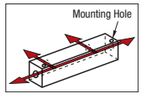
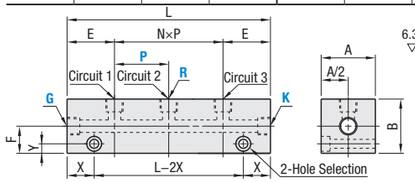
Manifold Blocks (Hydraulic)



Manifold Blocks – Hydraulic

Type							Material	Surface Treatment	Normal Pressure
Pitch (P) Standard				Pitch (P) Configurable					
30 x 35 Sq	40 Sq	50 Sq	70 Sq	30 x 35 Sq	40 Sq	50 Sq			
BMRS	BMRF	BMRFL	BMRL	—	BMRFP	BMRFLP	General Structural Steel	Trivalent Chromate	20.6 MPa = 210 kgf/cm² or Less
—	BMRFM	BMRFLM	BMRLM	—	—	BMRFLMP		Electroless Nickel Plating	
BMRSR	BMRFR	BMRFLR	—	BMRSRP	BMRFRP	BMRFLRP	304 Stainless Steel	—	
—	BMRFC	—	—	—	—	—	Brass		1 MPa = 10 kgf/cm² or Less

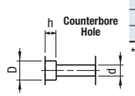


**Drawing is for when 3-Circuit type is selected.
The total no. of R, G and K threads is 5 each.

Ⓘ Mounting holes can be selected.
Ⓘ **Standard hole shape** is selected when no **hole shape modification** is specified.

L Dimension Calculation
Ex.: For BMRFP3—P35
L = N x P + 2E = (No. of Circuits 3-1) x 35 + 2 x 35 = 140

6.3 **Standard Mounting Hole**

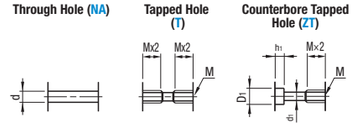


Mounting Hole Dimension	d	D	h	D_1	d_1	h_1
M5	5.5	9.5	5.5	8	*4.2	4.5
M6	6.6	11	6.5	9.5	5.1	5.5
M8	8.5	14	8.5	11	6.8	6.5

* Only 304 Stainless Steel d_1 dimension is 4.3.

Thread
JIS B0203 R (PT)
JIS B0202 G (PF): ISO 228-1 Compatible
ANSI / ASME B.I.20.1-1983 (NPT)

Mounting Hole Options



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Part Number			Rc (PT), NPT		Pitch P		No. of Pitches N	Total No. of R, G & K Threads	A	B	E	F	X	Y	Mounting Hole
Type	Mounting Hole Change	Circuits	R	G / K	Standard	Configurable 1 mm Inc.									M
30 x 35 SQ.		1			—	—	0	3							
		2					1	4							
		3					2	5							
Pitch Standard BMRS BMRSR	Pitch Configurable BMRSRP	4	1 (1/8)	1 (1/8)	30	20–50	3	6	30	35	20	20	15	6	M5
		5	2 (1/4)	2 (1/4)			4	7							
		6					5	8							
		7					6	9							
		8				20–40	7	10							
40 SQ.		1			—	—	0	3							
		2	1 (1/8)	2 (1/4)			1	4							
		3	2 (1/4)	3 (3/8)			2	5							
Pitch Standard BMRF BMRFM BMRFR BMRFC	Pitch Configurable BMRFP BMRFRP	4	3 (3/8)	4 (1/2)	40	25–50	3	6	40	40	35	20	20	7	M6
		5	1N (NPT 1/8)	2N (NPT 1/4)			4	7							
		6	2N (NPT 1/4)	3N (NPT 3/8)			5	8							
		7	3N (NPT 3/8)	4N (NPT 1/2)		20–45	6	9							
		8				20–40	7	10							
50 SQ.		1			—	—	0	3							
		2	2 (1/4)	2 (1/4)			1	4							
		3	3 (3/8)	3 (3/8)			2	5							
Pitch Standard BMRFL BMRFLM BMRFLR	Pitch Configurable BMRFLP BMRFLMP BMRFLRP	4	4 (1/2)	4 (1/2)	60	35–60	3	6	50	50	30	28	20	8	M8
		5	6 (3/4)	6 (3/4)			4	7							
		6					5	8							
70 SQ.		1			—		0	3							
		2	6 (3/4)	8 (1)			1	4							
Pitch Standard BMRL BMRLM		3	8 (1)		60	—	2	5	70	70	40	35	25	9	M8
		4					3	6							

