

ME-0725-PS-215-B 09-08 FDP/ID  
 INSTALLATION DATA FOR MICRO SERIES DISTRIBUTOR TUBES,  
 END CAP, HEATERS AND AUTO-FIXED® "INTEGRAL HEATER"  
 DISTRIBUTOR PROBES, END CAPS.  
 Please read carefully before installing components.  
 REFER TO MINI-PRINT NO. 1700



### IMPORTANT SAFETY INFORMATION

A hot-runner system includes electrical elements and may contain molten plastic at elevated temperature and pressure. To avoid injury, exercise caution by reading these instructions before servicing or operating the system.

These instructions must be passed on to the end user where they should be read before using this product. Failure to do so can result in serious injury or death.



Failure to comply will result in serious injury or death:

#### ELECTRICAL HAZARDS

Improper voltages or grounding can result in electrical shock. Use only with proper voltage and a proper earth ground.

To avoid electrical shock, do not operate product when wet.

Do not operate this equipment with covers or panels removed.

To avoid electrical shock, turn off main power disconnect and lockout / tag out before servicing this device. Do not connect temperature sensors to electrical power. It will damage the product and it can cause fire, severe injuries or even death.

If green ground wire present wire must be connected to the ground.

Do not rebend rigid leads. Rebending leads might result in damage to circuit.

Product might absorb moisture when cool. Use low Voltage or power to drive out residual moisture before applying full power. Failure to do so may cause damage to this product.



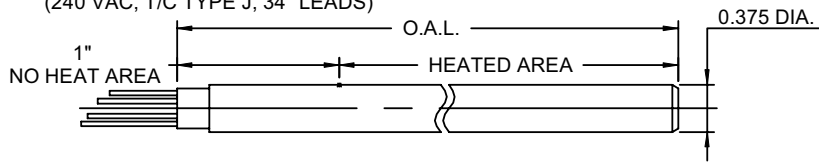
Failure to comply can result in serious injury or death:

#### STORED ENERGY AND HIGH TEMPERATURE HAZARDS

This product maintains molten plastic at high pressure. Use caution when operating and servicing the system.

Physical contact with molten plastic may result in severe burns. Proper protective equipment, including eye protection, must be worn. This product has heated surfaces. Use caution when operating and servicing the system to avoid severe burns. Proper protective equipment should be worn.

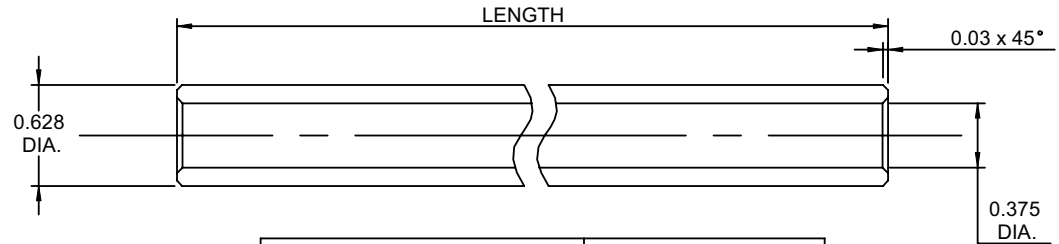
#### THERMOCOUPLE (T/C) DISTRIBUTOR TUBE HEATERS (240 VAC, T/C TYPE J, 34" LEADS)



CATALOG NUMBER	HEATED AREA	O.A.L.	WATTS
HCTC-03-4	4.0	5.0	320
HCTC-03-45	4.5	5.5	340
HCTC-03-5	5.0	6.0	400
HCTC-03-55	5.5	6.5	430
HCTC-03-6	6.0	7.0	450
HCTC-03-65	6.5	7.5	470
HCTC-03-7	7.0	8.0	480
HCTC-03-75	7.5	8.5	515
HCTC-03-8	8.0	9.0	550
HCTC-03-9	9.0	10.0	650
HCTC-03-10	10.0	11.0	710
HCTC-03-11	11.0	12.0	720
HCTC-03-12	12.0	13.0	760
HCTC-03-13	13.0	14.0	810

### DISTIBUTOR TUBES

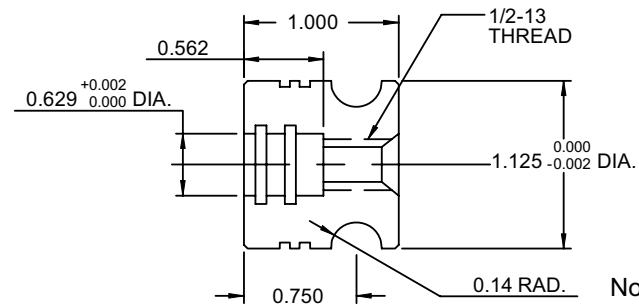
MATERIAL: AISI 4140 STEEL OR EQUIVALENT  
 HARDNESS:28-35 HRc



