

ENGINEERING
TOMORROW

Danfoss

APAC

Aeroquip® and Winner™ by Danfoss

Core Hydraulic hose products catalog





Sometimes less is **more.**

Fewer products,
smarter choices.

Finding the right product for your application can be complicated. At Danfoss we strive to make this process easier, by reducing the complexity of our hydraulic hose and fitting product offering, and developing intuitive ways to help you find the correct product fast. We know that your workforce demographics, regulatory environment and global economics require a new approach, and we're proactively leading the charge with a smaller— but smarter—hydraulics offering to help you spend less time combing through product options and more time competing in expanded markets, improving responsiveness, and closing new business.



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



Premium



High-Temp



Low-Temp



Abrasion



Suction



Standard



Premium and standard hydraulic hose **options**

Premium: Aeroquip by Danfoss

Standard: Winner by Danfoss

For the ultimate in performance and safety fluid conveyance products need to be designed with specific applications in mind. At Danfoss, understand. 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 hose 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.







*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.

The Core Premium hoses		Hose specialty	Operating temp	Abrasion resistance	Bend radius	Fluid compatibility and rubber compounding	Impulse cycles
PREMIUM		Certifications: SAE ABS EN MSHA ISO DNV Customer spec					
		 Premium	High: 126 °C Low: -40 °C	 Dura-Tuff® Cover (8x greater than standard)	 1/2 Bend	 Danfoss Premium	 Exceed Industry Standard
HIGH-TEMP		Certifications: SAE ABS EN MSHA Customer spec					
		 High-Temp	High: 150 °C Low: -40 °C	 Dura-Tuff Cover (8x greater than standard)	 Full Bend	 Danfoss Premium	 Exceed Industry Standard
LOW-TEMP		Certifications: SAE EN MSHA Customer spec					
		 Low-Temp	High: 100 °C Low: -57 °C	 Dura-Tuff Cover (8x greater than standard)	 1/2 Bend	 Danfoss Premium	 Exceed Industry Standard
ABRASION		Certifications: SAE ABS EN DNV Customer spec					
		 Abrasion	High: 100 °C Low: -40 °C	 Bruiser Cover (700x greater than standard)	 1/2 Bend	 Danfoss Premium	 Exceed Industry Standard
SUCTION		Certifications: SAE ABS EN MSHA ISO DNV USCG					
		 Suction	High: 135 °C Low: -40 °C	 Standard Cover	 1/2 Bend	 Danfoss Premium	 Exceed Industry Standard
The Core Standard hoses		Hose specialty	Operating temp	Abrasion resistance	Bend radius	Fluid compatibility and rubber compounding	Impulse cycles
STANDARD		Certifications: SAE EN MSHA Customer spec					
		 Standard	High: 100 °C Low: -40 °C	 Standard Cover Standard Abrasion (10,000 Cycles per ISO 6945)	 Full Bend	 Danfoss Standard	 Industry Standard

Premium & standard hydraulic hose. Know the **difference.**

Core hoses

Danfoss core hydraulic hoses – a portfolio of premium and standard performance, these braided and spiral hoses stand unrivaled as the industry's most sought-after hydraulic solutions. The core hoses are the choice that engineers trust for seamless operation in most applications.

 Premium	 High-Temp	 Low-Temp	 Abrasion	 Suction	 Standard
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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.

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.



GH681 Premium one wire braided hose

Exceeds: SAE 100R17 | EN 857 Type 1SC | ISO 1436 1SN | ISO 18752

GH681-6 9.5 MM (0.38 IN) DN10	Dura-Tuff	Exceeds EN 857 1SC Performance / SAE 100R17 • DNV ISO 1436 1SN • ISO 18752 • MSHA IC-84/19 • ABS • USCG	235 BAR (3400 PSI)	-46°C to +126°C -50°F to +260°F	1A
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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: Synthetic rubber	Reinforcement: One wire braid	Cover: Dura-Tuff premium abrasion
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Operating temperature: -46°C to +126°C (-50°F to +260°F)

Qualified fittings: 1A (-4 to -32) | 1R (-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	3,625	1,000	14,500	45	1.77	0.19	0.13
GH681-4	6.4	0.25	12.9	0.51	255	3,700	1,020	14,800	50	1.97	0.21	0.14
GH681-5	7.9	0.31	14.0	0.55	225	3,250	900	13,000	55	2.17	0.22	0.15
GH681-6	9.5	0.38	16.3	0.64	235	3,400	940	13,600	63	2.48	0.31	0.21
GH681-8	2.7	0.50	19.9	0.78	221	3,200	883	12,800	90	3.54	0.43	0.29
GH681-10	15.9	0.63	22.3	0.88	140	2,025	559	8,100	100	3.94	0.42	0.28
GH681-12	19.0	0.75	26.0	1.02	138	2,000	552	8,000	120	4.72	0.56	0.37
GH681-16	25.4	1.00	34.0	1.34	103	1,500	414	6,000	150	5.91	0.80	0.54
GH681-20	31.8	1.25	41.5	1.63	69	1,000	276	4,000	210	8.27	1.01	0.68
GH681-24	38.1	1.50	47.9	1.89	52	750	207	3,000	250	9.84	1.19	0.80
GH681-32	50.8	2.00	64.0	2.52	41	600	166	2,400	315	12.4	1.92	1.29

Also available with Bruiser® ultra-abrasion resistant cover for the highest abrasion protection

GH681B-6 9.5 MM (0.38 IN) DN10	Bruiser	Exceeds EN 857 1SC Performance / SAE 100R17 ISO 1436 1SN • ISO 18752 • MSHA IC-84/54 • DNV	235 BAR (3400 PSI)	-40°C to +126°C -40°F to +260°F	1A
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Core | Premium | Standard | Braided | Spiral | High-Temp | Low-Temp | Abrasion | Suction



Standard

EC110

Standard one wire braid hose

Meets or exceeds: SAE 100R1 | EN 853 1SN

Winner by Danfoss **EC110-04** | 6.4 MM (0.25 IN) DNG | SAE 100R1 - EN 853 1SN | MSHA IC-84/41 - DNV | 225 BAR (3250 PSI) | -40°C to +100°C / -40°F to +212°F | 1A 2pc

Typical application:

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

Agency specifications: MSHA | DNV

Hose construction:	Inner Tube:	Reinforcement:	Cover:
	Synthetic rubber	One wire braid	Synthetic rubber

Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1A (-4 to 32) | Winner 2pc (-4 to -32) | 1R (-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
EC110-04L	6.4	0.25	14.1	0.56	225	3,250	900	13,000	100	3.94	0.22	0.15
EC110-05L	7.9	0.31	15.7	0.62	215	3,125	860	12,500	115	4.53	0.26	0.17
EC110-06L	9.5	0.38	18.1	0.71	180	2,600	720	10,400	130	5.12	0.33	0.22
EC110-08L	12.7	0.50	21.4	0.84	160	2,300	640	9,200	180	7.09	0.41	0.28
EC110-10L	15.9	0.62	24.5	0.96	130	1,900	520	7,600	200	7.87	0.47	0.32
EC110-12L	19.0	0.75	28.5	1.12	105	1,525	420	6,100	240	9.45	0.59	0.40
EC110-16L	25.4	1.00	36.6	1.44	88	1,275	352	5,100	300	11.81	0.87	0.58
EC110-20L	31.8	1.25	44.8	1.76	63	925	252	3,700	420	16.54	1.20	0.81
EC110-24L	38.1	1.50	52.1	2.05	50	725	200	2,900	500	19.69	1.40	0.94
EC110-32L	50.8	2.00	65.5	2.58	40	580	160	2,320	630	24.80	1.91	1.28
EC110-40L*	63.5	2.50	78.0	3.07	40	580	200	2,900	762	30.00	2.52	1.69
EC110-48L*	76.2	3.00	90.5	3.56	35	508	160	2,320	900	35.43	2.70	1.81

