

FORESTRY





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// DUNLOP HIFLEX



// THE FIRST HOSES

Skottland, 1887. John Boyd Dunlop, a Scottish born inventive veterinarian observes his son as he's cycling down a bumpy road. The bike has hard solid rubber tyres and the ride is rough and shaky. The ride is neither fast nor particularly comfortable. He then comes up with an idea of wrapping an air filled rubber hose around the rim.

John Dunlop's idea of an air-filled rubber hose was the beginning of the industrial manufacturing process and later came the development of Hydraulic and Industrial hoses – a product that changes the world.



// DUNLOP HIFLEX SCANDINAVIA

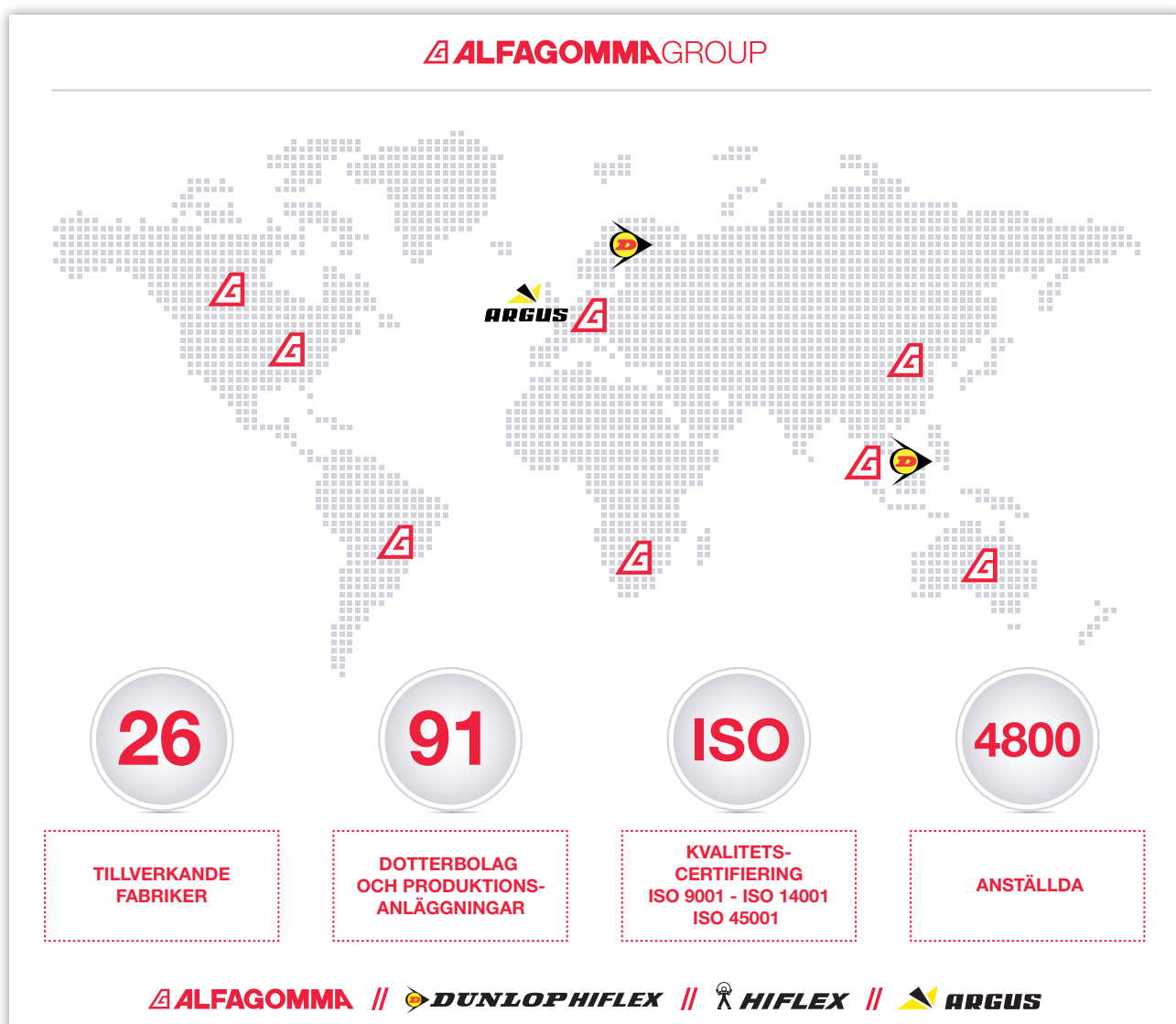
Dunlop Hiflex is one of the market's most established suppliers of high quality rubber hoses and fittings. We have good geographical coverage with our own Service Centers and Service Partners and together with complementary quality products from leading suppliers, we offer our customers a complete solution. Dunlop Hiflex Scandinavia consists of Sweden, Denmark and Norway and we have been in Sweden since 1969 with headquarters in Halmstad. Since 2005 we are part of the ALFAGOMMA GROUP, one of the leading global manufacturers of hydraulic and industrial hose.

