

Rubber hydraulic hose & fittings quick reference guide (RHHF: Rubber Hydraulic Hose & Fittings)

REGION: NORTH AMERICA

Leading Brands:

Weatherhead® Premium

Weatherhead®, founded in the 1920's, has one of the industry's broadest offerings of hydraulic hose, hose ends, assembly equipment, tube fittings, couplings and support accessories. Weatherhead by Danfoss products are widely used in construction, mining, agriculture, truck and bus applications.

Winner™ Standard

Winner™ by Danfoss hose lives up to its name, delivering quality and craftsmanship at a standard-performance price. You get it all with the Winner by Danfoss hose line. Great value and system-matched performance — plus consultative engineering expertise and responsive technical support. Winner is the perfect standard tier hose to round out a complete portfolio, so you get the perfect hose for every application.

Value beyond products

We are more than our products

Danfoss provides more than quality products for every application; we provide an entire global team dedicated to:

System matched offerings: Danfoss hoses, fittings, crimp machines and accessories are all engineered to work together to provide the most reliable hose assembly in the industry.

Design expertise: Danfoss offers access to experienced engineers who are ready to help solve specific platform design issues or simply bring fresh engineering ideas.

Responsive technical support: Questions on our products? Danfoss tech support is there for you. Call our tech support experts to review your issue step by step.

Robust supply chain: Supply chain issues can affect your business. Danfoss has a supply chain with built in redundancy to reduce the impact of supply issues.

Competitive pricing: Danfoss' two-tier strategy provides options. Need a cost competitive hose that meets specs? Review our Winner hose options. Have a more intense application that needs to stand the test of time? Check out options in our Weatherhead premium brands.

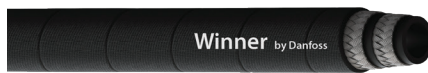
2-tier selling

Premium & standard

Always consider the best product for the application. Understand the application requirements and customer needs. Some platforms will be able to utilize both premium and standard product.



Premium Tier: **Exceed** specifications with increased ratings for pressure, temperature, abrasion (8x) and impulse life, while meeting industry certifications for ISO, ABS, DNV, etc. Includes hoses specified for high temp (up to 302° F), low temp (as low as -70°F) and high abrasion (up to 700x greater than standard hoses).



Standard Tier: **Meet** the standard specifications of SAE/EN for operating pressure, temperature, abrasion resistance and impulse life. They do not exceed the specifications.

Example of 2-wire braided hose tiers

Hose types & construction

Braided & spiral



TUBE: Conveys fluid. Danfoss has several specialty tubes including Dura-Pulse®, AQP/CPE elastomer tube and Nitrile

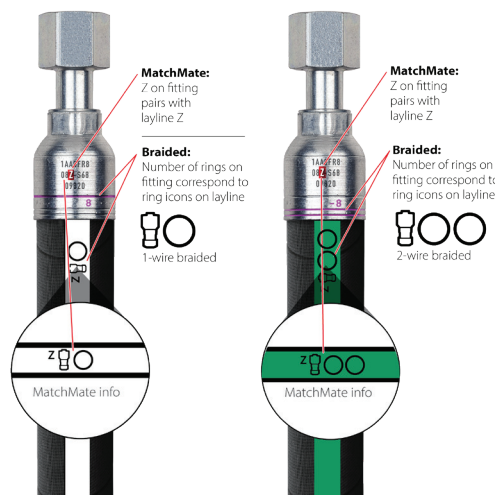
REINFORCEMENT: Gives hose its strength. Braided hose is flexible and is suited for medium/high pressure applications. Spiral hose is more rigid than braided, but stronger and works well in high pressure applications.

COVER: Protects the hose. Weather, oil and abrasion resistance. Danfoss specialty covers include Dura-Tuff™ and Bruiser™.

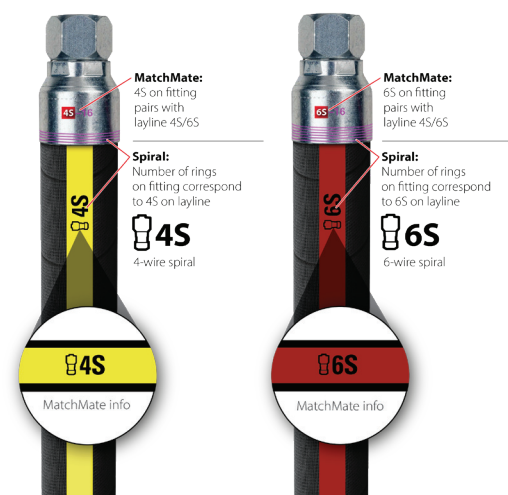
RHHF hose assemblies (Hose + Fitting = Hose Assembly)

Rubber hydraulic MatchMate™ system

BRAIDED



SPIRAL



Core two-tier hoses *NOTE: This chart is a representation of our core hoses, NOT a complete list of our RHHF hose product portfolio.

