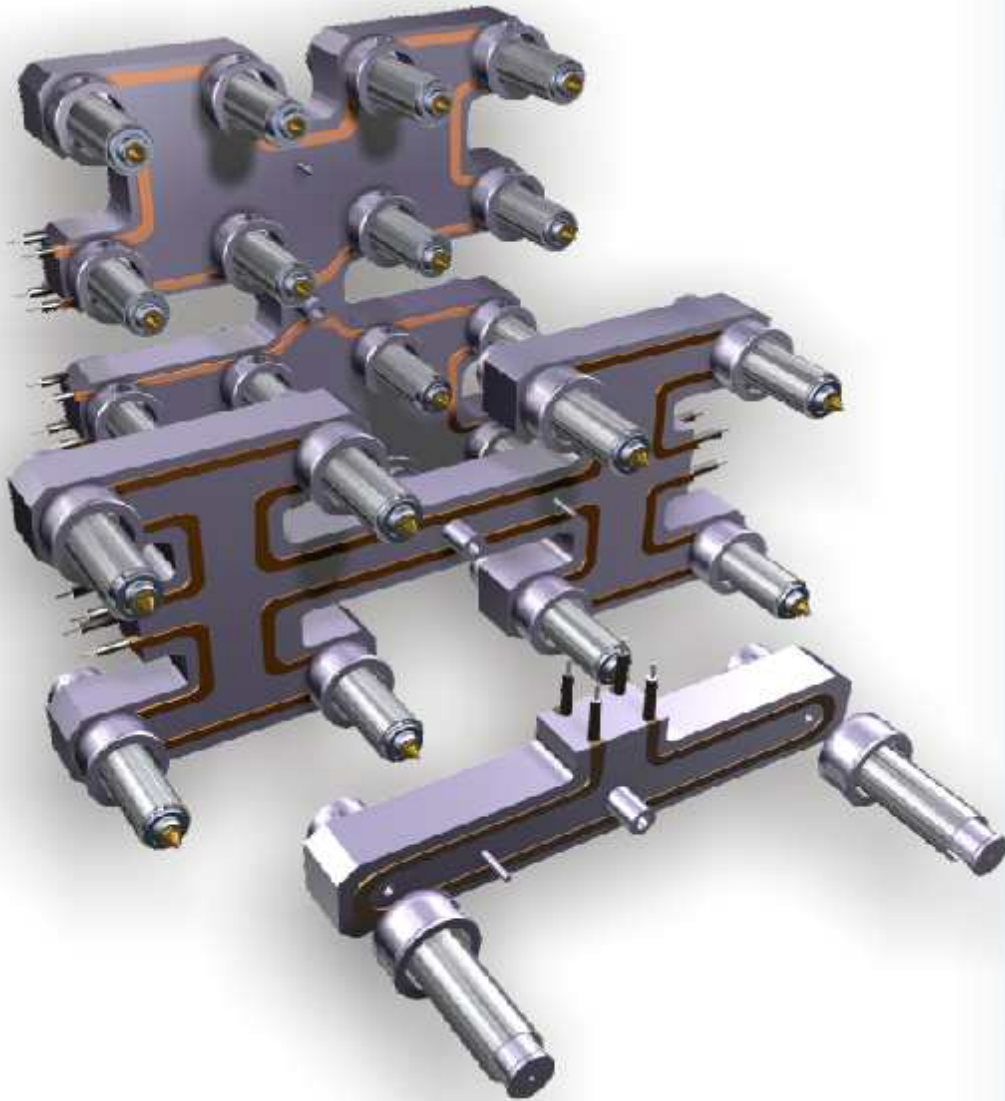




# HOT RUNNER MANIFOLD SYSTEMS



- Standard Integral
- Low Profile
- Large Bore



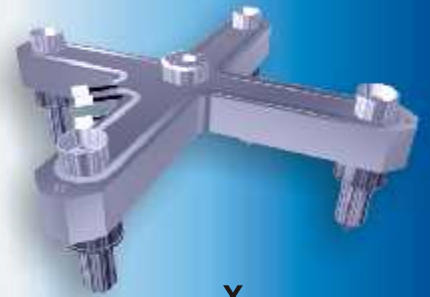
12 Block  
16 Block



4-in-Line Balanced



H



X



Y-Y



H-H



*Dedicated To Your Success*

HOT RUNNER MANIFOLD SYSTEMS

## ENGINEERED FOR SUPERIOR PERFORMANCE

### SPECIFICATIONS:

Material - AISI 414OHT  
or AISI 42O SS

Hardness - 32-36 RC

Melt Passage Ø - 6,3mm, 9,0mm,  
or 12,7mm as required \*

Heaters - Incoloy sheath,  
clamp terminals.  
High temp. wires  
and lugs supplied  
with unit

Voltage - 208/240 standard  
110/120 optional

Heater Covers - Brass, staked  
into heater grooves

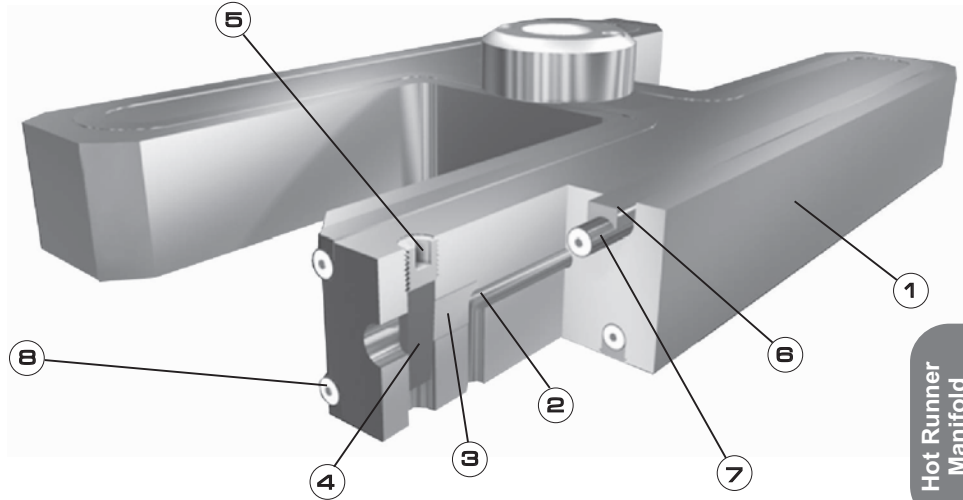
Thermocouples - Type J- ¼-28  
standard, supplied  
with unit

Manifold Spacers - AISI 414OHT  
or AISI 42OSS  
supplied with unit

\* Application Engineering  
Included With Each Order

MANIFOLD PROFILES ARE  
OPTIMIZED TO PROVIDE:

- STRUCTURAL STRENGTH
- FAST START-UP
- FAST COLOR CHANGES
- ECONOMICAL OPERATION  
(LOW WATTAGE REQUIREMENTS)
- DYNAMIC RESPONSE TO CONTROL



### Features:

**1- MANIFOLD BODY**  
Optimized profile, available  
in Alloy, Steel or Stainless  
Steel.

**2- MELT PASSAGE**  
Smooth polish, size and  
configuration matched  
to plastic resin, molding  
conditions, shot volume.

**3- END PLUG \***  
Fitted and contoured to  
avoid leaks and shear.  
Can be removed for  
cleaning melt passage,  
if necessary

**4- SLANTED PIN \***  
Designed to exert positive  
sealing pressure without  
the risks associated with  
threaded plugs, is also a  
safety feature.

**5-SET SCREW \***  
Secures the slanted pin  
assembly. Allows easy  
removal.

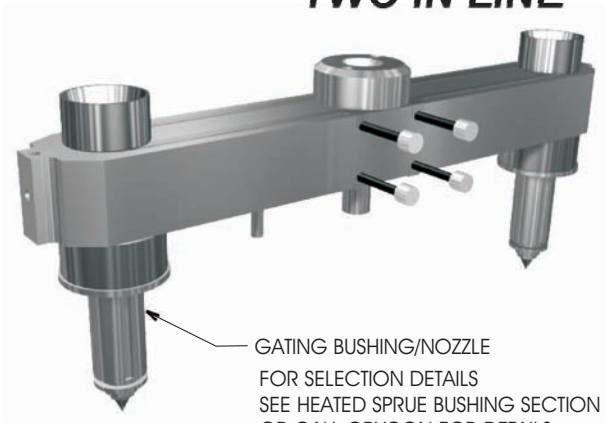
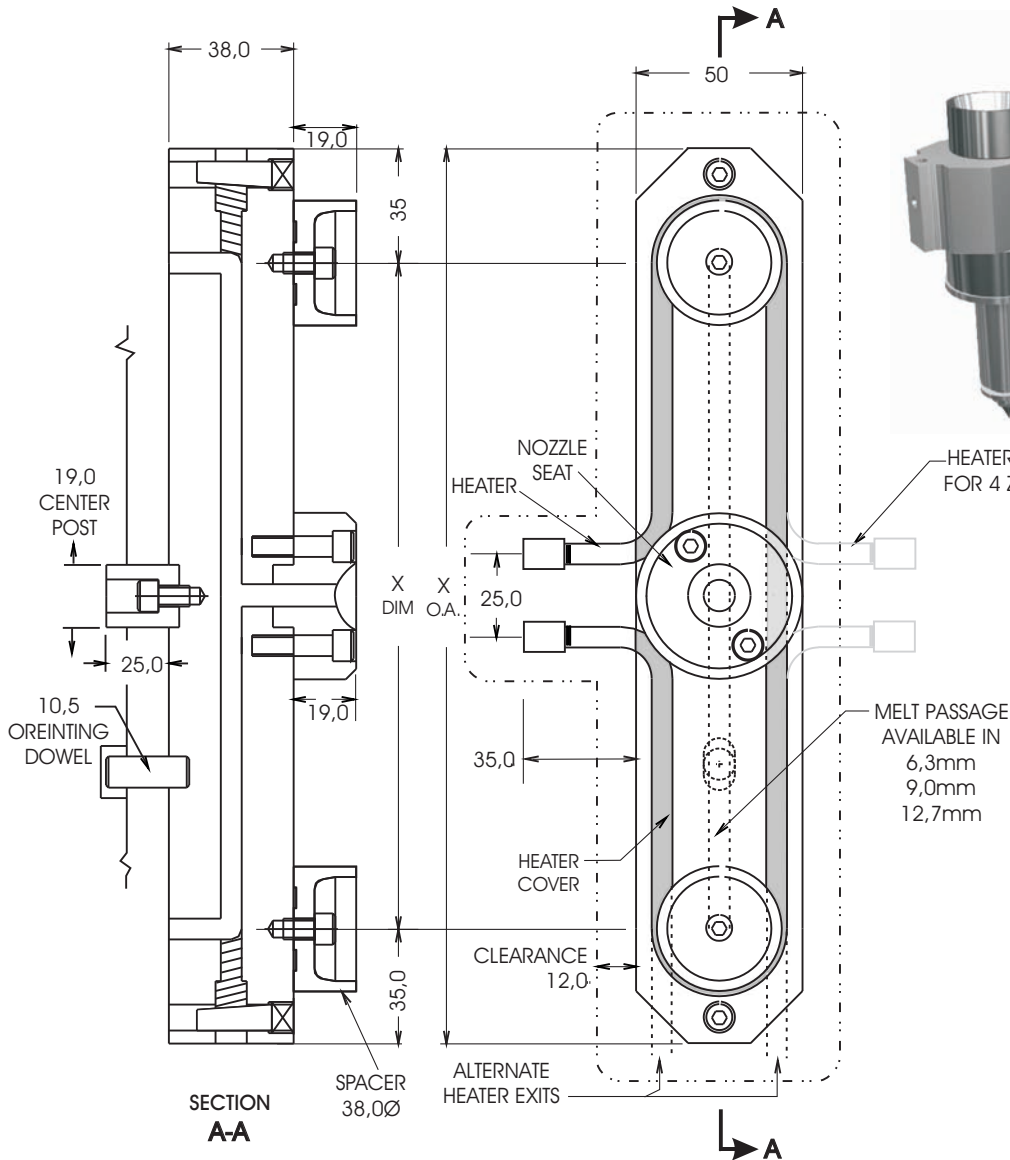
**6- HEATER COVER \***  
Made of malleable brass with high  
heat conduction properties, pressed  
over heating element and deformed  
into grooves cut into the sides of the  
heater channel. Provides positive  
retention for the heater and at the  
same time allows full transfer of heat  
to the manifold, keeping the heater  
running cooler and extending it's life.  
Can be removed for heater  
replacement.