CATALOG NUMBER	LENGTH
HT-05-03-12	11.82
HT-05-03-16	15.76

### END CAP FOR DISTRIBUTOR TUBE

MATERIAL: AISI 4140 STEEL OR EQUIVALENT



CATALOG NUMBER
EC-11-05

Note: Dimensions shown in Inches.

### WIRING INFORMATION

CAUTION: HANDLE LEADS WITH CARE.

POWER LEADS - MULTICOLOR

T/C LEADS - BLACK & WHITE

WHITE IS NEGATIVE (-) AND CONSTANTAN (NON-MAGNTIC)

BLACK IS POSITIVE (+) AND IRON (MAGNETIC)

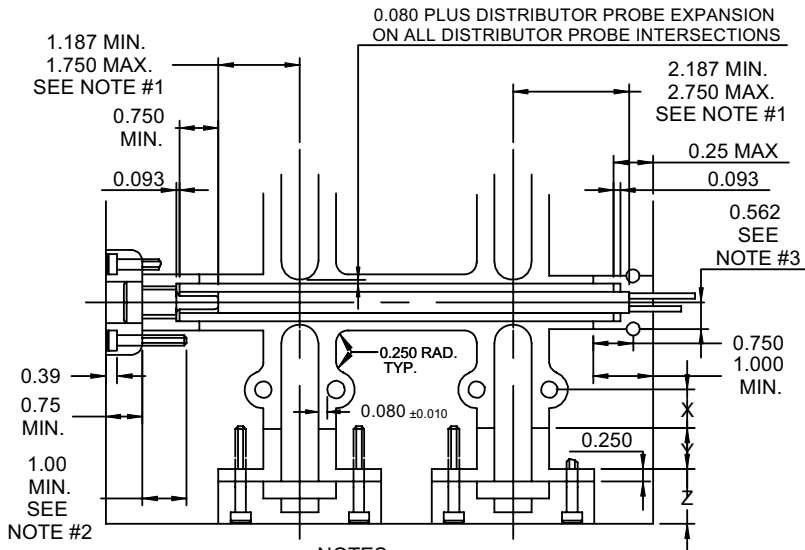
D-M-E SHALL NOT BE LIABLE FOR MISUSE OR FAILURE TO FOLLOW THE ENCLOSED INSTRUCTIONS AND SPECIFICATIONS. D-M-E HERBY TO DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL D-M-E BE RESPONSIBLE FOR LOSS OF USE, REVENUE OR PROFIT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGED.

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AUTO-FIXED® "INTEGRAL HEATER" DISTRIBUTOR PROBES  
 (240 VAC, T/C TYPE J, LEADS ARE 34" LONG AND 90°)  
 MATERIAL, S-7 STEEL OR EQUIVALENT WITH 32-34 Rc HARDNESS.



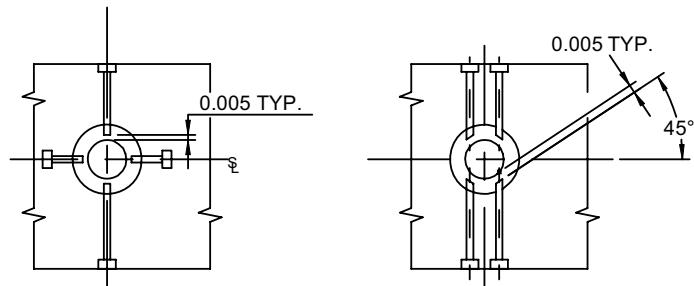
**RECOMMENDED RELATIONSHIP BETWEEN HEATERS, PROBES, INTERSECTIONS AND END CAPS**



- NOTES:
- Due to the longer no heat section at the Lead end, heater will not be centered in distributor tube.
  - The use of (4) 3/8-16 hardened socket head cap screws with 1.00 minimum thread engagement into mold is recommended to secure end caps to mold. (Solid Block and Split Plate Distributor System) Screws must be tightened evenly and torqued to 25-30 foot pounds.
  - The use of (2) 0.250 dia. dowel pins with 0.562 distance between dowel pin and end cap centerlines is recommended to secure end cap into mold (Solid Block Distributor System only).

