



Aeroquip
by Danfoss



The EDGE™ Series Product Line

The next generation of Aeroquip has an **EDGE**.

The EDGE Premier Hydraulic Series

TIPCO
TECHNOLOGIES | Focused
Flexible
Solutions

TIPCO  e-Store



Engineered to redefine the standard.

The Aeroquip by Danfoss | EDGE Series is the embodiment of our engineering mastery and our commitment to the future. Our essence is defined by three key words:

Innovation:

The innovation of the EDGE Series lies in making our most advanced, premium technologies the new, accessible standard for the hoses our customers rely on every day.

Performance:

The EDGE Series redefines the standard for hydraulic hose performance by embedding our most advanced durability and reliability technology into every hose.

Legacy:

The EDGE Series is built on the foundation of the Aeroquip legacy, using our deep industry knowledge to solve the real-world challenges of tomorrow.

The new benchmark of performance.

Our legacy. Redefined.

A legacy isn't just something to protect; it's something to build upon. That's why we created the Aeroquip EDGE Premier Hydraulic Series - **a complete portfolio of hydraulic hoses where premium performance is the new standard.**

We listened to our trusted partners, invested in groundbreaking technology, and engineered our most advanced features - like a 100x more durable cover and a one-million-cycle rating - into every hose. The result is more than a product; it's the next chapter in performance, built by learning from the past to define the future.



Table of contents

The Aeroquip Difference	5
Performance you can measure	6-7
EDGE braided hose	8
GH681	9
GH781	10
EC881	11
EDGE spiral hose	12
GH493	13
FC500	14
EC600	15
EDGE suction hose	16
FC619c	17
Fittings	18-19



Engineered for real-world reliability.

How we engineer the EDGE.

Our superior performance isn't an accident; it's engineered from the inside out. We control the entire manufacturing process to guarantee quality and reliability.

We embed our most advanced innovations into the EDGE Series - setting a new industry benchmark and making excellence the new expectation.

Built for excellence, from the inside out.

Proprietary Rubber Compounds:

We mix our own rubber compounds in house. This gives us absolute control over the hose's durability, flexibility, and resilience, ensuring it performs exactly as designed.

Advanced Hose Reinforcement:

We develop our own hose reinforcement systems, engineered to exceed industry standards for strength and impulse life. This is the backbone of our performance promise, built on decades of Aeroquip expertise.

Superior Abrasion Resistance:

We formulate our own unique, abrasion-resistant hose coverings that create a protective shield, dramatically extending service life even in the most demanding environments.





The zero-friction upgrade.

On any job site, downtime is the enemy. It costs money, delays projects, and creates risk. Too often, the standard hydraulic hose is the first point of failure, - worn down by abrasion, heat, flexing, and pressure. Today, that changes.

We've taken the trusted Aeroquip hoses you already specify and given them a massive performance upgrade. This is the Aeroquip EDGE™ Premier Hydraulic Series, where our most advanced technology now comes standard.

This isn't a new line you have to special order. It's a running change to the products you already use, now engineered to eliminate common failures:

- **100x more abrasion resistant:** Our revolutionary DuraTUFF+™ cover protects your investment from external wear and tear.
- **1,000,000 impulse cycles:** Certified to outlast the competition, keeping your machines running and your operations profitable.
- **Tighter bend radius:** DuraFLX™ technology makes installation faster and easier, saving labor costs.
- **Zero leakage:** When paired with our proven 1A series fittings, you get a complete, leak-free solution you can trust from end to end.

The upgrade to the Aeroquip EDGE Series is an upgrade in confidence. You get the dependability you've always relied on, now with the next-generation performance you've demanded.

A new era. A new benchmark. A new EDGE.

A system of reliability.

The EDGE Six-Point System

The EDGE Six-Point System is our uncompromising standard of performance - six critical pillars engineered into every EDGE Series hydraulic hose. It's not marketing hype. It's performance you can measure.