**7- TUBULAR HEATER**  
Disposed around the perimeter of the  
manifold to compensate for heat  
losses at the surfaces without over-  
heating any one spot.

**8- SECOND SET OF HEATERS**  
Provides redundancy, as only one set  
is capable of maintaining the manifold  
to running temperature. Allows more  
uniform heating.

\* Manufactured Under One  
or More of the Following U.S. Patents:  
5,227,179 5,352,109 5,072,078  
5,503,545 And Patents Pending

## INTEGRAL HOT MANIFOLDS TWO IN LINE



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS

HEATER EXITS  
FOR 4 ZONES

TYPICAL CONSTRUCTION  
2 DROP MANIFOLD

Hot Runner  
Manifold  
Systems

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

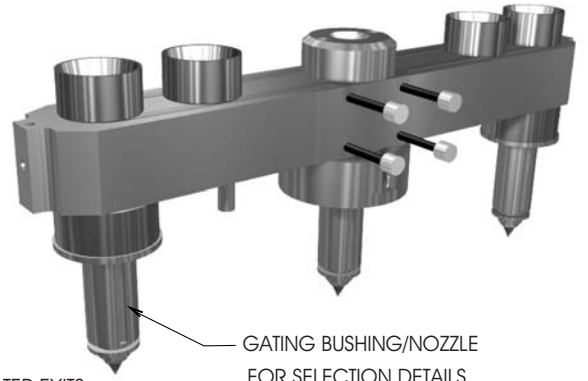
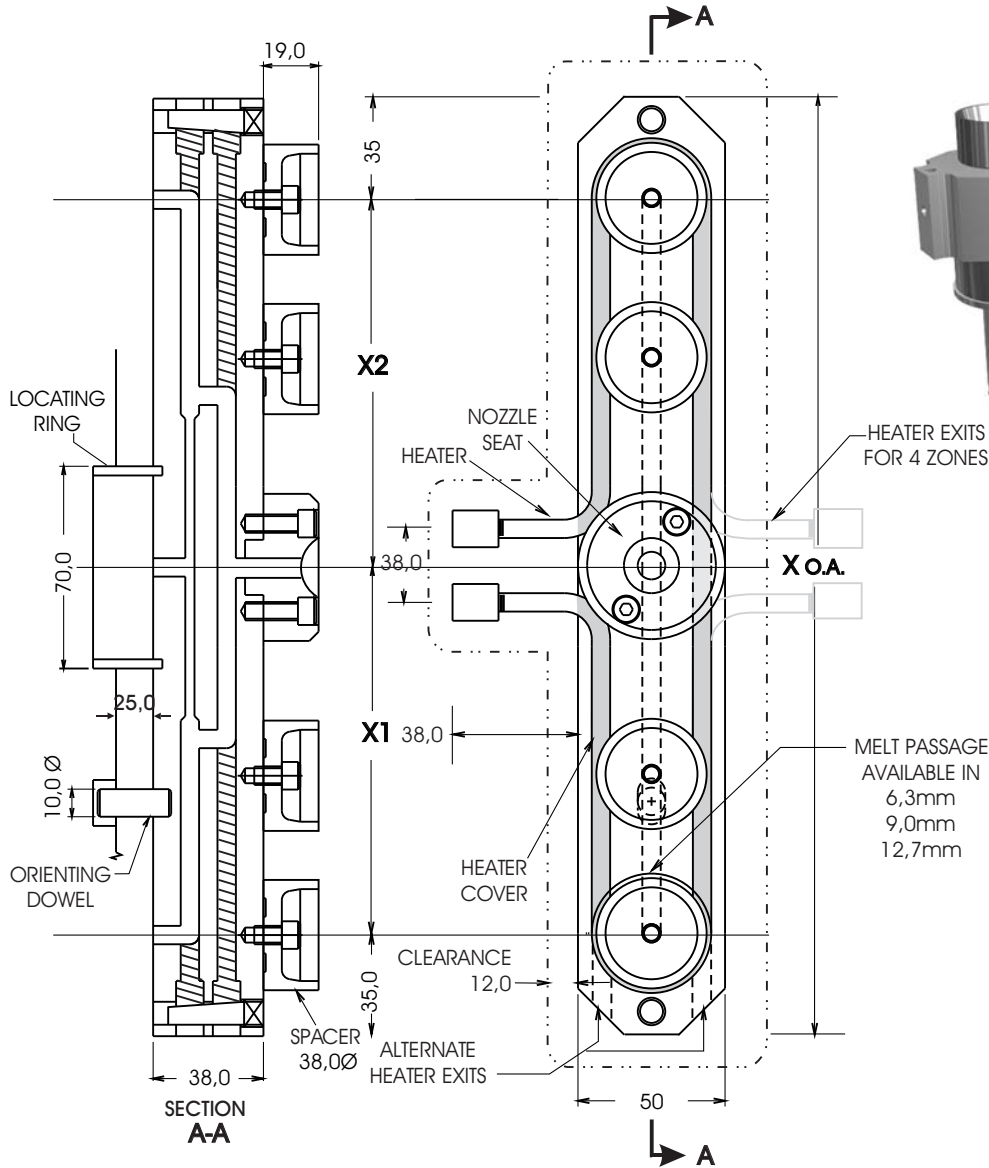
### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	X O.A. (mm)	WATTS *	AMPS *	ZONES
100,0	170,0	681	3,0	2
150,0	220,0	883	4,0	2
175,0	250,0	984	4,4	2
200,0	270,0	1085	4,9	2
225,0	300,0	1186	5,3	2
250,0	320,0	1287	5,8	2
275,0	350,0	1388	6,3	2
300,0	370,0	1489	6,7	2
325,0	400,0	1590	7,2	2
350,0	420,0	845	3,8	4
400,0	470,0	946	4,3	4
450,0	530,0	1047	4,7	4
500,0	570,0	1148	5,2	4

NOTE: Design specifications subject to change without notice. \* Per Zone At 220 Volts

## INTEGRAL HOT MANIFOLDS THREE IN LINE



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS

TYPICAL CONSTRUCTION  
3 DROP MANIFOLD

MELT PASSAGE  
AVAILABLE IN  
6,3mm  
9,0mm  
12,7mm

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

Hot Runner  
Manifold  
Systems

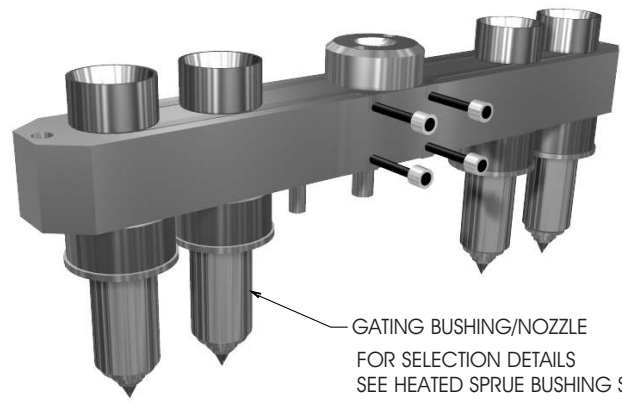
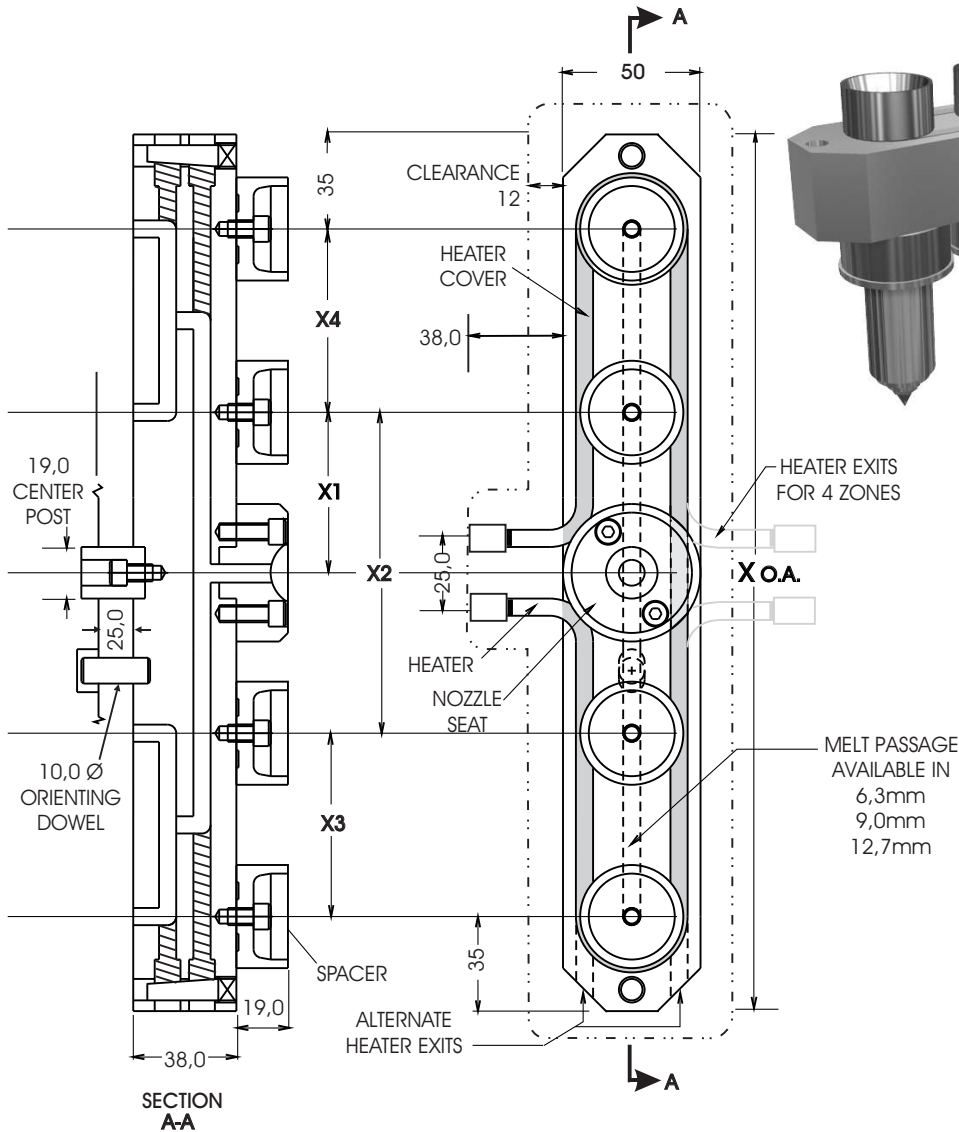
### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X1 (mm)	X2 (mm)	X O.A. (mm)	WATTS *	AMPS *	ZONES
80,0	80,0	230,0	883	4,0	2
90,0	90,0	250,0	984	4,4	2
100,0	100,0	270,0	1085	4,9	2
110,0	110,0	290,0	1186	5,3	2
120,0	120,0	310,0	1287	5,8	2
130,0	130,0	330,0	1388	6,3	2
140,0	140,0	350,0	1489	6,7	2
150,0	150,0	370,0	1590	7,2	2
160,0	160,0	390,0	845	3,8	4
170,0	170,0	410,0	946	4,3	4
180,0	180,0	430,0	1047	4,7	4
190,0	190,0	450,0	1098	4,9	4
200,0	200,0	470,0	1148	5,2	4
210,0	210,0	490,0	1320	6,0	4

