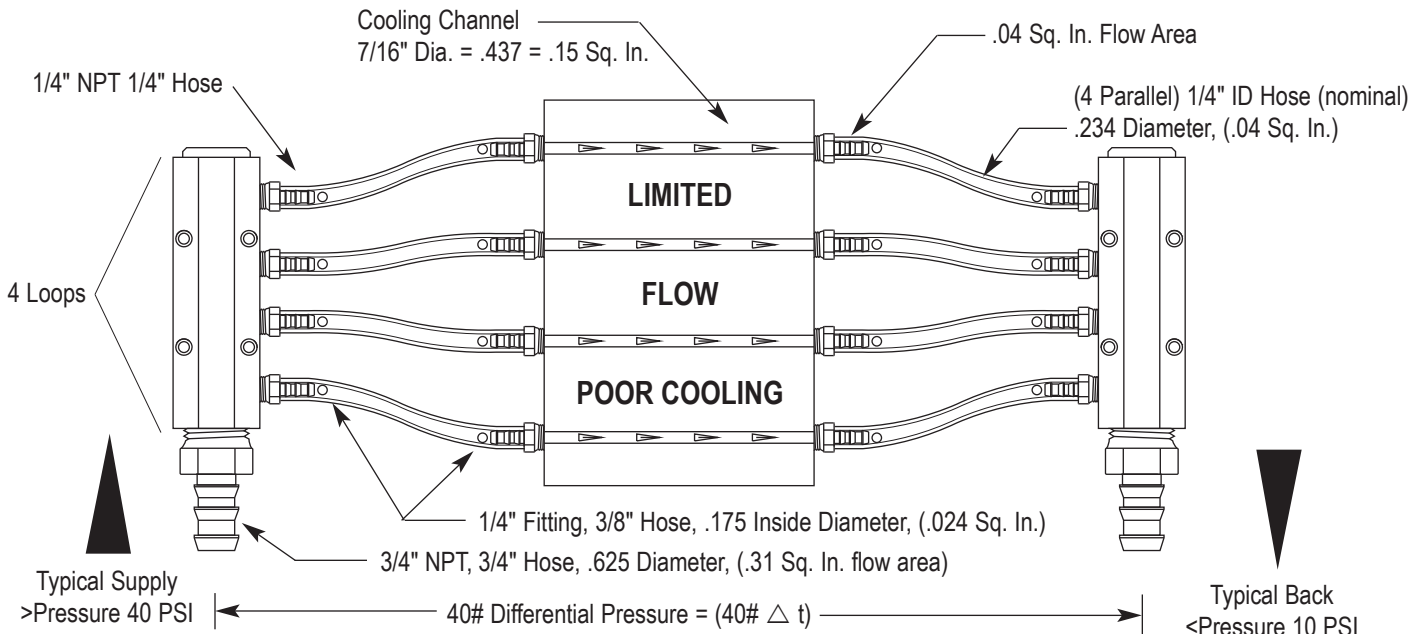
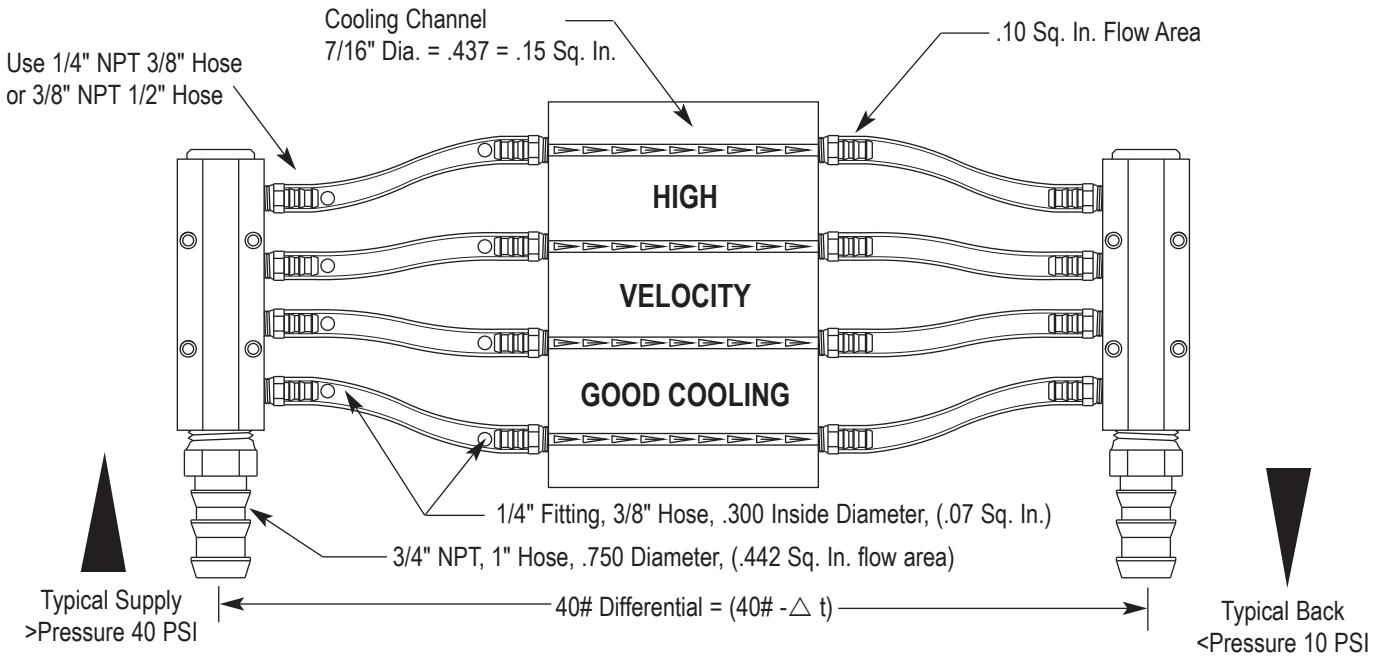


Flow Restrictions



Supply line must be larger than total of all cooling circuits
(As shown: Supply .31 Sq. In.,
Loop Fittings 4 x .024 Sq. In. = .096 Sq. In.)