*Only bulk hose

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



Standard

EC115

Standard one wire braid hose

Meets or exceeds: EN 857 Type 1SC | SAE 100R1

Winner by Danfoss **EC115-08** 12.7 MM (0.50 IN) DN12 | SAE 100R1 • EN 857 1SC MSHA IC-84/41 • 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: MSHA | DNV | USCG

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: One wire braid	Cover: Synthetic rubber
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1A (-4 to 32) | Winner 2pc (-4 to -32) | 1R (-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
EC115-04	6.4	0.25	12.6	0.50	225	3,250	900	13,000	50	1.97	0.18	0.12
EC115-05	7.9	0.31	14.5	0.57	215	3,125	860	12,500	55	2.17	0.20	0.13
EC115-06	9.5	0.38	16.0	0.63	180	2,600	720	10,400	63	2.48	0.26	0.17
EC115-08	12.7	0.50	19.4	0.77	160	2,300	640	9,200	90	3.54	0.34	0.23
EC115-10	15.9	0.62	22.4	0.88	130	1,900	520	7,600	100	3.94	0.42	0.28
EC115-12	19.0	0.75	26.0	1.02	105	1,525	420	6,100	120	4.72	0.50	0.34
EC115-16	25.4	1.00	33.8	1.33	88	1,275	352	5,100	160	6.30	0.74	0.50
EC115-20	31.8	1.25	41.2	1.62	63	925	252	3,700	210	8.27	0.99	0.67
EC115-24	38.1	1.50	48.0	1.89	50	725	200	2,900	300	11.81	1.20	0.81
EC115-32	50.8	2.00	61.0	2.41	40	580	160	2,320	400	15.75	1.50	1.01



Standard

EC210

Standard two wire braid hose

Meets or exceeds: ESAE 100R2 | EN 853 2SN

Winner by Danfoss **EC210-16** 25.4 MM (1.00 IN) DN25 | SAE 100R2 - EN 853 2SN MSHA IC-84/41 - DNV | **165 BAR (2400 PSI)** -40°C to +100°C -40°F to +212°F **1A** **2pc**

Typical application:

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

Agency specifications: MSHA | DNV

Hose construction:	Inner Tube: Synthetic rubber	Reinforcement: Two wire braid	Cover: Synthetic rubber
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1A (-4 to 32) | Winner 2pc (-4 to -32) | 2R (-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
EC210-04L	6.4	0.25	15.7	0.62	400	5,800	1,600	23,200	100	3.94	0.38	0.26
EC210-05L	7.9	0.31	17.3	0.68	350	5,100	1,400	20,400	115	4.53	0.43	0.29
EC210-06L	9.5	0.38	19.7	0.78	330	4,800	1,320	19,200	130	5.12	0.54	0.36
EC210-08L	12.7	0.50	23.0	0.91	275	4,000	1,100	16,000	180	7.09	0.64	0.43
EC210-10L	15.9	0.62	26.2	1.03	250	3,650	1,000	14,600	200	7.87	0.75	0.50
EC210-12L	19.0	0.75	30.1	1.19	215	3,125	860	12,500	240	9.45	0.93	0.62
EC210-16L	25.4	1.00	38.9	1.53	165	2,400	660	9,600	300	11.81	1.29	0.87
EC210-20L	31.8	1.25	49.5	1.95	125	1,800	500	7,200	420	16.54	1.89	1.27
EC210-24L	38.1	1.50	55.9	2.20	90	1,300	360	5,200	500	19.69	2.10	1.41
EC210-32L	50.8	2.00	68.6	2.70	80	1,150	320	4,600	630	24.80	2.76	1.85
EC210-40L*	63.5	2.50	81.0	3.19	69	1,000	300	4,350	760	29.92	3.80	2.55
EC210-48L*	76.2	3.00	93.0	3.66	50	725	240	3,500	900	35.43	4.03	2.71

*Only bulk hose



Standard

EC215

Standard two wire braid hose

Meets: EN 857 Type 2SC | ISO 18752

Winner by Danfoss **EC215-06** 9.5 MM (0.38 IN) DN10 | EN857 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 **800**

Typical application:

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

Agency specifications: MSHA | DNV | USCG

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Two wire braid	Cover: Synthetic rubber
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1A (-4 to 32) | Winner 2pc (-4 to -32) | 2R (-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
EC215-04	6.4	0.25	13.5	0.53	400	5,800	1,600	23,200	50	1.97	0.28	0.19
EC215-05	7.9	0.31	16.0	0.63	350	5,100	1,400	20,400	55	2.17	0.33	0.22
EC215-06	9.5	0.38	17.5	0.69	345	5,000	1,380	20,000	65	2.56	0.41	0.28
EC215-08	12.7	0.50	20.8	0.82	275	4,000	1,100	16,000	90	3.54	0.57	0.38
EC215-10	15.9	0.62	24.0	0.94	250	3,650	1,000	14,600	100	3.94	0.68	0.46
EC215-12	19.0	0.75	27.9	1.10	215	3,125	860	12,500	120	4.72	0.81	0.54
EC215-16	25.4	1.00	35.7	1.40	165	2,400	660	9,600	160	6.30	1.17	0.79
EC215-20	31.8	1.25	43.9	1.73	125	1,800	500	7,200	250	9.84	1.56	1.05
EC215-24	38.1	1.50	51.0	2.01	100	1,450	400	5,800	300	11.81	1.81	1.22
EC215-32	50.8	2.00	63.4	2.50	90	1,300	360	5,200	400	15.75	2.36	1.59

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



EC881

Premium Dynamax® ultra-performance two wire braided hose

Exceeds: SAE 100R16 Type S | EN 857 2SC | ISO 11237-1 Type 2SC

EC881-6
9.5 MM (0.38 IN) DN10
Dura-Tuff Dynamax
Exceeds SAE 100R16 / 100R19 / EN857 2SC ISO 18752 • ABS • DNV • MSHA IC-84/56
400 BAR (5800 PSI)
-46°C to +126°C (-50°F to +260°F)
1/3 Bend 1A

Typical application:

Low & medium pressure hydraulic systems, petroleum & water-based fluids, construction equipment, agriculture equipment. 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). For high abrasion applications select Bruiser cover. Extra demanding applications requiring high performance- EC881 offers one million impulse cycle performance and 1/3 SAE bend radius.

