Manifold Guidelines



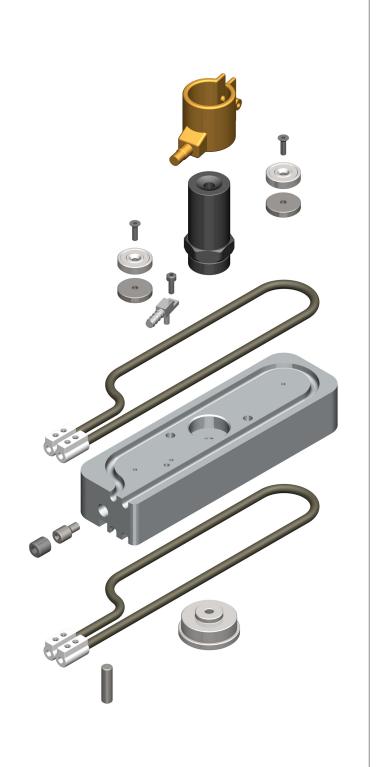
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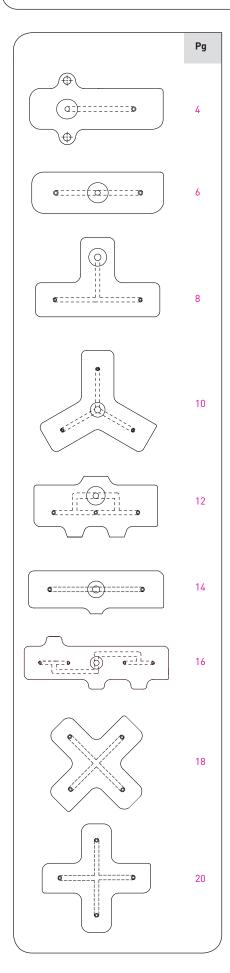
Manifold Assembly's

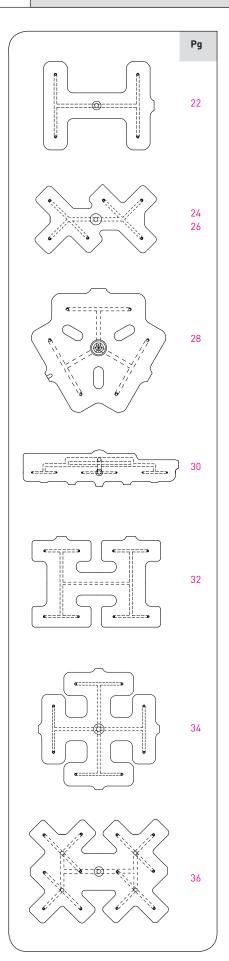
Mastip specifically designs every manifold to suit the individual customer's application. All manifolds are fully balanced, except where noted, to ensure even and consistent filling of all cavities.

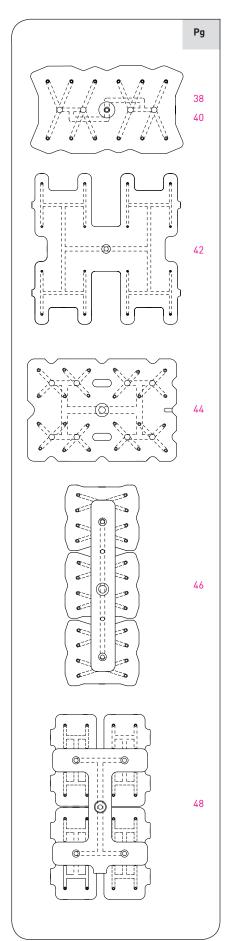
Manifolds are supplied with the following:

- Titanium locator and steel dowel pin
- Steel adjustment discs, titanium spacers, and countersunk screws
- Manifold thermocouple and cap screw
- Mould ID plate
- Ceramic heater terminal connectors
- Sprue Bush and Heater



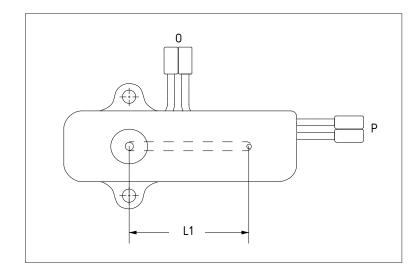






To order please fill in the QUOTE REQUEST FORM ensuring the following information is completed:

- Heater wire exit position (0 or P)
- L1 and measurements
- Sprue Bush size
- Nozzle details

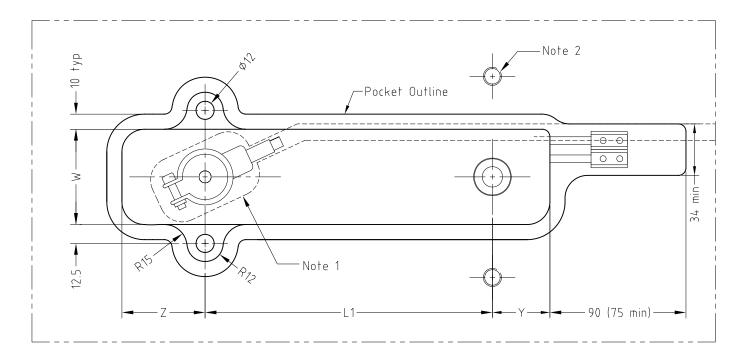


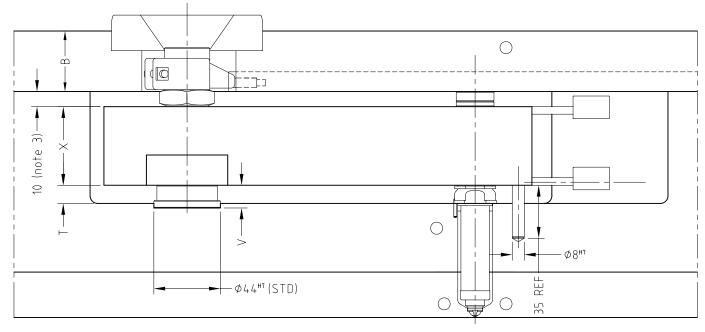
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	Χ			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (many)	10	10	13	17	12	12	15	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	10	22	15	15	10	15
Valve Gate	V	15	15	18	22	15	15	18	
Thermal Gate	W	/2	/ 2	/2	/2	/2	/2	/2	63
Valve Gate	VV	63	63	63	63	63	63	63	
Thermal Gate	V	36	//	, ,	44	36			36
Valve Gate	Χ	44	44	44	50	44	44	44	
Thermal Gate	V ()	20	/ 7	/ 7	F /	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	
Thermal Gate	7 (many)	EE	EE	EE	E/	EE	EE	EE	55
Valve Gate	Z (max)	55	55	55	56	55	55	55	

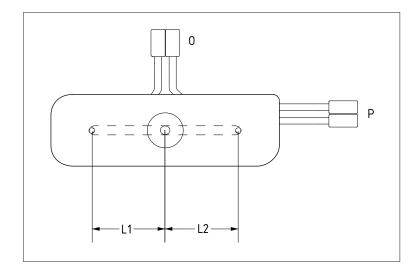




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

To order please fill in the QUOTE REQUEST FORM ensuring the following information is completed:

- Heater wire exit position (0 or P)
- L1 and L2 measurements
- Sprue Bush size
- Nozzle details

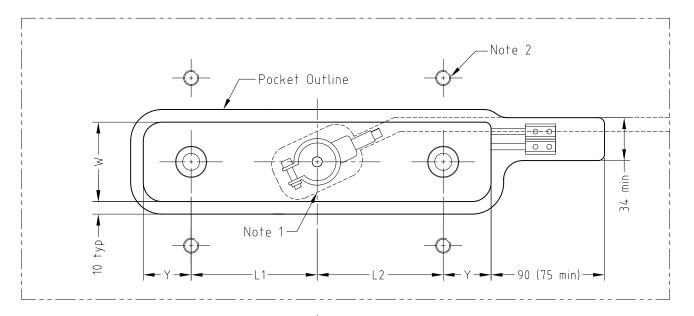


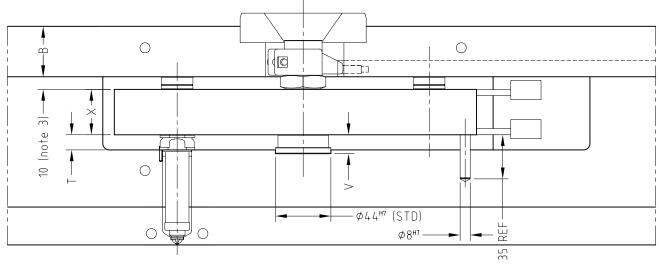
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	Χ			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Valve Gate	D (IIIIII)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Valve Gate	I (IIIdX)	10	10	13	17	12	12	13	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	15	10	
Thermal Gate	W	/2	/2	/2	/2	/2	/2	63	63
Valve Gate	VV	63	63	63	63	63	63	03	
Thermal Gate	Х	36	//	,,	44	36	44	44	36
Valve Gate	^	44	44	44	50	44	44	44	
Thermal Gate	Y (max)	20	/7	/7	5.4	20	/7	47	38
Valve Gate	T (IIIAX)	38	47	47	56	38	47	47	

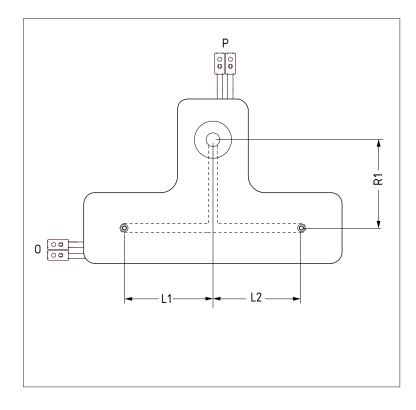




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep backplate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

To order please fill in the QUOTE REQUEST FORM ensuring the following information is completed:

