

ENGINEERING
TOMORROW


Danfoss

EMEA

Aeroquip® and Winner® by Danfoss®

Core Hydraulic hose products catalog





Aeroquip by Danfoss GH681

Sometimes less is **more.**

Fewer products,
smarter choices.

Danfoss is taking a new approach to helping you succeed by reducing the complexity of our hydraulics hose and fittings product offering, while developing new, more intuitive ways to help you find the right 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		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		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.**

 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

Meets or exceeds: SAE 100R1 Type S | EN857 1SC

Aeroquip by Danfoss	GH681-6	9.5 mm (0.38 in) DN10	Dura-Tuff	Exceeds SAE 100R17 / EN857 1SC • ISO 18752 MSHA IC-84/19 • ABS • DNV-GL • USCG+	235 BAR (3400 PSI)	-46°C to +126°C -50°F to +260°F	HALF BEND	1A 1R
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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
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Operating temperature: -46°C to +126°C (-50°F to +260°F)

Qualified fittings: 1A series | 1R 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
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 cover for higher abrasion resistance.

Aeroquip by Danfoss	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 1R
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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

Winner by Danfoss **EC115-08** 12.7 MM (0.50 IN) DN12 | EN857 1SC • MSHA IC-84/41 DNV-GL • USCG | 160 BAR (2300 PSI) -40°C to +100°C -40°F to +212°F | 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 series | 2-piece Winner | 1R 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
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

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



EC881 | Premium Dynamax ultra-performance two wire braided hose

Meets or exceeds: SAE 100R16 Type S | EN 857 2SC | ISO 11237-1 Type 2SC

Aeroquip by Danfoss EC881-6 9.5 MM (0.38 IN) DN10 Dura-Tuff Dynamax Exceeds SAE 100R16 / 100R19 / EN857 2SC ISO 18752 - ABS - DNV-GL - 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.

High abrasion applications- with 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
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Operating temperature:

-46°C to +126°C (-50°F to +260°F)

Qualified fittings:

1A series

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 cover for higher abrasion resistance.

Aeroquip by Danfoss EC881B-6 9.5 MM (0.38 IN) DN10 Dura-Tuff Dynamax Exceeds SAE 100R16 / 100R19 / EN857 2SC ISO 18752 - ABS - DNV-GL - MSHA IC-84/56 400 BAR (5800 PSI) -46°C to +126°C -50°F to +260°F 1/3 Bend 1A

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



✓ Standard

EC215

Standard two wire braid hose

Meets or exceeds: EN 857 Type 2SC

Winner by Danfoss **EC215-06** 9.5 mm (0.38 in) DN10 | EN857 2SC • ISO 18752 MSHA IC-84/41 • DNV-GL • 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: MSHA | DNV | USCG

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

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

Qualified fittings: 1A series | 2-piece Winner | 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
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



GH425 | Premium four wire spiral hose

Meets or exceeds: EN856 4SP

GH425-6
 9.5 MM (0.38 IN) DN10
 Dura-Tuff
 Exceeds EN 856 4SP MSHA IC-84/19 • 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

Hose construction:

Inner Tube:	Reinforcement:	Cover:
Synthetic rubber	four wire spiral	Dura-Tuff

Operating temperature:

-40°C to +100°C (-40°F to +212°F)

Qualified fittings:

1T series (-6,-8,-10) | 4S/6S series (-12,-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 cover for higher abrasion resistance.

GH425B-6
 9.5 MM (0.38 IN) DN10
 Bruiser
 Exceeds EN 856 4SP MSHA IC-84/54 • 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 or exceeds: EN856 4SP

Winner by Danfoss **EC426-12** | 19 mm (0.75 in) DN19 | EN856 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 series (-6,-8,-10) | 4S/6S series (-12,-16,-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



Premium

GH506

Premium four wire spiral hose

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

Aeroquip by Danfoss	GH506-12	19.0 mm (0.75 in) DN19	Dura-Tuff	Exceeds EN 856 / ISO 18752 / ISO 3862	420 BAR (6100 PSI)	-40°C to +100°C -40°F to +212°F	1W
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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
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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 series

