

Danfoss Contamination Control Products

FT1555-BM bench mount capping machine



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Figure 1

Capabilities

CapSeal capsules: 1" (20mm) I.D. through 3" (80mm) I.D.

Hex fitting sizes: 1/2" (12mm) through 3" (78mm).

Cycle time: 2.0 seconds.

Specifications

Dimensions: 9 1/2" (W) by 20 1/2" (L) by 7" (H) / 241mm (W) by 520mm (L) by 180mm (H).

Weight: 20.5 Pounds. (9kg).

Voltage: 230 Volt, single phase, 50/60 Hz, 15 Amps.

Power consumption: 3,400 Watts.

Heater temperature: 163°C / 325°F.

Mark of conformity: 

General information

The Danfoss FT1555-BM bench mount capping system (Figure 1) provides a quick and economical solution to prevent contamination in hydraulic circuits. CapSeal capsules prevent particulate and other contaminants from entering hose assembly ends once the fittings are assembled, and prevent the fitting terminal end threads from being damaged during transit. The capping system also works on the tube and pipe ends preventing moisture and contamination from getting into the tubing and piping assemblies.

The purpose of this manual is to present critical safety information, and basic installation and operating instructions for the Danfoss FT1555-BM capping system.

Safety instructions

-  Thoroughly read the operator's manual before attempting to heat shrink capsules on the terminal ends of a hose assembly, tube or pipe assembly. Electronic manuals can be found on Danfoss Power Source, or print versions can be ordered via Standard Register. Failure to follow operating instruction could result in serious injury or property damage.
-  Prevent Unauthorized Operation: Do not permit anyone to operate this machine unless they have thoroughly read and understand this manual.
-  Wear Safety Glasses: Risk of eye injury! Eye protection is required at all times during the installation, operation and maintenance of this machine. Failure to wear safety glasses could result in personal injury.
-  Keep work area clean: cluttered areas and benches invite accidents.
-  Do not touch the areas of the machine around the Heat Shrink Tunnel Plunger as these surfaces are hot and they can cause burns. Let the machine housing surfaces cool down before touching external surfaces of the machine. Do not expose skin or eyes to hot air exhausting from the machine around the Heat Shrink Tunnel plunger or Hot Air Out Vent. (See Figure 1).
-  Incorrect use of hot air blowers can cause fire and explosion hazard, especially near combustible materials and explosive gases.
-  Unplug the power supply when the Heat Shrink machine is not in use.
-  Do not open machine enclosure when capping system is plugged into a live power supply. This is not a field repairable machine.
-  Do not open machine enclosure except to perform maintenance as outlined in this manual.

Installation / environment

Step 1:

Position the machine in a clean, dry, level surface in a well ventilated area free of combustible material. Keep a clear perimeter of 12" on both sides and 6" at rear of machine. Do not place anything on top of machine.

Step 2:

Connect to an appropriate power source using a NEMA L6-15, 2-pole, 3-wire grounding, 15 Amp 230V locking plug and outlet. (See Figure 2)



Figure 2

Machine operation

Step 3:

Set the Power On/Off switch and Heater Timer On/Off to the Off position before connecting the machine to the power source. (See Figure 3)



Figure 3

Installation / environment

Step 4:

Set the Main Power On/Off switch to the On position.
Note: Power Switch will illuminate green when power is on.
(See Figure 4).



Figure 4

Step 5:

Turn the Heater On/Off Timer clockwise past 10 minutes to desired heat duration allowing for at least five minutes of preheat time.
(See Figure 5).

Note: White indicator light will illuminate when heater is activated.



Figure 5

Step 6:

Select the proper CapSeal capsule by measuring the end fitting point to point on a hex style fitting or the measure the largest outside diameter of the end fitting. (See Figure 6).



Figure 6

Step 7:

Reference the sizing chart on page 7 to determine the proper CapSeal capsule.

Step 8:

Place CapSeal capsule over the end-fitting securely ensuring that the fitting is fully inserted into the capsule. (See Figure 7).



Figure 7

Installation / environment

Step 9:

Place capsuled hose assembly fitting end against white Heat Shrink Tunnel Plunger and push into heat Shrink Tunnel Plunger about 3" and hold for at least 2 seconds. (See Figure 8 & 9).



Figure 8

Step 10:

Remove hose assembly and inspect capsule to confirm that it is shrunk securely onto fitting end. (See Figure 10).



Figure 10



Figure 9

Maintenance

Bi-monthly cleaning of the Danfoss FT1555-BM Capping System Intake Air Filter and Grill is vital in maintaining correct operating temperatures and function of the heating element. Proper air flow through the system will prevent the element from over heating which can cause internal damage and possible fire hazard. Airborne contaminants varies from location to location, and it is imperative that the Air Intake Filter and Grill is cleaned every two months at a minimum.

