

Core industrial
hose catalog - Americas



Danfoss **core industrial** hose catalog

Connecting industries, powering progress.





Embracing a **fresh product strategy** for core industrial hose

Danfoss Power Solutions has launched a new Core Industrial Hose Strategy. This strategic initiative aims to provide customers with a comprehensive range of hoses, catering to various industries and applications including water, oil & petroleum, air & multipurpose, steam, material handling, chemical, LPG, and food & beverage.

With the implementation of the Core Industrial Hose Strategy, Danfoss ensures that these value-based hoses will be readily available at all times, accompanied by significantly shorter lead times. This commitment to improved availability and faster delivery underscores Danfoss' dedication to meeting the evolving needs of its customers, enabling them to streamline their operations and enhance overall efficiency.



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Our history

A tradition of excellence



Our Danfoss industrial hose line comes from a long tradition of excellence and innovation. Boston Woven Hose & Rubber Company, founded in 1870, was among the first companies to produce a tubular rubber hose. These early pioneers in the industrial hose industry passed on their expertise from one generation to the next. In 150 years, Boston by Danfoss has grown from a tiny operation to a global leader in electrical components and systems for power quality, distribution and control; hydraulics components, systems and services for industrial and mobile equipment; aerospace fuel, hydraulics and pneumatic systems for commercial and military use; and truck and automotive drivetrain and powertrain systems for performance, fuel economy and safety.



Who we are now

Engineering tomorrow

Boston
by Danfoss

At Danfoss, we value the knowledge of these early innovators, so much so that in 2021, we bought the company. Our Danfoss industrial hose products build upon the expertise of these early innovators in partnership with our cutting-edge technology to make us the leading authority in industrial hose.

Every industrial hose application requires something different, whether it's high or low pressure, fast or slow transfer rates, or materials that range from air to water to hazardous chemicals. With this wide range of requirements we are proud to announce that Danfoss brand is now **Boston by Danfoss**. At Boston by Danfoss, we have an extensive portfolio of industrial hoses to suit a range of markets and applications with unique requirements.



Laying it on the line

Our laylines provide critical information at a glance

Every hose is **easily identified**

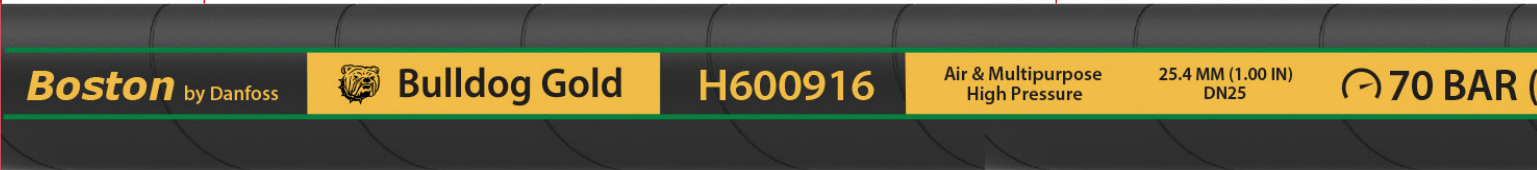
Every foot of every Boston by Danfoss hose is easily identified with permanent branding allowing for quicker, easier and safer hose selection — at a glance you can see all the information needed to make the right choice.

Brand

Boston by Danfoss name on every hose is assurance that you are relying on a global leader.

Category / Application

Industry category & application for which the hose was designed for.



Product name

Memorable product name and icon allowing for easy recognition in the field.

Series / Size

Product series and size identification for additional verification that you are choosing the right product for your needs.

ID / DN

Inner dimension (millimeters and inches) and diametre nominal (DN), which also denotes the inside diameter.

Boston by Danfoss

Brand name identity

(and the quality that goes behind it)

The Boston by Danfoss brand name is on every hose—safety and reliability are in every hose. With over 150 years worth of reputation you are assured maximum value and consistent quality with every hose product for every application.

Temperature

Working temperature range in Celsius and Fahrenheit.



Warning label

Warning labels on all hoses to ensure safety is a priority when handling Danfoss products.

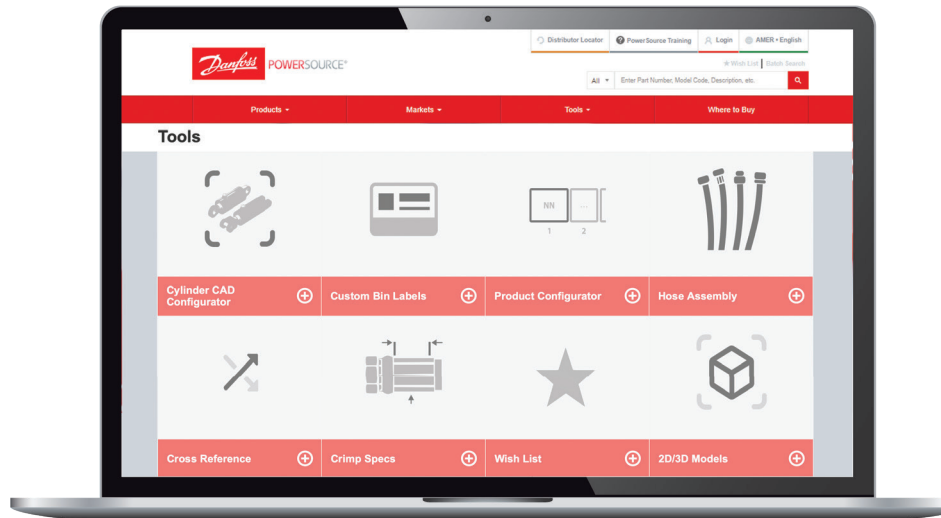
Operating pressure

Maximum operating pressure in BAR and pounds per square inch (PSI).

Knowledge is **power**

Single source for everything you need to know

POWERSOURCE®



Danfoss PowerSource

PowerSource: the online tool is your single source for everything you need to know about Danfoss' fluid conveyance products. With the click of your mouse, be immediately connected to Danfoss' extensive resources including: product literature library, training videos, crimp specs, hose assembly configurator, cross reference guides, and so much more...

Because this extensive product resource is online and the resources are digital, all of the information is easily transferable to your customers.



Products

Search, spec, and sell over 200,000 Danfoss Products.



Cross Reference

Find equivalent Danfoss parts for thousands of competitor parts.



Product Configurators

Generated customized bills of materials for hose assemblies, actuation, power and motion control products.



Literature & videos

Deliver detailed product and online training materials at the speed of businesses worldwide.



Locator

Find local and regional Danfoss product dealers.



3D Models

View, download and share easy-to-use digital models.

DanfossPowerSource.com

Marketing Resources

Need more info? We have it!



Visit

Danfoss.com/industrialhose

Here you will find videos, a link to our entire portfolio, marketing materials and more.

Boston Catalog & Market Brochures

Target market selling with key application and product mapping.



Sell Sheets & Quick Reference Guide

Product DNA of what, where, how and who to sell against.



