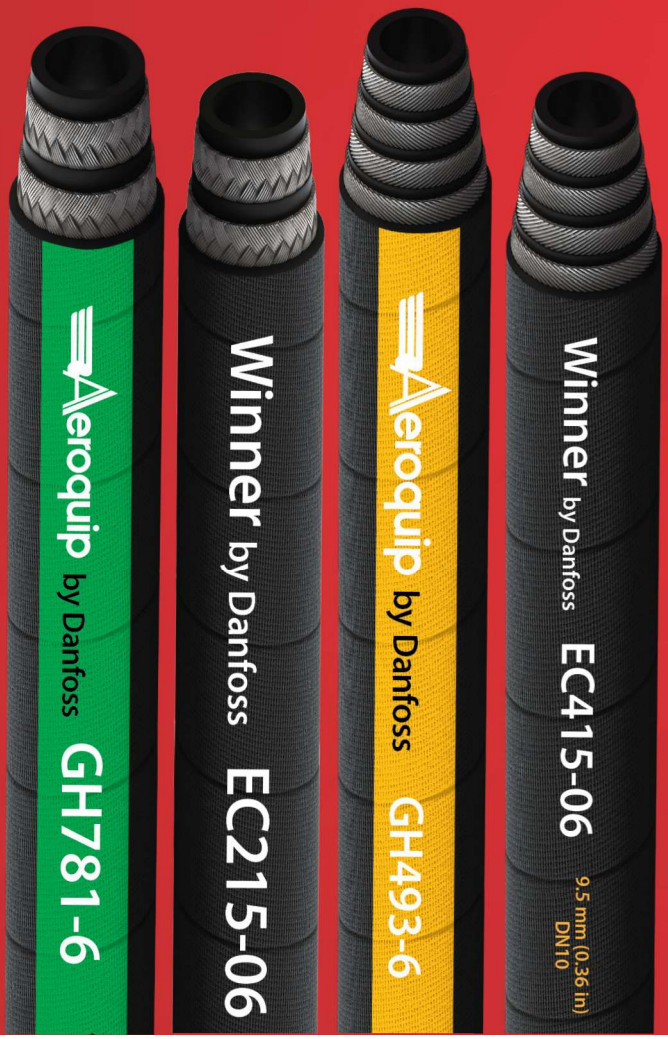
ENGINEERING
TOMORROW

Americas

Aeroquip® by Danfoss

Rubber hydraulic hose and fitting catalog



NAHAD
HOSE SAFETY INSTITUTE
MEMBER

ENGINEERING
TOMORROW

Aeroquip® by Danfoss
Stronger than ever.

For decades, Aeroquip has moved the industry forward. Uncovering problems to be solved. Never settling for the status quo. Now, backed by the power of Danfoss, we're making major investments in product innovation, expanding manufacturing capabilities, supporting you with a world-class team. And we're just getting started.

Aeroquip
by Danfoss

Industry leading fluid conveyance

Rubber hydraulics
product overview

Explore the world of
Danfoss fluid conveyance

From thermoplastic hose to data center connections,
Danfoss has the hose, fittings and connectors that work.

Connectors

Product Categories:

- Brass Connectors
- Flexmaster
- FLOCS
- Quick Disconnect Couplings
- Steel Adapters
- Swivels
- Tube Fittings

Fuel, air conditioning, thermoplastic & specialty (FACTS)

Product Categories:

- A/C & Refrigeration
- Airbrake
- Beverage Tubing
- Engine/Fuel
- Performance Products
- PTFE
- Railway
- Silicone
- Socketless
- Specialty
- Subsea Oil & Gas
- Thermoplastic

Industrial hose

Product Categories:

- Air & Multipurpose
- Chemical
- Food & Beverage
- Material Handling
- Oil & Petroleum
- Specialty
- Steam
- Water

Rubber hydraulic hose & fittings (RHHF)

Product Categories:

- Braided Hose & Fittings
- Spiral Hose & Fittings
- Tools, Machines & Accessories

Hose selection chart

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

Selection of hose: Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of the hose for your application can result in hose leaking, bursting, or other failure which can cause serious bodily injury or property damage from spraying fluids or flying projectiles. You should carefully review the information in this catalog.

Hose selection chart								
	Core premium braided hose							
Hose	**GH681**	**FC839B**	**GH194**	**GH781**	**EC881**	**FC735**	**GH195**	**GH120**
Page	39	40	41	42	43	44	45	46
Usage	Low to medium pressure hydraulic & water-based fluids	Medium pressure hydraulic & water-based fluids in abrasive applications	Hydraulics, crude, fuel and lubricating oils, gasoline, water and phosphate ester base hydraulic fluids	Transfer of medium to high pressure hydraulic & water-based fluids	Hydraulic system with petroleum and water gycol based fluids for lubricating oils	For high pressure hydraulics subjected to high surge peaks	Hydraulics, crude, fuel and lubricating oils, gasoline, water and phosphate ester base hydraulic fluids	Low temperature hydraulic system service with petroleum and water-based fluids, for general industrial service.
Certifications								
SAE	SAE 100R17 SAE 100R1	SAE 100R17	SAE 100R1	SAE 100R16	SAE 100R16 SAE 100R19	SAE 100R16	SAE 100R2	SAE 100R16
EN	EN 857 1SC performance		EN 853	EN 857 2SC	EN 857 2SC	EN 857 2SC	EN 853 2SN	EN 857 2SC
ISO	ISO 1436 1SN ISO 18752	ISO 18752		ISO 18752	ISO 18752 ISO 11237	ISO 18752 ISO 11237	ISO 1436	ISO 11237-1
OTHER	ABS MSHA DNV USCG	MSHA	ABS MSHA DNV	ABS MSHA DNV USCG	ABS MSHA DNV	ABS MSHA DNV	ABS MSHA DNV USCG	MSHA
Hose Specifications								
Temp Range	-46° to 126° C -50° to 260° F	-40° to 100° C -40° to 212° F	-40° to 150° C -40° to 302° F	-46° to 126° C -50° to 260° F	-46° to 126° C -50° to 260° F	-40° to 100° C -40° to 260° F	-40° to 150° C -40° to 302° F	-57° to 100° C -70° to 212° F
Fittings	1A Series 1R Series	1A Series	1A Series	1A Series 2R Series	1A Series	1A Series	1A Series	1A Series
Hose Construction								
Inner Tube	Nitrile	Nitrile	AQP High-Temp	Nitrile	Dura-Pulse	Nitrile	AQP	Nitrile
Reinforcement	1 wire braid	1 wire braid or 2 wire braid	1 wire braid	2 wire braid	2 wire braid	2 wire braid	2 wire braid	2 wire braid
Cover	Dura-Tuff	Bruiser	AQP	Dura-Tuff	Dura-Tuff	Bruiser	AQP	Rubber Cover

Maximum operating pressure (PSI)									
DASH	**HOSE ID**	**GH681**	**FC839B**	**GH194**	**GH781**	**EC881**	**FC735**	**GH195**	**GH120**
-4	**1/4**	3,700	3,050	3,250	6,500	6,525	6,500	5,800	6,000
-6	**3/8**	3,400	3,050	3,125	5,800	5,800	5,800	5,000	5,000
-8	**1/2**	3,200	3,050	2,550	5,000	5,220	5,000	4,250	4,500
-10	**5/8**	2,025	3,050	2,050	4,000	5,075	4,000	3,650	4,000
-12	**3/4**	2,000	3,050	1,800	3,500	4,785	3,500	3,125	3,500
-16	**1**	1,500	3,050	1,300	3,000	4,060	3,000	2,550	2,800
-20	**1-1/4**	1,000		950	2,500	2,500	2,500	2,250	2,300
-24	**1-1/2**	750		725	2,000	2,000		1,800	2,000
-32	**2**	600		580	1,600	1,600		1,525	1,500
-40	**2-1/2**								
-48	**3**								
-64	**4**								

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

Hose selection chart

Core premium spiral hose

Hose	GH493	FC736	EC525	FC500	FC273B	EC810	EC600
Page	47	48	49	50	51	52	53
Usage	Hydraulic system service with petroleum and water based fluids, for general use.	High abrasion industrial and hydraulic system applications with petroleum and water-based fluids	Petroleum and fire-resistant hydraulic fluids, fuel and lubricating oils, gasoline, water and other industrial fluids	High pressure hydraulic system service with petroleum and water-based fluids, for general industrial service.	Hydraulic system service with petroleum and water-based fluids, for general use	Hydraulic system service with petroleum based fluids for use in cold environments.	High pressure hydraulic system service with petroleum and water-based fluids, for general industrial service
Certifications							
SAE	SAE 100R12	SAE 100R12		SAE 100R13	SAE 100R13	SAE 100R15	SAE 100R15
EN	EN 856 R12	EN 856 R12		EN 856 R13	EN 856 R13	EN 856 4SH performance	EN 856 4SH EN 85 R13
ISO	ISO 18752 ISO 3862 R12	ISO 18752		ISO 3862 R13 ISO 18752	ISO 3862 R13 ISO 18752		ISO 18752
OTHER	ABS MSHA DNV USCG	ABS MSHA DNV	DNV MSHA	DNV USCG MSHA	MSHA	MSHA	ABS MSHA DNV USCG
Hose Specifications							
Temp Range	-40° to 126° C -40° to 260° F	-40° to 121° C -40° to 250° F	-40° to 149° C -40° to 300° F	-40° to 127° C -40° to 260° F	-40° to 121° C -40° to 250° F	-57° to 100° C -70° to 212° F	-40° to 127° C -40° to 260° F
Fittings	4S Series	4S Series	4S Series	4S Series 6S Series	4S Series 6S Series	4S Series 6S Series	4S Series 6S Series 1W Series
Hose Construction							
Inner Tube	Nitrile	Nitrile	AQP High Temp	Nitrile	Nitrile	Nitrile	Nitrile
Reinforcement	4 wire spiral	4 wire spiral	4 wire spiral	4 wire spiral or 6 wire spiral	4 wire spiral or 6 wire spiral	4 wire spiral or 6 wire spiral	4 wire spiral or 6 wire spiral
Cover	Dura-Tuff	Bruiser	AQP	Dura-Tuff	Bruiser	Rubber Cover	Dura-Tuff

Maximum operating pressure (PSI)

DASH	HOSE ID	GH493	FC736	EC525	FC500	FC273B	EC810	EC600
-4	1/4							
-6	3/8	6,500	5,500				6,100	
-8	1/2	6,000	5,000				6,100	
-10	5/8	6,000	5,000				6,100	
-12	3/4	5,500	4,050	5,000	5,100	5,100	6,100	6,100
-16	1	5,100	4,050	5,000	5,100	5,100	6,100	6,100
-20	1-1/4	4,500	3,050	3,500	5,100	5,100	6,100	6,100
-24	1-1/2	4,000	2,550	3,500	5,100	5,100	6,100	6,100
-32	2	4,000	2,550	3,250	5,100	5,100	6,100	6,100
-40	2-1/2							
-48	3							
-64	4							

Hose selection chart

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

	Hose selection chart						
	Premium braided hose						
Hose	**FC639**	**GH663**	**FC849**	**FC849B**	**FC510**	**GH793**	**FC611**
Page	54	55	56	57	58	59	60
Usage	System service with petroleum and water-base fluids. Recommended for high-pressure oil lines.	Hydraulic systems with petroleum and water-glycol base fluids, for lubricating oils and water.	Industrial and hydraulic system applications with petroleum and water-based fluids. Recommended for use on construction, forestry, and other off-highway vehicles	Ultra-abrasion industrial and hydraulic system applications with petroleum and water-based fluids. Recommended for use on critical applications in construction, forestry, and other off-highway vehicles	Petroleum and fire-resistant hydraulic fluids, fuel, and lubricating systems.	Hydraulic system service with petroleum & waterbased fluids, for general industrial service.	Ground support equipment (GSE), industrial phosphate esterbased fluids, water glycol systems.
Certifications							
SAE	SAE 100R17	SAE 100R1	SAE 100R19 Performance	SAE 100R19 Performance	SAE 100R2	SAE 100R2	
EN		EN 8583 1SN Performance			EN 857 1SC	EN 853 2SN performance	
ISO	ISO 18752	ISO 1436 1SN				ISO 1436 2SN	
OTHER	MSHA	ABS MSHA DNV USCG	ABS, USCG MSHA	MSHA	DNV USCG MSHA	ABS USCG MSHA	
Hose Specifications							
Temp Range	-40° to 127° C -40° to 260° F	-46° to 126° C -50° to 260° F	-40° to 100° C -40° to 212° F	-40° to 100° C -40° to 212° F	-40° to 149° C -40° to 300° F	-40° to 126° C -40° to 260° F	-40° to 79° C -40° to 175° F
Fittings	1A Series	1A Series	1A Series	1A Series	1A Series	1A Series 2R Series (size dependent)	1A Series
Hose Construction							
Inner Tube	Nitrile	Nitrile	Nitrile	Nitrile	AQP elastomer	Nitrile	EPDM
Reinforcement	1 wire braid or 2 wire braid	1 wire braid	2 wire braid	2 wire braid	1 wire braid	2 wire braid	1 wire braid
Cover	Dura-Tuff	Dura Tuff	Dura-Tuff	Bruiser	AQP High-Temp	Dura-Tuff	EPDM Rubber

Maximum operating pressure (PSI)								
DASH	**HOSE ID**	**FC639**	**GH663**	**FC849**	**FC849B**	**FC510**	**GH793**	**FC611**
-4	**1/4**	3,050	3,700	4,000	4,000	5,000	6,500	
-6	**3/8**	3,050	3,400	4,000	4,000	4,000	5,800	
-8	**1/2**	3,050	2,900	4,000	4,000	3,500	5,000	2,000
-10	**5/8**	3,050	2,050	4,000	4,000	2,750	4,000	
-12	**3/4**	3,050	2,000	4,000	4,000	2,250	3,500	1,250
-16	**1**	3,050	1,500			2,000	3,000	1,000
-20	**1-1/4**		1,000			1,625	2,500	625
-24	**1-1/2**		750				2,000	500
-32	**2**		600				1,600	375
-40	**2-1/2**							
-48	**3**							
-64	**4**							

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

Hose selection chart

	Premium braided hose				Premium Spiral Hose		
Hose	**FC693**	**EC502**	**FC579**	**EC230**	**FC254**	**GH506**	**FC606**
Page	61	62	63	64	65	66	67
Usage	Ground support equipment (GSE), industrial phosphate esterbased fluids, water glycol systems.	General hydraulics Agricultural equipment – turf care Vocational fleets – mobile refuse, mobile cement mixers Manufacturing – stationary machining centers	Hydraulic jacking system service with petroleum and water-base fluids. Meets the performance requirements of the MHIS IJ100.	Hydraulic system service with petroleum and waterbased fluids, for general industrial service	Hydraulic system service with petroleum or water based fluids, for general industrial use	Hydraulic systems with petroleum and water-glycol based fluids, for lubricating oils and water	High-pressure hydraulics, hydrostatic transmissions.
Certifications							
SAE		SAE 100R2		SAE 100R2			SAE 100R15
EN		EN 853 2SN			EN 856 4SP	EN 856 4SH	
ISO						ISO 3862 4SH ISO 18752	ISO 3862 R15
OTHER		MSHA	MSHA IJ100	MSHA	MSHA	ABS MSHA DNV	ABS MSHA
Hose Specifications							
Temp Range	-40° to 79° C -40° to 175° F	-40° to 100° C -40° to 212° F	-40° to 49° C -40° to 120° F	-40° to 100° C -40° to 212° F	-40° to 126° C -40° to 260° F	-40° to 100° C -40° to 212° C	-40° to 121° C -40° to 250° F
Fittings	1A Series	3L Series	1A Series	Nipple: FC8251 Socket: FC1346	4S Series 1W Series	1W Series 4S Series	6S series
Hose Construction							
Inner Tube	EPDM	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile
Reinforcement	2 wire braid	2 wire braid	2 wire braid	2 wire braid	4 wire spiral	4 wire spiral	6 wire spiral
Cover	EPDM Rubber	Dura-Tuff	Dura-Tuff	Dura-Tuff	Dura-Tuff	Dura-Tuff	Dura-Tuff

Maximum operating pressure (PSI)

DASH	HOSE ID	FC693	EC502	FC579	EC230	FC254	GH506	FC606
-4	**1/4**	5,000		10,000				
-6	**3/8**	4,000		10,000				
-8	**1/2**	3,500	4,250			7,700		
-10	**5/8**							
-12	**3/4**		3,125			7,200	6,100	
-16	**1**		2,500			6,000	6,100	
-20	**1-1/4**					5,100	5,100	
-24	**1-1/2**					4,350	4,350	6,100
-32	**2**					4,000	3,650	
-40	**2-1/2**				1,150			
-48	**3**							
-64	**4**							