// KNOWLEDGE, QUALITY AND SERVICE

Dunlop Hiflex manufactures industrial hoses that can handle almost anything, from the simplest PVC water hose to high-tech rubber hoses for the offshore industry. We adapt materials and properties according to requirements specification and many of our hoses are specially designed for demanding applications for transport of chemicals, oils, concrete, waste, food and steam with properties such as being flexible, resistant to high pressures and pressure shocks, but also withstand harsh environments. We adapt materials according to specification and perform our own tests, both in the laboratory and in the field. Our philosophy is to be close to our customers in order to guarantee high service and deliver quality products.

// ALFAGOMMA GROUP

ALFAGOMMA, founded in 1956, is a global manufacturer specialized in complex, innovative and high-tech hydraulic and industrial products, manufactured with a commitment to quality and innovation. The Group is focused on continuous improvement in product development, processes and production, which has made it possible to respond quickly to developing international rules, to develop the product's performance, safety and efficiency. With manufacturing in our own factories, we lead the development of the next generation of hoses. Long experience with own production provides knowledge and control over the products and thus a guarantee of high quality.



// FORESTRY

The forestry industry has a very demanding environment where the machines are exposed to high pressure, difficult conditions and friction. It is essential to maximize the performance with quality products and to have access to specialized services for a better productivity, higher security and durability to maximize service life under this difficult conditions.

Dunlop Hiflex offers a complete range of hydraulic- and industrial products for different applications in the forestry industry, for example Harvesters, Forwarders, Mounders, Choppers and the Pulp- and Paper industry. Our hoses, fittings and Quick Release Couplings are developed to meet all challenging requirements of forestry applications and guarantee quality, reliability and top performance of equipment, providing high productivity and efficiency.

