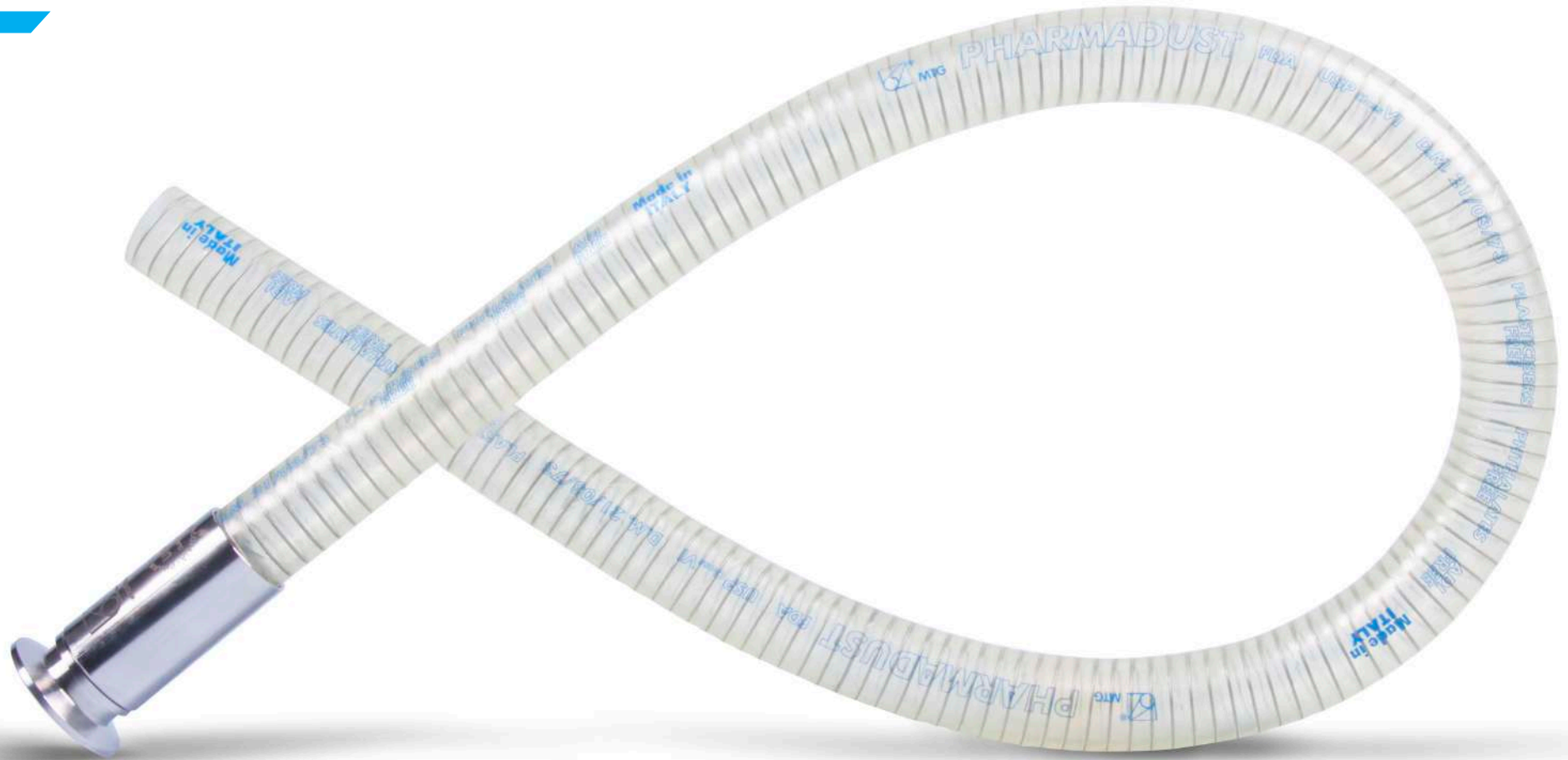




MTG PHARMA DIVISION



MTG PHARMA DIVISION



MTG PHARMA is the new division dedicated to the production of hoses for pharmaceutical use created by MTG in order to preserve the high quality of the products.

The formulation and development of raw materials and semi-finished products are made in MTG PHARMA including the perfluoropolymer tubings entirely produced and processed in the company. "Mechanical resistance tests to repeated bending cycles" * are regularly carried out on hoses with perfluoropolymer inner liner, in order to check their behaviour under dynamic conditions.

Furthermore **MTG PHARMA** has developed a special line of hoses with perfluoropolymer inner liner totally free from phthalates and nitrosamines to work in aseptic environments and in contact with high-purity fluids.

The range is completed by a hose line produced in accordance with EN 12115 and a fully conductive structure suitable for dissipation of electrostatic charges.

Special areas of the **MTG PHARMA** division are reserved for the production of platinum-cured silicone hoses, in order to avoid environmental contamination that might alter the excellent properties of the material.

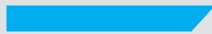
Within this product range for the pharmaceutical industry, **MTG PHARMA** is able to offer a great variety of complementary products such as compensators, tubing for peristaltic pumps as well as hoses for pharmaceutical powders, produced with special pharmaceutical and food quality polymers, resistant to abrasion and with excellent mechanical properties.

All **MTG PHARMA** hoses fulfill the most stringent national and international regulations of the food and pharmaceutical industry such as USP class VI, E.P. 3.1.9, ISO 10993 and EU Regulation 10/2011, where applicable.

The pharma hose line includes a wide range of stainless steel fittings lined with translucent or black antistatic PFA complying with the FDA and USP Class VI Standards. The PFA is perfectly anchored to the fitting in order to ensure a high chemical and mechanical resistance even in case of suction and high temperatures.

** Norm FFSS 373407 esp. 03 par. 7.9*

HIGH PURITY & CLEAN PROCESS





MTG CLEARWAY PLATINUM



USP CLASS VI
EUROPEAN EP 319
ISO 15848
FDA
BIR
ITALY



MTG CLEARWAY PLATINUM



MTG CLEARWAY/SD-Platinum

MARKING

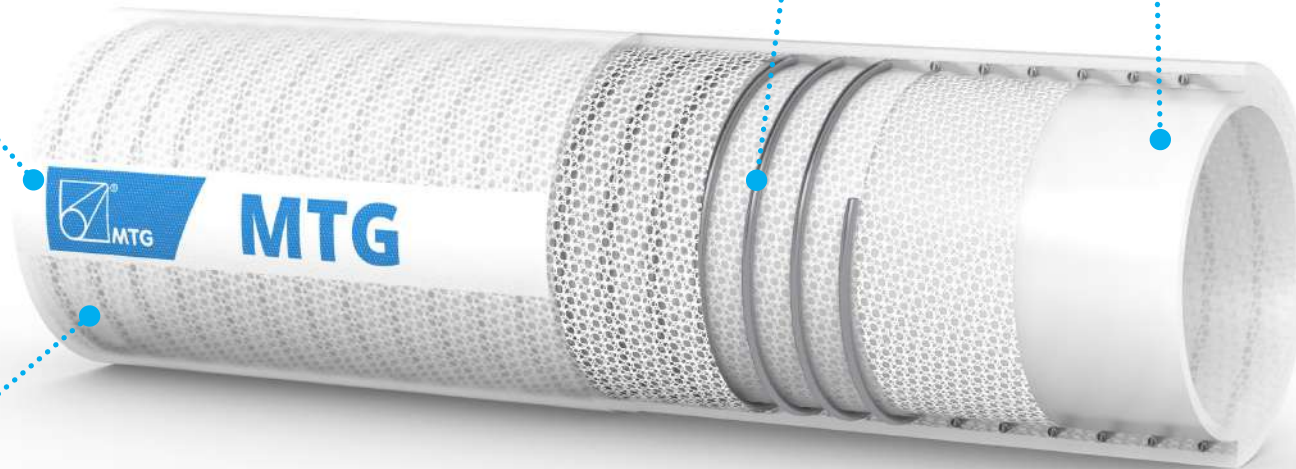


REINFORCEMENT

- High strength polyester plies.
- Embedded stainless steel helix wire AISI 302.

TUBE

Silicone rubber, translucent (code SILICONE-3362PT), food and pharmaceutical quality, odourless and tasteless, mirror smooth.



COVER

- Silicone rubber, translucent (code SILICONE-3362PT), food and pharmaceutical quality, odourless and tasteless, smooth, glossy finish.
- It may be easily cleaned with any mild detergent.

STANDARDS

- US Pharmacopoeia Class VI, non-cytotoxic according to ISO 10993-Part 5.
- Compliance: 3A, FDA, BfR, E.P. 3.1.9. (European Pharmacopoeia), ISO 10993-4, -10, -11.



APPLICATION

- Silicone hose for suction and delivery of high purity products, foodstuff and fluids with alcohol content up to 96%.
- Reinforced version suitable for process applications requiring a tight bending radius and a high vacuum resistance.
- Normally used in food, pharmaceutical and cosmetic industries.

STERILIZATION

- Sterilization with steam up to +135°C at 3.5 bar for max. 90 minutes.
- Sterilization with hot air up to +200°C for max. 30 minutes.
- Sterilizations repeated at intervals of less than 1 hour may seriously affect the mechanical features of the hose.

MAIN BENEFITS

- Platinum-cured silicone hose with non-stick and hydrophobic properties.
- Safe solution for use in the aseptic environments and hygienic applications: utmost care is used starting from the choice of high-purity ingredients, production and storing procedures.
- Pharma grade validation: the MTG Clearway design is tested in accordance with USP Class VI, EU Pharmacopoeia and FDA Standards.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP). The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers and nitrosamines free hose.



SAFETY FACTOR
≥ 3 times working pressure



TEMPERATURE RANGE
From -60°C to +200°C.

