



Hose Technology



Welcome

The MARKERT Group specialises in the production and distribution of high-quality hose and coupling assemblies in addition to textile filters for industrial applications.

The MARKERT Group has two specialised production ranges: **marsoflex**, known for particularly high-quality industrial hose lines, and **marsyntex** for textile filters.

Together they stand for the best user-specific advice, highest quality in all industrial areas and maximum possible efficiency and effectiveness.

Production is carried out in two state-of-the-art certified plants (ISO 9000 / ISO 14000 / EMAS) right in the heart of Europe. Medium-sized and owner-developed structures as well as a qualified team of engineers and office staff guarantee products and customer-supplier relationships at the highest level.

Under the brand name of **marsoflex** we produce hose assemblies for the safe transport of liquid, gaseous and solid media.

Our products provide specialised solutions for all industrial applications. This includes, among others, the chemical and petrochemical industry; refineries; the pharmaceutical industry; carriers and tank storage; the foodstuffs industry; all areas of mechanical engineering; plant manufacturing and industrial engineering as well as the steel industry and foundries.

Due to their specialised requirements, the many diverse application areas make great demands on hose lines. Wide-ranging experience and a precise understanding of operating conditions are required to allow for safe operation. With its **marsoflex** product line, the MARKERT Group guarantees technically coordinated components of the highest quality, expert advice and excellent customer service.



Alfons Markert + Co. GmbH



Contents

	Page
Tank Truck and Bunker Hoses	
Type S - Suction and Discharge Hose NBR 1	04
Type D - Discharge Hose NBR 1	06
Type LTW - Lightweight Suction and Discharge Hose NBR 1	08
Chemical Hoses	
Type 40 HW - Suction and Discharge Hose EPDM	10
Type 44 HW - Suction and Discharge Hose FEP	12
Type 45 HW - Suction and Discharge Hose UPE	14
Type 45 LTW - Lightweight Suction and Discharge Hose UPE	16
Type 48 HW - Chemie- und Pharmaschlauch BioPharm	18
PTFE Hoses	
Type G - Smooth Hose, white with stainless steel braiding	20
Type GC - Smooth Hose, white with wire spiral	22
Type GA - Smooth Hose, black with wire spiral	24
Type C - Convolute Hose, white	26
Type CA - Convolute Hose, black	28
Composite Chemical Hoses	
Type 1015 - Composite Hose	30
Type 1421 - Composite Hose	32
Metal Hoses	
Type EW - Corrugated Stainless Steel Hose	34
Food Service Hoses	
Type L - Suction and Discharge Hose NBR	36
Air / Water Hoses	
Type 60 - Air / Water Hose NBR	38
Type 80 - Multi-Purpose Hose NBR	40
Type 60 - Nitrogen Hose EPDM	42
Type WH - Water Hose EPDM	44
Type PR - Compressed Air Hose SBR	46
Steam Hoses	
Type 202 - EPDM/CSM	48
Type 205 - EPDM/EPDM	50
Pipeline Hoses	
Type 46 HW	52
Special Hoses	54

Tank Truck and Bunker Hose Type S

The **marsoflex** Tank Truck and Bunker Hose Type S is the perfect hose for the loading and unloading of tank trucks, rail wagons and tank ships.

It is suitable as suction and discharge hose for all petroleum based products with a benzol proportion of less than 50% and for petrol qualities with a maximum MTBE additive ratio of 14.8%.

The **marsoflex** Tank Truck and Bunker Hose Type S complies with EN 1761 / EN 12115.

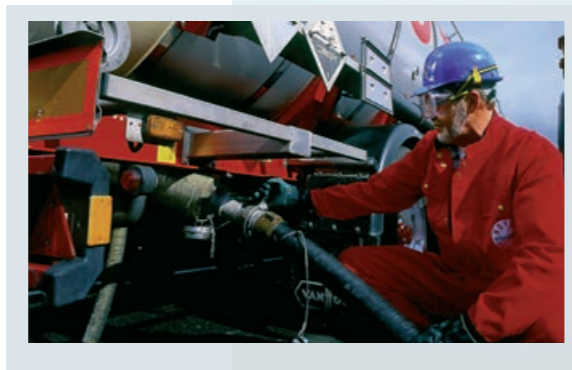
Hose tube: NBR 1, black, smooth
Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals
Hose cover: CR, black, fabric pattern.
 Resistant to oil, ozone and weather influences.
Electrical resistance: $R < 10^6 \Omega$
Temperature range: -40°C to +100°C
Roll length: 40 metres, custom made up to 120 metres

Marking: The **marsoflex** Tank Truck and Bunker Hose Type S is marked in accordance with EN 1761 / EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex Tank Truck and Bunker Hoses Type S can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
	mm	inch					
S 025	25	1"	16 (10)	0,9	≥ 64 (40)	24 (15)	150
S 032	32	1 1/4"	16 (10)	0,9	≥ 64 (40)	24 (15)	175
S 038	38	1 1/2"	16 (10)	0,9	≥ 64 (40)	24 (15)	250
S 050	50	2"	16 (10)	0,9	≥ 64 (40)	24 (15)	275
S 065	63	2 1/2"	16 (10)	0,9	≥ 64 (40)	24 (15)	300
S 075	75	3"	16 (10)	0,9	≥ 64 (40)	24 (15)	350
S 080	80	3"	16 (10)	0,9	≥ 64 (40)	24 (15)	400
S 100	100	4"	16 (10)	0,9	≥ 64 (40)	24 (15)	500
S 125*	125	5"	10 / 16	0,8	≥ 48	15 / 24	625
S 150*	150	6"	10 / 16	0,8	≥ 48	15 / 24	750
S 200*	200	8"	10 / 16	0,8	≥ 48	15 / 24	900

* = based on to EN 12115
 () = data acc. to EN 12115

Tank Truck, Bunker and Cargo Hose Type D

The **marsoflex** Tank Truck, Bunker and Cargo Hose Type D is the perfect hose for the loading and unloading of tank trucks, rail wagons and tank ships. It is also suitable as reel hose.

Among other things, it is suitable as discharge hose for all petroleum based products with a benzol proportion of less than 50% and for petrol qualities with a maximum MTBE additive ratio of 14.8%.

The **marsoflex** Tank Truck, Bunker and Cargo Hose Type D complies with EN 1761 / EN 12115.

Hose tube: NBR 1, black, smooth

Hose reinforcements: High-strength textile braids

Hose cover: CR, black, fabric pattern.

Resistant to oil, ozone and weather influences.

Electrical resistance: R 10⁶ Ω

Temperature range: -40°C to +100°C

Roll length: 40 metres, custom made up to 120 metres

Marking: The **marsoflex** Tank Truck, Bunker and Cargo Hose Type D is marked in accordance with EN 1761 / EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex Tank Truck, Bunker and Cargo Hoses Type D can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø		Working pressure* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
	mm	inch				
D 025	25	1"	16 (10)	≥ 64 (40)	24 (15)	150
D 032	32	1 1/4"	16 (10)	≥ 64 (40)	24 (15)	175
D 038	38	1 1/2"	16 (10)	≥ 64 (40)	24 (15)	225
D 050	50	2"	16 (10)	≥ 64 (40)	24 (15)	275
D 065	63	2 1/2"	16 (10)	≥ 64 (40)	24 (15)	300
D 075	75	3"	16 (10)	≥ 64 (40)	24 (15)	350
D 080	80	3"	16 (10)	≥ 64 (40)	24 (15)	375
D 100	100	4"	16 (10)	≥ 64 (40)	24 (15)	450
D 125*	125	5"	10 / 16	≥ 48	15 / 24	625
D 150*	150	6"	10 / 16	≥ 48	15 / 24	750
D 200*	200	8"	10 / 16	≥ 48	15 / 24	1400

* = based on to EN 12115
() = data acc. to EN 12115



Lightweight Suction and Discharge Hose Type LTW

The **marsoflex**® Lightweight Suction and Discharge Hose Type LTW is the sturdy hose for the loading and unloading of tank trucks, rail wagons and tank ships. Due to its high flexibility, the small bending radius and the light weight it is very easy to handle.

Among other things, it is suitable as suction and discharge hose for all petroleum based products with a benzol proportion of less than 50% and for petrol qualities with a maximum MTBE additive ratio of 14.8%.

The **marsoflex**® Lightweight Suction and Discharge Hose Type LTW complies with EN 1761.

Tube: NBR, black, smooth

Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals

Hose cover: NBR, black, fabric pattern, corrugated. Resistant to oil, ozone and weather influences.

Electrical resistance: $R < 10^6 \Omega$

Temperature range: -40°C to +100°C

Roll length: 40 metres

Marking: The **marsoflex**® Lightweight Suction and Discharge Hose Type LTW is marked in accordance with EN 1761 / EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Lightweight Suction and Discharge Hoses Type LTW can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø		Working pressure bar	Vacuum bar	Burst pressure bar	Test pressure bar	Bending radius = mm
	mm	inch					
LTW 050	50	2"	10	0,9	≥ 40	15	125
LTW 075	75	3"	10	0,9	≥ 40	15	200
LTW 100	100	4"	10	0,9	≥ 40	15	300

EPDM Chemical Hose Type 40 HW

The **marsoflex**® EPDM Chemical Hose Type - 40 HW is suitable for the loading and unloading of road and rail vehicles as well as tank ships.

It is suitable for the suction and discharge of corrosive chemicals such as ketones, esters, alcohol and non-oxidising acids. Not oil-resistant!

The **marsoflex**® EPDM Chemical Hose Type - 40 HW complies with EN 12115.

Hose tube: EPDM, black, smooth
Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals
Hose cover: EPDM, black, fabric pattern. Resistant to chemicals, ozone and weather influences.
Electrical resistance: $R < 10^6 \Omega$
Temperature range: -40°C to +100°C
Note: It is possible to clean the hose when depressurised using steam.
Roll length: 40 metres
Marking: The **marsoflex**® EPDM Chemical Hose Type 40 HW is marked in accordance with EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® EPDM Chemical Hoses Type 40 HW can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm / inch		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
40 HW 019	19	3/4"	16 (10)	0,9	≥ 64 (40)	24 (15)	135
40 HW 025	25	1"	16 (10)	0,9	≥ 64 (40)	24 (15)	150
40 HW 032	32	1 1/4"	16 (10)	0,9	≥ 64 (40)	24 (15)	175
40 HW 038	38	1 1/2"	16 (10)	0,9	≥ 64 (40)	24 (15)	225
40 HW 050	50	2"	16 (10)	0,9	≥ 64 (40)	24 (15)	275
40 HW 065	63	2 1/2"	16 (10)	0,9	≥ 64 (40)	24 (15)	320
40 HW 075	75	3"	16 (10)	0,9	≥ 64 (40)	24 (15)	350
40 HW 080	80	3"	16 (10)	0,9	≥ 64 (40)	24 (15)	370
40 HW 100	100	4"	16 (10)	0,9	≥ 64 (40)	24 (15)	450

* = based on to EN 12115
 () = data acc. to EN 12115

FEP Chemical Hose Type 44 HW

The **marsoflex**® FEP Chemical Hose Type 44 HW is the perfect hose for the loading and unloading of tank vehicles, rail wagons and tank ships as well as for mobile and non-moving facilities in the chemical and pharmaceutical industries.

It is suitable for the suction and discharge of almost all aggressive chemicals, fuels, solvents and oils.

The few chemicals that corrode the tube are: chlorine trifluoride, fluor gas dry +150°C, oxygen difluoride, phosgene gas and fused alkali metals such as sodium.

The **marsoflex**® FEP Chemical Hose Type 44 HW complies with EN 12115.

Hose tube: FEP, seamless, bright, smooth, FDA compliant

Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals

Hose cover: EPDM, black, fabric pattern. Resistant to ozone and weather influences.

Electrical resistance: $R < 10^2 \Omega$

Note: It is possible to clean the hose when de-pressurised at a maximum temperature of 130°C for about 30 minutes using steam.

Temperature range: -40°C to +150°C (depending on media)

Roll length: 40 metres

Marking: The **marsoflex**® FEP Chemical Hose Type 44 HW is marked in accordance with EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® FEP Chemical Hoses Type 44 HW can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm / inch		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
44 HW 019	19	3/4"	16 (10)	0,9	≥ 64 (40)	24 (15)	200
44 HW 025	25	1"	16 (10)	0,9	≥ 64 (40)	24 (15)	225
44 HW 032	32	1 1/4"	16 (10)	0,9	≥ 64 (40)	24 (15)	275
44 HW 038	38	1 1/2"	16 (10)	0,9	≥ 64 (40)	24 (15)	340
44 HW 050	50	2"	16 (10)	0,9	≥ 64 (40)	24 (15)	415
44 HW 075	75	3"	16 (10)	0,9	≥ 64 (40)	24 (15)	525

* = based on to EN 12115
() = data acc. to EN 12115

Universal Chemical Hose Type 45 HW

The **marsoflex**® Universal Chemical Hose Type 45 HW is the perfect hose for the loading and unloading of tank trucks, rail wagons and tank ships. Suitable for the equipping of facilities in the chemical industry.