DUNLOP HIFLEX PRODUCT BENEFITS

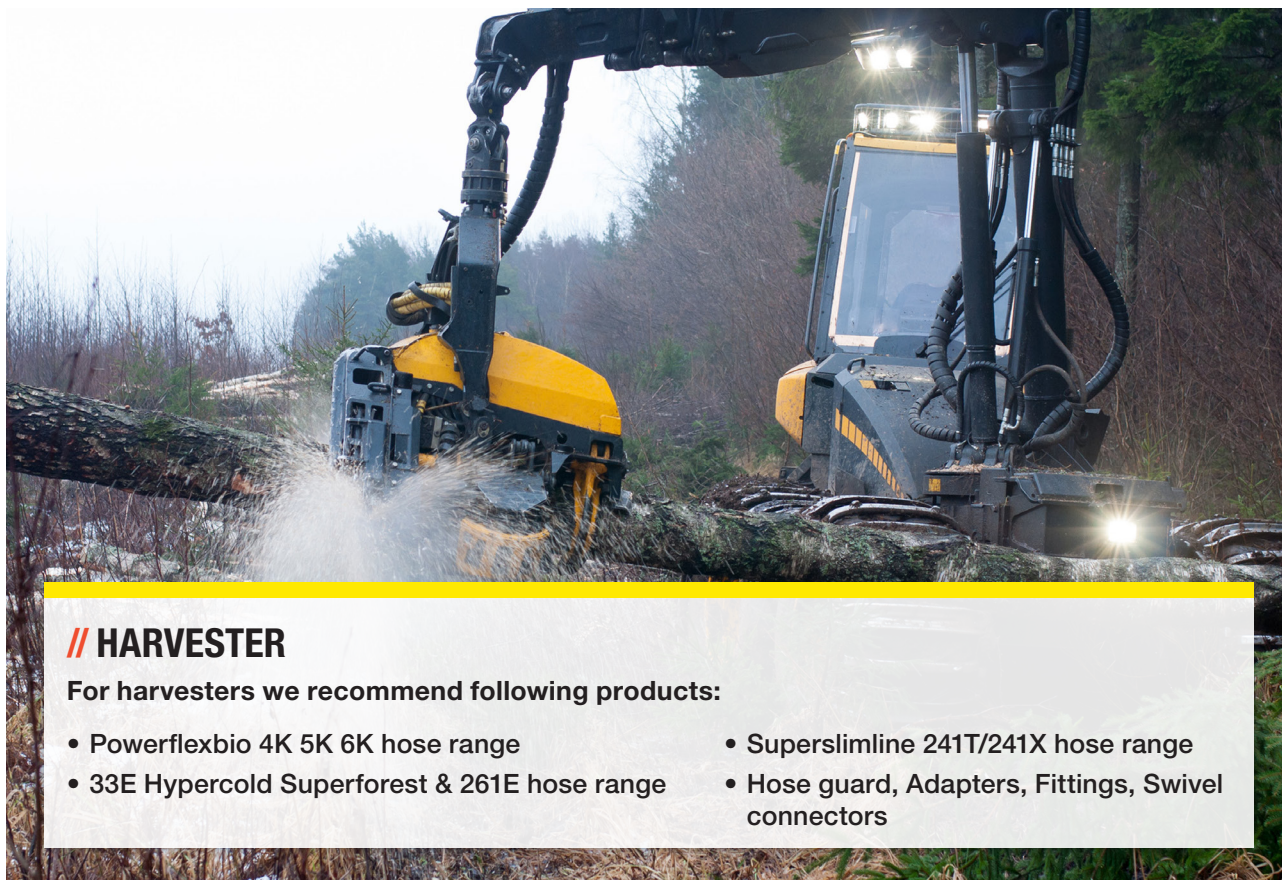
- **POWERFLEXBIO 5000 PLUS** - 380 bars spiral hydraulic hose last 3100 hours!
- **33E HYPERCOLD SUPERFOREST-** hydraulic hose has a 45% longer life time!
- **241T SUPERSLIMLINE HI-TUFF-** hydraulic hose has a superior performance against competitors
- Designed and adapted for the Nordic severe climate conditions
- Strongly withstand both low and high temperatures
- Robust construction that can withstand pressure spikes
- Easy to install on the equipment due to the hoses great flexibility
- Hoses are ideal for ozone resistance and have strong abrasion resistant cover
- All metal parts have the special TOP COAT surface treatment

You make the right choice by adopting Dunlop Hiflex branded products highly engineered for the Forestry Industry!

// APPLICATIONS

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APPLICATIONS



// HARVESTER

For harvesters we recommend following products:

- Powerflexbio 4K 5K 6K hose range
- 33E Hypercold Superforest & 261E hose range
- Superslimline 241T/241X hose range
- Hose guard, Adapters, Fittings, Swivel connectors



// FORWARDER

For forwarders we recommend following products:

- Powerflexbio 4K 5K 6K hose range
- 33E Hypercold Superforest & 261E hose range
- Superslimline 241T/241X hose range
- Hose guard, Adapters, Fittings

