

# D-M-E Hot Runner Systems

## Gate-Mate™ Lite Hot Runner Nozzles

The most economical choice  
for direct gating applications



# Gate-Mate™ Lite

## Hot Runner Nozzles

### Delivers consistent performance — economically

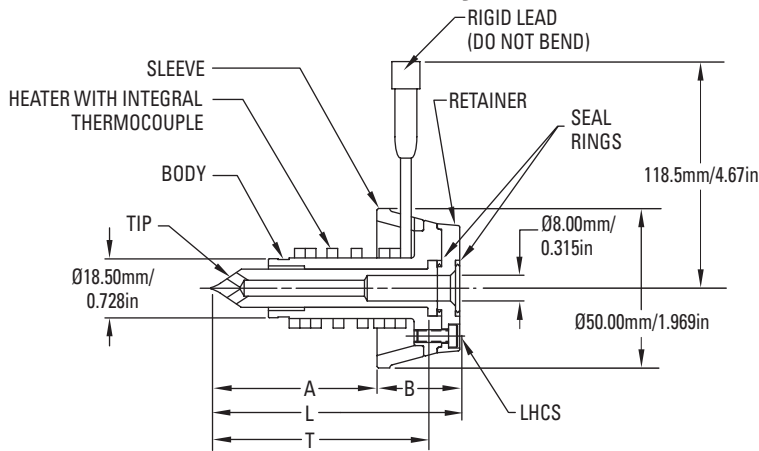
Gate-Mate Lite is a very cost-effective solution for thin-walled parts, direct gating, and high-cavitation molding.

#### Key features include:

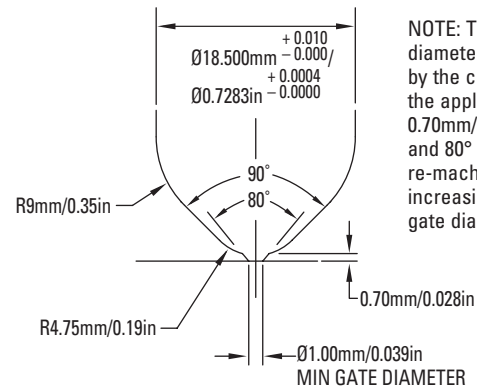
- **Available in 10 nozzle lengths (42-130mm)** — flexibility to suit your application requirements
- **Bodiless designs** — leave no witness lines on the finished molded part
- **Precise temperature control** — advanced design, square-coil heater and integrated thermocouple ensure accurate temperature control
- **Excellent gate control** — highly conductive, full-length, beryllium copper tip delivers heat to ensure proper gate control, minimum vestige, and better part appearance
- **Easy installation and operation** — set-up and production are streamlined and simple
- **Suitable for multi-cavity molds** — provides optimum gate cosmetics in parts up to 225 grams (For part weights greater than 225 grams, contact D-M-E for review of the application. For maximum throughput to the hot runner system and cavities, the machine nozzle tip orifice must be equal to the nozzle seat orifice on the manifold extension nozzle.)
- **Compatible with a wide range of unfilled materials** — easily processes POM, TPE, TPO, PE, PP, PS, SAN, ABS, PA, PPO, PMMA, and PC



## Point Gate Nozzle Assembly

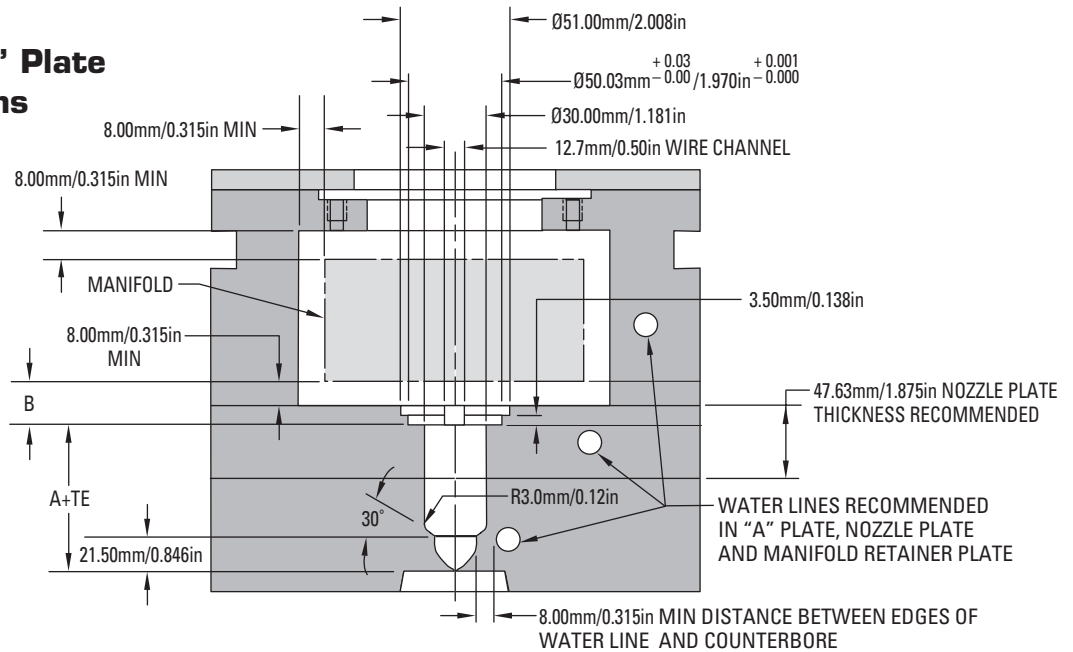


## Gate Detail



NOTE: The gate diameter can be opened by the customer to suit the application. Also, the 0.70mm/.028in dimension and 80° angle must be re-machined after increasing the gate diameter.