It is suitable for the suction and discharge of about 95% of all chemical media. For example acids in higher concentrations; bases; solvents containing chlorine and oxygen; mineral oils as well as organic compounds such as alcohols, esters and ketones. Not resistant to fluorinated hydrocarbons, tar, asphalt and LPG.

The **marsoflex**® Universal Chemical Hose Type 45 HW complies with EN 12115.

Hose tube: UPE, black, smooth, FDA compliant
Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals
Hose cover: EPDM, black, fabric pattern.
 Resistant to ozone and weather influences.
Electrical resistance: $R < 10^6 \Omega$
Temperature range: -40°C to $+100^\circ\text{C}$

Note: It is possible to clean the hose when de-pressurised at a maximum temperature of 130°C for about 30 minutes using steam.

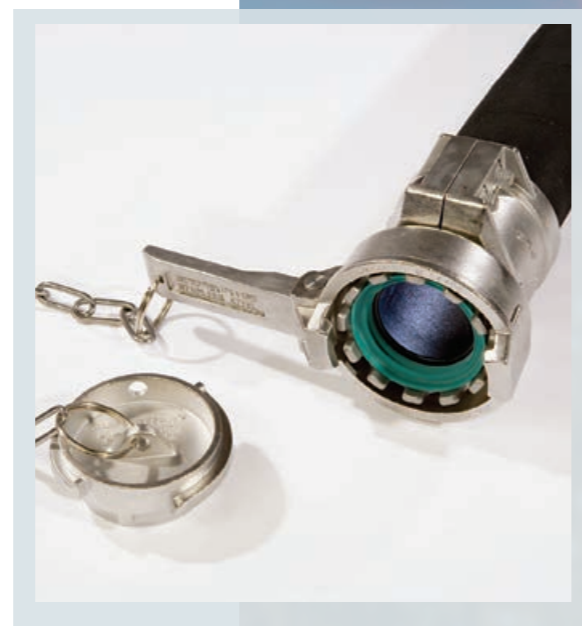
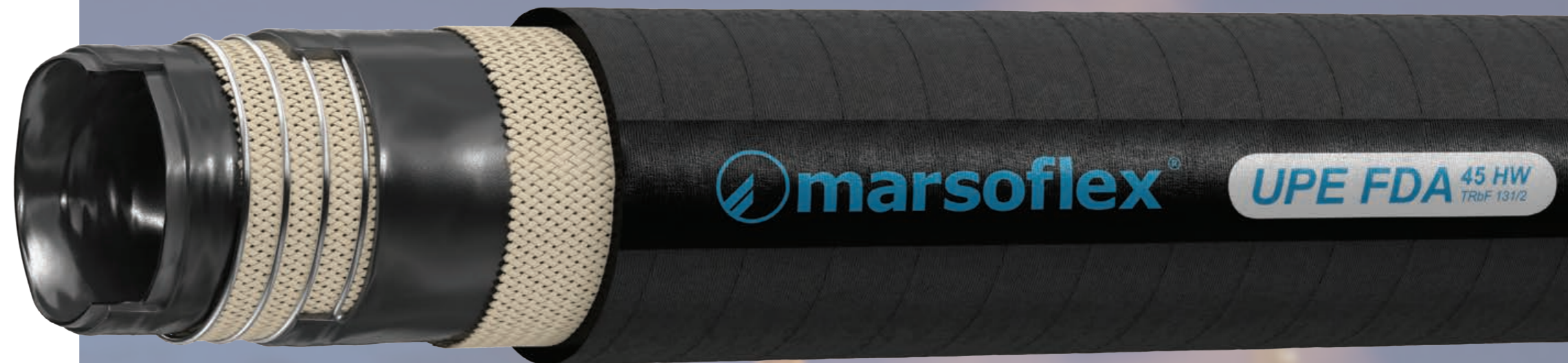
Roll length: 40 metres to inner diameter 4" / 100 mm

Marking: The **marsoflex**® Universal Chemical Hose Type 45 HW is marked in accordance with EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Universal Chemical Hoses Type 45 HW can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.




Order-no.	Inner Ø mm / inch		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
45 HW 019	19	3/4"	16 (10)	0.9	≥ 64 (40)	24 (15)	125
45 HW 025	25	1"	16 (10)	0.9	≥ 64 (40)	24 (15)	150
45 HW 032	32	1 1/4"	16 (10)	0.9	≥ 64 (40)	24 (15)	175
45 HW 038	38	1 1/2"	16 (10)	0.9	≥ 64 (40)	24 (15)	225
45 HW 050	50	2"	16 (10)	0.9	≥ 64 (40)	24 (15)	275
45 HW 065	63	2 1/2"	16 (10)	0.9	≥ 64 (40)	24 (15)	320
45 HW 075	75	3"	16 (10)	0.9	≥ 64 (40)	24 (15)	350
45 HW 100	100	4"	16 (10)	0.9	≥ 64 (40)	24 (15)	450
45 HW 125*	125	5"	16	0.9	≥ 48	24	1000
45 HW 150*	150	6"	16	0.9	≥ 48	24	1200
45 HW 200*	200	8"	16	0.9	≥ 48	24	1600

* = based on to EN 12115
 () = data acc. to EN 12115



Universal Chemical Hose Type LTW-UPE

The favoured use for the  **marsoflex**® Universal Chemical Hose Type LTW-UPE is the loading and unloading of tank trucks, rail wagons and tank ships. It is used when slight bending forces are called for.

It is suitable for the suction and discharge of about 95% of all chemical media. For example, acids in higher concentrations; bases; solvents containing chlorine and oxygen; mineral oils as well as organic compounds such as alcohols, esters and ketones. Not resistant to fluorinated hydrocarbons, tar, asphalt and LPG!

The  **marsoflex**® Universal Chemical Hose Type LTW-UPE complies with EN 12115.

Hose tube: UPE, black, smooth

Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spirals


Hose cover: EPDM, black, fabric pattern, corrugated. Resistant to chemicals, ozone and weather influences.

Electrical resistance: $R < 10^6 \Omega$


Temperature range: -40°C to +100°C

Note: It is possible to clean the hose when depressurised at a maximum temperature of 130°C for about 30 minutes using steam.

Roll length: 40 metres

Marking: The  **marsoflex**® Universal Chemical Hose Type LTW-UPE is marked in accordance with EN 12115 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

 **marsoflex**® Universal Chemical Hoses Type LTW-UPE can be equipped with user-specific fittings and couplings.

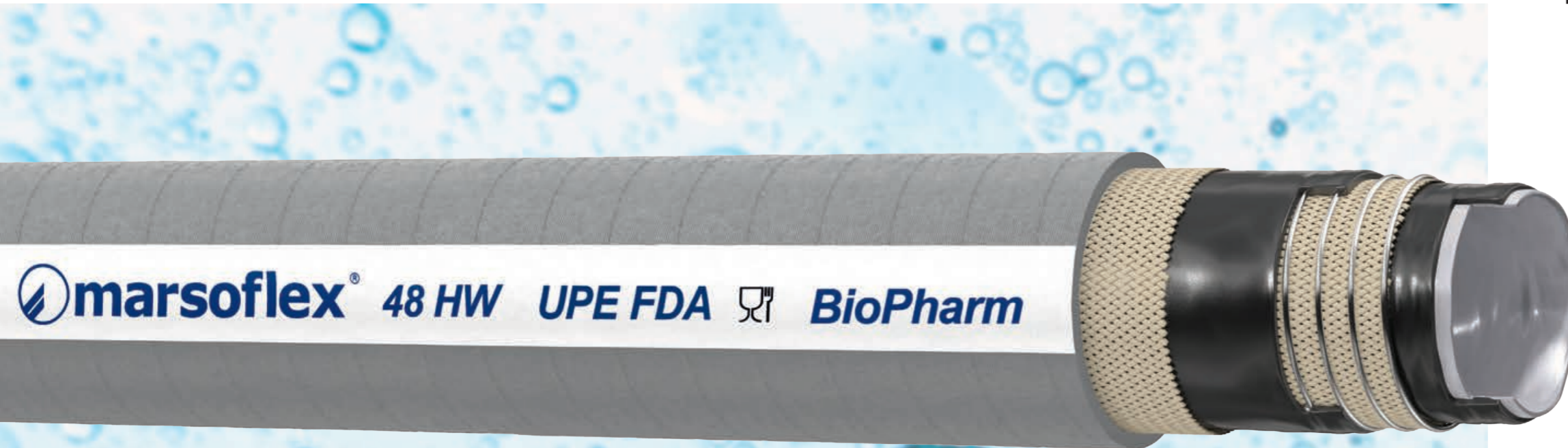
Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm / inch		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure bar	Bending radius* = mm
LTW 050 UPE	50	2"	10	0.9	≥ 40	15	150
LTW 075 UPE	75	3"	10	0.9	≥ 40	15	250
LTW 100 UPE	100	4"	10	0.9	≥ 40	15	350

* = acc. to EN 12115

Pharmaceutical and chemical hose, type 48 HW BioPharm



marsoflex® pharmaceutical and chemical hoses, type 48 HW are ideally suitable for conveying pure liquids or powders. Thanks to their structure, these types of hoses can be used for any purposes in the pharmaceuticals and food industries.

Hoses of type 48 HW are suitable for suction and pressure operations for conveying of approx. 90% of all medium types used in pharmaceutical chemistry and biochemistry. For example: aqueous solutions, CIP media, acids, lye, oils, and greases, as well as organic compounds. Not suitable for flammable bulk goods.

Der marsoflex® pharmaceutical and chemical hoses, type 48HW comply with EN 12115.

Hose tube: UPE, white, smooth, FDA-compliant
Hose reinforcements: High-strength textile braids, kink-resistant steel wire spirals
Hose cover: NBR, grey, fabric pattern. Resistant to oil, ozone, and weather influences.

Electrical resistance: Cover < 10⁹ Ω, intermediate layers R < 10⁶ Ω, tube is insulating
Temperature range: -40°C to +100°C, temporarily up to 130°C (saturated steam)

Note: It is possible to clean the hose in depressurized condition using steam at a maximum temperature of 130°C for about 30 minutes.

Reel length: 40 meters (up to an inner diameter of 3"/ 75 mm)

Marking: marsoflex® pharmaceutical and chemical hoses, type 48HW are marked in accordance with EN 12155; and in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 as well as classification in accordance with the Pressure Equipment Directive (97/23 EC) are included in the scope of delivery. marsoflex® pharmaceutical and chemical hoses, type 48HW can be equipped with user-specific fittings and couplings.

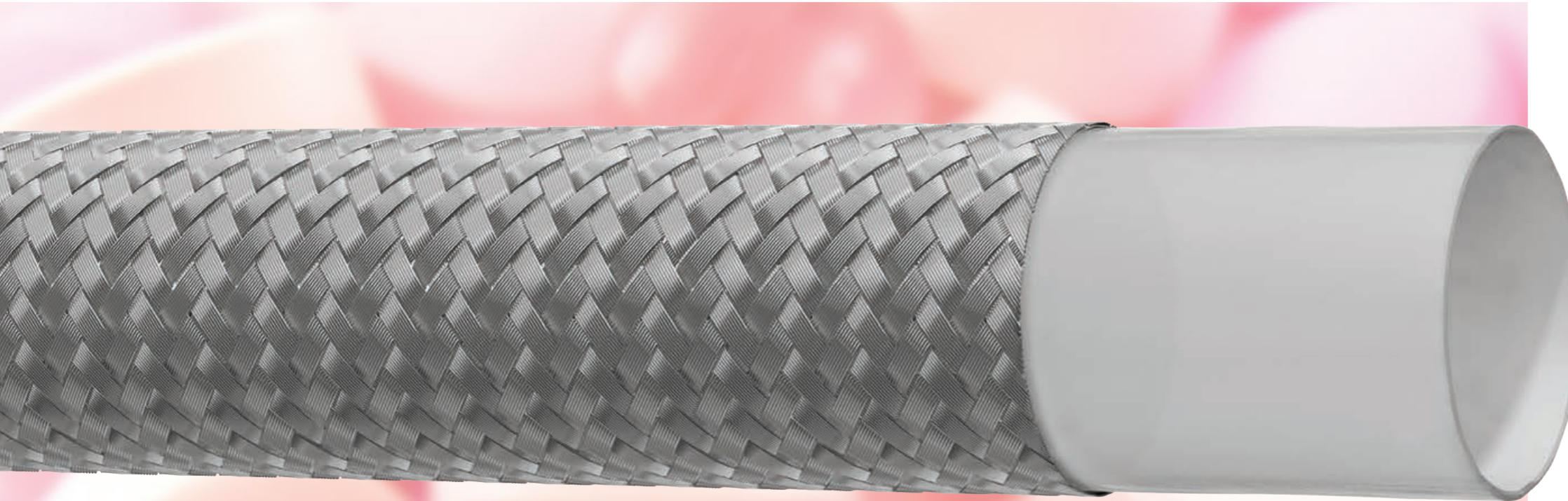
Technical specifications are subject to change without notice.

