



**EMEA** 

## **Tooling products** master catalog



# 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.

### **Crimp machines**

Our reliable and high-quality machines enable accurate and efficient crimping—letting you achieve outstanding results more quickly, efficiently and safely.

Our portfolio includes one manual and four workshop crimpers, as well as two production crimping machines. While the manual and workshop machines meet small or mid-sized requirements, our production machines can deliver the speed and efficiency demanded by large assembly lines. Our portfolio structure also reflects our global part numbers to make it easy to identify the right machines for your needs.

As well as offering crimpers with no crimp jaws, we also offer two types of kits for each machine that include the most commonly used dies.

#### Presenting market-leading technology, our crimping machines offer many benefits—including:



#### Slide bearing technology

- No greasing improves machine cleanliness and prolongs lifetime
- Maximum productivity with very low maintenance cost
- Flanking cannot stick in grease; no risk of prematurely damaging the crimping head
- End product can be used in sanitary applications without cleaning
- 20% more capacity for crimping stronger or more difficult couplings versus competing crimpers
- Consistently accurate crimp results



#### Large opening

(except ET4100 machine):

- Easy crimping of even 90° elbow pieces, without having to remove all the dies
- Compact design
- Fits in any workshop



#### **Ergonomic design**

• Ease of use maximizes productivity



#### Fixed 6-o'clock die

- Workpiece does not move, making it easier to position laterally
- Increases productivity, driving up profitability
- Reduces the risk of injuries



#### Low noise

 Very quiet hydraulic system improves operator experience



### Engineered solutions using quality components

- Hi-Low cylinder enables maximum efficiency while producing less heat
- Lateral reinforcement optimizes overall tolerance



#### **CE** compliant

### 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	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"
(up to)*	(Size -20)	(Size –24)	(Size –24)	(Size –32)	(Size -32	(Size – 32)
Capability 4-Spiral	3/4"	1"	1"	1 1/4"	1 1/4"	2"
(up to)*	(Size -12)	   (Size -16)	(Size -16)	(Size - 20)	(Size -20)	(Size -32)
Capability 6-Spiral	-	-	-	1 1/4"	1 1/4"	1 1/2"
(up to)*				(Size -20)	(Size -20)	(Size -24)

 $<sup>\</sup>hbox{$^*$ Capabilities based on Danfoss core hose and fitting products}$ 

<sup>\*</sup>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			
Production volume	medium	medium	high	high	high
Pump option**	230V / 380 V	380 V	380 V	380 V	380 V
Application	Workshop Crimper	Workshop Crimper	Production Crimper	Production Crimper	Production Crimper
Capability Braided	3"	3"	1 1/2"	2"	3"
(up to)*	(Size –48)	(Size –48)	(Size -24)	(Size -32)	(Size –48)
Capability 4-Spiral	2"	2"	1"	1 1/4"	3"
(up to)*	(Size -32)	(Size -32)	(Size -16)	(Size -20)	(Size -48)
Capability 6-Spiral	1 1/2"	1 1/2"	-	-	2 1/2"
(up to)*	(Size -24)	(Size -24)			(Size -40)

<sup>\*</sup>Capabilities based on Danfoss core hose and fitting products

<sup>\*</sup>See pump ordering options for each machine for specific kit numbers

### **Ordering options**

Our tooling portfolio has been specifically selected to meet the broadest spectrum of customer demand, based on:

- · The most used machines in the market
- · The machines best aligned to our hose and fitting portfolio
- · The machines needed to cover all key functions: crimping, cutting, insert pushing, skiving, etc



#### Our portfolio also features transparent coding:

- ET4 Workshop crimping machines
- ET5 Production crimping machines
- ET6 Nipple inserters, skiving machines, marking machines
- ET7 Crimp machine dies
- ET9 Cutting machines and blades



#### Broad portfolio:

Our portfolio considers not only the best suited machines for our hoses and fittings, but also real-world use cases based on market intelligence about the most popular machines. This ensures we meet the broadest possible spectrum of customer needs.



#### Easy to navigate portfolio:

We use easy to follow coding across our tooling portfolio so customers can quickly navigate between different types of machines.

As well as offering crimping machines with no crimp jaws, we also offer two types of packages for each machine. These packages are designed to include the most commonly used dies:



#### Kit One

includes the crimping machine with an initial die package, which supports a good portion of our hose and fitting portfolio



#### Kit Two

includes the crimping machine with more die sets than Kit1 , allowing customers to crimp the broadest range of hoses

Kit One is the most economical option if customers don't need to crimp larger hose sizes, as it excludes a few of the bigger dies that are included in Kit Two.

Our portfolio structure reflects our global part numbers to make it easy to identify the right machines for a customer's needs.

### Mobile crimp machines

### ET4100

#### Field servicing

Customers with an aftersales business often need to change and crimp hoses in the field, outside of workshops. Portable, cost-effective, and easy to use, the ET4100 is the perfect choice for field servicing. It also features the biggest opening in the market—enabling it to support more hoses than most manual crimpers. No electrical connection is required, as the ET4100 functions with a hand pump. It offers a broad crimp capability that is sure to excite hose assemblers in the field.



• Service hoses in the field: Portable, cost-effective, and easy to use

#### **Tooling options**

Danfoss Part Number	Description	Included crimp dies				
ET4100-001	Crimp Machine ET4100	-				
ET4100-001KT	Crimp Machine ET4100 Kit 1	ET7100-M150 ET7100-M170 ET7100-M190 ET7100-M230 ET7100-M260 ET7100-M280 ET7100-M290 ET7100-M320				
ET4100-001K2	Crimp Machine ET4100 Kit2	ET7100-M150 ET7100-M170 ET7100-M190 ET7100-M230 ET7100-M260 ET7100-M280 ET7100-M290 ET7100-M320 ET7100-M360 ET7100-M400 ET7100-M440 ET7100-M440				

Note: ET4100 manual crimp machine to be used with crimp dies ET7100-\*  $\,$ 

#### **Specifications**

#### **Dimensions:**

500mm x 420 mm x 440 mm

**Weight:** 32 kg Crimp-force 900 kN

Noise: -

Pump option: manual
Control unit: micrometer

#### **Capabilities**

**Braided hose: -**4 thru -20 **4-Spiral hose:** -6 thru -12

6-Spiral hose: -

#### **Features & Benefits**

- Manual crimp machine with hand-pump
- Ideal for on-site servicing
- Can be mounted on service vehicles or bench tops
- Light weight makes it ideal for mobile applications

### ET4100 crimp die kits

		ET7100-M*													
Die Set		150	170	190	230	260	280	290	320	360	400	440	460		
	Kit 1	Х	Х	Х	Х	Χ	Х	Χ	X						
ET4100	Kit 2	Х	Х	Х	X	Χ	X	Χ	Х	Χ	Χ	X	Х		
	GH681(B)	-4	-5	-6	-8	-10		-12		-16			-20		
	GH781	-4	-5	-6	-8		-10	-12			-16		-20		
	EC881(B)	-4	-5	-6	-8		-10	-12			-16				
	GH425(B)					-6	-8		-10	-12	-16				
	GH506									-12					
sso	FC500									-12		-16			
Aeroquip by Danfoss	GH466														
by [	EC600									-12					
quip	EC850							-10		-12					
Aero	FC310	-4	-5	-6	-8	-10		-12			-16		-20		
	FC510	-4		-6	-8	-10		-12			-16		-20		
	GH195	-4		-6	-8		-10		-12		-16				
	EC525									-12		-16			
	GH120	-4	-6	-8			-10	-12			-16		-20		
	EC810					-6	-8		-10	-12					
	EC115	-4	-5	-6	-8	-10		-12		-16		-20			
	EC215		-5	-5 / -6	-8		-10	-12		-16			-20		
SS	EC426					-6	-8		-10	-12		-16			
anfo	EC420									-12		-16			
Winner by Danfoss	EC512									-12		-16			
ıner	EC615											-16			
Wir	WH004								-12		-16	-20			
	WH006		-4	-5	-6	-8	-10		-12			-16			
	WH007			-4	-5/-6	-8			-10 / -12			-16			
	WHR7	-4/-5	-6	-8		-10	-12			-16					
foss	WHR8	-4	-6/-8				-12				-16				
' Dan	WHR18	-4	-5	-6	-8		-10								
s by	3TR7	-4/-5	-6	-8	-10	-12				-16					
Synflex by Danfoss	3TR8	-4		-6	-8		-12			-16					
0,	3TR18CT	-4/-5	-6	-8		-10									
	EC045	-5	-6	-8	-10			-12		-16					
	EC060	-4		-6	-8		-10	-12			-16	-20			
SS	EC112	-4	-5	-6	-8	-10		-12			-16				
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16		-20		
Dš	EC190							-12		-16			-20		
	FC699		-6	-8	-10			-12	-16						
	GH100		-6	-8	-10			-12							
n oss	EC116	-4/-5		-6	-8										
Boston by Danfoss	EC216	-4	-5	-6	-8										

### General purpose crimp machines

### ET4200 and ET4250

#### Agriculture aftermarket

Companies supporting the agriculture segment need a reliable crimper for smaller hoses that balances quality and cost-effectiveness. Supporting smaller braided and spiral hoses, our reliable and versatile ET4200/ET4250 crimper is ideal for the agriculture aftermarket. The ET4200 / ET4250's compact construction allows for ergonomic working, while long master dies enable crimping of 90° elbow fittings up to 1¼".



