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

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

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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**						

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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**						

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