Order number	ND Inner-Ø mm / inch		Working pressure* bar	Vacuum* bar	Burst pressure* bar	Test pressure* bar	Bending radius* = mm
48 HW 019	19	3/4"	16	0,9	≥ 64 (40)	24 (15)	125
48 HW 025	25	1"	16	0,9	≥ 64 (40)	24 (15)	150
48 HW 032	32	1 1/4"	16	0,9	≥ 64 (40)	24 (15)	175
48 HW 038	38	1 1/2"	16	0,9	≥ 64 (40)	24 (15)	225
48 HW 050	50	2"	16	0,9	≥ 64 (40)	24 (15)	275
48 HW 065	63	2 1/2"	16	0,9	≥ 64 (40)	24 (15)	320
48 HW 075	75	3"	16	0,9	≥ 64 (40)	24 (15)	350

*= based on EN 12115
 () = data acc. to EN 12115



PTFE Smooth Hose Type G



The **marsoflex**® PTFE Smooth Hose Type G is suitable for the chemical industry as well as for the pharmaceutical and foodstuffs industries and in addition for hydraulic applications.

This hose possesses the highest chemical resistance to aggressive chemicals. The few chemicals that decompose the tube are: chlorine trifluoride, fluor gas dry +150°C, oxygen difluoride, phosgene gas and fused alkali metals such as sodium.

Hose tube: PTFE, white, smooth, seamlessly extruded, FDA compliant
Hose cover: Stainless steel wire braids
Temperature range: -60°C to +260°, depending on reinforcement and material of fittings

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® PTFE Smooth Hoses Type G can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.

Order-no.	Inner Ø mm	Working pressure bar	Burst pressure bar	Bending radius ≈ mm
G 05	5	205	820	65
G 06	6	205	820	80
G 08	8	172	690	115
G 10	10	137	550	135
G 12	12	120	480	150
G 16	16	102	410	180
G 20	20	67	270	205
G 25	25	67	270	250



PTFE Smooth Hose Type GC

The **marsoflex**® PTFE Smooth Hose Type GC is suitable for the chemical industry as well as the pharmaceutical and foodstuffs industries.

PTFE Smooth Hose Type GC is used in applications requiring a smooth hose with high flexibility. The stainless steel helix provides the smooth hose with a very high vacuum and kink resistance.

The anti-adhesive quality of PTFE effectuates a trouble-free transport of the media. The smooth tube prevents nests of dirt and bacteria from forming. The hose tube can be cleaned without any difficulties.

Due to its FDA compliance the **marsoflex**® PTFE Smooth Hose is also suitable for use in the foodstuffs industry.

Hose tube: PTFE, white, smooth, seamlessly extruded, FDA compliant

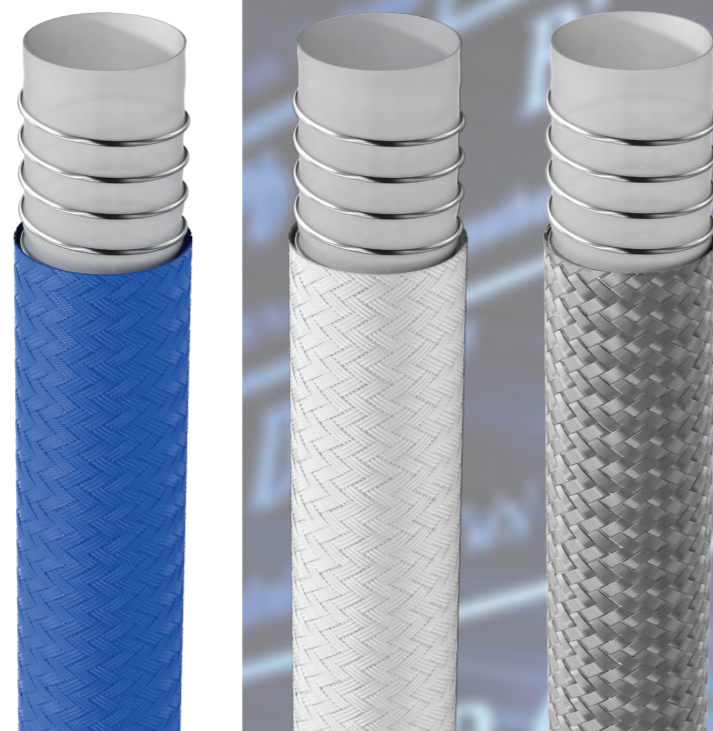
Hose cover: Stainless steel wire braids, polypropylene braids, PVDF braids or stainless steel wire braids with rubber lining

Temperature range: -60°C to +260°, depending on reinforcement and material of fittings

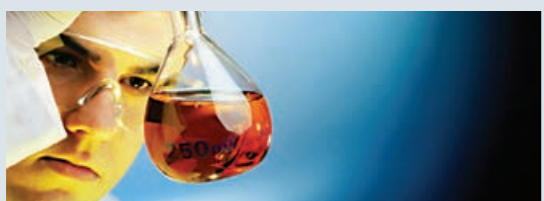
Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® PTFE Smooth Hoses Type GC can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm	Stainless steel braiding with and without coating			PVDF braiding Polypropylene braiding		
		Working pressure bar	Burst pressure bar	Bending radius = mm	Working pressure bar	Burst pressure bar	Bending radius = mm
GC 13	12	40	200	110	10	40	110
GC 16	16	35	175	125	10	40	125
GC 20	20	20	100	150	10	40	150
GC 25	25	16	80	200	10	40	200
GC 32	32	16	80	250	10	40	250
GC 40	38	16	80	300	10	40	300
GC 50	50	16	80	350	10	40	350



PTFE Smooth Hose Type GA



The **marsoflex**® PTFE Smooth Hose Type GA is suitable for the chemical industry as well as the pharmaceutical and foodstuffs industries.

PTFE Smooth Hose Type GA is used in applications requiring a smooth hose with high flexibility. The stainless steel helix provides the smooth hose with a very high vacuum and kink resistance.

The anti-adhesive quality of PTFE effectuates a trouble-free transport of the media. The smooth tube prevents nests of dirt and bacteria from forming. The hose tube can be cleaned without any difficulties.

Due to its FDA compliance the **marsoflex**® PTFE Smooth Hose is also suitable for use in the foodstuffs industry.

Hose tube: PTFE, black, smooth, seamlessly extruded, FDA compliant

Electrical resistance: $R < 10^6 \Omega$

Hose cover: Stainless steel braids, polypropylene braids, PVDF braids, stainless steel wire braids with rubber lining

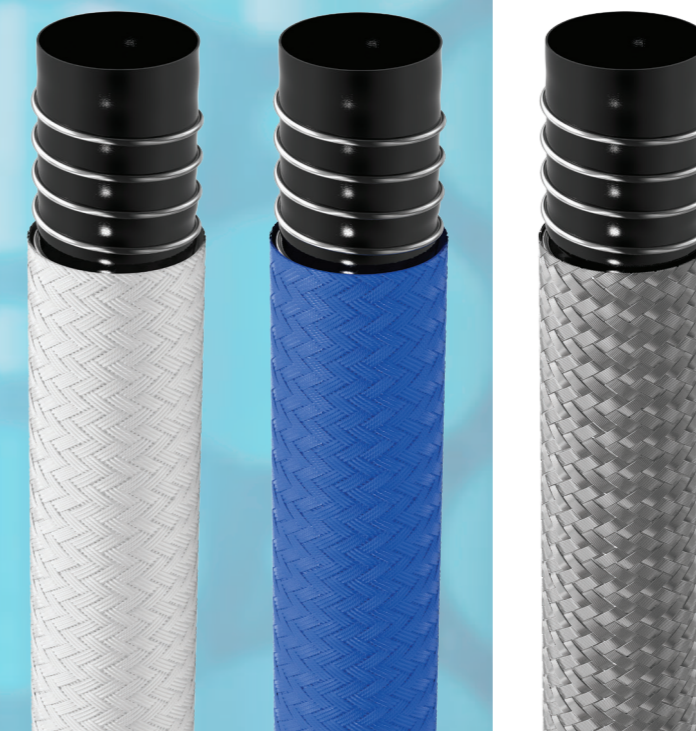
Temperature range: -60°C to +260°C, depending on reinforcement and material of fittings

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® PTFE Smooth Hoses Type GA can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.

Order-no.	Inner Ø mm	Stainless steel braiding with and without coating			PVDF braiding Polypropylene braiding		
		Working pressure bar	Burst pressure bar	Bending radius = mm	Working pressure bar	Burst pressure bar	Bending radius = mm
GA 13	12	40	200	110	10	40	110
GA 16	16	35	175	125	10	40	125
GA 20	20	20	100	150	10	40	150
GA 25	25	16	80	200	10	40	200
GA 32	32	16	80	250	10	40	250
GA 40	38	16	80	300	10	40	300
GA 50	50	16	80	350	10	40	350



PTFE Convuluted Hose Type C

The **marsoflex**® PTFE Convuluted Hose Type C as a highly flexible multi-purpose suction and discharge hose is suitable for use in the chemical industry as well as the foodstuffs and pharmaceutical industries.

Due to their very high flexibility and the highest resistance to chemicals, acids, steam, pharmaceutical products or to solvents the area of application is practically unlimited.

The few chemicals that decompose the tube are: chlorine trifluoride, fluor gas dry +150°C, oxygen difluoride, phosgene gas and fused alkali metals such as sodium.

The anti-adhesive quality of PTFE effectuates a trouble-free transport of the media. The smooth tube prevents nests of dirt and bacteria from forming. The hose tube can be cleaned without any difficulties.

Due to its FDA compliance the **marsoflex**® PTFE Convuluted Hose is also suitable for use in the foodstuffs industry.

Hose tube: PTFE, white, convuluted, seamlessly extruded, FDA compliant

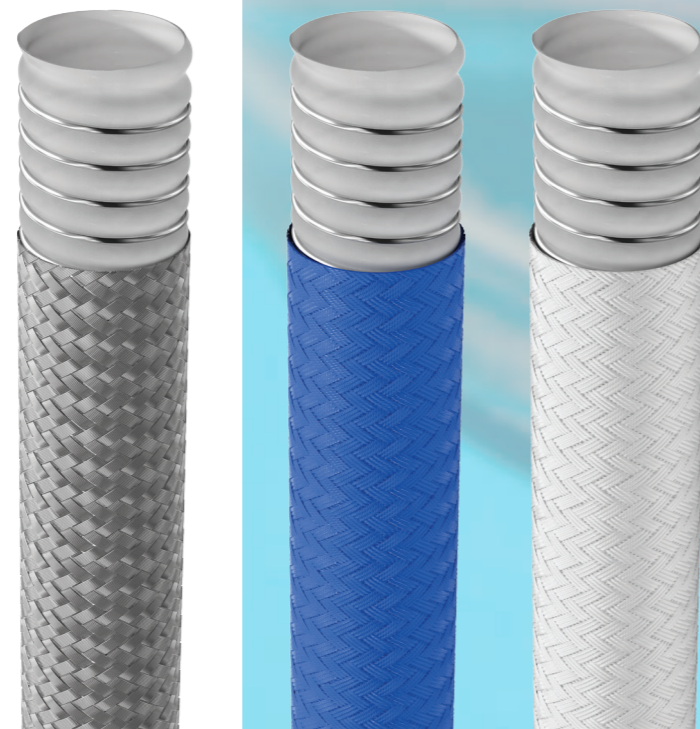
Hose cover: Stainless steel wire braids, polypropylene braids, PVDF braids or stainless steel wire braids with rubber lining

Temperature range: -60°C to +260°C, depending on reinforcement and material of fittings

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® PTFE Convuluted Hoses Type C can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm	Stainless steel braiding with and without coating			PVDF braiding Polypropylene braiding		
		Working pressure bar	Burst pressure bar	Bending radius = mm	Working pressure bar	Burst pressure bar	Bending radius = mm
C006	6	35	170	25			
C008	8	35	170	25			
C013	12	25	125	25	10	40	50
C016	16	25	125	50	10	40	65
C020	20	25	125	65	10	40	75
C025	25	20	100	90	10	40	90
C032	32	16	80	125	10	40	125
C040	38	16	80	150	10	40	150
C050	50	16	80	200	10	40	200
C065	65	10	50	230	7	28	230
C080	80	10	50	300	8	24	300
C100	100	10	40	400			
C150	150	6	24	520			

PTFE Convoluted Hose Type CA



The **marsoflex**® PTFE Convoluted Hose Type CA as a highly flexible multi-purpose suction and discharge hose is suitable for use in the chemical industry as well as the foodstuffs and pharmaceutical industries.