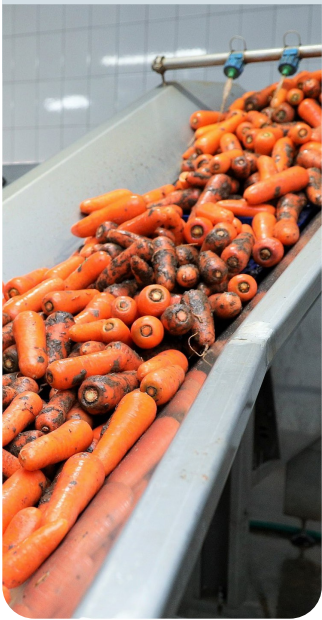
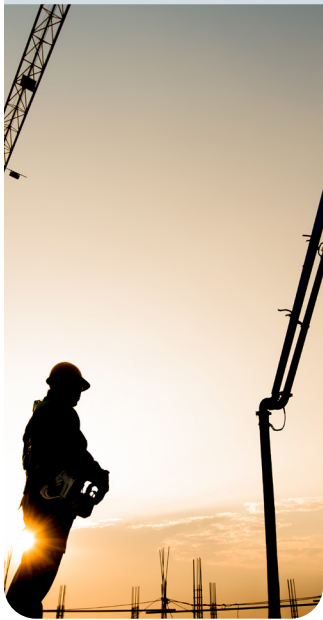
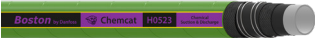
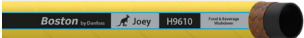
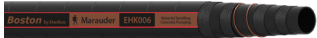
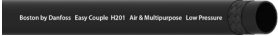
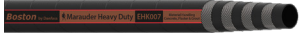
Much more...

Browse other sales tools that are available.



To order: **My.Danfoss.com**

Core industrial hose market categories, applications & products

Air & Multipurpose	Chemical	Food & Beverage	Material Handling
			
			
Bulldog Gold H6009 Air & Multipurpose Hose  pg 12	Chemcat H0523 Chemical Hose  pg 15	Joey Washdown 1000 H9610 Food & Beverage Hose  pg 16	Marauder EHK006 Material Handling Hose  pg 17
Easy Couple H201 Air & Multipurpose Hose  pg 13			Marauder Heavy Duty EHK007 Material Handling Hose  pg 18
Greyhound EHA500 High Pressure Air & Multipurpose Hose  pg 14			

Oil & Petroleum



Puma H0363
S&D Petroleum Hose

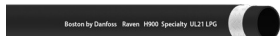


pg 19

Specialty



UL H900
LPG Hose



pg 21

Steam

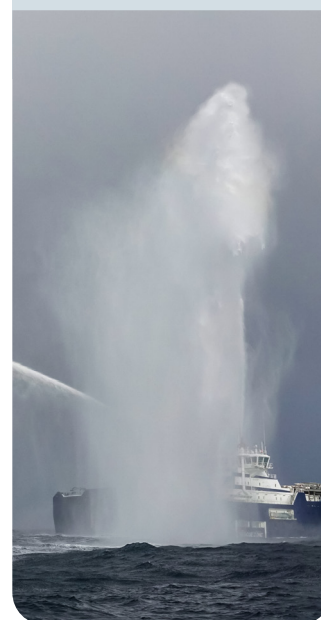


Steam Slayer EH084
Steam Hose

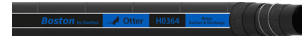


pg 23

Water

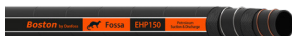


Otter H0364
Water Hose



pg 26

Fossa EHP150
S&D Petroleum Hose



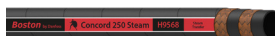
pg 20

Hydrocarbon Drain H9690
Specialty Hose



pg 22

Concord 250 H9568
Steam Hose



pg 24

Mink EHW150
Water Hose



pg 27

Royalflex H1196
Water Hose



pg 28

High Pressure



H6009

Bulldog Gold



Application

- Provide power to air-operated construction equipment
- Power air-operated drills, boring, and mining equipment

Markets

- Construction
- Mining
- Oil and gas exploration
- Water drilling
- Ship building

Construction

Tube Nitrile (RMA Class A)

Reinforcement

1.00" - 1.25" 1-wire braid
1.50" - 3.00" 2-wire braid
4.00" 3-wire braid

Cover Pin-pricked carboxylated nitrile

Color Black

Certification

RMA Class A

Operating temperature

-40°C to +121°C
(-40°F to +250°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H600924-100	38.1	1.50	54.2	2.13	41.0	600	165	2400	2.01	1.34	30.5	100
H600932-100	50.8	2.00	67.5	2.66	41.0	600	165	2400	2.95	1.97	30.5	100
H600940-100	63.5	2.50	80.2	3.16	41.0	600	165	2400	3.75	2.50	30.5	100
H600948-100	76.2	3.00	94.5	3.72	41.0	600	165	2400	4.72	3.15	30.5	100
H600964-100	101.6	4.00	127.0	5.00	35.0	500	138	2000	7.97	5.32	30.5	100

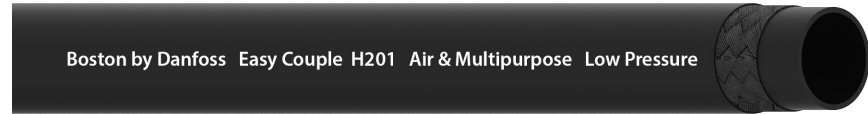
Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Low Pressure

H201

Easy Couple



Application

- Air and water transfer
- Pneumatic tools
- Air tools

Markets

- Oil and gas exploration
- Construction
- Mining
- Plastic molding

Construction

Tube Synthetic rubber (RMA Class A)

Reinforcement

1-braid fiber

Cover Synthetic rubber

Colors Black (BK), Blue (BU),
Red (RD), Green (GR),
Gray (GY) and Yellow (YW)

Certifications

RMA Class A tube
MSHA IC - 46/6 Black, MSHA IC - 84/62 Blue,
MSHA IC - 84/47 Red, MSHA IC - 84/48 Green,
MSHA IC - 84/64 Gray, MSHA IC - 84/63 Yellow

Operating temperature

Air and water

-40°C to +100°C (-40°F to +212°F)

Oil

-40°C to +127°C (-40°F to +260°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H20104BK-250R	6.4	0.25	12.7	0.50	20.7	300	83.0	1200	0.13	0.09	76.2	250
H20106BK-250R	9.5	0.38	17.0	0.67	20.7	300	83.0	1200	0.19	0.13	76.2	250
H20108BK-250R	12.7	0.50	19.6	0.77	20.7	300	83.0	1200	0.22	0.15	76.2	250
H20110BK-250R	15.9	0.62	23.6	0.93	20.7	300	83.0	1200	0.34	0.23	76.2	250
H20112BK-250R	19.0	0.75	26.3	1.04	20.7	300	83.0	1200	0.39	0.26	76.2	250
H20116BK-250R	25.4	1.00	35.0	1.38	13.8	200	55.0	800	0.57	0.38	76.2	250

Coupling info:

Visit PowerSource crimp specs at
danfoss.com/crimp for crimp specifications

High Pressure



EHA500

Greyhound



Application

- High-pressure air service

Markets

- Construction
- Oil field equipment
- Drilling equipment
- Mining
- Rental industry
- Steel
- Paper