Hose selection chart

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

	Hose selection chart					
	Premium spiral				Premium suction	
Hose	**GH466**	**FC636**	**EC850**	**EC910**	**FC619**	**2661**
Page	68	69	70	71	72	73
Usage	High pressure hydraulic systems with constant high working pressure for use with petroleum based fluids.	Ground support equipment (GSE), industrial phosphate ester based fluids, water glycol systems.	Ultra high pressure applications, hydraulic systems with petroleum and water-glycol based fluids, lubricating oils and water.	Waterblast service with water, water-soap emulsion exceeds ISO 7751 requirements	Suction and transfer applications for petroleum hydraulic fluids, fuel, lubricating oils, gasoline,water and many other industrial fluids.	Suction and transfer applications for petroleum and fire resistant hydraulic fluids, fuel, lubricating oils, gasoline, water and many other industrial fluids.
Certifications						
SAE	SAE 100R15	SAE 100R12	SAE 100R15		SAE 100R4	SAE 100R4
EN	EN 856 R13		EN 856 R13		EN 45545	
ISO	ISO 18752		ISO 18752	ISO 7751		
OTHER	ABS MSHA DNV		MSHA	MSHA	ABS USCG MSHA	ABS USCG MSHA
Hose Specifications						
Temp Range	-40° to 121° C -40° to 250° F	-40° to 79° C -40° to 175° F	-40° to 100° C -40° to 212° F	-40° to 93° C -40° to 200° F	-40° to 135° C -40° to 275° F	-40° to 150° C -40° to 300° F
Fittings	1W Series 6S Series	4S Series	1W Series	-8: EJ5892 -12 & -16: 1W Series	1A Series 1G Series 4S Series	1A Series 1G Series
Hose Construction						
Inner Tube	Nitrile	EPDM	Nitrile	Nitrile	AQP	AQP
Reinforcement	6 wire spiral	4 wire spiral	4 wire spiral or 6 wire spiral	4 wire spiral	2 fiber ply with helical wire	2 fiber ply with helical wire
Cover	Dura-Tuff	EPDM Rubber	Dura-Tuff	Rubber	Dura-Tuff	AQP High-Temp

Maximum operating pressure (PSI)							
DASH	**HOSE ID**	**GH466**	**FC636**	**EC850**	**EC910**	**FC619**	**2661**
-4	**1/4**						305
-6	**3/8**						255
-8	**1/2**				16,000		205
-10	**5/8**			7,250			160
-12	**3/4**		4,000	7,250	14,500	305	100
-16	**1**		4,000	7,250	10,200	245	65
-20	**1-1/4**	6,100	3,000	7,250		205	60
-24	**1-1/2**	6,100	2,500			150	50
-32	**2**	6,100				100	
-40	**2-1/2**					60	
-48	**3**					60	
-64	**4**						

How to use chart: Locate the hose I.D. required and move to the right to the correct pressure. Then move up or down in this column for data on material, temperature, etc. to quickly determine whether the hose meets your requirements.

For complete information on any hose refer to hose catalog page number.

Core hoses are indicated with icons: Premium | High-Temp | Low-Temp | Abrasion | Suction | Standard

Hose selection chart

	Standard braided			Standard spiral		Standard suction
Hose	**EC115**	**EC215**	**EC118**	**EC415**	**EC420**	**WH004**
Page	78	79	80	81	82	83
Usage	✓ Hydraulic system service with petroleum and water-based fluids and general industrial service.	✓ Hydraulic system service with petroleum and water-base fluids, for general industrial service.	✓ Hydraulics, gasoline, air, crude, fuel and lubricating oils	✓ Hydraulic systems service with petroleum and water based fluids, for general use.	✓ Suitable for use in hydraulic systems with high peak pressures and arduous operating conditions.	✓ Suitable for use in suction applications for hydraulics, crude fuel, lubricating oils, gasoline, air, water and chemical transfer
Certifications						
SAE	SAE 100R1		SAE 100R17	SAE 100R12	SAE 100R13	SAE 100R4 Performance
EN	EN 857 1SC (-4 to -16)	EN 857 2SC		EN 856 R12	EN856 R13	
ISO		18752	18752	18752	18752	
OTHER	DNV USCG MSHA	DNV USCG MSHA	MSHA USCG	MSHA USCG	DNV USCG MSHA	MSHA
Hose Specifications						
Temp Range	-40° to 100° C -40° to 212° F	-40° to 100° C -40° to 212° F	-40° to 100° C -40° to 212° F	-40° to 121° C -40° to 250° F	-40° to 121° C -40° to 250° F	-40° to 100°C -40° to 212°F
Fittings	1A Series 2 pc Winner 1R Series	1A Series 2 pc Winner 2R Series	1A Series 2 pc Winner 1R Series (-4 to -8)	4S Series	4S Series 6S Series	1A Series, 1G Series, 2 pc Winner Series & 4T Optimum
Hose Construction						
Inner Tube	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile
Reinforcement	1 wire braid	2 wire braid	1 wire braid or 2 wire braid	4 wire spiral	4 wire spiral or 6 wire spiral	2 fiber ply with helical wire
Cover	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile	Abrasion-resistant nitrile

Maximum operating pressure (PSI)

DASH	HOSE ID	EC115	EC215	EC118	EC415	EC420	WH004
-4	1/4	3,250	5,800	3,050			
-6	3/8	2,600	5,000	3,050	4,050		
-8	1/2	2,300	4,000	3,050	4,050		
-10	5/8	1,900	3,650	3,050	4,050		`
-12	3/4	1,525	3,125	3,050	4,050	5,100	305
-16	1	1,275	2,400	3,050	4,050	5,100	245
-20	1-1/4	925	1,800		3,050	5,100	205
-24	1-1/2	725	1,450		3,000	5,100	150
-32	2	580	1,300		3,000	5,100	100
-40	2-1/2						60
-48	3						60
-64	4						

Hose selection worksheet

Danfoss recommends using the **STAMPED** process to aid in determining the correct hose and coupling for your application. This worksheet is designed to help you organize information for determining the best hose for a given application. The questions are based on the hose selection factors described in this guide.

When selecting a hose, always use this worksheet in conjunction with this guide. Read all instructions concerning the hose you are selecting. If any questions arise contact Danfoss technical support at 1-888-258-0222.

STAMPED

S - Size (I.D., O.D. and length)

T - Temperature of material conveyed and environmental

A - Application, the conditions of use

M - Material being conveyed, type and concentration

P - Pressure to which the assembly will be exposed

E - Ends; style, type, orientation, attachment methods, etc.

D - Delivery testing, quality, packaging, and delivery requirements

If you have any questions, please contact Danfoss Technical Support at 1-888-258-0222.

1. Size

Flow (cubic feet per minute) requirements? _____

See RMA Water Discharge table.

Hose I.D. requirements given the flow requirements? _____

Pressure drop? _____

Length requirements (excluding hose ends)? _____

2. Temperature

Temperature range of material to be transferred?
Min. _____ Max. _____ Average _____

Year-round external environment temperature range? _____

Cleaning temperature?
_____

3. Application

If the application is new, what service is to be performed?

_____
_____
_____
_____

4. Material: compatibility & environment

Internal and external environment consideration. Internal environment relates to the material being conveyed. External environment relates to anything originating from outside the hose.

Check all that apply.

- ☐ Abrasive materials (conveyants and external)
- ☐ Petroleum products (aromatics, aliphatics, etc)
- ☐ Materials that could cut or gouge hose
- ☐ Solvents
- ☐ Cleaning with steam
- ☐ Ozone
- ☐ Acids/caustics
- ☐ Animal fats (oils)
- ☐ Sparking or flames

Material to be transferred? _____

Material concentration (%)? _____

What hose cleaning solution(s) will be used? _____

5. Pressure & Suction

What working pressure is required? _____

Are pressure surges involved in this application? How high? _____

What safety factor is required? _____

Is this a suction application? What vacuum rating is required? _____

6. Ends

End _____

Material _____

Attachment Method _____

7. Delivery

Qty. required _____ Date required_____ Pkg. requirements_____

Testing Required - ☐ No ☐ Yes If Yes, Type: _____

Certification Required - ☐ No ☐ Yes If Yes, Type: _____

Special requirement/other information

Will the selected hose need to possess any of the following features:

Branding information needed on the hose? _____

Color coding? _____

Any special designations required by agencies or associations? _____

Will any regulatory agency approvals be required? If yes, which one(s)? _____

Non-conductive rubber needed to prevent transmittal of electricity? _____

Static wire or static-dissipating tube to prevent static electricity buildup and discharge sparks? _____

Pin-pricked cover to resist blistering when transferring hot materials or air/gases under pressure? _____

Abrasion sleeve or guard? _____

Heat shield? _____

Sub-zero exposure resistance? _____

Special assembly requirements? _____

Continuous transfer service or intermittent service? _____

Flexibility: Do space restrictions exist where the hose will be used? _____

Bend Radius: of the hose relative to space in which hose will be used? _____

Considering the intended use of the hose, how flexible will it need to be (check one)?

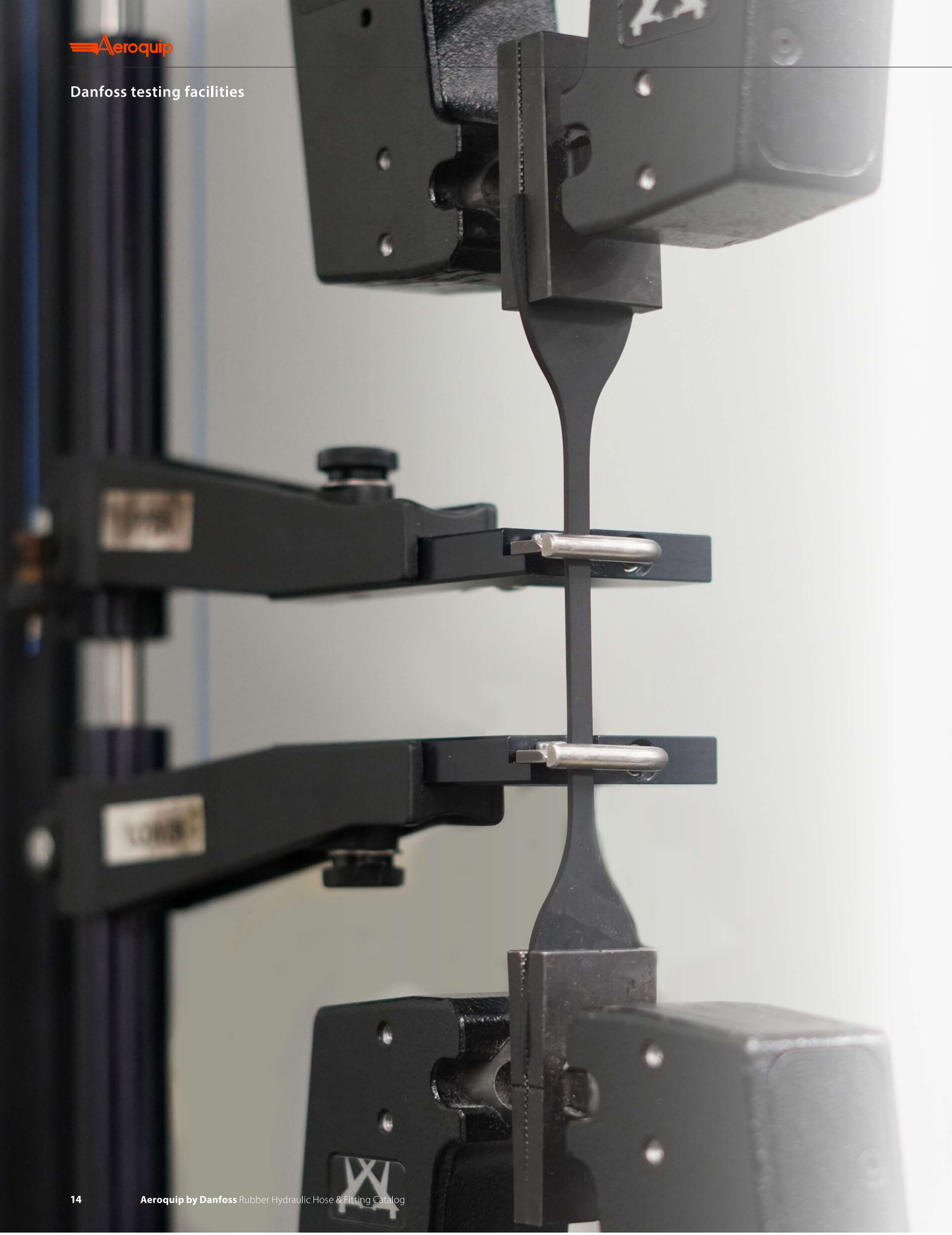
☐ Extremely flexible ☐ Slightly flexible ☐ Not an issue

Weight: How will the hose be handled during use, if at all? _____

How important is the weight of the hose going to be in this application (check one)?

☐ Very important ☐ Slightly important ☐ Not an issue

Danfoss testing facilities



Danfoss **Tech Center**

Where innovation and technology meet

Application engineering

A Product Applications Engineer is responsible for performing a wide variety of engineering and technical tasks. They review all customer product specifications, including drawings, contracts, and project details. They are the main technical resources throughout the sales process. The Product Applications Engineer identifies and designs complex products and solutions, determining manufacturing feasibility and costs for specific customer applications and quotations.

Engineering lab

The Engineering Lab is a place of learning and discovery for our technical team. This area includes our current crimp machine line up where we can build test samples and prove out new products and tooling on our crimp equipment. It also includes two of our 3D printers that we use for rapid prototypes, proving designs and developing new methods of manufacturing components. There is also space to perform product tear downs, review and analysis as well as machining capabilities for custom tooling, fixtures and cutaways.

Environmental room

Fluid Conveyance Products are exposed to many harsh environments and we need to be able to duplicate some of these conditions. Environmental chambers are machines we use to simulate extreme temperature, humidity, vibration, flexing and pressurization conditions. The environmental room is filled with six environmental chambers with varying capabilities. While all the chambers can be programmed with a high/low temperature profile, two of the chambers have vibration capabilities, one has a mechanical flex capability and two have humidity capabilities. Environmental testing is performed to either industry specifications, customer specifications or internally developed test protocols. As an added feature, a power unit can be brought to the chambers to perform impulse testing while at varying environmental conditions.

Hydraulics lab

Our ISO/TS 16949 approved and A2LA certified Test Lab provides a suitable environment to conduct laboratory testing in support of new product development, ongoing customer support and internal continuous improvement activities. Our staff includes experienced Technicians, Hydraulics Systems experts, Electrical expertise, LabView expertise, in house Gauging and Calibration, Quality and Maintenance. We are fully capable of designing and developing all our test equipment from simple test fixtures to complex impulse machines.

Impulse lab

The machines within this area are designed to perform the core hose tests of impulse and burst. Impulse testing is a fatigue test where hose is repeatedly exposed to high pressure pulses for a high number of cycles while at its highest operating temperature and smallest bend radius. These extreme conditions ensure hoses meet endurance requirements. Burst is a one time pressure test where hose is taken to failure and required to meet a 4 to 1 safety factor. Other testing that takes place in this area includes vibration, tensile, volumetric expansion and air brake flex testing. While not as common as burst and impulse, these tests are needed to support the vast array of industries that the Fluid Conveyance product lines serve.

Material science lab

The Maumee Materials Science laboratory offers the formulation development of novel thermoset and thermoplastic elastomers alongside expertise in testing, chemical compatibility and QC analysis.

Oven room

The ovens that occupy most of this room's floor space are utilized for a variety of high temperature tests including high temperature aging, hot oil circulation, high temperature impulse and high temperature burst. Testing to these protocols ensures our products will perform even when run at their extreme rated operating temperatures.

Abrasion to a hose cover will expose the steel reinforcement wires causing corrosion and eventually hose failure. The Fluid Conveyance product group offers a variety of hose covers from entry level low abrasion resistance to premium products that offer very high abrasion resistance. To characterize the abrasion resistance of a hose cover, we use an abrasion tester designed to run testing per ISO-6945.

Salt spray is another standardized test protocol run in this room to test plating corrosion resistance. Plating is a significant factor for Fluid Conveyance because most of our fitting and adapter product lines are Zinc plated steel.

Pilot plant

The Maumee Pilot Plant generates prototype hose based on engineering specifications and used in the Concept Assessment and Design Suitability stages of development.