- Heater wire exit position (0 or P)
- L1 and L2 and R1 measurements
- Sprue Bush size
- Nozzle details

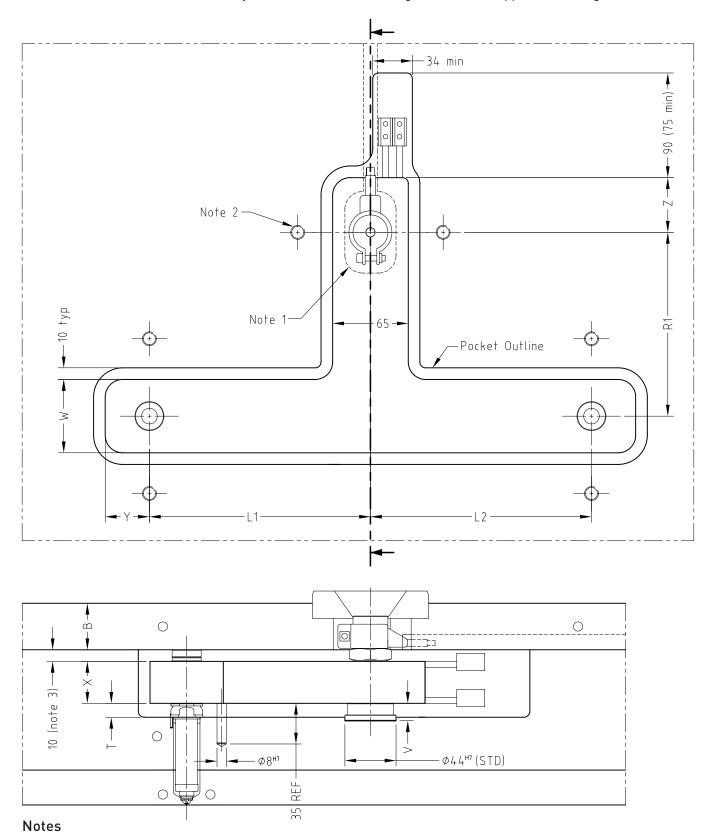


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

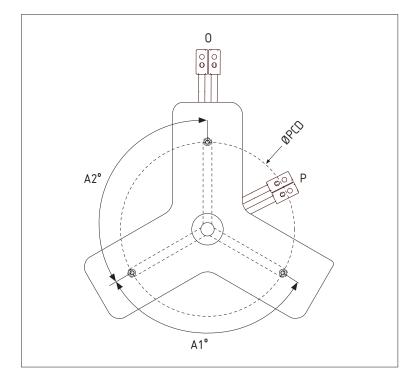
			В	Х			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (many)	10	10	10	17	10	12	15	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	10	22	15	15	10	15
Valve Gate	V	15	15	18	22	15	15	18	
Thermal Gate	14/	/2	/2	/2	/2	/2	/2	/2	60
Valve Gate	W	63	63	63	63	63	63	63	
Thermal Gate	Х	//		, ,	44			//	44
Valve Gate	Χ	44	44	44	50	44	44	44	
Thermal Gate	V ()	20	/7	/ 7	F /	20	/7	/ 7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	
Thermal Gate	7 (many)	/7	/0	/0	EO	/7	/0	/0	47
Valve Gate	Z (max)	47	49	49	58	47	49	49	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- Diameter marked PCD
- Angle measurements A1° and A2°
- Sprue Bush size
- Nozzle details

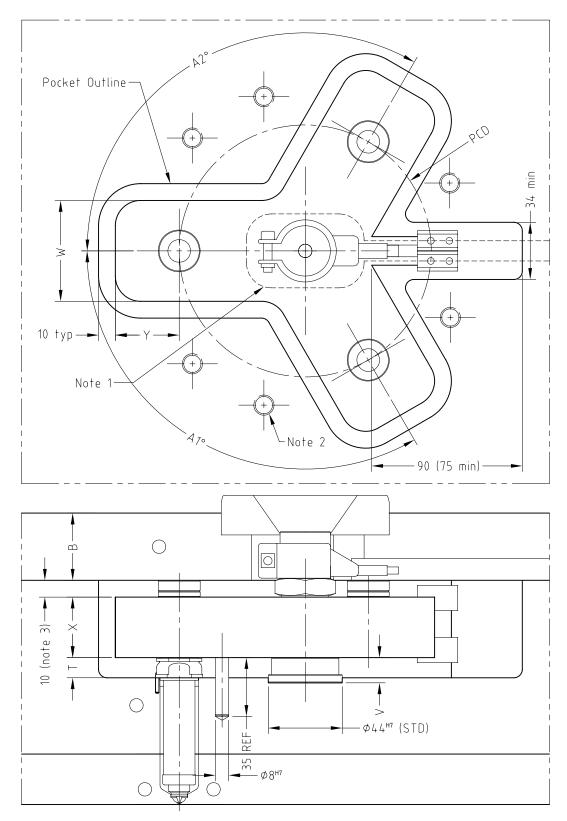


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

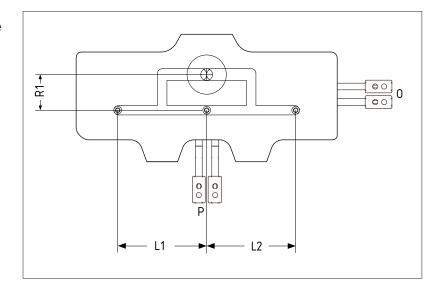
			В	Χ			МХ		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Valve Gate	i (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	15	10	
Thermal Gate	W	60	60	/2	63	60	60	/2	60
Valve Gate	VV	63	63	63	63	63	63	63	
Thermal Gate	Х	36	//	44	44	36	44	44	36
Valve Gate	^	44	44	44	50	44	44	44	
Thermal Gate	V (may)	20	/7	/7	5.4	38	47	47	38
Valve Gate	Y (max)	38	47	47	56	38	4/	4/	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1, L2 and R1 measurements
- Sprue Bush size
- Nozzle details

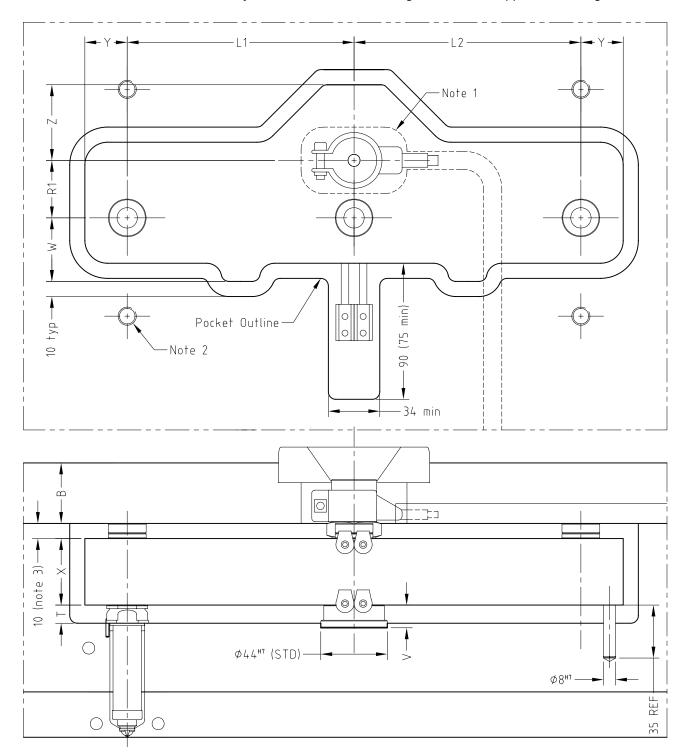


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

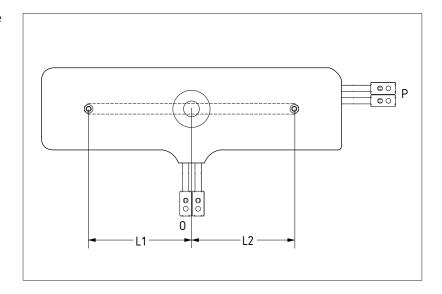
			В	Χ			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D(main)	/0	40	40	40	/0	40	40	40
Valve Gate	B(min)	40	55	55	55	40	55	55	
Thermal Gate	R1(min)	17	19	19	23	17	19	19	17
Valve Gate	KI(MIN)	17	17	17	23	17	17	17	
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Valve Gate	I (IIIdX)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	15	10	
Thermal Gate	W	42	44	44	55	42	44	44	42
Valve Gate	VV	42	44	44	33	42	44	44	
Thermal Gate	Х	44	44	44	50	44	44	44	44
Valve Gate	۸	44	44	44	30	44	44	44	
Thermal Gate	V (ma a.v.)	38	47	/7	56	38	47	/7	38
Valve Gate	Y (max)	36	47	47	36	36	47	47	
Thermal Gate	Z (max)	45	53	53	62	45	53	53	45
Valve Gate	Z (IIIdX)	40	ეა	ეა	02	45	ეა	ეა	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and L2 measurements
- Sprue Bush size
- Nozzle details

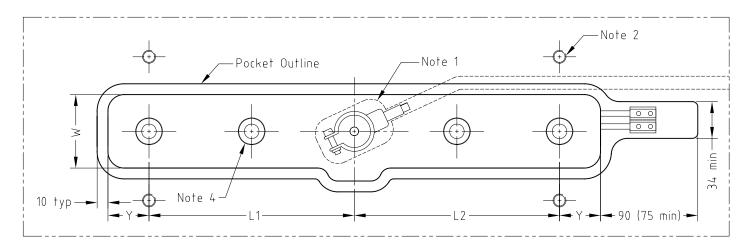


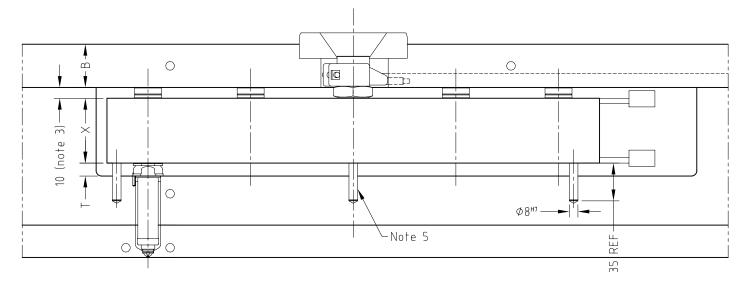
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	X				MT	
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Thermal Gate	T(max)	10	10	13	17	12	12	15	7.5
Thermal Gate	W	68	68	68	75	68	68	68	68
Thermal Gate	X	60	62	62	72	60	62	62	60
Thermal Gate	Y (max)	38	47	47	56	38	47	47	38