- Narrow and innovative user-friendly construction: The ET4200 and ET4250's compact construction allows for ergonomic working.
- High versatility: Long master dies allow crimping of 90° elbow fittings up to 11/4".
- Long service life: The ET4200's tried and tested greaseless slide bearing technology reduces maintenance costs and increases product quality.
- **Service vehicle version:** use the ET4250 version with 12V pump as a mobile version or mounted on a desk bench

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET4200-001-230 (ET4250-001-012)	Crimp Machine ET4200 1PH (Crimp Machine ET4250-012)	230 V (12 V)	-
ET4200-001-230KT (ET4250-001-012KT)	Crimp Machine ET4200 1PH Kit1 (Crimp Machine ET4250 Kit1)	230 V (12 V)	ET7200-M150 ET7200-M280 ET7200-M170 ET7200-M290 ET7200-M190 ET7200-M320 ET7200-M230 ET7200-M360 ET7200-M260
ET4200-001-230K2 (ET4250-001-012K2)	Crimp Machine ET4200 1PH Kit2 (Crimp Machine ET4250 Kit2)	230 V (12 V)	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280 ET7200-M460
ET4200-001-380	Crimp Machine ET4200 3PH	380 V	
ET4200-001-380KT	Crimp Machine ET4200 3PH Kit1	380 V	ET7200-M150 ET7200-M280 ET7200-M170 ET7200-M290 ET7200-M190 ET7200-M320 ET7200-M230 ET7200-M360 ET7200-M260
ET4200-001-380K2	Crimp Machine ET4200 3PH Kit2	380 V	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280 ET7200-M460

Note: ET4200 machine to be used with crimp dies ET7200-\*

#### **Specifications ET4200**

#### **Dimensions:**

592mmx 545mmx 672mm

Weight: 150kg Crimp-force 1200 kN Noise: 69 dBA

Pump option: 230 V / 380 V Control unit: micrometer

#### **Capabilities**

**Braided hose:** -4 thru -24 **4-Spiral hose:** -6 thru -16

6-Spiral hose: -

#### **Specifications ET4250**

#### **Dimensions:**

430mmx 370mmx 440mm **Weight:** 110kg without engine

Crimp-force 1800 kN Noise: 69 dBA Pump option: 12V Control unit: micrometer

#### **Capabilities**

**Braided hose:** -4 thru -24 **4-Spiral hose:** -6 thru -16

6-Spiral hose: -

#### **Features & Benefits**

- Semiautomatic machine for flexible use
- Accurate repeatability (ET4200)
- Mounted on a workbench
- Can be mounted on service vehicles or bench top (ET4250)

### ET4200 and ET4250 crimp die kits

							ET72	200-M*					
Die Set		150	170	190	230	260	280	290	320	360	400	440	460
ET4200	Kit 1	Х	Х	X	Χ	Х	Х	X	Χ	Χ			
ET4250	Kit 2	Х	Х	Х	Х	Х	Х	X	Χ	Х	Х	Χ	Х
	GH681(B)	-4	-5	-6	-8	-10		-12		-16			-20
	GH781	-4	-5	-6	-8		-10	-12			-16		-20
	EC881(B)	-4	-5	-6	-8		-10	-12			-16		
	GH425(B)					-6	-8		-10	-12	-16		
	GH506									-12			
055	FC500									-12		-16	
Aeroquip by Danfoss	GH466												
by I	EC600									-12			
quip	EC850							-10		-12			
Aero	FC310	-4	-5	-6	-8	-10		-12			-16		-20
	FC510	-4		-6	-8	-10		-12			-16		-20
	GH195	-4		-6	-8		-10		-12		-16		
	EC525									-12		-16	
	GH120	-4	-6	-8			-10	-12			-16		-20
	EC810					-6	-8		-10	-12			
	EC115	-4	-5	-6	-8	-10		-12		-16		-20	
988	EC215		-5	-5 / -6	-8		-10	-12		-16			-20
	EC426					-6	-8		-10	-12		-16	
Winner by Danfoss	EC420									-12		-16	
by [	EC512									-12		-16	
nner	EC615											-16	
×	WH004							-12		-16	-20		
	WH006	-4	-5	-6	-8	-10		-12			-16		
	WH007		-4	-5 / -6	-8			-10 / -12			-16		
s	WHR7	-4/-5	-6	-8		-10	-12			-16			
nfos	WHR8	-4	-6 /-8				-12				-16		
у Da	WHR18	-4	-5	-6	-8		-10						
lex b	3TR7	-4 / -5	-6	-8	-10	-12				-16			
Synflex by Danfoss	3TR8	-4		-6	-8		-12			-16			
	3TR18CT	-4 / -5	-6	-8		-10							
	EC045	-5	-6	-8	-10			-12		-16			
	EC060	-4		-6	-8		-10	-12			-16	-20	
SS	EC112	-4	-5	-6	-8	-10		-12			-16		
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16		-20
Δ	EC190							-12		-16			-20
	FC699		-6	-8	-10			-12	-16				
	GH100		-6	-8	-10			-12					
on foss	EC116	-4/-5		-6	-8								
Boston by Danfoss	EC216	-4	-5	-6	-8								

### General purpose crimp machines

### ET4300 and ET4350

#### Versatility and cost-effectiveness

Combining the benefits of a cost-effective small workshop machine with the versatility to manufacture a varied range of hose and fitting configurations thanks to solid master dies, the ET4300/ ET4350 crimpers are an unrivalled leader in the 1½" field. While the ET4300 cannot crimp everything, it can meet the needs of most general assembly businesses.



- **High cost-effectiveness:** The ET4300/ET4350 sets the standard for quality and cost-effectiveness.
- Narrow and innovative user-friendly construction: The ET4300/ET4350's compact construction allows for ergonomic working.
- **High versatility:** Solid master dies allow crimping of all types of fittings.
- Long service life: The ET4300/ET4350's tried and tested greaseless slide bearing technology reduces maintenance costs and increases product quality.
- **Service vehicle version:** use the ET4350 version with 12V pump as a mobile version or mounted on a desk bench

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET4300-001-230 (ET4350-001-012)	Crimp Machine ET4300 1PH (ET4350)	230 V (12 V)	-
ET4300-001-230KT (ET4350-001-012KT)	Crimp Machine ET4300 1PH Kit1 (ET4350 Kit1)	230 V (12 V)	ET7200-M150 ET7200-M280 ET7200-M170 ET7200-M290 ET7200-M190 ET7200-M320 ET7200-M230 ET7200-M360 ET7200-M260 ET7200-M400
ET4300-001-230K2 (ET4350-001-012K2)	Crimp Machine ET4300 1PH Kit2 (ET4350 Kit 2)	230 V (12 V)	ET7200-M150 ET7200-M320 ET7200-M170 ET7200-M360 ET7200-M190 ET7200-M400 ET7200-M230 ET7200-M440 ET7200-M260 ET7200-M460 ET7200-M280 ET7200-M540 ET7200-M290
ET4300-001-380	Crimp Machine ET4300 3PH	380 V	-
ET4300-001-380KT	Crimp Machine ET4300 3PH Kit1	380 V	ET7200-M150 ET7200-M280 ET7200-M170 ET7200-M290 ET7200-M190 ET7200-M320 ET7200-M230 ET7200-M360 ET7200-M260 ET7200-M400
ET4300-001-380K2	Crimp Machine ET4300 3PH Kit2	380 V	ET7200-M150 ET7200-M320 ET7200-M170 ET7200-M360 ET7200-M190 ET7200-M400 ET7200-M230 ET7200-M440 ET7200-M260 ET7200-M460 ET7200-M280 ET7200-M540 ET7200-M290

**Note:** ET4300 machine to be used with crimp dies ET7200\*

#### **Specifications ET4300**

#### **Dimensions:**

592mmx 545mmx 672mm

Weight: 160kg Crimp-force 1800 kN Noise: 69 dBA

Pump option: 230 V / 380 V Control unit: micrometer

#### **Capabilities**

**Braided hose:** -4 thru -32 **4-Spiral hose:** -6 thru -20 **6-Spiral hose:** -6 thru -20

#### **Specifications ET4350**

#### **Dimensions:**

509mmx 430mmx 485mm **Weight:** 132kg

Crimp-force 1800 kN Noise: 69 dBA Pump option: 12 V Control unit: micrometer

#### **Capabilities**

Braided hose: -4 thru -32 4-Spiral hose: -6 thru -20 6-Spiral hose: -6 thru -20

#### **Features & Benefits**

- Semiautomatic machine for flexible use in shopfloor
- Accurate repeatability
- Energy efficient option for moderate volume assembly work – 30% usage per hour
- Can be mounted on service vehicles or bench top (ET4350)