Agency specifications: MSHA | ABS | DNV

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 (-4 to -32)		

PART #	SIZE DIMENSIONS					PRESSURE				BEND		WEIGHT	
	Hos			Hose O.D. (nominal)		Working Pressure		Min. Burst pressure		Min. Bend Radius		Weight	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC881-4	6	6.4	0.25	14.2	0.56	450	6,525	1,800	26,100	33	1.30	0.32	0.22
EC881-5	8	7.9	0.31	16	0.63	400	5,800	1,600	23,200	38	1.50	0.38	0.26
EC881-6	10	9.5	0.38	18.3	0.72	400	5,800	1,600	23,200	42	1.65	0.42	0.28
EC881-8	12	12.7	0.50	21.5	0.85	360	5,220	1,440	20,880	60	2.36	0.58	0.39
EC881-10	16	15.9	0.63	24.7	0.97	350	5,075	1,400	20,300	68	2.68	0.75	0.50
EC881-12	19	19	0.75	28.6	1.13	330	4,785	1,320	19,140	80	3.15	1.03	0.69
EC881-16	25	25.4	1.00	36.6	1.44	280	4,060	1,120	16,240	150	5.91	0.47	0.99
EC881-20	31	31.8	1.25	44.3	1.74	172	2,500	688	9,980	210	8.27	1.75	1.18
EC881-24	38	38.1	1.50	52.8	2.08	138	2,000	552	8,000	250	9.84	1.91	1.28
EC881-32	51	50.8	2.00	65.5	2.58	110	1,600	440	6,400	315	12.40	2.62	1.76

Also available with Bruiser ultra-abrasion resistant cover for the highest abrasion protection

EC881B-6
9.5 MM (0.38 IN) DN10
Bruiser Dynamax
Exceeds SAE 100R16 / 100R19 / EN857 2SC ISO 18752 • DNV • MSHA IC-84/54
400 BAR (5800 PSI)
-40°C to +126°C (-40°F to +260°F)
1/3 Bend 1A

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



GH425

Premium
four wire spiral hose

Exceeds: EN856 4SP

GH425-6
9.5 MM (0.38 IN) DN10
Dura-Tuff
Exceeds EN 856 4SP MSHA IC-84/56 • ABS • DNV
490 BAR (7100 PSI)
-40°C to +100°C
-40°F to +212°F
1T

Typical application:

High pressure hydraulic system service with petroleum and water-base fluids for low temperature applications.

Agency specifications: MSHA | DNV | ABS

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Four wire spiral	Cover: Dura-Tuff premium abrasion
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1T (-6 to -10) | 4S (-12 to -16)

PART #	SIZE DIMENSIONS					PRESSURE				BEND		WEIGHT	
	Hose I.D.			Hose O.D. (nominal)		Working Pressure		Min. Burst pressure		Min. Bend Radius		Weight	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH425-6	10	9.5	0.38	20.9	0.82	490	7,100	1,960	28,400	180	7.09	0.70	0.47
GH425-8	12	12.7	0.50	24.4	0.96	420	6,100	1,680	24,400	230	9.06	0.92	0.62
GH425-10	16	15.9	0.62	28.1	1.11	420	6,100	1,680	24,400	250	9.84	1.13	0.76
GH425-12	19	19.1	0.75	32.9	1.30	380	5,500	1,520	22,000	300	11.81	1.50	1.01
GH425-16	25	25.4	1.00	39.8	1.57	320	4,650	1,280	18,600	340	13.39	2.15	1.44

Also available with Bruiser ultra-abrasion resistant cover for the highest abrasion protection

GH425B-6
9.5 MM (0.38 IN) DN10
Bruiser
Exceeds EN 856 4SP MSHA IC-84/56 • ABS • DNV
490 BAR (7100 PSI)
-40°C to +100°C
-40°F to +212°F
1T



✓ Standard

EC426

Standard four wire spiral hose

Meets: EN856 4SP

Winner by Danfoss **EC426-12** 19.0 MM (0.75 IN) DN19 | EN 856 4SP MSHA IC-84/41 | **350 BAR (5100 PSI)** -40°C to +100°C / -40°F to +212°F **4S**

Typical application:

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

Agency specifications: MSHA

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Four wire spiral	Cover: Synthetic rubber
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1T (-6 to -10) | 4S (-12 to -20)

PART #	SIZE DIMENSIONS					PRESSURE				BEND		WEIGHT	
	Hose I.D.			Hose O.D. (nominal)		Working Pressure		Min. Burst pressure		Min. Bend Radius		Weight	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC426-6	10	9.5	0.37	20.9	0.82	445	6,450	1,780	25,800	180	7.09	0.74	0.50
EC426-8	12	12.7	0.50	25.4	1.00	415	6,000	1,660	24,000	230	9.06	0.88	0.59
EC426-10	16	15.9	0.62	29.0	1.14	350	5,100	1,400	20,400	250	9.84	1.04	0.70
EC426-12	19	19.0	0.75	33.0	1.30	350	5,100	1,400	20,400	300	11.81	1.47	0.99
EC426-16	25	25.4	1.00	40.9	1.61	280	4,050	1,120	16,200	340	13.39	1.90	1.28
EC426-20	31	31.8	1.25	48.6	1.91	210	3,050	840	12,200	460	18.11	2.46	1.65



GH506

Premium
four wire spiral hose

Meets or exceeds: EN 856 Type 4SH | ISO 18752 | ISO 3862 Type 4SH

by Danfoss **GH506-12** 19.0 MM (0.75 IN) DN19 **Dura-Tuff** EN 856 4SH • ISO 3862 4SH • ISO 18752 MSHA IC-84/56 • 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 based fluids. Challenging applications like construction equipment, agriculture machines, stationary applications. 2 Million flex impulse cycle performance according ISO6802 for size 12' and 16'.

Agency specifications: MSHA | DNV | ABS

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Four wire spiral	Cover: Dura-Tuff premium abrasion
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Operating temperature: -40°C to +100°C (-40°F to +212°F), Short term to +120°C (+248°F)

Qualified fittings: 1W (-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	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH506-12*	19	19	0.75	33	1.30	420	6,100	1,680	24,400	280	11.02	1.49	1.00
GH506-16*	25	25.4	1	39.9	1.57	420	6,100	1,680	24,400	340	13.39	2.05	1.38
GH506-20	31	31.8	1.25	47.1	1.85	350	5,100	1,400	20,300	460	18.11	2.54	1.71
GH506-24	38	38.1	1.5	55.1	2.17	300	4,350	1,200	17,400	560	22.05	3.27	2.20
GH506-32	51	50.8	2	69.7	2.74	250	3,650	1,000	14,500	700	27.56	4.58	3.08

* 2 million flex impulse cycle performance according ISO6802



Standard

EC512

Standard four wire spiral hose

Meets: EN 856 Type 4SH

Winner by Danfoss **EC512-12** | 19.0 MM (0.75 IN) DN19 | EN 856 4SH Performance MSHA IC-84/41 | **420 BAR (6100 PSI)** | -40°C to +100°C / -40°F to +212°F | **4S**

Typical application:

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

Agency specifications: MSHA | DNV

Hose construction:	Inner tube:	Reinforcement:	Cover:
	Synthetic rubber	Four wire spiral	Synthetic rubber

Operating temperature: 40°C to +100°C (-40°F to +212°F)

Qualified fittings: 4S (-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	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC512-12	19	19	0.75	33.0	1.30	420	6,100	1,680	24,400	280	11.02	1.47	0.99
EC512-16	25	25.4	1.00	39.9	1.57	380	5,500	1,520	22,000	340	13.39	2.04	1.37
EC512-20	31	31.8	1.25	47.1	1.85	350	5,100	1,400	20,400	460	18.11	2.39	1.61
EC512-24	38	38.1	1.05	55.1	2.17	290	4,200	1,160	16,800	560	22.05	3.19	2.14
EC512-32	51	50.8	2.00	69.7	2.74	250	3,650	1,000	14,600	700	27.56	4.37	2.94



FC500

Premium X-Flex
four and six wire spiral hose

Meets or exceeds: SAE 100R13 | EN 856 R13 | ISO 3862 R13

Available by Danfoss **FC500-12** 19.0 MM (0.75 IN) DN19 Exceeds SAE 100R13 / EN 856 R13 / ISO 3862 R13 MSHA IC-84/19 • USCG **350 BAR (5100 PSI)** -40°C to +127°C -40°F to +260°F Half Bend **4S**

Typical application:

High pressure hydraulic system service with petroleum and water-base fluids for applications where extra flexibility needed.