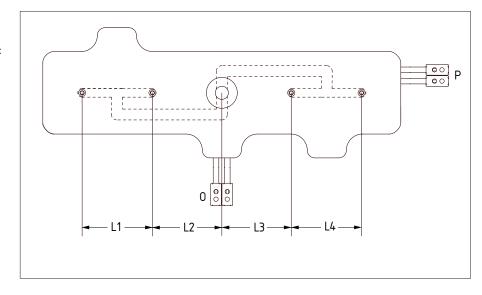




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. To make the manifold fully balanced deviation plugs are used.A spacer must ALWAYS be fitted between the backplate and the deviation plug to prevent leaks.
- 5. Items shown out of position.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1, L2, L3 and L4 measurements
- Sprue Bush size
- Nozzle details

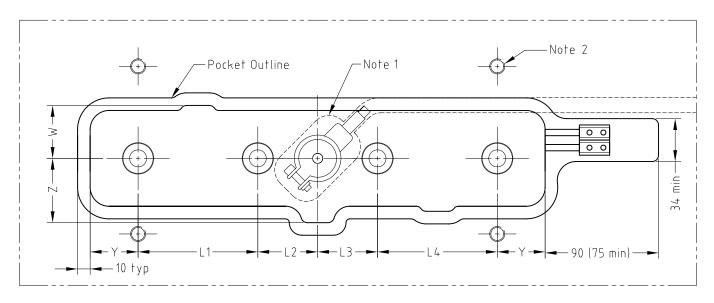


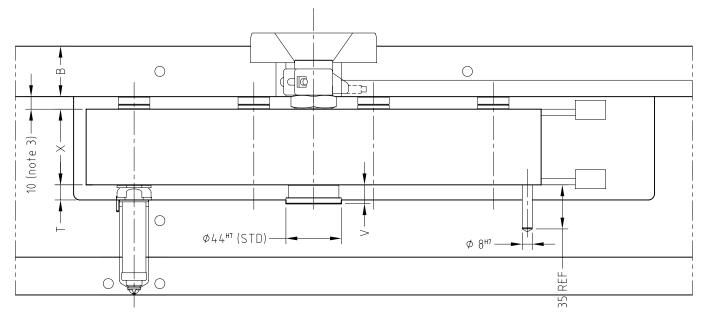
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	Χ			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T ()	10	10	10	17	10	10	1.5	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	1 5	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	15	10	
Thermal Gate	W	/2	44	44	55	42	44	44	42
Valve Gate	VV	42	44	44	33	42	44	44	
Thermal Gate	Х	//	44	//	44	//	44	44	44
Valve Gate	^	44	44	44	50	44	44	44	
Thermal Gate	V ()	20	/ 7	/7	E/	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	
Thermal Gate	7 ()	/ 1	/ =	/ =	70	/ 1	/ 5	/ -	61
Valve Gate	Z (max)	61	65	65	78	61	65	65	

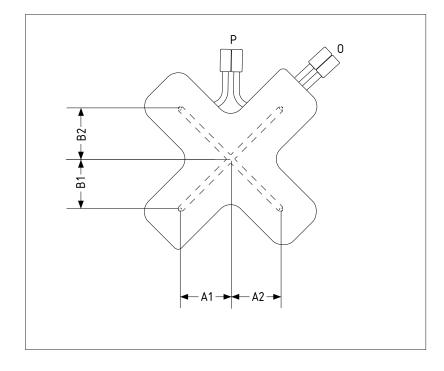




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. To make the manifold fully balanced deviation plugs are used.A spacer must ALWAYS be fitted between the backplate and the deviation plug to prevent leaks.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- A1 and A2 measurements
- B1 and B2 measurements
- Sprue Bush size
- Nozzle details

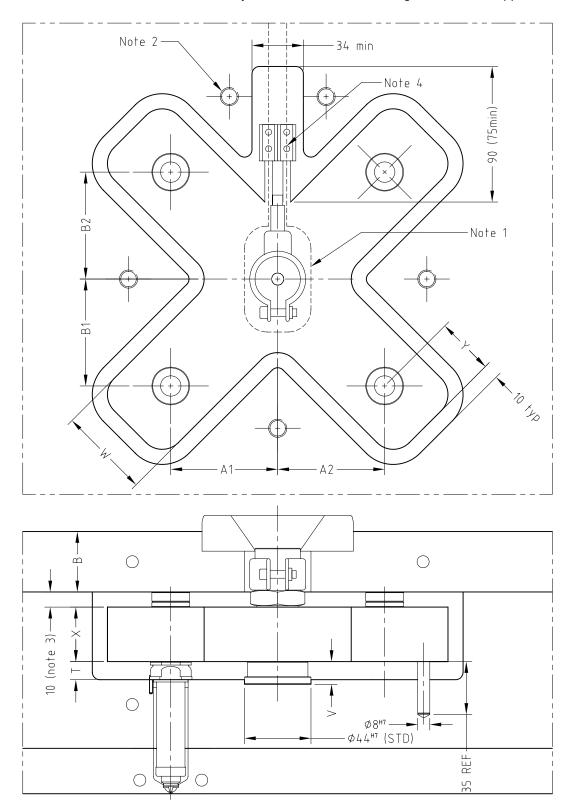


Specifications

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Actual appearance of manifold depends on drop dimension

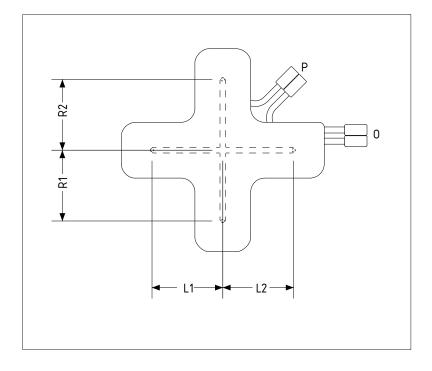
			В	X			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	/0	40	40	40	/0	40	40	40
Valve Gate	b (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Valve Gate	I (IIIdX)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10		15	15	10	
Thermal Gate	W	60	60	63	63	60	60	/2	60
Valve Gate	VV	63	63	03	03	63	63	63	
Thermal Gate	X	36	44	44	44	36	44	44	36
Valve Gate	^	44	44	44	50	44	44	44	
Thermal Gate	V (many)	20	/7	/7	E/	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. If A1, A2, B1, B2 < 50mm, only 0 heater position is available.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and L2 measurements
- R1 and R2 measurements
- Sprue Bush size
- Nozzle details

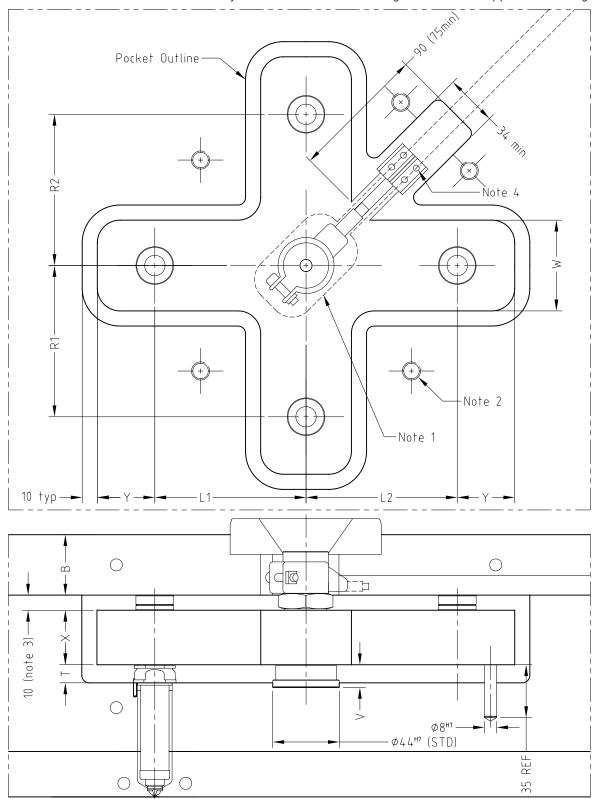


Specifications

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Actual appearance of manifold depends on drop dimension

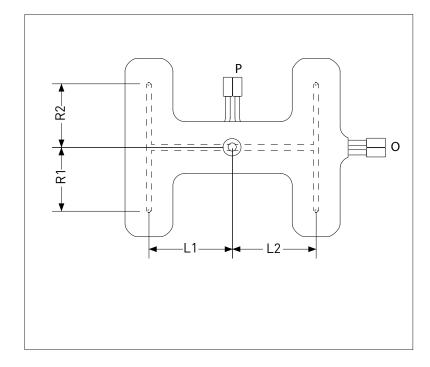
			В	Χ			МХ		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Valve Gate	I (IIIdX)	10	10	13	17	12	12	13	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	10	10	
Thermal Gate	W	60	60	63	63	60	60	63	60
Valve Gate	VV	63	63	03	03	63	63	03	
Thermal Gate	Х	36	44	44	44	36	44	44	36
Valve Gate	۸	44	44	44	50	44	44	44	
Thermal Gate	Y (max)	38	47	47	56	38	47	47	38
Valve Gate	i (iilax)	38	4/	47	36	J 36	47	47	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. → Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. If L1, L2, R1, R2 < 50 mm, only 0 heater position is available.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and L2 measurements
- R1 and R2 measurements
- Sprue Bush size
- Nozzle details