### ET4300 and ET4350 crimp die kits

		ET7200-M*													
Die Set		150	170	190	230	260	280	290	320	360	400	440	460	540	
ET4300	Kit 1	Х	Х	Х	Χ	Х	Х	Х	Χ	Х	Х				
ET4350	Kit 2	Х	X	Х	X	Х	Х	Х	Χ	Х	Х	Х	Х	Х	
	GH681(B)	-4	-5	-6	-8	-10		-12		-16			-20	-24	
	GH781	-4	-5	-6	-8		-10	-12			-16		-20	-24	
	EC881(B)	-4	-5	-6	-8		-10	-12			-16			-24	
	GH425(B)					-6	-8		-10	-12	-16				
	GH506									-12		-16			
oss	FC500									-12		-16			
Aeroquip by Danfoss	GH466													-20	
by [	EC600									-12		-16		-20	
quip	EC850							-10		-12		-16			
Aero	FC310	-4	-5	-6	-8	-10		-12			-16		-20		
	FC510	-4		-6	-8	-10		-12			-16		-20		
	GH195	-4		-6	-8		-10		-12		-16				
	EC525									-12		-16			
	GH120	-4	-6	-8			-10	-12			-16		-20	-24	
	EC810					-6	-8		-10	-12				-20	
255	EC115	-4	-5	-6	-8	-10		-12		-16		-20			
	EC215		-4	-5/-6	-8		-10	-12		-16			-20	-24	
	EC426					-6	-8		-10	-12		-16			
Winner by Danfoss	EC420									-12		-16			
by [	EC512									-12		-16			
nner	EC615											-16		-20	
×	WH004							-12		-16	-20			-24	
	WH006	-4	-5	-6	-8	-10		-12			-16				
	WH007		-4	-5/-6	-8			-10 / -12			-16				
S	WHR7	-4/-5	-6	-8		-10	-12			-16					
nfos	WHR8	-4	-6/-8				-12				-16				
y Da	WHR18	-4	-5	-6	-8		-10								
lex b	3TR7	-4/-5	-6	-8	-10	-12				-16					
Synflex by Danfoss	3TR8	-4		-6	-8		-12			-16					
	3TR18CT	-4/-5	-6	-8		-10									
	EC045	-5	-6	-8	-10			-12		-16					
	EC060	-4		-6	-8		-10	-12			-16	-20			
55	EC112	-4	-5	-6	-8	-10		-12			-16				
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16		-20		
۵	EC190							-12		-16			-20		
	FC699		-6	-8	-10			-12	-16						
	GH100		-6	-8	-10			-12							
Boston by Danfoss	EC116	-4/-5		-6	-8										
Вс by D	EC216	-4	-5	-6	-8										

### General purpose crimp machines

#### ET4400

#### Crimping large bore hose assemblies

Customers supporting the most demanding applications require machines that can crimp the biggest and heaviest hoses. Our ET4400 crimper offers the higher force and larger machine opening needed to crimp large bore hose assemblies. The ET4400 can crimp all hydraulic hose types, including R15 spiral hoses up to size -24, as well as industrial hose assemblies up to 3". Long master dies also allow crimping of 90° elbow fittings up to 2".



- Narrow and innovative user-friendly construction: The ET4400's compact construction allows for ergonomic working.
- Large crimping tool: Enables crimping of industrial hose assemblies up to 3".
- High versatility: Long master dies allows crimping of 90° elbow fittings up to 2".
- Long service life: The ET4400's tried and tested greaseless slide bearing technology reduces maintenance costs and increases product quality.

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET4400-001-230	Crimp Machine ET4400 1PH	230 V	-
ET4400-001-230KT	Crimp Machine ET4400 1PH Kit1	230 V	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280
ET4400-001-230K2	Crimp Machine ET4400 1PH Kit2	230 V	ET7200-M150 ET7200-M320 ET7200-M170 ET7200-M360 ET7200-M190 ET7200-M400 ET7200-M230 ET7200-M440 ET7200-M260 ET7200-M460 ET7200-M280 ET7200-M540 ET7200-M290 ET7400-M620
ET4400-001-380	Crimp Machine ET4400 3PH	380 V	-
ET4400-001-380KT	Crimp Machine ET4400 3PH Kit1	380 V	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280
ET4400-001-380K2	Crimp Machine ET4400 3PH Kit2	380 V	ET7200-M150         ET7200-M320           ET7200-M170         ET7200-M360           ET7200-M190         ET7200-M400           ET7200-M230         ET7200-M440           ET7200-M260         ET7200-M460           ET7200-M280         ET7200-M540           ET7200-M290         ET7400-M620

**Note:** ET4400 machine to be used with crimp intermediate die ET7400-7200 in combination with ET7200. ET4400 machine to be used with crimp dies ET7400.

#### **Specifications**

#### **Dimensions:**

700mmx 600mmx 735mm

Weight: 248 kg Crimp-force 2000 kN Noise: 69 dBA

Pump option: 230 V / 380 V Control Unit: micrometer

#### **Capabilities**

**Braided hose:** -4 thru -32 **4-Spiral hose:** -6 thru -32 **6-Spiral hose:** -6 thru -24

#### **Features & Benefits**

- The perfect workshop crimper for bigger and spiral hoses also.
- Can be mounted on bench top
- Accurate repeatability

### ET4400 crimp die kits

							E	T7200-M	*						ET7400-M*
Die Set		150	170	190	230	260	280	290	320	360	400	440	460	540	620
	Kit 1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			
ET4400	Kit 2	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	GH681(B)	-4	-5	-6	-8	-10		-12		-16				-20	-24
	GH781	-4	-5	-6	-8		-10	-12			-16			-20	-24
	EC881(B)	-4	-5	-6	-8		-10	-12			-16				-24
	GH425(B)					-6	-8		-10	-12	-16				
	GH506									-12		-16	-16		
oss	FC500									-12		-16	-16		
Danf	GH466														-20
Aeroquip by Danfoss	EC600									-12		-16	-16		-20
oquip	EC850							-10		-12		-16	-16		
Aero	FC310	-4	-5	-6	-8	-10		-12			-16			-20	
	FC510	-4		-6	-8	-10		-12			-16			-20	
	GH195	-4		-6	-8		-10		-12		-16				
	EC525									-12		-16	-16		
	GH120	-4	-6	-8			-10	-12			-16			-20	-24
	EC810					-6	-8		-10	-12					-20
Winner by Danfoss	EC115	-4	-5	-6	-8	-10		-12		-16		-20	-20		
	EC215		-4	-5 / -6	-8		-10	-12		-16				-20	-24
	EC426					-6	-8		-10	-12		-16	-16		
	EC420									-12		-16	-16		
· by [	EC512									-12		-16	-16		
nnei	EC615											-16	-16		-20
Ň	WH004							-12		-16	-20				-24
	WH006	-4	-5	-6	-8	-10		-12			-16				
	WH007		-4	-5 / -6	-8			-10 / -12			-16				
s	WHR7	-4/-5	-6	-8		-10	-12			-16					
ınfos	WHR8	-4	-6/-8				-12				-16				
oy Da	WHR18	-4	-5	-6	-8		-10								
Synflex by Danfoss	3TR7	-4/-5	-6	-8	-10	-12				-16					
Syn	3TR8	-4		-6	-8		-12			-16					
	3TR18CT	-4/-5	-6	-8		-10									
	EC045	-5	-6	-8	-10			-12		-16					
	EC060	-4		-6	-8		-10	-12			-16	-20	-20		
SSC	EC112	-4	-5	-6	-8	-10		-12			-16				
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16			-20	
J	EC190							-12		-16				-20	
	FC699		-6	-8	-10			-12	-16						
	GH100		-6	-8	-10			-12							
Boston by Danfoss	EC116	-4/-5		-6	-8										
Bc by C	EC216	-4	-5	-6	-8										

### General purpose crimp machines

### ET4500 and ET4500-002

#### Crimping large bore hose assemblies

Customers supporting the most demanding applications require machines that can crimp the biggest and heaviest hoses. With a wider opening and a stronger crimping force than other workshop machines, the ET4500 offers a capacity that's almost at the level of production machines, but at a much lower cost. The ET4500 is designed to crimp hydraulic hose assemblies up to 2", including R15 spiral hoses up to size -32, and industrial hose assemblies up to 3". -002 version available with an optional controller, while ET4500 -001 version is working with micrometer.



- **Cost-effective capacity:** The ET4500 boasts a large capacity, almost at the level of production machines, but at a much lower cost.
- Large crimping tool: Enables crimping of industrial hose assemblies up to 3".
- **High versatility:** Crimps all hydraulic hoses, including R15 spiral hoses up to size -32, as well as industrial hose assemblies up to 3".
- Optional controller (code -002): Preset with Danfoss crimp specifications, our controller enables easier and faster crimping

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET4500-001-230 (ET4500-002-230)	Crimp Machine ET4500 1PH	230 V	-
ET4500-001-230KT (ET4500-002-230KT)	Crimp Machine ET4500 1PH Kit1	230 V	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280
ET4500-001-230K2 (ET4500-002-230K2)	Crimp Machine ET4500 1PH Kit2	230 V	ET7200-M150 ET7200-M320 ET7200-M170 ET7200-M360 ET7200-M190 ET7200-M400 ET7200-M230 ET7200-M440 ET7200-M260 ET7200-M460 ET7200-M280 ET7200-M540 ET7200-M290 ET7400-M620
ET4500-001-380	Crimp Machine ET4500 3PH	380 V	-
ET4500-001-380KT (ET4500-002-380KT)	Crimp Machine ET4500 3PH Kit1	380 V	ET7200-M150 ET7200-M290 ET7200-M170 ET7200-M320 ET7200-M190 ET7200-M360 ET7200-M230 ET7200-M400 ET7200-M260 ET7200-M440 ET7200-M280
ET4500-001-380K2 (ET4500-002-380K2)	Crimp Machine ET4500 3PH Kit2	380 V	ET7200-M150 ET7200-M320 ET7200-M170 ET7200-M360 ET7200-M190 ET7200-M400 ET7200-M230 ET7200-M440 ET7200-M260 ET7200-M460 ET7200-M280 ET7200-M540 ET7200-M290 ET7400-M620

**Note:** ET4500 machine to be used with crimp intermediate die ET7400-7200 in combination with ET7200. ET4500 machine to be used with crimp dies ET7400.