NOTE: Design specifications subject to change without notice. \* Per Zone At 220 Volts

## INTEGRAL HOT MANIFOLDS FOUR IN LINE BALANCED



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS

TYPICAL CONSTRUCTION  
4 DROP MANIFOLD

MELT PASSAGE  
AVAILABLE IN  
6,3mm  
9,0mm  
12,7mm

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X1 (mm)	X2 (mm)	X3 (mm)	X4 (mm)	X O.A. (mm)	WATTS *	AMPS *	ZONES
50,0	100,0	60,0	60,0	340,0	1186	6,3	2
50,0	100,0	80,0	80,0	380,0	1287	6,7	2
50,0	100,0	90,0	90,0	400,0	1388	7,2	2
50,0	100,0	100,0	100,0	420,0	1489	3,8	2
60,0	120,0	120,0	120,0	490,0	1641	7,4	2
60,0	130,0	130,0	130,0	520,0	976	4,4	4
70,0	140,0	140,0	140,0	560,0	1058	4,8	4
80,0	160,0	160,0	160,0	630,0	1140	5,1	4
90,0	170,0	170,0	170,0	670,0	1224	5,5	4
100,0	180,0	180,0	180,0	710,0	1300	5,9	4

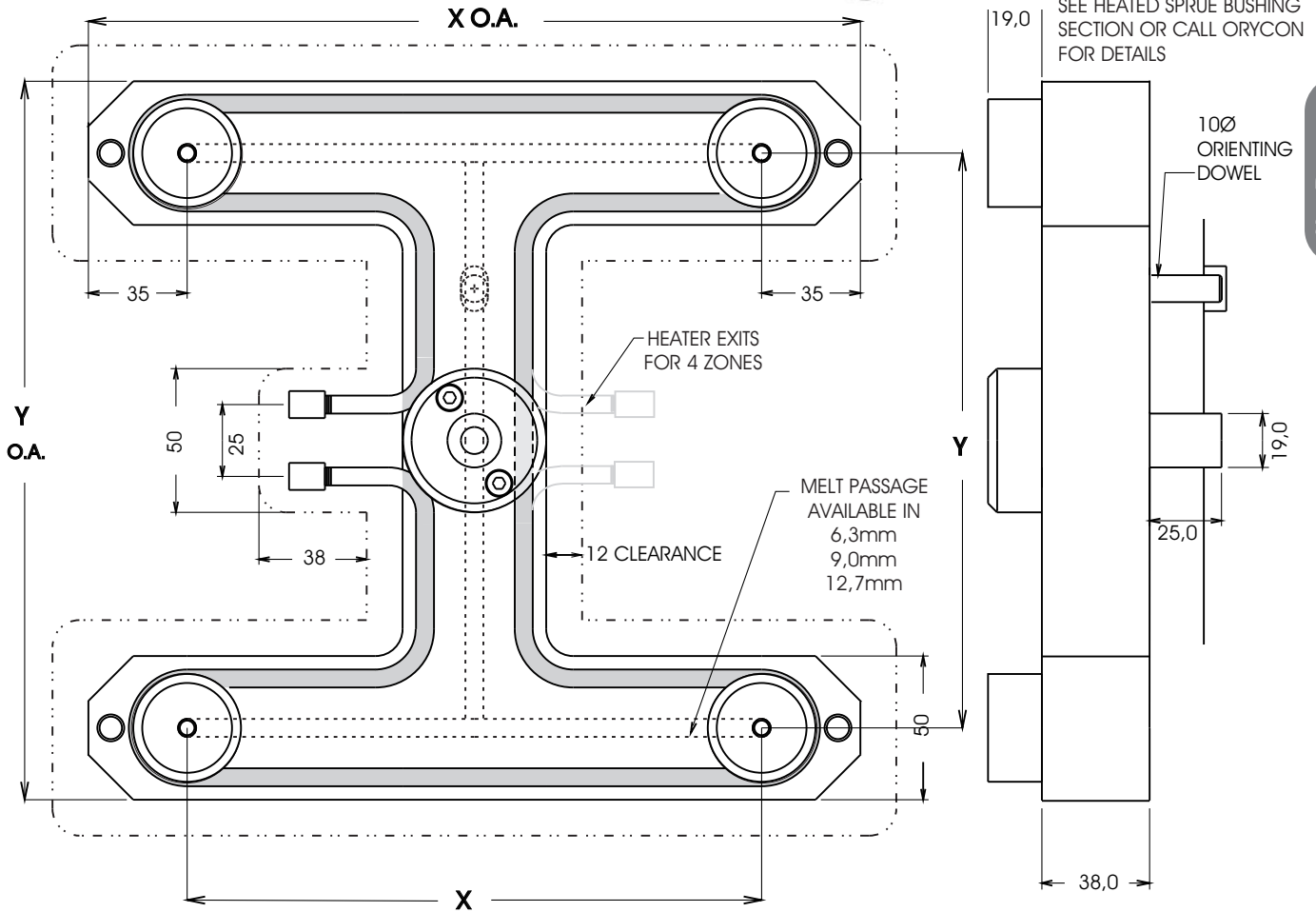
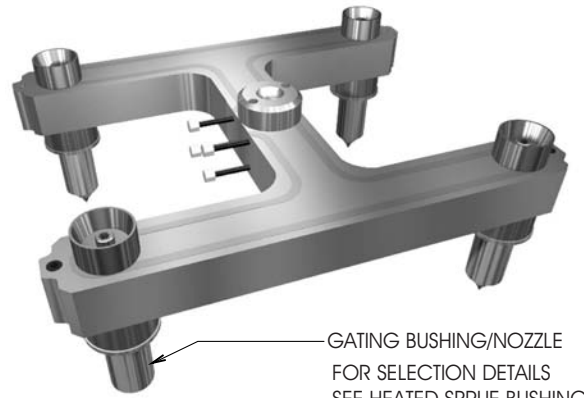
NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

## INTEGRAL HOT MANIFOLDS "H" CONFIGURATION

TYPICAL CONSTRUCTION  
H PATTERN 4 DROP MANIFOLD

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES	Xmm	Ymm	X O.A.mm	Y O.A.mm	WATTS *	AMPS *	ZONES
100,0	70,0	170,0	120,0	1387	6,3	2	230,0	130,0	300,0	180,0	1144	5,2	4
130,0	100,0	200,0	150,0	1612	7,3	2	230,0	180,0	300,0	230,0	1219	5,5	4
150,0	130,0	220,0	180,0	1837	8,3	2	250,0	150,0	320,0	200,0	1256	5,7	4
180,0	130,0	250,0	180,0	1987	9,0	2	250,0	180,0	320,0	230,0	1294	5,9	4
180,0	100,0	250,0	150,0	2062	9,3	2	300,0	150,0	370,0	200,0	1406	6,4	4
200,0	130,0	270,0	180,0	2137	9,7	2	300,0	200,0	370,0	250,0	1481	6,7	4
200,0	160,0	270,0	210,0	2212	10,0	2	300,0	250,0	370,0	300,0	1556	7,0	4

NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

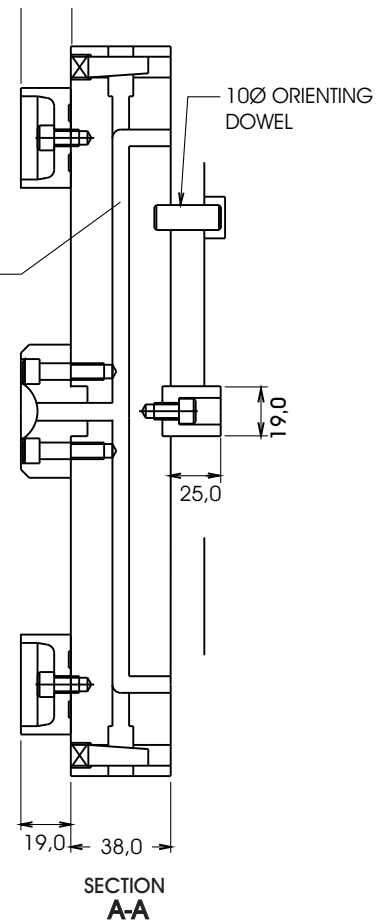
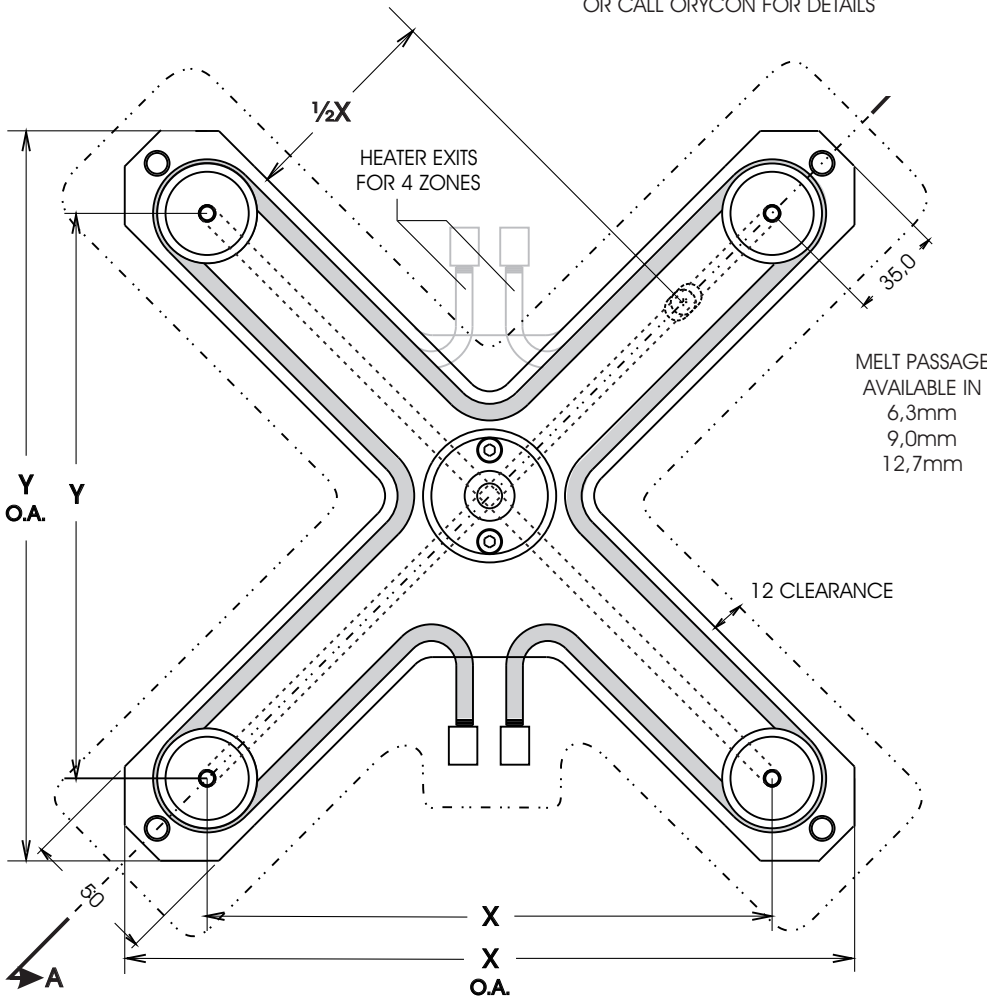
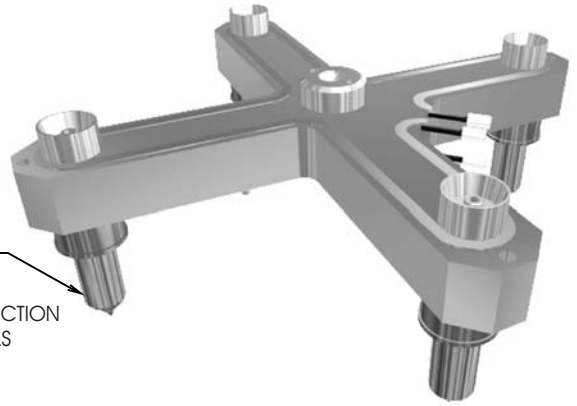
## INTEGRAL HOT MANIFOLDS "X" CONFIGURATION