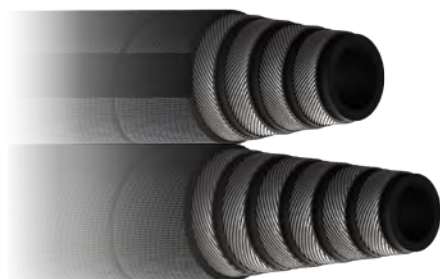
Agency specifications: MSHA | USCG

Hose construction:	Inner tube:	Reinforcement:	Cover:
	Synthetic rubber	Four wire spiral (-12 to -24) Six wire spiral (-32)	Dura-Tuff premium abrasion

Operating temperature: -40°C to +127°C (-40°F to +260°F)

Qualified fittings: 4S (-12 to -24) | 6S (-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	5,100	1,400	20,400	121	4.75	1.28	0.86
FC500-16	25.4	1.00	38.4	1.51	350	5,100	1,400	20,400	152	6.00	1.85	1.24
FC500-20	31.8	1.25	45.5	1.79	350	5,100	1,400	20,400	210	8.25	2.50	1.68
FC500-24	38.1	1.50	53.5	2.11	350	5,100	1,400	20,400	254	10.00	3.38	2.27
FC500-32	50.8	2.00	71.8	2.83	350	5,100	1,400	20,400	476	18.75	6.07	4.08



Standard

EC420

Standard
four and six wire spiral hose

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

Winner by Danfoss **EC420-12** 19.0 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: MSHA | USCG | DNV

Hose construction:	Inner tube:	Reinforcement:	Cover:
	Synthetic rubber	Four wire spiral (-12, -16) Six wire spiral (-20 to -32)	Synthetic rubber

Operating temperature: -40°C to +121°C (-40°F to +250°F)

Qualified fittings: 4S (-12 to -16) | 6S (-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	4.72	1.54	1.03
EC420-16	25.4	1.00	38.7	1.53	350	5,100	1,400	20,400	150	5.91	2.01	1.35
EC420-20	31.8	1.25	49.8	1.96	350	5,100	1,400	20,400	210	8.27	3.78	2.54
EC420-24	38.1	1.50	57.3	2.26	350	5,100	1,400	20,400	250	9.84	4.73	3.18
EC420-32	50.8	2.00	71.6	2.82	350	5,100	1,400	20,400	320	12.60	6.26	4.21



GH466

Premium six wire spiral hose

Exceeds: SAE 100R15 | EN 856 R13

Aeroquip by Danfoss **GH466-20** 31.8 MM (1.25 IN) DN31 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 constant high working pressure for use with petroleum based fluids. 2 Million flex impulse cycle performance according ISO6802.

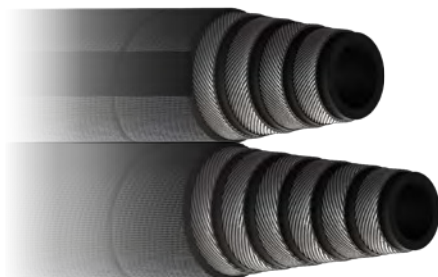
Agency specifications: MSHA | DNV | ABS

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Six wire spiral	Cover: Dura-Tuff premium abrasion
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Operating temperature: -40°C to +121°C (-40°F to +250°F)

Qualified fittings: 6S (-20 to -24) | 1W (-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	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH466-20	31	31.8	1.25	51.3	2.02	420	6,100	1,680	24,400	420	16.54	3.48	2.34
GH466-24	38	38.1	1.50	58.8	2.31	420	6,100	1,680	24,400	500	19.69	4.63	3.11
GH466-32	51	50.8	2.00	72.7	2.86	420	6,100	1,680	24,400	630	24.80	6.70	4.50



Standard

EC640

Standard
four and six wire spiral hose

Meets or exceeds: ISO 18752-CC | SAE100 R15

Winner by Danfoss **EC640-12** 19.0 MM (0.75 IN) DN19 | SAE 100R15 • ISO 18752 MSHA IC-84/43 | **420 BAR (6100 PSI)** -40°C to +120°C -40°F to +248°F Half Bend

Typical application:

For hydraulic systems with high peak pressure and arduous operating conditions such as high pressure hydraulic circuits (for example on booms) on mobile construction equipment, mining equipment, and agricultural machines.

Agency specifications: MSHA

Hose construction:	Inner Tube:	Reinforcement:	Cover:
	Synthetic rubber	Four wire & Six wire spiral	Synthetic rubber

Operating temperature: -40°C to +120°C (-40°F to +248°F)

Qualified fittings: 4S (-6 to 16) | 1W (-16) | Winner 2pc (-20,-24)

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
EC640-06	9.5	0.37	20.9	0.82	420	6100	1680	24360	65	2.56	0.70	0.47
EC640-08	12.7	0.50	24.0	0.94	420	6100	1680	24360	90	3.54	0.92	0.62
EC640-10	15.9	0.63	27.7	1.09	420	6100	1680	24360	100	3.94	1.13	0.76
EC640-12	19.0	0.75	30.7	1.21	420	6100	1680	24360	150	5.91	1.25	0.84
EC640-16	25.4	1.00	37.9	1.49	420	6100	1680	24360	210	8.27	1.83	1.23
EC640-20	31.8	1.25	49.6	1.95	420	6100	1680	24360	260	10.24	3.17	2.13
EC640-24	38.1	1.50	56.9	2.24	420	6100	1680	24360	310	12.20	4.40	2.95
EC640-32	50.8	2.00	71.4	2.81	420	6100	1680	24360	350	13.78	6.28	4.22



EC850

Dynamax® ultra-performance
four and six wire spiral hose

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

by Danfoss	EC850-12	19.0 MM (0.75 IN) DN19	Dura-Tuff Dynamax	Exceeds SAE 100R15 / EN856 R13 ISO 18752 • MSHA IC-84/56	500 BAR (7250 PSI)	-40°C to +100°C -40°F to +212°F	1W
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Typical application:

Demanding high pressure applications requiring SAE J517 100R15 compliant solutions at pressures up to 500 bar—including hydrostatic drives, direct drive steering systems and critical subsystems in off-highway equipment.