TECHNICAL SPECIFICATIONS

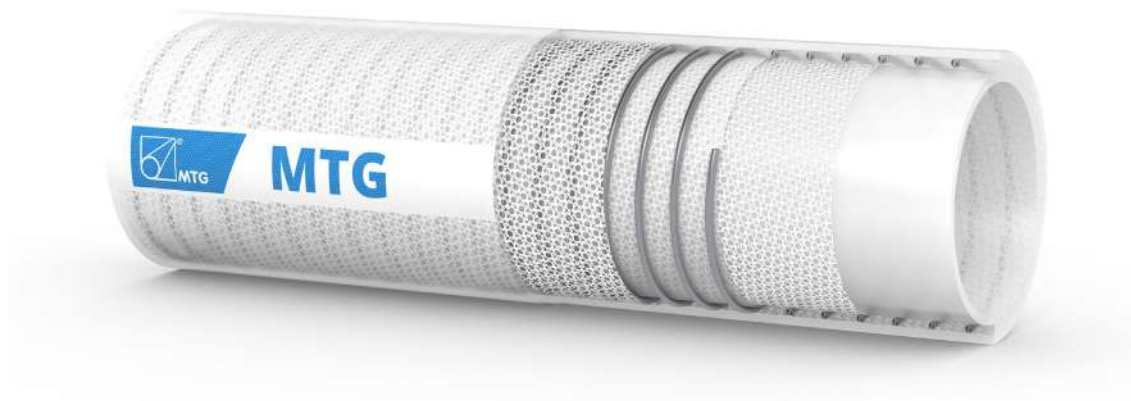
SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: +1/-0.5mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
10	20	5.0	10	30	-0.9	30	0.31	30
13	23	5.0	10	30	-0.9	40	0.38	30
16	26	5.0	10	30	-0.9	45	0.45	30
19	29	5.0	10	30	-0.9	55	0.51	30
25	35	5.0	10	30	-0.9	65	0.72	30
32	42	5.0	10	30	-0.9	95	0.88	30
38	48	5.0	10	30	-0.9	110	1.04	30
50	60	5.0	10	30	-0.9	150	1.41	30
65	75	5.0	8	24	-0.9	180	1.98	20
75	87	6.0	7	21	-0.9	240	2.61	20
100	112	6.0	5	15	-0.9	360	3.55	20

Other sizes and colours are available upon request. Please contact our Sales Department.
The a.m. technical data are referring to application at room temperature (+20°C).
A special version resistant to bending and twisting is available on demand.

Cod. IT-M00164

MTG CLEARWAY/HD-Platinum



TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: +1/-0.5mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure* BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
10	22	6	10	30	-0.9	50	0.38	30
13	25	6	10	30	-0.9	52	0.45	30
16	29	6.5	10	30	-0.9	60	0.53	30
19	32	6.5	10	30	-0.9	66	0.62	30
25	38	6.5	10	30	-0.9	86	0.75	30
32	45	6.5	10	30	-0.9	110	0.92	30
38	52	7	10	30	-0.9	130	1.25	30
50	64	7	10	30	-0.9	200	1.62	30
65	79	7	8	24	-0.9	250	2.22	20
75	89	7	8	24	-0.9	350	2.70	20
100	114	7	7	21	-0.9	500	3.62	20

(*) At a temperature of +100°C the W.P. decreases by 20%.
Chemical resistance acc. to MTG Chemical Resistance Chart. Above technical data refer to application at room temperature (+20°C).
Other sizes are available on demand. Please contact our Sales Department.

Cod. IT-M00124

MTG CLEARWAY/D-Platinum



TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: +1/-0.5mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure* BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
13	24	5.5	10	40	-	-	0.374	20
19	30	5.5	10	40	-	-	0.490	20
25	37	6.0	10	40	-	-	0.602	20
38	49	5.5	10	40	-	-	0.862	20
51	62	5.5	7	28	-	-	1.222	20

(*) At a temperature of +100°C the W.P. decreases by 20%.
Chemical resistance acc. to MTG Chemical Resistance Chart. Above technical data refer to application at room temperature (+20°C).
Other sizes are available upon request. Please contact our Sales Department.

Cod. IT-M00130

MTG PHARMATECH

COVER

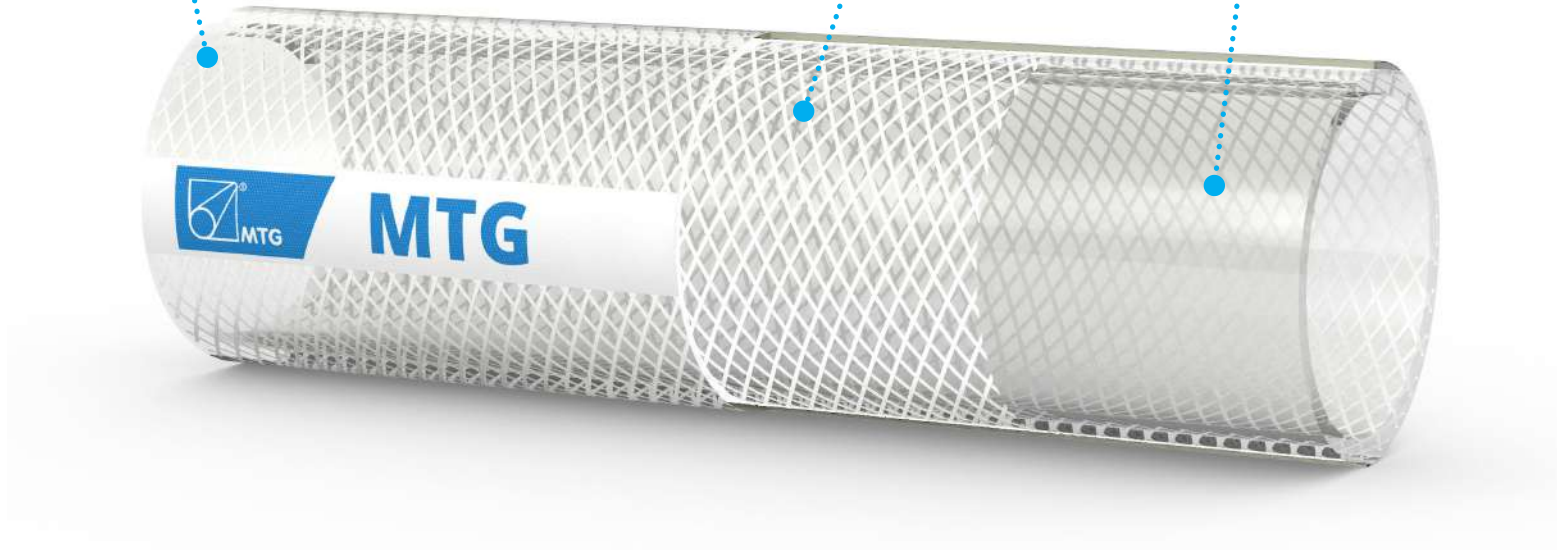
Platinum-cured silicone rubber, pharmaceutical and food quality, light colour, odourless and tasteless, mirror smooth.

REINFORCEMENT

Plies of synthetic cord.

TUBE

Platinum-cured silicone rubber, pharmaceutical and food quality, light colour, odourless and tasteless, mirror smooth.



FITTING

- By means of clamps, collars or crimping.
- If required, MTG can supply reusable fittings ensuring a regular flow and preventing turbulences inside the hose.

STANDARDS

Tube and cover: USP Class VI, 3A, FDA Standards, European Pharmacopoeia (E.P. 3.1.9.), BfR Recommendation XV, ISO 10993-4, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Platinum-cured silicone hose, designed for conveying high-purity products.
- It is normally used in the pharmaceutical, cosmetic, biotech and food industry.
- Delivery hose, not recommended for suction applications.
- Hose in accordance with EC 1935/2004.
- Autoclavable.



TEMPERATURE RANGE

From -60°C to +180°C depending on the fluids conveyed.



SAFETY FACTOR

≥ 3 times working pressure.



STERILIZATION

Sterilization with steam up to +135°C or, as an alternative, cobalt or argon radiations.

MAIN BENEFITS

- Non-stick and hydrophobic: it provides utmost safety during transport of high-purity fluids, thus removing the risk of bacterial growth on the hose surfaces.
- Perfectly smooth: it may easily be cleaned.
- See-through: this translucent platinum silicone product allows to check the fluid conveyed inside the hose.
- Plasticizers and nitrosamines free hose.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight gr/m	Max. length m
3.18	9.81	-	15	45	-	30	70	25
4.72	11.35	-	15	45	-	35	106	25
6.35	13.03	-	15	45	-	40	124	25
7.93	14.61	-	12	36	-	45	147	25
9.52	16.32	-	12	36	-	50	175	25
12.70	20.10	-	10	30	-	65	237	25
15.87	24.37	-	8	24	-	75	330	25
19.05	27.91	-	8	24	-	80	415	25
22.20	31.12	-	5	15	-	100	455	25
25.40	34.50	-	5	15	-	120	513	10
31.75	40.80	-	4	12	-	150	617	10

Chemical resistance acc. to MTG Chemical Resistance Chart.
Above technical data refer to application at room temperature (+20°C).
Other sizes and colours are available upon request. Please contact our Sales Department.

Cod. IT-M00130

MTG DYNAMIC® CLEANROOM-Platinum

MARKING



TUBE

- PFA (Perfluoroalkoxy, code PFA), fully fluorinated, white colour, mirror-smooth. Odourless and tasteless.
- Excellent flex-performance (resistance to repeated bending cycles in accordance with ASTM D 2176).
- Complying with US Pharmacopoeia Class VI, 3A, FDA Standards, D.M. 21/03/73 and following amendments, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



COVER

- Translucent silicone rubber (code: Silicone-3362PT), ultra smooth and glossy finish.
- It may be easily cleaned with any mild detergent.
- Special finish with a low coefficient of friction.
- Complying with US Pharmacopoeia Class VI, 3A, FDA Standards, BfR and European Pharmacopoeia (E.P. 3.1.9.), ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.