HIGH PERFORMANCE COOLING USE OF FULL FLOW FITTINGS

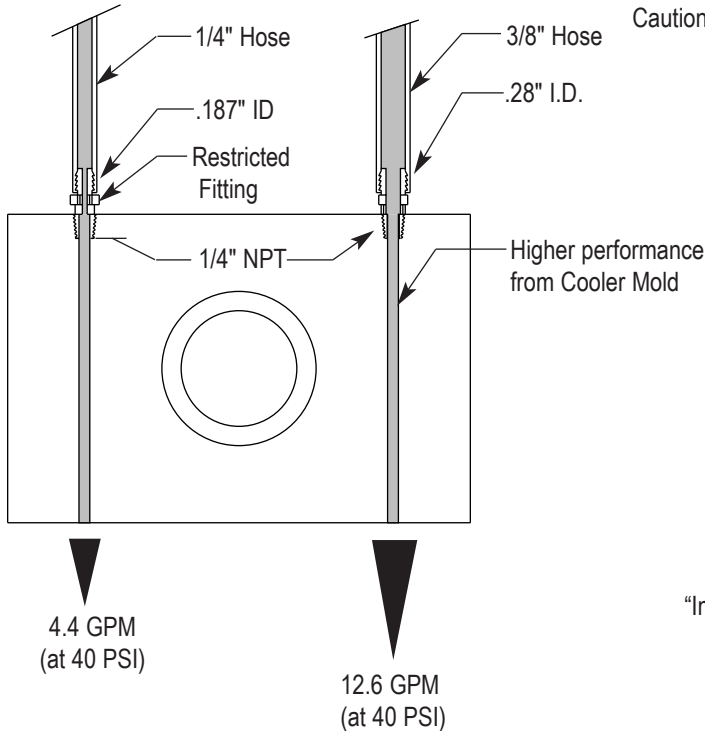


Supply line must be larger than total of all cooling circuits
(As shown: Supply .442 Sq. In.,
Fittings 4 x .07Sq. In. = .28 Sq. In.)

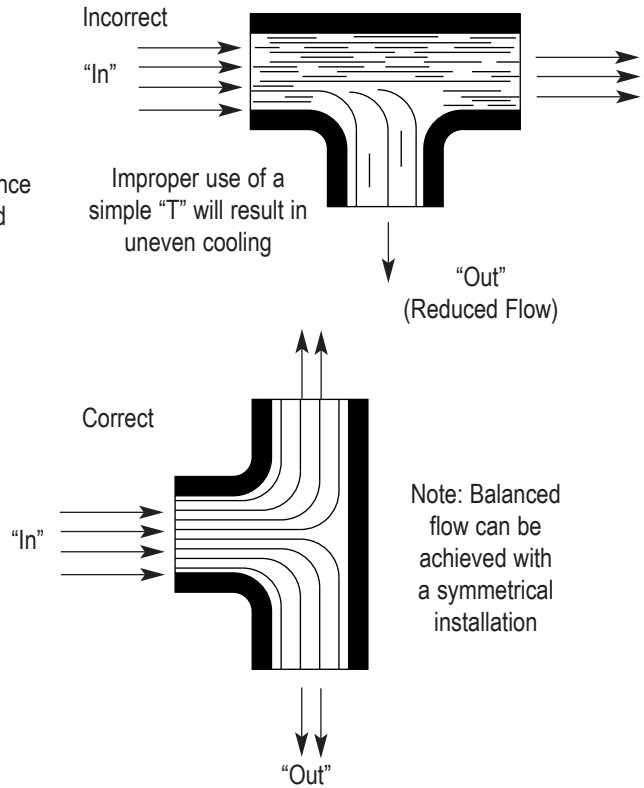
CITO-FP-PRICE-23-1120

Flow Considerations

Flow Restriction (or Unbalanced) Hook Ups Will Increase Cycle Time



Caution: Unbalanced flow will result from change in flow direction.



200% More Flow Area with High Flow Fittings

A mold will always be limited by its least cooled cavity. Coolant supply area should always be more than total mold ports area to avoid starving the mold of pressure and flow. Pressure difference across the mold should be no less than 40 P.S.I.

Avoid kinked hoses and any other restrictions.

Hose I.O.	Fitting Orifice Size	Area Square Inch	Supply area should exceed total of outlets (area square inch)						
			2 Ports	4 Ports	6 Ports	8 Ports	10 Ports	12 Ports	16 Ports
1/4"	.19"	.03	.06"	.12	.18	.24	.30	.36	.48
3/8"	.28"	.06	.12"	.24	.36	.48	.60	.72	.96
1/2"	.40"	.12	.24"	.48	.72	.96	1.20	1.44	1.92
3/4"	.56"	.25	.50"	1.0	1.50	2.00	2.50	3.00	4.00
1"	.87"	.59							
1-1/4"	1.0"	.78							
1-1/2"	1.25"	1.23							
2"	1.88"	2.7							

Example:
Supply 1" .59 sq. inch
3/8" waterlines = .06 square inches
.56 divided by .06 = up to 9 waterlines

Note: supply .48 sq. in. exceeds total hold cooling channel area

A typical mold with 8 (3/8) cooling circuits can be supplied with a 1" manifold.

CITO-FP-PRICE-20-1023