FIELD TEST HYDRAULIC HOSES HARVESTER

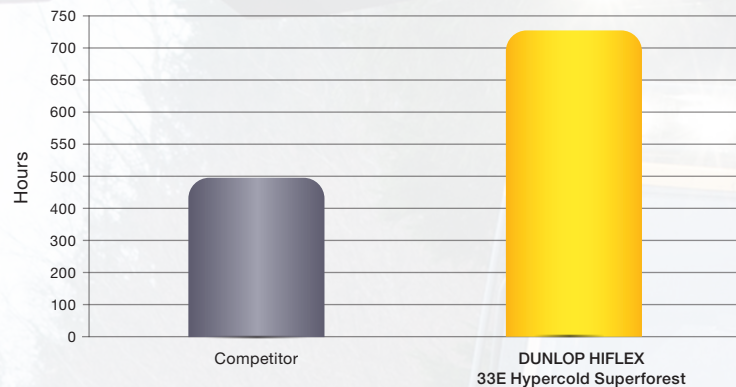
HARVESTER FORESTRY MACHINE #1

LIFE TIME

➤ **DUNLOP HIFLEX
33E HYPERCOLD
HAS A SUPERIOR
PERFORMANCE**

+45%
LONGER LIFE TIME

Hydraulic drive of the feedroller engine
working pressure: 280 bar



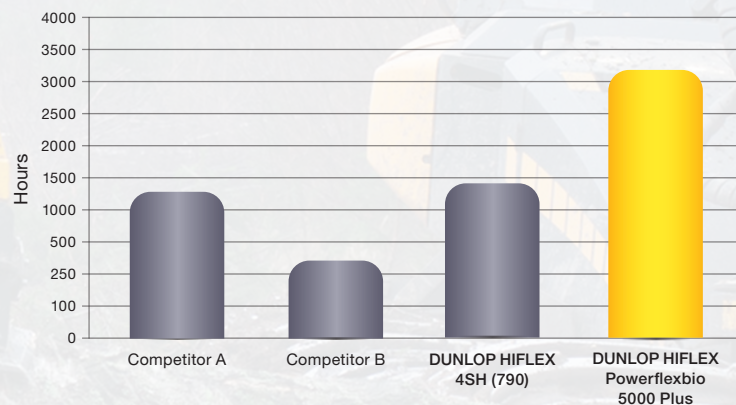
HARVESTER FORESTRY MACHINE #2

LIFE TIME

➤ **DUNLOP HIFLEX
POWERFLEXBIO 5000 PLUS
HAS SUPERIOR
PERFORMANCE WITH
3100 HOURS LIFE TIME**

➤ **DUNLOP HIFLEX CLOSE TO
2500 HOURS LONGER LIFE
TIME THAN THE ORIGINAL
MOUNTED OEM HOSE**

Pressure and return hoses (1") to the harvester head
working pressure: 280 bar



FIELD TEST HYDRAULIC HOSES FORWARDER

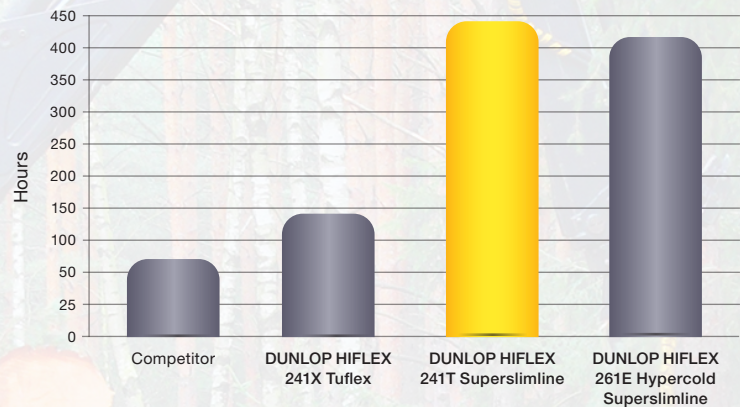
CRANE ON A FORWARDER

LIFE TIME



**DUNLOP HIFLEX
241T SUPERSLIMLINE
HAS SUPERIOR
PERFORMANCE**

Hoses (1/2") from boom tip to grab cylinder and rotator
working pressure: 220-240 bar with pressure spikes



// HYDRAULIC HOSE

// POWERFLEXBIO 4000 - HI-TUFF



ISO 18752 - Isobaric range 4000 psi - 280 bar

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C

Length: random up to 1" - 61 m max over 1" 1/4

	inch	3/4"	1"	1 1/4"	1 1/2"	2"
	bar	280	280	280	290	280
	mm	120	150	260	420	630

* Also available with TUFLEX cover.