REINFORCEMENT

High strength plies of synthetic cord and embedded steel helix wire AISI 302.



APPLICATION

- Multipurpose hose designed to ensure utmost purity during transport of pharmaceutical, cosmetic, food and chemical products in aseptic areas.
- Specifically engineered to combine the technical benefits of a PFA fluoropolymer with the elasticity and heat resistance of silicone.

NOTE

- Please check recommendations and instructions mentioned in the MTG "use and maintenance guideline for PFA/MFA hoses".



TEMPERATURE RANGE

From -30°C to +150°C depending on the fluids conveyed.



SAFETY FACTOR

≥ 3 times working pressure.



PATENT

E.P. 1450092.



STERILIZATION

- Sterilization with steam up to +135°C, in an open circuit, for max 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: ± 0.8 mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius (Static) mm	Min. bending radius (Dynamic) mm	Approx. weight kg/m	Max. length m
13	23	5.0	10	30	-0.9	45	60	0.38	20
16	28	6.0	10	30	-0.9	55	75	0.57	20
19	31	6.0	10	30	-0.9	65	90	0.65	20
25	37	6.0	10	30	-0.9	85	140	0.80	20
32	44	6.0	10	30	-0.9	120	200	1.00	20
38	51	6.5	10	30	-0.9	140	250	1.27	20
51	67	8.0	10	30	-0.9	180	300	1.98	20
63.5	79.5	8.0	5	15	-0.9	320	380	2.53	20
76	92	8.0	5	15	-0.9	380	460	3.62	20
100	118	9.0	3	9	-0.9	500	600	5.02	20

Above technical data are referring to application at room temperature (+20°C).
Chemical resistance according to MTG Chemical Resistance Chart.
Other sizes are available upon request. Please contact our Sales Department.

Cod. IT-D00050

MTG DYNAMIC®/BB

COVER

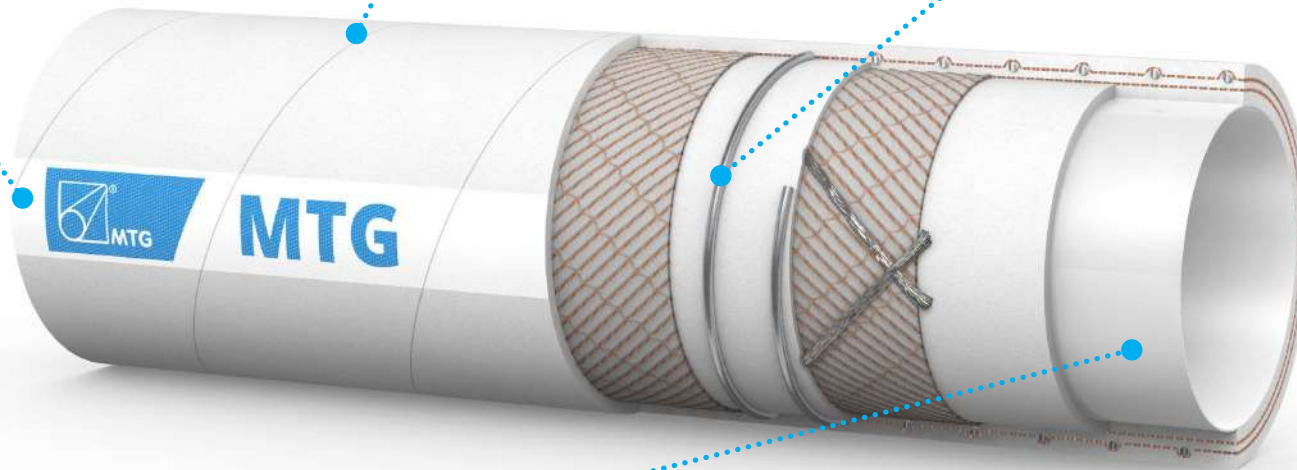
- EPDM rubber (code 140BI), light colour, smooth, food grade, abrasion, ozone and weather resistant, cloth finish.
- Food compliance acc. to FDA Standards.

MARKING



REINFORCEMENT

- High strength plies of synthetic cord and embedded steel helix wire.
- Two embedded copper wires.



TUBE

- PFA (Perfluoralkoxy Polymer, PFA), white colour, fully fluorinated, mirror-smooth.
- Compliance: USP Class VI, 3A, FDA Standards, D.M. 21/03/73 and following amendments, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.
- Good resistance to temperature, to cracking under mechanical stress and bending.



APPLICATION

- Multipurpose hose specifically designed for conveying pharmaceutical, cosmetic, chemical and food products in pharma-cosmetic, biotech and food industries.
- Excellence solution for use under dynamic working conditions.
- Suitable for use on dosing equipments.
- Suction and delivery hose.

NOTE

Please check recommendations and instructions mentioned in the MTG “use and maintenance guideline for PFA/MFA hoses”.



TEMPERATURE RANGE

- From -40°C to +150°C depending on the fluids conveyed.
- The a.m. temperature range has to be considered as a general indication referring to most chemicals; however it does not include the most aggressive combinations of products and the conditions of use. For specific applications please contact our Technical Department.



SAFETY FACTOR

≥ 4 times working pressure.



PATENTS

E.P. 1450092.



STERILIZATION

- Sterilization with steam up to +150°C, in an open circuit, for max 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.

MAIN BENEFITS

- The inner tube is made of fully perfluorinated material, totally inert, which ensures utmost impermeability as well as hygienic and contamination- free transport of the fluid conveyed.
- Good resistance to extreme temperatures and good resistance to mechanical stress.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP).
- The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers free inner tube.
- Nitrosamines free hose.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius (Static) mm	Min. bending radius (Dynamic) mm	Approx. weight kg/m	Max. length m
13	25	6.0	10	40	-0.9	45	60	0.55	20
19	31	6.0	10	40	-0.9	65	90	0.72	20
25	37	6.0	10	40	-0.9	85	140	0.89	20
32	45	6.5	10	40	-0.9	120	200	1.16	20
38	51	6.5	10	40	-0.9	140	250	1.47	20
51	65.5	7.25	10	40	-0.9	180	300	2.08	20
63.5	79.5	8.0	10	40	-0.9	250	380	2.80	20
76	92	8.0	10	40	-0.9	350	500	3.48	20
100	117	8.5	10	40	-0.9	700	700	4.77	20

Chemical resistance acc. to MTG Chemical Resistance Chart.
Above technical data refer to application at room temperature (+20°C).
Other sizes and colours are available upon request. Please contact our Sales Department.

Cod. IT-M00148

ATEX AREAS





MTG PURAlife™

MARKING



COVER

- Translucent non-toxic platinum-cured silicone rubber (code 3362PT-SILICONE/CLEARWAY-PLATINUM), translucent, glossy finish.
- It may be easily cleaned with any mild detergent.
- Complying with US Pharmacopoeia Class VI, FDA Standards, BfR and European Pharmacopoeia (E.P. 3.1.9.), ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.

REINFORCEMENT

- High strength plies of synthetic cord.
- Stainless steel helix wire.



FITTING

It may be supplied with PFA-lined fittings black conductive (clamp, flange, camlock etc.).

TUBE

- PFA (Perfluoroalkoxy, black PFA), fully fluorinated, black, antistatic ($R < 10^6 \Omega$), mirror-smooth.
- Complying with US Pharmacopoeia Class VI, FDA Standards, D.M. 21/03/73 and following amendments, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- This hose has been designed for conveying pharmaceutical, food and cosmetic products. Suction and delivery hose.
- Excellent solution for conveying high purity fluids; it combines the benefits of a special antistatic PFA tube with the platinum-cured silicone structure. Also suitable for the transport of NON-ABRASIVE powders.
- Produced with MTGp™ technology (Manufacturing Tubing Green process).

NOTE

- Please check recommendations and instructions mentioned in the MTG “use and maintenance guideline for PFA/MFA hoses”.
- Not autoclavable.

MAIN BENEFITS

- 100% safe transport of the fluid: no risk of contamination.
- Antistatic tube.
- No use of additives or chemicals potentially dangerous for environment and human health.
- Marking made with food quality pigments.
- Traceability is ensured for the whole production process of the hose.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP).
- The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers and nitrosamines free hose.



TEMPERATURE RANGE

From -30°C to +150°C, depending on the fluids conveyed and the application.



SAFETY FACTOR

≥ 3 times working pressure.



PATENTS

E.P. 1450092



CERTIFICATIONS

Hose approved by the Institute Ineris, attestation nr. INERIS-16-AM-342, for use in Atex areas.



STERILIZATION

- Sterilization with steam up to +135°C, in an open circuit, for max 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: ± 0.8mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
19	31	6.0	10	30	-0.9	120	0.68	20
25	37	6.0	10	30	-0.9	150	0.82	20
32	44	6.0	10	30	-0.9	200	1.04	20
38	52	7.0	10	30	-0.9	250	1.52	20
51	67	8.0	10	30	-0.9	300	1.96	20
63.5	79.5	8.0	5	15	-0.9	380	2.57	20
76	92	8.0	5	15	-0.9	460	3.66	20

Above technical data refer to application at room temperature (+20°C).
Other sizes are available upon request. Please contact our Sales Department.

