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### Millar Worldwide Distribution

Millar, Inc. has a network of Authorized Distributors in most countries around the world. For information on the Millar distributor in your country, please contact the Millar Customer Service Department at our headquarters in Houston, Texas.



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For your convenience, Millar provides translated IFUs in the following languages: Dutch, French, German, Spanish and Swedish. Please visit our website at millar com to access the additional languages.

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Making the improbable possible.

**PEC Series Cables** 

Models PEC-1.5C/10C, PEC-4D/10D

Instructions for Use

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M.I. P/N: 004-2111 Rev. F

# **Millar Limited Warranty**

Millar, Inc. warrants all of its cables to be free from defects in workmanship and materials at the time of shipment to the original purchaser.

Millar hereby excludes all warranties not herein stated, whether express or implied by operation of law or course of dealing or trade usage or otherwise, including but not limited to any implied warranties of fitness or merchantability.

Since handling, storage, cleaning and sterilization of the product, as well as factors relating to patient diagnosis, treatment, catheterization procedures, and other matters beyond Millar's control, directly affect the product and the results obtained from its use, Millar shall not be liable for any incidental or consequential loss, damage, or expense arising directly or indirectly from the use of this product.

Specifications subject to change without notice.

# Definition of SymbolsImage: Definition of SymbolsImage: Attention, consult accompanying documentsImage: Date of ManufactureImage: Date of ManufactureREFCatalog NumberImage: SNSerial NumberImage: Date CodeImage: Code<td

# **Device Description**

The PEC series of cables are designed as an interface between the Millar Mikro-Tip<sup>®</sup> catheters and the model PCU-2000 pressure control unit with patient isolation. The suffix "C" references catheters with a round viking connector and the suffix "D" references catheters with a flat low profile connector.

## Cleaning

Wipe the cable and connectors clean with a soft wet gauze or tissue. If extremely dirty, the cable may be soaked in a solution of Alconox<sup>®</sup> or other mild detergent.

**CAUTION:** Do not immerse the electrical connector.

# Method of Sterilization for Extension Cables

**CAUTION:** DO NOT sterilize by autoclaving, radiation (gamma or e-beam), plasma, peroxide or formaldehyde vapor solutions.

Cables must be completely cleaned and dried before sterilization. Aeration may be performed at room temperature or in a heated aeration (max. 145 °F, 63 °C) cabinet. Cables should be placed in a breathable polyethylene pouch (e.g., 3M<sup>™</sup> Steri-Lok<sup>™</sup>).

# Ethylene Oxide Sterilization Cycle Parameters

Ethylene Oxide Sterilization Preheat phase:	n Cycle Parameters Starting Temperature 110 °F (43°C) min. Duration 30 minutes	Schematic
Initial Vacuum:	6.0 inHgA (20.3 kPa) Rate: 3 minutes	
Nitrogen Flush: 2 cycles		P1 P2
Nitrogen Addition to:	28.0 $\pm$ 0.5 inHgA (94.8 $\pm$ 1.7 kPa)	
Rate:	1.4 $\pm$ 0.5 inHgA/min. (4.7 $\pm$ 1.7 kPa/min.)	BLACK (PIN 1 PIN 5
Evacuation:	6.0 ± 0.5 inHgA (20.3 ± 1.7 kPa)	5 / BLUE - SIGNAL
Rate:	$1.0 \pm 0.5$ inHgA/min. ( $3.4 \pm 1.7$ kPa)	
Conditioning		
Humidification:	$1.5 \pm 0.5$ inHgA (5.1 $\pm$ 1.7 kPa)	BROWN +EXCITATION
Steam Conditioning:	10 min.	3 / VENT TUBE / O REAR VIEW
Humidity Dwell:	30 $\pm$ 5 min. at 7.5 $\pm$ 0.5 inHgA (25.4 $\pm$ 1.7 kPa)	
Relative Humidity:	15-70%	C SHIELD
Ethylene Oxide Concentration:	$500\pm50$ mg/L	
Dwell Pressure:	$16.5 \pm 1.0$ inHgA (55.8 $\pm$ 3.4 kPa)	PEC-1.5C/10C
Dwell Time:	2 hours	
Temperature:	110-130 °F (43-54 °C)	
Relative Humidity:	30-70% (35-44% nominal)	
After Vacuum		
Vacuum:	6.0 ± 0.5 inHgA (20.3 ± 1.7 kPa)	
Rate:	1.0 ± 0.5 inHgA/min. (3.4 ± 1.7 kPa)	KEY-
Vacuum Hold: Gas Wash A:	10 min. 4 cycles (minimum)	P1 P2
Release:	$30.0 \text{ inHgA/min.} (94.8 \pm 1.7 \text{ kPa})$	
Rate:	$1.4 \pm 0.5$ inHgA/min. ( $4.7 \pm 1.7$ kPa)	$(\bigcirc (\bigcirc ($
Vacuum	$6.0 \pm 0.5$ inHgA (20.3 ± 1.7 kPa)	
Rate:	$1.0 \pm 0.5$ inHgA/min. ( $3.4 \pm 1.7$ kPa)	(3) + Signal $(0)$ $(0)$
Release (Filtered Air):	$28.0 \pm 0.5$ inHgA/min. ( $3.4 \pm 1.7$ kPa) 28.0 $\pm 0.5$ inHgA ( $94.8 \pm 1.7$ kPa)	(4) / BROWN (1) +EXCITATION
Release (Fillered All).	Rate: $2.0 \pm 0.5$ inHgA/min. ( $6.6 \pm 1.7$ kPa)	5 Shield Rear View
Aeration (Hot Cell)	Nate. 2.0 $\pm$ 0.5 iiii igAviiiii. (0.0 $\pm$ 1.7 KFa)	
Duration:	At least 8 hours	
Temperature:	$110 \pm 10$ °F (43 °C)	PEC-4D/10D
remperature.	10 ± 10 1 (45 0)	PEC-4D/10D

**CAUTION:** Cables should not be used earlier than 5 days after sterilization.

# **Routine Inspection**

Conductive liquid entering the cable connectors can cause erratic operation and possible corrosion of wires within the connectors. The connector pins should be routinely inspected for corrosion.

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