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 abraison 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

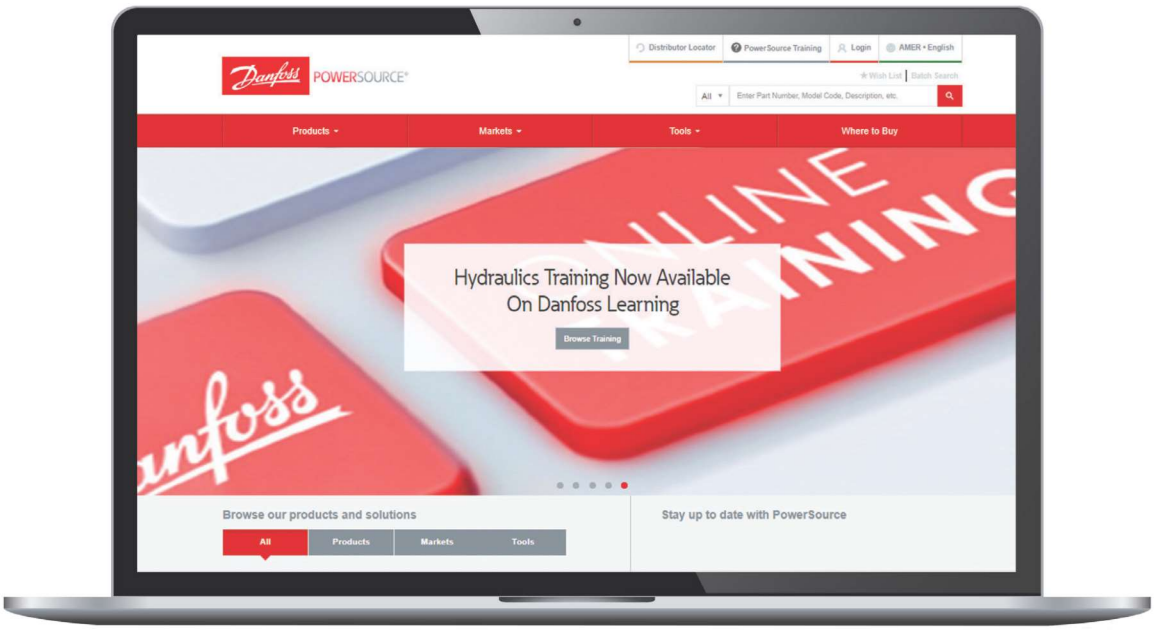
Products that **meet** industry specifications

Specialty hose

Active products that tend to be used for more niche applications

Danfoss **PowerSource™**

Your information headquarters

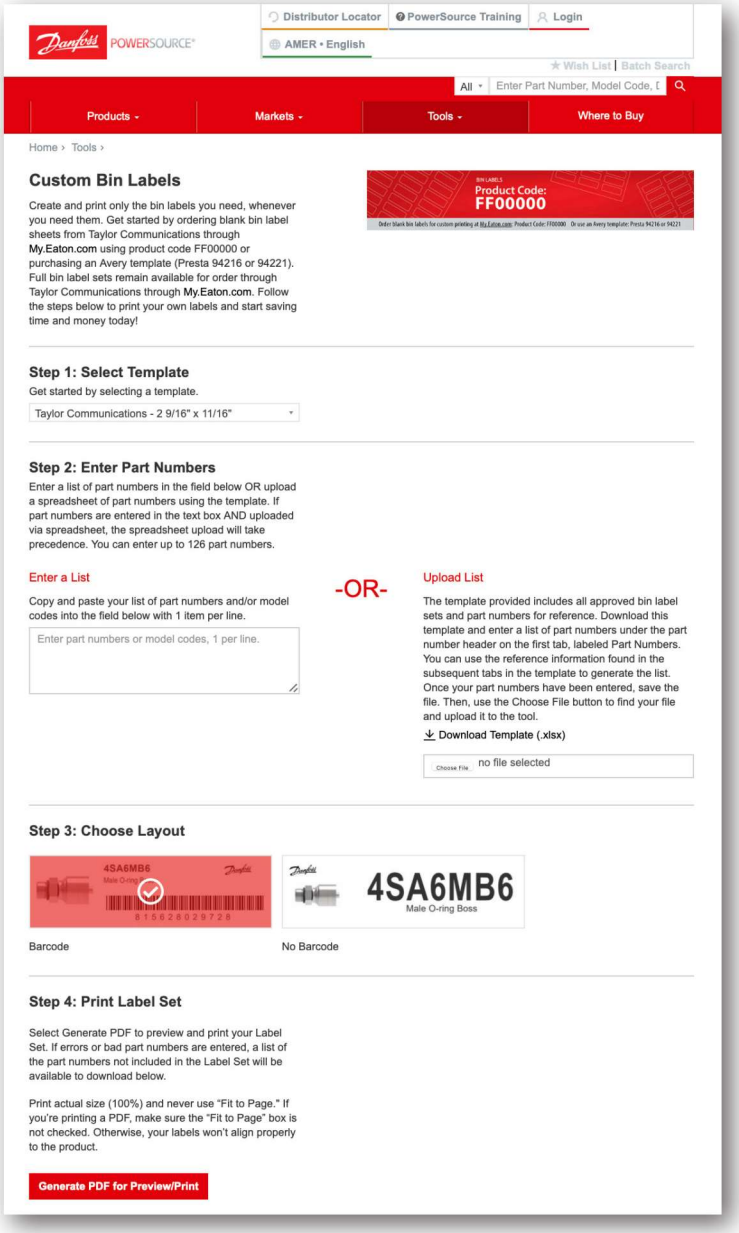


Putting fluid conveyance information at your **fingertips.**

Danfoss PowerSource™ is the hub for all of fluid conveyance. This informational site houses Danfoss's product, market and technical information including:

1. Searchable fluid conveyance product information:
   - Part numbers
   - Sizes
   - Performance and specifications
   - Branding information
2. Literature and videos
3. Product value propositions
4. Crimp specifications
5. Competitor cross reference tool
6. Coupling cross reference tool
7. Custom bin label tool
8. 2D/3D cad models
9. Hose assembly configurator
10. Marketplace (authenticated PowerSource only)
11. List prices and lead times (authenticated PowerSource only)

To access these tools and more, visit and log in to PowerSource from Danfosspowersource.com and then select tools.



Custom bin labels

Get your custom bin labels today!

Danfoss has created a solution for all your instant bin label needs from the convenience of your office in just four simple steps.

1. **Select template**
   Choose the template.
2. **Enter part numbers**
   Enter part numbers OR upload your own file of part numbers.
3. **Choose the layout**
   Configure label with or without barcode.
4. **Print label set**
   Generate a PDF to preview and print your label set.

For best results use the product code FF00000, available through Taylor Communications. Individual labels are 2 9/16" x 11/16".

This custom bin label web solution can be found at: Danfosspowersource.com > PowerSource > Tools > Custom Bin Labels

Fitting options

Standard and premium fittings - **the right product for every application**

Braided or spiral, premium or standard, there is a Danfoss fitting designed for your application.

Braided hose fittings	Features:
Premium 1A braided fittings 	• **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 • Over 550 1A series part numbers available • Danfoss' **MatchMate®** program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly
Standard Two-piece Winner fittings 	• 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	**Features:**
Premium 4S/6S spiral fittings 	• **Dura-Kote** plating technology for up to 1,000 hours of corrosion resistance • Danfoss patent-pending **Dura-Seal™** technology eliminates hose assembly cool-down leakage • Class zero leakage SAE J1176 on approved hose styles • Danfoss' **MatchMate** spiral-hose/fitting identification system program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly
Premium 1W internal skive spiral fittings 	• Internal skive high-performance spiral fitting with design-related sockets • Blow-off prevention for critical applications • Designed to withstand high-pressure environments, with a capacity of up to working 500 bar (7250 psi). • Tested to two million flex impulse cycles, proving their durability and reliability over the long-term. • Class 0 cool down leakage per SAE J1176 • Double O-ring **Dura-Seal** for sizes -20 to -32 providing extra protection and durability for large size hoses.
Field attachable hose fittings	**Features:**
Premium Field attachable fittings 	• **Dura-Kote** plating technology for up to 1,000 hours of corrosion resistance • Engineered to provide peak performance with Danfoss' core braided hose products • Can be assembled in the field without special tooling • Reduced downtime • Quick repair

Dura-Kote and Dura-Seal technology **extends the life of your hose assembly**

3X Carbon steel corrosion protection

Dura-Kote plating technology

Hose fittings that offer 3x the corrosion protection on carbon steel fittings as compared to competitive hose fittings. Danfoss' Dura-Kote fittings provide up to 1000 hours of corrosion protection. This is a huge step forward in metal fitting corrosion protection. (Only on 1A Series and 4S/6S fittings)

4S/6S fitting

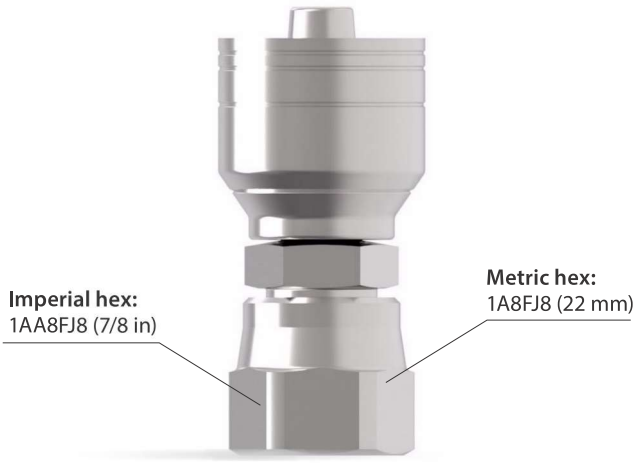
Class 0 Cool-down leakage protection

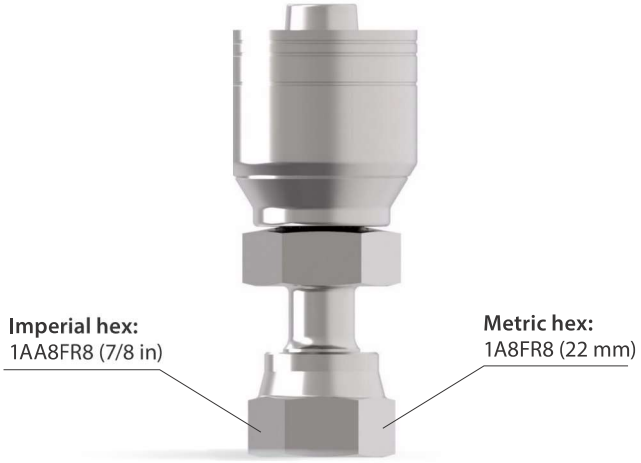
Dura-Seal technology

This patent-pending innovation from Danfoss eliminates hose assembly cool-down leakage, while extending hose assembly life, reducing equipment down-time. (Only on 4S/6S fittings)

Need **Metric?**

Danfoss has the answer.





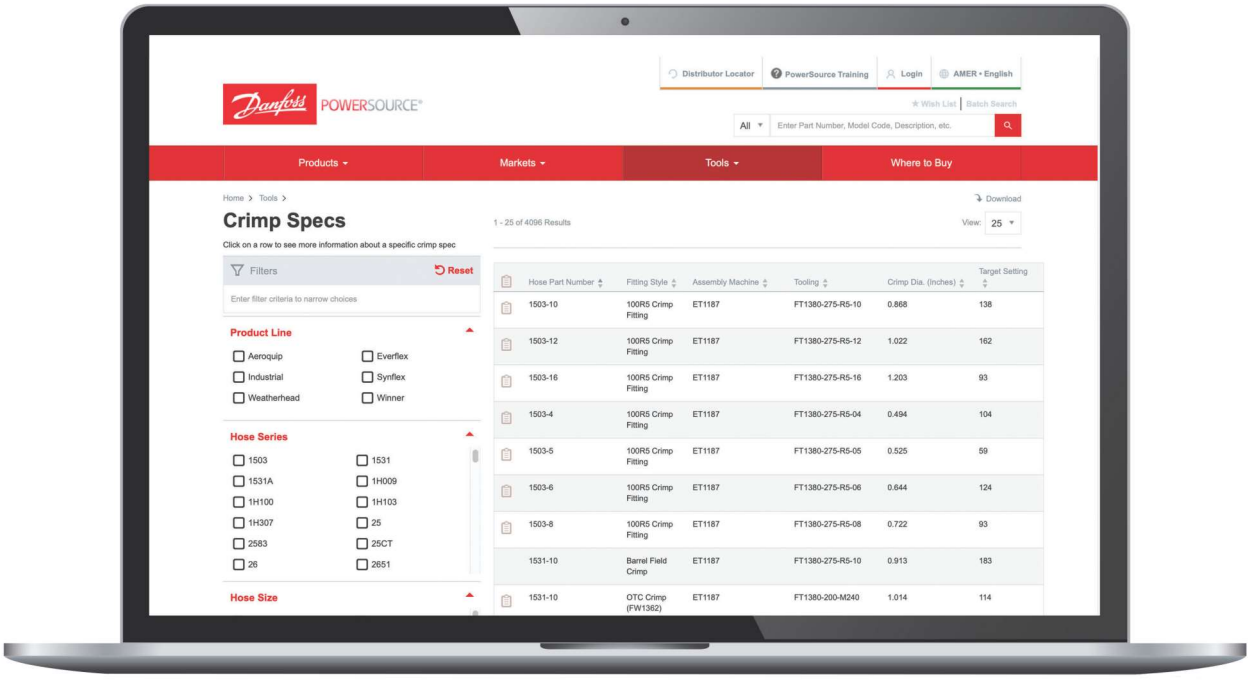
Available metric fitting configurations*:

• JIC • ORS • Many imperial FJ and FR fittings have a metric equivalent

*Danfoss metric fittings are not listed in this catalog, please contact customer service for more information.

Crimp specs **in a flash!**

Find your crimp specs quickly and easily with the PowerSource Crimp Spec tool. You can create a custom crimp chart from your desktop following these simple steps.



1. Go to PowerSource	2. Enter criteria	3. Download
Visit Crimp Specs at danfoss.com/crimp	Select your crimp spec criteria. This includes Assembly Machine(s), Product Line, Hose Series, Hose Size, and Fitting Style.	Locate the download icon at the top right of the screen and select either the PDF or Excel option to generate your custom chart. *Excel format allows you to perform custom sorting, filter data, remove unneeded fields, and to add custom notes and color coding.

Crimp specs **on the go!**

Danfoss's mobile crimp spec tool provides a four-step guided selection process for quick access to crimp specs on your mobile device.

It's as easy as:

Visit PowerSource Crimp specs at danfoss.com/crimp on your mobile device

- Find your machine
- Select your hose series
- Select your hose size
- Find your fitting style

Get results, fast!

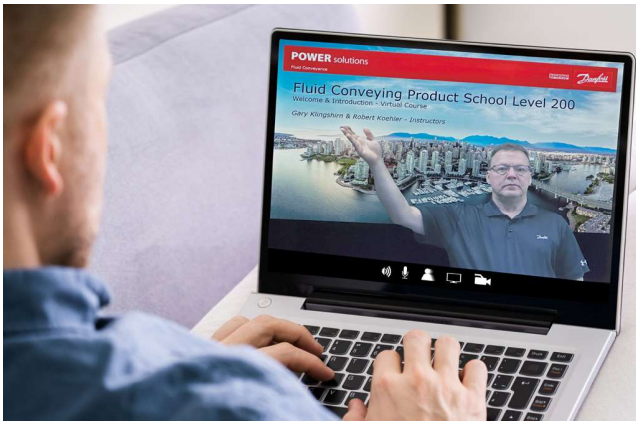
You can even bookmark the crimp spec page and add it as an app on the home screen of your mobile device for easy access at any time!

For iOS, open the webpage in Safari, click the boxed arrow icon at the bottom of the screen, and select the plus sign icon "Add to Home Screen."

For Android, open the webpage, click the three vertical dots on the top right hand corner, and select "Add to Home Screen."

Knowledge is power, **invest in your career!**

Danfoss' Fluid Conveyance training (virtual and face-to-face options available)



Virtual

Face-to-face

Master Danfoss's core fluid conveyance products and more with the help of our training team! Danfoss offers in depth, formal training courses designed to make you an expert in the field.

Attend Danfoss's 200 Level Fluid Conveying Products School to learn more about general product and application information or Danfoss' 300 and 400 Level Fluid Conveying Products Specialist School for a class focused on more technical information as well as competitive advantage materials.

Check out https://www.danfoss.com/en-us/service-and-support/training/dps-learning-and-training-solutions/ for specific product courses and dates. If these locations and dates do not work for you, our experts can come to you. Contact hydraulicstraining@Danfoss.com for further details.

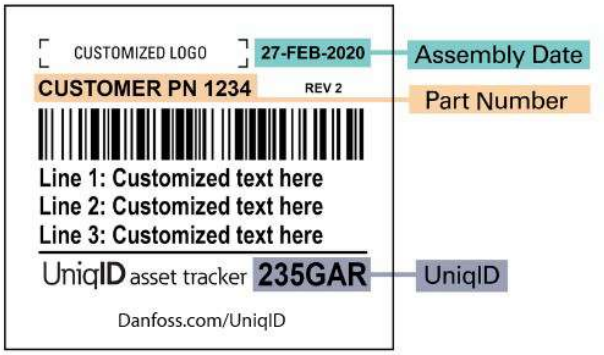
Danfoss hydraulics training center
1650 Indian Wood Circle
Maumee, OH 43537
Phone toll free: 1-800-413-8809
Fax: (952) 906-3731

HydraulicsTraining@Danfoss.com

UniqID™ asset tracker

Small label. Big impact.