Ⓘ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMRF) For ordering, see the Ordering Example. Ⓘ For R, G and K, specify 1, 2, 3, 4, 6, 8, 1N, 2N, 3N or 4N indicated before ( ).
Ⓘ Single Circuit is not available for Pitch Configurable Type. Ⓘ Brass is up to 6 connections. Ⓘ Specify the pitch taking into consideration the necessary dimensions for fitting the couplings.
Ⓘ Each 6 and 8 Circuit Type has an additional mounting hole at the midpoint of the overall length. 7 Circuit Type has an additional mounting hole at each midpoint from the left, 2 and 3 port pitch, and 5 and 6 port pitch.

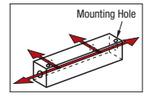
Part Number Example

Part Number									
Type	Mounting Hole Options	No. of Circuits	-	R	-	G	-	K	-	P
BMRF		3	-	R3	-	G2	-	K2		
BMRFLP	NA	4	-	R2	-	G3	-	K4	-	P50
G-BMRFLP	NA	4	-	-R2	-	G3	-	K4	-	P50 (G Thread)

Circuits	Available Types																
	30 x 35 SQ.		40 SQ.				50 SQ.			70 SQ.		30 x 35 SQ.	40 SQ.		50 SQ.		
	BMRS	BMRSR	BMRF	BMRFM	BMRFR	BMRFC	BMRFL	BMRFLM	BMRFLR	BMRL	BMRLM	BMRSRP	BMRFP	BMRFRP	BMRFLP	BMRFLMP	BMRFLRP
1	•	•	•	•	•	•	•	•	•	•	•	—	—	—	—	—	—
2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•	•	•
7	•	•	•	•	•	—	—	—	—	—	—	•	•	•	—	—	—
8	•	•	•	•	•	—	—	—	—	—	—	•	•	•	—	—	—

MiSUMi

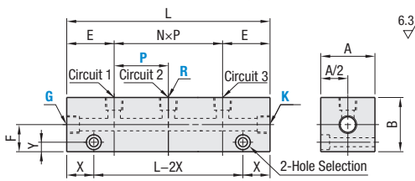
Manifold Blocks (Pneumatic)



Manifold Blocks – Pneumatic

Type							Material	Surface Treatment	Normal Pressure
Pitch (P) Standard				Pitch (P) Configurable					
15 Sq	25 Sq	30 x 40 Sq	50 Sq	25 Sq	30 x 40 Sq	50 Sq			
—	BMRAC	BMRAF	BMRAL	BMRACP	BMRAFP	BMRALP	Aluminum Alloy	—	1 MPa = 10 kgf/cm² or Less
BMRASA	BMRACA	BMRAFA	BMRALA	BMRACAP	BMRAFAP	BMRALAP		Clear Anodize	

Ⓘ Material of 15 Square is 6063 Aluminum Alloy.

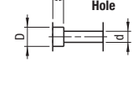


*Drawing is for when 3-Circuit type is selected.
The total no. of R, G and K threads is 5 each.

Ⓘ Mounting holes can be selected.
Ⓘ **Standard hole shape** is selected when no **hole shape modification** is specified.
Note that the default of 15 Square and 25 Square is Through Hole.