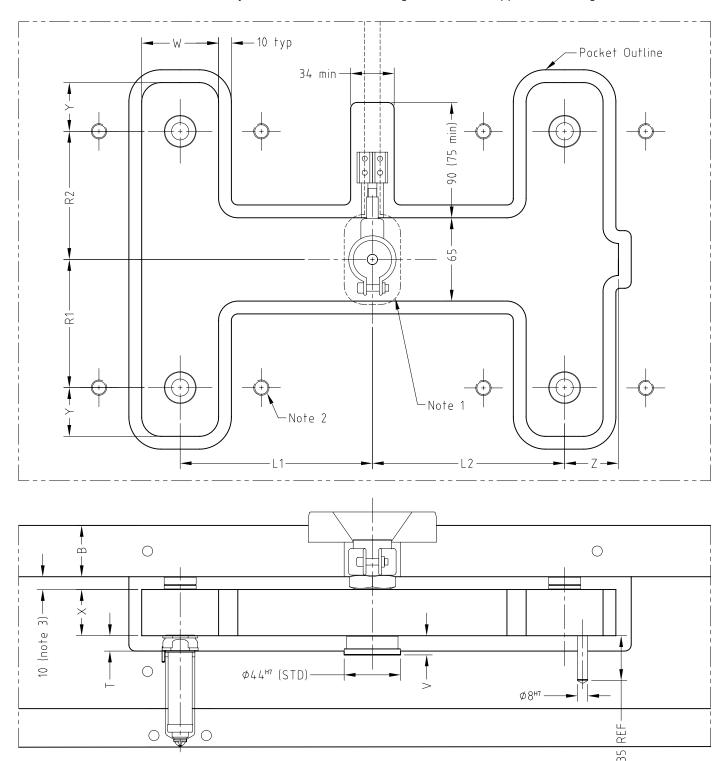


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

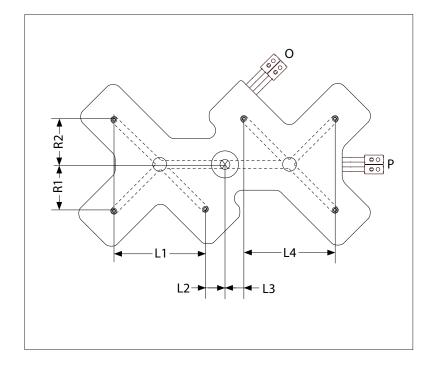
			В	X			MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	/0	40	40	40	/0	40	40	40
Valve Gate	B (MIN)	40	55	55	55	40	55	55	
Thermal Gate	T (many)	10	10	13	17	12	12	15	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	10	22	15	15	10	15
Valve Gate	V	15	15	18	22	15	15	18	
Thermal Gate	W	60	60	63	63	60	60	63	60
Valve Gate	VV	63	63	03	03	63	63	0.3	
Thermal Gate	Х	//	//	,,	44	,,	,,	//	44
Valve Gate	Χ	44	44	44	50	44	44	44	
Thermal Gate	V ()	20	/7	/7	F /	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	
Thermal Gate	7 (22.24)	/2	//	//	EE	/2	//	//	42
Valve Gate	Z (max)	42	44	44	55	42	44	44	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1, L2, L3 and L4 measurements
- R1 and R2 measurements
- Sprue Bush size
- Nozzle details

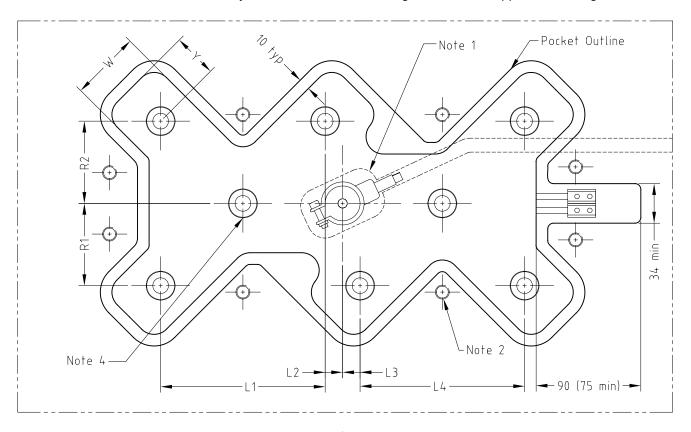


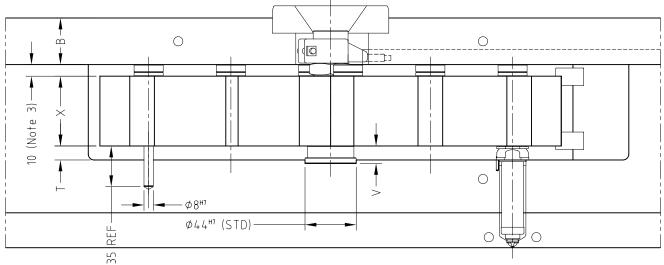
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	Χ			МХ		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (min)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T ()	10	10	10	17	10	10	15	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	10	22	15	15	10	
Thermal Gate	W	60	60	63	63	60	60	63	60
Valve Gate	VV	63	63	63	63	63	63	63	
Thermal Gate	Х	/0	/ 0	/2	70	/0	/2	/2	60
Valve Gate	^	60	62	62	72	60	62	62	
Thermal Gate	V ()	20	/ 7	/7	E/	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	

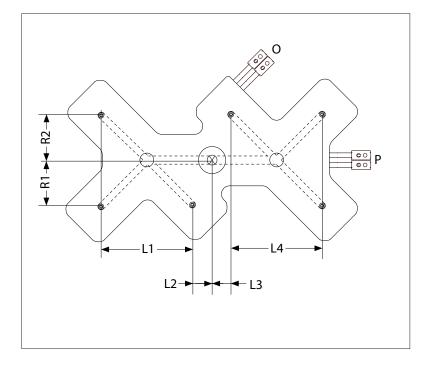




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. To make this manifold fully balanced deviation plugs are used.A spacer must ALWAYS be fitted between the backplate and the deviation plug to prevent leakage.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1, L2, L3 and L4 measurements
- R1 and R2 measurements
- Sprue Bush size
- Nozzle details

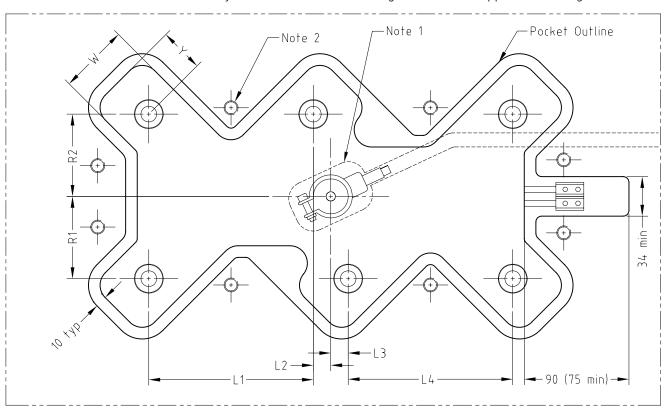


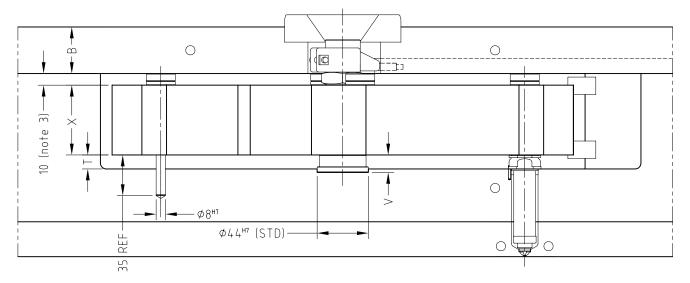
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	X			МХ		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	/0	40	40	40	/0	40	40	40
Valve Gate	D (IIIIII)	40	55	55	55	40	55	55	
Thermal Gate	T (many)	10	10	13	17	12	12	15	7.5
Valve Gate	T (max)	10	10	13	17	12	12	15	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	15	18	22	15	15	18	
Thermal Gate	W	60	60	/2	/2	60	60	/2	60
Valve Gate	VV	63	63	63	63	63	63	63	
Thermal Gate	V	,,,	, ,	,,,	FO	,,	,,,		44
Valve Gate	X	44	44	44	50	44	44	44	
Thermal Gate	V ()	20	/7	/7	E/	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	

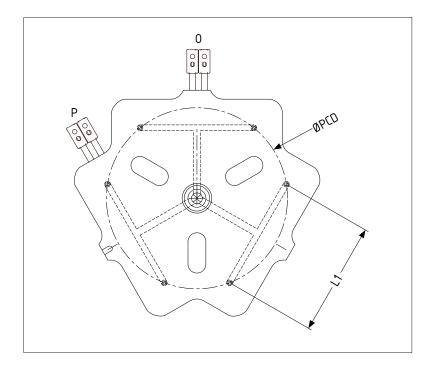




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and PCD measurements
- Sprue Bush size
- Nozzle details