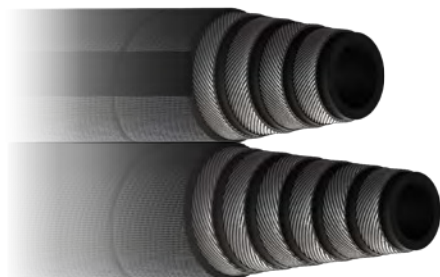
Agency specifications: MSHA

Hose construction:	Inner tube: Synthetic rubber	Reinforcement: Four wire spiral (-10, -12, -16) Six wire spiral (-20)	Cover: Dura-Tuff premium abrasion
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1W (-10 to -20)

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	16	15.9	0.63	29.0	1.14	500	7,250	2,000	29,000	200	7.87	1.23	0.83
EC850-12	19	19.0	0.75	33.3	1.31	500	7,250	2,000	29,000	215	8.46	1.52	1.02
EC850-16	25	25.4	1.00	40.4	1.59	500	7,250	2,000	29,000	270	10.63	2.31	1.55
EC850-20	31	31.8	1.25	50.9	2.00	500	7,250	2,000	29,000	380	14.96	4.01	2.69



EC600 Premium X-Flex® four and six wire spiral hose

Meets or exceeds: SAE 100R15 | ISO 18752-DC

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
1W 4S

Typical application:

High-pressure hydraulics, hydrostatic transmissions. Hydraulic system with petroleum and water-glycol base fluids, for lubricants oils and water.

Agency specifications:

MSHA | ABS | USCG | DNV

Hose construction:	Inner tube:	Reinforcement:	Cover:
Dura-Pulse patented tube		Four wire spiral (-12 to -16) Six wire spiral (-20 to -32)	Dura-Tuff premium abrasion

Operating temperature:

-40°C to +127°C (-40°F to +260°F)

Qualified fittings:

4S (-12 to -16) | 6S (-20 to 32) | 1W (-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		
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC600-12	19	19.0	0.75	33.3	1.31	420	6,100	1,680	24,400	135	5.31	1.52	1.01
EC600-16	25	25.4	1.00	39.4	1.55	420	6,100	1,680	24,400	165	6.50	2.04	1.36
EC600-20	31	31.8	1.25	50.5	1.99	420	6,100	1,680	24,400	225	8.86	3.89	2.61
EC600-24	38	38.1	1.50	57.7	2.27	420	6,100	1,680	24,400	265	10.43	4.78	3.21
EC600-32*	51	50.8	2.00	71.8	2.83	420	6,100	1,680	24,400	375	14.76	7.05	4.74

*-32 size is qualified for 500,000 cycles (ISO 18752-CC)



FC510

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

Exceeds: EN 857 1SC

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:

For applications operating in high temperature conditions, or applications with higher than average hydraulic fluid temperatures such as: mini excavators, skid steer loaders, mini hydraulic breakers, industrial high pressure compact power packs.

Agency specifications: MSHA | DNV | USCG

Hose construction:	Inner tube:	Reinforcement:	Cover:
	AQP® Elastomer	Hi-Pac® one wire braid	Blue AQP Elastomer

Operating temperature: -40°C to +149°C (-40°F to +300°F)

Qualified fittings: 1A (-4 to -20)

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	6.4	0.25	14.9	0.59	345	5,000	1,380	20,000	76	3.00	0.34	0.23
FC510-06	10	9.5	0.37	18.2	0.72	275	4,000	1,100	16,000	89	3.50	0.43	0.29
FC510-08	12	12.7	0.50	20.7	0.81	240	3,500	960	14,000	127	5.00	0.50	0.34
FC510-10	16	15.9	0.63	24.4	0.96	190	2,750	760	11,000	152	6.00	0.66	0.44
FC510-12	19	19.0	0.75	28.2	1.11	155	2,250	620	9,000	178	7.00	0.77	0.52
FC510-16	25	25.4	1.00	35.2	1.39	138	2,000	552	8,000	229	9.00	1.05	0.71
FC510-20	31	31.8	1.25	43.7	1.72	112	1,625	448	6,500	279	11.00	1.61	1.08



GH195

Premium AQP high-temp two wire braided hose

Meets or exceeds: SAE 100R | EN 853 2SN | ISO 1436-1 2SN

by Danfoss **GH195-6** 9.5 MM (0.38 IN) DN10 **AQP High-Temp** Exceeds SAE 100R2 / EN853 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:

For applications operating in high temperature conditions, or applications with higher than average hydraulic fluid temperatures such as: mini excavators, skid steer loaders, mini hydraulic breakers, industrial high pressure compact power packs.

Agency specifications: MSHA | ABS | DNV | USCG

Hose construction:	Inner tube: AQP elastomer	Reinforcement: Two wire braid	Cover: Blue AQP elastomer
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Operating temperature: -40°C to +150°C (-40°F to +302°F)

Qualified fittings: 1A (-4 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
GH195-4	6.4	0.25	15.1	0.60	400.0	5,800	1,600	23,200	102	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	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	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	7.99	0.80	0.54
GH195-12	19.0	0.75	29.5	1.16	215.0	3,125	860	12,500	241	9.49	1.00	0.67
GH195-16	25.4	1.00	37.8	1.49	175.0	2,550	700	10,200	305	12.01	1.44	0.97
GH195-20	31.8	1.25	48.5	1.91	155.0	2,250	620	9,000	419	16.50	2.38	1.60
GH195-24	38.1	1.50	55.1	2.17	125.0	1,800	500	7,250	508	20.00	2.59	1.74
GH195-32	50.8	2.00	67.8	2.67	105.0	1,525	420	6,100	635	25.00	3.38	2.27



EC525

Premium AQP high-temp
four wire spiral hose

Exceeds: SAE 100R12 | EN 856 R12

by Danfoss **EC525-12** 19.0 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:

For applications operating in high temperature conditions, or applications with higher than average hydraulic fluid temperatures such as: mini excavators, skid steer loaders, mini hydraulic breakers, industrial high pressure compact power packs.

Agency specifications: MSHA

Hose construction:	Inner tube:	Reinforcement:	Cover:
AQP Elastomer	AQP Elastomer	Four wire spiral	Blue AQP elastomer

Operating temperature: Typical fluids: -40°C To +150°C (-40°F To +302°F)
Phosphate-ester base fluids: -40°C To +82°C (-40°F To +180°F)

Qualified fittings: 4S (-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
EC525-12	19.0	0.75	30.7	1.21	345.0	5,000	1380.0	20,000	241.3	9.50	1.28	0.86
EC525-16	25.4	1.00	37.9	1.49	345.0	5,000	1380.0	20,000	304.8	12.00	1.73	1.16
EC525-20	31.8	1.25	46.6	1.84	240.0	3,500	960.0	14,000	419.1	16.50	2.31	1.55
EC525-24	38.1	1.50	53.9	2.12	240.0	3,500	960.0	14,000	508.0	20.00	2.96	1.99
EC525-32	50.8	2.00	67.3	2.65	225.0	3,250	900.0	13,000	635.0	25.00	4.42	2.97



GH120

Premium low-temp
two wire braided hose

Exceeds: SAE 100R16 | EN 857 2SC | ISO 11237-1 2SC

	GH120-6	9.5 mm (0.38 in) DN10	Low-Temp	Exceeds SAE 100R16 / EN857 2SC ISO 11237-1	345 BAR (5000 PSI)	-57°C to +100°C -70°F to +212°F	1A
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Typical application:

For applications operating in low temperature conditions, cold climate, extreme outdoor conditions such as snow snowploughs or material handling in freezer stores.

