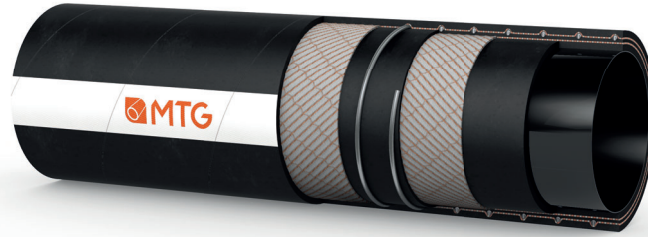




**MANIFATTURA TUBI GOMMA s.p.a.**  
 Grisignano di Zocco, 36040 (VI) ITALY  
 T. +39 0444.614755 | info@mtgspa.com  
 www.mtgspa.com



## 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).

## CONSTRUCTION

### 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.

### REINFORCEMENT

- Plies of synthetic cord and embedded steel helix wire.

### 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.
- The flame resistance is exceeding the requirements of the EN 12115 - Annex E (at least 5 times the testing time required by the Norm).

## SAFETY FACTOR

- $\geq 4$  times working pressure.

## MAIN BENEFITS

- The inner liner ensures utmost chemical and temperature resistance, excellent impermeability, as well as 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 acc. to EC 1907/2006 (REACH).

## TEMPERATURE RANGE

- In accordance with EN 12115:2011.
- Sterilization with steam up to +150°C for max. 30 minutes.

## CERTIFICATIONS

- Certificate "LAPI n°316.11S0040/15 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.

## ELECTRICAL PROPERTIES

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

## MARKING

- Embossed tape according to EN 12115:2011, lengthwise.



## TECHNICAL SPECIFICATIONS

SIZE TOLERANCES: Inner Diameter: EN 12115 - Outer diameter: 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	30
25	37	6.0	16	64	-0.90	225	1.00	30
32	44	6.0	16	64	-0.90	262	1.20	30
38	51	6.5	16	64	-0.90	338	1.47	30
50	66	8.0	16	64	-0.90	410	2.35	30
51	67	8.0	16	64	-0.90	412	2.38	30
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 acc. to MTG Chemical Resistance Chart. Other sizes are available upon request. Above technical data are referring to application at room temperature (+20°C).