The six EDGE pillars are:

- Impulse
- Abrasion
- Bend Radius
- Pressure
- Temperature
- Cool-Down Leakage

Together, they redefine what a hydraulic hose should deliver. The EDGE Six-Point System is our promise that every hose is built tougher, flexes further, seals better, and performs longer—no matter how demanding the application.

Note: Temperature, bend and pressure performance varies by hose type and size. Refer to product datasheets for exact specifications.



1M

One million impulse cycles

performance on ALL EDGE hoses

Trust in a hose proven to withstand one million impulse cycles, ensuring unmatched reliability and longevity.



up to

6500 psi

pressure performance

on select EDGE series hoses

Engineered for high-pressure applications, all EDGE Series hoses exceed industry standards, with specific products rated up to 6,500 psi (448 bar).



100x

higher abrasion resistance

performance on ALL EDGE hoses

Drastically reduce downtime and hose failure with our DuraTUFF+™ premium abrasion cover that is 100 times more resistant to abrasion than standard hoses.



up to

1/3 bend

smaller radius

on select EDGE series hoses

Simplify installation with flexible EDGE Series hoses. All offer a 1/2 bend radius, with select hoses achieving 1/3 or better. DuraFLX™ technology ensures flawless performance at high temperatures and pressures.



Zero

Cool-down leakage

performance on ALL EDGE hoses

Achieve a perfect, leak-free seal. When an Aeroquip EDGE Series hose is paired with a genuine Aeroquip fitting, you eliminate frustrating and costly cool-down leakage.



up to

+275° F

temperature range

on select EDGE series hoses

Built for demanding, high-temperature environments, all EDGE Series hoses feature high-temperature performance, with select hoses rated for continuous operation up to +275° F (135° C).

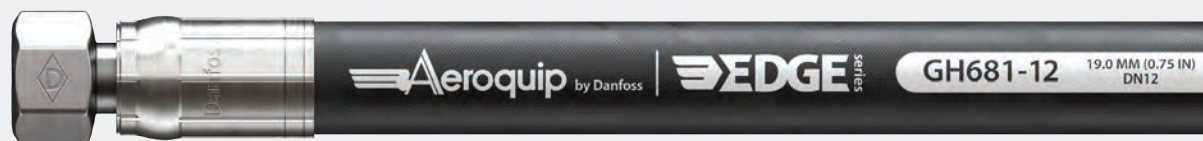
The ultimate in braided hose.

Where strength and flexibility meet.

The **Danfoss EDGE Premier Hydraulic Series** offers a robust selection of braided hydraulic hoses designed for reliable performance in a variety of applications. This series includes the GH681, GH781, and EC881, which are engineered to provide a durable and flexible solution for demanding hydraulic systems. As part of the Danfoss core hydraulics portfolio, these hoses deliver consistent quality and are a trusted choice for demanding hydraulic applications.

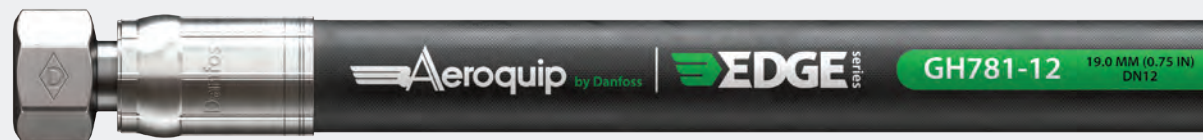


EDGE Premier Hydraulic Series • Braided

GH681Core premium
one wire braided hose**Meets or exceeds:**SAE 100R17 | SAE 100R1 | EN 857 Type 1SC performance
ISO 18752 | ISO 1436 1SN**Typical application:**Petroleum and fire-resistant hydraulic fluids, fuel and
lubricating oils, gasoline, water and other industrial fluids**Agency specifications:** ABS | DNV | MSHA | USCG
Hose construction:
Inner tube: Nitrile
Reinforcement: One wire braid
Cover: DuraTUFF+ premium abrasion
Operating temperature: -46°C to +126°C (-50°F to +260°F)**Qualified fittings:** 1A series | 1R series (-4, -6, -8, -12, -16)