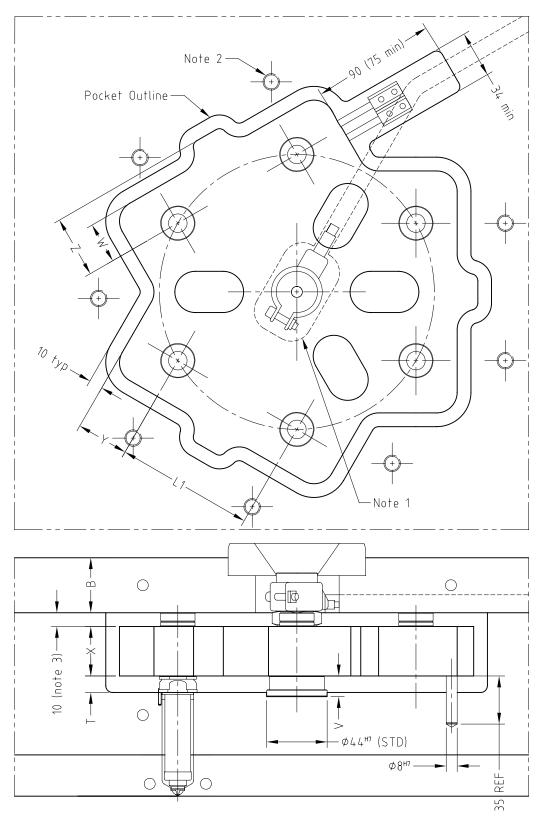


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

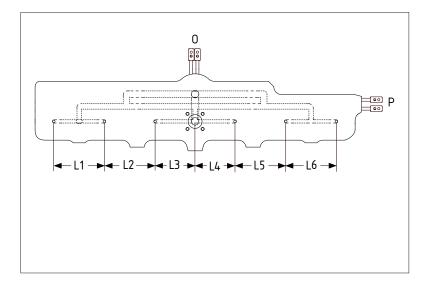
			В	Χ			MT		
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (· ·)	40	40	40	40	40	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	40	17	12	12	15	7.5
Valve Gate	i (max)	10	10	13					
Thermal Gate	V	1 5	15	18	22	15	15	18	15
Valve Gate		15							
Thermal Gate	W	30	30	31.5	31.5	30	30	31.5	30
Valve Gate	VV	31.5	31.5	31.5		31.5	31.5		
Thermal Gate	V	44	,,,	//	44	44	44	44	44
Valve Gate	X	44	44	44	50		44	44	
Thermal Gate	V (ma a.v.)	38	/7	47	E/	38	47	47	38
Valve Gate	Y (max)		47		56				
Thermal Gate	7()	/0			EE	/2	44		42
Valve Gate	Z (max)	42	44	44	55	42		44	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and PCD measurements
- Sprue Bush size
- Nozzle details



Specifications

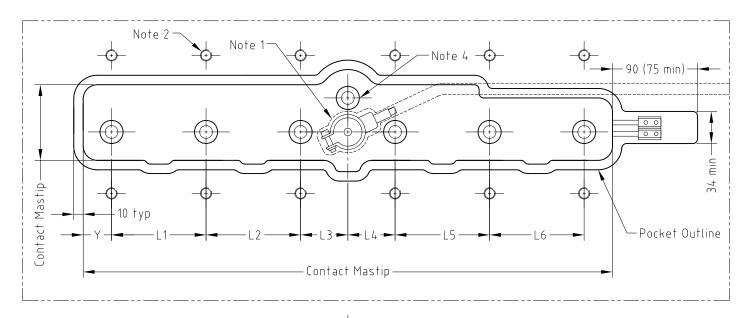
Final mould design MUST be based on Mastip approval drawing

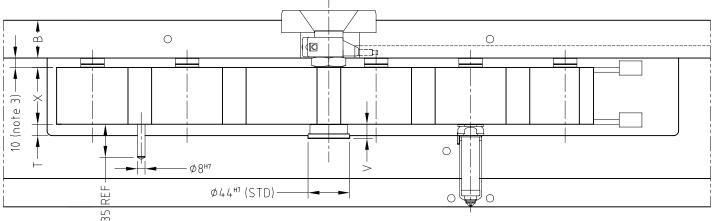
Actual appearance of manifold depends on drop dimension

			В	X			MT		
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	Х	65	70	70	*	65	70	70	65
Thermal Gate	Y (max)	38	47	47	56	38	47	47	38

^{*} Contact Mastip for more information

All dimensions are in millimetres

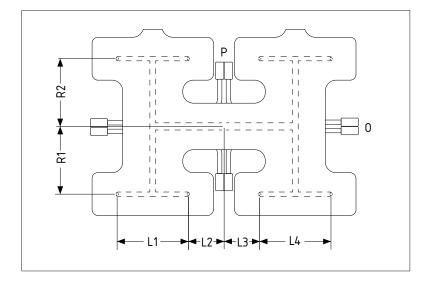




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. To make this manifold fully balanced deviation plugs are used.A spacer must ALWAYS be fitted between the backplate and the deviation plug to prevent leakage.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and PCD measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

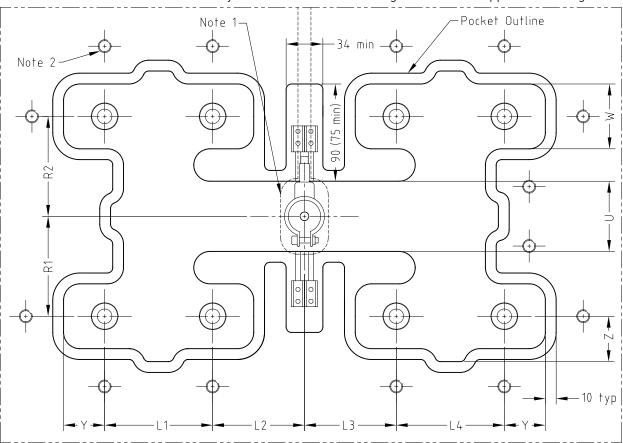


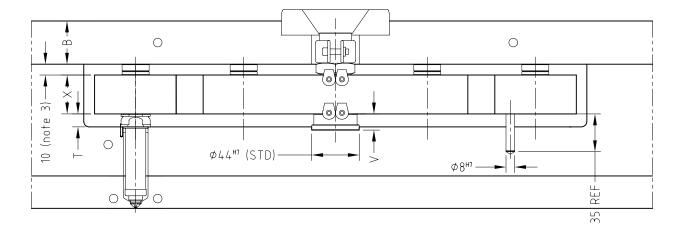
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	X			MT		
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Valve Gate	D (IIIIII)	40	55	55	55		55	55	
Thermal Gate	T (max)	10	10	13	17	10	12	15	7.5
Valve Gate	I (IIIdX)	10	10	13	17	12	12		
Thermal Gate	U	65	65	65	65	/ -	/ -	65	65
Valve Gate	U	63	65	65	65	65	65	65	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	10	15						
Thermal Gate	W	60	60	63	63	60	60	63	60
Valve Gate	VV	63	63	03	03	63	63	0.5	
Thermal Gate	Х	44			50	44	44	44	44
Valve Gate	۸	44	44	44					
Thermal Gate	V (ma a.v.)	20	/7	/7	E/	38	47	47	38
Valve Gate	Y (max)	38 47	4/	47	56				
Thermal Gate	7()	42		//	55	42			42
Valve Gate	Z (max)	42	44	44	ວວ		44	44	

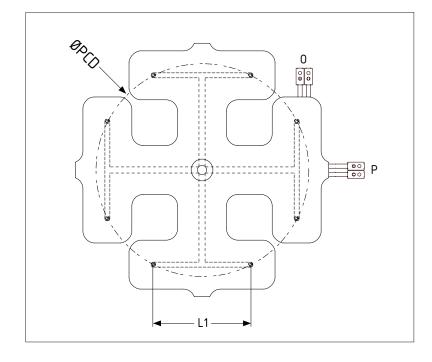




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 and PCD measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

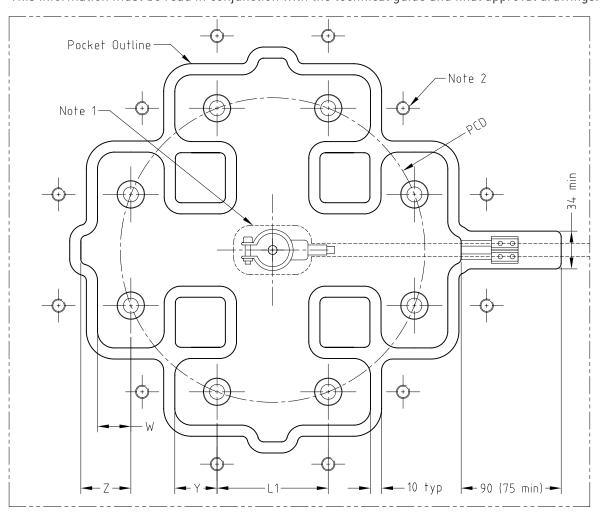


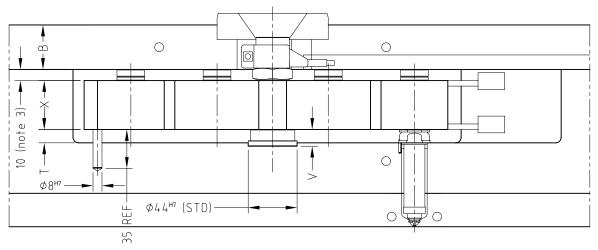
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	Х			MT		
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (· ·)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	4.0	4.17	4.0	4.0	15	7.5
Valve Gate	i (max)	10	10	13	17	12	12		
Thermal Gate		15	15	18	22	15	15	18	15
Valve Gate	V	15							
Thermal Gate		30	30	21 5	31.5	30	40 55 12 15 30	31.5	30
Valve Gate	W	31.5	31.5	31.5	31.5	31.5			
Thermal Gate	V		,,,	,,,	44	,,,		, ,	44
Valve Gate	Χ	44	44	44	50	44	44	44	
Thermal Gate	V (ma a.v.)	38	/7	47	56	38	47	47	38
Valve Gate	Y (max)		47		36				
Thermal Gate	7 (may)	//2		1.1	55	FF /0			42
Valve Gate	Z (max)	42	44	44	55	42	44	44	

