## Establishing a Legacy



## HOSES

TECHNICAL INFORMATION

#### DESIGN

Throughout the world, the name ALFAGOMMA has become synonymous with quality, a reputation based on first class products, a commitment to research and development and ongoing capital investment.

ALFAGOMMA's development and product engineering staff continues to provide fluid conveying product innovations that assure better performance and cost savings for customers.

ALFAGOMMA hose and couplings are designed to work together as a system for problem free performance, no matter what machine you operate. The performance of all ALFAGOMMA products exceeds SAE, DIN, and JIS requirements and some hoses meet the MSHA and LOBA flame resistance requirement, as well.

### LEADERSHIP IN HYDRAULIC HOSE AND COUPLING COMPONENTS

ALFAGOMMA has become a world-leading manufacturer of fluid power and fluid system components. A positive attitude toward the demands from new equipment, using the latest technology, has allowed ALFAGOMMA to introduce many outstanding new hydraulic hose types. These hoses have found acceptance in a wide range of industries. Some examples are:

| Mining       | Earthmoving            | Molding  |
|--------------|------------------------|----------|
| Logging      | Agriculture            | Drilling |
| Petroleum    | Waste/Refuse           | Crane    |
| Railroad     | Manufacturing          |          |
| Construction | Pulp and Plywood Mills |          |

#### **OUR COMMITMENT**

By remaining alert to customer's needs, ALFAGOMMA is constantly engineering new products for tomorrow's markets as well as modifying them for even higher performances. ALFAGOMMA's commitment to innovation and service makes the company's products known throughout the world for quality, reliability and leadership. When you need quality hose and couplings, use the best available. Now you can count on ALFAGOMMA for all your needs.

#### TESTING

ALFAGOMMA's laboratories are fully equipped to carry out tests according to international standards like SAE, DIN and JIS. New products are also subjected to laboratory simulation of actual service prior to being released on the market.

#### WORLD CLASS QUALITY

ALFAGOMMA is working to comply with internationally recognized quality programs requiring stringent standards. Many of our customers are demanding ISO qualification or its equivalent as a prerequisite for purchasing. This standard is an assurance of consistent quality. For ALFAGOMMA this is just the start of "doing it right from the beginning."

#### WARRANTY INFORMATION

ALFAGOMMA hose and fittings are designed, engineered and tested to be used together in an assembly.

The use of ALFAGOMMA fittings on other manufacturer's hose or the use of ALFAGOMMA hose with other manufacturer's fittings may result in the production of unreliable or unsafe assemblies. It is neither recommended nor authorized by ALFAGOMMA.

ALFAGOMMA recommends only those hose and coupling combinations specified in the ALFAGOMMA Hydraulic Products Catalogs.

ALFAGOMMA disclaims any liability for any hose assemblies that have not been produced in conformance with ALFAGOMMA assembly recommendations and current crimp data charts.

Extensive impulse testing has been performed by ALFAGOMMA to verify the recommendations contained in this catalogue. A simple burst or pressure test cannot determine a hose and coupling combination.

Any claim for defects must be made in writing on the appropriate ISO9000 complaint form within 8 days from receipt of the product. ALFAGOMMA will have a reasonable opportunity thereafter to examine and investigate the alleged defect.

The customer's exclusive remedy with respect to any claim of any kind whatsoever shall be refund of the purchase price or replacement of the product at the option of ALFAGOMMA and in no event shall ALFAGOMMA be liable for any incidental or consequential damages whatsoever.

Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.









NFORMATION

**TECHNICAL** 

IMPORTANT NOTE FOR USERS OF ALFAGOMMA AND PIRANHAFLEX HYDRAULIC HOSES

Hose assemblies require caution in use not only to ensure that they provide long service life but also to guard against potentially dangerous failure. Serious injury, death and destruction of property can result from the rupture or blowing-apart of a hydraulic hose assembly that is damaged, worn out, badly assembled or installed incorrectly.

Users should follow good maintenance practices. Avoid expensive downtime by establishing a program of inspection, testing and replacement of hose assemblies before failure occurs; taking into account such factors as severity of application, frequency of equipment use, and past performance of hose assemblies. Document your maintenance, inspections and testing.

Only properly trained persons should inspect, test or service hose assemblies and this training should be updated regularly.

Users should carefully observe the precautions listed below (under "Be aware that . . .") and they should also closely follow our suggestions for the proper selection of hose and couplings. In addition, care should be taken not to exceed the minimum bend radius listed for each hose size and type. Maximum operating pressure should not exceed the pressures listed. Instructions for assembling fittings to different hoses should be followed carefully to ensure the safe performance of the complete assembly.