Due to their very high flexibility and the highest resistance to chemicals, acids, steam, pharmaceutical products or to solvents the area of application is practically unlimited.

The anti-adhesive quality of PTFE effectuates a trouble-free transport of the media. The smooth tube prevents nests of dirt and bacteria from forming. The hose tube can be cleaned without any difficulties.

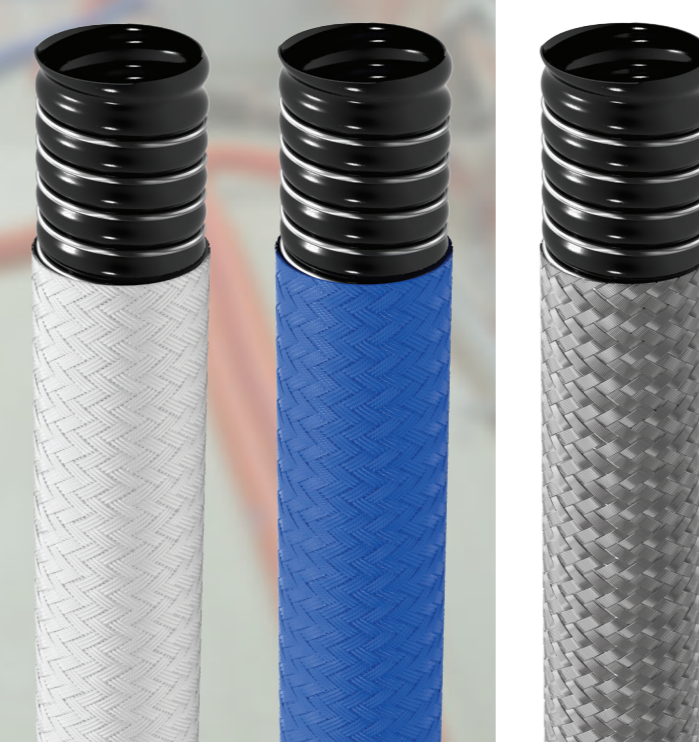
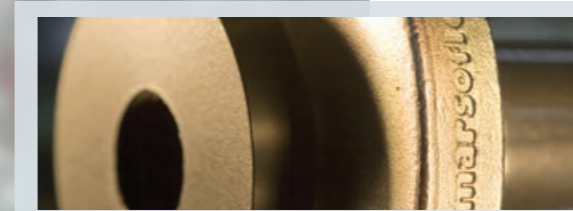
Due to its FDA compliance the **marsoflex**® PTFE Convoluted Hose is also suitable for use in the foodstuffs industry.

Hose tube: PTFE, black, convoluted, seamlessly extruded, FDA compliant
Electrical resistance: $R < 10^6 \Omega$
Hose cover: Stainless steel wire braids, polypropylene braids, PVDF braids or stainless steel wire braids with rubber lining
Temperature range: -60°C to +260°C, depending on reinforcement and material of fitting

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

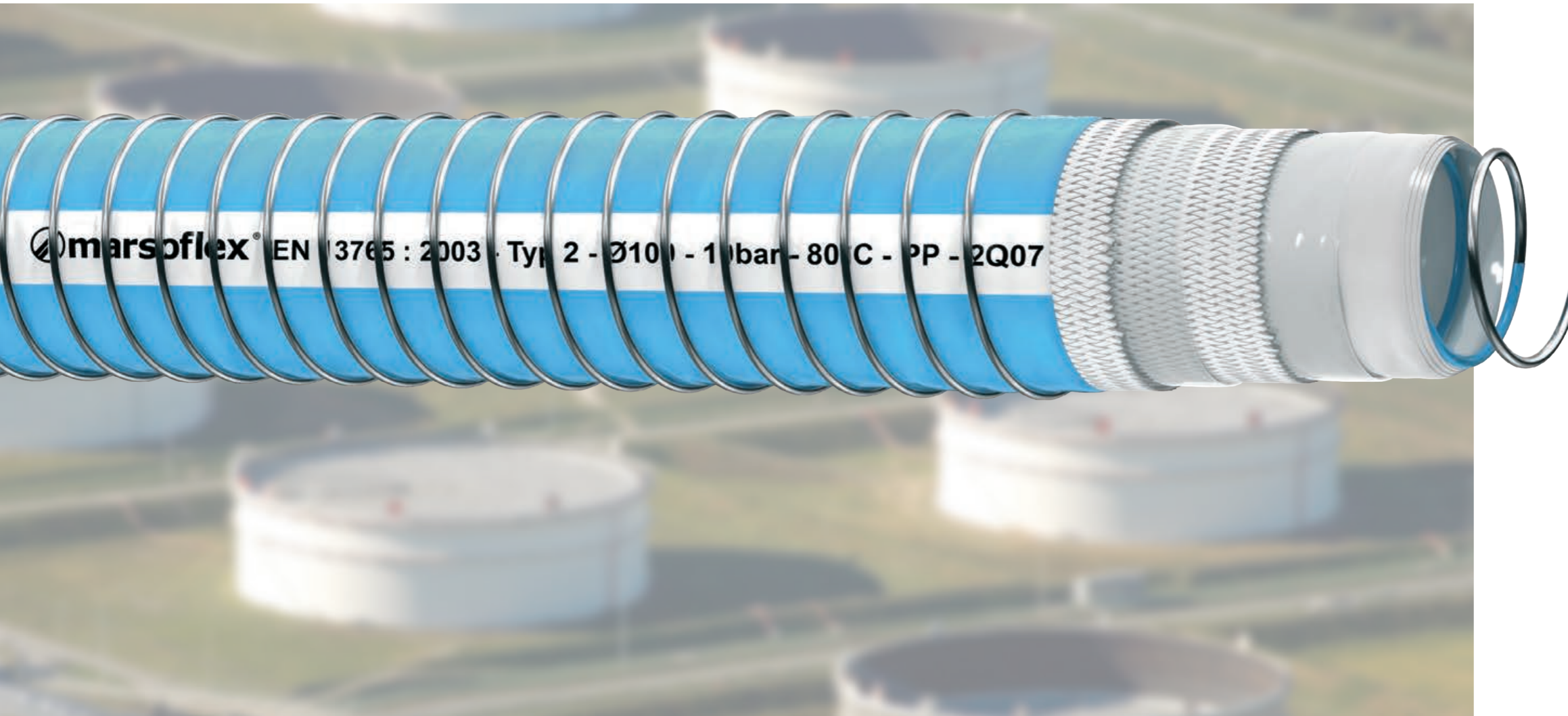
marsoflex® PTFE Convoluted Hoses Type CA can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm	Stainless steel braiding with and without coating			PVDF braiding Polypropylene braiding		
		Working pressure bar	Burst pressure bar	Bending radius = mm	Working pressure bar	Burst pressure bar	Bending radius = mm
CA006	6	35	170	25			
CA008	8	35	170	25			
CA013	12	25	125	25	10	40	50
CA016	16	25	125	50	10	40	65
CA020	20	25	125	65	10	40	75
CA025	25	20	100	90	10	40	90
CA032	32	16	80	125	10	40	125
CA038	38	16	80	150	10	40	150
CA050	50	16	80	200	10	40	200
CA065	65	10	50	230	7	28	230
CA080	80	10	50	300	8	24	300
CA100	100	10	40	400			
CA150	150	6	24	520			

Composite Chemical Hose Type 1015



The **marsoflex**® Composite Chemical Hose Type 1015 is suitable as a suction and discharge hose for the transport of mineral oil products, solvents, acids, bases, alcohols and hydrocarbons and is available in different versions.

The hose design is constructed of layers, allowing for high flexibility and a small bending radius regardless of temperature.

At the same time the materials used have good chemical resistance even at high temperatures. Therefore this hose type is perfectly suited for applications in process and draining facilities as well as for the loading and unloading of tank trucks, tank wagons and tank ships.

Hose tube: Polypropylene

Inner wires: Stainless steel wire, galvanized steel wire, polypropylene coated galvanized steel wire

Outer wires: Stainless steel wire, galvanized steel wire

Hose cover: Fabric, PVC coated. Resistant to oil, ozone and weather influences.

Electrical resistance: $R < 10 \Omega$

Temperature range: -30°C to $+80^{\circ}\text{C}$

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Composite Chemical Hoses

Type 1015 can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Inner Ø mm / inch		Working pressure bar	Vacuum bar	Burst pressure bar	Test pressure bar	Bending radius = mm
25	1"	10	0,9	≥ 40	15	75
38	1 1/2"	10	0,9	≥ 40	15	85
50	2"	10	0,9	≥ 40	15	125
63	2 1/2"	10	0,9	≥ 40	15	150
80	3"	10	0,9	≥ 40	15	180
100	4"	10	0,9	≥ 40	15	250
125	5"	10	0,8	≥ 40	15	490
150	6"	10	0,8	≥ 40	15	710
200	8"	10	0,8	≥ 40	15	1040

Composite Chemical Hose Type 1421

The **marsoflex**® Composite Chemical Hose Type 1421 is suitable as a suction and discharge hose for the transport of mineral oil products, solvents, acids, bases, alcohols and hydrocarbons and is available in different versions.

The hose design is constructed of layers, allowing for high flexibility and a small bending radius regardless of temperature.

At the same time the materials used have good chemical resistance even at high temperatures. Therefore this hose type is perfectly suited for applications in process and draining facilities as well as for the loading and unloading of tank trucks, tank wagons and tank ships.

Hose tube: Polypropylene, PTFE

Inner wires: Stainless steel wire, galvanized steel wire, polypropylene coated galvanized steel wire

Outer wires: Stainless steel wire, galvanized steel wire

Hose cover: Fabric, PVC coated. Resistant to oil, ozone and weather influences.

Electrical resistance: $R < 10 \Omega$

Temperature range: -30°C to $+100^{\circ}\text{C}$

Marking: The **marsoflex**® Composite Chemical Hose Type 1421 is marked in accordance with EN 13765 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

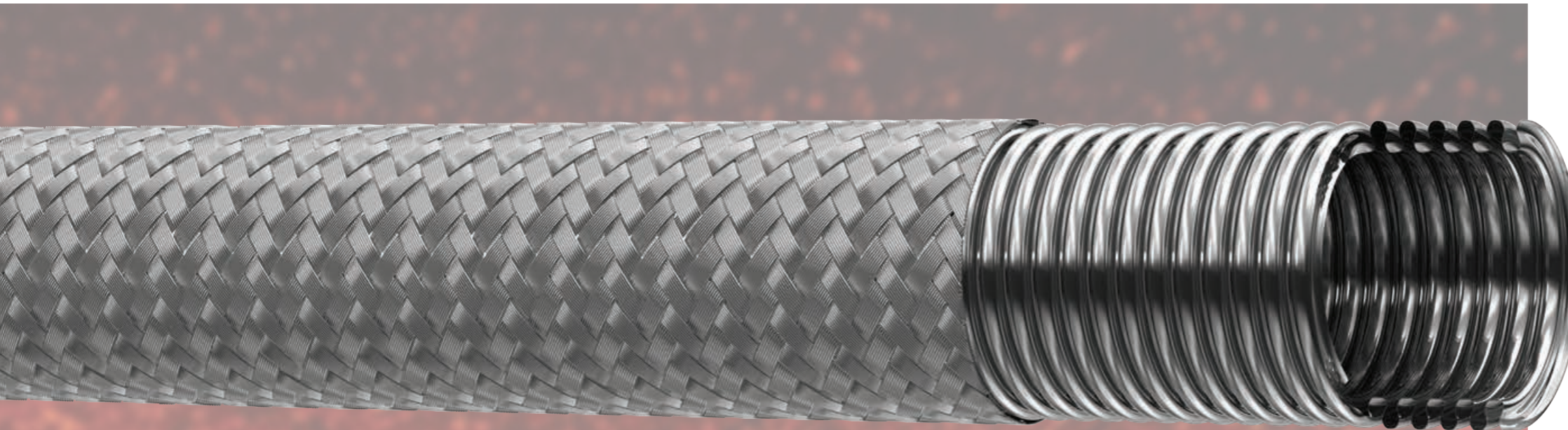
marsoflex® Composite Chemical Hoses Type 1421 can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Inner Ø mm / inch		Working pressure bar	Vacuum bar	Burst pressure bar	Test pressure bar	Bending radius = mm
19	3/4"	14	0,9	≥ 56	21	60
25	1"	14	0,9	≥ 56	21	75
38	1 1/2"	14	0,9	≥ 56	21	85
50	2"	14	0,9	≥ 56	21	125
63	2 1/2"	14	0,9	≥ 56	21	150
80	3"	14	0,9	≥ 56	21	180
100	4"	14	0,9	≥ 56	21	250
125	5"	14	0,8	≥ 56	21	490
150	6"	14	0,8	≥ 56	21	710
200	8"	14	0,8	≥ 56	21	1040

Corrugated Stainless Steel Hose Type EW



The **marsoflex**® Corrugated Stainless Steel Hose Type EW is annularly corrugated and braided with high-strength single or double layer stainless steel wire. It is suitable for applications in the chemical and foodstuffs industries as well as in all areas of mechanical and plant engineering.

marsoflex® Corrugated Stainless Steel Hoses are ready-for-fitting with welded hose fittings according to customers' specifications. If required the welded seams are processed smooth welded in accordance with DIN 2827.