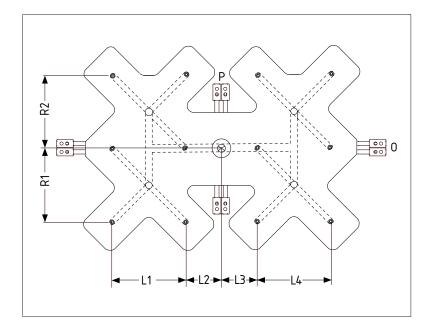




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1, L2, L3 and L4 measurements
- R1 and R2 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

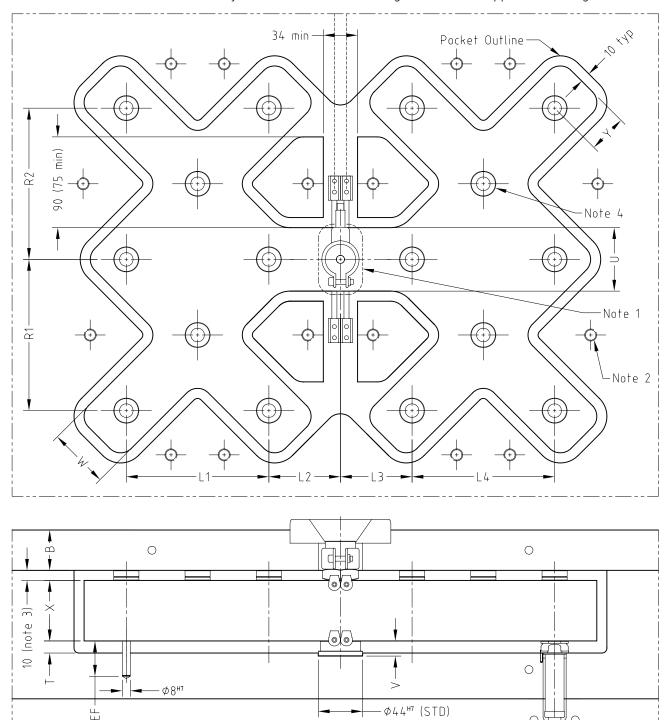


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			В	X			MT		
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	U	65	65	65	70	65	65	65	65
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	W	60	60	63	63	60	60	63	60
Thermal Gate	Х	60	62	62	72	60	62	62	60
Thermal Gate	Y (max)	38	47	47	56	38	47	47	38

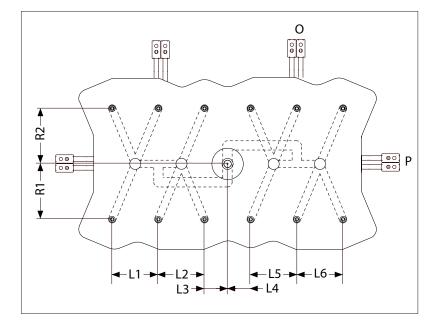


- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
- 4. To make this manifold fully balanced deviation plugs are used.

 A spacer must ALWAYS be fitted between the backplate and the deviation plug to prevent leakage.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L6 measurements
- R1 and R2 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

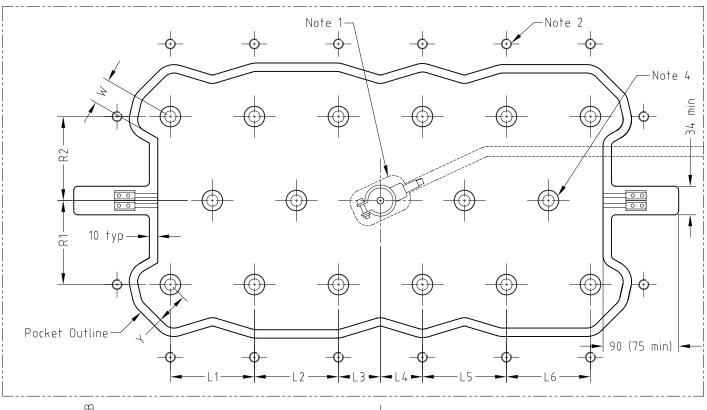


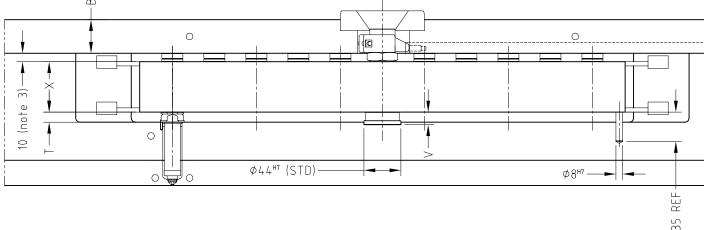
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			BX			MX			МТ
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	W	30	30	31.5	31.5	30	30	31.5	30
Thermal Gate	Х	60	62	62	72	60	62	62	60
Thermal Gate	Y (max)	38	47	47	56	38	47	47	38

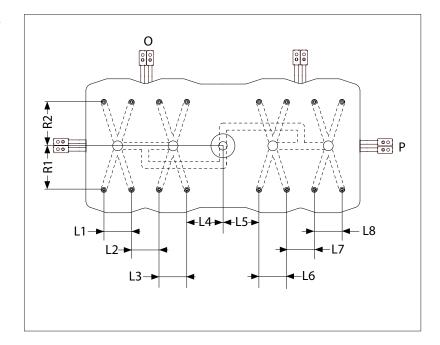




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
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Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L8 measurements
- R1 and R2 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

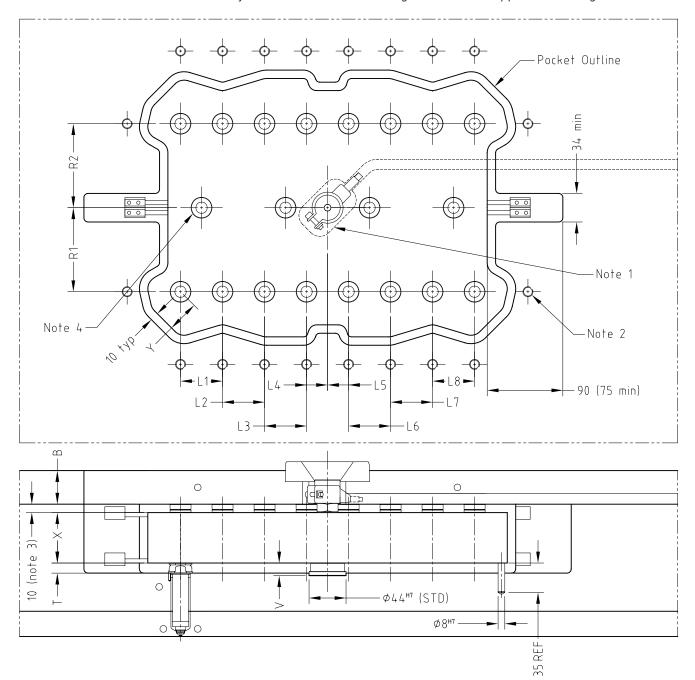


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

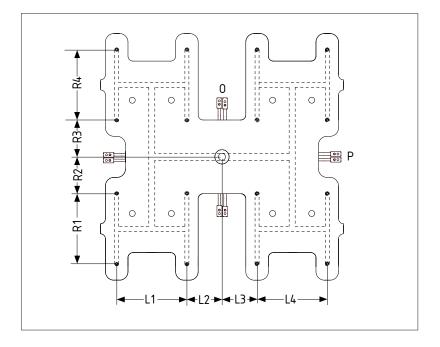
			BX				MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (i)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	0 13 17 12	12 15	7.5			
Valve Gate		T (max) 10 10 13 17 12	12	12	13				
Thermal Gate	V	15	15	18	22	15	15	10	15
Valve Gate	V	15	15	10	22	15	15	18	
Thermal Gate	Х	/0	/ 2	62	70	/0	62	/2	60
Valve Gate	^	60	62	02	72	60	02	62	
Thermal Gate	V (many)	00	47	/7	E/	56 38	47	47	38
Valve Gate	Y (max)	38		47	56				



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.
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Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L8 measurements
- R1 and R2 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold

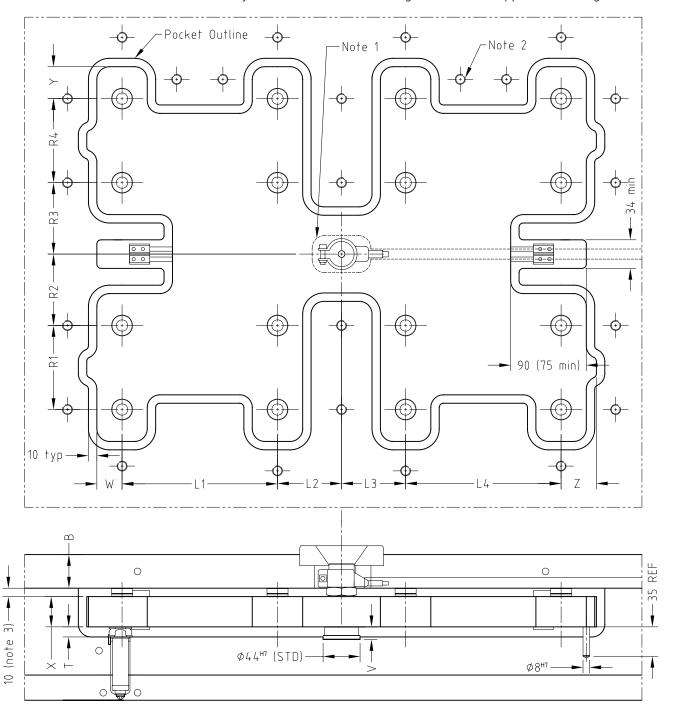


Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

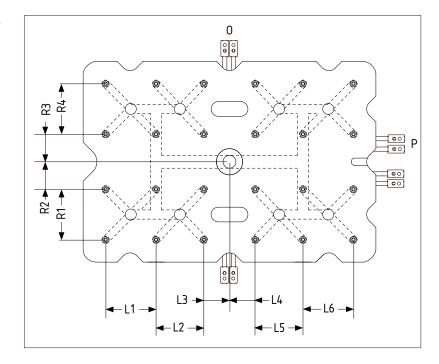
			BX				MX		MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	D (main)	/0	40	40	40	/0	40	40	40
Valve Gate	B (min)	40	55	55	55	40	55	55	
Thermal Gate	T (max)	10	10	4.0	17	12	12	15	7.5
Valve Gate		10	10	13	17	12	12	13	
Thermal Gate	V	15	15	18	22	15	15	18	15
Valve Gate	V	15	13	10	22	15	15	10	
Thermal Gate	W	30	30	21 5	31.5	30	30	31.5	30
Valve Gate	VV	31.5	31.5	31.5	31.5	31.5	31.5	31.3	
Thermal Gate	V	,,,	,,,	,,	FO	,,,	,,,		44
Valve Gate	Χ	44	44	44	52	44	44	44	
Thermal Gate	V ()	20	/7	/7	E/	20	/7	/7	38
Valve Gate	Y (max)	38	47	47	56	38	47	47	
Thermal Gate	7 (22.24)	/2	//	//	EE	/2	//	//	42
Valve Gate	Z (max)	42	44	44	55	42	44	44	



