



code	inside diameter		outside diameter		working pressure		burst pressure		weight nominal		length max	
	mm	inch	mm	inch	bar	psi	bar	psi	kg/m	lbs/ft	m	ft
1400019	13	1/2	28	1,10	25	375	125	1875	0,53	0,36	120	400
1400385	16	5/8	31	1,22	25	375	125	1875	0,60	0,40	120	400
1400021	19	3/4	34	1,34	25	375	125	1875	0,69	0,46	120	400
1400148	25	1	40	1,58	25	375	125	1875	0,84	0,56	120	400
1473441	32	1-1/4	49	1,93	25	375	125	1875	1,10	0,74	120	400


EN

Anhydrous ammonia hose

Standards: UNI EN ISO 5771:2008.

Application: softwall hose for the delivery of liquid and gaseous anhydrous ammonia. It is particularly used in the processes of production of fertilizers.

The operator must be instructed on use and maintenance of the hose for anhydrous ammonia. Failures in service may produce damage to people and property. Periodic inspections and tests allow detection of signals indicating the deterioration of the hoses or the loss of performance, before coming to malfunctions or failures.

Temperature: from -40°C (-40°F) up to + 55°C (+131°F).

Construction

Tube: black, smooth, antistatic synthetic rubber.

Reinforcement: high strength synthetic cord.

Cover: black, smooth (wrapped finish), antistatic synthetic rubber, resistant to chemicals, abrasion, ozone and weathering. Pin pricked cover.

Electrical Resistance: $R \leq 1 \times 10^9 \Omega/m$.

Branding: embossed marking: IVG CHEM AMMOTECH - ANHYDROUS AMMONIA - ISO 5771...

Also available upon request: 1. Different diameters.

RU

Рукав для подачи безводного аммиака

Нормативы: UNI EN ISO 5771:2008.

Применение: напорный рукав для подачи жидкого и газообразного безводного аммиака. Применяется при производстве удобрений.

В связи с тем, что безводный аммиак опасен для среды и персонала, ответственный работник должен пройти инструктаж по обслуживанию данного рукава. Кроме этого, безводный аммиак разрушает материал рукава, поэтому необходим периодический осмотр рукава во избежание аварийных ситуаций.

Температура: от -40°C до +55°C.

Конструкция

Внутренний слой: чёрный, гладкий из синтетического антистатического каучука.

Усиление: высокопрочный синтетический корд.

Покрытие: чёрное, гладкое из синтетического антистатического каучука (с отпечатком текстильного бандажа), устойчивое к хим. продуктам, истиранию, атмосферным воздействиям и озону. Покрытие с микроперфорацией.

Электрическое сопротивление: $R \leq 1 \times 10^9 \Omega/m$.

Маркировка: тиснённая маркировочная лента IVG CHEM AMMOTECH - ANHYDROUS AMMONIA - ISO 5771..

В наличии по запросу: 1. Другие диаметры.

INDICAZIONI DI SICUREZZA PER TUBI CHEM AMMOTECH

ATTENZIONE!

Non usare a temperature o pressioni superiori a quelle raccomandate dal produttore.

RACCORDATURA.

Consultare la letteratura del produttore o contattarlo per l'appropriata raccordatura dei tubi per ammoniaca anidra.

Sui tubi per ammoniaca anidra utilizzare solo raccordi permanenti in acciaio AISI 304/316 con estremità flangiate o filettate maschio.

I tubi per ammoniaca anidra **non** devono essere raccordati nuovamente in nessuna circostanza.

PROCEDURE DI ISPEZIONE.

I tubi per ammoniaca anidra hanno una durata limitata e l'utilizzatore deve essere allertato dai segni di imminente cedimento.

ISPEZIONE GIORNALIERA – Prima dell'uso giornaliero, deve essere eseguito un controllo visivo. Se vengono notati aspetti insoliti, il tubo deve essere soggetto a collaudo a pressione.

NUOVI ASSEMBLAGGI – Tutti i tubi nuovi devono essere testati prima dell'utilizzo per determinare se vi siano stati danni durante lo stoccaggio o il trasporto.