Cod. IT-M00135

MTG DYNAMIC[®] ANTISTATIC

MARKING

If required, execution acc. to EN 12115:2011, embossed tape according to EN 12115: 2011, lengthwise, with identification symbol:

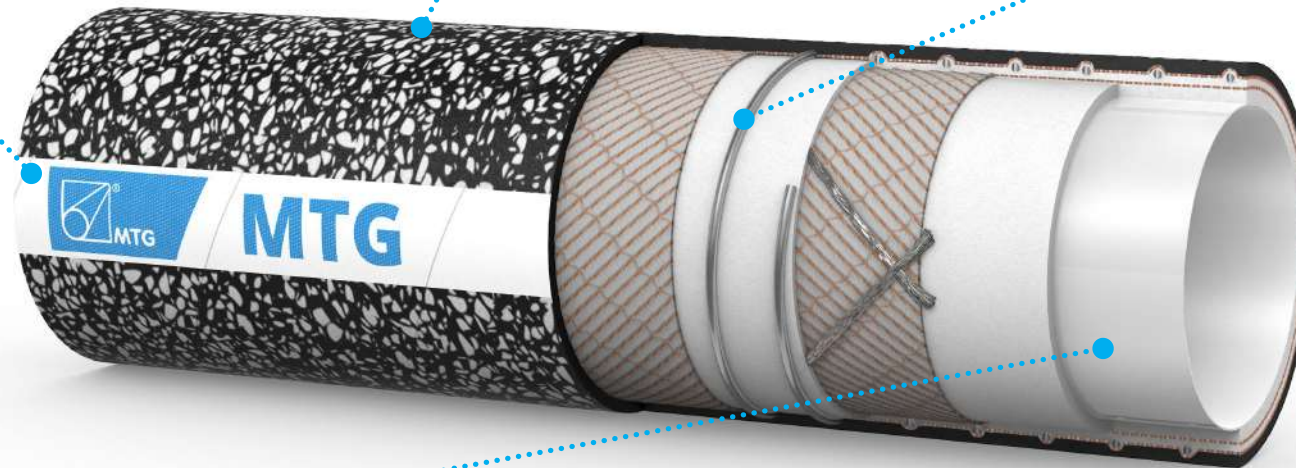
- Q for version WITHOUT embedded copper wires;
- M for version WITH embedded copper wires.

COVER

- Marble finish (UPE), black and white, patented, smooth, resistant to abrasion, ozone and ageing.
- Antistatic: Electrical resistance $R < 10^6 \Omega$.
- The special marble finish with a low coefficient of friction complies with FDA Standards, odourless and tasteless. The cover does not stain the contact surfaces.

REINFORCEMENT

- High strength plies of synthetic cord and embedded steel helix wire.
- Two embedded copper wires.



TUBE

- PFA (Perfluoroalkoxy Polymer), white colour, fully fluorinated, mirror-smooth. Odourless and tasteless.
- Compliance: USP Class VI, 3A, FDA Standards, D.M. 21/03/73 and following amendments, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Multipurpose hose, specifically designed to convey pharmaceutical, cosmetic and chemical substances.
- Especially suitable for application in pharmaceutical environments and production processes requiring the use of inert, contamination-free materials.

NOTE

- Execution acc. to EN 12115:2011, upon request.
- Please check recommendations and instructions mentioned in the MTG "use and maintenance guideline for PFA/MFA hoses".
- HOSE AVAILABLE WITH HIGHER PRESSURE RATING (WP 16 bar).
- Not autoclavable.



TEMPERATURE RANGE

- From -40°C to +130°C depending on the fluids conveyed and the application.
- In case of dynamic application: from +10°C to +40°C.



SAFETY FACTOR

≥ 4 times working pressure.



PATENTS

- E.P. 1450092.
- E.P. 1580475.
- U.S. Patent 7,389,799.



STERILIZATION

- Sterilization with steam up to +150°C, in an open circuit, for max. 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius (Static) mm	Min. bending radius (Dynamic) mm	Approx. weight kg/m	Max. length m
13	25	6.0	10	40	-0.9	45	60	0.55	20
19	31	6.0	10	40	-0.9	65	90	0.72	20
25	37	6.0	10	40	-0.9	85	140	0.89	20
32	45	6.5	10	40	-0.9	120	200	1.16	20
38	51	6.5	10	40	-0.9	140	250	1.47	20
51	65.5	7.25	10	40	-0.9	180	300	2.08	20
63.5	79.5	8.0	10	40	-0.9	250	380	2.80	20
76	92	8.0	10	40	-0.9	350	500	3.48	20
100	117	8.5	10	40	-0.9	700	700	4.77	20

Chemical resistance acc. to MTG Chemical Resistance Chart.
Above technical data refer to application at room temperature (+20°C).
Other sizes and colours are available upon request. Please contact our Sales Department.

Cod. IT-D00045

MAIN BENEFITS

- The perfluorinated tube ensures an excellent impermeability and absolutely hygienic and contamination-free transport of the fluid.
- Also it provides excellent resistance to repeated bending cycles acc. to ASTM D 2176.
- Marble finish cover, smooth and easy to clean. Resistant to mild chemicals and aggressive acids for short time.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP). The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers free inner tube.

MTG DYNAMIC® SAFE-TECH

MARKING

Embossed tape according to EN 12115: 2011, lengthwise.

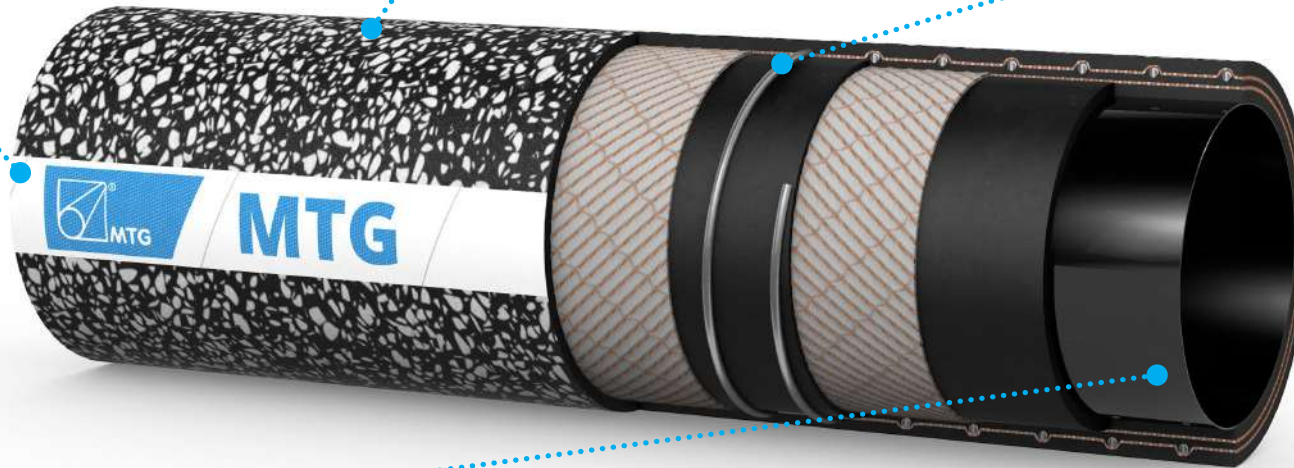


COVER

- Marble finish (UPE), black and white, patented, smooth; resistant to abrasion, ozone and ageing. The special marble finish with a low coefficient of friction complies with FDA Standards, odourless and tasteless. The cover does not stain the contact surfaces.
- Antistatic: Electrical resistance $R < 10^6 \Omega$.

REINFORCEMENT

- High strength plies of synthetic cord.
- Embedded steel helix wire.
- Copper wires on request.



TUBE

- PFA (Perfluoralcoxy Polymer, code PFA), fully fluorinated, mirror-smooth, black colour, antistatic ($R < 10^6 \Omega$), patented.
- Compliance: USP Class VI, FDA Standards, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.

USP
CLASS VI
PHARMACOPOEIA

ISO
10993

EU
10/2011

FDA
FOOD QUALITY

PATENTED
E.P.
1580475

PATENTED
E.P.
1450092

PATENTED
US
7,389,799

APPLICATION

- Multipurpose hose "Full Ohm", designed for conveying cosmetic, pharmaceutical and highly flammable chemical products in working areas requiring utmost safety.
- Execution complying with EN 12115: 2011.
- Engineered to ensure dissipation of electrostatic charges not only on the surfaces (tube and cover $R < 10^6 \Omega$) but also through the hose wall ($R < 10^9 \Omega$).

NOTE

- Please check recommendations and instructions mentioned in the MTG "use and maintenance guideline for PFA/MFA hoses".
- Not autoclavable.
- HOSE AVAILABLE WITH HIGHER PRESSURE RATING (WP 16 bar).



TEMPERATURE RANGE

In accordance with EN 12115: 2011.



SAFETY FACTOR

≥ 4 times working pressure.



PATENTS

- E.P. 1450092.
- E.P. 1580475.
- U.S. Patent 7,389,799.



ELECTRICAL PROPERTIES

- Electrical resistance through the hose wall: $R < 10^9 \Omega$.
- Identification symbol:
 - Ω/T for version without copper wires;
 - M/T for version with copper wires.

MAIN BENEFITS

- The perfluorinated inner liner ensures utmost chemical and temperature resistance, excellent impermeability and contamination-free transport of the fluid conveyed.
- Marble finish cover, smooth and easy to clean. Resistant to mild chemicals and aggressive acids for short time.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP).
- The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers free inner tube.



STERILIZATION

- Sterilization with steam up to $+135^\circ\text{C}$, in an open circuit, for max. 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: EN 12115 - O.D.: EN 12115 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius (Static) mm	Min. bending radius (Dynamic) mm	Approx. weight kg/m	Max. length m
13	25	6.0	10	40	-0.9	135	-	0.55	20
19	31	6.0	10	40	-0.9	188	-	0.72	20
25	37	6.0	10	40	-0.9	225	-	0.89	20
32	45	6.5	10	40	-0.9	262	-	1.16	20
38	51	6.5	10	40	-0.9	338	-	1.47	20
51	65.5	7.25	10	40	-0.9	412	-	2.08	20
63.5	79.5	8.0	10	40	-0.9	450	-	2.80	20
76	92	8.0	10	40	-0.9	525	-	3.48	20
100	117	8.5	10	40	-0.9	700	-	4.70	20

(*) In case of dynamic application please contact our Technical Dept.
Above technical data are referring to application at room temperature ($+20^\circ\text{C}$).
Other sizes and colours are available upon request. Please contact our Sales Department.

