	0.39	
20	¾"	19	31	120	3.0	10	1.0	80	0.64	
25	1"	25	38	180	3.0	10	1.0	80	0.86	
32	1 ¼"	32	45	230	3.0	10	1.0	80	1.04	
40	1 ½"	38	52	280	3.0	10	1.0	80	1.32	
50	2"	51	67	360	3.0	10	1.0	80	1.93	
65	2 ½"	63	81	480	3.0	10	1.0	80	2.74	
80	3"	76	94	580	3.0	10	1.0	80	3.60	
100	4"	102	120	800	3.0	10	1.0	80	4.50	

p_{max} Pressure data (MPa)

t_{max} Temperature data (°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Vacuum data (kPa)

Burst Pressure at ambient temperature

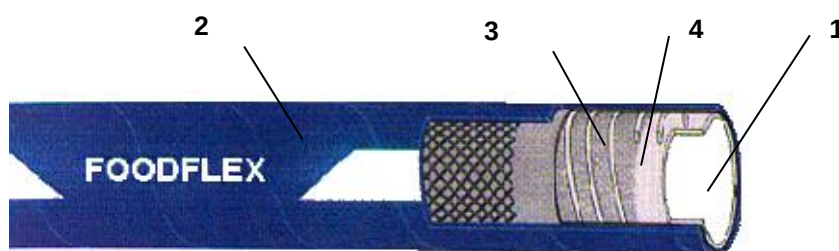
NBR-Hose - with even end smooth core

Proflex®

Foodflex Pressure- and Suction-Hose

DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material
1	Hose Core	NBR white (FDA-Approval) Compliance with Par. 21-177.2600; Food Grade RAL; BgVV
2	Covering	CR-Rubber
3	Helical Coil	Spring Steel
4	Textile Reinforcement	Polyester



Temperature Range:	-20°C up to +100°C
Purification:	up to 130°C (max. 30 min)
Fabrication Length	Spools of 40 m
Application	Dairy, Pharmaceutical-, Foodstuff-Industries and Cosmetics

Foodflex									
DN	Inch	ID	OD	Bend Radius	Burst Pressure	Vacuum	p _{max}	t _{max}	kg/m
15	½"	13	23	80	3.0	13.3	0.6	80	0.80
20	¾"	19	32	114	3.0	13.3	0.6	80	0.85
25	1"	25	37	150	3.0	13.3	0.6	80	0.94
32	1 ¼"	32	44	190	3.0	13.3	0.6	80	1.16
40	1 ½"	38	52	220	3.0	13.3	0.6	80	1.60
50	2"	51	67	300	3.0	13.3	0.6	80	1.99
65	2 ½"	63	81	390	3.0	13.3	0.6	80	3.05
80	3"	76	94	450	3.0	13.3	0.6	80	4.15
100	4"	102	120	600	3.0	13.3	0.6	80	5.45

p_{max} Pressure data (MPa)

t_{max} Temperature data (°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Vacuum data (kPa)

Burst Pressure at ambient temperature

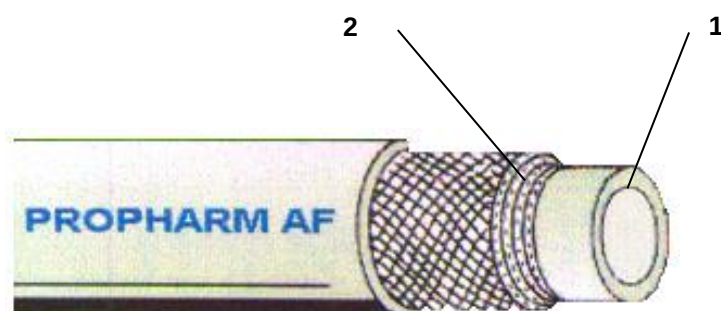
Silicone-Hose

Proflex®

Propharm AF Pressure-Hose

DN 15 - DN 100 and ½" - 4"

Pos.	Component	Material
1	Hose Core	Silicone (Compliance with FDA-Par. 21-177.2600, U.S.P. Class VI; BGA Class XVA)
2	Textile Reinforcement	Polyester (4-fold)



Temperature Range:	-60°C up to +180°C
Fabrication Length:	max. 4 m
Application:	Pharmaceutical- Foodstuff- Industries Medicine, Dairy