Specs		Hose type				Pressure range	WEATHERHEAD & WINNER CORE HOSES				
SAE	EN	Braided		Spiral			Winner Standard Tier	Weatherhead Premium Tier			
		1 BRAID	2 BRAID	4 SPIRAL	6 SPIRAL	PSI					
							STANDARD	PREMIUM	LOW-TEMP	HIGH-TEMP	ABRASION
SAE 100R1	EN 857 Type 1SC	X				580 to 3,625	EC115	H180	-	H190H	H145R
SAE 100R2	EN 857 Type 2SC		X			1,300 to 6,500	EC215	H280/H881	H245L	H290H	-
SAE 100R4			X			60 to 305	WH004	H039	-	-	-
SAE 100R12	EN 856 R12			X		2,550 to 6,500	EC415	H430	-	H525H	-
SAE 100R13	EN 856 R13			X	X	5,100	EC420	H471	-	-	H430R
SAE 100R15				X	X	6,100	-	H600	H810L	-	-
SAE 100R17		X	X			3,000	EC118	H145	-	-	-

Fittings

Braided hose fittings



Premium: Z series*

- **Dura-Kote™** plating technology for up to 1,000 hours of corrosion resistance
- Bite the wire technology for best in class connection and sealing
- Class zero leakage SAE J1176 on approved hose styles



Premium: 1R/2R reusable

- **Dura-Kote** plating technology for up to 1,000 hours of corrosion resistance
- Option to assemble in field without special tooling
- Reduced downtime and quick repair
- Engineered to provide peak performance with Danfoss' core braided hose products



Standard: Two-piece Winner

- Non-skive, two-piece crimp fitting
- One nipple part number for EC115, EC215 and EC118 standard hoses
- Meets industry specifications when used with the EC115, EC215 and EC118 standard hoses
- Clear silver hexavalent chromium-free plating
- Carbon steel material

Spiral hose fittings



Premium: 4S/6S spiral series

- **Dura-Kote** plating technology for up to 1,000 hours of corrosion resistance
- Our patented **Dura-Seal™** technology to eliminate hose assembly cool-down leakage
- Class zero leakage SAE J1176 on approved hose styles

Machines *NOTE: More crimp machines can be found in the Core Crimp & Tooling brochure AI426662111733en-000101

ET1187



VOLUME: Low
TYPE: Variable
BRAIDED: Up to 1.25"
SPIRAL: Up to 1"
APPLICATION: Portable, job shops, maintenance departments

ET1000



VOLUME: Low
TYPE: Positive stop
BRAIDED: Up to 1"
SPIRAL: Up to 1"
APPLICATION: Portable, job shops, maintenance departments

FT1380/FT1380e



VOLUME: Medium
TYPE: Variable
BRAIDED: Up to 1.25"
SPIRAL: Up to 1.25"
APPLICATION: Hose distributors, small assembly shops

T-420



VOLUME: Medium
TYPE: Positive stop
BRAIDED: Up to 1.25"
SPIRAL: Up to 1.25"
APPLICATION: Hose distributors, small assembly shops, factory, construction, mines

Literature & tools



Weatherhead Rubber Hydraulics Catalog
Coming Soon



Weatherhead Field Guide
AV463753396526en-000101



Core Machines & Tooling
AI426662111733en-000101

Important links:

- danfosspowersource.com
- danfoss.com/crimp

Digital copies:

This literature is available digitally at: danfosspowersource.com then navigate to Tools drop down menu and choose literature

Contacts

Customer Service:

(Order management, delivery, expedites) 1-800-258-0222 or email account CSR

Product Technical Support:

(Product technical questions) fpgproductsupport@danfoss.com

Product Training:

hydraulicstraining@danfoss.com

Crimp Machine Information:

www.danfosscrimpersupport.com



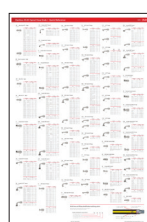
Winner Hose & Fittings
AD427561072277en-US0201



Weatherhead Hose Chart
BC452872734752en-000101



Z Series Fitting Chart
BC452872609750en-000101



4S/6S Fitting Chart
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