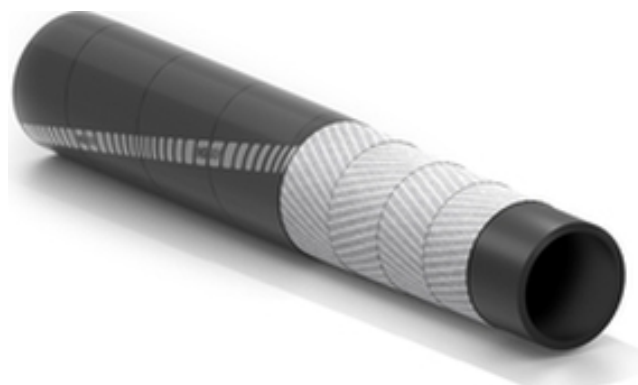


Orlando EPDM



Рукав для подачи химических продуктов, из каучука EPDM



Нормативно-правовые акты:
 EN 12115:2021.

Применение:

напорный рукав для подачи кислот, щелочей, спирта, альдегидов, кетонов и других хим. продуктов, а также горячей воды и горячего воздуха. Используется и для подачи пром. воды в водоочистительных системах. Рукав для использования в зоне ATEX. Тестирован уполномоченным обществом INERIS.

антистатик
 в соответствии с EN 12115
 напорный для химических веществ



Внутренний слой:

чёрный, гладкий из синтетического каучука EPDM. Хим. стойкость согласно соответствующей таблице IVG. Если темпер. подаваемого материала превышает 50°C - просим проконсультироваться с IVG.

Усиление:

высокопрочный синтетический корд.

Покрытие:

чёрное, гладкое из синтетич. каучука состава EPDM (с отпечатком текстильн. бандаж), устойчивое к хим. продуктам, истиранию, атмосферным воздействиям и озону.

Температура:

от -40°C до +100°C, в зависимости от жидкости.

Электрическое сопротивление:

Ω/Т, токопровод. рукав. Электрическое сопротивление для отрезков длиной менее или равным 40 м.

Маркировка:

фиолетовая маркировоч. лента "IVG Chem (логот. сферы применения)...". Тисненая лента в соот. с EN 12115.

Orlando EPDM

Ex
zone



| Код | Внутренний диаметр | | Внешний диаметр | | Рабочее давление | | Разрывное давление | | Номинальный вес | | Максимальная длина | |
|---------|--------------------|-------|-----------------|------|------------------|-----|--------------------|-----|-----------------|--------|--------------------|-----|
| | mm | inch | mm | inch | bar | psi | bar | psi | kg/m | lbs/ft | m | ft |
| 1433318 | 13 | 1/2 | 24 | 0,95 | 16 | 240 | 64 | 960 | 0,36 | 0,24 | 120 | 400 |
| 1422359 | 19 | 3/4 | 30 | 1,18 | 16 | 240 | 64 | 960 | 0,47 | 0,32 | 120 | 400 |
| 1427865 | 25 | 1 | 37 | 1,46 | 16 | 240 | 64 | 960 | 0,65 | 0,43 | 120 | 400 |
| 1428551 | 32 | 1-1/4 | 44 | 1,73 | 16 | 240 | 64 | 960 | 0,76 | 0,50 | 120 | 400 |
| 1430319 | 38 | 1-1/2 | 51 | 2,01 | 16 | 240 | 64 | 960 | 0,97 | 0,65 | 120 | 400 |
| 1425056 | 51 | 2 | 67 | 2,64 | 16 | 240 | 64 | 960 | 1,63 | 1,09 | 120 | 400 |
| 1485784 | 63,5 | 2 1/2 | 81 | 3,19 | 16 | 240 | 64 | 960 | 2,13 | 1,43 | 120 | 400 |
| 1200502 | 76 | 3 | 93 | 3,66 | 16 | 240 | 64 | 960 | 2,51 | 1,68 | 120 | 400 |
| 1469096 | 102 | 4 | 120 | 4,73 | 16 | 240 | 64 | 960 | 3,33 | 2,24 | 120 | 400 |

Рекомендуемые соединения:



Camlock



Thread coupling EN 14420-5 (DIN 2817)



TW EN 14420-6

SPECIAL DETAILS

NOTES AND SUGGESTIONS FOR THE END USERS FOR HOSE ASSEMBLIES INTENDED TO BE USED IN ATEX ENVIRONMENTS 2014/34/UE

Below are the notes for the proper use of the product in ATEX environments and warnings resulting from the risk analysis for the verification of effective ignition sources **regarding the hose assembly**.