The Danfoss UniqID asset management solution seamlessly drives new efficiencies into every aspect of the asset lifecycle—from asset tracking, to routinized maintenance alerts, replacement orders and more. Through the use of an intuitive six-digit coding system and cloud-based portal—UniqID asset tracker makes it easy to label, track and replace hose assemblies.



To get started, contact UniqID@Danfoss.com or visit Danfoss.com/UniqID

Label

Drive aftermarket sales
Via the UniqID code or label branding

Grow your business
Offer services to set yourself apart from the competition

Prevent attrition
Provide shared asset management information with key accounts

Track

Eliminate paper
With a web-based platform

Proactive inspection and replacement
Cyclical approach to maintenance, increasing sales potential

Improve decision making
With product lifecycle analysis tools

Manage safety certificatio
With electronic attachment features

Replace

Increase uptime
With proactive maintenance capabilities

Reduce downtime
Order replacements without ever bringing in a hose assembly

Reduce fines
By having critical documentation easy to find electronically

Assemble

Save time
UniqID's bill of material feature takes the guesswork out of hose replacement

Reduce errors
Labels provide critical data at-a-glance

Increase efficiency
Leverage shared attachments; no time wasted searching paper trails

Our laylines provide **vital hose data** instantly.

*Danfoss MatchMate® fitting system:

Match fittings to hose with ease.

Braided hose:

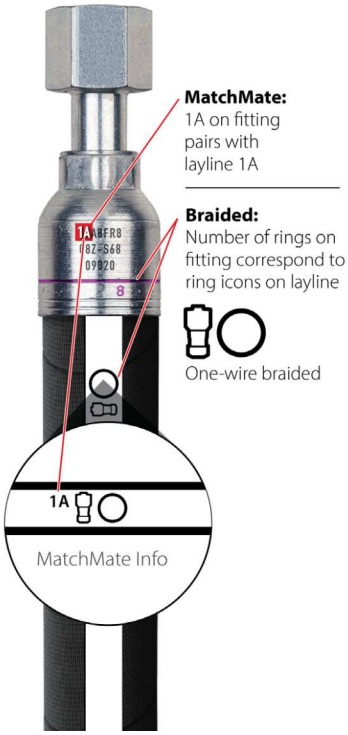
Fitting part number:

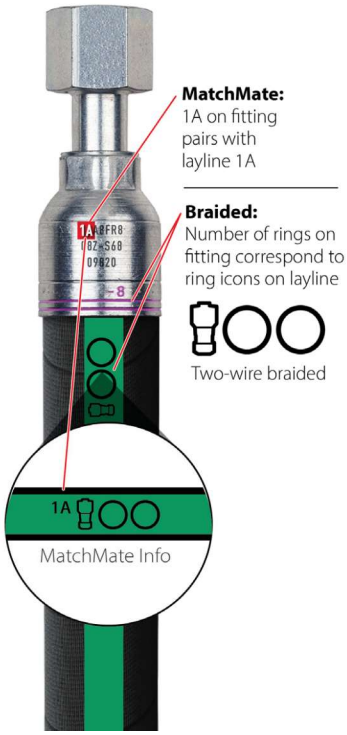
1A on the layline should pair with a **1A** on the fitting part number.

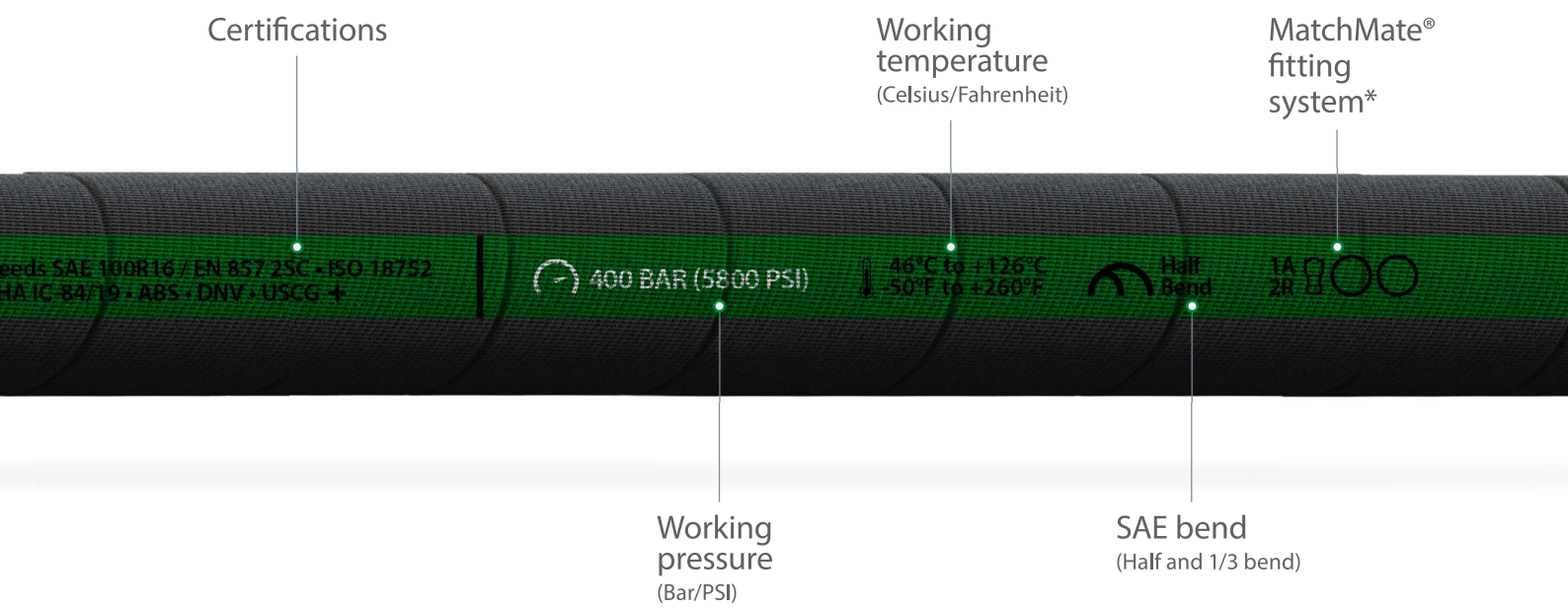
One or two-wire braid:

One **O** on the layline will match with one ring on fitting designating **one-wire braided hose.**

Double **OO** on the layline will match with two rings on fitting designating **two-wire braided hose.**







Spiral hose:

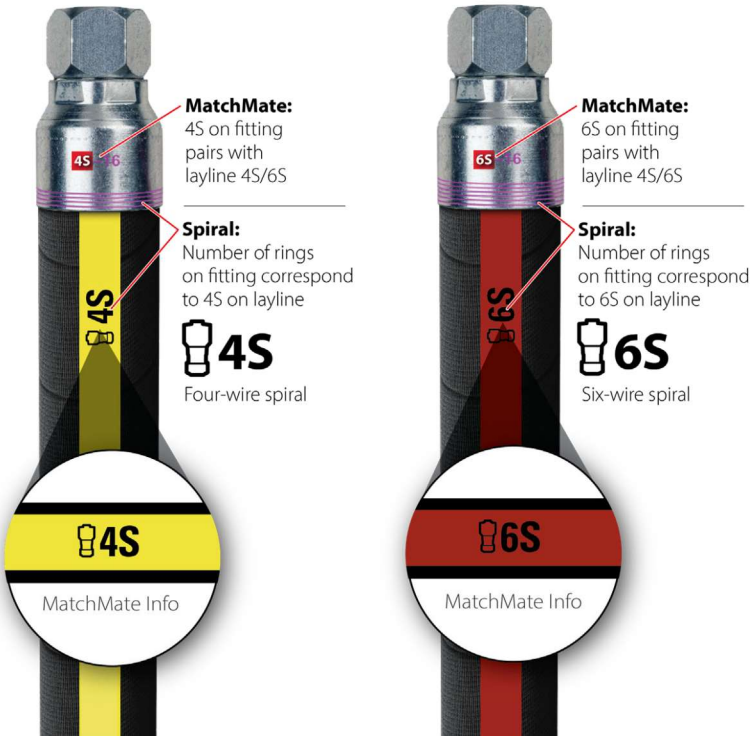
Fitting part number:

A **4S** or **6S** on the layline should pair with a **4S** or **6S** on the fitting part number.

Four or six-wire spiral

A **4S** on layline should pair with **four rings on fitting** designating **four-wire spiral hose.**

A **6S** on layline will match with **six rings on fitting** designating **six-wire spiral hose.**



Two-tier product portfolio

From the ordinary to the extreme, Danfoss has a **solution that fits.**

Premium | High-Temp | Low-Temp | Ultra-Abrasion | Suction | Standard

Premium and standard hydraulic **hose options:**

Premium: Aeroquip by Danfoss
Standard: Winner by Danfoss

At Danfoss, we understand that hydraulic hose and fittings need to match the application, for the ultimate performance and safety.

Because fluid conveyance platforms run the extreme, from low-pressure to high, moderate impulse to intense, from stable familiar environments to unforgiving conditions Danfoss Rubber Hydraulic Hose & Fittings provides options. The option to choose between standard-performance value based hose for less extreme environments and premium hoses developed for specific applications that push to the edge.

We do that for our customers, our partners. For those that put their trust in us. We don't compromise our standards and neither should you. When it comes to safety, technology and performance, we pledge our best, everyday.

Note: All **core** premium and standard hoses in the catalog are designated with an icon highlighting premium, premium specialty or standard. See chart on following page for more information.

Two-tier product portfolio

The **Core Premium** hoses		Operating temperature	Abrasion resistance	Bend radius	Impulse cycles
PREMIUM		**Certifications:** ABS DNV EN ISO MSHA SAE USCG			
	Premium	**HIGH:** 260° F (127° C) **LOW:** -40° F (-40° C)	**Dura-Tuff premium abrasion cover**	**1/2 Bend** (EC881 is 1/3 bend)	**Exceed industry standard**
HIGH-TEMP		**Certifications:** ABS DNV EN ISO MSHA SAE USCG			
	High-Temp	**HIGH:** 302° F (150° C) **LOW:** -40° F (40° C)	**AQP high temp**	**Full Bend**	**Exceed industry standard**
LOW-TEMP		**Certifications:** EN ISO MSHA SAE			
	Low-Temp	**HIGH:** 212° F (100° C) **LOW:** -70° F (-57° C)	**Dura-Tuff premium abrasion cover**	**Full Bend**	**Exceed industry standard**
ULTRA-ABRASION		**Certifications:** ABS DNV EN ISO MSHA SAE			
	Abrasion	**HIGH:** 212° F (100° C) **LOW:** -40° F (40° C)	**Bruiser ulta-abrasion cover**	**Full Bend** (FC735 is 1/2 bend)	**Exceed industry standard**
SUCTION		**Certifications:** ABS EN MSHA SAE			
	Suction	**HIGH:** 275° F (135° C) **LOW:** -40° F (40° C)	**Standard cover**	**1/3 Bend**	**Exceed industry standard**

The **Core Standard** hoses	Operating temperature	Abrasion resistance	Bend radius	Impulse cycles
STANDARD	**Certifications:** DNV EN ISO MSHA SAE USCG			
 Standard	**HIGH:** 260° F (127° C) **LOW:** -40° F (-40° C)	**Standard Cover**	**1/2 Bend** (excluding EC118)	**Meet industry standard**

What are the **core products?**

Danfoss' core rubber hydraulic portfolio is the heart of our product line. The core two-tier portfolio highlights the very best in technology and safety with hoses that are specifically designed to perform in a diverse range of applications, from the routine to the intense and all levels in-between.

Core two-tier portfolio options

Premium | High-Temp | Low-Temp | Ultra-Abrasion | Suction

Standard

Premium

Our core premium hoses for OEM or aftermarket use exceed industry standards for pressure, temperature and abrasion resistance, with options adapted to handle your toughest jobs.

Performance examples:

- Impulse 150%
- 300K cycles
- 121° C
- High frequency flexing
- High pressure impulse

Standard

Winner® by Danfoss hoses meet all industry standards for pressure, temperature and abrasion resistance, offering the right product at a competitive price point for OEM markets.

Performance examples:

- Impulse 133%
- 200K cycles
- 100° C
- Normal frequency flexing
- Normal pressure impulse

Hose product page diagram

Top hose section

6 Hose construction image

1 Core hose key

Premium

2 Part # and description

GH681 | Core premium one wire braided hose

3 Hose part number & hose classification

Premium core hose
GH681

4 Performance qualifications

Meets or exceeds:
SAE 100R17 performance | EN 857 Type 1SC performance | ISO 1436 1SN | ISO 18752

5 Layline

Middle hose section

7 Application and hose information

Typical application:

Petroleum and fire-resistant hydraulic fluids, fuel and lubricating oils, gasoline, water and other industrial fluids

Agency specifications:	MSHA | ABS | DNV | USCG		
Hose construction:	**Inner Tube:** Nitrile	**Reinforcement:** One wire braid	**Cover:** Dura-Tuff Premium Abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F)		
Qualified fittings:	1A Series 1R Series (-4, -6, -8, -12, -16)		

Bottom hose section

8 Part # and hose specs

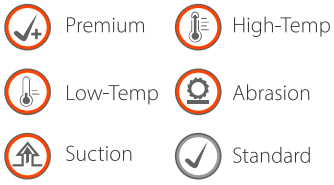
PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH681-3	4,8	0.19	10,9	0.42	250,0	3650	1000	14500	45,0	1.77	0,16	0.11
GH681-4	6,4	0.25	12,9	0.51	255,0	3700	1020	14800	50,0	1.97	0,21	0.14
GH681-5	7,9	0.31	14,0	0.55	225,0	3250	900	13000	55,0	2.17	0,22	0.15
GH681-6	9,5	0.38	16,3	0.64	235,0	3400	940	13600	63,0	2.48	0,31	0.21
GH681-8	12,7	0.50	19,9	0.78	221,0	3200	883	12800	90,0	3.54	0,43	0.29
GH681-10	15,9	0.63	22,3	0.88	140,0	2025	559	8100	100,0	3.94	0,44	0.29
GH681-12	19,0	0.75	26,0	1.02	138,0	2000	552	8000	120,0	4.72	0,56	0.37
GH681-16	25,4	1.00	34,0	1.34	103,0	1500	414	6000	150,0	5.91	0,84	0.56
GH681-20	31,8	1.25	41,5	1.63	69,0	1000	276	4000	210,0	8.27	1,01	0.68
GH681-24	38,1	1.50	47,9	1.89	52,0	750	207	3000	250,0	9.84	1,23	0.83
GH681-32	50,8	2.00	64,0	2.52	41,0	600	166	2400	315,0	12.4	2,01	1.32

9 Hose classification

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Top hose section

1 Core hose key



2 Part # & description

Hose part number and product description

3 Hose part number and hose classification

Corner key provides easy identification of hose name and premium, standard or core designation

4 Performance qualifications

Hose performance qualifications

- EN
- SAE
- ISO

5 Intelligent layline

Visual representation hose layline

6 Hose construction

Visual representation of hose construction

- One or two wire braid
- Four or six wire spiral
- Other

Middle hose section

7 Application & hose info

Application info

- Agency specifications
  - MSHA
  - ABS
  - DNV
  - USCG
- Hose construction
  - Inner tube
  - Reinforcement
  - Cover
- Operating temperature
- Qualified fittings

Bottom hose section

8 Part # and hose specs

Quickly locate hose part number, sizing, pressure rating, bend radius and weight in an easy to read chart

- Hose Part #
- Size (mm, in):
  - Hose I.D.
  - Hose O.D.
- Pressure (Bar/PSI)
  - Working Pressure
  - Burst Pressure
- Hose bend (mm/in)
- Weight (kg/m | lbs./ft.)

9 Easy hose classification

Easy hose reference identification located at the bottom of all hose part pages

- Core
- Premium
- Standard
- Spiral
- High-temp
- Low-temp
- Abrasion
- Suction

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)

EN Committee for European Normalization

ABS American Bureau of Shipping

SAE Society of Automotive Engineers

UL Underwriters Laboratories

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 - conductve 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

Aeroquip by Danfoss

Core premium and premium hose

Premium | High-Temp | Low-Temp | Ultra-Abrasion | Suction

Aeroquip

Table of contents

The **premium** hoses

Core hose

Premium core braided hose

Premium core spiral hose

Premium braided hose

The **premium** hoses

Core hose

Premium braided hose

Premium spiral hose

Premium suction hose

How to order

Accurate processing and prompt delivery of your order depends on easy identification of your requirements. Please order Aeroquip brand parts using correct part numbers as described in this guide. Inquiries and orders should be directed to your Aeroquip distributor or:

Danfoss
14615 Lone Oak Road
Eden Prairie, MN 55344
952-937-9800;
888-258-0222;
Fax: 952-974-7722
www.Danfoss.com/hydraulics

Part numbers and dash sizes

Dash size designates the nominal size in 16th of an inch. This number immediately follows the part number and is separated from it with a dash.