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure	Min. Burst Pressure			Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH681-3	4,8	0.19	10,9	0.43	250,0	3,650	1,000	14,500	45,0	1.77	0,16	0.11
GH681-4	6,4	0.25	12,9	0.51	255,0	3,700	1,020	14,800	50,0	1.97	0,21	0.14
GH681-5	7,9	0.31	14,1	0.55	225,0	3,250	900	13,000	55,0	2.17	0,22	0.15
GH681-6	9,5	0.38	16,3	0.64	235,0	3,400	940	13,600	63,0	2.48	0,31	0.21
GH681-8	12,7	0.50	19,9	0.78	221,0	3,200	883	12,800	90,0	3.54	0,43	0.29
GH681-10	15,9	0.62	22,3	0.88	140,0	2,025	559	8,100	100,0	3.94	0,44	0.29
GH681-12	19,0	0.75	26,0	1.02	138,0	2,000	552	8,000	120,0	4.72	0,56	0.37
GH681-16	25,4	1.00	34,0	1.34	103,0	1,500	414	6,000	150,0	5.91	0,84	0.56
GH681-20	31,8	1.25	41,5	1.63	69,0	1,000	276	4,000	210,0	8.27	1,01	0.68
GH681-24	38,1	1.50	47,9	1.89	52,0	750	207	3,000	250,0	9.84	1,23	0.83
GH681-32	50,8	2.00	64,0	2.52	41,0	600	166	2,400	315,0	12.40	2,01	1.32

EDGE Premier Hydraulic Series • Braided

GH781Core premium
two wire braided hose**Meets or exceeds:**

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

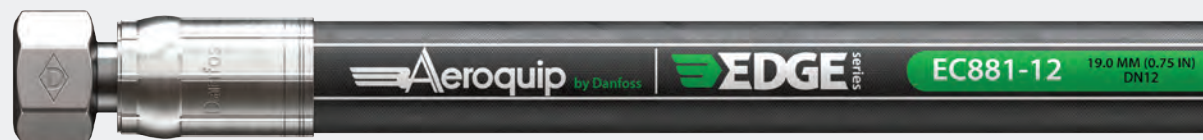
Typical application:

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

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

#	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
GH781-4	6,4	0.25	13,9	0.55	448	6,500	1,792	26,000	50,0	1.96	0,33	0.22
GH781-6	9,5	0.38	17,4	0.69	400	5,800	1,600	23,200	65,0	2.55	0,43	0.29
GH781-8	12,7	0.50	20,9	0.82	350	5,100	1,400	20,400	90,0	3.54	0,58	0.39
GH781-10	15,9	0.62	24,0	0.94	280	4,050	1,120	16,200	100,0	3.94	0,65	0.44
GH781-12	19,0	0.75	27,9	1.10	241	3,500	960	14,000	120,0	4.72	0,79	0.53
GH781-16	25,4	1.00	35,9	1.40	210	3,050	840	12,200	150,0	5.90	1,07	0.72
GH781-20	31,8	1.25	43,4	1.71	172	2,500	688	10,000	210,0	8.26	1,62	1.09
GH781-24	38,1	1.50	51,5	2.03	140	2,050	560	8,200	250,0	9.84	2,08	1.40
GH781-32	50,8	2.00	63,9	2.52	110	1,600	440	6,400	315,0	12.40	2,83	1.90

EDGE Premier Hydraulic Series • Braided

EC881Core premium
two wire braided hose**Meets or exceeds:**

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

Typical application:

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

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

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

PART	SIZE DIMENSIONS				PRESSURE				BEND		WEIGHT	
#	Hose I.D.		Hose O.D. (nominal)		Working Pressure	Min. Burst Pressure			Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC881-4	6.4	0.25	13,6	0.54	450	6,525	1,800	26,100	33,0	1.30	0,32	0.22
EC881-6	9.5	0.38	17,3	0.68	400	5,800	1,600	23,200	42,0	1.65	0,42	0.28
EC881-8	12.7	0.50	17,3	0.82	360	5,220	1,440	20,880	60,0	2.36	0,58	0.39
EC881-10	15.9	0.62	24,0	0.94	350	5,075	1,400	20,300	68,0	2.68	0,75	0.50
EC881-12	19.0	0.75	27,9	1.10	330	4,785	1,320	19,140	80,0	3.15	1,03	0.69
EC881-16	25.4	1.00	34,6	1.36	280	4,060	1,120	16,240	150,0	5.91	1,47	0.99
EC881-20	31.8	1.25	43,4	1.71	172	2,500	688	9,980	210,0	8.27	1,75	1.18
EC881-24	38.1	1.50	51,8	2.04	138	2,000	552	8,000	250,0	9.84	1,91	1.28

Engineered for the extreme.

The strength of spiral hose.

The Danfoss **EDGE Premier Hydraulic Series** of spiral hoses, including the GH493, FC500, and EC600, are engineered for demanding, high-pressure hydraulic applications. These hoses feature a spiral wire reinforcement that provides superior strength and durability for reliable operation in heavy-duty equipment and machinery. As premium offerings in the Danfoss line, they are designed to ensure both safety and high performance in the most challenging environments.



EDGE Premier Hydraulic Series • Spiral

GH493

Core premium
four wire spiral hose

**Exceeds:**

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

Typical application:

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

Typical applications include construction, mining, farming and high performance industrial equipment.

Agency specifications: ABS | DNV | MSHA | USCG

Hose construction:
Inner tube: Nitrile
Reinforcement: Four wire spiral
Cover: DuraTUFF+ premium abrasion

Operating temperature: -40°C to +126°C (-40°F to +260°F)

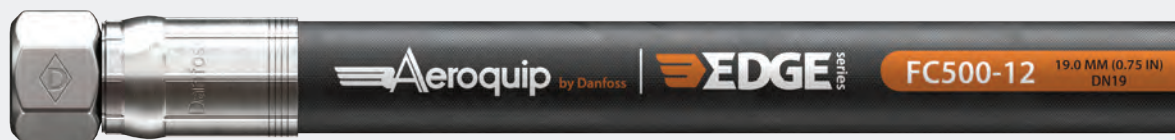
Qualified fittings: 4S series

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

EDGE Premier Hydraulic Series • Spiral

FC500

Core premium
four & six wire spiral hose

**Meets or exceeds:**

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

Typical application:

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

Agency specifications: DNV | MSHA | USCG

Inner tube: Nitrile

Hose construction:
Reinforcement:
Four wire spiral
Six wire spiral (-32)

Cover: DuraTUFF+ premium abrasion

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

Qualified fittings: 4S series (-12 to -24) | 6S series (-32)

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

** Six wire spiral

EDGE Premier Hydraulic Series • Spiral

EC600 | Core premium
four & six wire spiral hose



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

Typical application:
High pressure hydraulic circuits on mobile construction equipment, mining equipment, and industrial applications for pressures up to 6,100 PSI/420 bar.

Agency specifications:	ABS DNV MSHA USCG
	Inner tube: Dura-Pulse patented inner tube
	Reinforcement: Four wire spiral Six wire spiral**
Hose construction:	Cover: DuraTUFF+ premium abrasion
Operating temperature:	-40°C to +127°C (-40°F to +260°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	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC600-12	19,0	0.75	32,2	1.27	420	6,100	1,680	24,400	135,0	5.31	1,52	1.01
EC600-16	25,4	1.00	38,6	1.52	420	6,100	1,680	24,400	165,0	6.5	2,04	1.36
EC600-20**	31,8	1.25	49,7	1.96	420	6,100	1,680	24,400	225,0	8.86	3,89	2.61
EC600-24**	38,1	1.50	57,5	2.26	420	6,100	1,680	24,400	265,0	10.43	4,83	3.24
EC600-32**	50,8	2.00	71,0	2.79	420	6,100	1,680	24,400	375,0	14.76	7,10	4.77

** Six wire spiral

Rethink suction.