Construction

Tube Oil-resistant nitrile rubber

Reinforcement

High-tensile steel wire

Cover Pin-pricked, abrasion, ozone, and weather resistant SBR rubber blend

Color Yellow

Operating temperature

-40°C to +93°C
(-40°F to +200°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EHA500-08YW-100	12.7	0.50	23.0	0.91	41.0	600	165	2400	65.0	2.56	0.51	0.34	30.5	100
EHA500-12YW-100	19.1	0.75	30.0	1.18	41.0	600	165	2400	95.0	3.74	0.62	0.42	30.5	100
EHA500-16YW-100	25.4	1.00	36.0	1.42	41.0	600	165	2400	125.0	4.92	0.88	0.59	30.5	100
EHA500-20YW-100	31.8	1.25	43.0	1.69	41.0	600	165	2400	160.0	6.30	1.12	0.75	30.5	100
EHA500-24YW-100	38.1	1.50	50.0	1.97	41.0	600	165	2400	190.0	7.48	1.55	1.04	30.5	100
EHA500-32YW-100	50.8	2.00	66.0	2.60	41.0	600	165	2400	225.0	8.86	2.51	1.69	30.5	100
EHA500-40YW-100	63.5	2.50	80.0	3.15	41.0	600	165	2400	315.0	12.40	3.36	2.26	30.5	100
EHA500-48YW-100	76.2	3.00	93.9	3.70	41.0	600	165	2400	380.0	14.96	4.49	3.02	30.5	100
EHA500-64YW-100	101.6	4.00	122.0	4.80	41.0	600	165	2400	510.0	20.08	6.77	4.55	30.5	100

Coupling info:

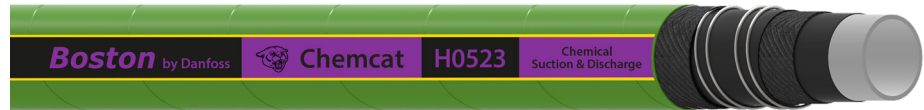
Visit PowerSource crimp specs at
danfoss.com/crimp for crimp specifications

Chemical Transfer



H0523

Chemcat



Application

- For transfer of acids, chemicals, solvents, and petroleum products
- Food transfer
- Potable water

Markets

- Chemical petroleum industry
- Bulk hauling
- Ship building
- In-plant transfers
- Forest products
- Tank truck
- Paper/pulp industry

Construction

Tube UHMW-PE,
FDA compliant material

Reinforcement

2-ply fiber and dual helical wires

Cover EPDM

Color Green (GN), Purple (PR)

Certifications

FDA compliant
Meets DIN & ANSI requirements

Operating temperature

-40°C to +121°C
(-40°F to +250°F)

Warning: Intermittent

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H052312GN-100	19.0	0.75	30.6	1.20	20.7	300	82.8	1200	101.6	4.00	94.8	28	0.46	0.31	30.5	100
H052316GN-100	25.4	1.00	38.7	1.52	20.7	300	82.8	1200	139.7	5.50	94.8	28	0.82	0.55	30.5	100
H052320GN-100	31.8	1.25	47.8	1.88	20.7	300	82.8	1200	152.4	6.00	94.8	28	1.00	0.67	30.5	100
H052324GN-100	38.1	1.50	54.1	2.12	20.7	300	82.8	1200	190.5	7.50	94.8	28	1.33	0.89	30.5	100
H052332GN-100	50.8	2.00	66.8	2.62	20.7	300	82.8	1200	203.2	8.00	94.8	28	1.74	1.16	30.5	100
H052340GN-100	63.5	2.50	79.5	3.12	20.7	300	82.8	1200	203.2	8.00	94.8	28	2.13	1.42	30.5	100
H052348GN-100	76.2	3.00	92.2	3.62	17.2	250	68.8	1000	228.6	9.00	94.8	28	2.52	1.68	30.5	100
H052364GN-100	101.6	4.00	118.6	4.67	12.1	175	48.8	700	381.0	15.00	94.8	28	3.39	2.26	30.5	100

Coupling info:

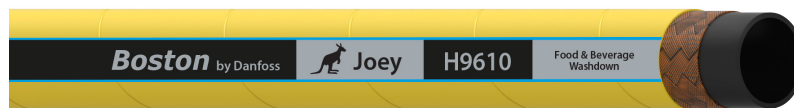
Visit PowerSource crimp specs at
danfoss.com/crimp for crimp specifications

Cleaning Service



H9610

Joey Washdown 1000



Application

- For washdown of food processing facilities and equipment

Markets

- Food processing
- Industry cleaning
- Construction
- Poultry

Construction

Tube Nitrile

Reinforcement

1-braid wire

Cover Nitrile

Colors Yellow (YW), Gray (GY)

Operating temperature

-40°C to +82°C

(-40°F to +180°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
H961006YW-350R	9.5	0.38	17.8	0.70	70.0	1000	280	4000	127.0	5.0	0.35	0.24	106.7	350
H961008YW-350R	12.7	0.50	21.6	0.85	70.0	1000	280	4000	177.8	7.0	0.48	0.32	106.7	350
H961012YW-350R	19.0	0.75	29.4	1.16	70.0	1000	280	4000	241.3	9.5	0.77	0.52	106.7	350

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Concrete, Plaster & Grout



EHK006

Marauder



Application

- For high pressure concrete pumping
- For high pressure spraying plaster, grout, sand, gypsum, and ready mixed concrete
- Light weight for hand held applications

Markets

- Construction
- Cement
- Swimming pool
- Tunnel faces
- Dams

Construction

Tube Abrasion resistant anti-static natural rubber

Reinforcement

High tensile synthetic textile and anti-static copper wire

Cover Abrasion, ozone and weather resistant pin-pricked synthetic rubber

Color Black

Certifications

Meets the requirements of ASME B30.27-2014

Operating temperature

-40°C to +70°C
(-40°F to +158°F)

Abrasion loss value acc. DIN53516 $\leq 60\text{mm}^3$

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
EHK006-20-100	32.0	1.25	48.8	1.92	85.0	1233	178	2581	1.22	.820	30.5	100
EHK006-24-100	38.0	1.50	57.0	2.24	85.0	1233	178	2581	1.81	1.21	30.5	100
EHK006-32-100	50.8	2.00	72.0	2.83	85.0	1233	178	2581	2.40	1.61	30.5	100
EHK006-40-100	63.5	2.50	86.3	3.40	85.0	1233	178	2581	3.01	2.02	30.5	100
EHK006-48-100	76.2	3.00	99.6	3.92	85.0	1233	178	2581	3.65	2.45	30.5	100
EHK006-64-100	101.6	4.00	126.0	4.92	85.0	1233	178	2581	4.74	3.18	30.5	100
EHK006-80-100	127.0	5.00	154.4	6.08	85.0	1233	178	2581	6.38	4.29	30.5	100

Coupling info:

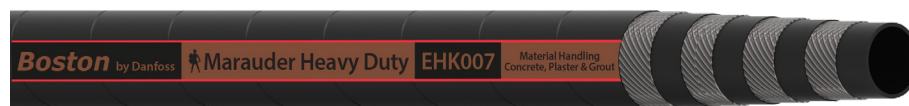
Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Concrete, Plaster & Grout



EHK007

Marauder Heavy Duty



Application

- For high pressure concrete pumping and placing, used in the end of concrete pump boom
- Heavy duty construction for applications needing long lasting durability

Markets

- Construction
- Cement placement
- Boom truck

Construction

Tube Abrasion resistant anti-static natural rubber and CBR rubber blend

Reinforcement

High tensile steel cords

Cover Abrasion, ozone and weather resistant pin-pricked special synthetic rubber

Color Black

Certifications

Meets the requirements of ASME B30.27-2014 Abrasion loss value acc. DIN53516 $\leq 60\text{mm}^3$

Operating temperature

-40°C to +70°C
(-40°F to +158°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EHK007-32-100	50.8	2.00	70.0	2.76	86.0	1250	200	2900	200	7.87	3.03	2.04	30.5	100
EHK007-40-100	63.5	2.50	88.0	3.46	86.0	1250	200	2900	240	9.45	4.48	3.01	30.5	100
EHK007-48-100	76.2	3.00	102.0	4.02	86.0	1250	200	2900	275	10.83	5.46	3.67	30.5	100
EHK007-64-100	101.6	4.00	130.0	5.12	86.0	1250	200	2900	350	13.78	8.46	5.68	30.5	100
EHK007-80-100	127.0	5.00	155.0	6.10	86.0	1250	200	2900	425	16.73	9.63	6.47	30.5	100