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L6 measurements
- R1 to R4 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold



Specifications

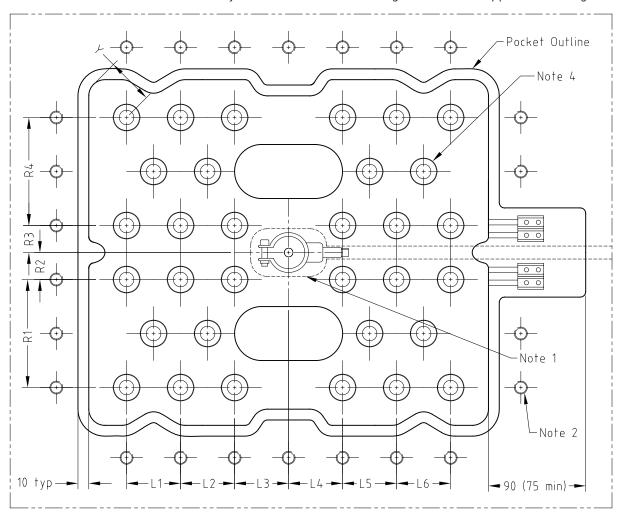
Final mould design MUST be based on Mastip approval drawing

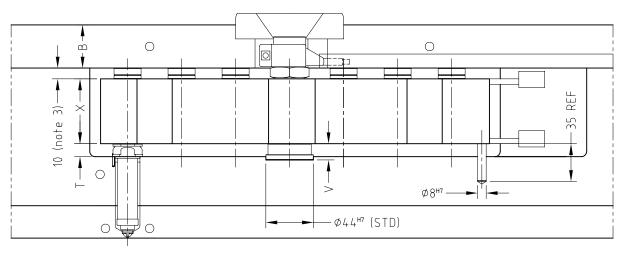
Actual appearance of manifold depends on drop dimension

			вх			MX			MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	40	40	40	40	40	40	40	40
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	Х	60	62	62	*	60	62	62	60
Thermal Gate	Y (max)	38	47	47	*	38	47	47	38

^{*} Contact Mastip for more information

All dimensions are in millimetres

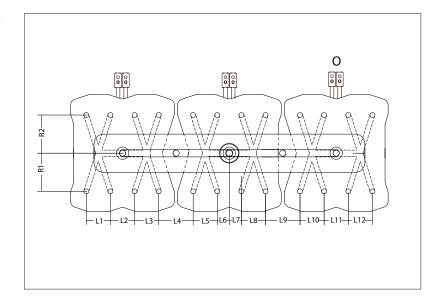




- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L12 measurements
- R1 and R2 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold



Specifications

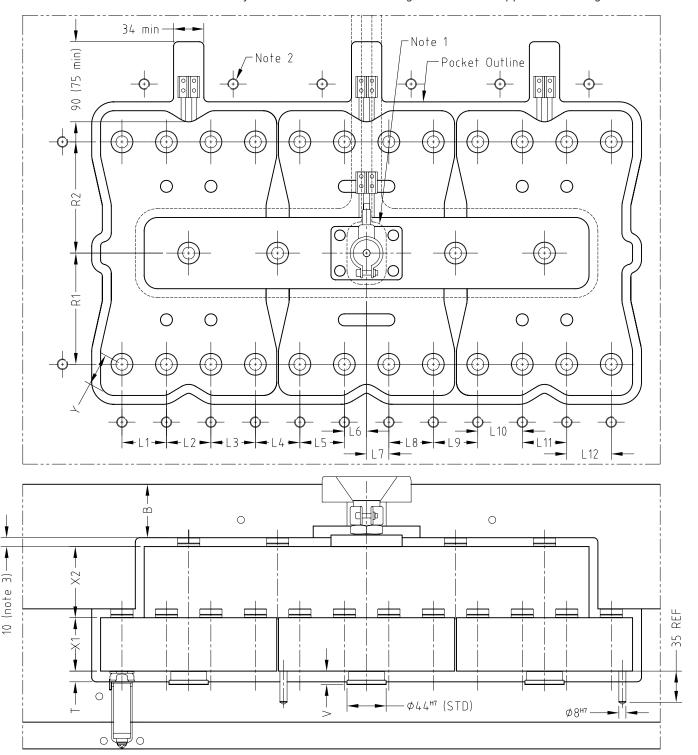
Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			BX			MX			MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	50	50	50	50	50	50	50	50
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	X1	*	*	*	*	*	*	*	*
Thermal Gate	X2	*	*	*	*	*	*	*	*
Thermal Gate	Y (max)	38	47	47	*	38	47	47	38

^{*} Contact Mastip for more information

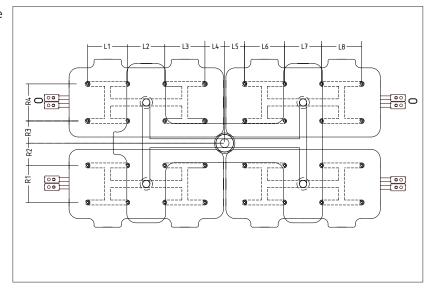
All dimensions are in millimetres



- 1. For minimum size of sprue pocket, refer to page 52. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Fill in the QUOTE REQUEST FORM and provide the following manifold specific information to your Mastip Distributor:

- Heater wire exit position (0 or P)
- L1 to L8 measurements
- R1 to R4 measurements
- Sprue Bush assembly information
- Nozzle type and series to be used in the manifold



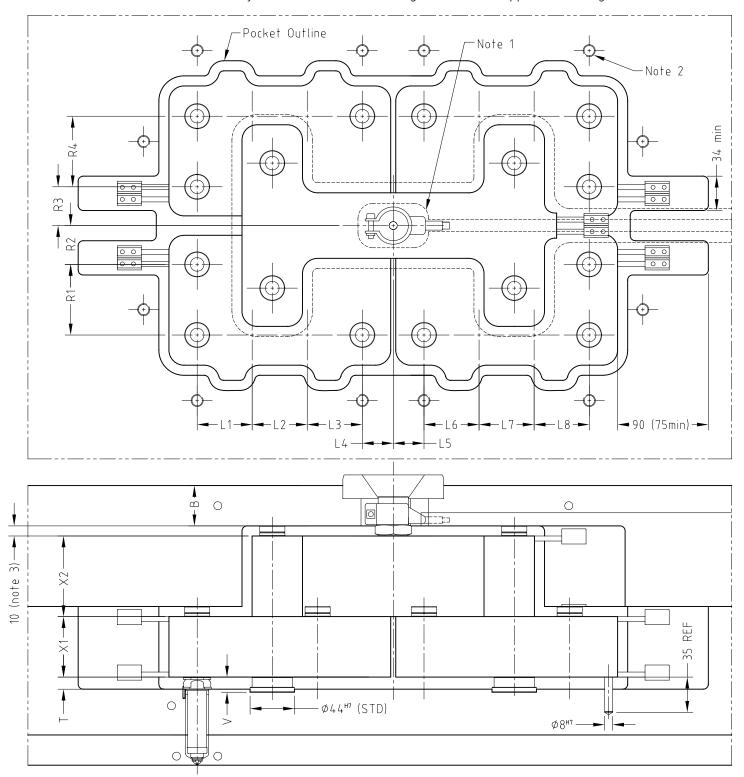
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

			вх			MX			MT
Gate	Reference	13	16	19	27	13	16	19	10
Thermal Gate	B (min)	50	50	50	50	50	50	50	50
Thermal Gate	T (max)	10	10	13	17	12	12	15	7.5
Thermal Gate	V	15	15	18	22	15	15	18	15
Thermal Gate	X1	*	*	*	*	*	*	*	*
Thermal Gate	X2	*	*	*	*	*	*	*	*

^{*} Contact Mastip for more information

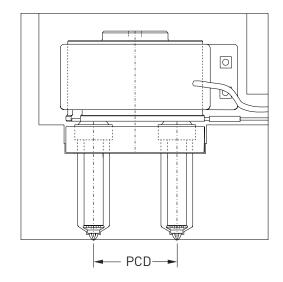


- 1. For minimum size of sprue pocket, refer to page 52.. Do not place band heater wire over spacers.
- 2. Keep back plate clamping bolts close to manifold without exposing to direct heat. Use as many bolts as needed to maintain rigidity.
- 3. \rightarrow Refer to "Thermal Gate Expansion" document for the expansion formula.