Unparalleled durability
and flexibility.

The FC619C Corrugated Suction hose is a top-tier suction hose in the **EDGE Premier Hydraulic Series** product line, engineered to extend hose life and simplify installation. Its primary characteristic is the industry's tightest corrugated hose bend radius which, combined with a reduced force to bend, makes it exceptionally easy to handle and install in confined spaces. This hose is built to exceed SAE 100R4 standards and is resistant to high temperatures, harsh chemicals, and buckling, ensuring reliable, leak-free performance.



EDGE Premier Hydraulic Series • Suction

FC619C | Core premium suction spiral hose



Meets or exceeds:
SAE 100R4 | ISO 18752

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

Agency specifications:	ABS MSHA
	Inner tube: Nitrile
Hose construction:	Reinforcement: Helical wire between two textile reinforcement layers
	Cover: DuraTUFF+ premium abrasion
Operating temperature: -40°C to +135°C (-40°F to +275°F)	
Qualified fittings:	1A series 1G series

PART #	SIZE DIMENSIONS				PRESSURE				BEND		VACUUM	
	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Vacuum Service	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
FC619C-12	19.0	0.75	28.6	1.13	21	305	84	1220	19	0.75	94.8	28
FC619C-16	25.4	1.00	35.0	1.38	17	245	68	980	25.4	1.00	94.8	28
FC619C-20	31.8	1.25	41.6	1.63	14	205	56	820	31.8	1.25	94.8	28
FC619C-24	38.1	1.50	49.2	1.94	10.5	150	42	600	38.1	1.50	94.8	28
FC619C-32	50.8	2.00	61.2	2.41	7	100	28	400	50.8	2.00	94.8	28
FC619C-40	63.5	2.50	76.0	3.00	4	60	16	240	63.5	2.50	94.8	28
FC619C-48	76.2	3.00	88.6	3.49	4	60	16	240	76.2	3.00	94.8	28

Zero worries.

A leak-proof seal, every time.

Pairing Danfoss fittings with **EDGE Premier Hydraulic Series** hoses creates a matched system that eliminates “cool-down” leakage, which can occur as a system’s temperature drops. This is critical for preventing costly fluid loss, avoiding environmental contamination, and reducing safety hazards. This perfectly matched hose and fitting combination ensures a more reliable and secure hydraulic connection, enhancing both safety and operational efficiency.





Premium Danfoss fittings

The right product for every application

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

Braided Hose Fittings



1A Series

- Dura-Kote™ plating technology for up to 1,000 hours of corrosion resistance
- Bite the wire technology for best in class connection and sealing
- Class 0 cool-down leakage SAE J1176 on approved hose styles
- Over 550 1A series part numbers available
- Danfoss' MatchMate® program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly

Spiral Hose Fittings



4S/6S Series

- Dura-Kote plating technology for up to 1,000 hours of corrosion resistance
- Danfoss patent-pending Dura-Seal™ technology eliminates hose assembly cool-down leakage
- Class 0 cool-down 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



1W Series

- Internal skive high-performance spiral fitting with design-related sockets
- Blow-off prevention for critical applications
- Designed to withstand high-pressure environments, with a capacity of up to working 500 bar (7250 psi).
- Tested to two million flex impulse cycles, proving their durability and reliability over the long-term
- Class 0 cool-down leakage per SAE J1176
- Double O-ring Dura-Seal for sizes -20 to -32 providing extra protection and durability for large size hoses

Engineered solutions.

The MatchMate® System

Danfoss MatchMate® fitting system:
Match fittings to hose with ease.