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Suction & Discharge



H0363

Puma



Application

- For suction and discharge of petroleum products

Markets

- Tank truck
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Batch plants

Construction

Tube NBR rubber (RMA Class A)

Reinforcement

2- or 4-ply fiber with dual helical wires and anti-static copper wire

Cover NBR rubber blend

Color Black

Certification

RMA Class A

Operating temperature

-40°C to +82°C
(-40°F to +180°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H036312BK-100	19.0	0.75	28.8	1.13	10.5	150	42.0	600	110	4.33	94.8	28	0.59	0.40	30.5	100
H036316BK-100	25.4	1.00	38.0	1.50	10.5	150	42.0	600	152	5.98	94.8	28	0.91	0.61	30.5	100
H036320BK-100	31.8	1.25	45.0	1.77	10.5	150	42.0	600	190	7.48	94.8	28	1.09	0.73	30.5	100
H036324BK-100	38.1	1.50	52.5	2.07	10.5	150	42.0	600	200	7.87	94.8	28	1.44	0.97	30.5	100
H036332BK-100	50.8	2.00	65.0	2.56	10.5	150	42.0	600	255	10.04	94.8	28	2.01	1.35	30.5	100
H036340BK-100	63.5	2.50	77.0	3.03	10.5	150	42.0	600	315	12.40	94.8	28	2.30	1.55	30.5	100
H036348BK-100	76.2	3.00	90.5	3.56	10.5	150	42.0	600	380	14.96	94.8	28	2.93	1.97	30.5	100
H036364BK-100	101.6	4.00	116.2	4.57	10.5	150	42.0	600	510	20.08	94.8	28	3.78	2.54	30.5	100
H036396BK-100	152.4	6.00	174.0	6.85	10.5	150	42.0	600	780	30.71	94.8	28	8.45	5.68	30.5	100

Coupling info:

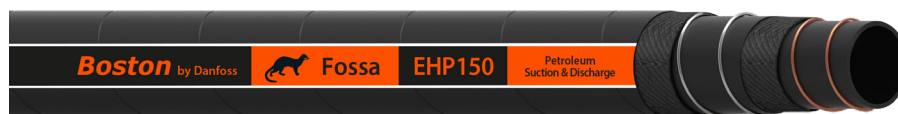
Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Suction & Discharge



EHP150

Fossa



Application

- For suction and discharge of petroleum products

For use with petroleum products with aromatic content up to 50%.

Markets

- Petroleum industry
- Paper/pulp industry
- Oil and gas exploration
- Ship building
- Tank trucks
- Waste hauling
- Batch plants

Construction

Tube NBR rubber (RMA Class A)

Reinforcement

High-tensile synthetic textile with a dual steel helical wire and anti-static copper wire

Cover Abrasion and weather resistant NBR rubber blend

Color Black

Certification

RMA Class A

Operating temperature

-35°C to +82°C
(-31°F to +180°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHP150-12BK-100	19.0	0.75	30.0	1.18	10.5	150	31.5	450	90	3.75	94.8	28	0.58	0.39	30.5	100
EHP150-16BK-100	25.4	1.00	36.0	1.41	10.5	150	31.5	450	110	4.33	94.8	28	0.71	0.48	30.5	100
EHP150-20BK-100	31.8	1.25	43.0	1.69	10.5	150	31.5	450	140	5.51	94.8	28	0.91	0.61	30.5	100
EHP150-24BK-100	38.1	1.50	49.0	1.93	10.5	150	31.5	450	170	6.69	94.8	28	1.17	0.79	30.5	100
EHP150-32BK-100	50.8	2.00	63.0	2.48	10.5	150	31.5	450	250	9.84	94.8	28	1.65	1.11	30.5	100
EHP150-40BK-100	63.5	2.50	76.0	2.99	10.5	150	31.5	450	310	12.20	94.8	28	2.13	1.43	30.5	100
EHP150-48BK-100	76.2	3.00	89.0	3.50	10.5	150	31.5	450	380	14.96	94.8	28	2.76	1.89	30.5	100
EHP150-64BK-100	101.6	4.00	117.0	4.60	10.5	150	31.5	450	510	20.08	94.8	28	4.06	2.73	30.5	100
EHP150-96BK-100	152.4	6.00	170.0	6.69	10.5	150	31.5	450	790	31.10	94.8	28	7.87	5.29	30.5	100
EHP150-128BK-100	203.2	8.00	228.0	8.97	10.5	150	31.5	450	1100	43.31	80.0	24	14.42	9.69	30.5	100

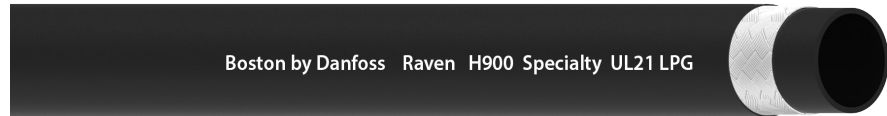
Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

LPG

H900

Raven



Application

- For transfer and delivery of propane and butane
- Transfer of natural gas in open, well ventilated areas
(1 psiG max. working pressure)

Markets

- Alternative energy
- Propane transfer
- In-plant tank transfer
- Agriculture
- Construction
- General industrial

Construction

Tube Synthetic rubber

Reinforcement

Textile braid

Cover Pin-pricked synthetic rubber

Color Black

Operating temperature

-40°C to +82°C
(-40°F to +180°F)

Hose is capable of this rating. LP-Gas should never be elevated above 100°F.

Certifications

UL 21 rated
CAN/CGA 8.1 rated
(CSA 8.1-2015 on -20 & -24)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H90004-500R	6.4	0.25	14.9	0.59	24.0	350	122	1750	0.18	0.12	152.4	500
H90006-500R	9.5	0.38	18.4	0.72	24.0	350	122	1750	0.25	0.17	152.4	500
H90008-500R	12.7	0.50	23.3	0.92	24.0	350	122	1750	0.36	0.24	152.4	500
H90012-500R	19.0	0.75	31.2	1.23	24.0	350	122	1750	0.61	0.41	152.4	500
H90016-300R	25.4	1.00	38.1	1.50	24.0	350	122	1750	0.77	0.52	91.4	300
H90020-250RC	31.8	1.25	46.0	1.81	24.0	350	122	1750	1.09	0.73	76.2	250
H90024-250RC	38.1	1.50	52.1	2.05	24.0	350	122	1750	1.25	0.84	76.2	250

Coupling info:

Visit PowerSource crimp specs at
danfoss.com/crimp for crimp specifications

Specialized



H9690

Hydrocarbon Drain



Application

- For hydrocarbon drain service

Markets

- Petroleum
- Refineries

Construction

Tube Synthetic rubber (RMA Class A)

Reinforcement

2-wire braid

Cover Pin-pricked chlorinated polyethylene

Color Blue

Certifications

RMA Class A

Operating temperature

-40°C to +177°C
(-40°F to +350°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H969012	19.0	0.75	33.3	1.31	20.7	300	207	3000	0.89	0.60	15.2	50

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Steam



EH084

Steam Slayer



Application

- Transfer of steam for processing products and cleaning equipment

Markets

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Construction

Tube Special chlorobutyl blend

Reinforcement:

2-wire braid

Cover Pin-pricked EPDM

Color Red & Black stripe
Black (EH080), Red (EH081)

Operating temperature

-40°C to +208°C, (-40°F to +407°F)

Continuous with saturated steam

+232°C (+450°F)

For intermittent superheated

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft	mtr	ft
EH08408	12.7	0.50	27.6	1.08	17.2	250	172	2500	177.8	7.0	0.80	0.54	15.2	50
EH08412	19.1	0.75	33.5	1.31	17.2	250	172	2500	241.3	9.5	1.03	0.69	15.2	50
EH08416	25.4	1.00	40.4	1.59	17.2	250	172	2500	304.8	12.0	1.34	0.90	15.2	50

Coupling info:

Visit PowerSource crimp specs at
danfoss.com/crimp for crimp specifications

EH084 Assemblies

Part Number	Description
FK6496HHH6000	EH08408, 50 ft.
FK6496KKK6000	EH08412, 50 ft.
FK6496MMK6000	EH08416, 50 ft.