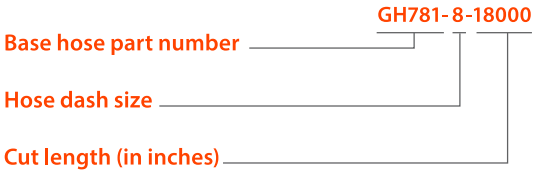
Dimensions

Dimensions given in this guide for Aeroquip products are approximate and should be used for reference only. Exact dimensional information for a given product is subject to change and varying tolerances; contact Danfoss directly for full current information.

Number system - hydraulic hose

Cut length hose

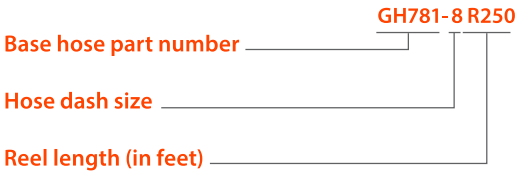
Cut lengths hoses are available only on core hose products.
Available cut lengths are 50, 100, and 150 ft.
The feet should be expressed in inches:



50 ft = 06000
100 ft = 12000
150 ft = 18000
Last digit is in 1/8 of an inch 00484 = 48 1/2 inches

Reeled hose

Most core hoses are offered on reels
of 250 or 500 ft lengths:



Notes: Length tolerance for hose, assemblies and sleeves is:

Up to and including 12 inches: ±1/8″
Above 12 inches to and including 18 inches: ±3/16″
Above 18 inches to and including 36 inches: ±1/4″
Above 36 inches: ±1% of length

WARNING ⚠

Hose assemblies

Danfoss manufactures the terminal ends of our hose fittings to the appropriate requirements established by the SAE. Therefore, the performance ratings of these hose fittings meet the SAE requirements. It is possible to order a hose assembly with a fitting terminal end that has a performance rating lower than the hose rating. When ordering hose assemblies, please keep the connecting end performance rating in mind since this may affect overall hose assembly performance. Hose assembly components (hose and fittings) are easily assembled in the field. However, factory assembled field attachable and crimped hose assemblies are available.

For complete information, contact Danfoss.

Premium

GH681

Core premium
one wire braided hose

Meets or exceeds:
SAE 100R17 | SAE 100R1 | EN 857 Type 1SC performance | ISO 1436 1SN | ISO 18752

Typical application:

Petroleum and fire-resistant hydraulic fluids, fuel and lubricating oils, gasoline, water and other industrial fluids

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F)		
Qualified fittings:	1A series | 1R series (-4, -6, -8, -12, -16)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH681-3	4,8	0.19	10,9	0.42	250,0	3,650	1,000	14,500	45,0	1.77	0,16	0.11
GH681-4	6,4	0.25	12,9	0.51	255,0	3,700	1,020	14,800	50,0	1.97	0,21	0.14
GH681-5	7,9	0.31	14,0	0.55	225,0	3,250	900	13,000	55,0	2.17	0,22	0.15
GH681-6	9,5	0.38	16,3	0.64	235,0	3,400	940	13,600	63,0	2.48	0,31	0.21
GH681-8	12,7	0.50	19,9	0.78	221,0	3,200	883	12,800	90,0	3.54	0,43	0.29
GH681-10	15,9	0.63	22,3	0.88	140,0	2,025	559	8,100	100,0	3.94	0,44	0.29
GH681-12	19,0	0.75	26,0	1.02	138,0	2,000	552	8,000	120,0	4.72	0,56	0.37
GH681-16	25,4	1.00	34,0	1.34	103,0	1,500	414	6,000	150,0	5.91	0,84	0.56
GH681-20	31,8	1.25	41,5	1.63	69,0	1,000	276	4,000	210,0	8.27	1,01	0.68
GH681-24	38,1	1.50	47,9	1.89	52,0	750	207	3,000	250,0	9.84	1,23	0.83
GH681-32	50,8	2.00	64,0	2.52	41,0	600	166	2,400	315,0	12.4	2,01	1.32

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium core hose
FC839B

Ultra-Abrasion

FC839B

Core premium Bruiser ultra-abrasion one & two wire braided hose

Meets or exceeds: SAE 100R17 | ISO 18752

Aeroquip by Danfoss **FC839B-06** 9.5 mm (038 in) DN10 **Bruiser** SAE 100R17 • ISO 18752 MSHA IC-84/71 **210 BAR (3050 PSI)** -40°C to +100°C -40°F to +212°F 1A

Typical application:

High abrasion industrial and hydraulic system applications with petroleum and water-based fluids

Recommended for use on critical applications in construction, forestry, and other off-highway vehicles. Bruiser™ outer cover offers unmatched abrasion, chemical, and environmental protection

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid (-04 to -08) Two wire braid (-10 to -16)	**Cover:** Bruiser ultra-abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC839B-04	6,4	0.25	12,7	0.50	210	3,050	840	12,200	50,0	1.97	0,22	0.15
FC839B-06	9,5	0.38	16,6	0.65	210	3,050	840	12,200	65,0	2.56	0,34	0.23
FC839B-08	12,7	0.50	20,9	0.82	210	3,050	840	12,200	90,0	3.54	0,48	0.32
FC839B-10**	15,9	0.62	24,9	0.98	210	3,050	840	12,200	100,0	3.94	0,71	0.48
FC839B-12**	19,0	0.75	28,5	1.12	210	3,050	840	12,200	120,0	4.72	0,89	0.60
FC839B-16**	25,4	1.00	37,1	1.46	210	3,050	840	12,200	150,0	5.91	1,43	0.96

** two-wire braid hose

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | **Abrasion** | Suction

High-Temp

GH194

Core premium high-temp one wire braided hose

Meets: SAE 100R1 | EN 853 1SN

Aeroquip by Danfoss | GH194-6 | 9.5 mm (0.38 in) DN10 | AQP High Temp | Exceeds SAE 100R1 / EN 853 1SN MSHA IC-84/18 • ABS • DNV | 215 BAR (3125 PSI) | -40°C to +150°C -40°F to +302°F | 1A

Typical application:

Petroleum and fire-resistant hydraulic fluids, fuel and lubricating oils, gasoline, water and other industrial fluids

Agency specifications:	ABS | DNV | MSHA		
Hose construction:	**Inner tube:** AQP elastomer	**Reinforcement:** One wire braid	**Cover:** AQP high-temp
Operating temperature:	-40°C to +150°C (-40°F to +302°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH194-4	6,4	0.25	13,5	0.53	225	3,250	900	13,000	100,0	3.94	0,25	0.17
GH194-6	9,5	0.38	17,3	0.68	215	3,125	860	12,500	125,0	4.92	0,37	0.25
GH194-8	12,7	0.50	20,4	0.80	175	2,550	700	10,200	180,0	7.09	0,45	0.30
GH194-10	15,9	0.62	23,8	0.94	140	2,050	560	8,200	205,0	8.07	0,54	0.36
GH194-12	19,0	0.75	27,4	1.08	125	1,800	500	7,200	240,0	9.45	0,69	0.46
GH194-16	25,4	1.00	36,2	1.42	90	1,300	360	5,200	300,0	11.81	0,98	0.66
GH194-20	31,8	1.25	43,9	1.73	65	950	260	3,800	420,0	16.54	1,26	0.85
GH194-24	38,1	1.50	50,6	1.99	50	725	200	2,900	500,0	19.69	1,58	1.06
GH194-32	50,8	2.00	59,2	2.33	40	580	160	2,320	630,0	24.80	2,04	1.37

Core | **Premium** | Standard | **Braided** | Spiral | **High-Temp** | Low-Temp | Abrasion | Suction

Aeroquip

Premium core hose
GH781

Premium

GH781

Core premium
two wire braided hose

Meets or exceeds: SAE 100R16 | EN 857 2SC | ISO 18752 | ISO 11237

Typical application:

Hydraulic systems service with petroleum and water based fluids, for general use.

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F)		
Qualified fittings:	1A series | 2R series (-4, -6, -8, -12 & -16)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH781-4	6,4	0.25	13,9	0.55	448	6,500	1,792	26,000	50,0	1.96	0,33	0.22
GH781-6	9,5	0.38	17,4	0.69	400	5,800	1,600	23,200	65,0	2.55	0,43	0.29
GH781-8	12,7	0.50	20,9	0.82	350	5,000	1,400	20,000	90,0	3.54	0,58	0.39
GH781-10	15,9	0.62	24,0	0.94	280	4,000	1,120	16,000	100,0	3.94	0,65	0.44
GH781-12	19,0	0.75	27,9	1.10	241	3,500	964	14,000	120,0	4.72	0,79	0.53
GH781-16	25,4	1.00	35,9	1.41	210	3,000	840	12,000	150,0	5.90	1,07	0.72
GH781-20	31,8	1.25	43,4	1.71	172	2,500	688	10,000	210,0	8.26	1,62	1.09
GH781-24	38,1	1.50	51,5	2.03	140	2,000	560	8,000	250,0	9.84	2,08	1.40
GH781-32	50,8	2.00	63,9	2.52	110	1,600	440	6,400	315,0	12.40	2,83	1.90

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Premium

EC881

Core premium Dynamax ultra-performance two wire braided hose

Exceeds: SAE 100R16 | SAE 100R19 | EN 857 2SC | ISO 18752

Typical application:

Hydraulic systems with petroleum and water-based fluids, for general industrial service.

This Dynamax ultra-performance hose with the Danfoss Dura-Pulse inner tube combines the lightweight flexibility of a two-wire braided hose with the pressure and performance of spiral 100R12 hoses (-16 and smaller).

Agency specifications:	ABS | DNV | MSHA		
Hose construction:	**Inner tube:** Dura-Pulse patented tube	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F) -46° C to +70° C (-50 to +158° F) for water based hyd. fluids 0° C to +70° C (+32°F to 158° F) for water		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC881-4	6.4	0.25	13.6	0.54	450	6,525	1,800	26,100	33,0	1.30	0.32	0.22
EC881-6	9.5	0.38	17.3	0.68	400	5,800	1,600	23,200	42,0	1.65	0.42	0.28
EC881-8	12.7	0.50	20.9	0.82	360	5,220	1,440	20,880	60,0	2.36	0.58	0.39
EC881-10	15.9	0.62	24.0	0.94	350	5,075	1,400	20,300	68,0	2.68	0.75	0.50
EC881-12	19.0	0.75	27.9	1.10	330	4,785	1,320	19,140	80,0	3.15	1.03	0.69
EC881-16	25.4	1.00	34.6	1.36	280	4,060	1,120	16,240	150,0	5.91	1.47	0.99
EC881-20	31.8	1.25	43.4	1.71	172	2,500	688	9,980	210,0	8.27	1.75	1.18
EC881-24	38.1	1.50	51.8	2.04	138	2,000	552	8,000	250,0	9.84	1.91	1.28

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium core hose
FC735

Ultra-Abrasion

FC735 | Core premium Bruiser ultra-abrasion two wire braided hose

Exceeds: SAE 100R16 | EN 857 2SC | ISO 18752 | ISO 11237

Aeroquip by Danfoss FC735-06 9.5 mm (0.38 in) DN10 Bruiser | Exceeds SAE 100R16 / EN 857 2SC ISO 18752 • MSHA IC-84/71 • ABS • DNV | 400 BAR (5800 PSI) | -40°C to +126°C -40°F to +260°F | Half Bend | 1A

Typical application:

Hydraulic systems service with petroleum and water based fluids, for general use.

Agency specifications:	ABS | MSHA | DNV		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Bruiser ultra-abrasion
Operating temperature:	-40°C to +126°C (-40°F to +260°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC735-04	6,4	0.25	14,1	0.55	448	6,500	1,792	26,025	50,0	1.97	0,31	0.21
FC735-06	9,5	0.38	17,4	0.69	400	5,800	1,600	23,200	65,0	2.56	0,42	0.28
FC735-08	12,7	0.50	20,8	0.82	345	5,000	1,380	20,000	90,0	3.54	0,49	0.33
FC735-10	15,9	0.62	24,9	0.98	276	4,000	1,104	16,060	100,0	3.94	0,71	0.48
FC735-12	19,0	0.75	28,4	1.12	241	3,500	964	13,960	120,0	4.72	0,83	0.56
FC735-16	25,4	1.00	35,7	1.41	207	3,000	828	12,000	150,0	5.91	1,19	0.80
FC735-20	31,8	1.25	43,3	1.70	172	2,500	688	9,965	210,0	8.27	1,52	1.02

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | **Abrasion** | Suction

High-Temp

GH195

Core premium AQP high-temp two wire braided hose

Meets: SAE 100R2 | EN 853 2SN | ISO 1436 2SN

Aeroquip by Danfoss GH195-6 | 9.5 mm (0.38 in) DN10 | AQP High Temp | Exceeds SAE 100R2 / EN 853 2SN • ISO 1436-1 2SN MSHA IC-84/18 • ABS • DNV • USCG ✣ | 345 BAR (5000 PSI) | -40°C to +150°C -40°F to +302°F | 1A

Typical application:

Petroleum and fire resistant hydraulic fluids, fuel, and lubricating systems

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** AQP elastomer	**Reinforcement:** Two wire braid	**Cover:** AQP high-temp
Operating temperature:	-40°C to +150°C (-40°F to +302 °F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH195-4	6,4	0.25	15,1	0.59	400,0	5,800	1,600	23,200	102,0	4.02	0,40	0.27
GH195-6	9.5	0.38	19,2	0.75	345,0	5,000	1,380	20,000	127,0	5.00	0,58	0.39
GH195-8	12,7	0.50	22,1	0.87	293,0	4,250	1,172	17,000	178,0	7.01	0,68	0.46
GH195-10	15.9	0.62	25,5	1.00	250,0	3,650	1,000	14,600	203,0	7.99	0,80	0.54
GH195-12	19,0	0.75	29,5	1.16	215,0	3,125	860	12,500	241,0	9.49	1,00	0.67
GH195-16	25,4	1.00	37,8	1.49	175,0	2,550	700	10,200	305,0	12.01	1,44	0.97
GH195-20	31,8	1.25	48,5	1.91	155,0	2,250	620	9,000	419,0	16.50	2,38	1.60
GH195-24	38,1	1.50	55,1	2.17	125,0	1,800	500	7,250	508,0	20.00	2,59	1.74
GH195-32	50,8	2.00	67,8	2.67	105,0	1,525	420	6,100	635,0	25.00	3,38	2.27

Core | **Premium** | Standard | **Braided** | Spiral | **High-Temp** | Low-Temp | Abrasion | Suction

Aeroquip

Premium core hose
GH120

Low-Temp

GH120

Core premium low-temp two wire braided hose

Exceeds: SAE 100R16 | EN 857 2SC | ISO 11237

Typical application:

Low temperature flexing and hydraulic system service with petroleum and water-based fluids

For use in frigid environments on construction equipment and other mobile applications

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Proprietary low-temp	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-57° C to +100° C (-70° F to +212° F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH120-4	6,4	0.25	13,8	0.54	414,0	6,000	1,656	24,025	51,0	2.00	0,30	0.20
GH120-6	9,5	0.38	17,4	0.68	345,0	5,000	1,380	20,025	64,0	2.50	0,40	0.27
GH120-8	12,7	0.50	20,8	0.82	310,0	4,500	1,240	18,000	89,0	3.50	0,58	0.39
GH120-10	15,9	0.62	24,9	0.98	276,0	4,000	1,104	16,000	102,0	4.00	0,74	0.50
GH120-12	19,0	0.75	28,4	1.12	241,0	3,500	964	14,000	121,0	4.75	0,92	0.62
GH120-16	25,4	1.00	35,7	1.41	193,0	2,800	772	11,200	152,0	6.00	1,22	0.82
GH120-20	31,8	1.25	43,3	1.71	159,0	2,300	636	9,225	210,0	8.25	1,59	1.07
GH120-24	38,1	1.50	51,5	2.03	138,0	2,000	552	8,000	254,0	10.00	2,11	1.42
GH120-32	50,8	2.00	63,9	2.51	103,0	1,500	412	6,000	318,0	12.50	2,80	1.88

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | **Low-Temp** | Abrasion | Suction

Premium

GH493

Core premium
four wire spiral hose

Exceeds: SAE 100R12 | EN 856 R12 | EN 856 4SP (-8 to -16) | ISO 18752 | ISO 3862 R12

Aeroquip by Danfoss GH493-6 | 9.5 mm (0.38 in) DN10 | Dura-Tuff | Exceeds SAE 100R12 / EN 856 R12 MSHA IC-84/19 • ABS • DNV • USCG | 448 BAR (6500 PSI) | -40°C to +126°C -40°F to +260°F | Half Bend | 4S

Typical application:

For very high pressure hydraulic lines subjected to pressure surges and flexing

Typical applications include construction, mining, farming and high performance industrial equipmen