TYPICAL CONSTRUCTION  
X PATTERN 4 DROP MANIFOLD

SAME CONFIGURATION USED  
AS BRIDGE MANIFOLD

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

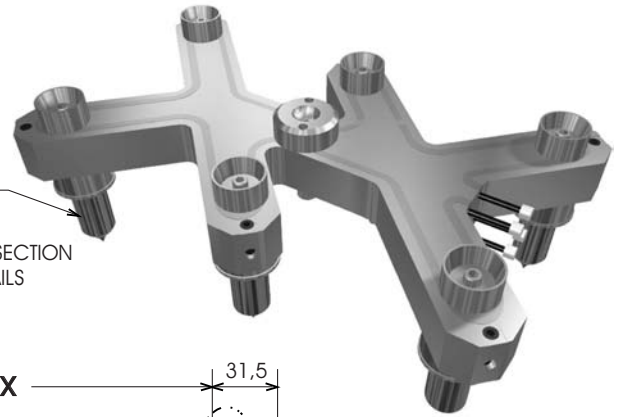
X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES	X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES
100,0	100,0	163,0	163,0	930	4,2	2	230,0	230,0	293,0	293,0	1046	4,7	4
130,0	130,0	193,0	193,0	1163	5,3	2	250,0	250,0	313,0	313,0	1162	5,2	4
150,0	150,0	213,0	213,0	1395	6,3	2	280,0	280,0	343,0	343,0	1278	5,8	4
180,0	180,0	243,0	243,0	1628	7,4	2	300,0	300,0	363,0	363,0	1395	6,3	4
200,0	200,0	263,0	263,0	1860	8,5	2	330,0	330,0	393,0	393,0	1511	6,8	4

NOTE: Design specifications subject to change without notice.

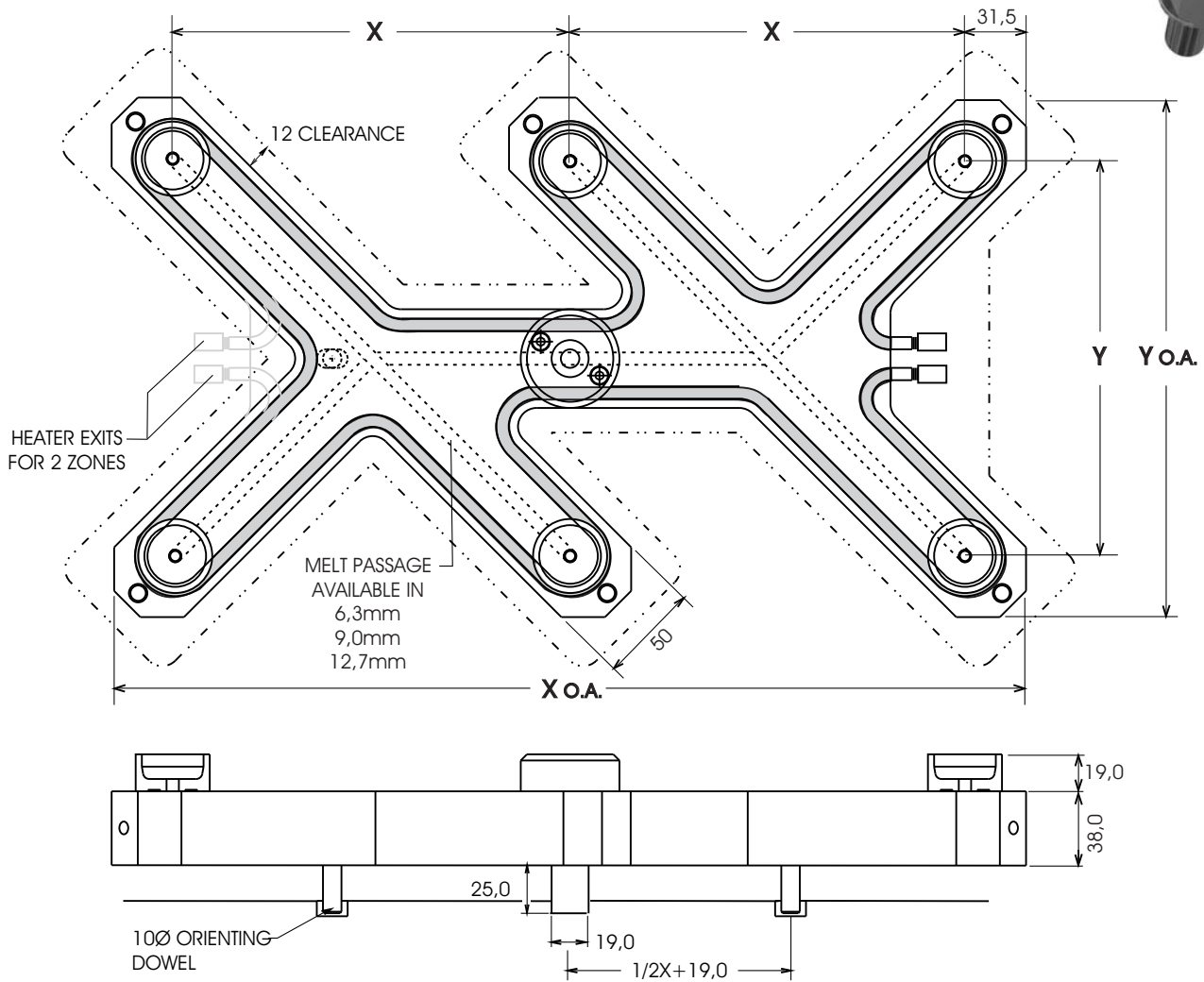
\* Per Zone At 220 Volts

## INTEGRAL HOT MANIFOLDS "Y-Y" CONFIGURATION

TYPICAL CONSTRUCTION  
YY PATTERN 6 DROP MANIFOLD



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS



### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	Y (mm)	X o.A. (mm)	Y o.A. (mm)	WATTS *	AMPS *	ZONES
100,0	100,0	263,0	163,0	1550	7,0	2
130,0	130,0	323,0	193,0	1860	8,4	2
150,0	150,0	363,0	213,0	1100	5,0	4
180,0	180,0	423,0	243,0	1340	6,0	4
200,0	200,0	463,0	263,0	1500	6,8	4

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

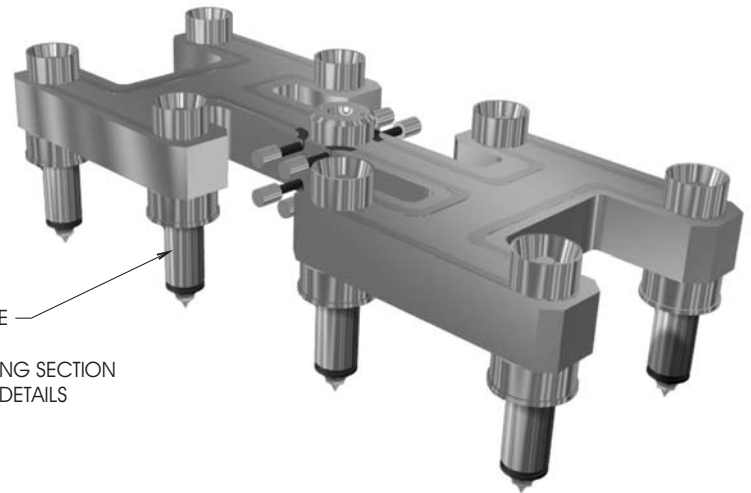
NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