#### **Specifications**

#### **Dimensions:**

745mmx 600mmx 1350mm

Weight: 450 kg Crimp-force 2800 kN Noise: 69 dBA

Pump option: 230 V / 380 V Control unit: micrometer/

Controller

#### **Capabilities**

**Braided hose:** -4 thru -48 **4-Spiral hose:** -6 thru -32 **6-Spiral hose:** -6 thru -24

#### **Features & Benefits**

- Our top capacity workshop machine enables assembly of big sizes and spiral hoses
- Optional controller with Danfoss crimp specifications, our controller enables easier and faster crimping (ET4500-002)

### ET4500 and ET4500-002 crimp die kits

							E	T7200-N	<b>1</b> *				,		ET7400-M*
Die Set		150	170	190	230	260	280	290	320	360	400	440	460	540	620
ET4500	Kit 1	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х			
ET4500-002	Kit 2	Х	Х	X	X	Х	Х	X	X	Х	X	X	Х	Х	X
	GH681(B)	-4	-5	-6	-8	-10		-12		-16				-20	-24
	GH781	-4	-5	-6	-8		-10	-12			-16			-20	-24
	EC881(B)	-4	-5	-6	-8		-10	-12			-16				-24
	GH425(B)					-6	-8		-10	-12	-16				
	GH506									-12		-16	-16		
055	FC500									-12		-16	-16		
Aeroquip by Danfoss	GH466														-20
by l	EC600									-12		-16	-16		-20
oquip	EC850							-10		-12		-16	-16		
Aero	FC310	-4	-5	-6	-8	-10		-12			-16			-20	
	FC510	-4		-6	-8	-10		-12			-16			-20	
	GH195	-4		-6	-8		-10		-12		-16				
	EC525									-12		-16	-16		
	GH120	-4	-6	-8			-10	-12			-16			-20	-24
	EC810					-6	-8		-10	-12					-20
	EC115	-4	-5	-6	-8	-10		-12		-16		-20	-20		
sso	EC215		-4	-5 / -6	-8		-10	-12		-16				-20	-24
	EC426					-6	-8		-10	-12		-16	-16		
Winner by Danfoss	EC420									-12		-16	-16		
ır by	EC512									-12		-16	-16		
/inne	EC615											-16	-16		-20
>	WH004							-12		-16	-20				-24
	WH006	-4	-5	-6	-8	-10		-12			-16				
	WH007		-4	-5/-6	-8	40	40	-10 / -12		4.5	-16				
SS	WHR7	-4/-5	-6	-8		-10	-12			-16	1.0				
anfo	WHR8	-4	-6/-8		0		-12				-16				
by D	WHR18	-4	-5	-6	-8	12	-10			1.0					
Synflex by Danfoss	3TR7	-4/-5	-6	-8	-10	-12	12			-16					
Syı	3TR8	-4 -4/-5		-6	-8	10	-12			-16					
	3TR18CT		-6	-8	10	-10		12		1.0					
	EC045	-5	-6	-8	-10		-10	-12		-16	1.0	20	20		
	EC060 EC112	-4 -4	-5	-6 -6	-8 -8	-10	-10	-12			-16 -16	-20	-20		
Danfoss						-10	10	-12						20	
Dan	EC212 EC190	-4	-5	-6	-8		-10	-12 -12		-16	-16			-20 -20	
	FC699		-6	-8	-10			-12	-16	-10				-20	
	GH100		-6	-8	-10			-12	-10						
SS			-0					-12							
Boston by Danfoss	EC116	-4 / -5		-6	-8										
B by	EC216	-4	-5	-6	-8										

### Industrial production crimp machines

### ET5020

#### On-site production

ET5020/ET5025 enables high productivity, safety, and ease-of-use. Compact, user-friendly construction enables high productivity, safety and ease-of-use, while solid master dies allow crimping of all fitting types. Available with an optional controller.



- Narrow and innovative user-friendly construction: The ET5020's compact construction allows for ergonomic working. High versatility: Solid master dies allow crimping of all types of fittings.
- Long service life: The ET5020's tried and tested greaseless slide bearing technology reduces maintenance costs and increases product quality.
- With a controller: PresETwith Danfoss crimp specifications, our controller enables easier and faster crimping
- For bigger hoses: Choose ET5025 for sizes up to braided 32, and spiral 24

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET5020-001-380	Crimp Machine ET5020 3PH	380 V	-
ET5020-001-380KT	Crimp Machine ET5020 3PH Kit1	380 V	ET7300-M150 ET7300-M170 ET7300-M190 ET7300-M230 ET7300-M260 ET7300-M280 ET7300-M290 ET7300-M320 ET7300-M360 ET7300-M400
ET5020-001-380K2	Crimp Machine ET5020 3PH Kit2	380 V	ET7300-M150 ET7300-M170 ET7300-M190 ET7300-M230 ET7300-M260 ET7300-M280 ET7300-M290 ET7300-M320 ET7300-M360 ET7300-M400 ET7300-M440 ET7300-M460

Note: ET5020 machine to be used with crimp dies ET7300.

#### **Specifications**

#### **Dimensions:**

625mmx 560mmx 1450mm

Weight: 310 kg Crimp-force 1350 kN Noise: 53 dBA Pump option: 380 V Control unit: Controller

#### **Capabilities**

Braided hose: -4 thru -24 4-Spiral hose: -6 thru -16 6-Spiral hose: -

#### **Features & Benefits**

- Production machine with Hi-Lo cylinder –high performance and low build up of heat
- Adjustable crimp diameter by digital touch control panel (complete Danfoss hose designs with crimp diameter)

### ET5020 crimp die kits

							ET73	00-M*					
Die Set		150	170	190	230	260	280	290	320	360	400	440	460
	Kit 1	Х	Х	Х	Χ	Х	Χ	Х	Х	Х	Х		
ET5020	Kit 2	Х	Х	Х	Χ	Х	Χ	Х	Х	Х	Х	Х	Χ
	GH681(B)	-4	-5	-6	-8	-10		-12		-16			-20
	GH781	-4	-5	-6	-8		-10	-12			-16		-20
	EC881(B)	-4	-5	-6	-8		-10	-12			-16		
	GH425(B)					-6	-8		-10	-12	-16		
	GH506									-12		-16	
SS	FC500									-12			
Janfo	GH466												
Aeroquip by Danfoss	EC600									-12		-16	
quip	EC850							-10		-12		-16	
Aero	FC310	-4	-5	-6	-8	-10		-12			-16		-20
	FC510	-4		-6	-8	-10		-12			-16		-20
	GH195	-4		-6	-8		-10		-12		-16		
	EC525									-12		-16	
	GH120	-4	-6	-8			-10	-12			-16		-20
	EC810					-6	-8		-10	-12		-16	
	EC115	-4	-5	-6	-8	-10		-12		-16		-20	
	EC215		-4	-5/-6	-8		-10	-12		-16			-20
SS	EC426					-6	-8		-10	-12		-16	
anfo	EC420									-12		-16	
Winner by Danfoss	EC512									-12		-16	
ner	EC615											-16	
Wir	WH004							-12		-16	-20		
	WH006	-4	-5	-6	-8	-10		-12			-16		
	WH007		-4	-5/-6	-8			-10 / -12			-16		
	WHR7	-4 / -5	-6	-8		-10	-12			-16			
foss	WHR8	-4	-6 / -8				-12				-16		
/ Dar	WHR18	-4	-5	-6	-8		-10						
ex by	3TR7	-4/-5	-6	-8	-10	-12				-16			
Synflex by Danfoss	3TR8	-4		-6	-8		-12			-16			
01	3TR18CT	-4 / -5	-6	-8		-10							
	EC045	-5	-6	-8	-10			-12		-16			
	EC060	-4		-6	-8		-10	-12			-16	-20	
SS	EC112	-4	-5	-6	-8	-10		-12			-16		
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16		-20
Ď	EC190							-12		-16			-20
	FC699		-6	-8	-10			-12	-16				
	GH100		-6	-8	-10			-12					
Boston by Danfoss	EC116	-4 / -5		-6	-8								
Bo by D.	EC216	-4	-5	-6	-8								

### Industrial production crimp machines

### ET5025

#### On-site production

ET5020/ET5025 enables high productivity, safety, and ease-of-use. Compact, user-friendly construction enables high productivity, safety and ease-of-use, while solid master dies allow crimping of all fitting types. Available with an optional controller.