USO NORMALE – Quando il tubo per ammoniaca anidra è soggetto ad uso ordinario, la frequenza dei collaudi deve essere ogni 90 giorni per il primo anno ed ogni 30 giorni successivamente.

USO PESANTE – I tubi assemblati devono essere testati immediatamente dopo che siano soggetti ad un uso non normale come trazione dell'estremità. Tubi flangiati, schiacciati da veicoli, o soggetti a kink devono essere rimossi dal servizio.

USO GRAVOSO – Tubi per ammoniaca anidra soggetti ad utilizzi severi, quali trascinarsi su superficie taglienti, piegate con angoli stretti, o continuamente esposti alle condizioni atmosferiche, si deteriorano più rapidamente di tubi maneggiati con cura. Tubi soggetti a uso gravoso devono essere testati ogni 30 giorni dalla data di installazione.

INDICATIONS DE SÉCURITÉ POUR LES TUYAUX CHEM AMMOTECH

ATTENTION!

Ne pas utiliser à températures ou pressions supérieures à celles indiquées par le constructeur.

RACCORDEMENTS.

Consulter le constructeur pour les raccords qui sont spécialement conçus pour les tuyaux d'ammoniac anhydre.

Sur les tuyaux pour ammoniac anhydre, n'utiliser uniquement les raccords permanents en acier AISI 304/316 avec brides aux extrémités ou filetés male.

Ils **ne** peuvent être rééquipés en aucunes circonstances.

PROCÉDURÈS D'INSPECTIONS ET RECOMMANDATIONS.

Les tuyaux pour ammoniac anhydre ont une durée limitée et l'utilisateur doit faire attention aux signes d'usure.

INSPECTIONS QUOTIDIENNES - Avant chaque utilisation, il est recommandé d'effectuer un contrôle visuel. Si vous remarquez des aspects insolites, nous vous conseillons d'effectuer des essais hydrauliques.

ASSEMBLAGES - Il est conseillé de tester les tuyaux avant utilisation afin de vérifier s'ils n'ont pas subi de dommages pendant le stockage ou le transport.

UTILISATION NORMALE - Quand le tuyau est utilisé quotidiennement, il est conseillé d'effectuer des contrôles fréquents tous les 90 jours la première année, puis tous les 30 jours pour les années suivantes.

UTILISATION EXCESSIVE - Dans le cas d'une utilisation excessive des tuyaux, telle que traction aux extrémités, des contrôles immédiats doivent être effectués. Les tuyaux équipés de brides, aplatis par des véhicules, ou croqués doivent être mis hors utilisation.

UTILISATION INTENSE - Les tuyaux soumis à une utilisation intense telle que l'utilisation sur des surfaces abrasives, qui sont pliés avec angles serrés, ou exposés continuellement aux conditions atmosphériques, se détériorent plus rapidement des tuyaux qui sont utilisés avec soin. Dans ce cas, ils doivent être contrôlés tous les 30 jours à partir de la date d'installation.

SAFETY HINTS FOR CHEM AMMOTECH HOSE

WARNING!

Do not use at temperatures or pressures above those recommended by the manufacturer.

COUPLINGS.

Consult the manufacturer's literature or contact him for the appropriate fitting system on the anhydrous ammonia hose.

Only use permanent steel fittings in AISI 304/316 with flanged or male threaded ends on hoses for anhydrous ammonia.

The anhydrous ammonia hoses must **not** be connected again under any circumstances.

INSPECTION PROCEDURES.

The hoses for anhydrous ammonia have a limited life and the user must be alerted by signs of impending failure.

DAILY INSPECTION - Prior to use daily, a visual inspection should be performed. If you noticed unusual aspects, the hose shall be subject to the pressure test.

NEW ASSEMBLY - All new hoses must be tested before use to determine if there is any damage during storage or transport.

NORMAL USE - When the hose for anhydrous ammonia is subject to ordinary use, the frequency of testing should be every 90 days for the first year and every 30 days thereafter.

