

Danfoss term glossary

Danfoss brand definitions

Aeroquip®

Premium brand hose

AQP™ High-Temp

Used exclusively for Aeroquip high-temp hose; constructed with patented elastomer materials

Bruiser®

Ultra-abrasion resistant hose cover; 700x greater abrasion resistance than industry standard

Dura-Kote®

Plating technology offering three times the **corrosion protection** on carbon steel fittings, compared to competitive hose fittings – up to 1000 hours of corrosion protection. Used on premium fitting series such as 1A, Z and 4S/6S series.

Dura-Pulse®

A patented **inner-tube** compound providing five times longer life than standard 2SC hoses. It is slow to age and has a low compression set, which provides better sealing and leak free performance

Dura-Seal™

Patented innovation that eliminates the hose assembly **cool-down leakage**, while extending hose assembly life and reducing equipment downtime

Dura-Tuff®

Premium **abrasion**-resistant hose cover; 8x greater resistance than the industry standard

Dynamax®

Ultra-performance, premium hose offering **high pressure capabilities** with extended life and 50% better **bend radius** than EN standard

Hi-Pac®

Special braided hose construction type. FC310 and FC510 are examples. Additional wire is added into the braided reinforcement to allow for higher pressures. Mining hose

Lifesense®

A monitoring system that detects impending hydraulic hose failure and alerts operators and maintenance crews so they can schedule maintenance and plan downtime. The system continuously monitors hose condition via electrical signals and generates an alert when the hose starts to experience internal fatigue.

MatchMate®

System that matches hose to fittings.

Braided-Match number of rings (O) on layline with number of rings on fitting

Spiral-Match either 4S or 6S on layline with corresponding mark on fitting

Braided & Spiral-Match hose dash size with size on fitting

ORS®

Specialized fitting that provides an o-ring seal at the face of the fitting designed to eliminate leaks in high pressure systems

Winner™

Standard tier brand hose & fittings

X-Flex®

Spiral hose offering 50% of SAE R13/R15 **bend radius** in demanding **high impulse** applications

Fitting definitions

1A Aeroquip fitting series (TTC)

Aeroquip one-piece fitting series' name for core, braided hose products. It corresponds with the printing on both the hose layline and fitting. "Through the cover" (TTC) is a legacy series' name. Suitable for use on premium and standard products

1G fitting series (OTC)

Premium series' name for "over-the-cover" (OTC) style fitting

1R/2R field attachable fitting series

Premium field attachable fitting series' name for one and two-wire braided hose products. Suitable for use on premium and standard products

1W fitting series

Premium internal skive, two-piece fitting series' name for select core spiral hoses used to achieve a higher level of performance. Suitable for use on premium and standard products

4S/6S fitting series

Premium one-piece fitting series' name for core spiral hose products. Suitable for use on premium and standard products

STC® (snap to connect) series

High pressure fitting series' that makes hose line connection quick and easy, without the need for assembly tools

Winner one-piece fitting series

Standard tier fitting series. Does not use dura-kote plating technology. Suitable for use on standard products and selectively on premium products

Winner two-piece fitting series

Non-skive standard tier fitting series. Does not use Dura-Kote plating technology. Suitable for use on standard products and selectively on premium products

Industry terms

Crimp fittings

A term used to describe non-field attachable fitting component parts or complete assemblies for braided and spiral hoses. Core series are: 1A, 1G, 4S and 6S

Field attachable fitting

A fitting designed to be attached to a hose without crimping or swaging. This fitting is not always a reusable type fitting

Hose fittings

A device attached to the end of the hose to facilitate connection. "Hose-end" and "coupling" are equivalent terms in the industry

Maximum working pressure

The maximum pressure for which the hose assembly is designed. Note: "operating pressure" is an equivalent term but should not be used in copy

Nipple

The portion of the fitting that goes directly into the inner diameter of the inner tube of the hose. It extends out of the hose and into the connecting end. Also known in the industry as a "stem" or "insert"

Non-skive

Refers to hose and fitting combinations that does not require removing part of the hydraulic hose cover and/or inner tube prior to attaching fittings. Also known in the industry as "no-skive"