Ordering Information Required for Mini Manifold

Provide the following information to your Mastip Distributor:

- Nozzle type and series to be used in the manifold
- Number of tips
- The PCD measurement
- Any other information requested on the Quote Request Form



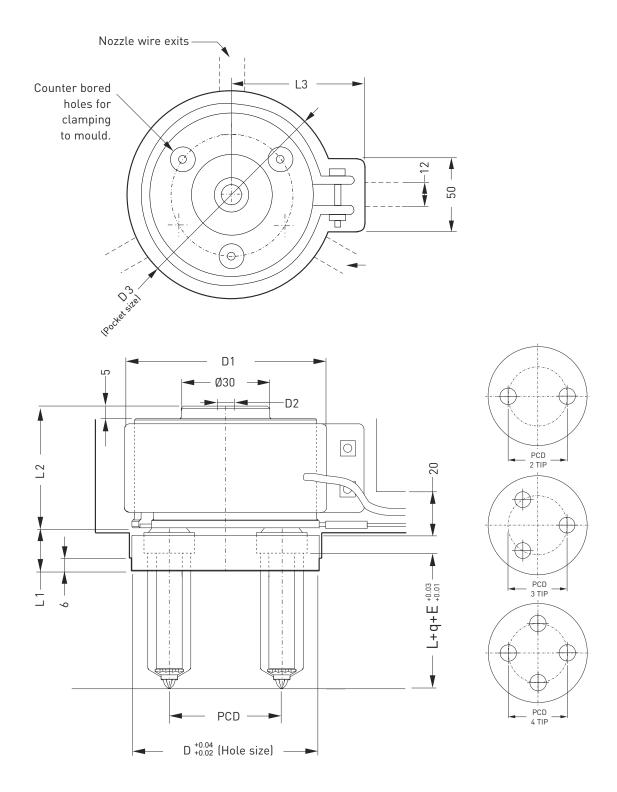
Specifications

Final mould design MUST be based on Mastip approval drawing

Actual appearance of manifold depends on drop dimension

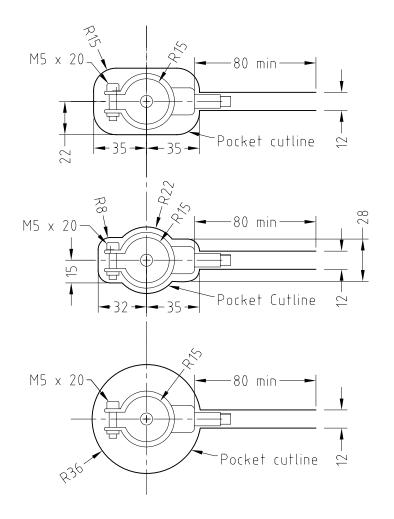
PCD	NOZZLE	L1	L2	L3	D	D1	D2	D3
	MT10	16					6-8	
PCD < 40	MX13	16	50	70	80	90	6-10	108
	MX16	21					6-10	
	MT10	16					6-8	
PCD = > 40	MX13	18	50	80	90	100	6-10	118
	MX16	21					6-10	

			MIN PCD	
NOZZLE	MAX PCD	2 Tips	3 Tips	4 Tips
MT10	58	30	30	32
MX13	55	35	35	40
MX16	50	39	39	46



- 1. Nozzle wire exit measurements are based on the nozzle series used in the Mini Manifold.
 - \rightarrow Refer to the Nozzle section for the nozzle series wire exit measurements.

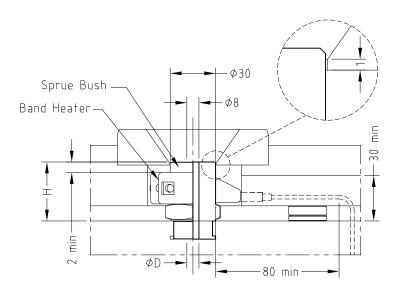
Sprue Bush Pocket



STYLE A PREFERRED STYLE Satisfactory material removal Simple to machine Satisfactory strength

STYLE B	IF THE MANIFOLD DESIGN DICTATES A SMALLER SPRUE BUSH POCKET STYLE B MUST BE USED.
	Minimum material removed Longer production time Maximum mould strength

STYLE C Maximum material removed
Very easy to machine
Minimum strength



The Mastip screw-in sprue bush:

- type J Thermocouple
- maximum heater temperature of 600°C
- standard lead length of 1000m

When you order a Manifold you must order a Sprue Bush and Heater.

The table below pairs the heater with the correct Sprue Bush

·					
Sprue Bush Order Number	Н	D	Heater Order Number	Heater Wattage	
MANSB30/31/8	19	8	-	-	
MANSB30/51/8	39	8	MANBHTC30/20	100	
MANSB30/71/8	59	8	MANBHTC30/30	160	
MANSB30/91/8	79	8	MANBHTC30/40	200	
MANSB30/111/8	99	8	MANBHTC30/60	320	
MANSB30/31/10	19	10	-	-	
MANSB30/51/10	39	10	MANBHTC30/20	100	
MANSB30/71/10	59	10	MANBHTC30/30	160	
MANSB30/91/10	79	10	MANBHTC30/40	200	
MANSB30/111/10	99	10	MANBHTC30/60	320	
MANSB30/31/12	19	12	-	_	
MANSB30/51/12	39	12	MANBHTC30/20	100	
MANSB30/71/12	59	12	MANBHTC30/30	160	

Sprue Bush Order Number	Н	D	Heater Order Number	Heater Wattage
MANSB30/91/12	79	12	MANBHTC30/40	200
MANSB30/111/12	99	12	MANBHTC30/60	320
MANSB30/31/14	19	14	-	-
MANSB30/51/14	39	14	MANBHTC30/20	100
MANSB30/71/14	59	14	MANBHTC30/30	160
MANSB30/91/14	79	14	MANBHTC30/40	200
MANSB30/111/14	99	14	MANBHTC30/60	320
MANSB30/31/16	19	16	-	-
MANSB30/51/16	39	16	MANBHTC30/20	100
MANSB30/71/16	59	16	MANBHTC30/30	160
MANSB30/91/16	79	16	MANBHTC30/40	200
MANSB30/111/16	99	16	MANBHTC30/60	320

Manifold Sprue Bush Heater Element

Wire Colour	Description
White with black thread	Neutral (-)
White with blue thread	Phase (+)
Yellow and green	Earth
Small blue	T/C (-)
Small red	T/C (+)

Screw-in Sprue Filter Bush Components

Please specify filter code required when ordering a filtered sprue bush.

These components are recommended for manifolds with a sprue bush diameter of 16 mm or less.

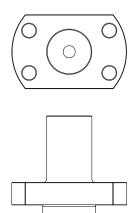
Sprue Bush Order Number	Н	D	Heater Order Number	Heater Wattage
MANFB30/80	68		MANBHTC30/40	200

Filter Part Description	Order Number	
Nozzle Filter (0.25 mm)	MANFF20/0.25	
Nozzle Filter (0.40 mm)	MANFF20/0.40	
Nozzle Filter (0.60 mm)	MANFF20/0.60	

Bolt-on Sprue Bush Assembly

For large Manifolds only. Mastip will provide standard heater bands where possible.

Part Description	Order Code
Bolt-on Sprue Bush	MANSBB0
(Contact Mastip for part dimension and	
details. Custom-made to suit customer	
requirements.)	



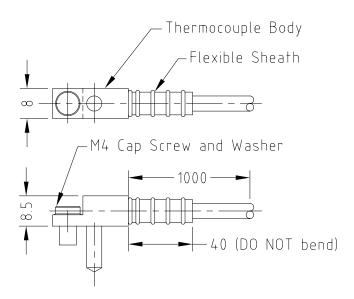
Standard Manifold Surface Thermocouple

Material: Fe-CuNi Type J

DIN 714 Wiring	ANSI Wiring
Blue (-)	Red (-)
Red (+)	White (+)

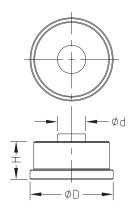
Part Description	Order Code
Thermocouple	MANSTC-J1000
M4 Cap Screw	MANSHS4X10
M4 Washer	MANSHS4X10W

^{* 2500}mm wire lengths available on request

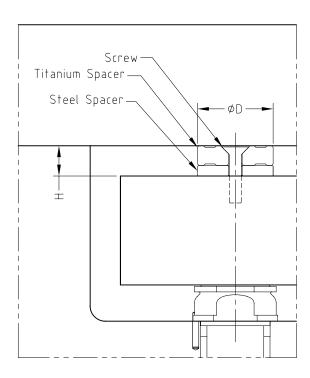


Titanium Locator

Order Code	d (mm)	D (mm)	H (mm)
MANTL15X22X19	15	22	15
MANTL15X44X19	15	44	15
MANTL15X44X22	15	44	18
MANTL15X44X26	15	44	22



Spacers and Screws



All steel spacers are supplied to the nominal size. Oversize spacers can be custom made to your requirements.

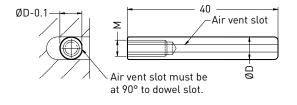
Steel Spacer Order Code	Titanium Spacer Order Code	Screw Order Code	H Nominal (mm)	D (mm)
51-000-001	MANTS25X6.5	MANCHS4X12	8.5	25
51-000-004	MANTS25X6.5	MANCHS4X16	10	25
51-000-007	MANTS25X6.5	MANCHS4X16	11.5	25
51-000-008	MANTS25X6.5	MANCHS4X16	12.0	25
51-000-010	MANTS25X6.5	MANCHS4X20	13.0	25
51-000-014	MANTS25X6.5	MANCHS4X20	15.0	25
51-000-018	MANTS25X6.5	MANCHS4X25	17.0	25
51-000-019	MANTS25X6.5	MANCHS4X25	17.5	25
MANSD40X8.5	MANTS40X6.5	MANCHS4X20	15.0	40

Dowel Pin

Material: DIN 7979

Order Code	D (mm)	М
MANDPT6X40	6.00	M4
MANDPT8X40 *	8.00	M5

^{*} Standard



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