Propharm AF									
DN	Inch	ID	OD	Bend Radius	Burst Pressure	Vacuum	p _{max}	t _{max}	
15	½"	12.7	22.5	205	3.2	26.6	0.4	120	
20	¾"	19.0	28.8	255	2.8	39.9	0.4	120	
25	1"	25.4	35.2	305	2.4	53.2	0.3	120	
32	1 ¼"	31.8	41.6	n/a	2.0	60.0	0.3	120	
40	1 ½"	38.1	47.8	n/a	2.0	73.2	0.3	120	
50	2"	50.8	60.6	n/a	1.6	73.2	0.2	120	
65	2 ½"	63.5	73.3	n/a	1.2	93.1	0.2	120	
80	3"	76.2	86.0	n/a	1.2	93.1	0.2	120	
100	4"	101.6	114.0	n/a	0.8	93.1	0.1	120	

p_{max} Pressure data (MPa)

t_{max} Temperature data (°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Vacuum data (kPa)

Burst Pressure at ambient temperature

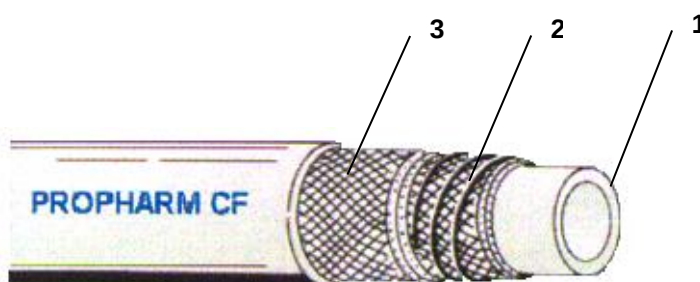
Silicone-Hose

Proflex®

Propharm CF Pressure- and Suction-Hose

DN 15 - DN 100 and ½" - 4"

Pos.	Component	Material
1	Hose Core	Silicone (Compliance with FDA-Par. 21-177.2600, U.S.P. Class VI; BGA Class XVA)
2	Helical Wire	Stainless Steel AISI 304L
3	Textile Reinforcement	Polyester (4-fold)



Temperature Range: -60°C up to +180°C
 Fabrication Length: max. 4 m
 Application: Pharmaceutical- Foodstuff- Industries
 Medicine, Dairy

Propharm CF									
DN	Inch	ID	OD	Bend Radius	Burst Pressure	Vacuum	p _{max}	t _{max}	
15	½"	12.7	25.1	75	4.0	16.0	1.0	120	
20	¾"	19.0	31.4	85	4.0	16.0	1.0	120	
25	1"	25.4	37.8	105	4.0	16.0	1.0	120	
32	1 ¼"	31.8	44.2	120	4.0	16.0	1.0	120	
40	1 ½"	38.1	50.5	140	4.0	16.0	1.0	120	
50	2"	50.8	63.2	250	3.6	16.0	0.9	120	
65	2 ½"	63.5	75.9	300	2.4	23.3	0.6	120	
80	3"	76.2	86.0	390	2.0	23.3	0.5	120	
100	4"	101.6	114.0	880	1.0	28.6	0.4	120	

p_{max} Pressure data (MPa)

t_{max} Temperature data (°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Vacuum data (kPa)

Burst Pressure at ambient temperature

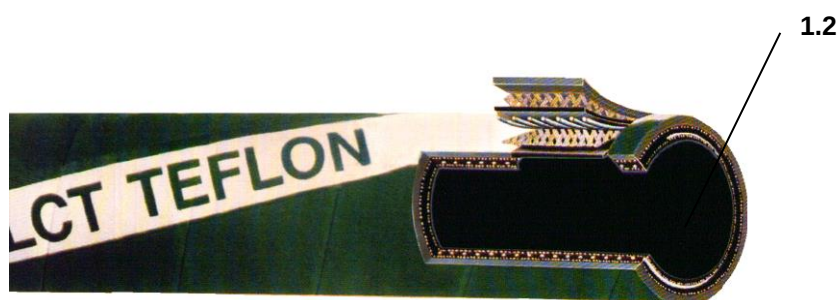
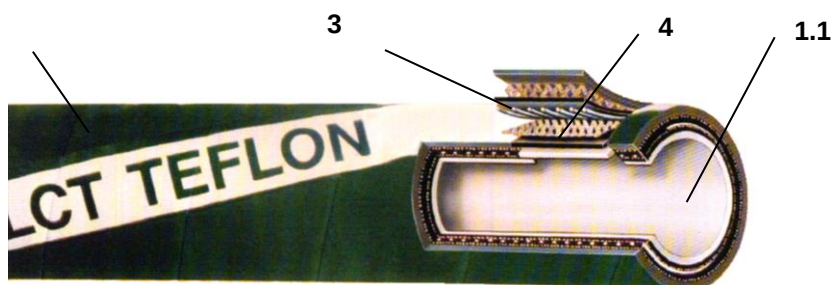
FEP(C-PTFE)-Hose with smooth and even core