Step 1:

Turn the timer to "0" position and turn off the main power switch and disconnect the FT1555-BM Capping System from the power source. (See Figure 11).



Figure 11

Step 2:

Visually inspect the Capping System for signs of overheating i.e. discoloration of the stainless steel cover, warning labels, discoloration or cracking of the plunger or deformation of the rubber mounts. (See Figure 12).



Figure 12

Step 3:

Pry and remove the black plastic filter retainer on the back of the switch plate and remove the foam filter. Wash the filter in warm soap and water and dry completely. (See Figure 13).



Figure 13

Step 4:

Using a 1/8" hex key wrench remove four 10-32 x 1/4" button head cap screws from the main switch end plate, two in the front and two in the back. (See Figure 14).



Figure 14

Maintenance

Step 5:

Turn the unit on the front side and remove the three 1/4-20 x 3/8" button head cap screws from the base plate using a 5/32" hex key wrench. (See Figure 15).



Figure 15

Step 6:

Remove the switch end plate and inspect the air intake grill for debris. Using a coarse brush remove any debris from the intake grill that could obstruct air flow. (See Figure 16).



Figure 16

Step 7:

Replace the main switch end plate. (See Figure 17).



Figure 17

Step 8:

Reinstall the foam filter and retainer and return unit to service. (See Figure 18).



Figure 18

Sizing chart heat seal capsules

Sizing		*Fitting			Packaged		Bulk	
HEX sizes covered in inches	HEX sizes covered in mm	Capsule size in mm (inside diameter x length)	Elbow	Straight	Part number (packaged)	Carton quantity	Part number (bulk)	Carton quantity
.47" to .71"	12mm to 18mm	20 X 23		X	FT1555-2023UP	810	FT1555-2023BP	23,400
.47" to .71"	12mm to 18mm	20 X 30	X		FT1555-2030UP	810	FT1555-2030BP	23,400
.63" to .63"	16mm to 21mm	22 X 24		X	FT1555-2224UP	810	FT1555-2224BP	22,500
.71" to .91"	18mm to 23mm	25 X 27		X	FT1555-2527UP	800	FT1555-2527BP	17,600
.71" to .91"	18mm to 23mm	25 X 40	X		FT1555-2540UP	800	FT1555-2540BP	17,600
.87" to 1.02"	22mm to 26mm	28 X 40	X		FT1555-2840UP	720	FT1555-2840BP	15,200
.94" to 1.14"	24mm to 29mm	31 X 33		X	FT1555-3133UP	640	FT1555-3133BP	12,240
.95" to 1.14"	24mm to 29mm	31 X 40	X		FT1555-3140UP	640	FT1555-3140BP	12,240
1.07" to 1.26"	27mm to 32mm	34 X 40	X		FT1555-3440UP	640	FT1555-3440BP	10,240
1.19" to 1.42"	30mm to 36mm	38 X 40	X	X	FT1555-3840UP	560	FT1555-3840BP	7,800
1.26" to 1.61"	32mm to 41mm	43 X 45	X	X	FT1555-4345UP	480	FT1555-4345BP	6,240
1.34" to 1.73"	34mm to 44mm	46 X 50	X	X	FT1555-4650UP	480	FT1555-4650BP	5,760
1.62" to 1.97"	41mm to 50mm	52 X 60	X	X	FT1555-5260UP	400	FT1555-5260BP	4,400
1.93" to 2.20"	49mm to 56mm	58 X 60	X	X	FT1555-5860UP	400	FT1555-5860BP	3,600
2.16" to 2.56"	55mm to 65mm	67 X 60	X	X	FT1555-6760UP	320	FT1555-6760BP	2,560
2.52" to 3.07"	64mm to 78mm	80 X 60	X	X	FT1555-8060UP	420	FT1555-8060BP	1,736

* Shorter length capsules are recommended for elbow/angled fittings. (i.e. 45 - degree and 90 - degree fittings).

Danfoss FT1555-BM bench mount capping machine Operator's Manual

EC DECLARATION OF CONFORMITY FOR MACHINERY
Directive 73/23/EEC, 89/336/EEC

Manufacturer: Ultraclean Technologies Corp.
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Herewith declares that the Clean Seal System Heat Shrink Machine
Model: UC-CSS-230, production year 2010
is in conformity with the requirements of the Machinery Directive
73/23/EEC, 89/336/EEC
Bridgeton, NJ 08302 USA, October 2010
Mark of Conformity 
Bruce Riley, Owner

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