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	1.05	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 or exceeds: EN 856 Type 4SH

Winner by Danfoss **EC512-16** 25.4 MM (1.00 IN) DN25 | EN856 4SH MSHA IC-8A/41 • DNV | **380 BAR (5500 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/6S series

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 Type R13 | ISO 3862 Type R13

FC500-12
19.0 mm (0.75 in) DN19
X-Flex
Exceeds SAE 100R13 / EN856 ISO 3862
 350 BAR (5100 PSI)
 -40°C to +127°C / -40°F to +260°F
 Half Bend
 4S 6S

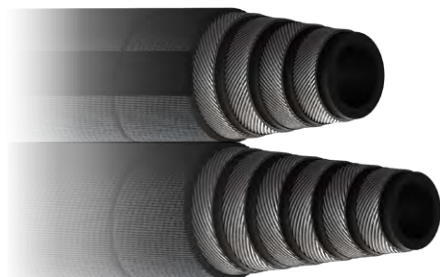
Typical application:

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

Agency specifications:

Hose construction:	Inner Tube: Synthetic rubber	Reinforcement: four wire spiral (-12 to -24) six wire spiral (-32)	Cover: Dura-Tuff
Operating temperature:	-40°C to +127°C (-40°F to +260°F)		
Qualified fittings:	4S series 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
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

Winner by Danfoss **EC420-12** 19 mm (0.75 in) DN11 SAE 100R13 • EN856 R13 • ISO 18752
DNV • MSHA IC-84/41 • 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: -12, -16, -20, -24, and -32: -40°C to +121°C (-40°F to +250°F)
-40°C to +100°C (-40°F to +212°F)

Qualified fittings: 4S series | 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
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

Meets or exceeds: SAE 100R15 | ISO 3862 Type R15

	GH466-24	31.8 mm (1.25 in) DN20	Dura-Tuff 2M Cycles	Exceeds SAE 100R15 / EN856 R13 MSHA IC-84/19 • ABS • DNV	420 BAR (6100 PSI)	-40°C to +121°C -40°F to +250°F	1W 6S
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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
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Operating temperature: -40°C to +121°C (-40°F to +250°F)

Qualified fittings: 6S series | 1W series

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

EC615

Standard
four and six wire spiral hose

Meets or exceeds: SAE 100R15

Winner by Danfoss **EC615-16** 25.4 MM (1.00 IN) DN25 | SAE 100R15 • EN 856 R13 ISO 18752 • MSHA IC-84/41 • DNV | **420 BAR (6100 PSI)** -40°C to +121°C -40°F to +250°F **4S**

Typical application:

High pressure hydraulic systems with constant high working pressure for use with petroleum based fluids.

Agency specifications: MSHA

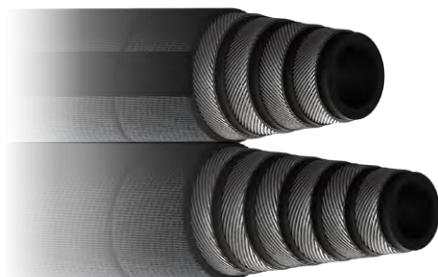
Hose construction:	Inner Tube:	Reinforcement:	Cover:
	Synthetic rubber	four wire & six wire spiral	Synthetic rubber

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

Qualified fittings: 4S series | 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
EC615-16	25.4	1.00	39.9	1.57	420	6 100	1 680	24 400	330	12.99	2.00	1.35
EC615-20	31.8	1.25	51.3	2.02	420	6 100	1 680	24 400	445	17.52	3.77	2.53
EC615-24	38.1	1.50	58.8	2.31	420	6 100	1 680	24 400	530	20.87	5.17	3.47
EC615-32*	50.8	2.00	72.8	2.87	420	6 100	1 680	24 400	600	23.62	7.26	4.88

*Only bulk hose



EC850 | Dynamax ultra-performance four and six wire spiral hose

Meets or exceeds: SAE 100R15 | ISO 18752

	EC850-12	19.0 mm (0.75 in) DN19	Dura-Tuff Dynamax	SAE 100R15 / EN 856R13 Type 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.