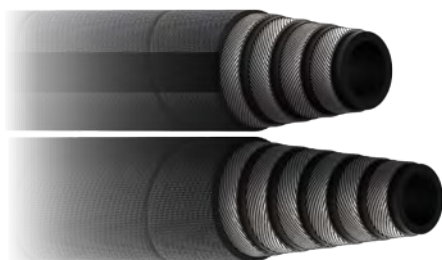
Agency specifications: MSHA

Hose construction:	Inner tube: Special low temperature synthetic rubber	Reinforcement: Two wire braid	Cover: Dura-Tuff premium abrasion
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Operating temperature: -57°C to +100°C (-70°F to +212°F)

Qualified fittings: 1A (-4 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
GH120-4	6.4	0.25	13.8	0.54	414.0	6,000	1656.0	24,025	51.0	2.00	0.30	0.20
GH120-6	9.5	0.38	17.4	0.68	345.0	5,000	1380.0	20,025	64.0	2.50	0.40	0.27
GH120-8	12.7	0.50	20.8	0.82	310.0	4,500	1240.0	18,000	89.0	3.50	0.58	0.39
GH120-10	15.9	0.62	24.9	0.98	276.0	4,000	1104.0	16,000	102.0	4.00	0.74	0.50
GH120-12	19.0	0.75	28.4	1.12	241.0	3,500	964.0	14,000	121.0	4.75	0.92	0.62
GH120-16	25.4	1.00	35.7	1.41	193.0	2,800	772.0	11,200	152.0	6.00	1.22	0.82
GH120-20	31.8	1.25	43.3	1.71	159.0	2,300	636.0	9,225	210.0	8.25	1.59	1.07
GH120-24	38.1	1.50	51.5	2.03	138.0	2,000	552.0	8,000	254.0	10.00	2.11	1.42
GH120-32	50.8	2.00	63.9	2.51	103.0	1,500	412.0	6,000	318.0	12.50	2.80	1.88



EC810

Premium low-temp
four and six wire spiral hose

EC810-12 19.0 MM (0.75 IN) DN19 **Low-Temp** MSHA IC-84/68 **420 BAR (6100 PSI)** **4S**

Typical application:

For applications operating in low temperature conditions, cold climate, extreme outdoor conditions such as snow snowploughs or material handling in freezer stores.

Agency specifications: MSHA

Hose construction:	Inner tube:	Reinforcement:	Cover:
Special low temperature synthetic rubber	Special low temperature synthetic rubber	Four wire spiral (-12 to -16) Six wire spiral (-20 to -32)	Synthetic rubber

Operating temperature: -57°C to +100°C (-70°F to +212°F)

Qualified fittings: 4S (-12 to -16) | 6S (-20 to -32) | 1W (-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
EC810-12	19.0	0.75	32.2	1.27	420	6,100	1,680	24,360	280	11.02	1.61	1.08
EC810-16	25.4	1.00	39.0	1.54	420	6,100	1,680	24,360	340	13.39	2.02	1.36
EC810-20	31.8	1.25	49.4	1.95	420	6,100	1,680	24,360	420	16.54	3.55	2.39
EC810-24	38.1	1.50	57.3	2.26	420	6,100	1,680	24,360	510	20.08	4.74	3.19
EC810-32*	50.8	2.00	71.1	2.80	420	6,100	1490	21,610	630	24.80	6.70	4.50

*With the 6S fitting the -32 size working pressure is 350 bar (5100 psi) with a 4:1 safety factor.



Suction

FC619

Premium suction
one wire braided hose

Exceeds: SAE 100R4 | EN 45545

FC619-12
 19.0 MM (0.75 IN) DN19
 Dura-Tuff
 Exceeds SAE 100R4 • ABS MSHA IC-84/19 • EN45545
 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: MSHA | EN45545

Hose construction:	Inner tube: AQP elastomer	Reinforcement: Helical wire between two textile reinforcement layers	Cover: Synthetic rubber
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Operating temperature: -40°C to +135°C (-40°F to +275°F)

Qualified fittings: 1A (-12 to -32) | 1G (-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	19.1	0.75	30.7	1.21	21.0	300,†	84	1,200	63.5	2.50	94.8	28	0.68	0.46
FC619-16	25.4	1.00	37.6	1.48	17.0	250†	70	1,000	76.2	3.00	94.8	28	0.83	0.56
FC619-20	31.8	1.25	44.5	1.75	14.0	200,†	56	800	102.0	4.00	94.8	28	1.16	0.78
FC619-24	38.1	1.50	51.8	2.04	10.5	150,†	42	600	127.0	5.00	94.8	28	1.49	1.00
FC619-32	50.8	2.00	64.8	2.55	7.0	100,†	28	400	152.4	6.00	94.8	28	1.83	1.23
FC619-40*	63.5	2.50	79.2	3.12	4.0	62	17	250	355.6	14.00	94.8	28	2.35	1.58
FC619-48*	76.2	3.00	95.3	3.75	4.0	62	16	225	457.2	18.00	94.8	28	3.36	2.26

*Only bulk hose

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



Standard

WH004

Standard suction and return hose

Meets or exceeds: SAE 100R4

Winner by Danfoss **WH004-12** **19.0 MM (0.75 IN) DN19** | **SAE 100R4 MSHA IC-261/5** | **21 BAR (305 PSI)** **-40°C to +100°C** **-40°F to +212°F** **1/3 Bend** **1A • Z 1G • 2pc**

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: Synthetic rubber
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Operating temperature: -40°C to +100°C (-40°F to +212°F)

Qualified fittings: 1A (-12 to -32) | 1G (-12 to -32) | Winner 2pc (-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		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft
WH004-12	19.0	0.75	30.0	1.18	21	305	84	1,220	40	1.57	94.8	28	0.54	0.36
WH004-16	25.4	1.00	36.2	1.43	17	245	68	980	45	1.77	94.8	28	0.68	0.46
WH004-20	31.8	1.25	43.0	1.69	14	205	56	820	60	2.36	94.8	28	0.85	0.57
WH004-24	38.1	1.50	50.2	1.98	10.5	150	42	600	65	2.56	94.8	28	1.20	0.81
WH004-32	50.8	2.00	63.2	2.49	7	100	28	400	100	3.94	94.8	28	1.53	1.03
WH004-40*	53.5	2.50	76.7	3.02	4	60	16	240	140	5.51	94.8	28	2.05	1.38
WH004-48*	76.2	3.00	89.4	3.52	4	60	16	240	180	7.09	94.8	28	2.62	1.76

*Only bulk hose

We're changing the crimping game.