Proflex®

TLCT / TLCT-AS

DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material
1.1	Hose Core	FEP (fluorinated Ethylene-Propylene)
1.2	Hose Core	PTFE (black) antistatic ($R \leq 10^8 \Omega$)
2	Covering	EPDM
3	Helical Coil	Spring Steel
4	Textile Reinforcement	Polyester



Temperature Range: -40°C up to +177°C

TLCT / TLCT-AS									
DN	Inch	ID	OD	Bend Radius	Burst Pressure	Vacuum	p _{max}	t _{max}	kg/m
15	½"	12.7	23.1	76	14.7	1.33	3.5	177	0.52
20	¾"	19.0	31.7	115	14.0	1.33	3.5	177	0.92
25	1"	25.4	38.1	152	12.6	1.33	3.2	177	1.12
32	1 ¼"	31.8	44.5	229	11.2	1.33	2.2	177	1.46
40	1 ½"	38.1	52.1	279	9.4	1.33	2.0	177	1.78
50	2"	50.8	67.3	343	8.4	1.33	1.7	177	2.23
65	2 ½"	63.5	81.3	508	6.3	2.66	1.3	177	3.50
80	3"	76.2	94.0	558	4.9	4.66	1.0	177	3.72
100	4"	101.6	119.4	1016	4.2	6.65	1.0	177	5.36

p_{max} Pressure data (MPa)

t_{max} Temperature data (°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Vacuum (kPa)

Burst Pressure at ambient temperature

Connection Fittings
Proflex®

Illustration	Connection Type	DN
	Flange Connections - PTFE flared. No dead spots. Available for Kamlok-Couplings - Stub Ends in Stainless Steel or / PTFE- PFA-lined - Loose flanges St 37-2, Stainless Steel 1.4301 or 1.4435 DIN and ANSI - Sleeves in stainless Steel	20-100 3/4" - 4"
	Clamping Nut (hexagonal) - Stub Ends in Stainless Steel or PTFE- PFA-lined - Clamping Nut 1.4301 or else 1.4435 (BSP or NPT) - plain sealing tapered sealing 60° or. 30° - Sleeves in stainless Steel	25-80 1" - 3"
	Kamlok-Couplings - Stub Ends in Stainless Steel or PTFE- PFA-lined - Kamlok-Couplings made of PP or Stainless Steel - Autolock® Safety Couplings - Gaskets PTFE/Viton - Clamps in Aluminum or Stainless Steel	10-100 3/8" - 4"
	Spherical Threading with Clamping Nut (DIN 11851) - Nipple in Stainless Steel or Stainless Steel polished - Clamping Nut 1.4301 - Gasket PTFE/Viton - Sleeves in stainless Steel	10-100 3/8" - 4"
	Tri-Clamp - Nipple in Stainless Steel or Stainless Steel polished - Sleeves in stainless Steel	10-100 3/8" - 4"

Above displayed connection versions do not represent the full scope of available connections. For additional connection types please consult our technical services

PTFE-Hose - helically convoluted

Convo-Flex®

Pressure Hose Type TCAMB1

DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material	Standard
1	Hose Core	PTFE antistatic ($R \leq 10^8 \Omega$)	ASTM D 4895
2	Braid	Stainless Steel	AISI 304L



TCAMB1									
DN	Inch	Outer-ø	s(PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m	
15	½ "	19	0.9	25	25	5.0	260	0.14	
20	¾ "	30	1.0	55	29	6.0	260	0.39	
25	1 "	37	1.1	85	21	4.0	260	0.54	
32	1 ¼ "	45	1.2	100	21	4.0	260	0.68	
40	1 ½ "	48	1.5	120	17	3.5	260	1.10	
50	2 "	60	1.5	165	13	2.5	260	1.71	
65	2 ½ "	88	1.6	230	6	1.4	260	2.14	
80	3 "	95	1.6	260	7	1.2	260	3.31	
100	4 "	126	1.8	400	4	1.0	260	4.05	