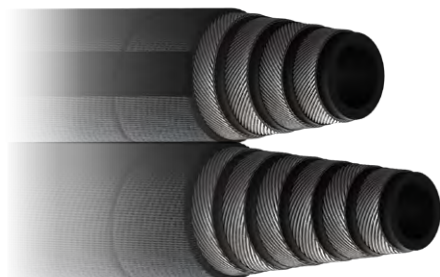
Agency specifications: MSHA

Hose construction:	Inner Tube: Synthetic rubber	Reinforcement: four wire spiral (-10, -12, -16) six wire spiral (-20)	Cover: Dura-Tuff
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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	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

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-GL • USCG+	420 BAR (6100 PSI)	-40°C to +121°C -40°F to +250°F	Half Bend	1W 4S
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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 (-24 to -32)	Dura-Tuff

Operating Temperature:

-40°C to +121°C (-40°F to +250°F)

Qualified fittings:

4S series | 6S series | 1W series

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	350	5 100	1 400	20 400	508	20.00	4.78	3.21
EC600-32*	51	50.8	2.00	71.8	2.83	350	5 100	1 400	20 400	635	25.00	7.05	4.74

*-32 size is qualified for 500.000 cycles (ISO 18752-CC) *With the 6S fitting the -32 size working pressure is 380 bar (5500 psi) with a 4:1 safety factor



High-Temp

FC510

Premium HI-PAC
one wire braided hose

Meets or exceeds: SAE 100R2 | EN857 Type 1SC

	FC510-04	6.4 mm (0.25 in) DN6	Hi-Pac	SAE 100R2 / EN857	350 BAR (5000 PSI)	-40°C to +150°C -40°F to +302°F	1A
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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: AQP Elastomer	Reinforcement: HI-PAC one 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 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	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 high-temp AQP HI-IMPULSE, two wire braided hose

Meets or exceeds: SAE 100R2 Type S | EN 853 2SN | ISO 1436-1 Type 2SN

	GH195-6	9.5 mm (0.38 in) DN10	AQP High Temp	SAE 100R2 / EN 853 2SN - ISO 1436-1 2SN MSHA IC-84/18 - ABS - DRV - USCG 4	345 BAR (5000 PSI)	-40°C to +150°C -40°F to +300°F	1A
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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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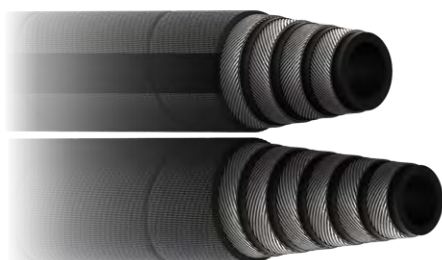
Operating temperature:

-40°C to +150°C (-40°F to +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
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 high-temp four and six wire spiral hose

Meets or exceeds: SAE 100R12 | EN 856 Type R12 performance

Aeroquip by Danfoss	EC525-12	19 mm (0.75 in) DN19	High Temp	Exceeds SAE 100R12 / EN 856	345 BAR (5000 PSI)	-40°C to +149°C -40°F to +300°F	4S 6S
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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: AQP Elastomer	Reinforcement: four wire spiral (-12 to -24) six wire spiral (-32)	Cover: Blue AQP elastomer
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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 | 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
EC525-12	19.0	0.75	30.7	1.21	345.0	5000	1380.0	20000	241.3	9.50	1.28	0.86
EC525-16	25.4	1.00	37.9	1.49	345.0	5000	1380.0	20000	304.8	12.00	1.73	1.16
EC525-20	31.8	1.25	46.6	1.84	240.0	3500	960.0	14000	419.1	16.50	2.31	1.55
EC525-24	38.1	1.50	53.9	2.12	240.0	3500	960.0	14000	508.0	20.00	2.96	1.99
EC525-32	50.8	2.00	67.3	2.65	225.0	3250	900.0	13000	635.0	25.00	4.42	2.97