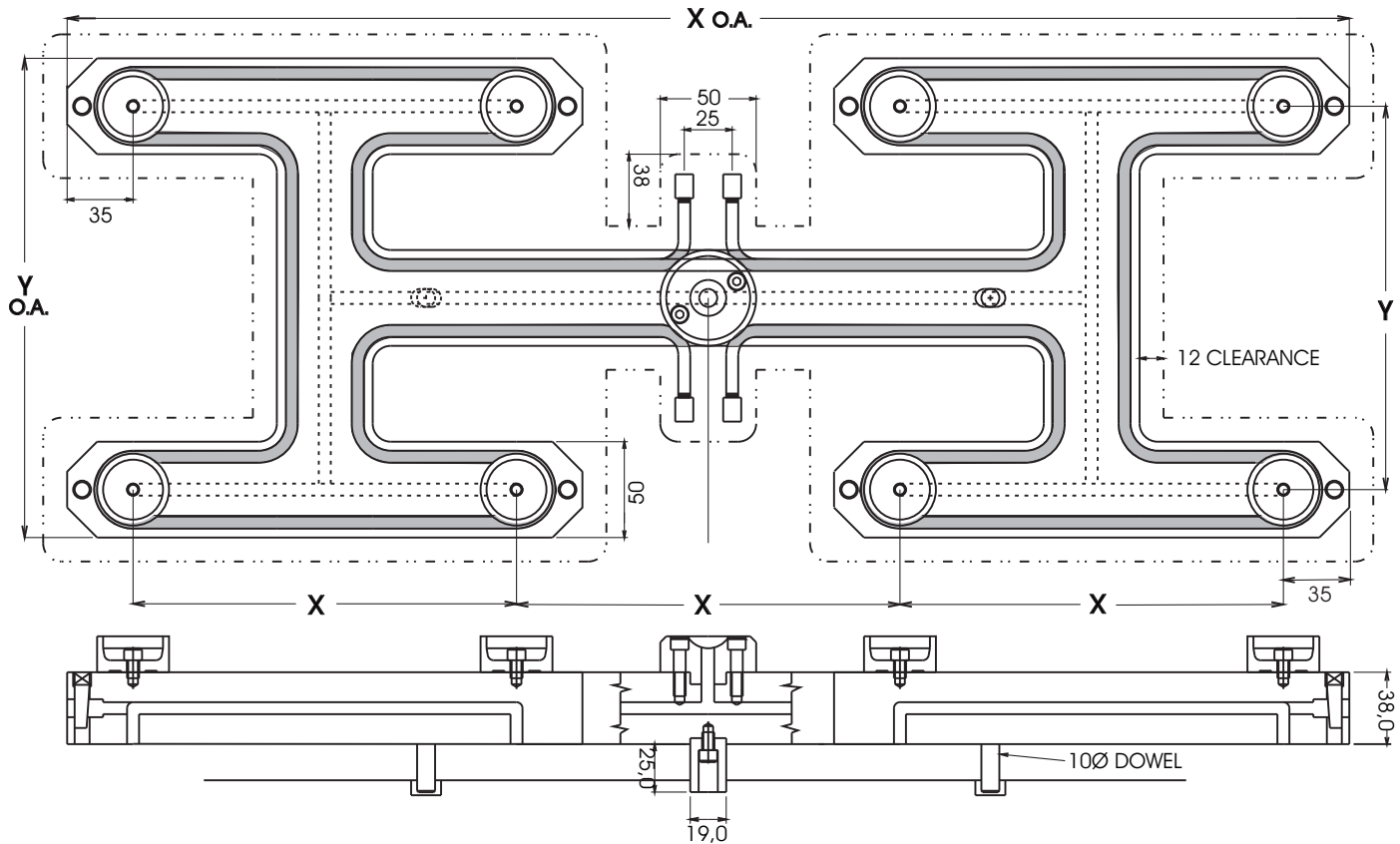


## INTEGRAL HOT MANIFOLDS "HH" CONFIGURATION

TYPICAL CONSTRUCTION  
HH PATTERN 8 DROP MANIFOLD



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

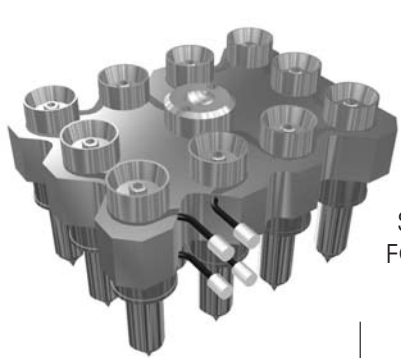
X (mm)	Y (mm)	X o.a. (mm)	Y o.a. (mm)	WATTS *	AMPS *	ZONES
75,0	75,0	370,0	175,0	950	4,3	2
130,0	130,0	460,0	180,0	1350	6,1	4
150,0	150,0	520,0	200,0	1620	7,3	4
180,0	180,0	610,0	230,0	1890	9,0	4
200,0	200,0	670,0	250,0	2160	9,8	4
230,0	230,0	760,0	280,0	2430	11,0	4
250,0	250,0	820,0	300,0	2700	12,2	4

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

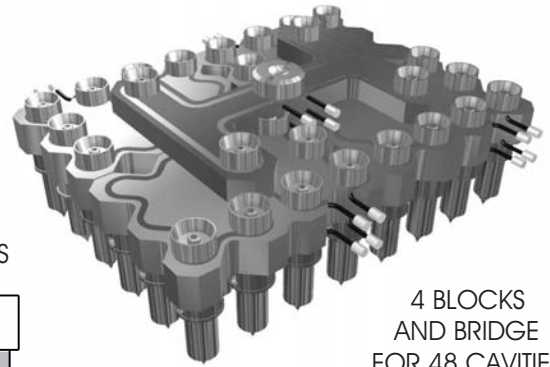
NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

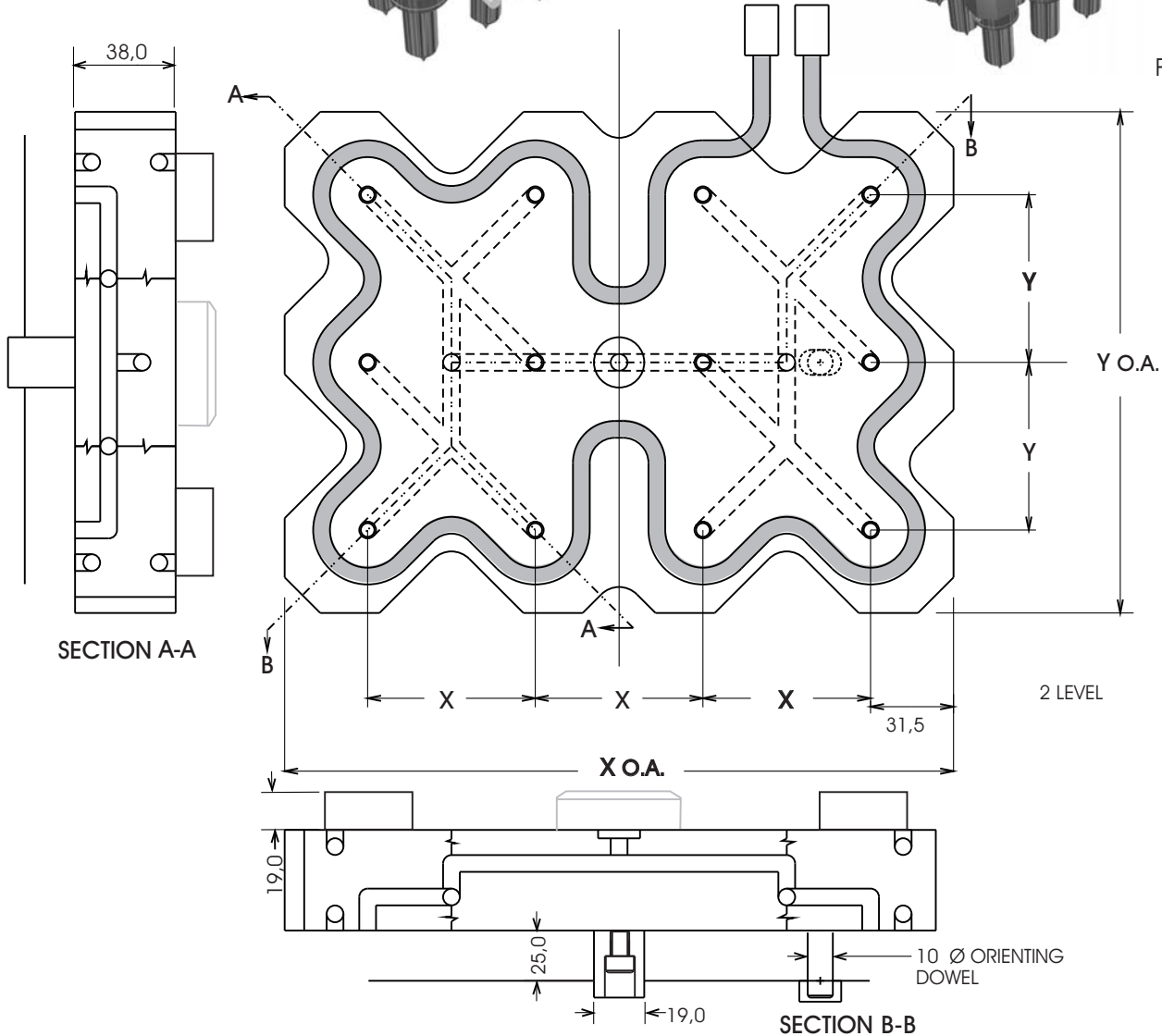
## INTEGRAL HOT MANIFOLDS 12 BLOCK CONFIGURATION



SINGLE BLOCK  
FOR 12 CAVITIES



4 BLOCKS  
AND BRIDGE  
FOR 48 CAVITIES



### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

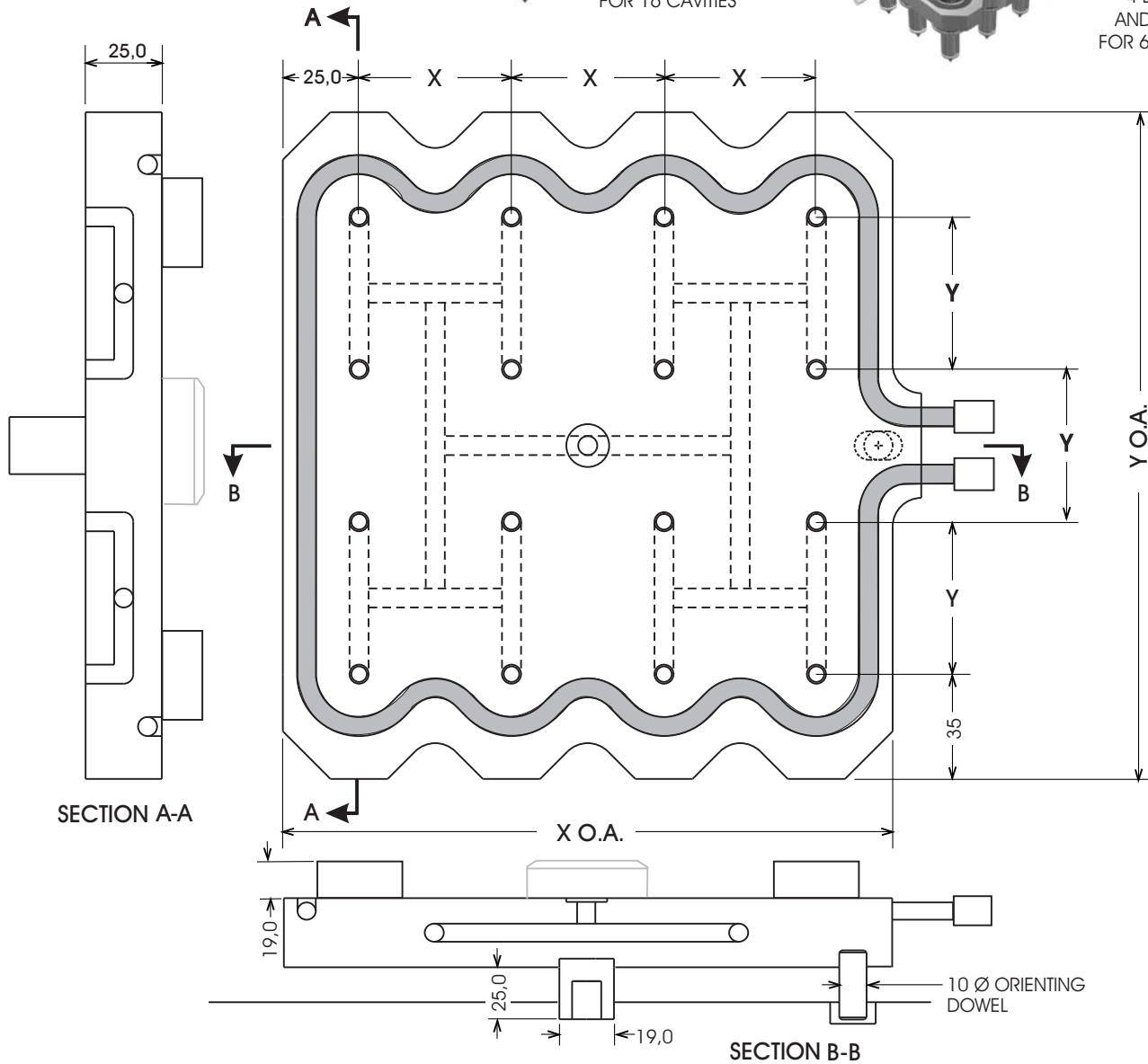
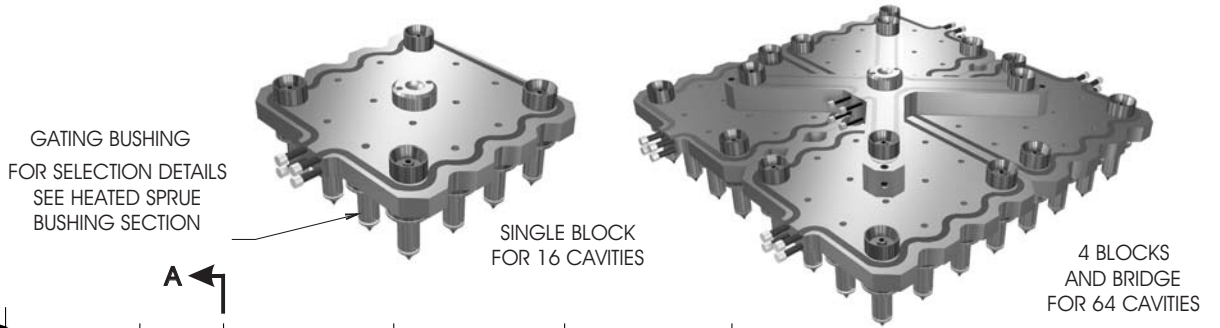
X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES
50,0	50,0	213	163	1500	6,8	2
65,0	65,0	258	190	1950	8,8	2
75,0	75,0	288	213	2350	10,6	2