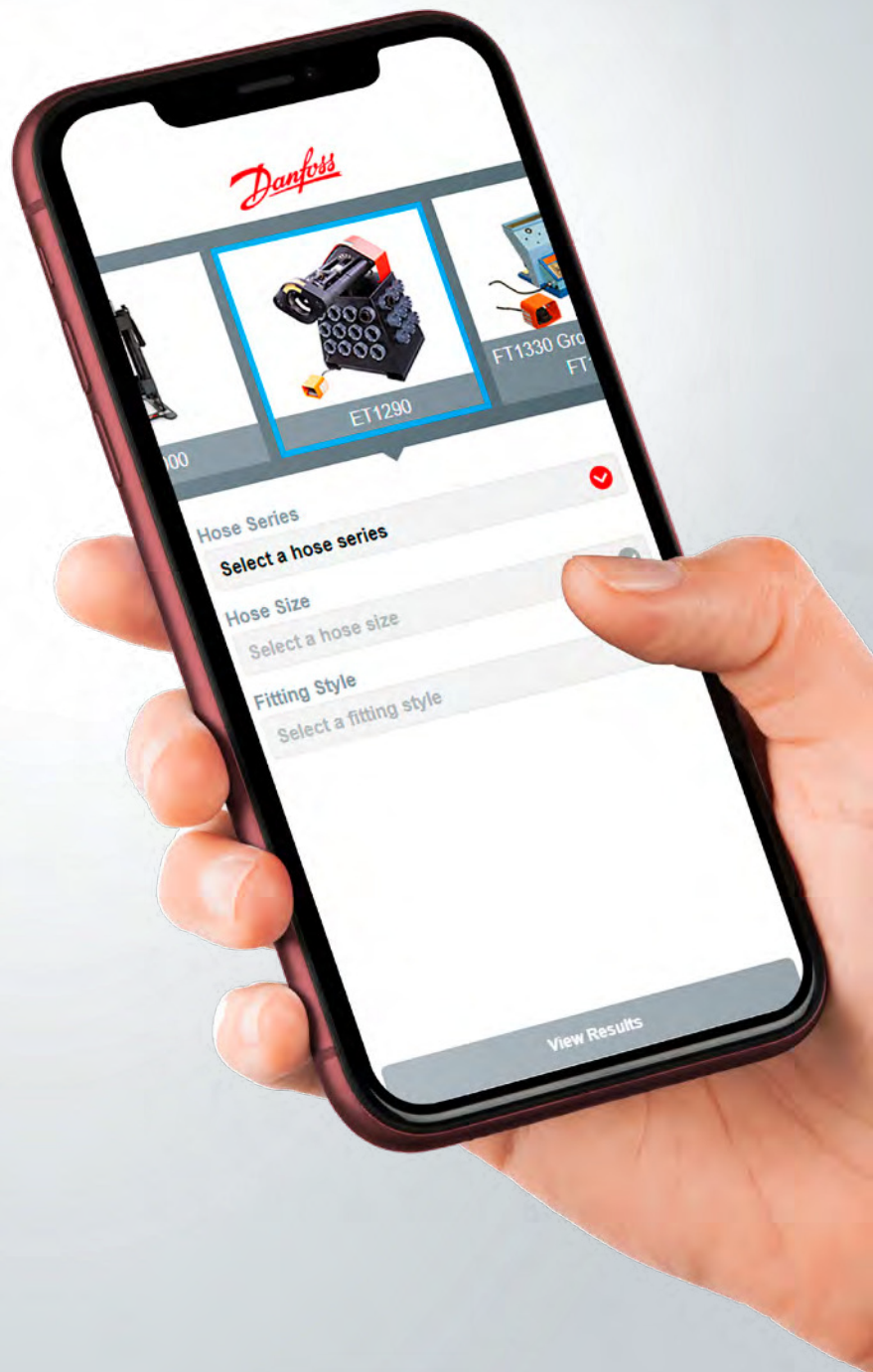
Mobile crimp tool

We've made it easier to help your customers find the proper crimp spec anytime, anywhere with the new mobile crimp spec tool on PowerSource.

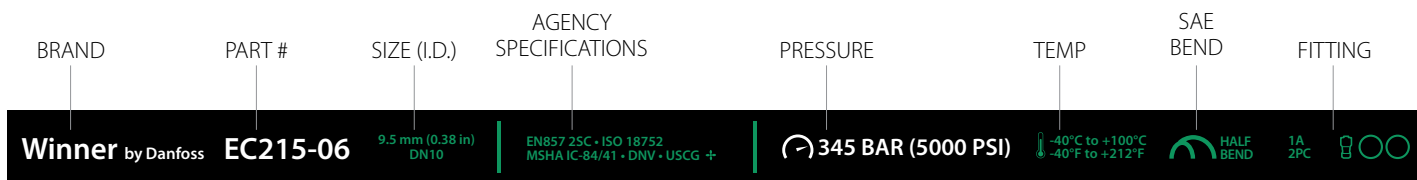
Visit www.Danfoss.com/crimp on your mobile device and follow these steps:

1. **Find your machine**
2. **Select your hose series**
3. **Select your hose size**
4. **Find your fitting style**

Then view your results.
Add the tool to your home screen for even quicker access.



New laylines



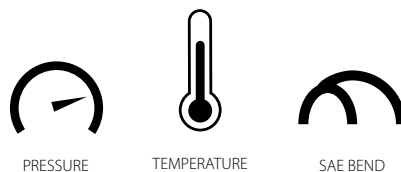
Agency specifications

Hose agency specifications are clearly defined on each hose. SAE, ISO, MSHA, DNV, USCG designation are displayed clearly on each hose, taking the guess work out of hose qualifications.

In addition, many of Danfoss' premium hydraulic hoses exceed SAE and EN specifications to offer superior performance. We will now consistently note this and other specification-related terms on the layline.

Global comprehension

The new layline design also introduces easy-to-identify icons and pictograms, which allow more users around the world to intuitively identify performance characteristics associated with each of Danfoss' rubber hydraulic hoses. Icons include temperature, bend radius, pressure, correct fitting type and more.



EN standards

Each hose standard specifies the minimum bend radius of a hose. This is defined as the smallest diameter the hose can be bent without kinking. However, Danfoss recognizes that merely meeting a standard is often not good enough for the tight routing needs of your applications. Many of our core hoses have long been engineered to perform at half or even one-third of the bend radius required by different standards.

For the first time, our laylines will now indicate when a hose exceeds the standard bend radius requirement. This improvement in bend means easier routing, better performance and reduced hose length requirements.

Fitting info

As part of this layline refresh, all of Danfoss' rubber hydraulic hoses will now utilize the simple, intuitive MatchMate® hose & fitting system.

▶ Braided



▶ Spiral



Fittings

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



3X Carbon steel corrosion protection








Class 0 Cool-down leakage 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.

Dura-Seal™ technology

This patent-pending innovation from Danfoss eliminates hose assembly cool-down leakage, while extending hose assembly life, reducing equipment down-time.

Braided hose fittings	Features
<p>Premium 1A (TTC series)</p> 	<ul style="list-style-type: none"> • New 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 TTC Series part numbers available • Danfoss' MatchMate® program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly
<p>Standard Two-piece Winner</p> 	<ul style="list-style-type: none"> • 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
<p>Premium 4S/6S spiral series</p> 	<ul style="list-style-type: none"> • New Dura-Kote plating technology for up to 1,000 hours of corrosion resistance • New patent pending Dura-Seal™ technology to eliminate 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
<p>Premium 1W internal skive series</p> 	<ul style="list-style-type: none"> • Internal Skive Hi-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
Reusable hose fittings	Features
<p>Premium Reusable</p> 	<ul style="list-style-type: none"> • New 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

Ordering & hose numbering system

How to order

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

Danfoss regional sales teams at:
FC-AP-SDM@danfoss.com

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 and Winner 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.

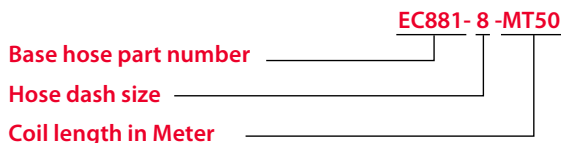
WARNING Hose assemblies

Danfoss manufactures the terminal ends of our hose fittings to the appropriate requirements established by the SAE or DIN. Therefore, the performance ratings of these hose fittings meet the SAE or DIN 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 reusable and crimped hose assemblies are available. For complete information, contact Danfoss.