GH120

Premium low-temp
two wire braided hose

Meets or exceeds: SAE 100R16 Types | EN 857 Type 2SC | ISO 11237-1 Type 2SC

Aeroquip by Danfoss	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:

Hose construction:	Inner Tube: AQP Elastomer	Reinforcement: two wire braid	Cover: Dura-Tuff
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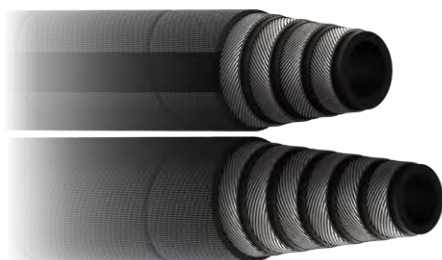
Operating temperature:

-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	6000	1656.0	24025	51.0	2.00	0.30	0.20
GH120-6	9.5	0.38	17.4	0.68	345.0	5000	1380.0	20025	64.0	2.50	0.40	0.27
GH120-8	12.7	0.50	20.8	0.82	310.0	4500	1240.0	18000	89.0	3.50	0.58	0.39
GH120-10	15.9	0.62	24.9	0.98	276.0	4000	1104.0	16000	102.0	4.00	0.74	0.50
GH120-12	19.0	0.75	28.4	1.12	241.0	3500	964.0	14000	121.0	4.75	0.92	0.62
GH120-16	25.4	1.00	35.7	1.41	193.0	2800	772.0	11200	152.0	6.00	1.22	0.82
GH120-20	31.8	1.25	43.3	1.71	159.0	2300	636.0	9225	210.0	8.25	1.59	1.07
GH120-24	38.1	1.50	51.5	2.03	138.0	2000	552.0	8000	254.0	10.00	2.11	1.42
GH120-32	50.8	2.00	63.9	2.51	103.0	1500	412.0	6000	318.0	12.50	2.80	1.88



EC810

Premium low-temp
four and six wire spiral hose

Meets or exceeds: SAE 100R15 | EN 856 Type R15

EC810-12	19.0 mm (0.75 in) DN19	Low-Temp	Exceeds SAE 100R16 / EN856	420 BAR (6100 PSI)	-57°C to +100°C -70°F to +212°F	4S 6S
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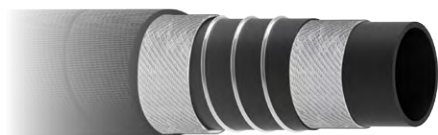
Typical application:

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

Agency specifications:

Hose construction:	Inner Tube: AQP Elastomer	Reinforcement: four wire spiral (-12 to -16) six wire spiral (-20 to -32)	Cover: Synthetic rubber
Operating temperature:	-57°C to +100°C (-70°F to +212°F)		
Qualified fittings:	4S series 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
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	350	5 100	1 400	20 305	630	24.80	6.70	4.50



Suction

FC619

Premium suction
one wire braided hose

Meets or exceeds: SAE 100R4 | ISO 18752

FC619-19	19.1 mm (0.75 in) DN19	Exceeds SAE 100R4 / ISO 18752	21 BAR (300 PSI)	-40°C to +135°C -40°F to +275°F	HALF BEND	1A
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Typical application:

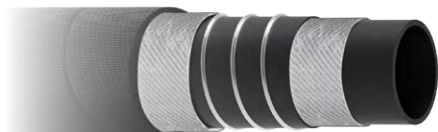
Suction and transfer applications for petroleum hydraulic fluids, fuel, lubricating oils, gasoline, water and many other industrial fluids.

Agency specifications:

Hose construction:	Inner Tube: Synthetic rubber	Reinforcement: Helical wire between two textile reinforcement layers	Cover: Synthetic rubber
Operating temperature:	-40°C to +135°C (-40°F to +275°F)		
Qualified fittings:	1A 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	19.1	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

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

Qualified fittings: 1A and 1G & Winner 2 pc: -12 to -32
Hose barb with band clamps: -12 thru -48 with a reduced operating pressure rating of 4 bar (60 psi)

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.