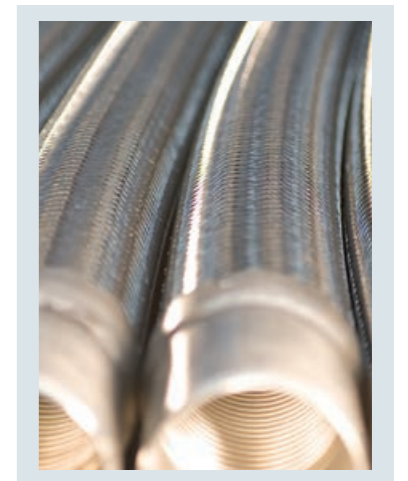
Hose materials: 1.4404, 1.4541 or 1.4571
Wire braid: 1.4301, other materials on request
Temperature range: -200°C to +600°C

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Corrugated Stainless Steel Hoses Type EW can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.

Size mm / inch		Inner Ø mm	Outer Ø mm	Working pressure bar	Test pressure bar	Bending radius = mm
8	5/16"	8,3	13,7	160	240	125
10	3/8"	10,2	15,7	130	195	130
12	1/2"	12,2	18,2	93	139	140
16	5/8"	16,2	23,3	85	127	160
20	3/4"	20,2	28,3	57	85	170
25	1"	25,5	34,2	65	97	190
32	1 1/4"	34,2	43,0	46	69	260
40	1 1/2"	40,1	52,0	50	75	300
50	2"	50,4	62,6	35	52	320
65	2 1/2"	65,3	81,2	40	60	460
80	3"	80,2	98,0	32	48	660
100	4"	100,0	119,4	25	38	750
125	5"	126,2	148,2	19	28	1000
150	6"	151,6	174,8	16	24	1300
200	8"	200,1	232,5	10	15	1350



Food Service Hose Type L

The **marsoflex**® Food Service Hose Type L is the perfect hose for use in the foodstuffs industry and for equipping discharge stations; non-moving processing and bottling plants as well as silo vehicles for liquid foods.

It is suitable for the suction and discharge of foodstuffs - including foods containing fat: such as wine, beer, milk, oil, juice and alcohol up to 96%.

The hose complies with the BGVV XXI category 2 recommendations.

Hose tube: NBR, white, smooth, FDA compliant
 Hose reinforcements: High-strength textile braids, kink-resistant spring steel wire spiral
 Hose cover: NBR / PVC, blue. Resistant to oil, ozone and weather influences.
 Temperature range: -30 C to +100 C
 Roll length: 40 metres

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Food Service Hoses Type L can be equipped with user-specific fittings and couplings.

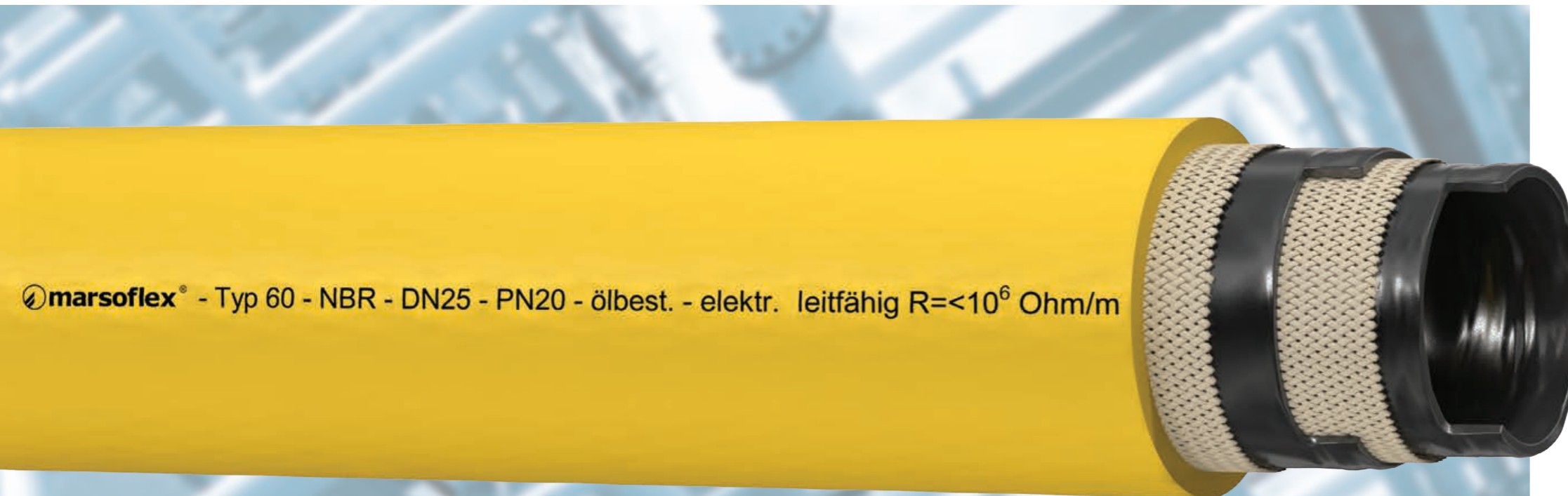
Technical specifications are subject to change without notice.




Order-no.	Inner Ø mm / inch		Working pressure bar	Vacuum bar	Burst pressure bar	Bending radius = mm
L019	19	3/4"	16	0,9	≥ 48	130
L025	25	1"	16	0,9	≥ 48	150
L032	32	1 1/4"	16	0,9	≥ 48	200
L038	38	1 1/2"	16	0,9	≥ 48	230
L050	50	2"	16	0,9	≥ 48	300
L065	63	2 1/2"	16	0,9	≥ 48	380
L075	75	3"	16	0,9	≥ 48	450
L100	100	4"	16	0,9	≥ 48	600
L125	125	5"	16	0,9	≥ 48	700
L150	150	6"	16	0,9	≥ 48	800




Air/Water Hose Type 60



The  marsoflex® Air / Water Hose Type 60 can be used for a wide range of applications, such as compressors; spray units in industrial applications; the mineral oil industry; the chemical and petrochemical industry as well as plant manufacturing.

Hose tube: NBR oil resistant, black, smooth
Hose reinforcements: High-strength textile braids
Hose cover: NBR / PVC, yellow, smooth. Resistant to oil, ozone and weather influences.
Electrical resistance: Tube $R < 10^6 \Omega / m$
Temperature range: -25°C to +85°C (peak temperature up to 110°C)
Roll length: 40 metres


 marsoflex® Air / Water Hoses Type 60 can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.

Order-no.	Inner Ø mm / inch		Working pressure bar	Burst pressure bar	Bending radius = mm
6013	13	1/2"	20	≥ 60	80
6016	16	5/8"	20	≥ 60	100
6019	19	3/4"	20	≥ 60	120
6025	25	1"	20	≥ 60	150



Multi-Purpose Hose Type 80

The  marsoflex® Multi-Purpose Hose Type 80 is a multi-purpose discharge hose for many applications with high safety requirements.

This hose type is suitable for the discharge of air, water, oil, fats, petrol, nitrogen and miscellaneous chemicals.

The Type 80 hose is used in the chemical and mineral oil industry as well as in machine and plant manufacturing and mining.


Hose tube: NBR oil resistant, black, smooth
Hose reinforcements: High-strength textile braids

Hose cover: NBR, black, smooth.
Resistant to oil, ozone and weather influences.

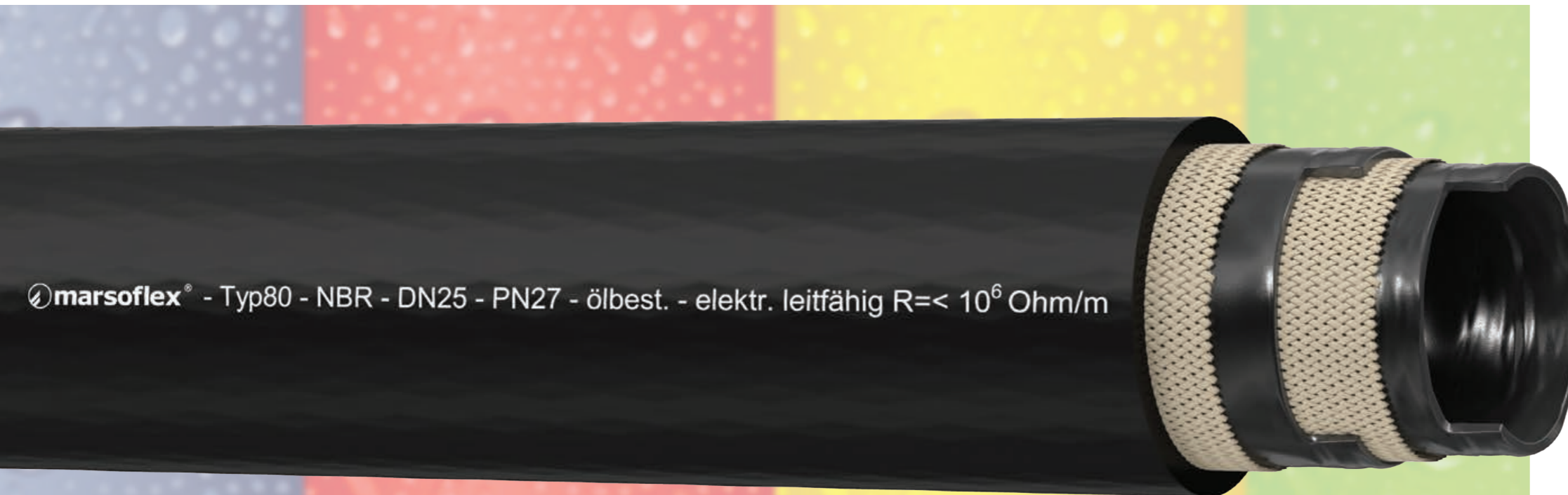
Electrical resistance: $R < 10^6 \Omega / m$


Temperature range: -25°C to +85°C
(peak temperature up to 110°C)

Roll length: 40 metres

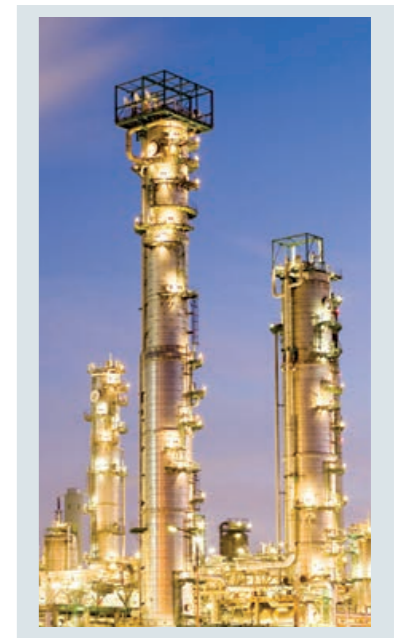
 marsoflex® Multi-Purpose Hoses Type 80 can be assembled, tested and marked with user-specific fittings and couplings. Corresponding certificates can be issued on request.