// POWERFLEXBIO 5000 - HI-TUFF



ISO 18752 - Isobaric range 5000 psi - 350 bar

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C

Length: random up to 1" - 61 m max over 1" 1/4

	inch	3/4"	1"	1 1/4"	1 1/2"	2"
	bar	350	350	350	350	350
	mm	150	180	280	500	550

* Also available in 5/8".

// POWERFLEXBIO 5000 PLUS - HI-TUFF



ISO 18752 - Isobaric range 5500 psi - 380 bar

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

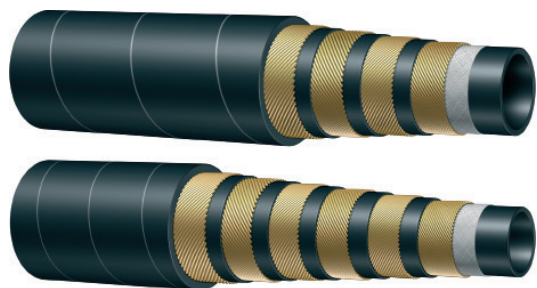
Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

Constant operation: -40 °C +121 °C

Length: random

	inch	3/4"	1"
	bar	380	380
	mm	180	210

// POWERFLEXBIO 6000 - HI-TUFF



ISO 18752 - exceeds SAE 100 R15 - Isobaric range 6000 psi - 420 bar

Tube: oil resistant synthetic rubber and biodegradable hydraulic fluids.

Reinforcement: four/six high tensile steel spirals.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: developed to withstand very demanding conditions, very high performance in pressure, pulsing and flexing.

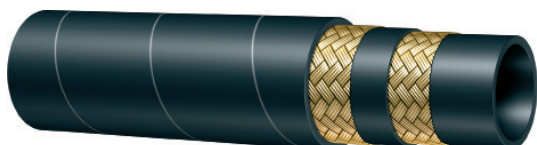
Constant operation: -40 °C +121 °C

Length: random up to 1" - 61 m max over 1" 1/4

	inch	1/4"	3/8"	5/8"	3/4"	1"
	bar	450	445	420	420	420
	mm	60	75	180	210	250

* Also available in 1/2", 1 1/4", 1 1/2".

// 241T - SUPERSLIMLINE - HI-TUFF



ISO 11237 - SAE 100 R16 - EN 857 2SC (up to 1")

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber.

MSHA APPROVED

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

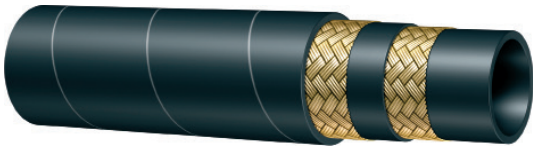
Constant operation: -40 °C - +100 °C

Length: random

	inch	1/4"	3/8"	1/2"	3/4"	1"
	bar	420	350	350	280	210
	mm	51	64	120	150	152

* Also available in 5/16", 1/2", 5/8" and 3/4".

// 261E - HYPERCOLD SUPERSLIMLINE



Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils. Specially designed for ultra low temperatures applications.

Constant operation: -55 °C - +100 °C air max T = +70 °C

Length: random

	inch	1/4"	3/8"	1/2"	3/4"	1"
	bar	420	350	310	240	210
	mm	51	64	90	121	152

* Also available in 5/8".

// 241X - SUPERSLIMLINE - TUFLEX



ISO 11237 - SAE 100 R16 - EN 857 2SC

Tube: oil resistant synthetic rubber.

Reinforcement: two high tensile steel braids.

Cover: abrasion, ozone and hydrocarbon resistant synthetic rubber. Special "supertuff" cover for excellent abrasion resistant and long service life in heavy duty applications.

MSHA APPROVED

Application: high pressure hydraulic lines, fuel oil, antifreeze solutions, air and water.

Constant operation: -40 °C - +100 °C air max T = +70 °C

Length: random

	inch	1/4"	3/8"	1/2"	3/4"	1"
	bar	420	350	310	240	210
	mm	51	64	90	121	152

* Also available in 5/16" and 5/8".

// 33E - HYPERCOLD SUPERFOREST



Tube: oil resistant ultra low temperature synthetic rubber.