Cod. IT-D00046

MTG DYNAMIC® SAFE-TECH PREMIUM

MARKING

Embossed tape according to EN 12115: 2011, lengthwise.

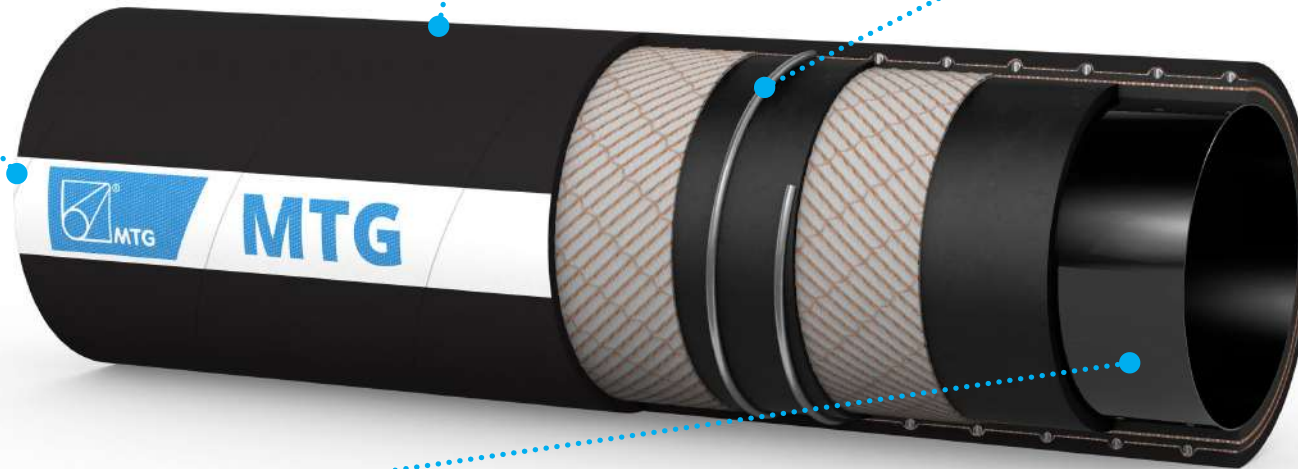


COVER

Synthetic rubber, black colour, resistant to abrasion and ageing, antistatic ($R < 10^6 \Omega$); smooth, cloth finish.

REINFORCEMENT

- High strength plies of synthetic cord.
- Embedded steel helix wire.
- Copper wires on request.



TUBE

- PFA (Perfluoralcoxy Polymer, code PFA), fully fluorinated, mirror-smooth, black colour, antistatic ($R < 10^6 \Omega$), patented.
- Compliance: USP Class VI, FDA Standards, Regulation EU n. 10/2011, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Flexible multipurpose hose “Full Ohm” for working areas requiring utmost safety.
- Perfect technical solution for handling cosmetic, pharmaceutical and highly flammable chemical products.
- Execution complying with EN 12115:2011.
- Engineered to ensure dissipation of electrostatic charges not only on the surfaces (tube and cover $R < 10^6 \Omega$) but also through the hose wall ($R < 10^9 \Omega$).

NOTE

- Please check recommendations and instructions mentioned in the MTG “use and maintenance guideline for PFA/MFA hoses”.
- HOSE AVAILABLE WITH HIGHER PRESSURE RATING (WP 16 bar).
- Not autoclavable.



TEMPERATURE RANGE

In accordance with EN 12115: 2011.



SAFETY FACTOR

≥ 4 times working pressure.



STERILIZATION

- Sterilization with steam up to $+135^\circ\text{C}$, in an open circuit, for max. 30 minutes.
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.



PATENTS

E.P. 1450092.



ELECTRICAL PROPERTIES

- Electrical resistance through the hose wall: $R < 10^9 \Omega$.
- Identification symbol:
 - Ω/T for version without copper wires;
 - M/T for version with copper wires.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: EN 12115 - O.D.: EN 12115 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius (Static) mm	Min. bending radius (Dynamic) mm	Approx. weight kg/m	Max. length m
13	25	6.0	10	40	-0.9	135	-	0.51	20
19	31	6.0	10	40	-0.9	188	-	0.67	20
25	37	6.0	10	40	-0.9	225	-	0.88	20
32	45	6.5	10	40	-0.9	262	-	1.16	20
38	51	6.5	10	40	-0.9	338	-	1.43	20
51	65.5	7.25	10	40	-0.9	412	-	1.95	20
63.5	79.5	8.0	10	40	-0.9	450	-	2.75	20
76	92	8.0	10	40	-0.9	525	-	3.20	20
100	117	8.5	10	40	-0.9	700	-	4.60	20

(*) In case of dynamic application please contact our Technical Dept.
Above technical data are referring to application at room temperature ($+20^\circ\text{C}$).
Other sizes and colours are available upon request. Please contact our Sales Department.

Cod. IT-M00128

MANIFLAM/SD-PTFE/Fire-Proof

MARKING

Embossed tape according to EN 12115:2011, lengthwise.

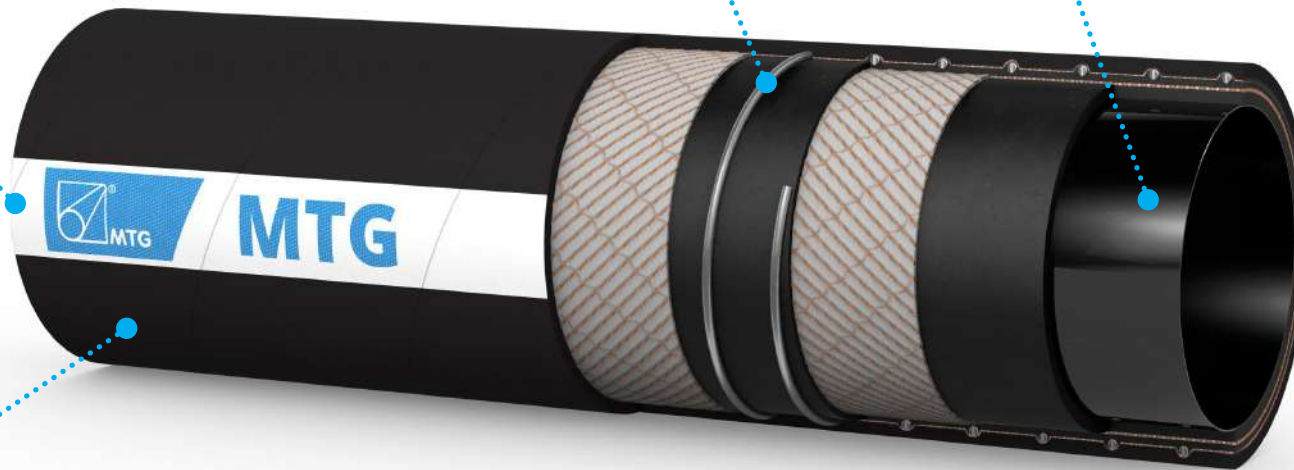


REINFORCEMENT

Plies of synthetic cord and embedded steel helix wire.

TUBE

- PTFE liner (Polytetrafluoroethylene, code PTFE BC), black colour, antistatic.
- Compliance: FDA, USP Class VI, ISO 10993-4, non-cytotoxic according to ISO 10993-Part 5.



COVER

- Silicone rubber, black colour, antistatic ($R < 10^6 \Omega$), resistant to abrasion and ageing, smooth, cloth finish.
- Reaction to fire:
 - Flame retardant in accordance with the standard EN ISO 4589-2: HL 3 with ref. to EN 45545-2:2013.
 - Low opacity of fumes in accordance with the standard EN ISO 5659-2: HL 1 with ref. to EN 45545-2:2013.
 - Low toxicity of gases in accordance with the standard NF X 70-100-1/-2: HL 3 with ref. to EN 45545-2:2013.
 - Flame resistance according to EN 12115.
 - Flame resistance: 20 minutes (test method according to EN 12115 – Annex E – Flammability test).
 - The flame resistance is exceeding the requirements of the EN 12115 – Annex E (at least 5 times the testing time required by the Norm).



CERTIFICATIONS

Certificate "LAPI n°316.1IS0040/15 dated 20/03/2015" with the following compliance requirements concerning fire and fumes:

- EN ISO 4589-2: HL 3 with ref. to EN 45545-2:2013.
- EN ISO 5659-2: HL 1 with ref. to EN 45545-2:2013.
- NF X 70-100-1/-2: HL 3 with ref. to EN 45545-2:2013.



APPLICATION

- Flexible multipurpose hose “Full Ohm” designed to handle pharmaceutical products and highly flammable chemicals in working areas requiring utmost safety.
- Execution in accordance with EN 12115:2011 and TRbF 131/2.
- Compliance with the requirements of UL 94 V0, EN 45545-2:2013 for Hazard Levels HL1 requirement set R22 and HL1 – HL2 requirement set R23.
- Engineered to ensure dissipation of electrostatic charges not only on the surfaces (tube and cover $R < 10^6 \Omega$) but also through the hose wall ($R < 10^9 \Omega$).
- Suitable to work in potentially explosive areas (Ex-zones).



TEMPERATURE RANGE

In accordance with EN 12115:2011.



SAFETY FACTOR

≥ 4 times working pressure.



STERILIZATION

- Sterilization with steam up to +135°C for max. 30 minutes (open circuit).
- For other cleaning, disinfection and sterilization processes with steam, please contact our Sales Department.