Suggestions for a correct Risk Analysis are also given. There is no presumption that these suggestions could be exhaustive of every possible ATEX environment scenario in which the hose assembly could found, however the goal is to help the final user to carry out a correct Risk Analysis.

IVG Colbachini cannot, nor does it intend to, replace the Employer in his task of carrying out the Analysis. The aim is to help him in this activity.

The 1999/92/CE Directive (Minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres) obliges the Employer to:

1. evaluate the risks of explosion considering the following:
 - likelihood and persistence of explosive atmospheres;
 - likelihood that ignition sources will be present including electrostatic discharge;
 - scale of possible effects;
 - characteristics of the plant, substances used, processes and possible interactions;
 - places that are or can be connected via openings with areas where explosive atmospheres are likely to generate.

2.To issue a document “**Explosion protection document**” (Risk Analysis).

3.To always update the **“Explosion protection document”** (Risk Analysis)

NOTE A – hot surfaces.

The hose does not contain heat sources, so the surface temperature of the hose depends strictly on the use by the end user. In the pneumatic conveying systems periodically check the integrity of the hose and its layers.

Do not use the use if the inner layer is heavily worn. The range of the working temperature of the material for which we guarantee the properties is according to the technical data sheet of the product.

Damage resulting from improper use of the product are not attributable to the manufacturer.

NOTE B – sparks of mechanical origin.

The hose has no moving parts and it is not able to generate this source of ignition. In the pneumatic conveying systems, it is likely that sparks are carried from earlier process operations and not due to the hose itself. It is the end user's responsibility to operate so that this source of ignition is not present, internally and externally to the hose.

NOTE C – electrical equipment.

There are no electrical materials provided with the hose. The possible steel helix wire (if present between the layers of the hose) has been designed, to impart mechanical strength to the hose. The helix wire is not intended as an electrical conductor, but it can help the dispersion of electrostatic charges if and only if it is correctly connected to the ground line or to equipotential bonding jumpers with equipment already connected to the ground line.

NOTE D – eddy currents.

This ignition source is not applicable to the hose in question. The end user must operate so that the hose is not isolated from sections of insulating hoses. The hose, thanks to its conductive/dissipative characteristics is able to disperse possible electric/electrostatic charges accumulated during the process if and only if the hose is properly connected to the ground line.

NOTE E – electrostatic charges.

The hose does not contain or inherently generates electrostatic ignition sources. Eventual generation and accumulation of charges may depend on the material transported in the process and the ability of the material, properly connected with equipotential connections and/or connections with grounding, to be able to drain them. Care should be taken in the perfect cleaning and maintenance of connections and periodic assessment of the earth resistance that can detect anomalies in the system. The material the hose is made of has been designed to maximize the dispersion of electrostatic charges that can be generated due to the process. The nonapplication of these notes and improper use of the product as designed, absolve the manufacturer from any responsibility for any damage that may result. According to the characteristics and needs of the process that may generate internal and external hazardous atmospheres, detailed studies should be performed by experienced staff to guarantee a proper use of the product.

The concepts, recommendations, references and the limits reported in the following standards are extremely important in order to carry out a detailed study:

- CEI CLC/TR 60079-32-1:2016 – Electrostatics – Code of practice for the avoidance of hazards due to static electricity.
- NFPA 77 - 2014 - Recommended Practice on Static Electricity.
- UNI CEI EN ISO 80079-36:2016 – Explosive atmospheres - Part 36: Non-electrical equipment intended for explosive atmospheres - Basic method and requirements.
- UNI CEI EN ISO 80079-37:2016 – Explosive atmospheres - Part 37: Non-electrical equipment intended for explosive atmospheres - Type of non-electrical protection for constructive safety "c", for ignition source control "b", by immersion in liquid "k".
- UNI EN 1127-1/2011 Explosive atmospheres. Explosion prevention and protection – Part 1: Basic concepts and methodology.