Reinforcement: three high tensile steel braids.

Cover: oil, water, ozone and ultra low temperature resistant synthetic rubber.

Application: hydraulic system with petroleum or water/glycol based fluids, fuel, lubricating oils. Specially designed for ultra low temperatures applications.

Constant operation: -55 °C - +100 °C air max T = +70 °C

Length: random

	inch	1/2"	3/4"	1"
	bar	470	375	327
	mm	160	260	310

* Also available in 3/8", 5/8" and 1 1/4".






// FITTINGS

BSP INSERTS, JIC 37° INSERTS, SAE FLANGES - OPTIMAL FOR THE FORESTRY INDUSTRY.

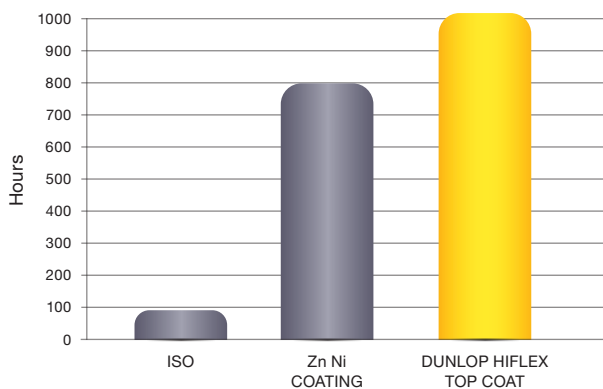
TOP COAT TREATMENT



TOP COAT - OVER 10 TIMES HIGHER THAN STANDARD

- 
TESTED IN ACCORDANCE WITH ASTM B117-03 AND UNI ISO 9227 STANDARDS
- 
OVER 500 HOURS CORROSION PREVENTION IN SALT SPRAY FOG TO WHITE RUST
- 
MORE THAN 1000 HOURS CORROSION RESISTANCE TO RED RUST

Resistance to red rust in salt fog
(test in compliance with ISO 9227)



All ALFAGOMMA metal parts feature TOP COAT an innovative proprietary surface treatment developed and patented by the ALFAGOMMA Research & Development team.

Dimensions shown may be changed without prior notice

// ADAPTERS



// JIC 37°

- MALE UNION
- MALE / FEMALE UNION
- BULKHEAD
- BSPP
- METRIC
- SAE UNF
- NPTF
- FLANGES
- ACCESSORIES
- PLUG



// BSP

- MALE UNION
- MALE / FEMALE UNION
- BULKHEAD
- BSPP
- METRIC
- SAE UNF
- NPTF
- FLANGES
- ACCESSORIES
- PLUG



// ORFS

- MALE UNION
- MALE / FEMALE UNION
- BULKHEAD
- BSPP
- METRIC
- SAE UNF
- NPTF
- FLANGES
- ACCESSORIES
- PLUG

// SWIVEL CONNECTORS



MAIN BENEFITS

- Increased service life
- Cut out fluid leakages
- Higher efficiency
- Easier & inexpensive maintenance
- Top level operating performance up to 410 bar
- Outstanding wear and corrosion resistance thanks to TOP COAT proprietary technology

PRODUCT FEATURES

Body material: high strength carbon steel with TOP COAT surface protection.

Seal material: HNBR and PTFE.

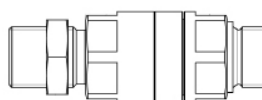
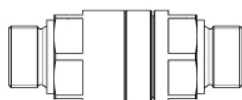
Working pressure:

- 410 bar up to 1 1/4"
- 310 bar 1 1/2"
- 210 bar 2"

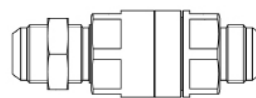
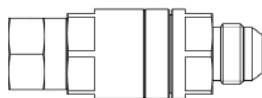
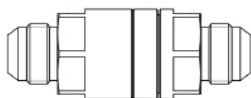
Safety factor: 4:1

Temperature: -35 °C +120 °C

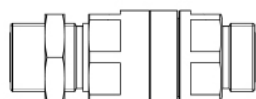
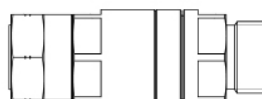
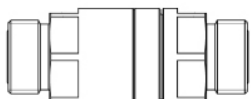
// SWIVEL CONNECTOR BSPP