Braided hose:

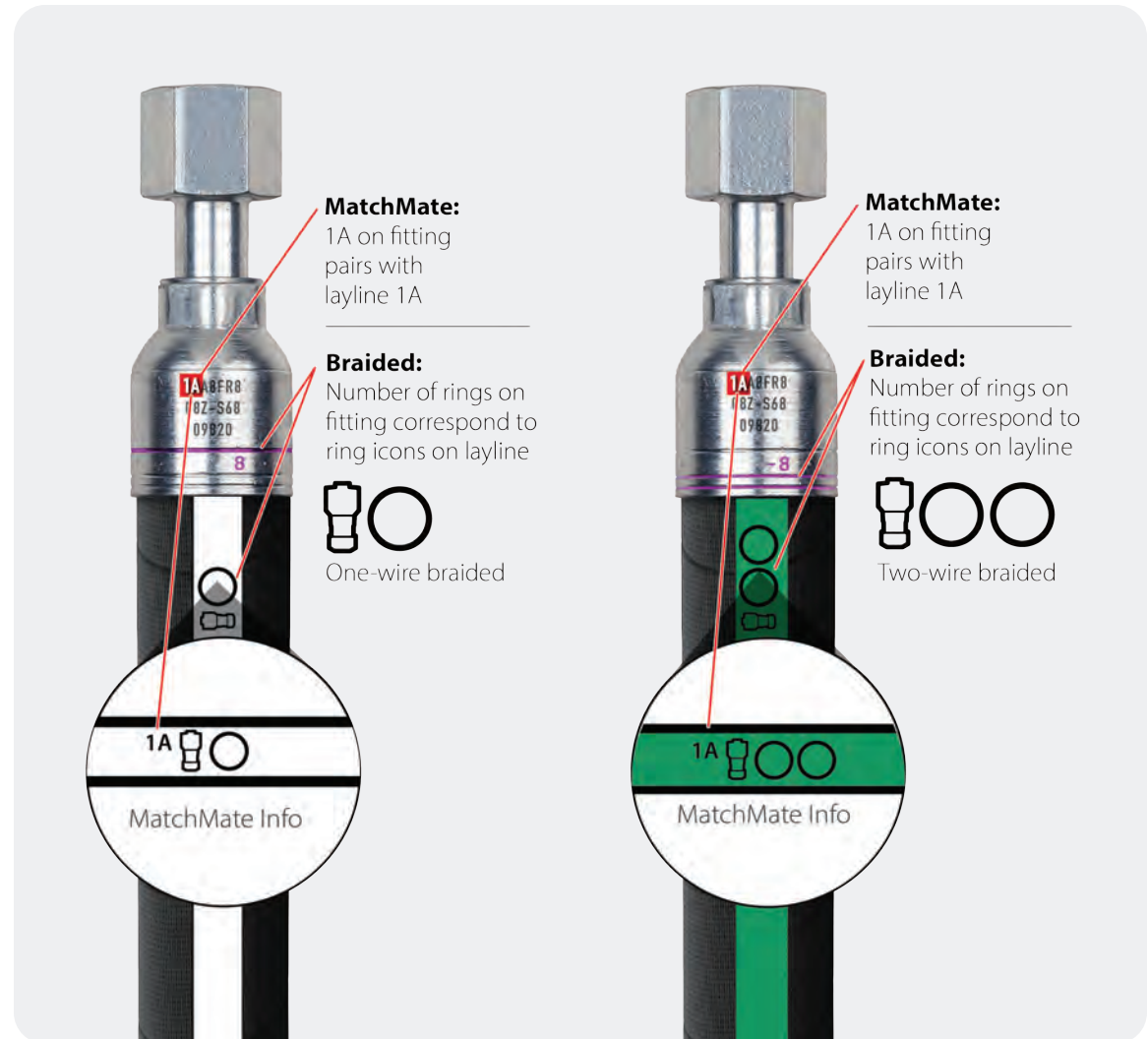
Fitting part number:

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

One or two-wire braid:

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

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



Spiral hose:

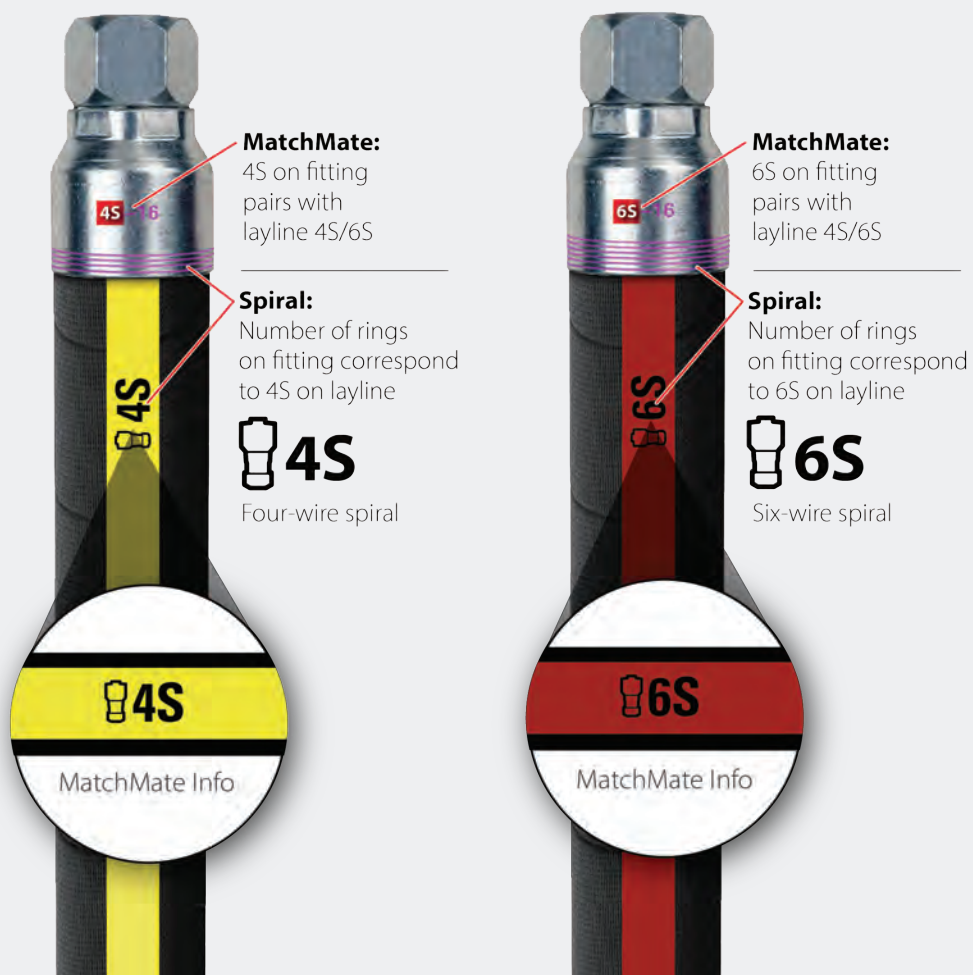
Fitting part number:

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

Four or six-wire spiral

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

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



Aeroquip &
EDGE Branding

Hose size
(millimeters/inches)



Part
number

Intelligent layline

EDGE layline updates

What is the Danfoss
Intelligent layline?

Danfoss's innovative intelligent layline system simplifies hydraulic hose selection by displaying all essential hose specifications at a glance. This intuitive design features clear icons printed directly on the hose, providing instant identification of critical data such as pressure rating, temperature range, and bend radius. With Danfoss's intelligent laylines, you can streamline maintenance and ensure you have the right component for the job, saving time and preventing errors.





Further information available on
Danfoss' website: danfoss.com

Danfoss A/S
Nordborgvej 81
6430 Nordborg
Denmark
danfoss@danfoss.com
CVR reg. no. 20165715