DISTRIBUTOR PROBE	X MIN.	Y MIN.	Z MIN.
0.394 DIA.	0.788	0.500	1.375
0.625 DIA.	1.250	0.875	1.375

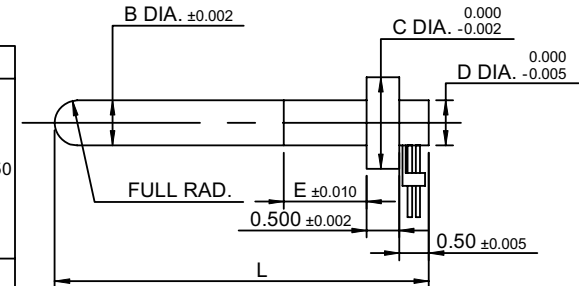
**RECOMMENDED RELATIONSHIP BETWEEN DISTRIBUTOR PROBE AND SUPPORT PINS**



DISTRIBUTOR PROBE	X
0.394 DIA.	0.139
0.625 DIA.	0.221

NOTE: - § SPLIT LINE OF MOLD

CAT. NO.	L	EXPAN-SION	WATTS	A	B	C	D	E
FDP0001	3.500	0.004	175					
FDP0002	4.000	0.004	200					
FDP0003	4.500	0.005	225					
FDP0004	5.000	0.005	250	0.394	0.384	0.740	0.394	0.750
FDP0005	5.500	0.006	275					
FDP0006	6.000	0.006	295					
FDP0007	6.500	0.007	320					
FDP0008	4.000	0.004	315					
FDP0009	4.500	0.005	355					
FDP0010	5.000	0.005	395					
FDP0011	5.500	0.006	430					
FDP0012	6.000	0.006	470					
FDP0013	6.500	0.007	510					
FDP0014	7.000	0.007	550	0.625	0.615	1.240	0.625	1.125
FDP0015	7.500	0.008	590					
FDP0016	8.000	0.008	630					
FDP0017	8.500	0.009	670					
FDP0018	9.000	0.009	705					
FDP0019	9.500	0.010	745					
FDP0020	10.000	0.010	785					



NOTE: PROBE DISCOLORATION

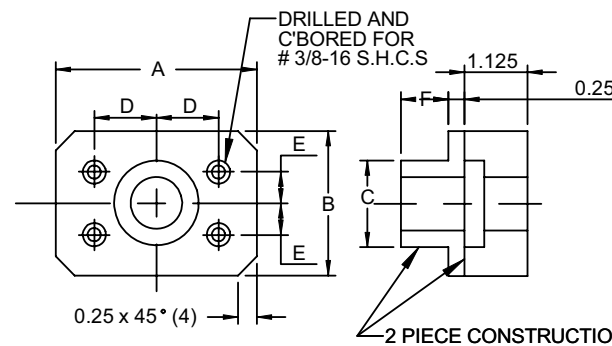
Each Integral Heater probe sold by D-M-E is pre-tested. This procedure discolors the outer surface of the probe, but in no way alters its performance or dimensions.

**REPLACEMENT THERMOCOUPLE (ALL PROBES)**

CATALOG NUMBER	LEAD LENGTH
TC-9900	48"

**END CAPS FOR DISTRIBUTOR PROBES**

MATERIAL, AISI 4140 STEEL OR EQUIVALENT WITH 28-35 Rc HARDNESS



Note: Dimensions shown in Inches.

# THREAD ENGAGEMENT INTO MOLD MUST BE 1.00 MINIMUM AND TORQUED TO 25-30 FOOT POUNDS.

CAT. NO.	ECP0003		ECP0006	
	0.394 DIA. DISTRIBUTOR PROBE	0.394 DIA. MACHINING	0.625 DIA. DISTRIBUTOR PROBE	0.625 DIA. MACHINING
A	1.98	2.000 <sup>+0.010</sup> <sub>-0.000</sub>	2.49	2.500 <sup>+0.010</sup> <sub>-0.000</sub>
B	1.98	2.000 <sup>+0.010</sup> <sub>-0.000</sub>	1.98	2.000 <sup>+0.010</sup> <sub>-0.000</sub>
C	0.874	0.875 <sup>+0.001</sup> <sub>-0.000</sub>	1.124	1.125 <sup>+0.001</sup> <sub>-0.000</sub>
D	0.656	0.656	0.875	0.875
E	0.437	0.437	0.375	0.375
F	0.500	-	0.875	-

**D-M-E COMPANY**

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