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +126°C (-40°F to +260°F)		
Qualified fittings:	4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH493-6	9,5	0.38	20,2	0.80	448,0	6,500	1,792	26,000	62,5	2.46	0,71	0.47
GH493-8	12,7	0.50	23,6	0.93	415,0	6,000	1,660	24,000	90,0	3.54	0,88	0.59
GH493-10	15,9	0.62	27,4	1.08	415,0	6,000	1,660	24,000	100,0	3.94	1,04	0.70
GH493-12	19,0	0.75	30,7	1.21	380,0	5,500	1,520	22,000	120,0	4.72	1,34	0.90
GH493-16	25,4	1.00	37,9	1.49	350,0	5,100	1,400	20,400	150,0	5.91	1,79	1.20
GH493-20	31,8	1.25	46,6	1.83	310,0	4,500	1,240	18,000	210,0	8.27	2,23	1.50
GH493-24	38,1	1.50	53,9	2.12	275,0	4,000	1,100	16,000	250,0	9.84	3,03	2.03
GH493-32	50,8	2.00	66,8	2.63	275,0	4,000	1,100	16,000	320,0	12.60	4,38	2.94

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium core hose
FC736

Ultra-Abrasion

FC736

Core premium Bruiser ultra-abrasion four wire spiral hose

Exceeds: SAE 100R12 | EN 856 R12 | ISO 18752

Aeroquip by Danfoss | FC736-06 | 9.5 mm (0.38 in) DN10 | Bruiser | Exceeds SAE 100R12 / EN 856 R12 ISO 18752 • MSHA IC-84/71 • DNV | 380 BAR (5500 PSI) | -40°C to +121°C -40°F to +250°F | 4S

Typical application:

High abrasion industrial and hydraulic system applications with petroleum and water-based fluids

Recommended for critical applications in construction, forestry, and other off-highway vehicles

Bruiser ultra-abrasion outer cover offers unmatched abrasion, chemical and environmental protection

Agency specifications:	ABS | DNV | MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Bruiser ultra-abrasion
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC 736-06	9,5	0.38	20,2	0.80	380	5,500	1,520	22,000	125,0	4.92	0,71	0.48
FC736-08	12,7	0.50	23,6	0.93	345	5,000	1,380	20,000	180,0	7.09	0,83	0.56
FC736-10	15,9	0.62	27,4	1.08	345	5,000	1,380	20,000	200,0	7.87	0,98	0.66
FC736-12	19,0	0.75	30,7	1.21	280	4,050	1,120	16,200	240,0	9.45	1,32	0.89
FC736-16	25,4	1.00	37,9	1.49	280	4,050	1,120	16,200	300,0	11.81	1,75	1.18
FC736-20	31,8	1.25	46,6	1.83	210	3,050	840	12,200	420,0	16.54	2,36	1.59
FC736-24	38,1	1.50	53,9	2.12	175	2,550	700	10,200	500,0	19.68	3,00	2.01
FC736-32	50,8	2.00	66,8	2.63	175	2,550	700	10,200	640,0	25.2	4,37	2.94

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | **Abrasion** | Suction

High-Temp

EC525

Core premium AQP™ high-temp four & six wire spiral hose

Aeroquip by Danfoss | EC525-12 | 19 mm (0.75 in) DN19 | AQP High Temp | MSHA IC-84/18 | 345 BAR (5000 PSI) | -40°C to +149°C -40°F to +300°F | 4S

Typical application:

Hydraulic system service with petroleum, fire-resistant, and water-based fluids, fuel, and lubricating systems

Agency specifications:	DNV | MSHA		
Hose construction:	**Inner tube:** AQP Elastomer	**Reinforcement:** Four wire spiral (-12 to -24) Six wire spiral (-32)`	**Cover:** AQP high-temp
Operating temperature:	Typical fluids: -40°C To +149°C (-40°F To +300°F) Phosphate-ester base fluids: -40°C To +82°C (-40°F To +180°F)		
Qualified fittings:	4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC525-12	19,0	0.75	30,7	1.21	345,0	5,000	1,380	20,000	241,3	9.50	1,28	0.86
EC525-16	25,4	1.00	37,9	1.49	345,0	5,000	1,380	20,000	304,8	12.00	1,73	1.16
EC525-20	31,8	1.25	46,6	1.84	240,0	3,500	960	14,000	419,1	16.50	2,31	1.55
EC525-24	38,1	1.50	53,9	2.12	240,0	3,500	960	14,000	508,0	20.00	2,96	1.99
EC525-32	50,8	2.00	67,3	2.65	225,0	3,250	900	13,000	635,0	25.00	4,42	2.97

Core | **Premium** | Standard | Braided | **Spiral** | **High-Temp** | Low-Temp | Abrasion | Suction

Premium core hose
FC500

Premium

FC500

Core premium X-Flex four & six wire spiral hose

Exceeds: SAE 100R13 | EN 856 R13 | ISO 3862 | ISO 18752

Typical application:

Ultra high pressure applications compatible with petroleum and water-based fluids

Agency specifications:	DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral (-12 to -24) Six wire spiral (-32)	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +127°C (-40°F to +260°F)		
Qualified fittings:	4S series (-12 to -24) | 6S series (-32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC500-12	19,0	0.75	31,0	1.22	350,0	5,100	1,400	20,400	121,0	4.75	1,28	0.86
FC500-16	25,4	1.00	38,4	1.51	350,0	5,100	1,400	20,400	152,0	6.00	1,85	1.24
FC500-20	31,8	1.25	45,5	1.79	350,0	5,100	1,400	20,400	210,0	8.25	2,50	1.68
FC500-24	38,1	1.50	53,5	2.11	350,0	5,100	1,400	20,400	254,0	10.00	3,38	2.27
FC500-32**	50,8	2.00	71,8	2.83	350,0	5,100	1,400	20,400	476,0	18.75	6,07	4.08

** Six wire spiral

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Ultra-Abrasion

FC273B

Core premium Bruiser ultra-abrasion four & six wire spiral hose

Exceeds: SAE 100R13 | EN 856 R13 | ISO 3862 | ISO 18752

Typical application:

High abrasion industrial and hydraulic system applications with petroleum and water-based fluids

Recommended for use on critical applications in construction, forestry, and other off-highway vehicles

Bruiser ultra-abrasion outer cover offers unmatched abrasion resistance

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral (-12 to -16) Six wire spiral (-20 to -32)	**Cover:** Bruiser ultra-abrasion
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	4S series (-12 to -16) | 6S series (-20 to -32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC273B-12	19,0	0.75	32,1	1.26	350	5,100	1,400	20,400	241,0	9.50	1,55	1.04
FC273B-16	25,4	1.00	38,7	1.53	350	5,100	1,400	20,400	305,0	12.00	1,95	1.31
FC273B-20**	31,8	1.25	50,3	1.98	350	5100	1,400	20,400	419,0	16.50	3,63	2.44
FC273B-24**	38,1	1.50	57,7	2.27	350	5,100	1,400	20,400	508,0	20.00	4,78	3.21
FC273B-32**	50,8	2.00	71,8	2.83	350	5,100	1,400	20,400	635,0	25.00	7,05	4.74

** Six wire spiral

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | **Abrasion** | Suction

Aeroquip

Premium core hose
EC810

Low-Temp

EC810

Core premium low-temp four & six wire spiral hose

Meets or exceeds: SAE 100R15 | EN 856 4SH Performance

Aeroquip by Danfoss | EC810-12 | 19.0 mm (0.75 in) DN19 | Low-Temp | MSHA IC-84/19 | 420 BAR (6100 PSI) | -57°C to +100°C -70°F to +212°F | 4S

Typical application:

Fluids for low temperature applications. Hydraulic systems with petroleum-based fluids

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral (-12 to -16) Six wire spiral (-20 to -32)	**Cover:** Nitrile
Operating temperature:	-57°C to +100°C (-70°F to +212°F)		
Qualified fittings:	4S series (-12 to -16) | 6S series (-20 to -32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC810-12	19,0	0.75	32,2	1.27	420	6,100	1,680	24,360	280,0	11.02	1,61	1.08
EC810-16	25,4	1.00	39,0	1.54	420	6,100	1,680	24,360	340,0	13.39	2,02	1.36
EC810-20**	31,8	1.25	49,4	1.94	420	6,100	1,680	24,360	420,0	16.54	3,55	2.39
EC810-24**	38,1	1.50	57,3	2.26	420	6,100	1,680	24,360	510,0	20.08	4,74	3.19
EC810-32**	50,8	2.00	71,7	2.82	350	5,100	1,400	20,400	630,0	24.80	6,70	4.50

**Six wire spiral

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | **Low-Temp** | Abrasion | Suction

Premium

EC600

Core premium X-Flex
four & six wire spiral hose

Meets or exceeds: SAE 100R15 | EN 856 4SH | EN 856 R13 | ISO 18752

Aeroquip by Danfoss EC600-12 | 19.0 MM (0.75 IN) DN19 | Dura-Tuff X-Flex | Exceeds SAE 100R15 • ISO 18752 MSHA IC-84/19 • ABS • DNV • USCG+ | 420 BAR (6100 PSI) | -40°C to +127°C -40°F to +260°F | Half Bend | 4S 1W 4S

Typical application:

High pressure hydraulic circuits on mobile construction equipment, mining equipment, and industrial applications for pressures up to 420 bar.

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Dura-Pulse patented inner tube	**Reinforcement:** Four wire spiral (-12 to -16) Six wire spiral (-20 to -32)	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +127°C (-40°F to +260°F)		
Qualified fittings:	4S series (-12 to -16) | 6S series (-20 to -32) | 1W series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC600-12	19.0	0.75	32.2	1.27	420	6,100	1,680	24,400	135,0	5.31	1.52	1.01
EC600-16	25.4	1.00	38.6	1.52	420	6,100	1,680	24,400	165,0	6.5	2.04	1.36
EC600-20**	31.8	1.25	49.7	1.96	420	6,100	1,680	24,400	225,0	8.86	3.89	2.61
EC600-24**	38.1	1.50	57.5	2.26	420	6,100	1,680	24,400	265,0	10.43	4.83	3.24
EC600-32**	50.8	2.00	71.0	2.79	420	6,100	1,680	24,400	375,0	14.76	7.1	4.77

**Six wire spiral

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium hose
FC639

FC639

Premium 3050 PSI constant pressure one & two wire braided hose

Exceeds: SAE 100R17 | ISO 18752

Aeroquip by Danfoss | FC639-06 | 9.5 mm (0.38 in) DN10 | Dura-Tuff | SAE 100R17 • ISO 18752 MSHA IC-84/19 | 210 BAR (3050 PSI) | -40°C to +127°C -40°F to +260°F | 1A

Typical application:

General industrial and hydraulic system service with petroleum and water-based fluids. Recommended for high-pressure oil lines used on construction equipment and other off-highway applications

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid (-04 to -08) Two wire braid (-10 to -16)	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +127°C (-40°F to +260°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC639-04	6,4	0.25	12,7	0.50	210,0	3,050	840,0	12,200	50,0	1.97	0,22	0.15
FC639-06	9,5	0.38	16,6	0.65	210,0	3,050	840,0	12,200	65,0	2.56	0,34	0.23
FC639-08	12,7	0.50	20,9	0.82	210,0	3,050	840,0	12,200	90,0	3.54	0,47	0.32
FC639-10*	15,9	0.63	24,9	0.98	210,0	3,050	840,0	12,200	100,0	3.94	0,73	0.49
FC639-12*	19,1	0.75	28,4	1.12	210,0	3,050	840,0	12,200	120,0	4.72	0,83	0.56
FC639-16*	25,4	1.00	37,1	1.46	210,0	3,050	840,0	12,200	150,0	5.91	1,44	0.97

*Two wire braids of high tensile wire

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

GH663

Premium
one wire braided hose

Exceeds: SAE 100R1 | EN 853 1SN performance | ISO 1436-1SN

Aeroquip by Danfoss | GH663-6 | 9.5 mm (0.38 in) DN10 | Dura-Tuff | Exceeds SAE 100R1 / ISO 1436-1SN • MSHA IC-84/19 Exceeds EN 853 1 SN Performance • ABS • DNV • USCG+ | 235 BAR (3400 PSI) | -46°C to +126°C -50°F to +260°F | Half Bend | 1A

Typical application:

Hydraulic system service with petroleum and water-based fluids, for general industrial service

Agency specifications:	ABS | DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH663-4	6,4	0.25	13,4	0.53	255,0	3,700	1,020	14,800	50,0	1.97	0,22	0.15
GH663-6	9,5	0.38	17,5	0.69	235,0	3,400	940	13,600	63,0	2.48	0,34	0.23
GH663-8	12,7	0.50	20,6	0.81	200,0	2,900	800	11,600	90,0	3.54	0,42	0.28
GH663-12	19,0	0.75	27,7	1.09	138,0	2,000	552	8,000	120,0	4.72	0,64	0.43
GH663-16	25,4	1.00	35,6	1.40	103,0	1,500	412	5,970	150,0	5.91	0.95	0.64
GH663-20	31,8	1.25	43,5	1.71	69,0	1,000	276	4,025	210,0	8.27	1,10	0.74
GH663-24	38,1	1.50	50,6	1.99	52,0	750	208	3,015	250,0	9.84	1,56	1.05
GH663-32	50,8	2.00	64,0	2.52	41,0	600	164	2,360	315,0	12.40	1,95	1.31

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

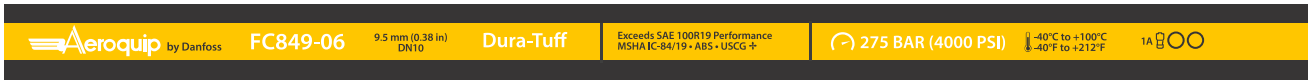
Aeroquip

Premium hose
FC849

FC849

Premium 4000 PSI constant pressure two wire braided hose

Exceeds: SAE 100R19 Performance



Typical application:

Industrial and hydraulic system applications with petroleum and water-based fluids

Recommended for use on construction, forestry, and other off-highway vehicles

Agency specifications:	ABS | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC849-04	6,4	0.25	15,1	0.59	280,0	4,000	1,120	16,000	50,0	2.00	0,36	0.24
FC849-06	9,5	0.38	19,2	0.75	280,0	4,000	1,120	16,000	63,5	2.50	0,53	0.36
FC849-08	12,7	0.50	22,1	0.87	280,0	4,000	1,120	16,000	88,9	3.50	0,64	0.43
FC849-10	15,9	0.62	25,7	1.01	280,0	4,000	1,120	16,000	100,0	4.00	0,89	0.60
FC849-12	19,0	0.75	29,9	1.17	280,0	4,000	1,120	16,000	120,0	4.75	1,07	0.72

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

FC849B

Premium Bruiser ultra-abrasion 4000 PSI constant pressure two wire braided hose

Exceeds: SAE 100R19 Performance

Aeroquip by Danfoss | FC849B-04 | 6.4 mm (0.25 in) DN6 | Bruiser | Exceeds SAE 100R19 Performance MSHA IC-84/71 | 275 BAR (4000 PSI) | -40°C to +100°C -40°F to +212°F | 1A

Typical application:

Ultra-abrasion industrial and hydraulic system applications with petroleum and water-based fluids

Recommended for use on critical applications in construction, forestry, and other off-highway vehicles

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Bruiser ultra-abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC849B-04	6,4	0.25	15,1	0.59	275	4,000	1,000	16,000	50,8	2.00	0,37	0.25
FC849B-06	9,5	0.38	19,2	0.75	275	4,000	1,000	16,000	63,5	2.50	0,52	0.35
FC849B-08	12,7	0.50	22,1	0.87	275	4,000	1,000	16,000	88,9	3.50	0,64	0.43
FC849B-10	15,9	0.63	25,7	1.01	275	4,000	1,000	16,000	101,6	4.00	0,91	0.61
FC849B-12	19,0	0.75	29,8	1.17	275	4,000	1,000	16,000	120,7	4.75	1,07	0.72

Aeroquip

Premium hose
FC510

FC510

Premium AQP high-temp HI-PAC one wire braided hose

Exceeds: EN 857 1SC

Aeroquip by Danfoss | FC510-04 | 6.4 mm (0.25 in) DN6 | AQP High-Temp Hi-Pac | Exceeds EN 857 1SC MSHA IC-84/18 • DNV • USCG + | 345 BAR (5000 PSI) | -40°C to +149°C -40°F to +300°F | 1A

Typical application:

Petroleum and fire-resistant hydraulic fluids, fuel, and lubricating systems

Agency specifications:	DNV | MSHA | USCG		
Hose construction:	**Inner tube:** AQP Elastomer	**Reinforcement:** HI-PAC one wire braid	**Cover:** AQP high-temp
Operating temperature:	-40°C to +150°C (-40°F to +300°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC510-04	6,4	0.25	14,5	0.57	345,0	5,000	1,380	20,000	76,2	3.00	0,34	0.23
FC510-06	9,5	0.38	17,6	0.69	275,0	4,000	1,100	16,000	88,9	3.50	0,43	0.29
FC510-08	12,7	0.50	20,2	0.80	240,0	3,500	960	14,000	127,0	5.00	0,50	0.34
FC510-10	15,9	0.63	23,9	0.93	190,0	2,750	760	11,000	152,4	6.00	0,66	0.44
FC510-12	19,0	0.75	27,7	1.09	155,0	2,250	620	9,000	177,8	7.00	0,77	0.52
FC510-16	25,4	1.00	34,6	1.37	138,0	2,000	552	8,000	228,6	9.00	1,05	0.71
FC510-20	31,8	1.25	43,1	1.70	112,0	1,625	448	6,500	279,4	11.00	1,61	1.08