NOTE F – adiabatic compression and shockwaves.

It is not applicable to the supplied hose. The possible releases of gas at high speed can only be caused by the process. The user must assess the possible presence of this ignition source before putting the hose into use.

The use of the product / hose as pneumatic conveying equipment brings the transport of embers generated in the connected process equipment.

We suggest checking the presence of ultrasonic waves as they may, in extreme cases, cause the ignition of a liquid or solid substance.

INTRODUCTION

The useful life of the product is seriously influenced by the conditions of use such as temperature and pressure, as well as delivery speed, abrasion, frequency, and duration of use. The age of the hose and the degree of impurities of the transported chemical product are also determining factors.

If you use chemical products or mixtures that differ from what is listed in the IVG chemical resistance chart please contact IVG before use. You are also advised to contact IVG if the nature or composition of the product to be conveyed, for example concentration or temperature, do not correspond to indications given by IVG. www.ivgspa.it/it/resistenze-chimiche.aspx

We recommend using fittings in materials suitable for the conveyed product. Pay particular attention to the combination between different materials if their contact can produce galvanic corrosion (e.g. aluminum - brass). Any small variation in concentration or temperature of the conveyed product can determine an important reduction of the mechanical characteristics of the metallic fitting. In case of doubts about the choice of the appropriate fitting please contact IVG Colbachini (<https://www.ivgspa.it/en/contacts.aspx>).

It is important during these periodic checks to pay attention to the state of the hose and fittings. Any anomalies that are detected indicate a degraded state of the hose and determine its removal from service.

- cracks, cuts, abrasions, detachments, tears of the cover with damaged or uncovered areas of reinforcement
- deformations, bubbles, specific swelling under pressure
- sticky or soft areas
- leaks

- cracks or signs of corrosion on the metal parts
- worn gaskets
- sliding of the fitting on the hose
- leaks

Avoid stagnation of products in the hose, especially in the case of solutions or emulsions. The resulting decanting causes concentrations to exceed the allowed limits. To avoid this phenomenon, proceed with emptying and cleaning after each use where possible.

SPECIAL DETAILS

SAFETY INFORMATION – USER RESPONSIBILITIES

The service life of rubber hoses mainly depends on the dedicated use. Equipment and systems where the hose is installed must be designed safely. Since our hose can be designed for different applications, **IVG Colbachini** cannot guarantee the proper functioning of the product for all situations.

The analysis of the technical aspects related to specific uses must be performed by the users when choosing the product that meets their requirements. So, in relation to the variety of operating conditions and applications of the IVG hose, the user is solely responsible for the final choice of the product deemed suitable to satisfy the performance and safety requirements called for the application.

The information and technical data shown in the product data sheets must be examined by users with appropriate technical skills. IVG Colbachini is not responsible for other uses, identified by the end user, that are different from the one shown in its catalogues, product sheets, offers, order confirmations and any recommendations attached.

An inappropriate choice of the product or a failure to follow the procedures of installation, use, maintenance and storage of the hoses may lead to a hose break and cause material damage and/or serious injury to people.

For the selection and proper use of the IVG products you can also refer to the document "Recommendations for selection, storage, use and maintenance of rubber hoses" provided by Assogomma and available on www.ivgspa.it. These recommendations are according to the international standard ISO 8331, "Plastic and rubber hoses and hose assemblies - Guidelines for selection, storage, use and maintenance."

For safety reasons, never exceed the working pressure indicated in the product data sheet.

For specific applications of rubber hoses, please refer to the legal requirements or specific standards; moreover, additional recommendations for particularly critical applications are available.

For further information, contact the Marketing department (marketing@ivgspa.it).