Technical specifications are subject to change without notice.



 marsoflex® - Typ80 - NBR - DN25 - PN27 - ölbest. - elektr. leitfähig $R < 10^6 \Omega / m$

Order-no.	Inner Ø mm / inch		Working pressure bar	Burst pressure bar	Bending radius = mm
8006	6	1/4"	27	≥ 80	35
8008	8	5/16"	27	≥ 80	50
8010	10	3/8"	27	≥ 80	60
8013	13	1/2"	27	≥ 80	80
8016	16	5/8"	27	≥ 80	100
8019	19	3/4"	27	≥ 80	120
8025	25	1"	27	≥ 80	150



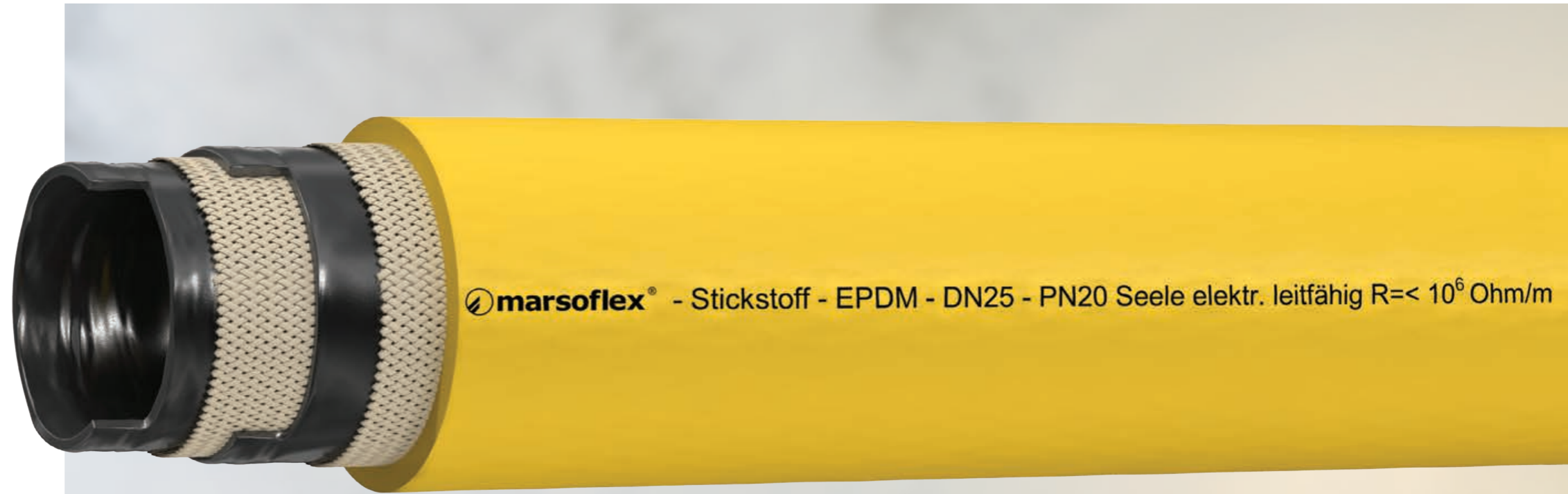
Nitrogen Hose Type 60 EPDM

The **marsoflex**® Nitrogen Hose Type 60 EPDM is outstandingly suitable for corrosive chemicals. Especially for the displacing and flushing of explosive gases and their mixtures. Application areas are industrial plants; the chemical industry; the mineral oil industry; shipping and mining.

- Hose tube:** EPDM, black, smooth
- Hose reinforcements:** High-strength textile braids
- Hose cover:** EPDM, yellow, smooth. Resistant to ozone and weather influences.
- Electrical resistance:** Tube R <
- Temperature range:** -25°C to +85°C (peak temperature up to 110°C)
- Roll length:** 40 metres

marsoflex® Nitrogen Hoses Type 60 EPDM can be assembled, tested and marked with user-specific fittings and couplings. Corresponding certificates can be issued on request.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm / inch		Working pressure bar	Burst pressure bar	Bending radius = mm
6019XSTEPDM	19	3/4"	20	≥ 60	120
6025XSTEPDM	25	1"	20	≥ 60	150

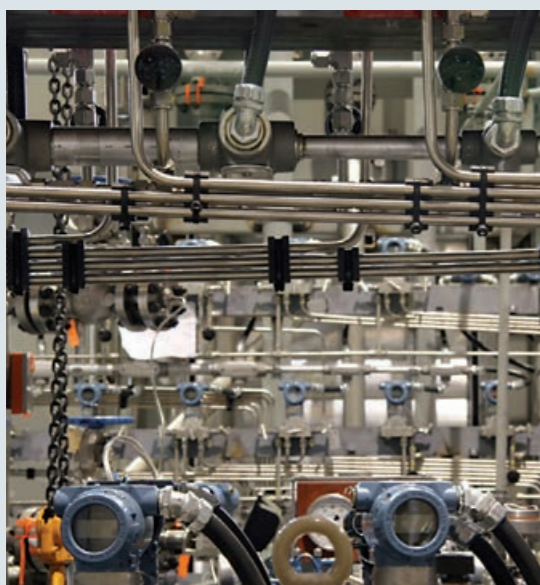
Water Hose Type WH

The **marsoflex**® Water Hose Type WH is a sturdy multi-purpose hose with an EPDM inner and outer layer. It is designed for piping water and media containing water. Thus it is outstandingly suitable for mobile and non-moving use in industrial piping systems.

- Hose tube:** EPDM, black, smooth
- Hose reinforcements:** High-strength textile braids
- Hose cover:** EPDM, black, fabric pattern. Resistant to ozone and weather influences.
- Temperature range:** -30°C to +130°C (temporarily up to 150°C)
- Marking:** green, red
- Roll length:** 40 metres

marsoflex® Water Hoses Type WH can be assembled, tested and marked with user-specific fittings and couplings. Corresponding certificates can be issued on request.


Technical specifications are subject to change without notice.




Order-no.	Inner Ø mm / inch		Working pressure bar	Burst pressure bar	Bending radius = mm
WH13	13	1/2"	15	≥ 50	130
WH19	19	3/4"	15	≥ 50	190
WH25	25	1"	15	≥ 50	250
WH50	50	2"	15	≥ 50	500



Compressed Air Hose Type PR

The  marsoflex® Compressed Air Hose Type PR is a sturdy and flexible hose for the transport of compressed air as well as industrial water under extreme operating conditions.

The  marsoflex® Compressed Air Hose Type PR complies with EN 20018.

Hose tube: SBR, black, smooth

Hose reinforcements: High-strength textile braids


Hose cover: SBR, black, fabric pattern.

Resistant to ozone and weather influences.

Electrical resistance: $R < 10^6 \Omega$

Temperature range: -30°C to +80°C

Roll length: 40 metres

 marsoflex® Compressed Air Hoses Type PR can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.

Order-no.	Inner Ø		Working pressure water bar	Working pressure air bar	Burst pressure bar	Bending radius = mm
	mm	inch				
PR135KS	13	1/2"	16	10	≥ 40	130
PR196KS	19	3/4"	16	10	≥ 40	190
PR257KS	25	1"	16	10	≥ 40	250



Steam Hose Type 202

The **marsoflex**® Steam Hose Type 202 is used to transport saturated steam or hot water. It has excellent resistance to chemicals and commercially available cleaning agents. Following stringent examinations and suitability tests in the chemical industry it has been awarded the attribute “with distinction” by operators.

The **marsoflex**® Steam Hose Type 202 complies with DIN EN ISO 6134.

Caution! For this hose only appropriate fittings (couplings with safety clamps) in accordance with DIN EN 14423 may be used.

Hose tube: EPDM, black, smooth

Hose reinforcements: High-strength steel wire

Hose cover: CSM, red, fabric pattern. Resistant to ozone and weather influences and oil.

Electrical resistance: Tube $R < 10^6 \Omega$

Temperature range: +210°C (saturated steam), +120°C (hot water)

Roll length: 40 metres

Marking: The **marsoflex**® Steam Hose Type 202 is marked in accordance with DIN EN ISO 6134 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Steam Hoses Type 202 can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø		Working pressure saturated steam bar	Working pressure hot water bar	Burst pressure bar	Bending radius = mm
	mm	inch				
20213	13	1/2"	18	55	≥ 180	80
20219	19	3/4"	18	55	≥ 180	110
20225	25	1"	18	55	≥ 180	180
20232	32	1 1/4"	18	55	≥ 180	250
20238	38	1 1/2"	18	55	≥ 180	300
20250	50	2"	18	55	≥ 180	390



Steam Hose Type 205



The **marsoflex**® Steam Hose Type 205 is used to transport saturated steam or hot water. It has an excellent resistance to chemicals and commercially available cleaning agents. Following stringent examinations and suitability tests in the chemical industry it has been awarded the attribute “with distinction” by operators.

The **marsoflex**® Steam Hose Type 205 complies with DIN EN ISO 6134.

Caution! For this hose only appropriate fittings (couplings with safety clamps) in accordance with DIN EN 14423 may be used.

- Hose tube:** EPDM, black, smooth
- Hose reinforcements:** High-strength steel wire
- Hose cover:** EPDM, black, fabric pattern. Resistant to ozone and weather influences.
- Electrical resistance:** Tube $R < 10^6 \Omega$
- Temperature range:** +210°C (saturated steam), +120°C (hot water)
- Roll length:** 40 metres
- Marking:** The **marsoflex**® Steam Hose Type 205 is marked in accordance with DIN EN ISO 6134 and, in addition, with a batch number. Thus traceability is guaranteed at all times.

Test documentation for hose lines assembled in accordance with EN 10204 3.1 as well as classification in accordance with the Pressure Equipment Directive (97 / 23 EC) are included in the scope of delivery.

marsoflex® Steam Hoses Type 205 can be equipped with user-specific fittings and couplings.

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm / inch		Working pressure saturated steam bar	Working pressure hot water bar	Burst pressure bar	Bending radius = mm
	mm	inch				
20513	13	1/2"	18	55	≥ 180	80
20519	19	3/4"	18	55	≥ 180	110
20525	25	1"	18	55	≥ 180	180
20532	32	1 1/4"	18	55	≥ 180	250
20538	38	1 1/2"	18	55	≥ 180	300
20550	50	2"	18	55	≥ 180	420

Pipeline Hose Type 46 HW



The **marsoflex**® Pipeline Hose Type 46 HW is a flexible discharge hose system for the transport of abrasive and chemically aggressive materials in pneumatic and hydraulic conveying systems. We offer a fully developed modular design of hose and flange couplings, which can be combined with elbows, shut-off devices and others. The flange couplings are made up of two halves each with a flange joint which are screwed onto the hose with positive locking.

Hose tubes: Natural rubber, rubber compound NR / BR, CSM, EPDM
Hose reinforcements: Special cord, wound and steel wire braids
Hose cover: CR, black, abrasion resistant, resistant to weather influences, sea water and oil, electrically conductive
Temperature range: -35°C to +94°C
Roll length: on request

marsoflex®-pipeline hoses Type 46 HW offer the user the following advantages:

- Infinitely variable transition in the hose line thanks to mechanical connection of hose and coupling
- No contact of carried medium and flange coupling
- Low tensile special reinforcements guarantee minimal longitudinal extension
- Short down times due to simple mounting of elements
- Can be assembled without special tools
- Up to 10(!) times longer service life compared to fixed pipeline systems
- Functions as compensating element; does not convey agitations and prevents impact sound
- Operation possible at zero pressure as well as at high and low pressure
- Flexible adjustment in confined spaces or on open surfaces

Technical specifications are subject to change without notice.



Order-no.	Inner Ø mm	Working pressure bar	Burst pressure bar	Vacuum max bar	Thickness of wear and tear layer = mm	Bending radius = mm
46HW051	51	10	≥ 32	0,9	5	400
46HW063	63	10	≥ 32	0,9	5,6	520
46HW076	76	10	≥ 32	0,9	11	600
46HW082	82	10	≥ 32	0,9	8	640
46HW100	102	10	≥ 32	0,9	7	800
46HW127	127	10	≥ 32	0,9	7	1000
46HW152	152	10	≥ 32	0,9	7,5	1200
46HW200	203	10	≥ 32	0,9	8	1600
46HW250	254	10	≥ 32	0,9	8	2000

Special Hose Lines

The **marsoflex**® Special Hose Lines are produced according to customer specifications.

A wide range of different materials and components are chosen for this purpose and designed according to the application and operating conditions.

marsoflex® Special Hose Lines are equipped ready-to-use with all required fittings.