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

GH793 | Premium two wire braided hose

Exceeds: SAE 100R2 | EN 853 2SN Performance | ISO 1436 2SN

Typical application:

Hydraulic system service with petroleum and water-based fluids, for general industrial service

Agency specifications:	ABS | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +126°C (-40°F to +260°F)		
Qualified fittings:	1A series | 2R series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH793-4	6,4	0.25	15,1	0.59	448,0	6,500	1,792	26,000	100,0	4.00	0,39	0.26
GH793-6	9,5	0.38	19,1	0.75	400,0	5,800	1,600	23,200	130,0	5.00	0,56	0.38
GH793-8	12,7	0.50	22,2	0.87	345,0	5,000	1,380	20,000	180,0	7.00	0,68	0.46
GH793-10	15,9	0.63	25,5	1.01	276,0	4,000	1,104	16,000	200,0	8.00	0,80	0.54
GH793-12	19,0	0.75	29,5	1.16	241,0	3,500	964	14,000	240,0	9.50	0,98	0.66
GH793-16	25,4	1.00	38,1	1.50	207,0	3,000	828	12,000	300,0	12.00	1,50	1.01
GH793-20	31,8	1.25	48,1	1.39	172,0	2,500	688	10,000	420,0	16.50	2,29	1.54
GH793-24	38,1	1.50	54,7	2.15	138,0	2,000	552	8,000	500,0	20.00	2,50	1.68
GH793-32	50,8	2.00	67,5	2.66	110,0	1,600	440	6,400	630,0	25.00	3,30	2.22

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium hose
FC611

FC611

Premium EPDM
one wire braided hose

Aeroquip by Danfoss | FC611-12 | 19.0 mm (0.75 in) DN19 | Phosphate Ester | 86 BAR (1250 PSI) | -40°C to +79°C -40°F to +175°F | 1A

Typical application:

Ground support equipment (GSE), industrial phosphate ester-based fluids, water glycol systems

Agency specifications:			
Hose construction:	**Inner tube:** EPDM	**Reinforcement:** One wire briad	**Cover:** EPDM
Operating temperature:	-40°C to +79°C (-40°F to +175°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC611-12	19,0	0.75	27,9	1.09	87,0	1,250	344	5,000	241,0	9.50	0,63	0.43
FC611-16	25,4	1.00	35,7	1.40	70,0	1,000	280	4,000	305,0	12.00	0,89	0.60
FC611-20	31,8	1.25	44,0	1.73	43,0	625	172	2,500	419,0	16.50	1,13	0.80
FC611-24	38,1	1.50	50,6	1.99	35,0	500	140	2,000	508,0	20.00	1,52	1.02
FC611-32	50,8	2.00	64,0	2.51	26,0	375	104	1,500	635,0	25.00	1,91	1.28

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

FC693

Premium EPDM
two wire braided hose

Aeroquip by Danfoss | FC693-04 | 6.4 mm (0.25 in) DN6 | 345 BAR (5000 PSI) | -40°C to +79°C -40°F to +175°F | 1A

Typical application:

Ground support equipment (GSE), industrial phosphate ester-based fluids, water glycol systems

Agency specifications:			
Hose construction:	**Inner tube:** EPDM	**Reinforcement:** Two wire briad	**Cover:** EPDM
Operating temperature:	-40°C to +79°C (-40°F to +175°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC693-04	6,4	0.25	15,1	0.59	345,0	5,000	1,380	20,000	102,0	4.00	0,37	0.25
FC693-06	9,5	0.38	19,2	0.75	275,0	4,000	1,100	16,000	127,0	5.00	0,54	0.36
FC693-08	12,7	0.50	22,1	0.87	240,0	3,500	960	14,000	178,0	7.00	0,60	0.40

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium hose
EC502

EC502

Premium LifeSense™ two wire braided hose

Exceeds: SAE 100R2 | EN 853 2SN

Typical application:

General hydraulics

Agricultural equipment – turf care

Vocational fleets – mobile refuse, mobile cement mixers

Manufacturing – stationary machining centers

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire briad	**Cover:** Nitrile
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	3L series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC502-08	12,7	0.50	23,6	0.92	293	4,250	1,172	17,000	177,8	7.0	0,74	0.50
EC502-12	19,0	0.75	30,0	1.18	215	3,125	860	12,500	241,3	9.5	0,98	0.66
EC502-16	25,4	1.00	37,9	1.49	172	2,500	690	10,000	304,8	12.0	1,47	0.99

FC579

Premium Hi-impulse jack
two wire braided hose

Meets: IJ100

Aeroquip by Danfoss | FC579-04 | 6.4 mm (0.25 in) DN6 | Dura-Tuff | MSHA IC-84/19 | 690 BAR (10000 PSI) | -40°C to +49°C -40°F to +120°F | 1A

Typical application:

Hydraulic jacking system service with petroleum and water-based fluids

Meets the performance requirements of the Material Handling Institute Specification IJ100

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +49°C (-40°F to +120°F)		
Qualified fittings:	1A series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC579-04	6,4	0.25	14,1	0.56	690,0	10,000	1,380	20,000	50,8	2.00	0,33	0.22
FC579-06	9,5	0.38	19,2	0.76	690,0	10,000	1,380	20,000	63,5	2.50	0,57	0.38

Aeroquip

Premium hose
EC230

EC230

Premium large bore two wire braided hose

Exceeds: SAE 100R2

Aeroquip by Danfoss | EC230-40 | 63.5 mm (2.50 in) DN60 | Dura-Tuff | Exceeds SAE 100R2 Performance MSHA IC-84/19 | 79 BAR (1150 PSI) | -40°C to +100°C -40°F to +212°F

Typical application:

Hydraulic system service with petroleum and waterbased fluids, for general industrial service

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire briad	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	For fitting information, see your Danfoss representative.		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC230-40	63,5	2.50	78,6	3.09	79,0	1,150	316	4,600	660,0	26.00	3,88	2.61

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

FC254 | Premium four wire spiral hose

Exceeds: EN 856 4SP

Typical application:

For general use with hydraulic system service with petroleum and water-based fluids

Agency specifications:	ABS | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-46°C to +126°C (-50°F to +260°F)		
Qualified fittings:	1W series (-08) | 4S series (-12 to -32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC254-08	12,7	0.50	24,8	0.98	530,0	7,700	2,120	30,800	203,0	8.0	1,07	0.72
FC254-12	19,0	0.75	32,0	1.26	497,0	7,200	1,988	28,800	279,0	11.0	1,58	1.06
FC254-16	25,4	1.00	38,6	1.52	415,0	6,000	1,660	24,000	305,0	12.0	1,96	1.32
FC254-20	31,8	1.25	45,2	1.78	350,0	5,100	1,400	20,400	419,0	16.5	2,43	1.63
FC254-24	38,1	1.50	54,1	2.13	300,0	4,350	1,200	17,400	508,0	20.0	3,02	2.03
FC254-32	50,8	2.00	68,0	2.68	275,0	4,000	1,100	16,000	635,0	25.0	4,49	3.02

Aeroquip

Premium hose
GH506

GH506

Premium
four wire spiral hose

Meets: EN 856 4SH | ISO 3862 4SH | ISO 18752

Aeroquip by Danfoss | GH506-12 | 19.0 mm (0.75 in) DN19 | Dura-Tuff | EN 856 4SH • ISO 3862 4SH • ISO 18752 MSHA IC-84/19 • ABS • DNV | 420 BAR (6100 PSI) | -40°C to +100°C -40°F to +212°F | 1W

Typical application:

High pressure hydraulic systems with petroleum and water-based fluids

Agency specifications:	ABS | DNV | MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	1W series | 4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH506-12	19,0	0.75	32,2	1.27	420,0	6,100	1,680	24,400	280,0	11.02	1,49	1.00
GH506-16	25,4	1.00	38,3	1.51	420,0	6,100	1,680	24,400	340,0	13.39	2,05	1.38
GH506-20	31,8	1.25	45,5	1.79	350,0	5,100	1,400	20,400	460,0	18.11	2,54	1.71
GH506-24	38,1	1.50	535	2.11	300,0	4,350	1,200	17,400	560,0	22.05	3,27	2.20
GH506-32	50,8	2.00	68,1	2.68	250,0	3,650	1,000	14,500	700,0	27.56	4,58	3.08

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

FC606 | Premium six wire spiral hose

Exceeds: SAE 100R15 | ISO 3862 R15

Typical application:

High-pressure hydraulics, hydrostatic transmissions

Hydraulic system service with petroleum and water-based fluids for general industrial use

Agency specifications:	ABS | MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Six wire spiral	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	6S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC606-24	38,1	1.50	58,4	2.30	420,0	6,100	1,680	24,400	508,0	20.00	4,72	3.17

Aeroquip

Premium hose
GH466

GH466

Premium
six wire spiral hose

Exceeds: SAE 100R15 | EN 856 R13 | ISO 18752

Aeroquip by Danfoss GH466-24 | 38.1 mm (1.50 in) DN38 | Dura-Tuff 2M Cycles | Exceeds SAE 100R15 / EN 856 R13 MSHA IC-84/19 • ABS • DNV | 420 BAR (6100 PSI) | -40°C to +121°C -40°F to +250°F | 1W 6S

Typical application:

High pressure hydraulic systems with extreme pressure peaks. For use with petroleum and water-based fluids

Agency specifications:	ABS | DNV | MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Six wire spiral	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	6S series (-20, -24) 1W series (ALL)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH466-20	31,8	1.25	49,4	1.94	420,0	6,100	1,680	24,400	420,0	16.53	3,48	2.34
GH466-24	38,1	1.50	57,3	2.26	420,0	6,100	1,680	24,400	500,0	19.69	4,63	3.11
GH466-32*	50,8	2.00	71,7	2.82	420,0	6,100	1,680	24,400	630,0	24.80	6,70	4.50

*only qualified with 1W fittings

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

FC636

Premium
four wire spiral hose

Meets or exceeds: SAE 100R12

Aeroquip by Danfoss | FC636-12 | 19.0 mm (0.75 in) DN19 | Phosphate Ester | 275 BAR (4000 PSI) | -40°C to +79°C -40°F to +175°F | 4S

Typical application:

Ground support equipment (GSE), industrial phosphate ester based fluids, water glycol systems

Agency specifications:			
Hose construction:	**Inner tube:** EPDM	**Reinforcement:** Four wire spiral	**Cover:** EPDM
Operating temperature:	-40°C to +79°C (-40°F to +175°F)		
Qualified fittings:	4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC636-12	19,0	0.75	30,7	1.21	275,0	4,000	1,100	16,000	241,0	9.50	1,31	0.88
FC636-16	25,4	1.00	37,9	1.49	275,0	4,000	1,100	16,000	305,0	12.00	1,74	1.17
FC636-20	31,8	1.25	46,6	1.83	207,0	3,000	828	12,000	419,0	16.50	2,31	1.55
FC636-24	38,1	1,50	53,9	2.12	172,0	2,500	688	10,000	508,0	20.00	2,92	1.96

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium hose
EC850

EC850

Premium Dynamax ultra-performance four & six wire spiral hose

Meets: SAE 100R15 | EN 856 R13 | ISO 18752

Aeroquip by Danfoss | EC850-12 | 19.0 mm (0.75 in) DN19 | Dura-Tuff Dynamax | Exceeds SAE 100R15 / EN 856 R13 Type ISO 18752 • MSHA IC-84/56 | 500 BAR (7250 PSI) | -40°C to +100°C -40°F to +212°F | 1W

Typical application:

Ultra high pressure

Hydraulic systems with petroleum and water-glycol based fluids

Lubricating oils and water

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral (-10, -12, -16) Six wire spiral (-20)	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings:	1W series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC850-10	15,9	0.62	27,9	1.10	500	7,250	2,000	29,000	200,0	7.87	1,23	0.82
EC850-12	19,0	0.75	32,2	1.27	500	7,250	2,000	29,000	215,0	8.46	1,52	1.01
EC850-16	25,4	1.00	39,2	1.54	500	7,250	2,000	29,000	270,0	10.63	2,31	1.54
EC850-20**	31,8	1.25	49,4	1.94	500	7,250	2,000	29,000	380,0	14.96	4,01	2.69

** Six wire spiral

EC910

Premium SafeShield Waterblast four wire spiral hose

Meets: ISO 7751 | EN 1829-2 (impulse)

Aeroquip by Danfoss | EC910-08 | 12.7 mm (0.50 in) DN12 | Dura-Tuff | ISO 7751 / EN 1829-2 IMPULSE MSHA IC-84/43 | 1100 BAR (16000 PSI) | -40°C to +93°C -40°F to +200°F | 1W

Typical application:

Waterblast service with water, water-soap, emulsion

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Dura-Tuff premium abrasion with WJTA* color-coded laylines
Operating temperature:	-40°C to +93°C (-40°F to +200°F) Continuous service temperature range -10°C to +80°C (-14°F to +176°F)		
Qualified fittings:	1W series		

*Water Jetting Technology Association

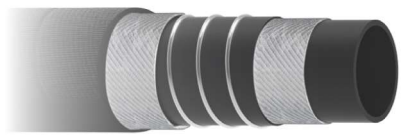
PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC910-08C50	12,7	0.50	24,6	0.97	1,100	16,000	2,750	40,000	228,6	9.00	1,12	0.75
EC910-12C50	19,0	0.75	32,8	1.29	1,000	14,500	2,500	36,250	279,4	11.00	1,74	1.17
EC910-16C50	25,4	1.00	39,9	1.57	700	10,200	1,750	25,500	304,8	12.00	2,23	1.50

* 50 foot cut lengths (orders must be placed in 50 foot increments)

Core | **Premium** | Standard | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Aeroquip

Premium hose
FC619



Suction

FC619 | Premium suction hose

Exceeds: SAE 100R4 | EN 45545

Aeroquip by Danfoss | FC619-12 | 19.0 mm (0.75 in) DN19 | Dura-Tuff | Exceeds SAE 100R4 • ABS MSHA IC-84/19 • EN 45545 | 21 BAR (305 PSI) | -40°C to +135°C -40°F to +275°F | 1/3 BEND | 4S • 1A 1G

Typical application:

Suction and transfer applications for petroleum hydraulic fluids, fuel, lubricating oils, gasoline, water and many other industrial fluids

Agency specifications:	ABS | MSHA | USCG		
Hose construction:	**Inner tube:** AQP elastomer	**Reinforcement:** Helical wire between two textile reinforcement layers	**Cover:** Dura-Tuff premium abrasion
Operating temperature:	-40°C to +135°C (-40°F to +275°F)		
Qualified fittings:	1A series (-12 to -32) | 4S series (-12) 1G series (-12 to -32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		VACUUM		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Vacuum Service		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	kg/m	lbs/ft
FC619-12	19,0	0.75	30,0	1.18	21,0	305 †	84,0	1,200	40,0	1.57	94,8	28	0,65	0.44
FC619-16	25,4	1.00	37,1	1.46	17,0	245†	68,0	1,000	45,0	1.77	94,8	28	0,77	0.52
FC619-20	31,8	1.25	44,8	1.76	14,0	205 †	56,0	820	60,0	2.36	94,8	28	1,12	0.75
FC619-24	38,1	1.50	51,2	2.01	10,5	150 †	42,0	600	65,0	2.56	94,8	28	1,26	0.85
FC619-32	50,8	2.00	64,8	2.55	7,0	100 †	28,0	400	100,0	3.94	94,8	28	1,73	1.16
FC619-40	63,5	2.50	77,7	3.06	4,0	60 †	16,0	240	140,0	5.51	94,8	28	2,35	1.58
FC619-48	76,2	3.00	92,5	3.64	4,0	60 †	16,0	240	279,4	11.00	94,8	28	3,36	2.26

† Maximum working pressure for band clamp type fittings is 3,4 bar [50 psi].