ELECTRICAL PROPERTIES

- Electrical resistance through the hose wall: $R < 10^9 \Omega$.
- Identification symbol:
 - Ω/T for version without copper wires;
 - M/T for version with copper wires.

MAIN BENEFITS

- The inner liner ensures utmost chemical and temperature resistance, excellent impermeability, as well as hygienic and contamination-free transport of the fluid conveyed.
- Hose in accordance with 2023/2006/EC (GMP). The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers free inner tube.

NOTE

Not autoclavable.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: EN 12115 - O.D.: EN 12115 - Length: ISO 1307

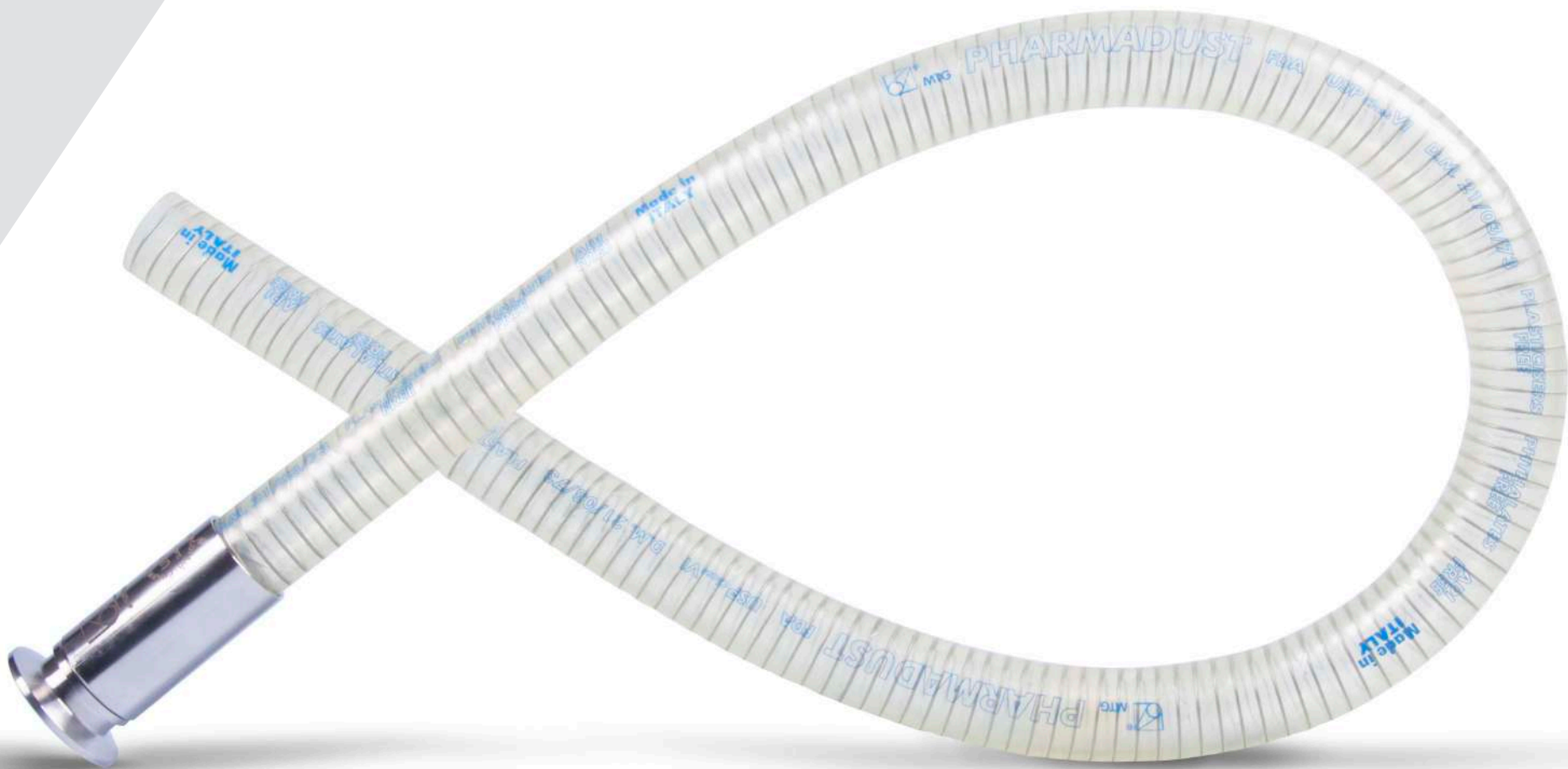
Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
19	31	6.0	16	64	-0.90	188	0.80	20
25	37	6.0	16	64	-0.90	225	1.00	20
32	44	6.0	16	64	-0.90	262	1.20	20
38	51	6.5	16	64	-0.90	338	1.47	20
50	66	8.0	16	64	-0.90	410	2.35	20
51	67	8.0	16	64	-0.90	412	2.38	20
63.5	79.5	8.0	16	64	-0.90	450	3.20	20
75	91	8.0	16	64	-0.90	520	3.75	20
76	92	8.0	16	64	-0.90	525	3.80	20
100	117	8.5	16	64	-0.90	690	5.20	20

(*) In case of dynamic applications please contact our Technical Dept.
Chemical resistance according to MTG Chemical Resistance Chart. Other sizes are available upon request.
Above technical data are referring to application at room temperature (+20°C).

Cod. IT-M00176

PHARMACEUTICAL POWDERS





MTG-PHARMADUST

MARKING

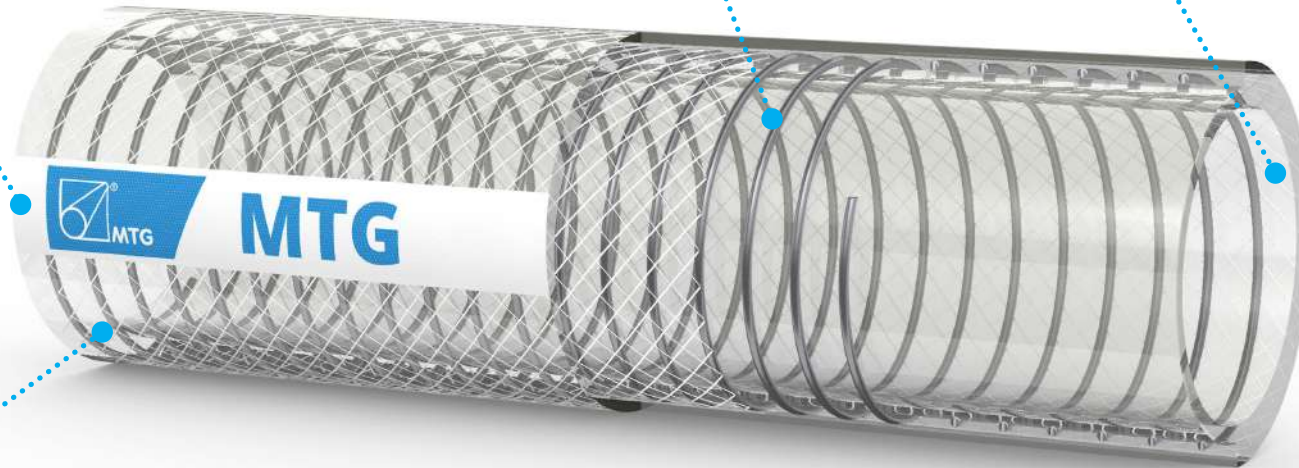


REINFORCEMENT

- High strength plies of synthetic cord.
- Stainless steel helix wire AISI 302.

TUBE

- TECHNOPOLYMER (code 3G26AU), fully see-through, odourless and tasteless, mirror-smooth.
- Abrasion loss: < 36 mm³ according to DIN 53516.
- Compliance: USP Class VI, Regulation EU n. 10/2011, FDA, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



COVER

- TECHNOPOLYMER (code 3G26AU), fully see-through, odourless and tasteless, smooth, glossy finish. Resistant to abrasion and ozone.
- Compliance: USP Class VI, Regulation EU n. 10/2011, FDA, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Suction and delivery hose, specifically designed for conveying air mixed with powders.
- Normally used in the pharmaceutical and food industry.

FITTING

- The hose may be supplied in application lengths and assembled with any kind of couplings (CLAMP, DIN 11851, etc.).
- Only for hose assemblies: test of electrical continuity between the couplings ($R < 10^2 \Omega$) according to EN 8031.



TEMPERATURE RANGE

- From +10°C to +85°C.
- Cleaning with water (up to +100°C without pressure) mixed with a normal mild cleaning detergent.



SAFETY FACTOR

- ≥ 3 times working pressure.

MAIN BENEFITS

- The inner smooth and compact surface of the hose make easy the flow of the products conveyed and the cleaning operations. Excellent resistance to abrasion.
- Innovative and fully see-through construction for easy visual inspection.
- Light and easy to handle.
- Free from phthalates, plasticizers and animal derived ingredients, thus reducing the risk of bacterial growth and contamination of the product conveyed.
- Hose in accordance with the Regulations EC 1935/2004 and 2023/2006/EC (GMP).
- Plasticizers and nitrosamines free hose.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
25	33	4.0	6	18	-0.9	150	0.38	20
38	46	4.0	6	18	-0.9	230	0.54	20
50	58.5	4.25	5	15	-0.9	300	0.98	20
63.5	72	4.25	4	12	-0.9	400	1.24	10
76	85	4.5	4	12	-0.8	490	1.63	10
100	112	6.0	3	9	-0.8	700	2.48	10

Other sizes and colours are available upon request.
Please contact our Sales Department.
Above technical data refer to application at room temperature (+20°C).