Socket

The portion of a fitting that is compressed by crimping to seal the hose onto the fitting barbs and create a permanent attachment. Also known as "collar" and "ferrule" in the industry

Key fluid conveyance terms

One wire braided hose

Hose series reinforced with a single steel braid

Two wire braided hose

Hose series reinforced with two steel braids

Four wire spiral hose

Hose series reinforced with four wires

Six wire spiral hose

Hose Series reinforced with six wires

Abrasion hose

Defines the level of abrasion-resistance a cover offers. Danfoss has three levels: standard, premium (Dura-Tuff) and ultra (Bruiser)

High-temp hose

Danfoss' designated term for premium core products with a max temperature rating of at least 150°C (300°F)

Low-temp hose

Danfoss' designated term for premium core products with a max temperature rating of at least -57°C (-70°F)

Premium tier

Products that **exceed** industry specifications. For Danfoss, distinctions from standard tier are made with abrasion resistance, temperature range, impulse cycles and ISO 18752 rating

Standard tier

Products that **meet** industry specifications

Specialty hose

Active products that tend to be used for more niche applications

Agency listings

Government agencies

MSHA	US Mine Safety and Health Administration
USCG	US Coast Guard
DNV	DNV/GL (USA) WC

Industry agencies

DIN	Deutsche (German) Industrial Norme (Replaced by EN)	SAE	Society of Automotive Engineers
EN	Committee for European Normalization	UL	Underwriters Laboratories
ABS	American Bureau of Shipping	ISO	International Standards Organization

ISO 18752 performance			
Type	Temperature	Impulse pressure % of max working pressure	Minimum # of cycles
AC	212° F (100° C)	133%	200,000
BC	212° F (100° C)	133%	500,000
CC	250° F (120° C)	133%	500,000
DC	250° F (120° C)	133%	1,000,000

EN hose series	
EN hose series	Description
1ST	One wire braid - standard cover
1SN	One wire braid - thin cover
2ST	Two wire braid - standard cover
2SN	Two wire braid - thin cover
4SP	Four wire spiral
4SH	High pressure four wire spiral
1SC	Compact one wire braid
2SC	Compact two wire braid

SAE 100R hose series	
SAE 100R series	Description
100R1	Steel wire reinforced, rubber covered hydraulic hose (one wire braid)
100R2	High pressure, steel wire reinforced, rubber covered hydraulic hose (two wire braid)
100R3	Double fiber braid (non-metallic), rubber covered hydraulic hose
100R4	Wire inserted hydraulic suction hose
100R5	Single wire braid, textile covered hydraulic hose
100R6	Single fiber braid (non-metallic), rubber covered hydraulic hose
100R7	Thermoplastic hydraulic hose Black - conductive Orange - non-conductive
100R8	High pressure thermoplastic hydraulic hose Black - conductive Orange - non-conductive
100R9	High pressure, four-spiral steel wire reinforced, rubber covered hydraulic hose
100R10	Heavy duty, four-spiral steel wire reinforced, rubber covered hydraulic hose

SAE 100R hose series	
SAE 100R series	Description
100R11	Heavy duty, six-spiral steel wire reinforced, rubber covered hydraulic
100R12	Heavy duty, high impulse, four-spiral wire reinforced, rubber covered hydraulic hose Heavy duty, high impulse, multiple-spiral wire reinforced, rubber covered hydraulic hose
100R13	Heavy duty, high impulse, multiple-spiral wire reinforced, rubber covered hydraulic hose
100R14	Polytetrafluorethylene (PTFE)-lined hydraulic hose, single-stainless steel braid
100R15	Heavy duty, high impulse, multiple-spiral wire reinforced, rubber
100R16	Compact high pressure, one- and two-wire reinforced rubber covered hydraulic hose
100R17	Compact 21 MPa maximum operating pressure, one- and two-steel wire reinforced rubber covered hydraulic hose with smaller bend radius
100R19	Compact 27.5 MPa maximum operating pressure, one- and two-steel wire reinforced rubber covered hydraulic hose with smaller bend radius