## Nozzle Plate and "A" Plate Machining Dimensions



### NOTES:

A + TE = Tip position, hot  
where TE = Tip thermal expansion

Tip thermal expansion must be taken into account prior to machining plates and installing nozzle into the mold.

The formula for determining thermal expansion is:  $TE (mm) = "T" \text{ dimension (mm)} \times .0000175 \text{mm} \times [\text{Nozzle Setpoint Temperature } (^{\circ}\text{C}) - 20]$  or  $TE (in) = "T" \text{ dimension (in)} \times .0000097 \text{in} \times [\text{Nozzle Setpoint Temperature } (^{\circ}\text{F}) - 68]$

EXAMPLE: For GML1070: "A" = 70.00mm, "T" = 86.00mm, Setpoint = 260°C  
"TE" = 86.00 x .0000175 x (260-20) = .36 ... thus "A" + "TE" = 70.00 + .36 = 70.36

NOZZLE ASSEMBLY	A DIM		T DIM		L DIM		B DIM		BODY ITEM NO	TIP ITEM NO	HEATER ITEM NO	SLEEVE ITEM NO	RETAINER ITEM NO	SEAL RING ITEM NO	LHCS ITEM NO
	mm	inch	mm	inch	mm	inch	mm	inch							
GML1042	42.00	1.654	68.00	2.677	78.00	3.071	36.00	1.417	GMC0162	GMT0015	GMH1940	GMS0163	GMR0052	EHR7155 (2 Required)	M410LH (3 Required)
GML1052	52.00	2.047	68.00	2.677	78.00	3.071	26.00	1.024	GMC0162	GMT0015	GMH1940	GMS0162			
GML1060	60.00	2.362	86.00	3.386	96.00	3.780	36.00	1.417	GMC0163	GMT0017	GMH1950	GMS0163			
GML1070	70.00	2.756	86.00	3.386	96.00	3.780	26.00	1.024	GMC0163	GMT0017	GMH1950	GMS0162			
GML1080	80.00	3.150	106.00	4.173	116.00	4.567	36.00	1.417	GMC0164	GMT0019	GMH1960	GMS0163			
GML1090	90.00	3.543	106.00	4.173	116.00	4.567	26.00	1.024	GMC0164	GMT0019	GMH1960	GMS0162			
GML1100	100.00	3.937	126.00	4.961	136.00	5.354	36.00	1.417	GMC0165	GMT0021	GMH1970	GMS0163			
GML1110	110.00	4.331	126.00	4.961	136.00	5.354	26.00	1.024	GMC0165	GMT0021	GMH1970	GMS0162			
GML1120	120.00	4.724	146.00	5.748	156.00	6.142	36.00	1.417	GMC0166	GMT0023	GMH1980	GMS0163			
GML1130	130.00	5.118	146.00	5.748	156.00	6.142	26.00	1.024	GMC0166	GMT0023	GMH1980	GMS0162			

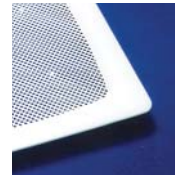
For ancillary hot runner components and temperature controls, contact D-M-E.

# Gate-Mate™ Lite

Hot Runner Nozzles

Gate-Mate™ Lite is just one of a family of D-M-E hot runner solutions. From components to turnkey hot halves, all D-M-E hot runner systems feature best-in-class components, application engineering expertise and our 100% satisfaction guarantee.

Serving customers in over 70 countries worldwide, no one equals D-M-E for injection molding solutions and support. D-M-E operates manufacturing and distribution locations in North America, South America, Europe and Asia.



#### World Headquarters

##### D-M-E Company

29111 Stephenson Highway  
Madison Heights, MI 48071  
800-626-6653 *toll-free tel*  
248-398-6000 *tel*  
888-808-4363 *fax*  
[www.dme.net](http://www.dme.net) *web*  
[info@dme.net](mailto:info@dme.net) *e-mail*

#### D-M-E of Canada, Ltd.

6210 Northwest Drive  
Mississauga, Ontario, L4V 1J6  
800-387-6600 *toll-free tel*  
905-677-6370 *tel*  
800-461-9965 *fax*

#### D-M-E Europe

D-M-E Belgium C.V.B.A.  
Industriepark Noord  
B-2800 Mechelen, Belgium  
32-15-215011 *tel*  
32-15-218235 *fax*  
[dme\\_europe@dmeeu.com](mailto:dme_europe@dmeeu.com) *e-mail*

#### D-M-E Australia

Amalgamated Diemould D-M-E  
33 Garema Circuit  
Kingsgrove, NSW 2208  
61-2-9740 3300 *tel*  
61-2-9740 3292 *fax*