- Narrow and innovative user-friendly construction: The ET5025's compact construction allows for ergonomic working. High versatility: Solid master dies allow crimping of all types of fittings.
- Long service life: The ET5025's tried and tested greaseless slide bearing technology reduces maintenance costs and increases product quality.
- With a controller: Preset with Danfoss crimp specifications, our controller enables easier and faster crimping

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET5025-001-380	Crimp Machine ET5025 3PH	380 V	-
ET5025-001-380KT	Crimp Machine ET5025 3PH Kit1	380 V	ET7300-M150 ET7300-M170 ET7300-M190 ET7300-M230 ET7300-M260 ET7300-M280 ET7300-M290 ET7300-M320 ET7300-M360 ET7300-M400
ET5025-001-380K2	Crimp Machine ET5025 3PH Kit2	380 V	ET7300-M150 ET7300-M170 ET7300-M190 ET7300-M230 ET7300-M260 ET7300-M280 ET7300-M290 ET7300-M320 ET7300-M360 ET7300-M400 ET7300-M440 ET7300-M460

Note: ET5020 machine to be used with crimp dies ET7300.

#### **Specifications**

#### **Dimensions:**

645mmx 560mmx 1470mm

Weight: 470 kg Crimp-force 1600 kN Noise: 53 dBA Pump option: 380 V Control unit: Controller

#### **Capabilities**

**Braided hose:** -4 thru -32 **4-Spiral hose:** -6 thru -20

6-Spiral hose: -

#### **Features & Benefits**

- Production machine with Hi-Lo cylinder –high performance and low build up of heat
- Adjustable crimp diameter by digital touch control panel (complete Danfoss hose designs with crimp diameter
- Choose ET5025 for bigger sizes and higher force

### ET5025 crimp die kits

							ET7	300-M*					
ie Set		150	170	190	230	260	280	290	320	360	400	440	460
ET5025	Kit 1	Х	Х	Χ	Χ	Х	X	Х	Х	Х	Х		
	Kit 2	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х
	GH681(B)	-4	-5	-6	-8	-10		-12		-16			-20
	GH781	-4	-5	-6	-8		-10	-12			-16		-20
	EC881(B)	-4	-5	-6	-8		-10	-12			-16		
	GH425(B)					-6	-8		-10	-12	-16		
	GH506									-12		-16	
oss	FC500									-12			
Danf	GH466												
Aeroquip by Danfoss	EC600									-12		-16	
oquip	EC850							-10		-12		-16	
Aero	FC310	-4	-5	-6	-8	-10		-12			-16		-20
	FC510	-4		-6	-8	-10		-12			-16		-20
	GH195	-4		-6	-8		-10		-12		-16		
	EC525									-12		-16	
	GH120	-4	-6	-8			-10	-12			-16		-20
	EC810					-6	-8		-10	-12		-16	
	EC115	-4	-5	-6	-8	-10		-12		-16		-20	
	EC215		-4	-5/-6	-8		-10	-12		-16			-20
SSC	EC426					-6	-8		-10	-12		-16	
Winner by Danfoss	EC420									-12		-16	
by [	EC512									-12		-16	
innei	EC615											-16	
Š	WH004							-12		-16	-20		
	WH006	-4	-5	-6	-8	-10		-12			-16		
	WH007		-4	-5 / -6	-8			-10 / -12			-16		
S	WHR7	-4/-5	-6	-8		-10	-12			-16			
nfos	WHR8	-4	-6/-8				-12				-16		
Synflex by Danfoss	WHR18	-4	-5	-6	-8		-10						
flex b	3TR7	-4/-5	-6	-8	-10	-12				-16			
Synt	3TR8	-4		-6	-8		-12			-16			
	3TR18CT	-4/-5	-6	-8		-10							
	EC045	-5	-6	-8	-10			-12		-16			
	EC060	-4		-6	-8		-10	-12			-16	-20	
255	EC112	-4	-5	-6	-8	-10		-12			-16		
Danfoss	EC212	-4	-5	-6	-8		-10	-12			-16		-20
_	EC190							-12		-16			-20
	FC699		-6	-8	-10			-12	-16				
	GH100		-6	-8	-10			-12					
Boston by Danfoss	EC116	-4/-5		-6	-8								
Bo by D	EC216	-4	-5	-6	-8								

### Industrial production crimp machines

### ET5070

#### High volume on-site production

On-site facilities with the highest production rates need a high-end crimper that offers reliability, safety, ease-of-use, and excellent productivity. The ET5070 is a powerful and fast programmable crimper, ideal for on-site serial production. Designed for operator safety, improved ergonomics, increased hose size capability, ease of use, and maximum productivity, the ET5070 can meet almost any challenge across a broad range of hose sizes and construction types. Available with an optional controller.



- **High versatility:** Unlike other production machines which offer limited openings or crimping power, the ET5070 can meet almost any challenge across a broad range of hose sizes and construction types.
- Fast and safe operations: The ET5070 is designed for ease-of-use and operator safety, enabling faster cycle times and higher productivity.
- **Quickly setup multiple crimps:** The ET5070 increases throughput by reducing the time needed to set-up multiple crimps.
- **Grease-free dies:** Dies can be changed more easily and cleanly, reducing the chance of operator error, since there's no need to apply grease to dies and the crimp ring.
- Smart assembly support: The ET5070 comes pre-programmed with Danfoss hose and fitting specifications to enable easier and faster crimping, with fewer errors and less waste. In addition, the ET5070 assists the user in selecting approved Danfoss hose fittings for each hose part number, as well as the dies required for each assembly—enabling the creation of OEM-quality hose assemblies.
- With a controller: Preset with Danfoss crimp specifications, our controller enables easier and faster crimping

#### **Tooling options**

Danfoss Part Number	Description	Voltage	Included crimp dies
ET5070-001-380	Crimp Machine ET5070 1PH	380 V	-
ET5070-001-380KT	Crimp Machine ET5070 1PH Kit1	380 V	ET7200-M150 ET7200-M170 ET7200-M190 ET7200-M230 ET7200-M260 ET7200-M280 ET7200-M290 ET7200-M320 ET7200-M360 ET7200-M400 ET7200-M440
ET5070-001-380K2	Crimp Machine ET5070 1PH Kit2	380 V	ET7200-M150 ET7200-M170 ET7200-M190 ET7200-M230 ET7200-M260 ET7200-M280 ET7200-M320 ET7200-M320 ET7200-M360 ET7200-M400 ET7200-M440 ET7200-M460 ET7200-M540 ET7200-M540

**Note:** ET5070 machine to be used with intermediate die ET7500-7200 in combination with ET7200. ET5070 machine to be used with crimp dies ET7500.

#### **Specifications**

#### **Dimensions:**

1200mmx 600mmx 1700mm

Weight: 750 kg Crimp-force 3150 kN Noise: 62 dBA pump option: 380 V Control unit: Controller

#### **Capabilities**

**Braided hose:** -4 thru -48 **4-Spiral hose:** -6 thru -48 **6-Spiral hose:** -6 thru -40

#### **Features & Benefits**

- Production machine with HiLo cylinder –high performance and low warm building
- Adjustable crimp diameter by digital touch control panel (complete Danfoss hose designs with crimp diameter)
- High volume production machine

### ET5070 crimp die kits

							E	T7200-N	1*						ET7500-M*
Die Set		150	170	190	230	260	280	290	320	360	400	440	460	540	620
	Kit 1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			
ET5070	Kit 2	Х	X	X	X	Х	X	X	X	Х	X	Х	X	Х	X
	GH681(B)	-4	-5	-6	-8	-10		-12		-16				-20	
	GH781	-4	-5	-6	-8		-10	-12			-16			-20	
	EC881(B)	-4	-5	-6	-8		-10	-12			-16				
	GH425(B)					-6	-8		-10	-12	-16				
	GH506									-12		-16	-16		
925	FC500									-12		-16	-16		
Aeroquip by Danfoss	GH466														-24
by	EC600									-12		-16	-16		-24
quip	EC850							-10		-12		-16	-16		
Aero	FC310	-4	-5	-6	-8	-10		-12			-16			-20	
	FC510	-4		-6	-8	-10		-12			-16			-20	
	GH195	-4		-6	-8		-10		-12		-16				
	EC525									-12		-16	-16		
	GH120	-4	-6	-8			-10	-12			-16			-20	
	EC810					-6	-8		-10	-12					-24
	EC115	-4	-5	-6	-8	-10		-12		-16		-20	-20		-32
	EC215		-4	-5/-6	-8		-10	-12		-16				-20	
SSO	EC426					-6	-8		-10	-12		-16	-16		
Janf	EC420									-12		-16	-16		-24
r by [	EC512									-12		-16	-16		
Winner by Danfoss	EC615											-16	-16		-24
≯	WH004							-12		-16	-20				
	WH006	-4	-5	-6	-8	-10		-12			-16				
	WH007		-4	-5/-6	-8			-10 / -12			-16				
SS	WHR7	-4/-5	-6	-8		-10	-12			-16					
anfo	WHR8	-4	-6/-8				-12				-16				
Synflex by Danfoss	WHR18	-4	-5	-6	-8		-10								
ıflex	3TR7	-4/-5	-6	-8	-10	-12				-16					
Syr	3TR8	-4		-6	-8	4.0	-12			-16					
	3TR18CT	-4/-5	-6	-8	4.0	-10		40		4.5					
	EC045	-5	-6	-8	-10		10	-12		-16	10	20	30		
	EC060	-4		-6	-8	10	-10	-12			-16	-20	-20		
foss	EC112	-4	-5 E	-6	-8	-10	10	-12			-16			20	
Danfoss	EC212	-4	-5	-6	-8		-10	-12		16	-16			-20	22
	EC190 FC699		-6	-8	-10			-12 -12	16	-16				-20	-32
	GH100		-6	-8	-10			-12	-16						
SS		, , =	-0					-12							
Boston by Danfoss	EC116	-4/-5		-6	-8										
Bo by D	EC216	-4	-5	-6	-8										