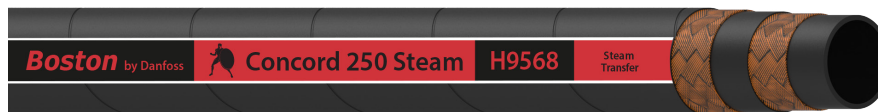
Assembly includes male pipe solid & wing nut
swivel ground joint fitting

Steam



H9568

Concord 250 Steam



Application

- Transfer of steam for processing products and cleaning equipment

Markets

- Refining and petrochemical
- Paper industry
- Industrial cleaning markets
- Oil and gas exploration
- Steel
- Ship building

Construction

Tube EPDM

Reinforcement

2-wire braid

Cover Pin-pricked EPDM

Colors Black (BK), Red (RD)

Operating temperature

-40°C to +208°C, (-40°F to +407°F)

Continuous with saturated steam

+232°C (+450°F) for intermittent superheated"

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	kg/m	lbs/ft	mtr	ft
H956808BK	12.7	0.50	26.2	1.03	17.2	250	172	2500	0.68	0.46	15.2	50
H956812BK	19.0	0.75	34.1	1.34	17.2	250	172	2500	1.04	0.70	15.2	50
H956816BK	25.4	1.00	39.4	1.55	17.2	250	172	2500	1.43	0.96	15.2	50

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

H9568 Assemblies

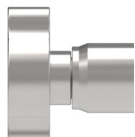
Part Number	Description
FK6500HHH6000	H956808, 50 ft.
FK6500KKK6000	H956812, 50 ft.
FK6500MMK6000	H956816, 50 ft.

Assembly includes male pipe solid & wing nut swivel ground joint fitting

EJ Series Crimp Couplings for steam hose

EJ series crimp couplings were specifically designed and tested for use with Danfoss hoses and wall thicknesses, use on other hose is not recommended.

Wing Nut Swivel Ground Joint



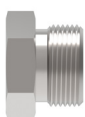
Number	Hose I.D.		Thread size		DIM A		Hole Dia		DIM D	
	mm	in	NPSM		mm	in	mm	in	mm	in
EJ5323-0808S	12.7	0.50	1-1/2 – 11-1/2		72.3	2.85	6.4	0.25	60.5	2.38
EJ5323-1212S	19.1	0.75	1-1/2 – 11-1/2		72.3	2.85	12.7	0.50	90.4	3.56
EJ5323-1216S	25.4	1.00	1-1/2 – 11-1/2		72.3	2.85	18.3	0.72	90.4	3.56

Male Pipe (NPTF) Rigid



Number	Hose I.D.		Thread size		DIM A		Hole Dia		Hex E	
	mm	in	NPTF		mm	in	mm	in	mm	in
EJ5324-0808S	12.7	0.50	1/2 – 14		76.5	3.01	6.4	0.25	22.2	0.875
EJ5324-1212S	19.1	0.75	3/4 – 14		77.8	3.08	12.7	0.50	30.2	1.188
EJ5324-1616S	25.4	1.00	1 – 11-1/2		82.6	3.25	18.3	0.72	34.9	1.375

Female Spud



Number	Hose I.D.		Thread size		DIM A		Hole Dia		Hex E	
	mm	in	NPSM	NPTF	mm	in	mm	in	mm	in
FF91058-08S	12.7	0.50	1-1/2 – 11-1/2	1-1/2 – 14	30.1	1.185	9.1	0.36	50.8	2.00
FF91058-12S	19.1	0.75	1-1/2 – 11-1/2	3/4 – 14	30.1	1.185	15.5	0.61	50.8	2.00
FF91058-16S	23.9	1.00	1-1/2 – 11-1/2	1 – 11-1/2	30.1	1.185	20.6	0.81	50.8	2.00

Assembly Instructions

Step 1

Cut the hose square to the required length using a cut-off wheel. Clean the cut end and hose bore.

Step 2

Mark the end of the hose with the correct insertion depth by size. See chart.

Step 3

Lubricate the I.D. of the hose with a water based lubricant such as P-80. A mixture of 5% dish soap/95% water can also be utilized.

Step 4

Insert the fitting into the hose. Twist the fitting while inserting to help with spreading the lubricant and easier insertion. Be sure the fitting is fully inserted by checking the end of the socket is aligned with the insertion depth mark on the hose.

Step 5

Crimp the hose to the specifications found in chart. Measure the crimp diameter in three locations utilizing calipers and take the average to verify that the crimp is within the specified range.

Also verify that the insertion depth mark on the hose is still at the end of the socket and that the hose has not pulled off of the fitting during the crimping process.

Steam applications are hazardous to both personnel and equipment.

These hazards are due to the high pressures and temperatures of steam conveyance. Hot water, low pressure steam and high pressure steam can cause severe scalding or bodily injury. Operators should use extreme caution to avoid burns. Danfoss understands the importance of utilizing quality products that provide maximum safety, especially when it comes to steam application, safety always comes first.

Hose Dash Size	Fitting Insertion Depth	Crimp Diameter B ±0.12 mm ±0.005 in	Crimp Position C ±0.75 mm ±0.030 in
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Steam Slayer Hose: EH080, EH081, EH084

-08	34,7 mm	30,23 mm	32,39 mm
	1.37 in	1.190 in	1.275 in
-12	35,5 mm	35,94 mm	32,39 mm
	1.40 in	1.415 in	1.275 in
-16	34,7 mm	41,40 mm	32,39 mm
	1.37 in	1.630 in	1.275 in

Concord 250 Hose: H9568

-08	34,7 mm	30,23 mm	32,39 mm
	1.37 in	1.190 in	1.275 in
-12	35,5 mm	35,94 mm	32,39 mm
	1.40 in	1.415 in	1.275 in
-16	34,7 mm	41,78 mm	32,39 mm
	1.37 in	1.645 in	1.275 in

None of the hoses listed are to be used as a pressure washer hose.

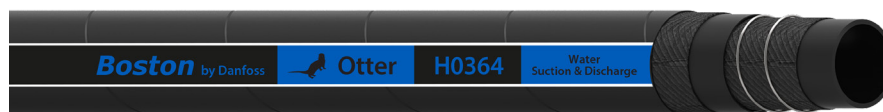
Contact your sales or customer service representative for availability, minimum order run & ordering information.