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

## INTEGRAL HOT MANIFOLDS 16 BLOCK CONFIGURATION



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

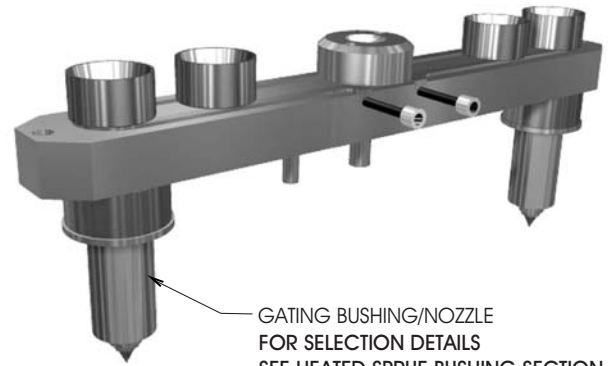
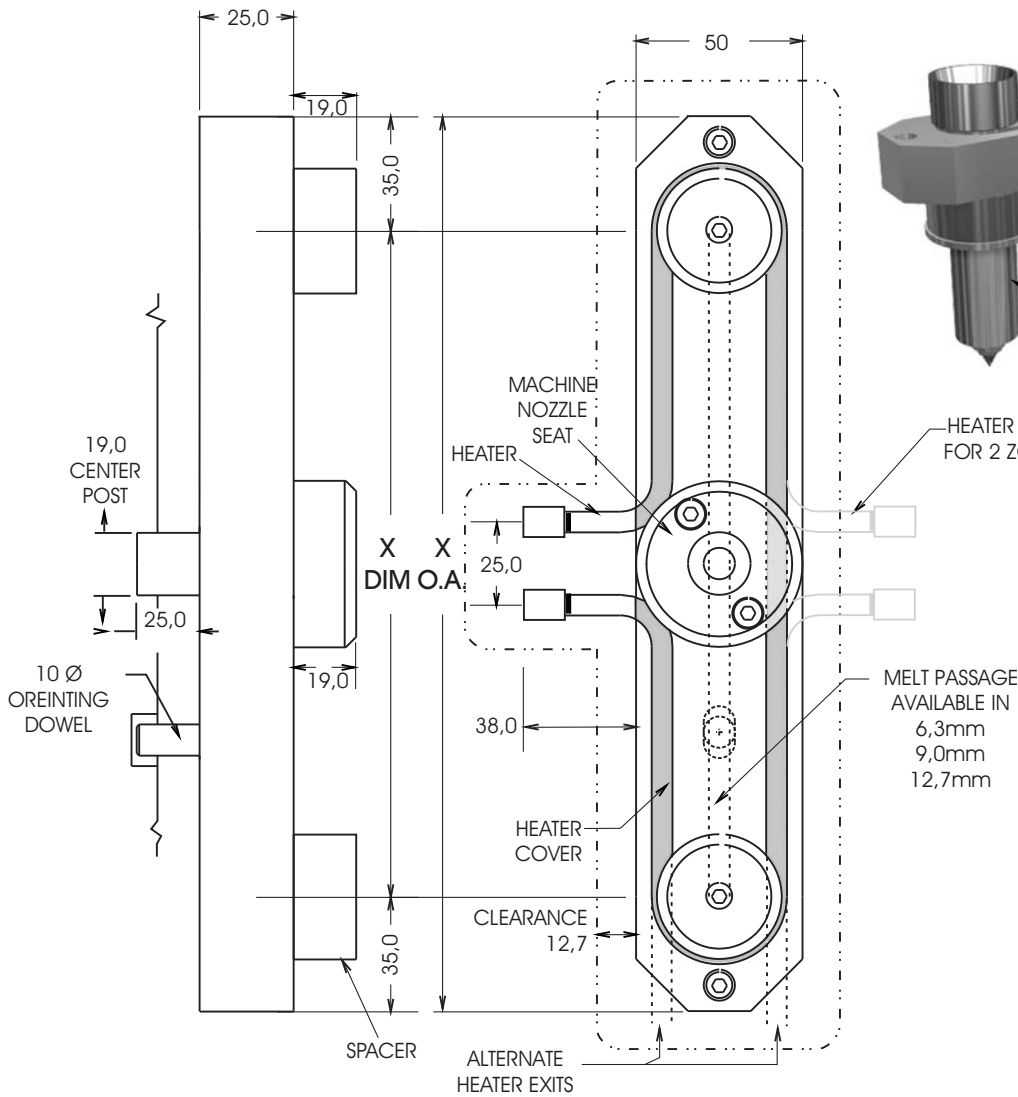
SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	Y (mm)	X o.A. (mm)	Y o.A. (mm)	WATTS *	AMPS *	ZONES
65,0	65,0	245,0	259,0	3300	15,00	1
75,0	75,0	275,0	298,0	2585	11,75	2
90,0	90,0	320,0	340,0	3300	15,00	2

GENERAL APPLICATION DESIGN, INCLUDING PLATES IS SUPPLIED WITH EACH SYSTEM.

NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING SECTION  
OR CALL ORYCON FOR DETAILS

HEATER EXITS  
FOR 2 ZONES

DESIGNED FOR RESPONSIVE,  
ECONOMICAL OPERATION

TYPICAL CONSTRUCTION  
2 DROP MANIFOLD

MELT PASSAGE  
AVAILABLE IN  
6,3mm  
9,0mm  
12,7mm

Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	X O.A. (mm)	WATTS *	AMPS *	ZONES
100,0	170,0	681	3,0	2
150,0	220,0	883	4,0	2
175,0	250,0	984	4,4	2
200,0	270,0	1085	4,9	2
225,0	300,0	1186	5,3	2
250,0	320,0	1287	5,8	2
275,0	350,0	1388	6,3	2
300,0	370,0	1489	6,7	2
325,0	400,0	1590	7,2	2
350,0	420,0	845	3,8	4
400,0	470,0	946	4,3	4
450,0	530,0	1047	4,7	4
500,0	570,0	1148	5,2	4

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

NOTE: Design specifications subject to change without notice. \* Per Zone At 220 Volts

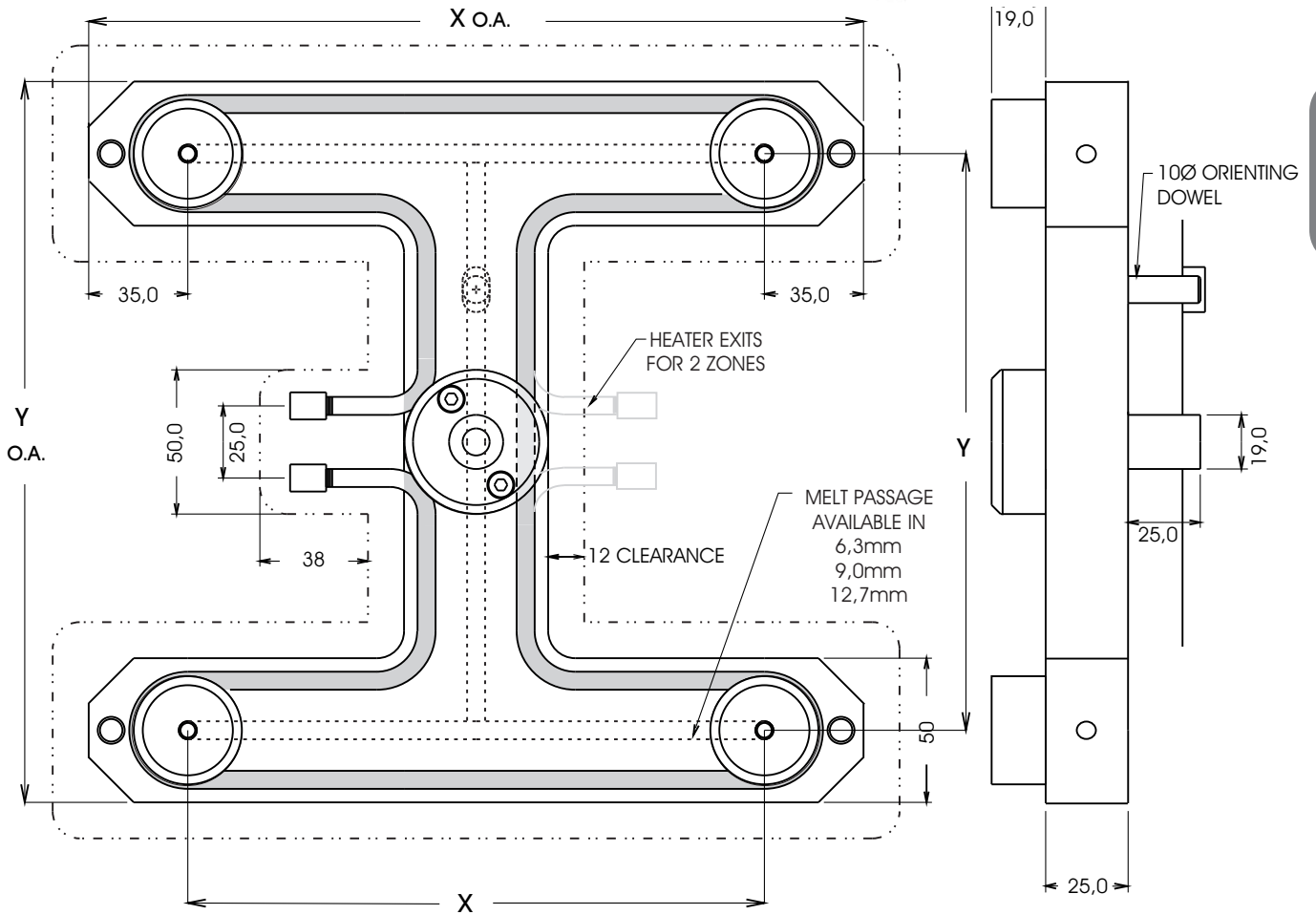
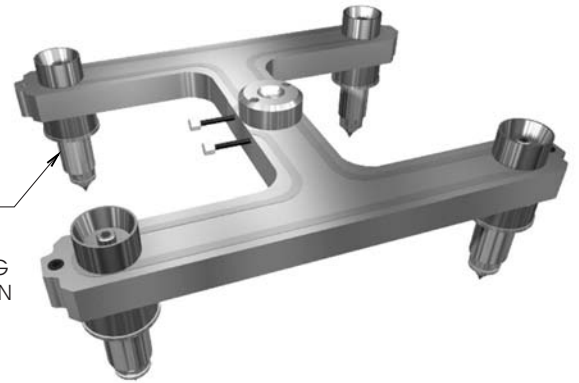
## LOW PROFILE INTEGRAL HOT MANIFOLDS "H" CONFIGURATION