Examples for individual hose systems:

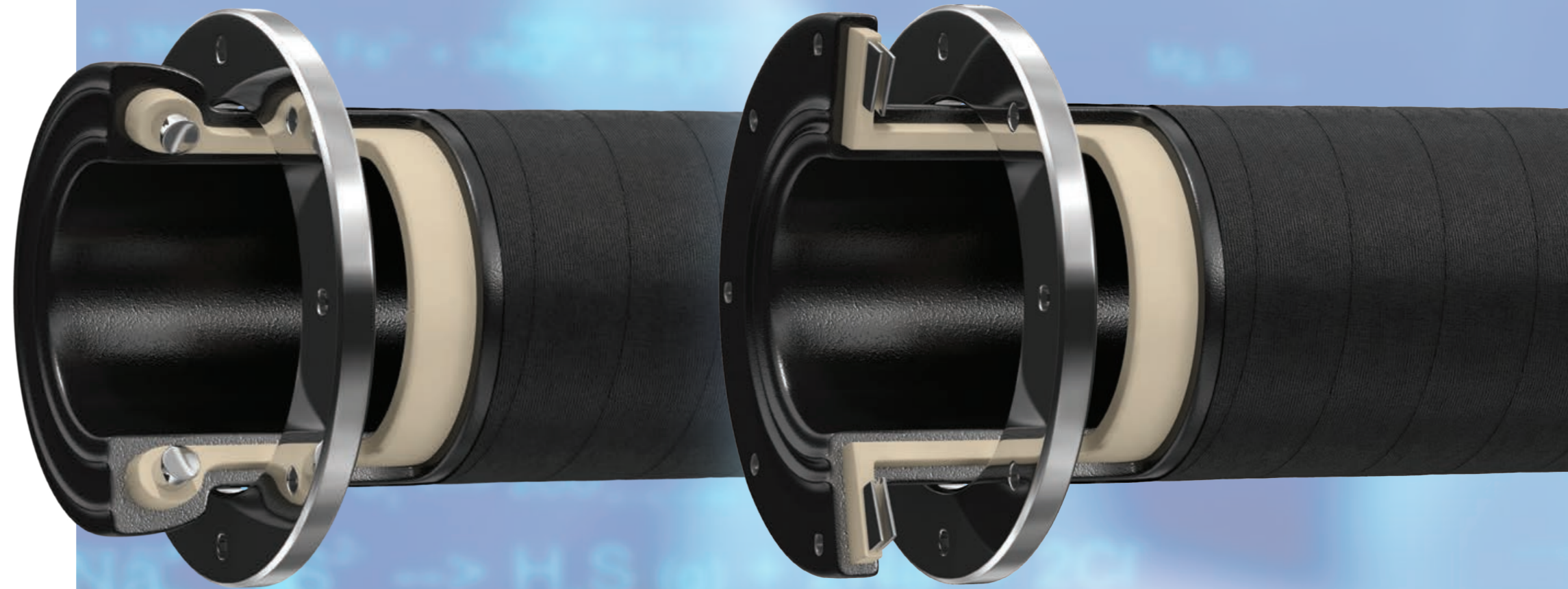
Hoses

- With or without reinforcements, helixes or copper strand
- With specially corrugated hose cover
- Made from materials particularly resistant to chemicals and abrasion
- With vulcanized fittings (see pictures)
- With steel wire free ends
- With heat tracing or, alternatively, cooling
- For applications in the high temperature range

Overview of materials:

PUR	Polyurethane
EPDM	Thyylene Propylene Diene rubber
NR	Natural rubber
CSM	Cholrosulponated polyethylene rubber
FKM	Fluorinated elastomers in different types of composition
CR	Choroprene rubber
IIR	Butyl rubber
NBR	Nitrile rubber
SBR	Styrene-butadiene rubber

Take advantage of our customized expert advice to obtain ideal hose lines for your application!



Selection of the ideal hose line

To determine the ideal and, above all, safe hose line components for your application, it is important to describe it in as much detail as possible.

The following are some of the criteria which are important for a selection:

Flow medium: _____

Composition: _____

CAS-N°: _____

Concentration: _____

Positive operating pressure: _____

Negative operating pressure: _____

Operating temperature: min. ____ max. ____

Flow volume: _____

Electric conductivity: _____

Total length: _____

Internal diameter: _____

Smallest bending radius: _____

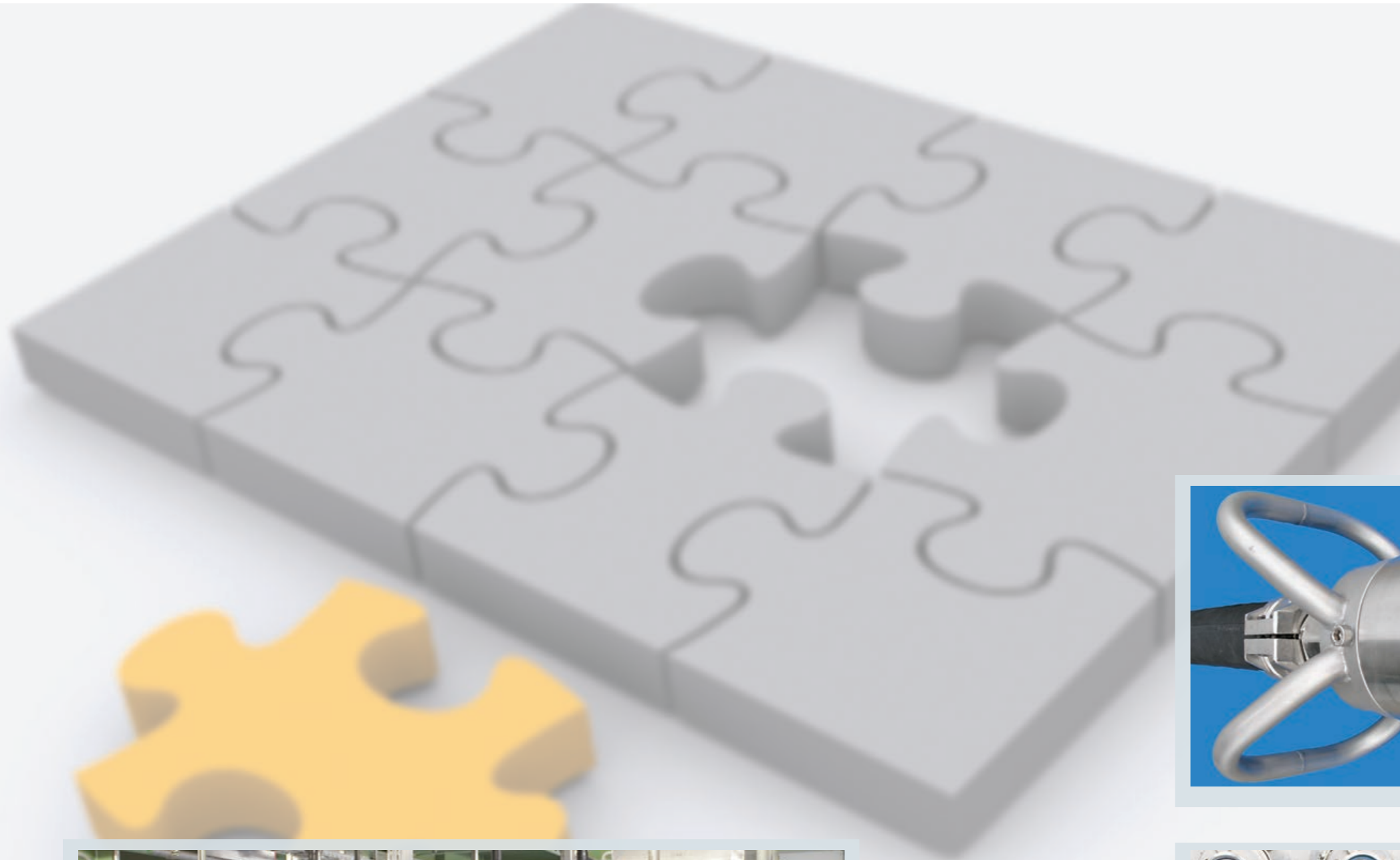
Connection joint Side 1: _____

Connection joint Side 2: _____

Material of fittings: _____

Other influences
(e. g. temperature, abrasion, weather): _____

Please talk to us to ensure that you obtain hose assemblies for your applications which make your technology SAFE and therefore EFFICIENT!



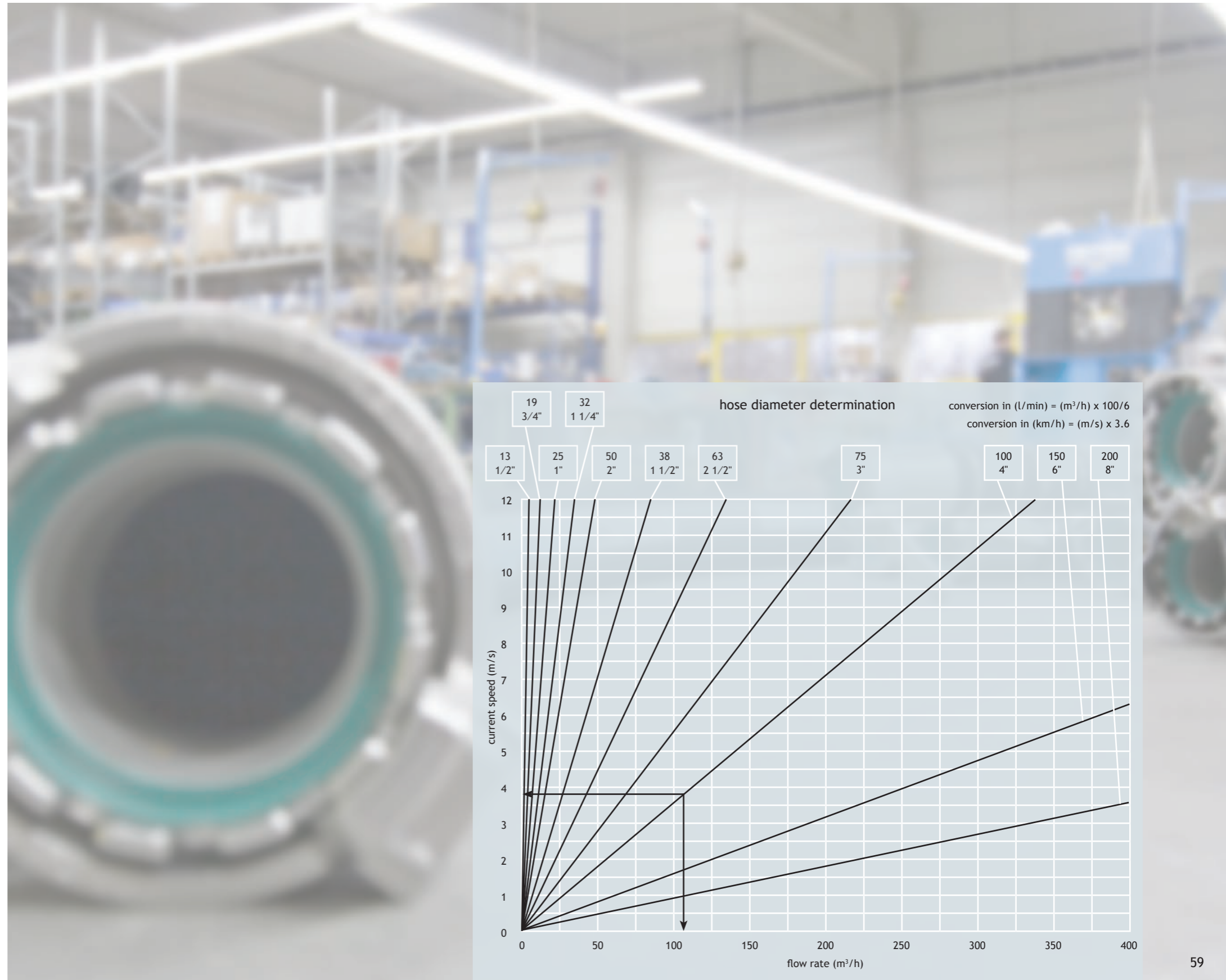
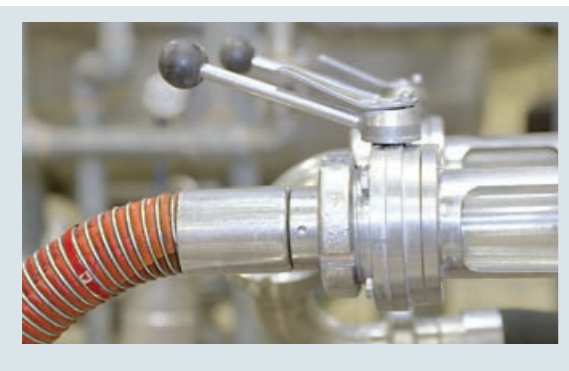
Nomogramme for the determination of the hose diameter

This nomogramme (see table) should help you determine the inside diameter of your hose.