// SWIVEL CONNECTOR JIC



// SWIVEL CONNECTOR ORFS



// VALVE

 **ARGUS**


ONE-PIECE HOUSING LOW PRESSURE DROP

DN: 6 to 25**WP:** to max 450 bar

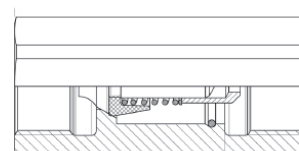
General features: non return valves enable a flow in one direction and block it in the opposite direction. They therefore belong to the group of check valves (DIN 24300). ARGUS non return valves guarantee an extremely low-resistant flow through their streamlined internal parts. The valves are sealed by springhydraulic poppets and washer. Stroke limitation ensures free outlet opening. Depending on opening pressure, they can also be used as a suction and safety valve.

Materials: galvanized steel housing and poppet valve - Brass housing also available - Brass valve stem guide - TPE seals (PTFE optional). TOP COAT Cr-III zinc plating with additional trivalent passivation for outstanding surface protection.

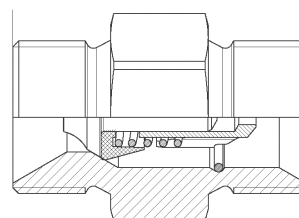
Application: suitable for liquid lines with mineral oil-based hydraulic fluids to DIN 51524 and DIN 51525. Also available for flame-resistant hydraulic fluids to VDMA 24317, for pneumatics and water hydraulics in appropriate materials on request.

Temperature range: -30 °C +125 °C**Viscosity range:** to 400 cSt (53 °E)**Symbol:** 

// NON RETURN VALVE - RV

Female thread

// NON RETURN VALVE - RV

Male thread

// HOSE GUARD



ALFAGOMMA Hose Guard is a high quality plastic spiral specifically designed for hose protection in almost every environment. Flexible, elastic, smooth and with a wide temperature range, it ensures an optimal solution against abrasion and shocks.

Made of High Density PolyEthylene by means of an extrusion process, ALFAGOMMA Hose Guard has got rounded edges to avoid any damage to the hose cover. It is easy to mount on hydraulic and industrial hoses to be or already assembled.

Material: HDPE (halogen-free, recyclable)

Temperature range: -40 °C +100 °C

Pack quantity: 25 or 50 m

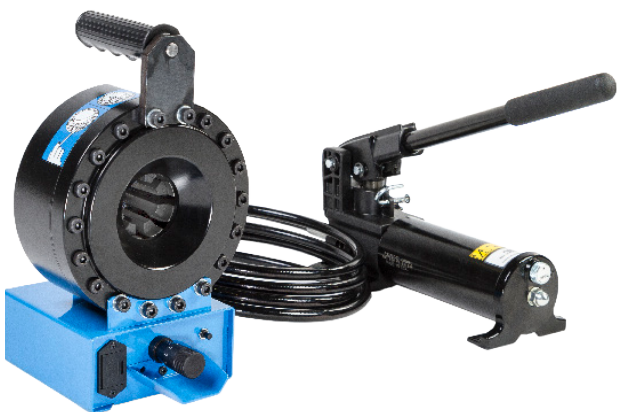
Colour: black or yellow

UV/ozone resistance: very good

Oil/water resistance: very good

Use: protection of hoses, cables and bundles

// SERVICE KIT FOR FIELD SERVICE



Crimper:

- Compact and light weight
- Portable
- Hand operated
- Easy to operate

Dimensions shown may be changed without prior notice

// MOBILE HYDRAULICS



Dunlop Hiflex has a wide assortment of hydraulic products for mobile and industrial applications within the Forestry industry. Filters, valves, pumps, motors and cylinders among other things.

Contact us for more specific product details meeting your specification and need.

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MOBILE HYDRAULICS

// CUSTOM MADE POWERPACKS



We can produce powerpacks according to your specifications and demands.

// DUNLOP HIFLEX SCANDINAVIA

// SWEDEN

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NOTES

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