DESIGNED FOR RESPONSIVE,  
ECONOMICAL OPERATION

TYPICAL CONSTRUCTION  
H PATTERN 4 DROP MANIFOLD

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING  
SECTION OR CALL ORYCON  
FOR DETAILS



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES	X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES
100,0	70,0	170	120	1387	6,3	1	230,0	130,0	300	180	1144	5,2	2
130,0	100,0	200	150	1612	7,3	1	230,0	180,0	300	230	1219	5,5	2
150,0	130,0	220	180	1837	8,3	1	250,0	150,0	320	200	1256	5,7	2
180,0	130,0	250	180	1987	9,0	1	250,0	180,0	320	230	1294	5,9	2
180,0	160,0	290	210	2062	9,3	1	300,0	150,0	370	200	1406	6,4	2
200,0	130,0	270	180	2137	9,7	1	300,0	200,0	370	250	1481	6,7	2
200,0	160,0	270	210	2212	10,0	1	300,0	250,0	370	300	1556	7,0	2

NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

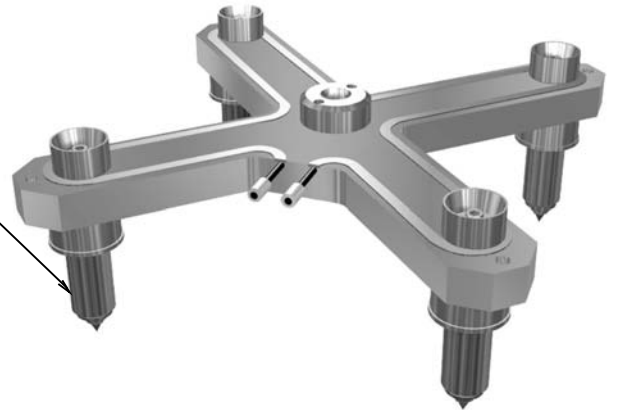


# LOW PROFILE INTEGRAL HOT MANIFOLDS "X" CONFIGURATION

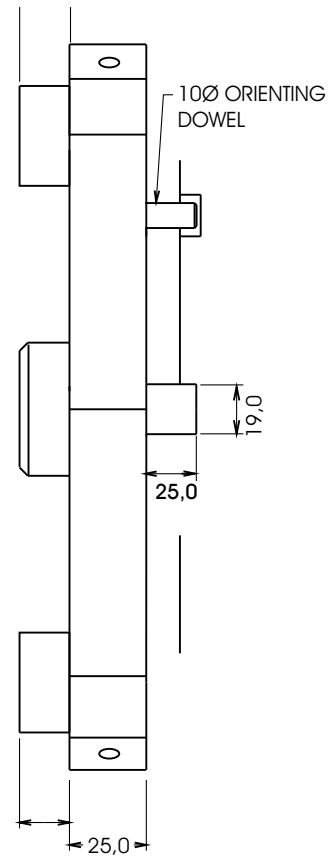
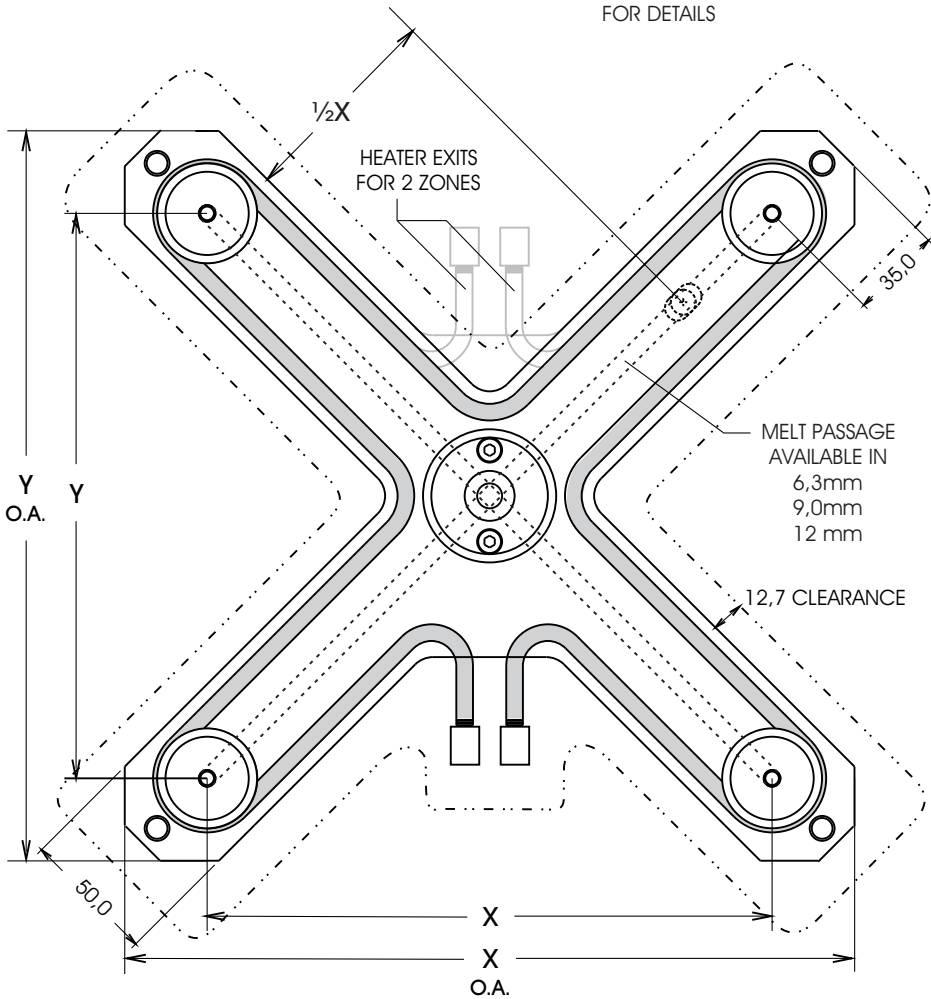
DESIGNED FOR RESPONSIVE,  
ECONOMICAL OPERATION

SAME CONFIGURATION USED  
AS BRIDGE MANIFOLD

TYPICAL CONSTRUCTION  
X PATTERN 4 DROP MANIFOLD



GATING BUSHING/NOZZLE  
FOR SELECTION DETAILS  
SEE HEATED SPRUE BUSHING  
SECTION OR CALL ORYCON  
FOR DETAILS



Hot Runner  
Manifold  
Systems

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES	X (mm)	Y (mm)	X O.A. (mm)	Y O.A. (mm)	WATTS *	AMPS *	ZONES
100,0	100,0	163	163	930	4,2	1	230,0	230,0	293	293	1046	4,7	2
130,0	130,0	193	193	1163	5,3	1	250,0	250,0	313	313	1162	5,2	2
150,0	150,0	213	213	1395	6,3	1	280,0	280,0	343	343	1278	5,8	2
180,0	180,0	243	243	1628	7,4	1	300,0	300,0	363	363	1395	6,3	2
200,0	200,0	263	263	1860	8,5	1	330,0	330,0	393	393	1511	6,8	2

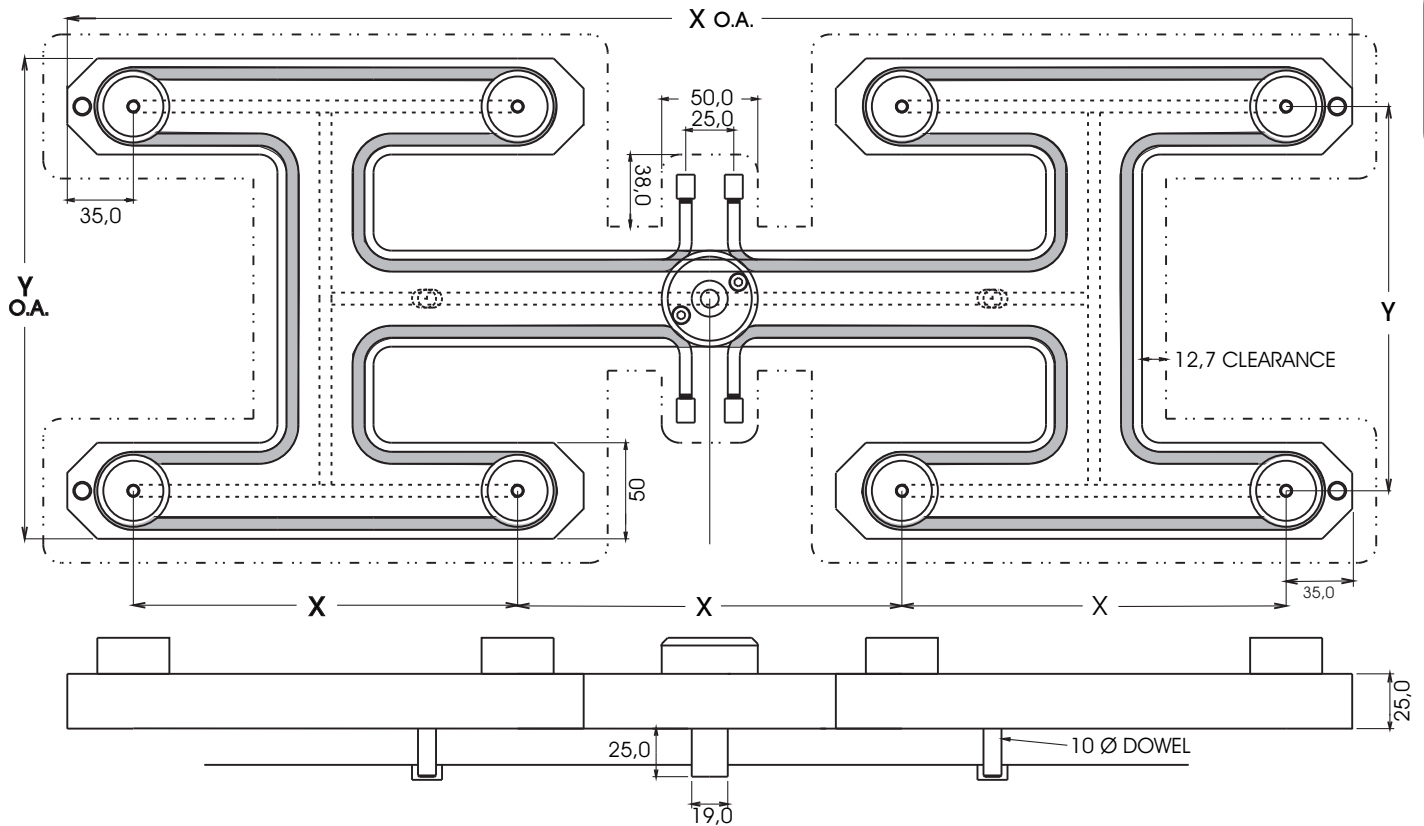
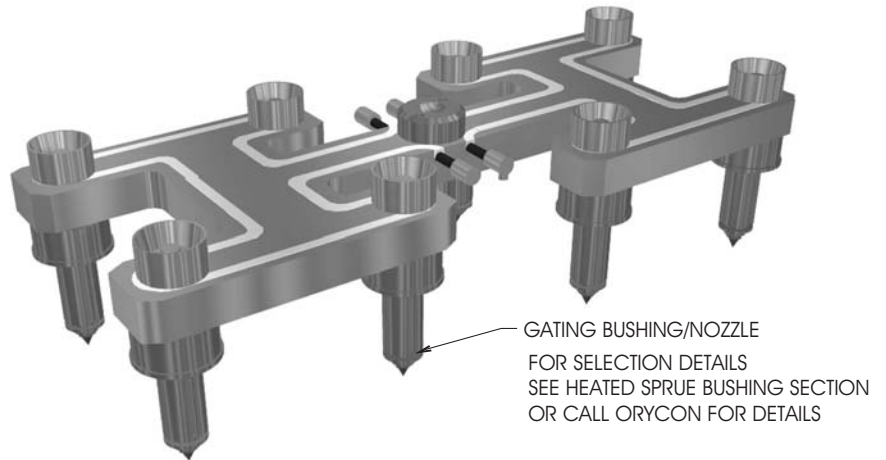
NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