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

PTFE-Hose - helically convoluted
Convo-Flex®
Pressure Hose Type TCAMB6
DN 15 - DN 80 or ½" - 3"

Pos.	Component	Material	Standard
1	Hose Core	PTFE antistatic ($R \leq 10^8 \Omega$)	ASTM D 4895
2	Braid	Polypropylene	



TCAMB6									
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m	
15	½ "	22	0.9	50	4.0	1.0	90	0.13	
20	¾ "	33	1.0	55	4.0	1.0	90	0.34	
25	1 "	40	1.1	85	4.0	1.0	90	0.46	
32	1 ¼ "	48	1.2	100	4.0	1.0	90	0.57	
40	1 ½ "	52	1.4	120	4.0	1.0	90	0.71	
50	2 "	69	1.5	165	4.0	1.0	90	1.15	
65	2 ½ "	79	1.6	230	2.8	0.7	90	2.14	
80	3 "	90	1.6	260	2.4	0.6	90	3.31	

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

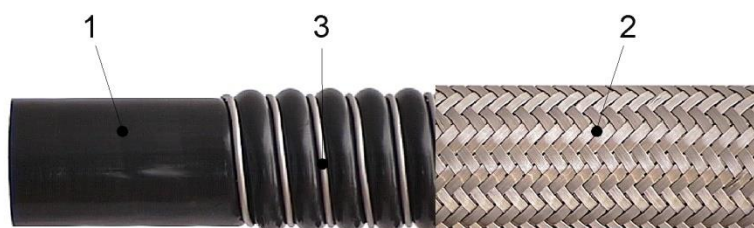
- Elevated temperatures and pressure rates on request

PTFE-Hose - helically convoluted

Convo-Flex®

Pressure- and Suction-Hose Type TCAMW1B1 DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material	Standard
1	Hose Core	PTFE antistatic ($R \leq 10^8 \Omega$)	ASTM D 4895
2	Braid	Stainless Steel	AISI 304L
3	Helical Wire	Stainless Steel	AISI 304L



TCAMW1B1									
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m	
15	½ "	19	0.9	25	17	3.5	260	0.22	
20	¾ "	31	1.0	55	29	6.0	260	0.54	
25	1 "	38	1.1	85	21	4.0	260	0.89	
32	1 ¼ "	45	1.1	100	21	4.0	260	1.18	
40	1 ½ "	50	1.4	120	17	4.0	260	1.71	
50	2 "	60	1.5	165	13	2.5	260	2.61	
65	2 ½ "	85	1.6	230	6	1.4	260	3.44	
80	3 "	95	1.6	260	6	1.2	260	4.71	
100	4 "	126	1.8	400	4	1.0	260	5.55	

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

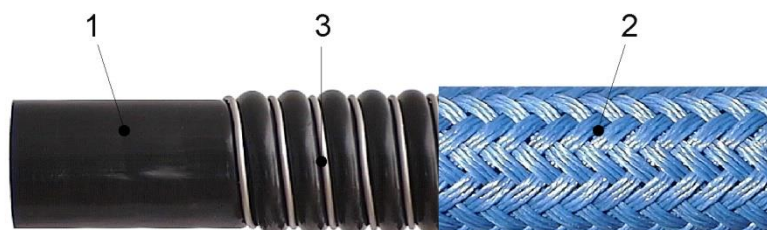
- Elevated temperatures and pressure rates on request

PTFE-Hose - helically convoluted

Convo-Flex®

Pressure- and Suction-Hose Type TCAMW1B6 DN 15 - DN 80 or ½" - 3"

Pos.	Component	Material	Standard
1	Hose Core	PTFE antistatic ($R \leq 10^8 \Omega$)	ASTM D 4895
2	Braid	Polypropylene	
3	Helical Wire	Stainless Steel	AISI 304L



TCAMW1B6									
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m	
15	½ "	22	0.9	50	4.0	1.0	90	0.21	
20	¾ "	34	1.0	55	4.0	1.0	90	0.49	
25	1 "	41	1.1	85	4.0	1.0	90	0.81	
32	1 ¼ "	49	1.2	100	4.0	1.0	90	1.07	
40	1 ½ "	52	1.4	120	4.0	1.0	90	1.31	
50	2 "	70	1.5	165	4.0	1.0	90	2.05	
65	2 ½ "	90	1.6	230	2.8	0.7	90	3.44	
80	3 "	100	1.6	260	2.4	0.6	90	3.92	