Suction & Discharge



H0364

Otter



Application

- Pumping, suction and discharge of water, mud and slurries
- Diluted agricultural fertilizers
- Convey water
- Transfer and haul salt water (brine)

Construction

- Tube** EPDM rubber
- Reinforcement** High-tensile synthetic textile and steel helical wire
- Cover** EPDM rubber

Operating temperature

-40°C to +120°C
(-40°F to +248°F)

Markets

- Agriculture
- Construction
- Equipment rental
- Mining
- Ship building
- Oil and gas exploration
- Tank truck

Color Black

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H036420-100	31.8	1.25	42.0	1.65	10.5	150	31.5	450	110	4.33	92.0	27.0	0.86	0.58	30.5	100
H036424-100	38.1	1.50	48.0	1.89	10.5	150	31.5	450	135	5.31	92.0	27.0	1.09	0.73	30.5	100
H036432-100	50.8	2.00	62.0	2.44	10.5	150	31.5	450	200	7.87	92.0	27.0	1.63	1.10	30.5	100
H036440-100	63.5	2.50	75.0	2.95	10.5	150	31.5	450	270	10.63	92.0	27.0	2.07	1.39	30.5	100
H036448-100	76.2	3.00	89.0	3.50	10.5	150	31.5	450	340	13.39	92.0	27.0	2.69	1.81	30.5	100
H036464-100	101.6	4.00	115.0	4.53	10.5	150	31.5	450	450	17.72	80.0	24.0	3.72	2.50	30.5	100
H036496-100	152.4	6.00	168.0	6.61	10.5	150	31.5	450	700	27.56	80.0	24.0	6.98	4.69	30.5	100

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Suction & Discharge



EHW150

Mink



Application

- Pumping, suction and discharge of water, mud and slurries
- Convey water in applications where oil resistance is needed on outer cover
- Transfer and haul salt water (brine)

Markets

- Construction
- Equipment rental
- Mining
- Ship building
- Oil and gas exploration
- Tank truck

Construction

Tube SBR rubber blend

Reinforcement

High tensile synthetic textile and steel helical wire

Cover Oil resistant NBR rubber blend

Color Black

Certifications

RMA Class B

Operating temperature

-25°C to +70°C
(-13°F to +158°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
EHW150-20-100	31.8	1.25	42.0	1.65	10.5	150	31.5	450	125	4.92	94.8	28	0.85	0.57	30.5	100
EHW150-24-100	38.1	1.50	49.0	1.93	10.5	150	31.5	450	150	5.91	94.8	28	1.16	0.78	30.5	100
EHW150-32-100	50.8	2.00	63.0	2.48	10.5	150	31.5	450	215	8.46	94.8	28	1.71	1.15	30.5	100
EHW150-40-100	63.5	2.50	76.0	2.99	10.5	150	31.5	450	280	11.02	94.8	28	2.10	1.41	30.5	100
EHW150-48-100	76.2	3.00	89.0	3.50	10.5	150	31.5	450	350	13.78	94.8	28	2.64	1.77	30.5	100
EHW150-64-100	101.6	4.00	115.0	4.52	10.5	150	31.5	450	490	19.29	94.8	28	3.67	2.47	30.5	100
EHW150-96-100	152.4	6.00	168.0	6.61	10.5	150	31.5	450	760	29.92	94.8	28	7.09	4.76	30.5	100

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Specialty

H1196

Royalflex Water



Application

- Transfer of water, liquid diluted fertilizers and pesticides
- Pumping, suction, and discharge of water and slurries

Markets

- Petroleum industry
- Oil and gas exploration
- Tank trucks
- Waste hauling
- Batch plants

Construction

Tube PVC with nitrile blend

Reinforcement

100% polyester and helical wire

Cover PVC with nitrile blend

(MSHA approved)

Color Blue

Certification

MSHA IC-84/37

Operating temperature

-29°C to +82°C
(-20°F to +180°F)

Number	Hose I.D.		Hose O.D.		Operating Pressure		Min. Burst Pressure		Minimum Bend Radius		Vacuum		Weight		Length	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kPa	in/Hg	kg/m	lbs/ft	mtr	ft
H119624-100	38.1	1.50	50.8	2.00	21.0	300	62	900	152.4	6.00	100	30	1.19	0.81	30.5	100
H119632-100	50.8	2.00	63.5	2.50	21.0	300	62	900	203.2	8.00	100	30	1.64	1.10	30.5	100
H119640-100	63.5	2.50	76.2	3.00	21.0	300	62	900	254.0	10.00	100	30	1.99	1.34	30.5	100
H119648-100	76.2	3.00	88.9	3.50	17.0	250	52	750	304.8	12.00	100	30	2.98	2.00	30.5	100
H119664-100	101.6	4.00	114.3	4.50	14.0	200	41	600	406.4	16.00	100	30	4.05	2.72	30.5	100

Coupling info:

Visit PowerSource crimp specs at danfoss.com/crimp for crimp specifications

Safety information



Safety information

Read this page before using any of the products/information in this catalog.

Read this page before using any of the products/information in this catalog.



With wide operating pressure ranges, optimal levels of abrasion resistance, long-lasting durability and high-performance transfer capabilities, Danfoss hoses and hose fittings provide the ultimate fluid conveyance solutions for a variety of equipment and applications around the world, including vehicles, aircraft, mining, food and beverage, and mobile and industrial equipment.

At Danfoss, we have invested a lot of time and resources in helping OEMs analyze the risks and hazards associated with their machines. We work to identify the right solutions to make their functional safety systems best in class.

Look to us for expert support with:

- Identifying the functional safety requirements for specific machine types
- Designing and selecting products or solutions to fulfill functional safety requirements
- Obtaining the relevant functional safety data

The information provided will ensure the best hose choice:

- By providing detailed construction and recommended application for each hose
- By listing suggestions on how to take care of the hose and maintenance for optimum service and safety

Before using any hose in this catalog, consult the safety section in this catalog and the guidelines on the Danfoss website for the most current information or contact Technical Support.

This catalog is designed to be used as a guide in selecting the proper hose for the applications listed herein. It contains many cautions, warnings, guidelines, and directions for the safe and proper use of Danfoss Industrial hose. All these directions and footnotes should be read and understood before specifying or using any of these hoses.

Some of the most common problems in the chemical hose industry result from improper hose and coupling selection, improper assembly techniques, failure to correctly inspect and test hose assemblies, and improper cleaning practices and hose assembly storage techniques.

In turn, these situations can lead to material leakage, spraying, spattering, end blow-offs, explosions, and other situations that may result in serious personal injury and property damage.

Personal injuries caused by improper hose assembly specification, installation, and usage could include cuts and abrasions, serious burns, irreparable eye damage, or even death. Therefore, for your safety and the safety of others working around you, Danfoss strongly urges you to read and comply with all safety information printed in this publication.

⚠WARNING Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose may result in its failure to perform in the manner intended and may result in serious injury, death, and damage to property.

⚠WARNING Testing can be dangerous and should be done only by trained personnel using proper tools and procedures. Failure to follow such procedures might result in serious injury, death, or damage to property.

Consult the coupling manufacturer to make sure you choose the correct coupling and proper assembly for the application, or contact Danfoss Technical Support. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer's instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

⚠WARNING Never use a hose to transfer material it is not specifically meant to transfer. Doing so could deteriorate the hose and result in leaking, hose bursting, or end blow-offs. This could lead to serious personal injury or death. Always transfer material in a hose that is designed specifically to transfer that material. This information is listed in this catalog.

⚠WARNING Consider both working pressure and pressure surges when determining "maximum" pressure. Failure to select a hose that meets both these requirements could lead to end blow-offs, hose leakage, and hose bursting. The result could be serious injury or death. The Danfoss hose you choose must meet or exceed the required working pressure, and must have a safety factor to allow for surge pressure.