Cod. IT-P00143

MTG-PHARMADUST/AS (ANTISTATIC)

MARKING

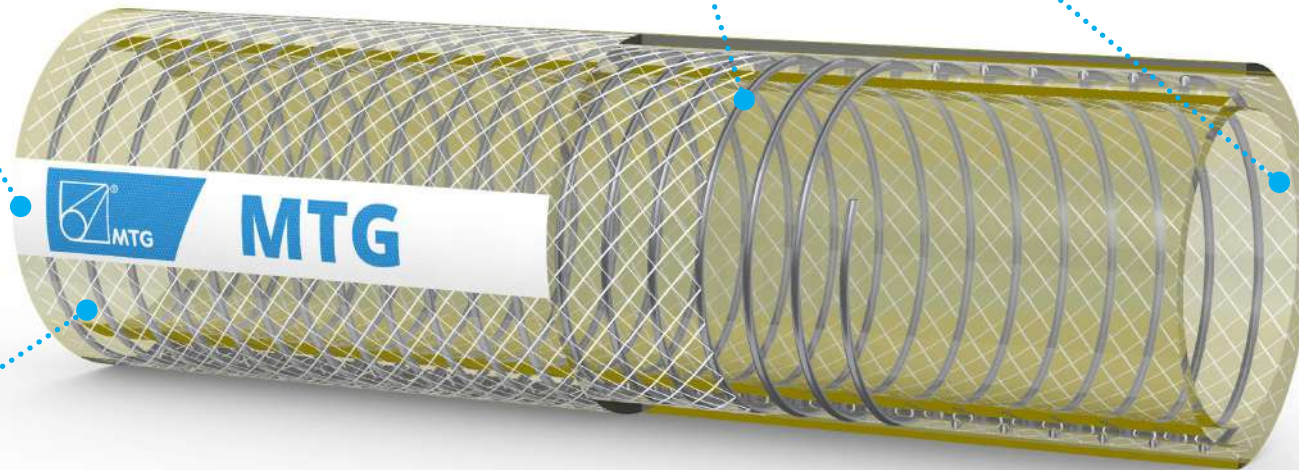


REINFORCEMENT

- High strength plies of synthetic cord.
- Steel helix wire INOX AISI 302.

TUBE

- TECHNOPOLYMER (code 3G26AU), fully see-through, odourless and tasteless, mirror-smooth.
- Abrasion loss: < 36 mm³ according to DIN 53516.
- Resistance: R<10⁹ Ω.
- Compliance: TRGS 727, USP Class VI, FDA, Regulation EU n. 10/2011, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



COVER

- TECHNOPOLYMER (code 3G26AU), fully see-through, odourless and tasteless, smooth, glossy finish. Resistant to abrasion and ozone.
- Compliance: USP Class VI, Regulation EU n. 10/2011, FDA, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Suction and delivery hose, specifically designed for conveying air mixed with powders.
- Normally used in the pharmaceutical and food industry.
- Tube designed and developed to ensure dissipation of electrostatic charges, with resistance $R < 10^9 \Omega$.

FITTINGS

- The hose may be supplied in application lengths and assembled with any kind of couplings (CLAMP, DIN 11851, etc.).
- Only for hose assemblies: test of electrical continuity between the couplings ($R < 10^2 \Omega$) according to EN 8031.



TEMPERATURE RANGE

- From -10°C to $+85^{\circ}\text{C}$.
- Cleaning with water (up to $+100^{\circ}\text{C}$ without pressure) mixed with a normal mild cleaning detergent.



SAFETY FACTOR

≥ 3 times working pressure.

MAIN BENEFITS

- The inner smooth and compact surface of the hose make easy the flow of the products conveyed and the cleaning operations. Excellent resistance to abrasion.
- Innovative and fully see-through construction for easy visual inspection.
- Light and easy to handle.
- Free from phthalates, plasticizers and animal derived ingredients, thus reducing the risk of bacterial growth and contamination of the product conveyed.
- Hose in accordance with the Regulations EC 1935/2004 and 2023/2006/EC (GMP).
- Plasticizers and nitrosamines free hose.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
25	33	4.0	6	18	-0.9	150	0.38	20
38	46	4.0	6	18	-0.9	230	0.54	20
50	58.5	4.25	5	15	-0.9	300	0.98	20
63.5	72	4.25	4	12	-0.9	400	1.24	10
76	85	4.5	4	12	-0.8	490	1.63	10
100	112	6.0	3	9	-0.8	700	2.48	10

Other sizes and colours are available upon request.
Please contact our Sales Department.
Above technical data refer to application at room temperature ($+20^{\circ}\text{C}$).

Cod. IT-P00144

MTG-PHARMADUST/ST

MARKING

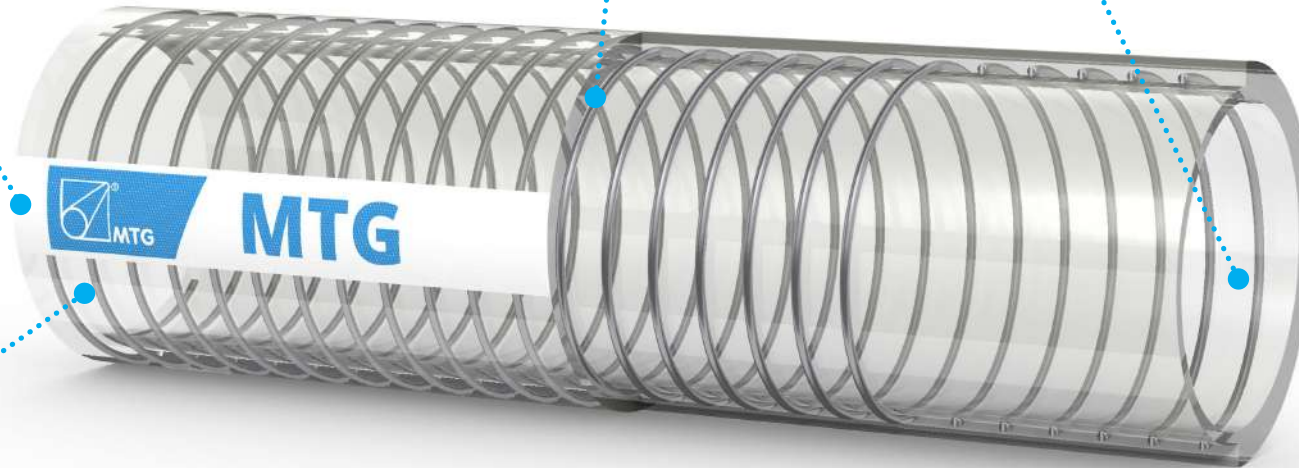


REINFORCEMENT

Stainless steel helix wire AISI 302.

TUBE

- TECHNOPYLIMER (code 3G26AU), fully see-through, odourless and tasteless, mirror-smooth.
- Abrasion loss: < 36 mm³ according to DIN 53516.
- Compliance: USP Class VI, Regulation EU n. 10/2011, FDA, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



COVER

- TECHNOPYLIMER (code 3G26AU), fully see-through, odourless and tasteless, smooth, glossy finish. Resistant to abrasion and ozone.
- Compliance: USP Class VI, Regulation EU n. 10/2011, FDA, D.M. 21/03/73 and following amendments, ISO 10993-4, -10, -11, non-cytotoxic according to ISO 10993-Part 5.



APPLICATION

- Suction hose for air mixed with powders.
- Hose with steel helix wire, utmost see-through.
- Normally used in the pharmaceutical and food industry.

FITTING

- The hose may be supplied in application lengths and assembled with any kind of couplings (CLAMP, DIN 11851, etc.).
- Only for hose assemblies: test of electrical continuity between the couplings ($R < 10^2 \Omega$) according to EN 8031.



TEMPERATURE RANGE

- From -10°C to +85°C.
- Cleaning with water (up to +100°C without pressure) mixed with a normal mild cleaning detergent.



SAFETY FACTOR

≥ 3 times working pressure.

MAIN BENEFITS

- The inner smooth and compact surface of the hose make easy the flow of the products conveyed and the cleaning operations. Excellent resistance to abrasion.
- Innovative and fully see-through construction for easy visual inspection.
- Light and easy to handle.
- Free from phthalates, plasticizers and animal derived ingredients, thus reducing the risk of bacterial growth and contamination of the product conveyed.
- Hose in accordance with the Regulations EC 1935/2004 and 2023/2006/EC (GMP).
- Plasticizers and nitrosamines free hose.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: DIN 7715 T4 S2 - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
25	33	4.0	1	3	-0.9	150	0.36	20
38	46	4.0	1	3	-0.9	230	0.52	20
50	58.5	4.25	1	3	-0.9	300	0.95	10
63.5	72	4.25	1	3	-0.9	400	1.20	10
76	85	4.5	1	3	-0.8	490	1.59	10
100	112	6.0	1	3	-0.8	700	2.42	10

Other sizes and colours are available upon request.
Please contact our Sales Department.
Above technical data refer to application at room temperature (+20°C).