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | **Suction**

2661 | Premium high-temp suction hose

Meets: SAE 100R4

Aeroquip by Danfoss | 2661-12 | 19.0 mm (0.75 in) DN19 | AQP High-Temp | Exceeds SAE 100R4 MSHA IC-84/19 • USCG ÷ | 21 BAR (305 PSI) | -40°C to +150°C -40°F to +300°F | 1A 1G

Typical application:

Suction and transfer applications for petroleum hydraulic fluids, fuel, lubricating oils, gasoline, water and many other industrial fluids

Agency specifications:	ABS | MSHA | USCG		
Hose construction:	**Inner tube:** AQP elastomer	**Reinforcement:** Helical wire between two textile reinforcement layers	**Cover:** AQP high-temp
Operating temperature:	-40°C to +149°C (-40°F to +300°F)		
Qualified fittings:	1A series | 1G series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		VACUUM		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Vacuum Service		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	kg/m	lbs/ft
2661-12	19,0	0.75	31,8	1.25	21,0	305 †	84,0	1,205	125,0	4.92	94,8	28	0,62	0.42
2661-16	25,4	1.00	38,0	1.50	17,5	255 †	70,0	1,000	150,0	5.91	94,8	28	0,74	0.50
2661-20	31,8	1.25	45,8	1.80	14,0	205 †	56,0	810	200,0	7.87	94,8	28	1,34	0.90
2661-24	38,1	1.50	53,1	2.09	11,0	160 †	44,0	640	255,0	10.04	94,8	28	1,68	1.13
2661-32	50,8	2.00	64,8	2.55	7,0	100 †	28,0	400	300,0	11.81	94,8	28	1,93	1.30
2661-40	63,5	2.50	78,0	3.07	4,5	65 †	18,0	260	355,0	13.98	94,8	28	2,56	1.72
2661-48 ‡	76,2	3.00	92,5	3.64	4,0	60 †	16,0	230	457,0	17.99	94,8	28	2,92	1.96
2661-64 ‡	101,6	4.00	119,1	4.69	3,5	50 †	14,0	205	610,0	24.02	94,8	28	4,58	3.08

† Maximum working pressure for band clamp type fittings is 3,4 bar [50 psi].

‡ Sold as bulk hose only.

Core | **Premium** | Standard | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | **Suction**

Winner by Danfoss

Standard hose

Standard

Winner

Table of contents

The **standard** hoses

Core hose

Standard core braided hose

Standard core spiral hose

Standard core suction hose

How to order

Accurate processing and prompt delivery of your order depends on easy identification of your requirements. Please order Aeroquip brand parts using correct part numbers as described in this guide. Inquiries and orders should be directed to your Aeroquip distributor or:

Danfoss
14615 Lone Oak Road
Eden Prairie, MN 55344
952-937-9800;
888-258-0222;
Fax: 952-974-7722
www.Danfoss.com/hydraulics

Part numbers and dash sizes
Dash size designates the nominal size in 16th of an inch. This number immediately follows the part number and is separated from it with a dash.

Dimensions
Dimensions given in this guide for Aeroquip products are approximate and should be used for reference only. Exact dimensional information for a given product is subject to change and varying tolerances; contact Danfoss directly for full current information.

Number system - hydraulic hose

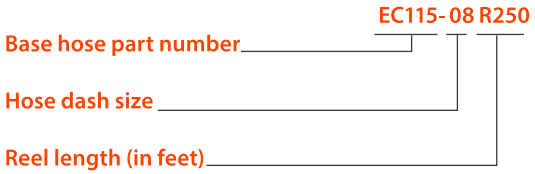
Cut length hose

Cut lengths hoses are available only on core hose products.
Available cut lengths are 50, 100, and 150 ft.
The feet should be expressed in inches:

50 ft = 06000
100 ft = 12000
150 ft = 18000
Last digit is in 1/8 of an inch 00484 = 48 1/2 inches

Reeled hose

Most core hoses are offered on reels of 250 or 500 ft lengths.



WARNING ⚠

Hose assemblies
Danfoss manufactures the terminal ends of our hose fittings to the appropriate requirements established by the SAE. Therefore, the performance ratings of these hose fittings meet the SAE requirements. It is possible to order a hose assembly with a fitting terminal end that has a performance rating lower than the hose rating. When ordering hose assemblies, please keep the connecting end performance rating in mind since this may affect overall hose assembly performance. Hose assembly components (hose and fittings) are easily assembled in the field. However, factory assembled field attachable and crimped hose assemblies are available.

For complete information, contact Danfoss.

Winner

Standard core hose
EC115

Standard

EC115 | Winner one wire braid hose

Meets: SAE 100R1 | EN 857 Type 1SC

Winner by Danfoss **EC115-08** | 12.7 MM (0.50 IN) DN12 | SAE 100R1 • EN 857 1SC MSHA IC-84/25 DNV • USCG + | 160 BAR (2300 PSI) | -40°C to +100°C -40°F to +212°F | Half Bend | 1A • Z 2PC • 1R

Typical application:

Hydraulic system service with petroleum and water based fluids, for general industrial service.

Agency specifications:	DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid	**Cover:** Nitrile
Operating temperature:	-40°C to +100°C (-40°F to +212°F)`		
Qualified fittings/socket:	Fittings: 1A series | 2-piece Winner | 1R field attachable Socket: 00110 (pg 173)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC115-04	6.4	0.25	12.6	0.50	225	3,250	900	13,000	50,0	1.97	0.18	0.12
EC115-06	9.5	0.38	16.1	0.63	180	2,600	720	10,400	63,0	2.48	0.26	0.17
EC115-08	12.7	0.50	19.5	0.77	160	2,300	640	9,200	90,0	3.54	0.34	0.23
EC115-10	15.9	0.62	22.5	0.88	130	1,900	520	7,600	100,0	3.94	0.42	0.28
EC115-12	19.0	0.75	26.0	1.02	105	1,525	420	6,100	120,0	4.72	0.50	0.34
EC115-16	25.4	1.00	33.9	1.33	88	1,275	352	5,100	160,0	6.30	0.74	0.50
EC115-20	31.8	1.25	40.9	1.61	63	925	252	3,700	210,0	8.27	0.99	0.67
EC115-24	38.1	1.50	48.0	1.89	50	725	300	4,350	300,0	11.81	1.20	0.81
EC115-32	50.8	2.00	61.0	2.40	40	580	220	3,190	400,0	15.75	1.50	1.01

Core | Premium | **Standard** | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Standard

EC215 | Winner two wire braid hose

Meets: EN 857 2SC | ISO 18752

Winner by Danfoss **EC215-06** 9.5 mm (0.38 in) DN10 | EN 857 2SC • ISO 18752 MSHA IC-84/41 • DNV • USCG + | 345 BAR (5000 PSI) | -40°C to +100°C -40°F to +212°F | Half Bend | 1A • Z 2R • 2PC

Typical application:

Hydraulic system service with petroleum and water based fluids, for general industrial service.

Agency specifications:	DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Two wire braid	**Cover:** Nitrile
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings/socket:	Fittings: 1A series | 2-piece Winner | 2R field attachable Socket: 03310 (pg 173)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC215-04	6.4	0.25	13.5	0.53	400	5,800	1,600	23,200	50,0	1.97	0.28	0.19
EC215-06	9.5	0.38	17.5	0.69	345	5,000	1,380	20,000	65,0	2.56	0.41	0.28
EC215-08	12.7	0.50	20.8	0.82	275	4,000	1,100	16,000	90,0	3.54	0.57	0.38
EC215-10	15.9	0.62	24.0	0.94	250	3,650	1,000	14,600	100,0	3.94	0.68	0.46
EC215-12	19.0	0.75	27.9	1.10	215	3,125	860	12,500	120,0	4.72	0.81	0.54
EC215-16	25.4	1.00	35.7	1.41	165	2,400	660	9,600	160,0	6.30	1.17	0.79
EC215-20	31.8	1.25	43.9	1.73	125	1,800	500	7,200	250,0	9.84	1.56	1.05
EC215-24	38.1	1.50	51.0	2.01	100	1,450	400	5,800	300,0	11.81	1.81	1.22
EC215-32	50.8	2.00	63.4	2.50	90	1,300	380	5,500	400,0	15.75	2.36	1.59

Core | Premium | **Standard** | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Winner

Standard core hose
EC118

Standard

EC118 | Winner
one & two wire braid hose

Meets: SAE 100R17 | ISO 18752

Winner by Danfoss **EC118-08** | 12.7 mm (0.50 in) DN12 | SAE 100R17 • ISO 18752 MSHA IC-84/41 • USCG+ | 210 BAR (3050 PSI) | -40°C to +100°C -40°F to +212°F | 1A • Z 1R • 2pc

Typical application:

Low and medium pressure hydraulic systems with petroleum and water-based fluids

Construction equipment and agriculture equipment

Agency specifications:	MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** One wire braid (-04 to -08) Two wire braid (-10 to -16)	**Cover:** Nitrile
Operating temperature:	-40°C to +100°C (-40°F to +212°F)`		
Qualified fittings/socket:	Fittings: 1A series | 1R series (-04, -05, -06, -08) | 2-piece Winner Sockets: 00110 (-04, -06, -08) • 03310 (-10, -12, -16) (pg 173)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC118-04	6,4	0.25	12,5	0.49	210,0	3,050	840,0	12,200	50,0	1.97	0,18	0.12
EC118-06	9,5	0.38	16,1	0.63	210,0	3,050	840,0	12,200	65,0	2.56	0,27	0.18
EC118-08	12,7	0.50	19,9	0.78	210,0	3,050	840,0	12,200	90,0	3.54	0,36	0.24
EC118-10**	15,9	0.62	24,6	0.97	210,0	3,050	840,0	12,200	100,0	3.94	0,69	0.46
EC118-12**	19,0	0.75	28,8	1.13	210,0	3,050	840,0	12,200	120,0	4.72	0,81	0.54
EC118-16**	25,4	1.00	37,1	1.46	210,0	3,050	840,0	12,200	150,0	5.91	1,21	0.81

** indicates two-wire braid

Core | Premium | **Standard** | **Braided** | Spiral | High-Temp | Low-Temp | Abrasion | Suction

Standard

EC415 | Winner four wire spiral hose

Meets: SAE 100R12 | EN 856 R12 | ISO 18752

Winner by Danfoss **EC415-08** | 12.7 mm (0.50 in) DN12 | SAE 100R12 • EN 856 R12 • ISO 18752 MSHA IC-84/41 • USCG + | 280 BAR (4050 PSI) | -40°C to +121°C -40°F to +250°F | Half Bend | 4S

Typical application:

Hydraulic system service with petroleum and water based fluids, for general industrial service.

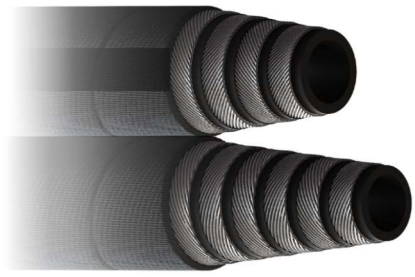
Agency specifications:	MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral	**Cover:** Nitrile
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	4S series		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC415-06	9.5	0.38	20.3	0.80	280	4,050	1,120	16,200	63,0	2.48	0.60	0.40
EC415-08	12.7	0.50	23.8	0.94	280	4,050	1,120	16,200	90,0	3.54	0.74	0.50
EC415-10	15.9	0.62	27.7	1.09	280	4,050	1,120	16,200	100,0	3.94	1.03	0.69
EC415-12	19.0	0.75	30.7	1.21	280	4,050	1,120	16,200	120,0	4.72	1.16	0.78
EC415-16	25.4	1.00	38.0	1.50	280	4,050	1,120	16,200	150,0	5.91	1.76	1.18
EC415-20	31.8	1.25	47.0	1.85	210	3,050	840	12,200	210,0	8.27	2.46	1.65
EC415-24	38.1	1.50	53.5	2.11	207	3,000	827	12,000	250,0	9.84	2.87	1.92
EC415-32	50.8	2.00	66.7	2.63	207	3,000	827	12,000	320,0	12.60	4.03	2.70

Core | Premium | **Standard** | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction

Winner

Standard core hose
EC420



Standard

EC420 | Winner
four & six wire spiral hose

Meets: SAE 100R13 | EN 856 R13 | ISO 18752

Winner by Danfoss **EC420-12** | 19 mm (0.75 in) DN19 | SAE 100R13 • EN 856 R13 • ISO 18752 MSHA IC-84/41 • DNV • USCG + | 350 BAR (5100 PSI) | -40°C to +121°C -40°F to +250°F | Half Bend | 4S

Typical application:

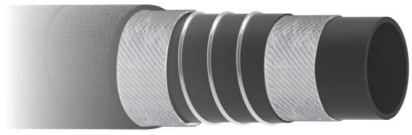
Suitable for use in hydraulic systems with high peak pressures and arduous operating conditions.

Agency specifications:	DNV | MSHA | USCG		
Hose construction:	**Inner tube:** Nitrile	**Reinforcement:** Four wire spiral (-12, -16) Six wire spiral (-20 to -32)	**Cover:** Nitrile
Operating temperature:	-40°C to +121°C (-40°F to +250°F)		
Qualified fittings:	4S series (12, -16) | 6S series (-20 to -32)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC420-12	19.0	0.75	32.1	1.27	350	5,100	1,400	20,400	120,0	4.72	1.54	1.03
EC420-16	25.4	1.00	38.7	1.53	350	5,100	1,400	20,400	150,0	5.91	2.01	1.35
EC420-20**	31.8	1.25	49.8	1.96	350	5,100	1,400	20,400	210,0	8.27	3.78	2.54
EC420-24**	38.1	1.50	57.3	2.26	350	5,100	1,400	20,400	250,0	9.84	4.73	3.18
EC420-32**	50.8	2.00	71.5	2.81	350	5,100	1,400	20,400	315,0	12.40	7.26	4.88

** 6 wire spiral

Core | Premium | **Standard** | Braided | **Spiral** | High-Temp | Low-Temp | Abrasion | Suction



Standard

WH004

Winner
suction & return hose

Exceeds: SAE 100R4 performance

Winner by Danfoss **WH004-12** | 19 mm (0.75 in) DN19 | Exceeds SAE 100R4 PERFORMANCE MSHA IC-261/5 | 21 BAR (305 PSI) | -40°C to +100°C -40°F to +212°F | Half Bend | 1A • Z 1G • 2 pc

Typical application:

Suitable for use in suction applications for hydraulics, crude fuel, lubricating oils, gasoline, air, water and chemical transfer

Agency specifications:	MSHA		
Hose construction:	**Inner tube:** Oil-resistant NBR	**Reinforcement:** Textile with helical & anti-static wire	**Cover:** Nitrile
Operating temperature:	-40°C to +100°C (-40°F to +212°F)		
Qualified fittings/socket:	Fittings: • 1A and 1G: -12, -16, -20, -24 and -32 • 4T Optimum & Winner 2 pc series: -12 and -16 • Hose barb with band clamps: -12 thru -48 with a reduced operating pressure rating of 4 bar (60 psi) Socket: 03310 (pg 173)		

PART	SIZE DIMENSIONS				PRESSURE				BEND		VACUUM`		WEIGH`T	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Vacuum Service		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft
WH004-12	19.0	0.75	28,6	1.13	21,0	305	84	1220 †	40,0	1.57	94.8	28	0,54	0.36
WH004-16	25.4	1.00	35,2	1.39	17,0	245	68	980 †	45,0	1.77	94.8	28	0,68	0.46
WH004-20	31.8	1.25	42,0	1.65	14,0	205	56	820 †	60,0	2.36	94.8	28	0,85	0.57
WH004-24	38.1	1.50	49,2	1.94	10,5	150	42	600 †	65,0	2.56	94.8	28	1,20	0.81
WH004-32	50.8	2.00	62,0	2.44	7,0	100	28	400 †	100,0	3.94	94.8	28	1,53	1.03
WH004-40	63.5	2.50	75,5	2.97	4,0	60	16	240 †	140,0	5.51	94.8	28	2,05	1.38
WH004-48	76.2	3.00	88,0	3.46	4,0	60	16	240 †	180,0	7.09	94.8	28	2,62	1.76

† Maximum working pressure for band clamp type fittings is 3,4 bar [50 psi]

Core | Premium | **Standard** | Braided | Spiral | High-Temp | Low-Temp | Abrasion | **Suction**

Winner

Aeroquip by Danfoss

Braided fittings

Braided series fittings

Match the fitting to the **hose:** braided

Premium core hose:

Standard core hose:

Global 1A fittings (pg.90 - 144)		
For use with hose:		See hose page:
GH681		39
FC839B		40
GH194		41
GH781		42
EC881		43
FC735		44
GH195		45
GH120		46
FC639		54
GH663		55
FC849		56
FC849B		57
FC510		58
GH793		59
FC611		60
FC693		61
FC579		63
FC619		72
2661		73
EC115		78
EC215		79
EC118		80
WH004		83

Global OTC fittings (pg.90 - 144)		
For use with hose:		See hose page:
FC619		72
2661		73
WH004		83

Two-piece Winner (pg. 173 - 183)		
For use with hose:		See hose page:
EC115		78
EC215		79
EC118		80
WH004		83

Field attachable 1R fittings (pg 146 - 150)		
For use with hose:		See hose page:
GH681		39
EC115		78
EC118		80

Field attachable 2R fittings (pg 151 - 155)		
For use with hose:		See hose page:
GH781		42
GH793		59
EC215		79

Field attachable HI-PAC fittings (pg 158 - 169)		
For use with hose:		**See Hose Page:**
FC510		58