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

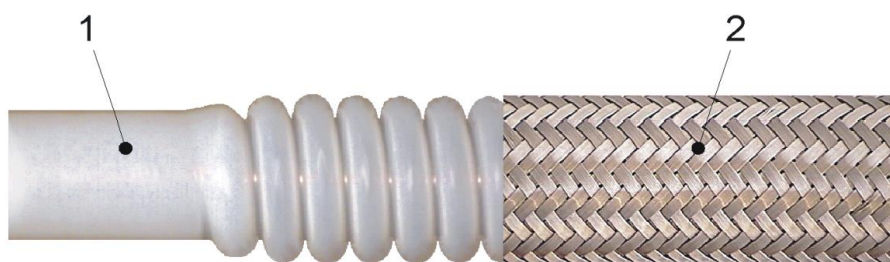
PTFE-Hose - helically convoluted

Convo-Flex®

Pressure Hose Type TCMB1

DN 15 - DN 100 or ½" - 4"

Pos.	Component	Material	Standard
1	Hose Core	pure PTFE	ASTM D 4895
2	Braid	Stainless Steel	AISI 304L



TCMB1								
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m
15	½ "	19	0.9	25	25	5.0	260	0.14
20	¾ "	30	1.0	55	29	6.0	260	0.39
25	1 "	37	1.1	85	21	4.0	260	0.54
32	1¼ "	45	1.2	100	21	4.0	260	0.68
40	1 ¼ "	48	1.5	120	17	3.5	260	1.10
50	2 "	60	1.5	165	13	2.5	260	1.71
65	2 ¼ "	88	1.6	230	6	1.4	260	2.14
80	3 "	95	1.6	260	7	1.2	260	3.31
100	4 "	126	1.8	400	4	1.0	260	4.05

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

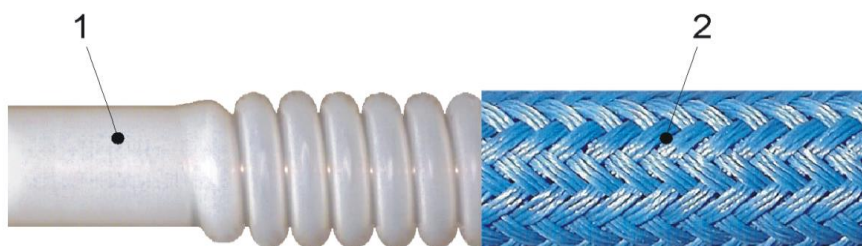
PTFE-Hose - helically convoluted

Convo-Flex®

Pressure Hose Type TCMB6

DN 15 - DN 80 or ½" - 3"

Pos.	Component	Material	Standard
1	Hose Core	pure PTFE	ASTM D 4895
2	Braid	Polypropylene	



TCMB6								
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m
15	½ "	22	0.9	50	4.0	1.0	90	0.13
20	¾ "	33	1.0	55	4.0	1.0	90	0.34
25	1 "	40	1.1	85	4.0	1.0	90	0.46
32	1 ¼ "	48	1.2	100	4.0	1.0	90	0.57
40	1 ½ "	52	1.4	120	4.0	1.0	90	0.71
50	2 "	69	1.5	165	4.0	1.0	90	1.15
65	2½ "	79	1.6	230	2.8	0.7	90	2.14
80	3 "	90	1.6	260	2.4	0.6	90	3.31

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

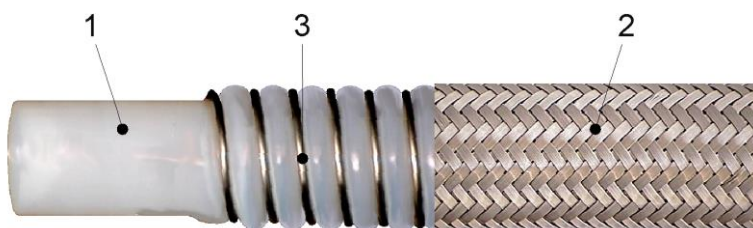
PTFE-Hose - helically convoluted

Convo-Flex®

Pressure- and Suction-Hose Type TCMW1B1

DN 15 - DN 100 and ½" - 4"

Pos.	Component	Material	Standard
1	Hose Core	pure PTFE	ASTM D 4895
2	Braid	Stainless Steel	AISI 304L
3	Helical Wire	Stainless Steel	AISI 304L