### Crimp die recommendation

#### For the most common Danfoss hoses

Hose /	Size	-3	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32
	GH681(B)		M150	M170	M190	M230	M260	M290	M360	M460	M540	M670
	GH781		M150	M170	M190	M230	M280	M290	M400	M460	M540	M670
	EC881(B)		M150	M170	M190	M230	M280	M290	M400	M460	M540	M670
	GH425(B)				M260	M280	M320	M360	M400			
	GH506							M360	M440	M500	M570	M710
oss	FC500							M360	M440	M500	M570	M780
Danf	GH466									M540	M620	M780
by	EC600							M360	M440	M540	M620	M780
Aeroquip by Danfoss	EC850						M290	M360	M440	M570		
Aero	FC310	M120	M150	M170	M190	M230	M260	M290	M400	M460		
	FC510		M150		M190	M230	M260	M290	M400	M460		
	GH195		M150		M190	M230	M280	M320	M400	M500	M570	M670
	EC525							M360	M440	M530	M570	M710
	GH120		M150		M190	M230	M280	M290	M400	M460	M540	M670
	EC810				M260	M280	M320	M360	M440	M540	M620	M780
	EC115		M170	M170	M190	M230	M260	M290	M360	M440	M620	M050
	EC215		M170	M190	M190	M230	M280	M290	M360	M460	M540	M670
SS	EC426				M260	M280	M320	M360	M440	M530		
anfo	EC420							M360	M440	M570	M620	M780
by D	EC512							M360	M440	M530	M570	M710
Winner by Danfoss	EC615							M360	M440	M530	M570	M710
×	WH004							M290	M360	M400	M540	M670
	WH006	M120	M150	M170	M190	M230	M260	M290	M400			
	WH007		M170	M190	M190	M230	M290	M290	M400			
	WHR7	M090/M120	M150	M150	M170	M190	M240	M280	M360			
foss	WHR8		M170		M190	M190		M280	M400			
/ Dar	WHR18	M120	M150	M170	M190	M230	M280					
ex by	3TR7		M150	M150	M170	M190	M230	M260	M360			
Synflex by Danfoss	3TR8		M150		M190	M230		M280	M360			
O1	3TR18CT		M150	M150	M170	M200	M260					
	EC007				F0106	F0108	F0110	F0112				
	GH001		F0104		F0106	F0108	F0110	F0112	F0116			
	EC045	M120	M120	M150	M170	M190	M230	M290	M360			
S	EC060		M170		M190	M230	M280	M290	M400	M440		
Danfoss	EC112		M150	M170	M190	M230	M260	M290	M400			
۵	EC212		M150	M170	M190	M230	M280	M290	M400	M460	M530	M670
	EC190							M290	M360	M460	M530	M620
	FC699		M120		M170	M190	M230	M290	M320			
	GH100		M120		M170	M190	M230	M290				
n by oss	EC116		M150	M150	M190	M230						
Boston by Danfoss	EC216		M150	M170	M190	M230						

### Crimp dies per diameter

diameter	Part Number
Ø6,8	ET7100-M068
Ø9,0	ET7100-M090
Ø12,0	ET7100-M120
Ø14,0	ET7100-M140
Ø15,0	ET7100-M150
Ø17,0	ET7100-M170
Ø19,0	ET7100-M190
Ø20,0	ET7100-M200
Ø23,0	ET7100-M230
Ø24,0	ET7100-M240
Ø26,0	ET7100-M260
Ø28,0	ET7100-M280
Ø29,0	ET7100-M290
Ø32,0	ET7100-M320
Ø36,0	ET7100-M360
Ø40,0	ET7100-M400
Ø44,0	ET7100-M440
Ø46,0	ET7100-M460
Ø47,0	ET7100-M470

diameter	Part Number
Ø54,0	ET7500-M540
Ø57,0	ET7500-M570
Ø62,0	ET7500-M620
Ø67,0	ET7500-M670
Ø71,0	ET7500-M710
Ø74,0	ET7500-M740
Ø78,0	ET7500-M780
Ø84,0	ET7500-M840
Ø86,0	ET7500-M860
Ø90,0	ET7500-M900
Ø92,0	ET7400-M920
Ø96,0	ET7500-M960
Ø103,0	ET7500-M1030
Ø106,0	ET7500-M1060
Ø111,0	ET7500-M1110
Ø116,0	ET7500-M1160
Ø121,0	ET7500-M1210
Ø126,0	ET7500-M1260
Ø131,0	ET7500-M1310

diameter	Part Number
Ø6,8	ET7200-M068
Ø9,0	ET7200-M090
Ø12,0	ET7200-M100
Ø14,0	ET7200-M120
Ø15,0	ET7200-M140
Ø17,0	ET7200-M150
Ø16,0	ET7200-M160
Ø17,0	ET7200-M170
Ø19,0	ET7200-M190
Ø20,0	ET7200-M200
Ø22,0	ET7200-M220
Ø23,0	ET7200-M230
Ø24,0	ET7200-M240
Ø26,0	ET7200-M260
Ø28,0	ET7200-M280
Ø29,0	ET7200-M290
Ø30,0	ET7200-M300
Ø31,0	ET7200-M310
Ø32,0	ET7200-M320
Ø34,0	ET7200-M340
Ø36,0	ET7200-M360
Ø38,0	ET7200-M380
Ø39,0	ET7200-M390
Ø40,0	ET7200-M400
Ø44,0	ET7200-M440
Ø46,0	ET7200-M460
Ø50,0	ET7200-M500
Ø54,0	ET7200-M540
Ø57,0	ET7200-M570
Ø62,0	ET7200-M620

### Crimping machine accessories

Meet your unique demands for faster, more efficient, or more accurate assembly production by customizing your machines with our high-quality accessories.

### ET5040C-0045

#### Front die storage rack

The ET5040C-0045 die storage rack offers a convenient place to store your tooling in front of the crimper.



### ET5040C-0046

#### Quick die change storage rack

The ET5040-0046 is optimal solution for wall mounting



### ET5040C-0047

#### Mobile die storage rack

The ET5040C-0047 mobile die storage rack enables easy work with two side storage, with easy moving around.



### ET5040C-0048

#### Table and quick die change storage rack

The ET5040C-0048 offers a complete solution for the storage and assembly of the dies.



### Crimping machine accessories

### ET5040C-0020

#### Foot pedal

The ET5040C-0020 foot pedal is for machines with a controller. Acting like a dual foot switch, this pedal enables you to perform crimp head activation and retraction, leaving your hands free to handle the hose and crimping. To activate the foot switch, select the appropriate button on the controller



### ET5040C-0019

#### Calibration pin

The ET5040C-0019 calibration pin is a tool for machines with a controller that simplifies the calibration process to ensure the crimper is achieving consistent and accurate crimp diameters.



### ET5040C-0006

#### **Automatic backstop**

Use the ET5040C-0006 with the controllers, to enable the closing of the machine automatically.



### ET5040C-0007

#### Manual backstop

The ET5040C-0007 manual backstop ensures the right crimp position to ensure assembly crimping happens at the right location.