Cod. IT-P00145

MTG CLEARWAY/SMO-Plat/FC

MARKING

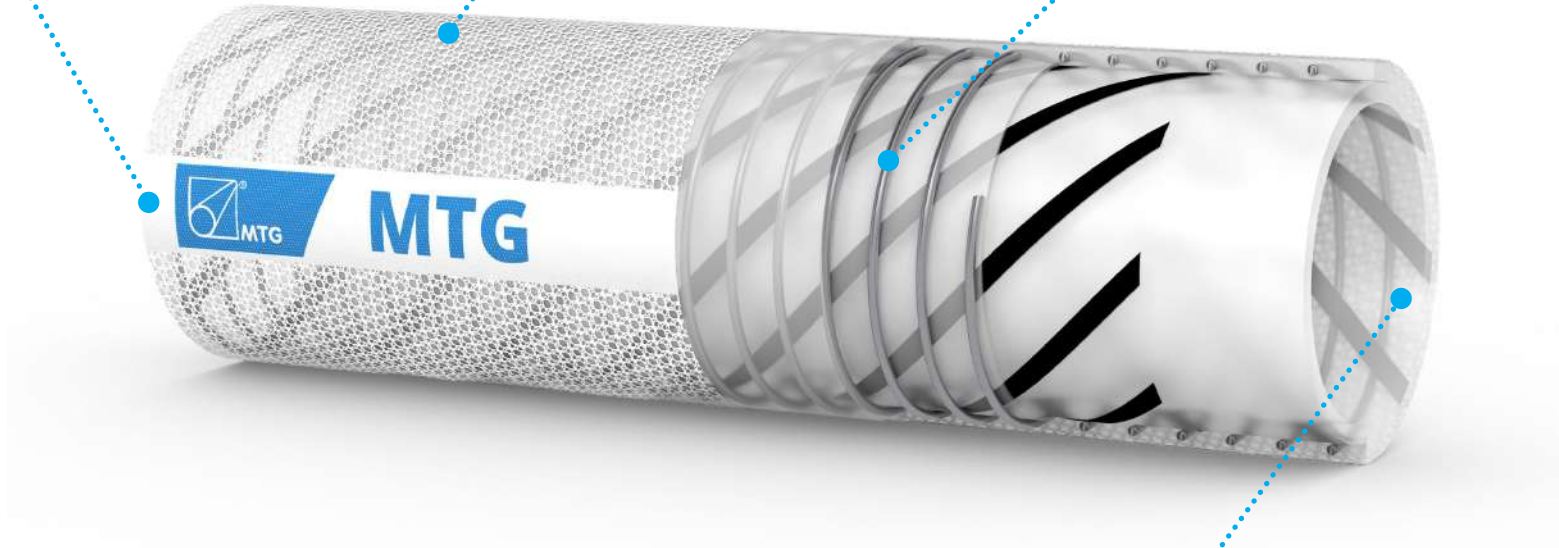


COVER

Translucent silicone rubber (code SILICONE-3362PT), pharmaceutical and food quality.

REINFORCEMENT

- Carbon fiber fabric.
- Embedded stainless steel helix wire AISI 304.
- High strength polyester plies.



TUBE

Translucent silicone rubber (code SILICONE-3362PT), pharmaceutical and food quality, odourless and tasteless, mirror-smooth.

STANDARDS

- US Pharmacopoeia Class VI, non-cytotoxic according to ISO 10993-Part 5.
- Compliance: FDA, BfR, E.P. 3.1.9. (European Pharmacopoeia), ISO 10993-4, -10, -11.



APPLICATION

- Silicone hose for suction of air mixed with non-abrasive high purity powders.
- Suitable for process applications requiring a tight bending radius and easy handling.
- Normally used for vacuum cleaners in pharmaceutical and cosmetic industries.
- Special version made with carbon fiber fabric to dissipate the electrostatic charges created by the friction of the powders on the hose walls.

NOTE

- In order to dissipate any electrostatic charges the hose must be grounded with the installation.

MAIN BENEFITS

- Platinum-cured silicone hose with non-stick and hydrophobic properties.
- Safe solution for use in the aseptic environments and hygienic applications: utmost care is used starting from the choice of high-purity ingredients, production and storing procedures.
- Pharma-grade validation: the advanced MTG Clearway design has been tested in accordance with USP Class VI, EU Pharmacopoeia and FDA Standards.
- Hose in accordance with EC 1935/2004 and 2023/2006/EC (GMP). The MTG production cycle is free from animal derived ingredients, phthalates, adipates and materials subject to restrictions according to EC 1907/2006 (REACH).
- Plasticizers and nitrosamines free hose.



TEMPERATURE RANGE

From 0°C to +50°C.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: +1/-0.5mm - Length: ISO 1307

Inner Diameter mm	Outer diameter mm	Wall thickness mm	Working pressure BAR	Burst pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight kg/m	Max. length m
25	30	2.5	-	-	-0.7	50	0.214	10
38	44	2.0	-	-	-0.7	80	0.317	10
51	57	3.0	-	-	-0.7	125	0.482	10
63.5	70	3.3	-	-	-0.7	190	0.708	10

Other sizes and colours are available upon request. Please contact our Sales Department.
Above technical data are referring to application at room temperature (+20°C).

Cod. IT-M00167

OTHER PRODUCTS

PURITYFLOW



BEST OF TECHNOLOGY FOR HIGHEST LEVEL OF PURITY

Purityflow is the new transport system for high purity fluids, designed by MTG for critical applications in the pharmaceutical industry. The system consists of an injection molded silicone coupling with embedded gasket, connected with the pharma quality silicone hose by means of an innovative and contamination-free way of adherence.

Purityflow ensures full flow transport of pharmaceutical products, thus avoiding stagnation between the hose and the coupling.

Purityflow complies with US Pharmacopoeia Class VI, European Pharmacopoeia 3.1.9, BfR and FDA Standards, not cytotoxic (ISO 10993 – Part 5). The protection cap of the molded silicone end is made of stainless steel AISI 316.

Sterilization may be performed in an autoclave, radiation or gas (ethylene oxide).



MTG-PERISTALTIC/PHARMA



TEMPERATURE RANGE

From 30°C to +90°C.



STERILIZATION

- Chemical CIP sterilization.
- Radiation.
- Gas - EtO.

APPLICATION

Specifically designed for use on peristaltic pumps, suitable for transport of high purity products.

MAIN BENEFITS

- The outstanding mechanical properties ensure a longer lifetime.
- See-through construction for easy visual inspection.
- Odourless hose, free from plasticizers, animal derived ingredients, allergens and nitrosamines.
- Hose in accordance with the Regulations EC 1935/2004 and 2023/2006/EC (GMP).

CONSTRUCTION

- Technopolymer (code GMAST1620), odourless, tasteless, mirror-smooth.
- Complying with USP class VI and EU 10/2011.
- Compliance: FDA Standards, D.M. 21/03/73 and following amendments.

TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: I.D.: ISO 1307 - Wall thickness: +1/-0.5mm - Length: ISO 1307

Inner Diameter mm	Inner diameter inch	Wall thickness mm	Wall thickness inch	Working pressure BAR	Vacuum BAR	Min. bending radius mm	Approx. weight gr/m	Max. length m
3.2	0.126	2.4	0.094	-	-	-	35	100
4.8	0.189	2.4	0.094	-	-	-	45	100
6.1	0.252	2.45	0.096	-	-	-	50	100
9.6	0.378	2.2	0.086	-	-	-	70	100

OTHER DIAMETERS AND WALL THICKNESSES ARE AVAILABLE ON REQUEST.

Cod. IT-P00140

The inner and outer diameter as well as the lengths will be defined with the user in accordance with the operating conditions.



PFA LINED FITTINGS



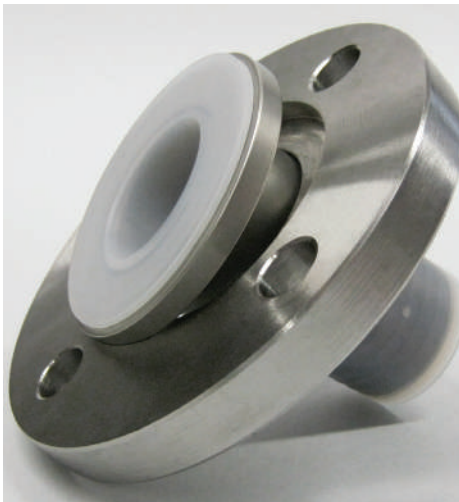
FEMALE RETAINER



CLAMP



ADAPTER A-LF



FLANGE RETAINER



MALE CAMLOCK



ADAPTER A-A

FEATURES AND BENEFITS OF PFA LINED FITTINGS

- **APPLICATIONS AND CHEMICAL RESISTANCE:** PFA-lined fittings are especially used for high purity applications in the pharmaceutical industry. Thanks to the excellent chemical resistance, they are the best and safest solution for the most critical applications in the chemical industry.
- **LIFETIME:** Perfluoropolymer lining (PFA) ensures a better performance and a longer lifetime of the hose assembly, thus reducing the operating and maintenance costs.
- **FOOD AND PHARMA COMPLIANCE:** Compliance of the PFA liner with the regulations FDA and USP Class VI for use in the pharmaceutical, cosmetic and food industries.
- **SAFETY:** The PFA, joined to the metal part in AISI 316L* by injection molding, is further anchored by means of special geometries created on the metal support in order to avoid the risk of implosion in case of suction and high temperatures.

* The casting certificates are available on demand.

MTG PHARMASIL/COMP



MTG PHARMASIL/COMP IS A FLEXIBLE CONNECTION THAT AVOIDS TRANSMISSION OF VIBRATIONS AND THE PERFECT ALIGNMENT BETWEEN UNALIGNED ELEMENTS

The compensator is specifically developed for the delivery of high purity products in the pharmaceutical industry and it is produced in platinum-cured silicone complying with FDA 21 CFR 177.2600 and USP Class VI Standards.

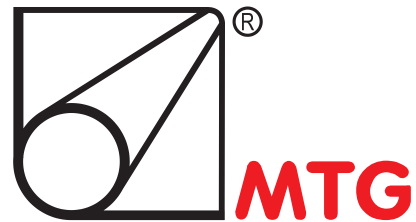
The special finishing totally smooth is to ensure the prevention of cross contamination and bacterial growth.

Textile reinforcement are used to grant resistance to pressure and compensation for volumetric expansion. The structure is free from metal parts, thus ensuring its primary function of preventing vibrations.

The compensator may be produced in a wide range of diameters and lengths. The flanges are produced in AISI 316L.

Temperature range from -60°C to +200°C. The compensator is autoclavable and resistant to the most common sterilization processes (radiations, Eto, etc).





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