⚠WARNING Be aware that if you replace a hose with one having a different I.D. than the original hose, material velocity could increase or decrease, possibly creating static electricity. This could lead to an explosion causing serious injury or death.

⚠WARNING Selection of the proper hose for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to selection of hose for the application can result in serious bodily injury or property damage. In order to avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog.

⚠WARNING Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Part number nomenclature

A hose part number is composed of several different elements, all combined to make the final number. The following is a diagram of an example hose part number and the elements that go into creating that number.

Hose type

The hose number is simply the type of hose you want to order.

Hose size

These are two digits after the base hose number. The hose size code follows industry standards.

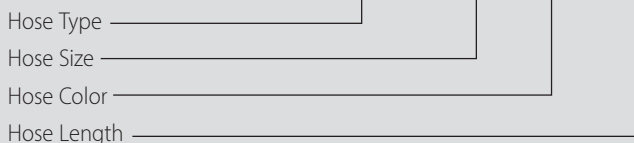
Metric equivalents are found with the hose specification charts on each hose page within the hose section of the catalog

Hose length

The hose length is indicated in feet. Metric equivalents are found in the length section of the hose specification charts.

Danfoss part numbers

E H A 5 0 0 - 0 8 Y W - 1 0 0



Selection of Hose

Selection of the proper Danfoss Industrial hose for an application is essential to the proper operation and safe use of the hose and related equipment. Inappropriate hose selection may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying projectiles. To avoid serious bodily injury or property damage resulting from selection of the wrong hose, you should carefully review the information in this catalog. Some of the factors to consider in proper hose selection are known as STAMPED:

S	Size (I.D., O.D. and length)
T	Temperature of material conveyed and environmental
A	Application, the conditions of use
M	Material being conveyed, type and concentration
P	Pressure to which the assembly will be exposed
E	Ends; style, type, orientation, attachment methods, etc.
D	Delivery testing, quality, packaging, and delivery requirements

These factors and the supplemental information contained in this catalog should be considered in selecting the proper hose for your application. If you have any questions regarding the proper hose for your application, please contact Technical Support.

Proper Selection of Hose Ends

Selection of the proper Danfoss Industrial hose end or coupling is essential to the proper operation and safe use of hose assemblies and related equipment. Inadequate attention to the selection of the end fittings may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from selection of an incompatible hose end or coupling, you should carefully review the information in this catalog. Some of the factors which are involved in the selection of the proper hose couplings are:

- fluid compatibility
- temperature
- installation design
- hose size
- corrosion requirements
- fluid conveyed

The given hose and hose end selection factors and the other information contained in this catalog should be considered by you in selecting the proper hose end fitting for your application.

If you have any questions regarding the use of hose/hose ends, for North America contact Technical Support or your technical representative.

Hose Installation

Proper installation is essential to the proper operation and safe use of the hose assembly and related equipment.

⚠WARNING Improper hose assembly installation may result in serious injury or property damage caused by spraying fluids or flying projectiles. In order to avoid serious bodily injury or property damage resulting from improper hose assembly installation carefully review the information in this catalog. Some of the factors to be considered when installing a hose assembly are:

- hose elongation or contraction
- proper bend radius/hose routing under pressure
- elbows and adapters to relieve strain
- protection from rubbing or abrasion high temperature sources
- protection against excessive movement
- twisting from pressure spikes/surges

These hose assembly installation factors and the other information in this catalog should be considered by you before installing the hose assembly. If you have any questions regarding proper hose installation, or hose maintenance contact Technical Support.

Proper maintenance of the hose is essential to the safe use of the hose and related equipment. Hose should be stored in a dry place. Hose should also be visually inspected. Any hose that has a cut or gouge in the cover that exposes the reinforcement should be retired from service. Hoses should also be inspected for kinking or broken reinforcement. If the outside diameter of the hose is reduced by 20% or more, the hose should be repaired or removed from service. Inadequate attention to hose maintenance may result in hose leakage, bursting, or other failure which may cause serious bodily injury or property damage from spraying fluids, flying projectiles, or other substances.

Hose selection

Choose the right hose for the application

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

When selecting a hose, always use this worksheet in conjunction with this catalog. Read all instructions concerning the hose you are selecting.

- S - Size** (I.D., O.D. and length)
- T - Temperature** of material conveyed and environmental
- A - Application**, the conditions of use
- M - Material** being conveyed, type and concentration
- P - Pressure** to which the assembly will be exposed
- E - Ends**; style, type, orientation, attachment methods, etc.
- D - Delivery** testing, quality, packaging, and delivery requirements

1. Size

Flow (cubic feet per minute) requirements? _____

See Flow Capacity Chart.

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

Pressure drop? _____

Length requirements (excluding hose ends)? _____

2. Temperature

Temperature range of material to be transferred?

Min. _____ Max. _____ Average _____

Year-round external environment temperature range? _____

Cleaning temperature? _____

3. Application

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

4. Material: Compatibility & Environment

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

Check all that apply.

- ☐ Abrasive materials (conveyants and external)
- ☐ Petroleum products (aromatics, aliphatics, etc.)
- ☐ Materials that could cut or gouge hose
- ☐ Solvents

- ☐ Ozone
- ☐ Acids/caustics
- ☐ Animal fats (oils)
- ☐ Sparking or flames
- ☐ Cleaning with steam

Material to be transferred? _____

Material concentration (%)? _____

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

5. Pressure & Suction

What working pressure is required? _____

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

What safety factor is required? _____

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

6. Ends

End _____

Material _____

Attachment Method _____

7. Delivery

Qty. required _____ Date required _____ Pkg. requirements _____

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

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

Special Requirements/Other Information

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

Branding information needed on the hose? _____

Color coding? _____

Any special designations required by agencies or associations? _____

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

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

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

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

Abrasion sleeve or guard? _____

Heat shield? _____

Sub-zero exposure resistance? _____

Special assembly requirements? _____

Continuous transfer service or intermittent service? _____

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

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

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

☐ Extremely flexible ☐ Slightly flexible ☐ Not an issue

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

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

☐ Very important ☐ Slightly important ☐ Not an issue

Be sure to reference chemical compatibility recommendations in the Chemical Resistance Charts

If you have any questions, please contact Danfoss Technical Support.

Coupling Selection

This catalog lists the most common type of coupling used for each hose.

Consider the following items when selecting couplings for your application. Consult your coupling manufacturer and Danfoss for further information about these items:

Environment

External environment year round

Temperature ranges

External environment year round, temperature of material being conveyed, and temperature of cleaning solution

Maximum pressure requirements

Corrosive resistance and compatibility with material being conveyed

Conductivity

Especially in flammable applications (non-spark brass cam lever arms)

Gasket material required, if any

Gasket compatibility with the material being conveyed is to be considered

Port or fitting

The port or fitting the hose assembly must be connected to

Coating on coupling

The coating on coupling (i.e. zinc, etc.), if any.

Safety information

Choosing the correct coupling is important for maximum hose efficiency and safety. Couplings must be applied properly. Incorrect or improperly applied couplings can result in shorter hose life and hose failures. These failures can result in serious bodily harm or property damage.

Hose couplings have been carefully engineered over the years to meet specific safety requirements.

When choosing the proper coupling, some factors you should consider for a particular application are:

1. What is the material to be handled?	2. What are the pressures involved?	3. What means of connection are required?
Is it dangerous?	High pressure	Threads
Is it corrosive?	Medium pressure	Special locking
Is it abrasive?	Low pressure	Flanged ends
	Suction	

WARNING: Consult with the Coupling Manufacturer to make sure you choose the correct coupling and proper assembly for the application. Such matching of hose and couplings, and assembling of couplings, should be performed only by trained personnel using proper tools and procedures. Failure to follow manufacturer’s instructions or failure to use trained personnel may result in serious bodily injury and/or property damage.