### Crimping machine accessories ordering options













		ET4100-001	ET4200-001	ET4250-001	ET4300-001	ET4350-001	ET4400-001
Backstop manual ET4200-001-230/380	ET4200C-0001		X				
Backstop manual ET4250-001-012	ET4250C-0001			X			
Backstop manual ET4300-001-230/-380	ET4300C-0001				X	X	
Backstop manual ET4400-001-230/-380	ET4400C-0001						X
Backstop automatic ET4400-001-230/-380	ET4400C-0002						X
Backstop manual ET4500-001-230/-380	ET4500C-0001						
Backstop automatic ET4500-001-230/-380	ET4500C-0002						
Backstop manual ET4500-002-230/-380 with Controller	ET4500C-0003						
Backstop automatic ET4500-002-230/-380 with Controller	ET4500C-0004						
Backstop manual ET5020-001-380 with Controller	ET5020C-0001						
Backstop automatic ET5020-001-380 with Controller	ET5020C-0002						
Backstop manual ET5025-001-380 with controller	ET5025C-0001						
Backstop automatic ET5025-001-380 with Controller	ET5025C-0002						
Backstop automatic ET5070-001-380 with Controller	ET5040C-0006						
Backstop manual ET5070-001-380 with Controller	ET5040C-0007						
Calibration tool for machine with Controller	ET5040C-0019						
Foot pedal for machine with Controller	ET5040C-0020						
Die set storage to put in front of crimper	ET5040C-0045						
Die set storage to put in front of crimper in combination with ET5040C-0048	ET5040C-0046		X	X	X	X	X
Mobile storage rack for dies set of type ET7200-M*** / ET7300-M*** / ET7400-M*** / ET7500-M***	ET5040C-0047		X	X	X	X	X
Table top rack	ET5040C-0048	X	X	X	X	X	X

### Crimping machine accessories ordering options











		ET4500-001	ET4500-002	ET5020-001	ET5025-001	ET5070-001
Backstop manual ET4200-001-230/380	ET4200C-0001					
Backstop manual ET4250-001-012	ET4250C-0001					
Backstop manual ET4300-001-230/-380	ET4300C-0001					
Backstop manual ET4400-001-230/-380	ET4400C-0001					
Backstop automatic ET4400-001-230/-380	ET4400C-0002	Х				
Backstop manual ET4500-001-230/-380	ET4500C-0001	X				
Backstop automatic ET4500-001-230/-380	ET4500C-0002		X			
Backstop manual ET4500-002-230/-380 with Controller	ET4500C-0003		X			
Backstop automatic ET4500-002-230/-380 with Controller	ET4500C-0004			X		
Backstop manual ET5020-001-380 with Controller	ET5020C-0001			X		
Backstop automatic ET5020-001-380 with Controller	ET5020C-0002					
Backstop manual ET5025-001-380 with controller	ET5025C-0001				X	
Backstop automatic ET5025-001-380 with Controller	ET5025C-0002				X	
Backstop automatic ET5070-001-380 with Controller	ET5040C-0006					X
Backstop manual ET5070-001-380 with Controller	ET5040C-0007		X	X		X
Calibration tool for machine with Controller	ET5040C-0019		X	X	X	X
Foot pedal for machine with Controller	ET5040C-0020	X	×	X	X	×
Die set storage to put in front of crimper	ET5040C-0045				X	X
Die set storage to put in front of crimper in combination with ET5040C-0048	ET5040C-0046	X	X	X		
Mobile storage rack for dies set of type ET7200-M*** / ET7300-M*** / ET7400-M*** / ET7500-M***	ET5040C-0047				Х	X
Table top rack	ET5040C-0048	X	X	X	X	X

### **Cutting machines**

Efficient, precise and durable, our high-quality blades will accelerate your productivity. While using appropriate blades generates less smoke, debris, and heat—which can damage the final product—our offerings are also very cost-effective, lasting up to 7X longer than markETalternatives.

We offer several types of cutting blades to meet the most common customer use cases, including slotted, and plated variants. Please check which blade we recommend for use with each machine



### Unique drive motor with double bearings and oversized shafts

- A larger shaft enables a higher cutting force, enabling you to work faster and generate a more saleable product
- Maximizes motor life, giving you the lowest cost of ownership in the market
- Longer time between blade sharpening increases productivity
- Reduces scrap with straight cuts for less shopfloor contamination and more costeffective products



#### **Compact design**

• Ideal for a mobile service



### German-quality steel blades

 Long-lasting high-quality steel blades lower cost of ownership by enabling faster cutting, as well as less debris, smoke, and heat that can impact hose performance. This also reduces the risk of hose rubber and wire separating



#### Safety features

- Safety motor brake meeting DIN CE standard requiring the blade to stop turning in 10 seconds
- Security shield

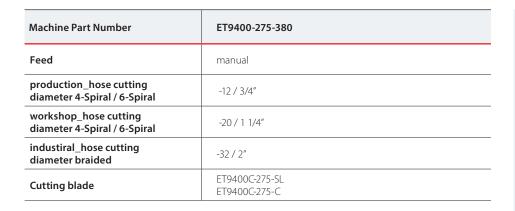
### **Cutting machines**

### ET9400

#### Mobile servicing

Portable, easy to use, and designed for maximum safety, the ET9400 is a manual hose cutting machine for workshop use that also enables cost-effective field servicing. With a 3 kW drive, the ET9400 is suitable for hydraulic hoses up to 11/4" in size. It is compatible with the following blades:

- ET9400C-275-SL (275 x 3 x 30mm)
- **ET9400C-275-C** (275 x 3 x 30mm)





#### **Specifications**

**Dimensions:** 

540mmx440mmx300 mm **Suction diameter:** 80mm

Weight: 50 kg Noise: 90 dBA

Electric drive: 3kW 3VAC (Brake motor)

#### **Features & Benefits**

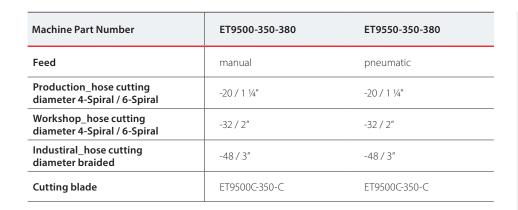
- Manual feed
- · For onsite service
- Small volumes and smaller hoses

### ET9500 and ET9550

#### Versatility and cost-effectiveness

Designed for workshop use, our manual ET9500 and pneumatic ET9550 cutting machines support a wide range of the most common hose sizes at a reasonable price. They are suitable for hydraulic hoses up to 2" and a model that supports 3" industrial hoses is also available. It is compatible with the following blades:

• **ET9500C-350-C** (350 x 3 x 30mm)





#### **Specifications**

**Dimensions (ET9500):** 745mmx690mmx430mm **Suction diameter:** 60mm

Weight: 75 kg Noise: 90 dBA

Electric drive: 4,6kW 3VAC (Brake

motor)

**Dimensions (ET9550):** 820mm x 785mm x 755 mm **Suction diameter:** 60mm

Weight: 110 kg Noise: 90 dBA

Electric drive: 3,6kW 3VAC (Brake

motor)

#### **Features & Benefits**

• With manual or pneumatic feed

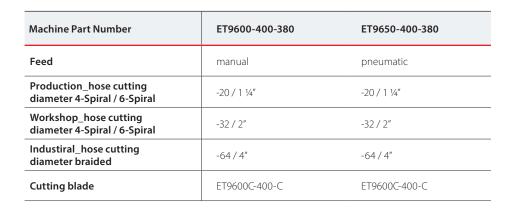
### **Cutting machines**

### ET9600 and ET9650

#### Versatility and cost-effectiveness

Designed for workshop use, our manual ET9500 and pneumatic ET9550 cutting machines support a wide range of the most common hose sizes at a reasonable price. They are suitable for hydraulic hoses up to 2" and a model that supports 3" industrial hoses is also available. It is compatible with the following blades:

• ET9600C-400-C (38x400x400 mm)





#### **Specifications**

Dimensions (ET9600): 983mm x 760mm x 875mm Suction diameter: 60 mm

Weight: 122 kg Noise: 90 dBA

Electric drive: 4,6 kW 3 VAC (break

motor)

**Dimensions (ET9650):** 983mm x 760mm x 540mm **Suction diameter:** 60 mm

Weight: 140 kg Noise: 90 dBA

Electric drive: 4,6 kW 3 VAC (break

motor)

#### **Features & Benefits**

- · With manual or pneumatic feed
- · With wide opening

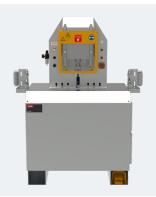
### ET9700

#### Versatility and cost-effectiveness

The ET9700 cutting machine can support high volume manufacturing across a broad range of hose sizes and construction types. With a 7.5 kW motor, the ET9700 is best suited to high-volume manufacturing of 2" hoses, along with a workshop capability for 3" high pressure hoses and 3" industrial hoses. It is compatible with the following blades:

• **ET9700C-520-C** (520x4x40 mm)

Machine Part Number	ET9700-520-380
Feed	pneumatic
production_hose cutting diameter 4-Spiral / 6-Spiral	-32 / 2"
workshop_hose cutting diameter 4-Spiral / 6-Spiral	-48 / 3"
industiral_hose cutting diameter braided	-48 / 3"
Cutting blade	ET9700C-520-C



#### **Specifications**

#### Dimensions:

1210 mm x 650 mm x 1650 mm **Suction diameter:** 100 mm

Weight: 245 kg Noise: 80 dBA

Electric drive: 7,5 kW / Break motor

#### **Features & Benefits**

- With pneumatic feed
- · Low noise of 80 dBA
- High volume production machine

Efficient, precise and durable, our high-quality blades will accelerate your productivity. While using appropriate blades generates less smoke, debris, and heat – which can damage the final product – our offerings are also very cost-effective, lasting up to 7x longer than market alternatives.

We offer several types of cutting blades to meet the most common customer use cases, including slotted, and plated variants. Please check which blade we recommend for use with each machine



### ET9400C-275-SL

#### Slotted blade

• Dimensions: 275x3x30 mm

#### **Features & Benefits**

- Unique design incorporates tiny slots to both cut and dissipate heat
- Cleanest cut of all blades
- Best blade on Teflon and LifeSense hoserecommended for any cut
- Same price as Advanced Scalloped blade



### ET9400C-275-C

#### Diamond coated blade

• Dimensions: 275x3x30 mm

### Features & Benefits

- Extremely effective cutting all hose styles and sizes:
- -40 six spiral hose cut clean in 15 seconds
- Quite dirty and smoky, just like abrasive blades
- Expensive: ~2 ½ 3 times steel blades
- · Lower cutting force



### ET9500C-350-C

#### Diamond coated blade

• Dimensions: 350x3x30 mm



### ET9600C-400-C

#### Diamond coated blade

• Dimensions: 400x4x30 mm



### **Skiving machines**

Our tooling portfolio offers two highly efficient machines designed to skive all types of hydraulic hoses and fittings on the outside, on the inside, or on the outside and inside in one operation—enabling higher productivity and optimal results.