TCMW1B1								
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m
15	½ "	19	0.9	25	17	3.5	260	0.22
20	¾ "	30	1.0	55	29	6.0	260	0.54
25	1 "	37	1.0	85	21	4.0	260	0.89
32	1 ¼ "	45	1.1	100	21	4.5	260	1.18
40	1 ½ "	50	1.4	120	17	4.0	260	1.71
50	2 "	60	1.5	165	13	2.5	260	2.61
65	2 ½ "	85	1.6	230	6	1.4	260	3.44
80	3 "	95	1.6	260	6	1.2	260	4.71
100	4 "	126	1.8	400	4	1.0	260	5.55

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

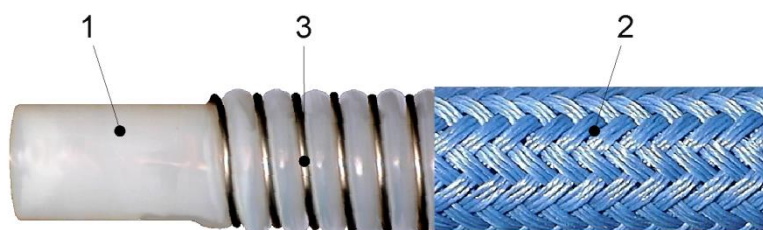
PTFE-Hose - helically convoluted

Convo-Flex®

Pressure- and Suction-Hose Type TCMW1B6

DN 15 - DN 80 or ½ - 3"

Pos.	Component	Material	Standard
1	Hose Core	pure PTFE	ASTM D 4895
2	Braid	Polypropylene	
3	Helical Wire	Stainless Steel	AISI 304L



TCMW1B6									
DN	Inch	Outer-ø	s (PTFE)	Bend Radius	Burst Pressure	p _{max}	t _{max}	kg/m	
15	½ "	22	0.9	50	4.0	1.0	90	0.21	
20	¾ "	34	1.0	55	4.0	1.0	90	0.49	
25	1 "	41	1.1	85	4.0	1.0	90	0.81	
32	1 ¼ "	49	1.2	100	4.0	1.0	90	1.07	
40	1 ½ "	52	1.4	120	4.0	1.0	90	1.31	
50	2 "	70	1.5	165	4.0	1.0	90	2.05	
65	2 ½ "	90	1.6	230	2.8	0.7	90	3.44	
80	3 "	100	1.6	260	2.4	0.6	90	3.92	

p_{max} Pressure data (MPa)

t_{max} Temperature data(°C)

s Length and thickness (mm)

- For fittings please consult corresponding data sheet

- Elevated temperatures and pressure rates on request

Assembly Modifications

Convo-Flex®

Illustration	Fittings with flared PTFE	Fittings Stainless Steel	DN/Size
	Camlock M-Couplings PTFE-flared - fixed - pivoted Gasket PTFE/Viton Sockets Stainless Steel	Camlock M-Couplings PTFE-flared - fixed - pivoted Gasket PTFE/Viton Sockets Stainless Steel	20-80 ¾" - 3"
	Camlock M-Couplings PTFE-flared Type Autolock - fixed - pivoted Gasket PTFE/Viton Sockets Stainless Steel	Camlock M-Couplings Stub End Stainless Steel Type Autolock - fixed - pivoted Gasket PTFE/Viton Sockets Stainless Steel	25-80 1" - 3"
	Flange Connector PTFE flared - Loose Flange Carbon Steel - Loose Flange AISI 304L - Loose Flange AISI 316L - DIN PN 16 - ANSI B 16.5 Class 150 Stub end/socket Stainless Steel	Flange Connector Flare Stainless Steel - Loose Flange Carbon Steel - Loose Flange AISI 304L - Loose Flange AISI 316L - DIN PN 16 - ANSI B 16.5 Class 150 Stub end/socket Stainless Steel	15-80 ½" - 3"
	Threaded Connector Clamping Nut with Spherical Thread (DIN 11851) PTFE flared Sleeves Stainless Steel	Threaded Connector Clamping Nut with Spherical Thread (DIN 11851) Flare Stainless Steel Sleeves Stainless Steel	15-100 ½" - 4"
	Threaded Connector Spherical Thread (DIN 11851) PTFE flared Sleeves Stainless Steel	Threaded Connector Spherical Thread (DIN 11851) Flare Stainless Steel Sleeves Stainless Steel	15-100 ½" - 4"

Above displayed connector versions do not represent the full scope of available connections. For additional connection types please consult our technical services