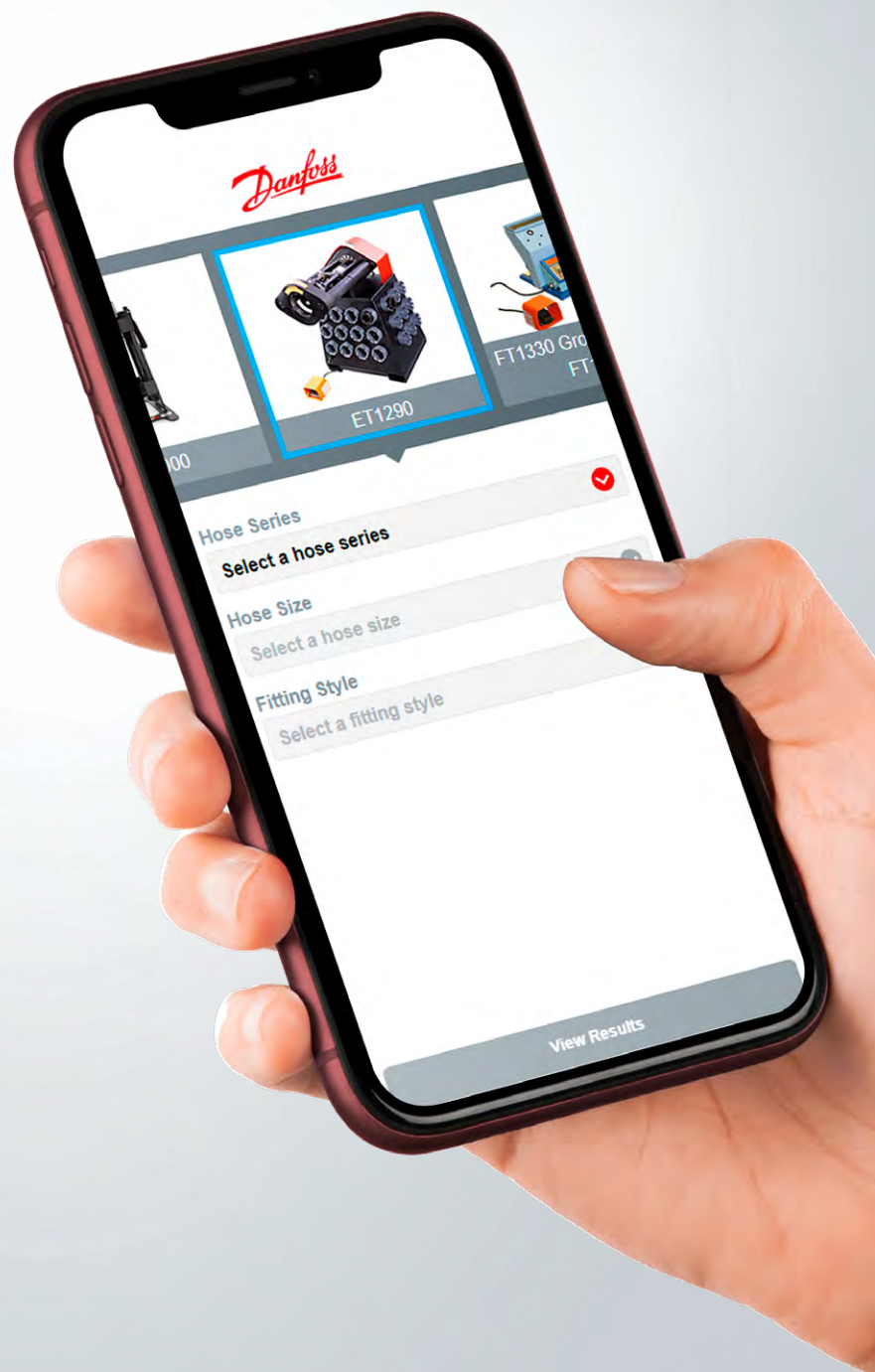
Mobile crimp tool

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

BRAND	PART #	SIZE (I.D.)	AGENCY SPECIFICATIONS	PRESSURE	TEMP	SAE BEND	FITTING
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 2PC

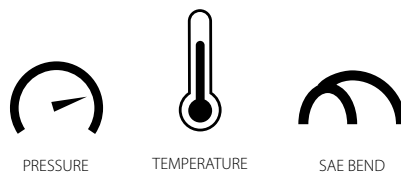
Agency specifications

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.