Based on the flow rate (m³/h) the corresponding hose diameter can be calculated using the flow speed (m/s).

Example: a flow rate of 110 m³/h and a flow speed of 3.8 m/s will result in a hose diameter of 100 mm.

Please note:
To avoid electrostatic charging the flow speed of the media should not exceed 4 m/s.



Construction

Our staff offer personal and competent advice to provide integrated problem and system solutions. Based on the relevant norms we conform with customer demands.

Every **marsoflex®** hose assembly is manufactured by trained and experienced employees in accordance with specified guidelines and norms and is submitted to an overall and documented quality and product check before delivery.

In addition to ISO 9001, 14001, EMAS und CE certification; approvals from BWB and MED and diverse component markings we have numerous type approvals for hose assemblies awarded by classification bodies.



Steam and steam hose information

Safety instructions, temperature-pressure chart

When choosing steam hoses special safety measures must be taken into account. In this context the interdependence between steam and pressure must be considered. The boiling point of water increases with rising pressure. This correlation is shown in the saturated steam curve in the temperature-pressure chart (see illustration).

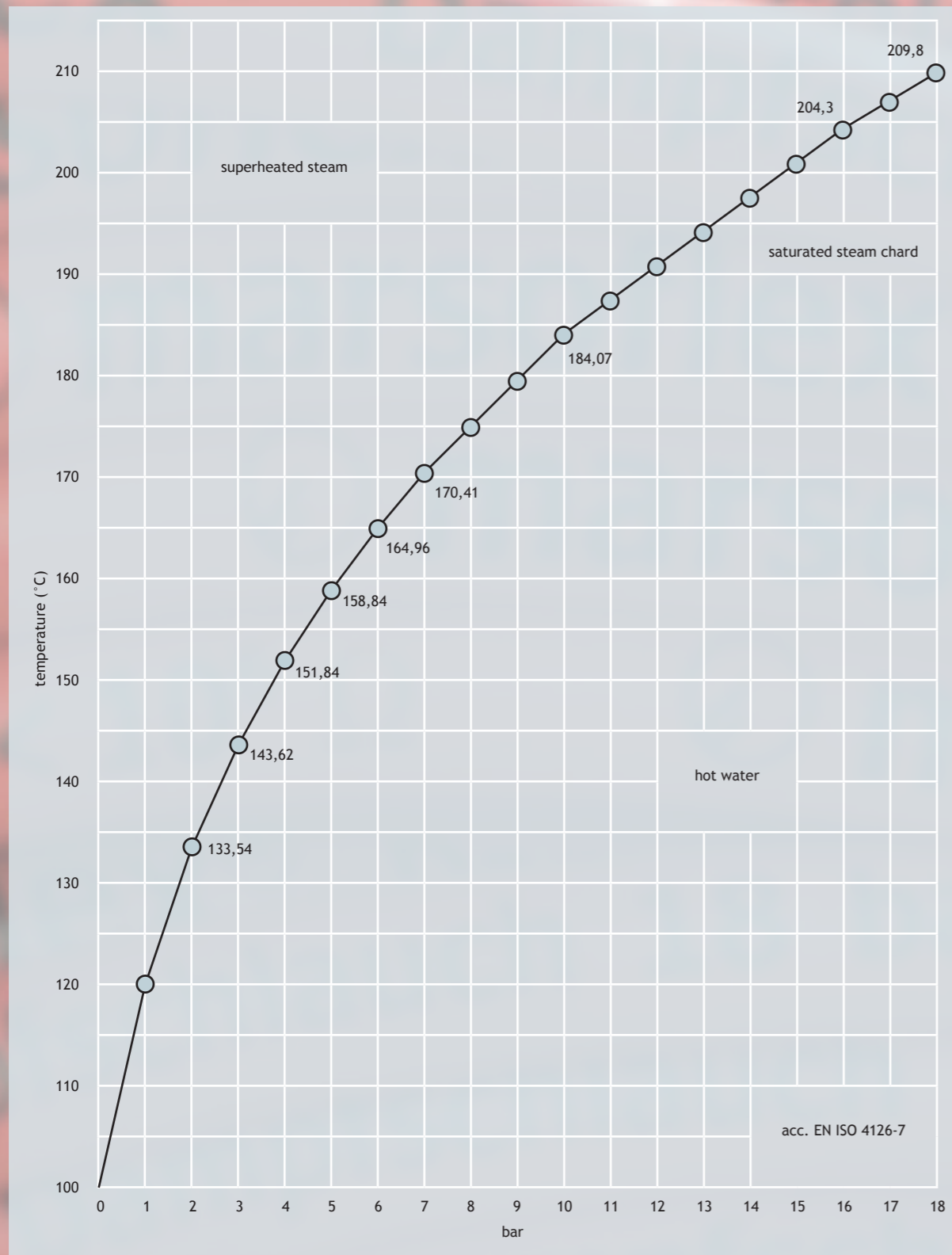
Water, for example, has a boiling point of 162°C at 6 bar and is therefore saturated steam. At the same temperature but at 5 bar water would be superheated steam and at 7 bar hot water. Should there be a pressure drop in a hose line (for example due to the opening of a fitting), saturated steam becomes superheated steam.

Should a hose line not be designed to discharge superheated steam, it is possible that this type of steam can cause embrittlement or maceration of the hose components. Taking this into consideration a sudden pressure drop may thus lead to the destruction of the hose line.

Steam hose lines are only suitable for use with hot water up to a temperature of 120°C or a pressure of 1 bar overpressure. At higher temperatures the increase in volume of water permeating into the inner layer causes damage to the structure. It is thus necessary to ensure that the saturated steam curve is not exceeded.

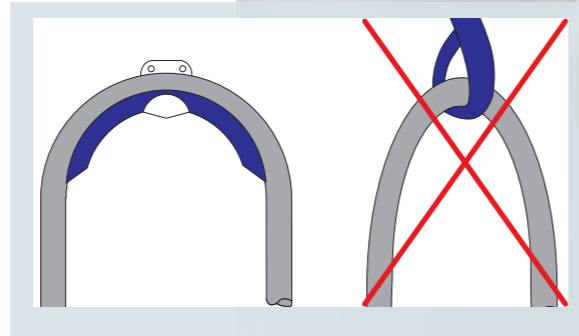
IMPORTANT!

Steam can be dangerous. Always be careful and keep within the recommended guidelines. Steam and water cannot be discharged alternately. For safety reasons integration can only be carried out by using the appropriate fittings.

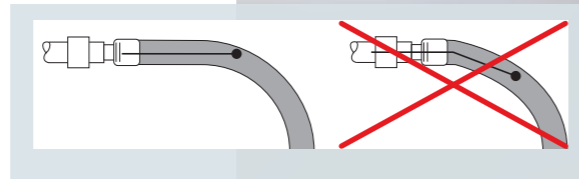


The correct use of hoses

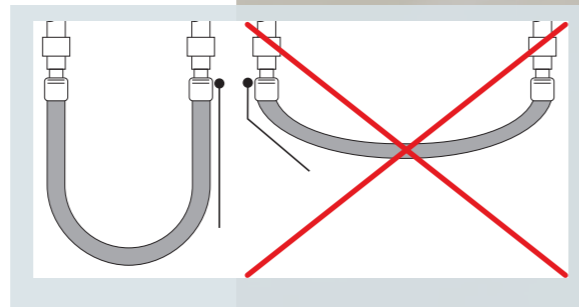
Do not overbend when hanging, instead use mountings such as hose gauges or rollers.



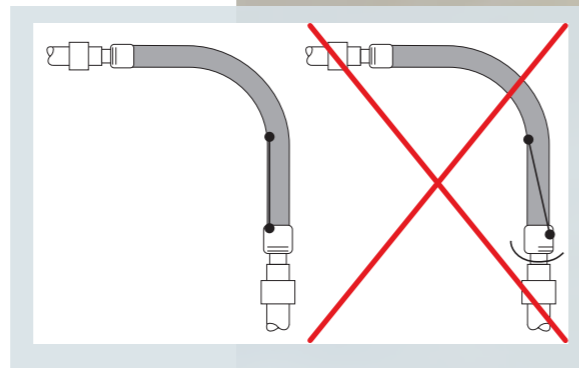
Do not kink hose lines in the bonding region. Avoid slant tensile forces.



Hose lines should be designed to be of sufficient length. Avoid slant tensile forces in the bonding.

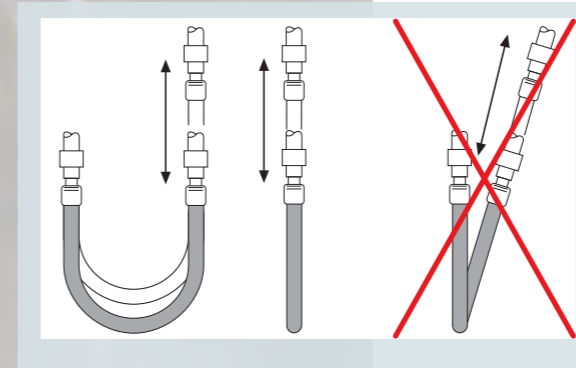


Please do not twist the hose line when installing and avoid torsional forces.

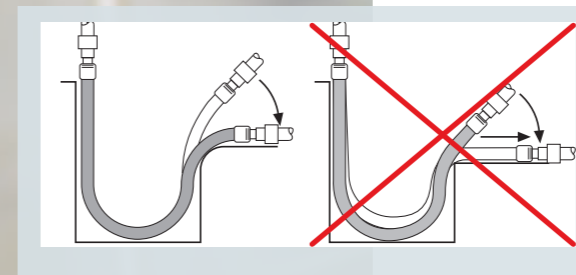


The correct use of hoses

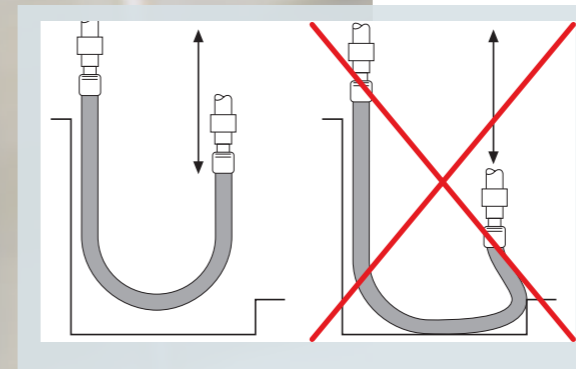
Place directions of motion at hose level.



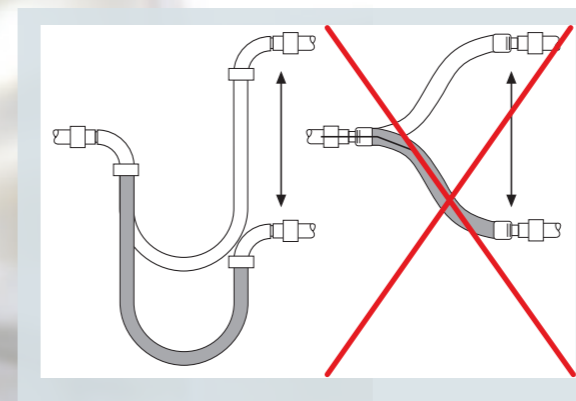
To avoid damage or kinking please do not position or pull hose assemblies over sharp edges.




Allow ample space for hoses in motion. Please avoid kinking or contact with floors or walls.



Avoid fluctuations in bending strain.



Coupling and Fitting Ranges

For our hose types we offer an extensive range of  marsoflex® couplings and fittings.

- **Quick couplings**
Tank truck couplings; camlocking couplings; Storz couplings; Guillemin couplings and quick couplings
- **Safety couplings**
Quick couplings with locking device; dry disconnect couplings and dry break couplings
- **Hose fittings**
Hose couplings for safety clamps with male thread; swivel nut and flange; hose connections
- **Fixing systems**
Safety clamps and swage fittings
- **Hose fittings**
Double and reducer fittings; dust caps and plugs; welded and flange fittings: coupling and thread gaskets.

All products can be delivered from stock in customary norms, standards, nominal diameters and materials.

All fitting and coupling systems can also be supplied with chemically resistant PTFE, PFA or Halar® linings and coatings.

Furthermore we offer system-specific special designs.





Hose and Coupling Technology

Alfons Markert + Co. GmbH
Gadelander Straße 135
24539 Neumünster • Germany

Fon: +49 4321 8701-0
Fax: +49 4321 8701-149
Email: marsoflex@markert.de
Web: www.markert.de

Branch Office Belgium

Fon: +32 11 39 75 30
Fax: +32 11 39 75 34
Email: marsoflex@markert.de