## LOW PROFILE INTEGRAL HOT MANIFOLDS "HH" CONFIGURATION

DESIGNED FOR RESPONSIVE,  
ECONOMICAL OPERATION

TYPICAL CONSTRUCTION  
HH PATTERN 8 DROP MANIFOLD



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

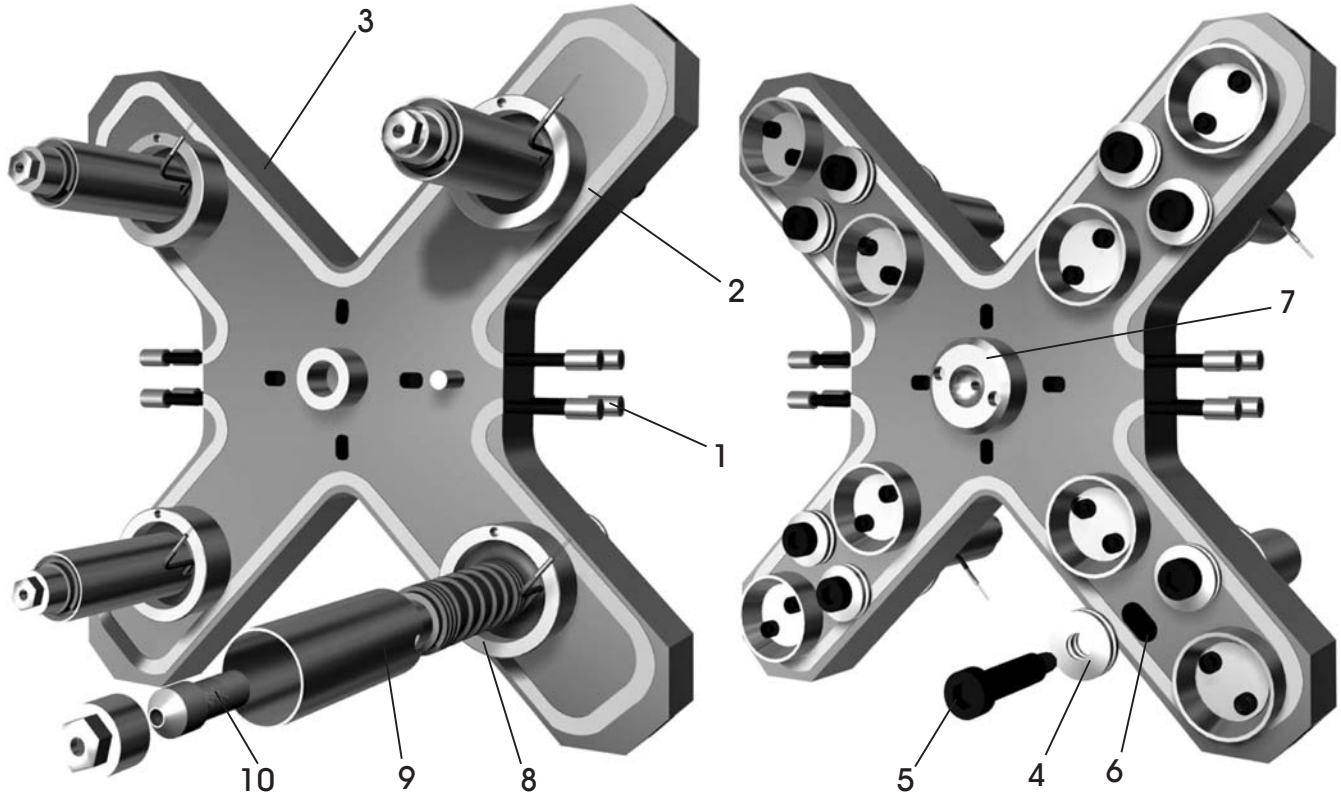
X (mm)	Y (mm)	X o.a. (mm)	Y o.a. (mm)	WATTS *	AMPS *	ZONES
100,0	100,0	370,0	170,0	1080	4,9	2
130,0	130,0	460,0	200,0	1350	6,1	2
150,0	150,0	520,0	220,0	1620	7,3	2

NOTE: Design specifications subject to change without notice.

\* Per Zone At 220 Volts

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

## LEAK-PROOF INTEGRAL MANIFOLD SYSTEM FOR LARGE VOLUME PARTS



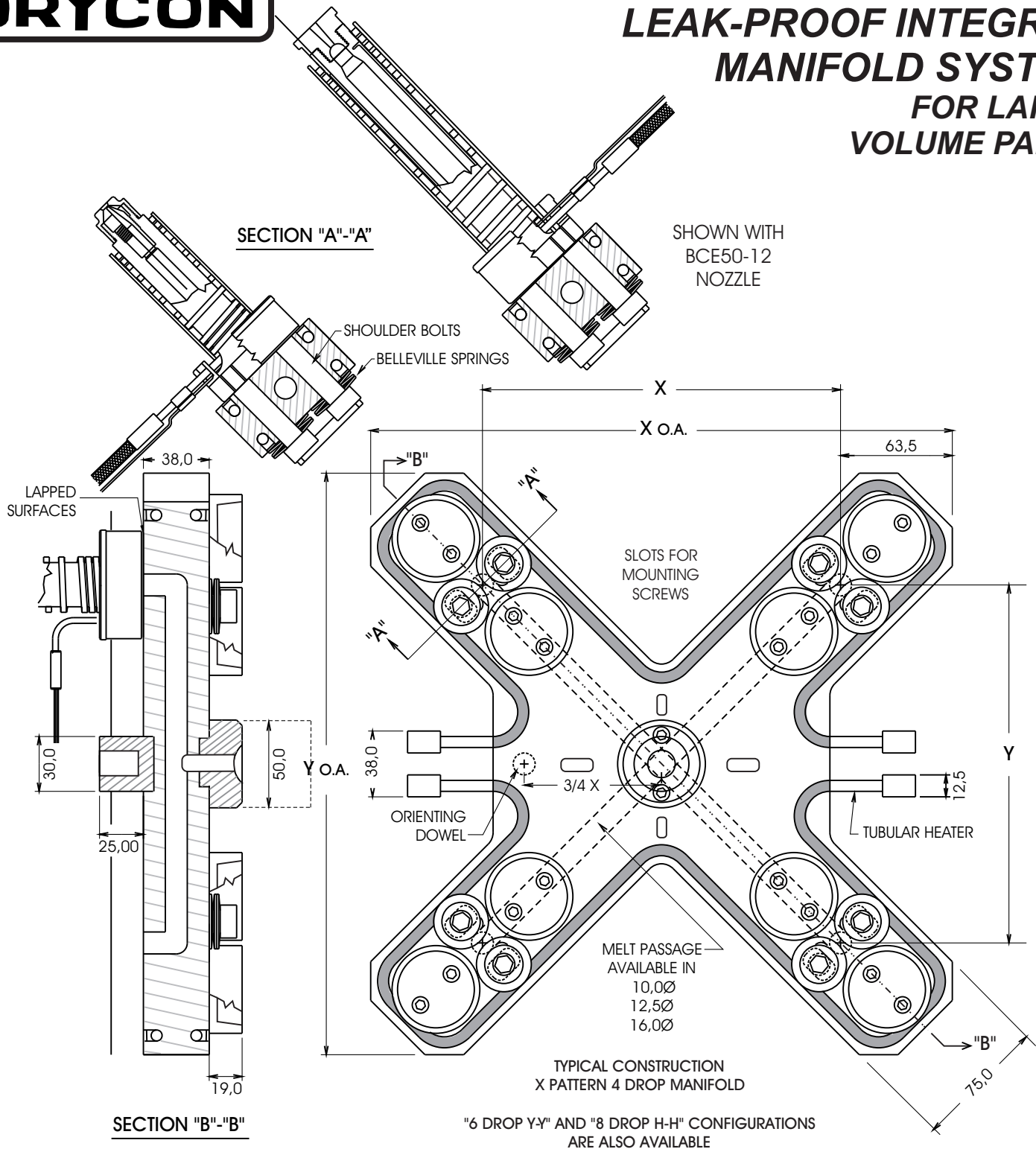
Orycon's Leak-Proof Manifold System is designed specifically for large parts. Shown here with the Easy Clean-out Bushing, it can be fitted with other Orycon Gating nozzle styles. The Leak-Proof System offers the following features:

1. Long-life Tubular heaters.
2. Patented heater cover with positive retention allowing 100% heat transfer from the tubular heater to the manifold.
3. Hardened and lapped surfaces eliminate the need for "O" ring seals.
4. Cupped stainless steel Belleville type springs exert approximately double the pressure of the maximum injection molding pressure and keep the nozzle sealed to the manifold. This prevents leaks even if mold plate stack loses compression.
5. Shoulder bolts maintain springs under pressure at all times.
6. Slots allow manifold expansion and contraction without distorting the nozzle assembly.
7. Low-profile machine nozzle seat shown. Other styles can be used.
8. Highly durable nozzles. Three different types can be used.
9. Easily removable internal tip.
10. Easily serviceable nozzle cap can be removed directly from the cavity for cleaning tips.

\* Manufactured under one or more of the following Patents:  
5,227,179 5,352,109  
And Patents Pending.



## LEAK-PROOF INTEGRAL MANIFOLD SYSTEM FOR LARGE VOLUME PARTS



Hot Runner  
Manifold  
Systems

### STANDARD DESIGNS

SIZES NOT LISTED AVAILABLE WITH SLIGHTLY LONGER LEAD TIMES.

Xmm	Ymm	X O.A. mm	Y O.A. mm	WATTS *	AMPS *	ZONES
175,0	175,0	305,0	305,0	1550	7,0	4
200,0	200,0	332,0	332,0	1700	7,7	4
250,0	250,0	381,0	381,0	1940	8,8	4
300,0	300,0	432,0	432,0	2100	9,5	4
350,0	350,0	483,0	483,0	2330	10,5	4

GENERAL APPLICATION  
DESIGN, INCLUDING  
PLATES IS SUPPLIED  
WITH EACH SYSTEM.

NOTE: Design specifications subject to change without notice. \* Per Zone At 220 Volts