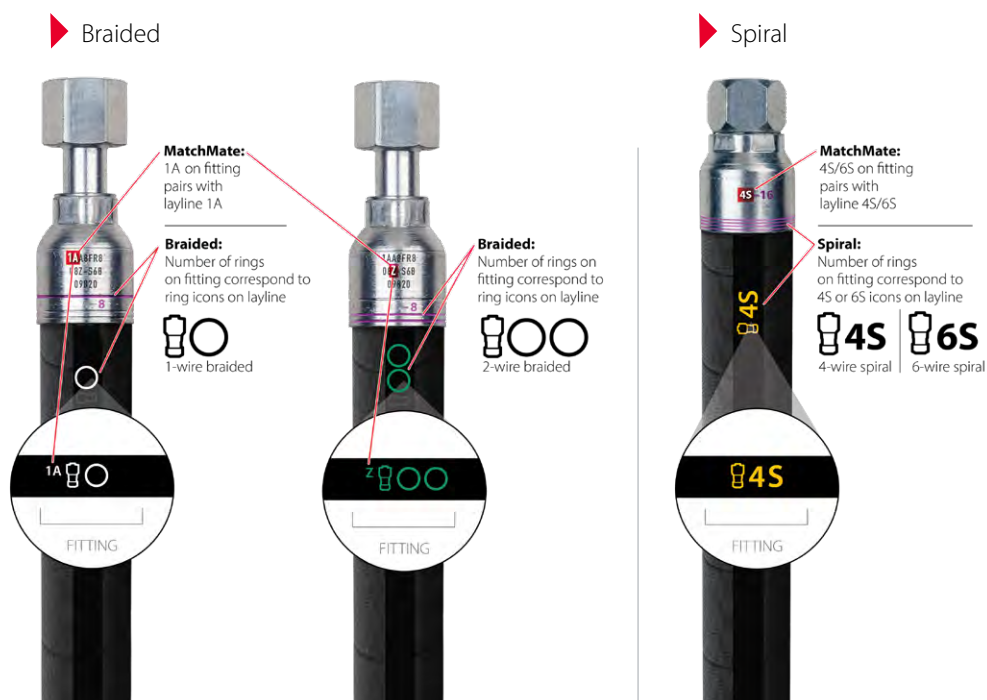
EN standards

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.



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 will now 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 Aeroquip distributor or:

Danfoss Distribution II
 A/S Nordborgvej 81,
 6430
 Nordborg, denmark
www.Danfoss.com/hydraulics
 Inside.Sales.DPS.EMEA@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%

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

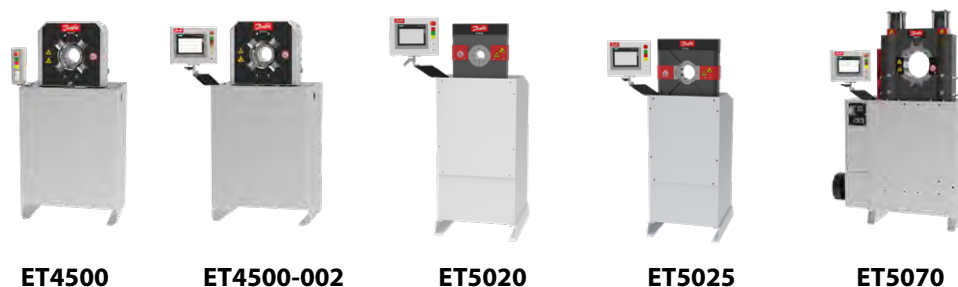

ET4100
ET4200
ET4250
ET4300
ET4350
ET4400

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.

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