L Dimension Calculation
Ex.: In the case of BMRAFP3-P35
L = N x P + 2E = (No. of Ports 3-1) x 35 + 2 x 20 = 110

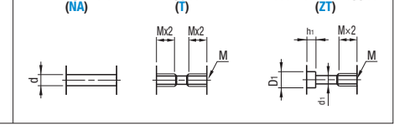
6.3 **Standard Mounting Hole**



Mounting Holes Dimension	d	D	h	D_1	d_1	h_1
M4	4.3	—	—	—	—	—
M5	5.5	9.5	5.5	8	4.2	4.5
M8	8.5	14	8.5	11	6.8	6.5

Thread
JIS B0203 R (PT)
JIS B0202 G (PF): ISO 228-1 Compatible
ANSI / ASME B.I.20.1-1983 (NPT)

Mounting Hole Options



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Part Number			Rc(PT), NPT, M (Coarse)	Pitch P		No. of Pitches N	Total No. of R, G & K Threads	A	B	E	F	X	Y	Mounting Hole
Type	Mounting Hole Change	Circuits	R, G & K	Standard	Configurable 1 mm Inc.									M
15 SQ.		1				0	3							
		2				1	4							
		3	M3 (M3)			2	5							
Pitch Standard BMRASA		4	M4 (M4)	15	—	3	6	15	15	15	10	5	3.5	M4
		5	5 (M5)			4	7							
		6				5	8							
		7				6	9							
	T (Tapped)	8				7	10							
25 SQ.		1				0	3							
		2				1	4							
		3	1 (1/8)		15–50	2	5							
Pitch Standard BMRAC BMRACA	Pitch Configurable BMRACP BMRACAP	4	M3 (M3)*	15		3	6	25	25	20	12.5	10	4	M5
		5	M4 (M4)*			4	7							
		6	5 (M5)*			5	8							
		7*			15–40	6	9							
		8*			15–35	7	10							
30 x 40 SQ.		1				0	3							
		2	1 (1/8)			1	4							
		3	2 (1/4)			2	5							
Pitch Standard BMRAF BMRAFA	Pitch Configurable BMRAFP BMRAFAP	4	5 (M5)*	30	20–50	3	6	30	40	20	20	7.5	7	M5
		5	1N (NPT 1/8)			4	7							
		6	2N (NPT 1/4)			5	8							
		7*			15–40	6	9							
		8*			15–35	7	10							
50 SQ.		1				0	3							
		2	2 (1/4)			1	4							
		3	3 (3/8)			2	5							
Pitch Standard BMRAL BMRALA	Pitch Configurable BMRALP BMRALAP	4	4 (1/2)	40	35–60	3	6	50	50	25	25	8.5	8.5	M8
		5				4	7							
		6				5	8							

Ⓘ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMRAF) For ordering, see the Ordering Example. Ⓘ For R, G and K, specify 1, 2, 3, 4, 5, M3, M4, 1N, or 2N indicated before ( ).
Ⓘ Single Circuit is not available for Pitch Configurable Type. Ⓘ Specify the pitch taking into consideration the necessary dimensions for fitting the couplings.
Ⓘ Each 6 and 8 Circuit Type has an additional mounting hole at the midpoint of the overall length.
7 Circuit Type has an additional mounting hole at each midpoint from the left, 2 and 3 port pitch, and 5 and 6 port pitch. (Except for 15 Square)
Ⓘ *When * marked 25 Square or 30 x 40 Square for 7 or 8 is selected, M3, M4 and 5 (M5) are not available for G and K.
Ⓘ M3, M4 and 5 (M5) are not available for 25 Square, 30x40 Square Pitch Configurable Type G and K.

Part Number Example

Part Number									
Type	Mounting Hole Options	No. of Circuits	-	R	-	G	-	K	-	P
BMRAC	T	2	-	R5	-	G1	-	K1		
BMRAFP	ZT	3	-	R1	-	G2	-	K2	-	P40
G-BMRAFP	ZT	3	-	R1	-	G2	-	K2	-	P40 (G Thread)

Circuits	Available Types												
	15 SQ.	25 SQ.		30 x 40 SQ.		50 SQ.		25 SQ.		30 x 40 SQ.		50 SQ.	
	BMRASA	BMRAC	BMRACA	BMRAF	BMRAFA	BMRAL	BMRALA	BMRACP	BMRACAP	BMRAFP	BMRAFAP	BMRALP	BMRALAP
1	•	•	•	•	•	•	•	—	—	—	—	—	—
2	•	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•	•
7	•	•	•	•	•	—	—	•	•	•	•	—	—
8	•	•	•	•	•	—	—	•	•	•	•	—	—