

## 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.

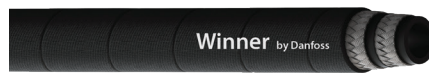
#### 2-tier selling

#### 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).

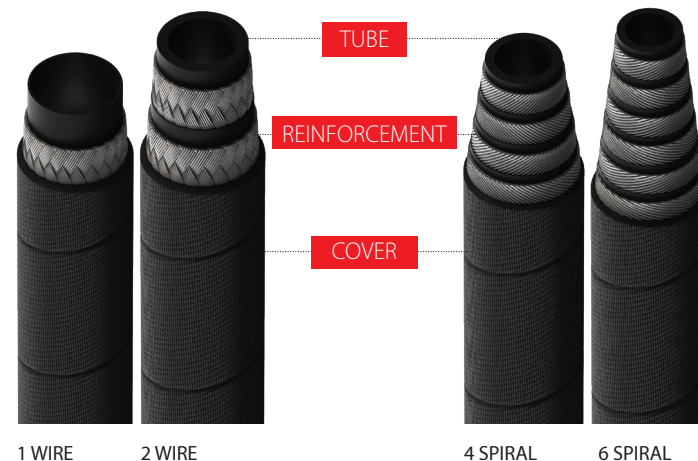


Standard Tier: **Meet** the standard specifications of SAE/EN for operating pressure, temperature, abrasion resistance and impulse life. They do not exceed the specifications.

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

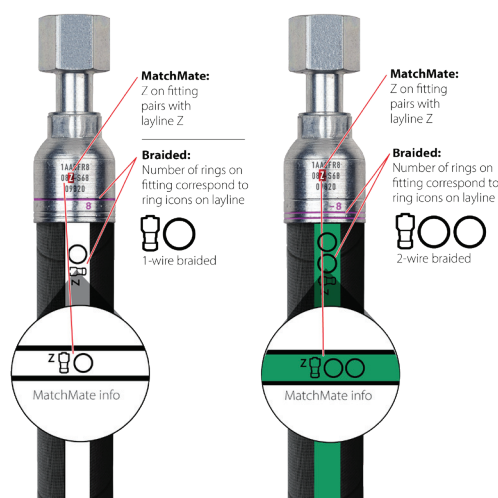
**REINFORCEMENT: Gives hose its strength.** Braided hose is flexible and is suited for medium/high pressure applications. Spiral hose is more rigid than braided, but stronger and works well in high pressure applications.

**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	PSI	Winner Standard Tier	Weatherhead Premium Tier				
		1 BRAID	2 BRAID	4 SPIRAL		6 SPIRAL					
							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, construction, mines

## Literature & tools



Weatherhead Rubber Hydraulics Catalog  
**Coming Soon**



Weatherhead Field Guide  
[AV463753396526en-000101](#)



Core Machines & Tooling  
[AI426662111733en-000101](#)

### Important links:

[danfosspowersource.com](http://danfosspowersource.com)

[danfoss.com/crimp](http://danfoss.com/crimp)

### Digital copies:

This literature is available digitally at: [danfosspowersource.com](http://danfosspowersource.com) then navigate to Tools drop down menu and choose literature



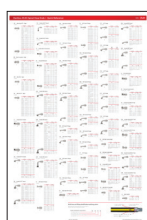
Winner Hose & Fittings  
[AD427561072277en-US0201](#)



Weatherhead Hose Chart  
[BC452872734752en-000101](#)



Z Series Fitting Chart  
[BC452872609750en-000101](#)



4S/6S Fitting Chart  
[AV435153171853en-000101](#)

## Contacts

### Customer Service:

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

### Product Technical Support:

(Product technical questions)  
[fpgproductsupport@danfoss.com](mailto:fpgproductsupport@danfoss.com)

### Product Training:

[hydraulicstraining@danfoss.com](mailto:hydraulicstraining@danfoss.com)

### Crimp Machine Information:

[www.danfosscrimpersupport.com](http://www.danfosscrimpersupport.com)

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