By following the recommendations on hose assembly routing and installation, improved safety and longer service life of any hose installation will result.

Hydraulic fluid under pressure can be potentially dangerous! An explosive burst or stream of escaping fluid can cause damage to equipment as well as serious injury to persons nearby.

#### Be aware that ...

- 1. Highly pressurized fluid escaping from a small pinhole can be almost invisible, and yet exert extreme force capable of penetrating the skin and other body tissues, causing possible severe injury.
- 2. Hot fluids or chemicals can cause severe burns.
- 3. Pressurized fluids, if released uncontrolled, can exert a tremendous explosive force.
- 4. All rubber hydraulic hoses listed in this catalog are electrically conductive.
- 5. Some hydraulic fluids are highly flammable.

#### and . . .

- 6. Always position a shield between you and any pressurized hydraulic lines when working next to them, or, better yet, release the pressure in the lines.
- 7. Wear safety glasses.
- 8. Do not use your hands to check for leaks. Instead, use a piece of cardboard. Do not touch a pressurized hydraulic hose assembly with any part of your body, if fluid punctures the skin, even if no pain is felt, a serious emergency exists. Obtain medical assistance immediately. Failure to do so can result in loss of the injured body part or death.
- 9. Stay out of hazardous areas while testing hose assemblies under pressure. Use proper safety protection.
- 10. If an injury or reaction occurs, get medical attention immediately.
- 11. Use only non-conductive thermoplastic hoses where electrical conductivity is not desired, for example for use with equipment working near electrical power lines.

Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.

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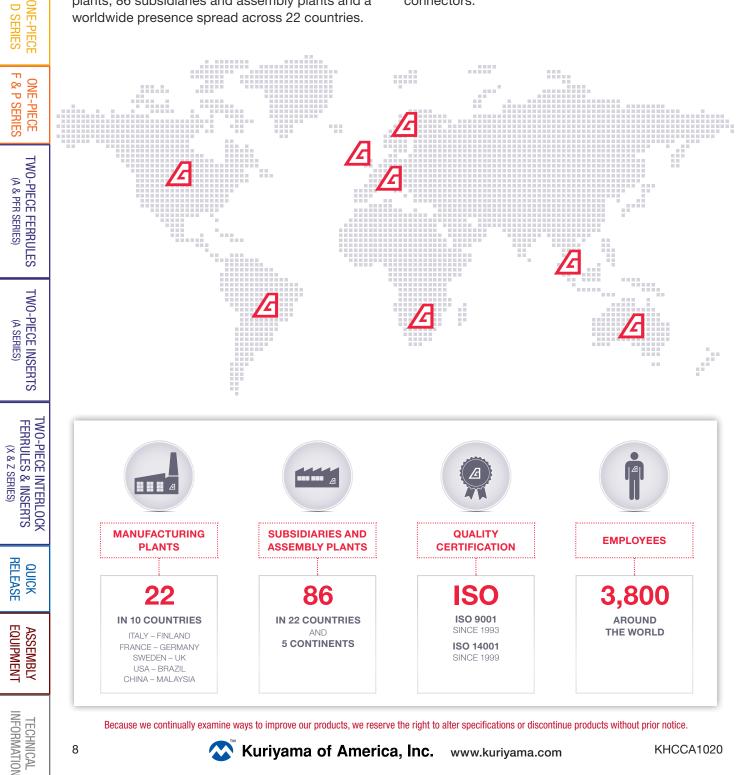
# **Providing Excellence** and Reliability



#### **ALFAGOMMA**

Developing cutting-edge technology and innovative solutions. Supplying top quality products worldwide. These are the pillars on which ALFAGOMMA's success has been built since 1956. Today, ALFAGOMMA plays a leading role in the industrial and hydraulic rubber hoses segment, with 22 plants, 86 subsidiaries and assembly plants and a worldwide presence spread across 22 countries.

The Group has been providing top quality products for 60 years and it has always been known for its excellent technical department: a strong commitment to quality and control design that is reflected in the Group's state-of-the-art product portfolio, which also include adapters and swivel connectors.



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ONE-PIECE B SERIES

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## **Main Plants Overview**

















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KHCCA1020

Kuriyama of America, Inc. www.kuriyama.com

HOSES

ONE-PIECE B SERIES

ONE-PIECE D SERIES

ONE-PIECE F & P SERIES

TWO-PIECE FERRULES (A & PFR SERIES)

TWO-PIECE INSERTS (A SERIES)

TWO-PIECE INTERLOCK FERRULES & INSERTS (X & Z SERIES)

> QUICK RELEASE

> **ASSEMBLY** EQUIPMENT

TECHNICAL INFORMATION