- A larger shaft enables a higher cutting force, enabling you to work faster and generate a more saleable product
- Maximizes motor life, giving you the lowest cost of ownership in the market
- Longer time between blade sharpening increases productivity
- Reduces scrap with straight cuts for less shopfloor contamination and more costeffective products



 Long-lasting high-quality steel blades lower cost of ownership by enabling faster cutting, as well as less debris, smoke, and heat that can impact hose performance. This also reduces the risk of hose rubber and wire separating

### Skiving machines

### **ET6100KT**

#### Workshop skiving

The ET6100KT is a two-step workshop skiving machine for all types of hoses and fittings. It is suitable for skiving hoses from 5/8" to 2" on the inside and from 3/16" to 2" on the outside. User-friendly controls and fast change over times optimize the process, while an easy-to-open protective cover and safety flap reduce the risk of injury. The ET6100KT also includes a 2-year warranty.



Machine Part Number	ET6100KT
Skiving diameter (inner diameter)	5/8" (-10) / 2" (-32)
Skiving diameter (outer diameter))	3/16" (-3) / 2" (-32)
Simultaneous internal and external skiving	110 rpm
Engine	0,37 kW
Application area	workshop

#### **Specifications**

#### **Dimensions:**

440 mmx 440 mmx 545 mm

Weight: 35 kg Noise: 60 dBA

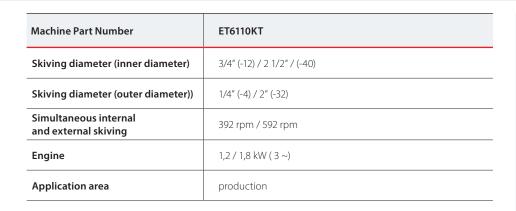
#### **Features & Benefits**

- Easy handling via foot pedal
- Good overview to the operation (Makrolon®- glass window)
- Low setting time Quick Connector (tooling change)

### **ET6110KT**

#### Workshop skiving

The ET6110KT enables simultaneous internal and external hose skiving, completing the process in one efficient operation for higher productivity. It is suitable for skiving hoses from 3/4" to 2" on the inside and from 1/4" to 2" on the outside. User-friendly controls and fast change over times further optimize the process, with foot pedal motor control allowing the operator to use both hands to guide the hose. An easy-to-open protective cover and safety flap also reduce the risk of injury. The ET6110KT includes a 2-year warranty.





#### **Specifications**

#### **Dimensions:**

780 mmx 620 mmx 550 mm

Weight: 70 kg Noise: 60 dBA

#### **Features & Benefits**

- Skiving for inner and outer diameter in one step
- Easy handling via foot pedal
- Good overview to the operation (Makrolon®- glass window)
- Low setting time Quick Connector (tooling change)
- Lower drawer with easy access to remove the waste

### **Nipple inserters**

Our two robust and ergonomic nipple inserters enable faster and easier installation of even very heavy or bent fittings, accelerating productivity and delivering high-performance results.



#### Good visibility of the work area

(Makrolon®- glass window) allows clear visibility and strong protection



#### Soft clamping

Safe but soft clamping for protective hose clamping



#### **Ergonomic operations**

Adaptable foot pedal control over hose clamping saves time and increases productivity by freeing both of the operator's hands. Lifting eyes also enable easy positioning of the machine.



#### Simple-to-use

Safe but soft clamping for protective hose clamping



#### Robust design

Drives cost-savings with high resistance to wear and tear and no need for regular maintenance.



#### Designed for safety

CE-compliant and includes safety guards for moving components.

### Nipple inserters

### ET6200KT

#### Workshop nipple inserter

The ET6200KT is a high-performance nipple inserter for difficult to assemble fittings. With a press force of 6 bar (90 psi), the ET6200KT has a working range of up to 2". It is compatible with all types of hoses and fittings and includes 10 different adapters.



Machine Part Number	ET6200KT
Max. nipple diameter	-32 / 2"
Clamping Force	5,1 kN (6 bar)
Air supply	7 bar (100psi)
Piston movement	100 mm
Application area	Workshop

#### **Specifications**

#### **Dimensions:**

600 mm x 810 mm x 310 mm **Weight:** 35 kg

#### Features & Benefits

- Ideal for workshops
- Manual activation

### ET6210KT

#### Production nipple inserter

Suited to both workshop and production environments, the ergonomic ET6210KT eliminates lengthy set-up times. With a press force of 8 bar (116 psi), the ET6210KT has a working range of up to 3", features multi-purpose dies, and is compatible with all types of hoses and fittings. Adaptable foot pedal control over hose clamping also frees both of the operator's hands, while an innovative rapid tool sled enables simple and quick insertion of 90°, 45°, or straight fittings without time-consuming tool changes.



Machine Part Number	ET6210KT
Max. nipple diameter	-48 / 3"
Clamping Force	8 kN (8 bar)
Air supply	7 bar (100psi)
Piston movement	-
Application area	Production

#### **Specifications**

#### **Dimensions:**

625 mm x 1185 mm x 320 mm

Weight: 100 kg

#### **Features & Benefits**

- For high volume production
- Food pedal activation

### **Marking machines**

Our tooling portfolio offers two embossing and marking machines that permanently imprint appropriate information onto hose assemblies—enabling easy identification as required by CE standards.



#### Good visibility of the work area

(Makrolon®- glass window) allows clear visibility and strong protection



#### Soft clamping

Safe but soft clamping for protective hose clamping



#### **Ergonomic operations**

Adaptable foot pedal control over hose clamping saves time and increases productivity by freeing both of the operator's hands. Lifting eyes also enable easy positioning of the machine.



#### Simple-to-use

Safe but soft clamping for protective hose clamping



#### Robust design

Drives cost-savings with high resistance to wear and tear and no need for regular maintenance.



#### Designed for safety

CE-compliant and includes safety guards for moving components.

### Marking machines

### ET6300KT

#### Manual hose marking

The ET6300KT is a manual marking machine suitable for all hoses and fittings that features an easy-to-use, compact table-top design. With 30 insertable steel characters and a marking area of  $\emptyset$  11.5 - 90 mm, the ET6300KT enables two rows of up to 15 characters each. It comes with a two-year warranty.

Machine Part Number	ET6300KT
Working area	Ø 11,5 - 90 mm
Working depth	0,5 mm
Engine	manual



#### **Specifications**

#### **Dimensions:**

272 mm x 200 mm x 750 mm

Weight: 35 kg

#### **Features & Benefits**

- Portable marking machine for mobile service
- Easy to handle and flexible to use

### ET6310KT

#### **Production hose marking**

The ET6310KT is a pneumatic marking machine suitable for high-volume production environments and compatible with all hoses and fittings. With 22 insertable steel characters and a marking area of  $\emptyset$  11.5 - 100 mm, the ET6310KT enables two rows of up to 15 characters each. It comes with a two-year warranty.

Machine Part Number	ET6310KT
Working area	Ø 11,5 - 90 mm
Working depth	0,5 mm
Engine	pneumatic 7 bar



#### **Specifications**

#### Dimensions:

600 mm x 454 mm x 500 mm

Weight: 80 kg

#### **Features & Benefits**

• For high volume production

# We're changing the **crimping game**.

### **Mobile crimp tool**

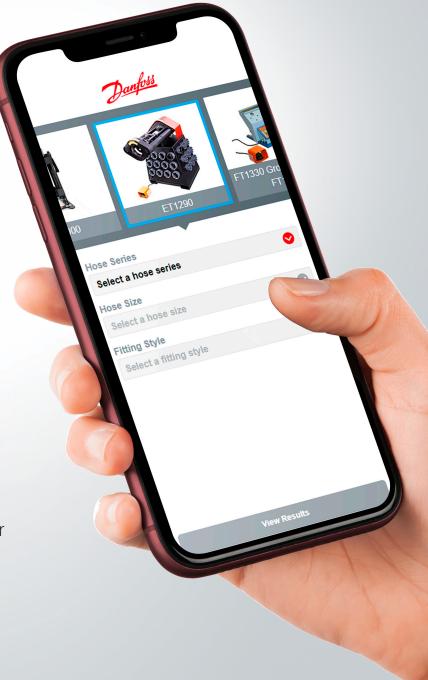
We've made it easier to help your customers find the proper crimp spec anytime, anywhere with the new mobile crimp spec tool on PowerSource.

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.



### **About Danfoss Power Solutions FC**

Danfoss hoses, fittings, and tooling provide the ultimate fluid conveyance solutions for a variety of equipment and applications around the world. We proudly engineer to support a sustainable future for tomorrow.

To learn more please visit: http://www.danfoss.com/en/about-danfoss/our-businesses/power-solutions

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