HARD USE - The hose assemblies shall be tested immediately after they are subjected to abnormal use as traction end. Flanged hoses, crushed by vehicles, or subject to kink must be removed from service.

HEAVY DUTY - Hoses for anhydrous ammonia subject to severe use, such as driving on surface edges, bent with narrow angles, or continuously exposed to the weather conditions, deteriorate more quickly than hoses handled with care. Hoses under heavy use must be tested every 30 days from the date of installation.

SICHERHEITSHINWEISE FÜR DIE SCHLÄUCHE CHEM AMMOTECH

ACHTUNG!

Nicht bei höheren Temperaturen oder Drücken als vom Hersteller empfohlen verwenden.

KUPLUNGEN.

Beachten Sie die schriftlichen Anweisungen des Herstellers oder fragen Sie den Hersteller zur korrekten Einbindung von Schläuchen für wasserfreies Ammoniak.

Diese Schläuche für wasserfreies Ammoniak dürfen nur mit dauerhaften Kupplungssystemen aus Stahl AISI 304/316 mit Flanschen oder männlichen Gewindeenden eingebunden werden.

Schläuche für wasserfreies Ammoniak dürfen **niemals** neu eingebunden werden.

PRÜFPROZEDUR.

Schlauchleitungen für wasserfreies Ammoniak haben eine begrenzte Lebensdauer. Der Anwender muss die Zeichen eines drohenden Ausfalls erkennen.

TÄGLICHE SICHTPRÜFUNG – Vor jedem Gebrauch muss die Schlauchleitung auf Anomalien untersucht werden. Beim geringsten Anzeichen von Anomalien ist die Schlauchleitung einer Druckprüfung zu unterziehen.

ERSTVERWENDUNG – Neue Schlauchleitungen sind vor der Verwendung zu prüfen und auf Transport- und Lagerungsschäden zu untersuchen.

NORMALE VERWENDUNG – Bei normalem Einsatz sollen die Schlauchleitungen für wasserfreies Ammoniak im ersten Jahr alle 90 Tage geprüft werden. Danach alle 30 Tage.

STARKE BELASTUNG – Schlauchleitungen die einem besonderen Stress wie Längsdehnung ausgesetzt wurden sind sofort zu prüfen. Leitungen mit beschädigten Flanschen oder Knicken sind zu entsorgen.

ERSCHWERTE BEDINGUNGEN – Schlauchleitungen für wasserfreies Ammoniak die unter erschwerten Bedingungen wie engen Biegeradien, scharfen Kanten oder dauerhaften Witterungseinflüssen ausgesetzt sind altern schneller als Schlauchleitungen die sorgsam behandelt werden. Diese Schlauchleitungen sind 30 täglich zu prüfen.

SAFETY INSTRUCTIONS FOR HOSES INTENDED FOR CHEMICAL APPLICATIONS

INTRODUCTION

The chemical resistance of a hose is closely related to the medium conveyed and to the conditions of use. In particular, remember to check the chemical resistance of the elastomer that constitutes the inner tube in the table found on the IVG website (<https://www.ivgspa.it/en/chemical-resistance.aspx>).

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.

USE

Particular care must be taken to ensure that the cover and ends of the hose don't come into contact with the chemicals and/or elements that may damage the integrity of the hose.

All operators involved in the use and maintenance of the hose and its fittings must be adequately trained on the proper use of chemicals. They must also wear appropriate protective clothing and devices.

A system failure could cause the release of toxic, corrosive and/or flammable material.

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

FITTINGS

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>).

INSPECTION AND MAINTENANCE

Even if the use of the product complies with all the prescriptions reported in this document and in the attached sheets, all the materials used for the hose production suffer a natural aging with subsequent loss of the chemical-physical-mechanical characteristics. Hoses and fittings must be carefully inspected preferably before each use and in any case with a periodic frequency not exceeding 6-12 months. This will help prevent possible leakage of polluting substances, dangerous for the health of man and the environment.

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.

Main anomalies detectable on hoses:

- 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

Main anomalies detectable on fittings:

- 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.

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 SpA 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).