Coupling Selection

Application and pressure

When selecting couplings, the end user should inform the distributor of the application and pressures involved when ordering hose assemblies, and it's up to the distributor to supply the right hose and coupling for that application.

All hose assemblies should be treated with respect as potential hazards. Fittings, clamps or clips should be checked on a regular basis, and removed from service if damaged.

Shank length of coupling should be 1-1/2 times the inside diameter of the hose.

Combination nipples should only be used for suction and low pressure discharge applications.

Coupling types

There are two general types of couplings to consider, field-attachable and permanent.

Field-attachable couplings are usually secured by one of the following methods; flat bands, single bolt, double bolt or interlocking clamps.

Band clamps are generally used for applications requiring cam and groove style couplings (less than 150 psi).

Bolt clamps generally offer greater security than bands and are therefore chosen more often for higher pressure applications. They can also be retightened after a hose has been in service.

Interlocking clamp engages the fitting in a manner which prevents the clamp from sliding off the fitting, typically a bolt or U-bolt style with interlocking fingers which engage an interlock ring on the fitting.

Permanent couplings are also used in applications where you could see pressures greater than 150 psi. These end fittings are swaged, crimped or internally expanded onto the hose. Internal expansion couplings exist for full-flow applications and allow easier assembly cleaning.



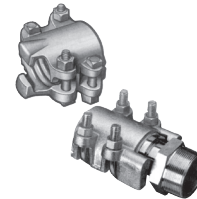
Flat band clamp



Double bolt clamp



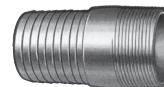
Single bolt clamp



Interlocking clamps



Cam and groove coupling



King Combination nipple coupling or "KC"



Flange end

Coupling Configurations

Coupling Configurations Examples



Short Shank

Short Shank

Low pressure air and water service

Size Range: 3/16" to 1"

Cast brass with serrated shank; GHT, NPSM or NPT male and NPSH female; washer seal

Attachment: Clamps or bands



Long Shank

Long Shank

Medium pressure air, water, sanitary and liquids in suction or discharge service

Size Range: 3/8" to 4"

Machined steel or brass with serrated shank; NPT or NPSM male and female; thread seal to NPT and washer seal to NPSM female

Attachment: Bands or clamps



Barbed Inserts

Barbed Inserts

Low or medium pressure air, water and fluids

Size Range: 3/16" to 1"

Machined brass with serrated shank; NPT or NPTF male and rigid female, and NPSM swivel female; thread seal to NPT or NPTF female, and ball end or washer seal to NPSM female

Attachment: Bands or clamps



Interlocking

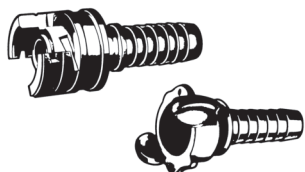
Interlocking

High pressure air and water service, steam, high pressure spray, and LPG service

Size Range: 1/4" to 6"

Plated malleable iron; insert and spud may be either steel or malleable iron; NPT male and female with ground joint or washer seal

Attachment: Four bolt or two bolt interlocking clamps



Quick Acting

Quick Acting

Low to medium pressure; air, water or oil service where frequent and fast connections must be made

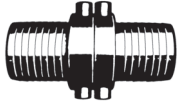
Size Range: 1/4" to 2"

Plated malleable iron, stainless steel or bronze

Attachment: Interlocking clamps or bands

Coupling Configurations

Coupling Configurations Examples, continued



Water Suction

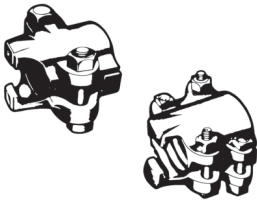
Water Suction

Heavy duty water discharge and suction service

Size Range: 1" to 8"

Malleable iron, aluminum and/or brass

Attachment: Clamps or bands



Interlocking Clamp

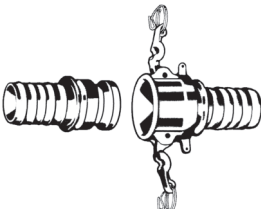
Interlocking Clamp

Heavy duty high pressure applications such as air, steam, water, spray, LPG service

Size Range: 9/16" to 7-3/16" hose O.D.

Malleable iron, plated

Attachment: Clamps bolted into position



Cam and Grove

Cam and Grove

Low and medium pressure water, petroleum and chemical transfer where fast connections are needed; also used for suction service

Size Range: 1/2" to 8"

Aluminum, bronze, stainless steel, Monel, malleable iron; washer seal with no threads

Attachment: Clamps, bands, or crimp/swage ferrules



Swaged or Crimped

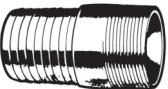
Swaged or Crimped

For use on all types of high pressures hose

Size Range: 1-1/4" to 8"

Couplings consist of swaged fittings having serrated steel shanks with ferrules of plated steel

Attachment: Swaging or crimping equipment



Combination Nipple

Combination Nipple

Low or medium pressure suction and discharge of water, fluids, and material handling

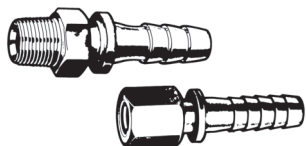
Size Range: 1/2" to 12"

Description: Tubular steel, stainless, malleable iron, aluminum or brass with serrated shank; NPT male threads, grooved, or beveled for welding

Attachment: Clamps or bands

Coupling Configurations

Coupling Configurations Examples



Steel Nipple

Steel Nipple

Low pressure air and water service

Size Range: 3/16" to 1"

Cast brass with serrated shank; GHT, NPSM or NPT male and NPSH female; washer seal

Attachment: Clamps or bands



Single Bolt Clamp

Single Bolt Clamp

Low pressure, and suction service on shank couplings, combination nipples, and pipe nipples

Size Range: 7/8" to 5-1/4" hose O.D.

Cast malleable iron, plated.

Attachment: Bolted on hose



Double Bolt Clamp

Double Bolt Clamp

Low or medium pressure, and suction service with large sizes of combination nipples, or couplings

Size Range: 3-1/2" to 17-1/2" hose O.D.

Cast malleable iron, plated, and brass

Attachment: Applied over hose and bolted into position



Band Clamp

Band Clamp

Low or medium pressure, and suction service

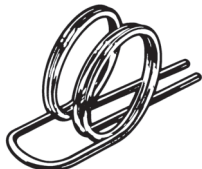
Size Range: 3/4" to 6" hose O.D.

Pre-formed flat stainless steel, high carbon steel

Attachment: Special locking band tool

Coupling Configurations

Coupling Configurations Examples



Wire Hose Clamp

Wire Hose Clamp

Medium pressure, air, water or general purpose hose; good for hose with helical wire or corrugations; available in larger sizes for pin lug, serrated pipe nipple or combination nipples

Size Range: 5/8" to 13-1/4" hose O.D.

Pre-formed round wire made of stainless steel, galvanized steel, copper, bronze or aluminum

Attachment: Wire ends pulled and crimped with special tool or machine



Brass Ferule

Brass Ferule

Low or medium pressure air or water using general purpose hose and brass inserts

Size Range: 31/64" to 1 1/2" hose O.D

Description: Made from various gauge brass tubing; stamped with standard industrial part number

Attachment: Crimped on using either ribbed or plain die



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