Numbering system - hydraulic hose

Depending on the production type, hoses will be bundled in pre-defined hose lengths:

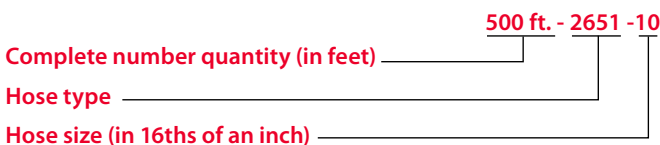


Danfoss is committed to providing pre-defined hose lengths with as few cuts as possible. Nevertheless, please note that following specifications will be valid for the bundled part numbers:

	< MT61	> MT61
Max number of pieces in one bundled coil	Max. 3 pieces	Max. 5 pieces
Shortest length	5 meter	5 meter
Overall length tolerance	+/- 1%	+/- 1%

Bulk hose

Bulk hose should be ordered by specifying length in feet as shown below.



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

- Up to and including 12 inches: $\pm 1/8"$
- Above 12 inches to and including 18 inches: $\pm 3/16"$
- Above 18 inches to and including 36 inches: $\pm 1/4"$
- Above 36 inches: $\pm 1\%$ of length

NOTE: For bulk hose prices please contact your sales representative.

Hose fitting numbering system

Numbering system - hose fittings

Part numbering system

Part numbers collapse to the shortest possible number of digits:

It is assumed that a fitting has a straight configuration unless a code is added to designate otherwise.

e.g., 1AA8FJ8 has a straight configuration
1AA8FJA8 has a 45° elbow configuration

Dashes and unnecessary zeros are not used.

e.g., 1/4" is designated by "4" not "-4" or "04"
5/8" is designated by "10" not "-10"

Crimp fittings

Complete nipple part number:

Product group code

- 1A = TTC fitting part number
- 4S = 4S fitting part number for four spiral hose
- 6S = 6S fitting part number for six spiral hose
- 1R = Reusable fitting part # for one wire braided hose
- 2R = Reusable fitting part # for two wire braided hose
- 4T = One piece fitting for Synflex 100R7, 100R8 and 100R18 Thermoplastic hose
- 1W = Internal Skive Hi-Performance Spiral Fitting with design related sockets

Material stock code

- If material is round stock, then this position collapses.
- A = inch hex stock (metric hex, this position collapses)

End connection size*

End connection code

- BF = BSP Female Swivel (1 hex)
- BP = BSP Male Parallel
- BT = BSP Male Tapered
- CT = Cat Flange
- DK = 24 Male (light duty)
- DL = DKO Female Swivel (light duty)
- DS = DKO Female Swivel (heavy duty)
- EK = 24 Male (heavy duty)
- FH = Flange Code 62
- FJ = Female JIC Swivel
- FL = Flange Code 61
- FR = Female ORS
- FS = Female SAE Swivel
- JF = JIS Female Swivel
- JM = BSP Female Swivel (2 hexes)
- KF = Komatsu Female Swivel
- KS = Komatsu Split Flange
- MB = Male Boss O-Ring
- MF = Male Inverted Flare
- MJ = Male JIC
- MP = Male Pipe
- MR = Male ORS
- PF = Female Pipe Swivel
- PS = Pipe Swivel

Connecting end configuration code

If nipple has a straight configuration, then this position collapses.

- A = 45° D = 22-1/2°
- B = 90°, standard or short drop
- C = 90°, long drop
- E = 67-1/2°
- F = 30°
- G = 60°

Hose size*

Material designation

C = stainless steel, if fitting is zinc plated carbon steel (standard), this position collapses.

1A A 8 FJ A 8

*When ordering sizes 3, 4, 5, 6 and 8 the part number requires only single digits.

Crimp machine comparison chart



ET4100

ET4200

ET4250

ET4300

ET4350

ET4400

Description	Manual crimper	Electric crimper 1 phase or 3 phase	Mobile electric crimper with 12V	Electric crimper 1 phase or 3 phase	Mobile electric crimper with 12V	Electric crimper 1 phase or 3 phase
Production volume	Low	medium	medium	medium	medium	medium
Pump option**	manual	230V / 380 V	DC 12V - Mobile	230V / 380 V	DC 12V - Mobile	230V / 380 V
Application	Portable crimper	Workshop crimper	Portable crimper	Workshop crimper	Portable crimper	Workshop crimper
Capability braided (up to)*	1 1/4" (Size -20)	1 1/2" (Size -24)	1 1/2" (Size -24)	2" (Size -32)	2" (Size -32)	2" (Size -32)
Capability 4 spiral (up to)*	3/4" (Size -12)	1" (Size -16)	1" (Size -16)	1 1/4" (Size -20)	1 1/4" (Size -20)	2" (Size -32)
Capability 6 spiral (up to)*	-	-	-	1 1/4" (Size -20)	1 1/4" (Size -20)	1 1/2" (Size -24)

*Capabilities based on Danfoss core hose and fitting products

**See pump ordering options for each machine for specific kit numbers

Crimp machine comparison chart



Description	Electric crimper 1 phase or 3 phase	Electric crimper 3 phase with controller	Electric crimper 3 phase with controller	Electric crimper 3 phase with controller	Electric crimper 3 phase with controller
Production volume	medium	medium	high	high	high
Pump option**	230V / 380V	380V	380V	380V	380V
Application	Workshop crimper	Workshop crimper	Production crimper	Production crimper	Production crimper
Capability braided (up to)*	3" (Size -48)	3" (Size -48)	1 1/2" (Size -24)	2" (Size -32)	3" (Size -48)
Capability 4 spiral (up to)*	2" (Size -32)	2" (Size -32)	1" (Size -16)	1 1/4" (Size -20)	3" (Size -48)
Capability 6 spiral (up to)*	1 1/2" (Size -24)	1 1/2" (Size -24)	-	-	2 1/2" (Size -40)

*Capabilities based on Danfoss core hose and fitting products

**See pump ordering options for each machine for specific kit numbers

A broad portfolio of leading technology expertly **matched to your needs...**



Tooling is a costly investment that you must get right. Whether your challenge is a mobile workshop, a full hose assembly manufacturing branch, or anything in between, our high-quality tooling can meet your needs and ensure a strong return-on-investment.

We offer an extensive portfolio of portable, workshop, and production line crimping machines that can suit any environment, as well as versatile cutting, skiving, nipple insertion, and marking machines. There's no need to waste time and money researching appropriate solutions—our experts have pre-selected market-leading tooling that's the best technical match for Danfoss hoses and fittings.

We also offer expert technical guidance and recommendations that consider your unique needs to ensure 'right-sized' solutions that can support you over the long term. We'll advise you on the most appropriate tooling and methods to use when assembling individual hoses and fittings, so you can accelerate production speeds, ensure optimal assembly performance, and minimize the risk of errors that can cause leaks and safety issues.

About Danfoss Power Solutions

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

Danfoss Power Solutions – your strongest partner in mobile hydraulics and mobile electrification.

Products we offer:

- Aeroquip by Danfoss
- Boston by Danfoss
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software services, support and training
- PLUS+1® software
- Position controls and sensors
- PVG proportional valves
- SEL by Danfoss
- Steering components and systems
- Synflex Optimum by Danfoss
- Telematics
- Weatherhead by Danfoss
- Winner by Danfoss

Go to www.danfoss.com for further product information.

Danfoss Power Solutions (US) Company

2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

Danfoss Power Solutions ApS

Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

Danfoss Power Solutions GmbH & Co. OHG

Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

Danfoss Power Solutions Trading (Shanghai) Co. Ltd.

Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 3418 5200

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