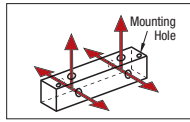


Manifold Blocks (Hydraulic)

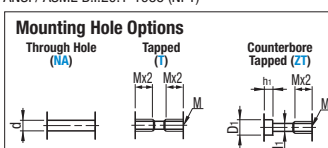
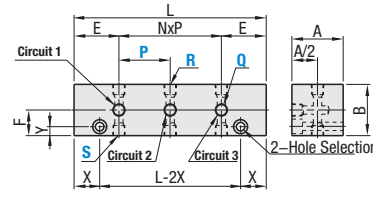


Manifold Blocks - Hydraulic



Type									Material	Surface Treatment	Normal Pressure
Pitch (P) Standard				Pitch (P) Configurable							
25 x 32 Sq	40 Sq	50 Sq	60 Sq	70 Sq	40 Sq	50 Sq	60 Sq				
BMAS	BMAF	BMAFL	BMAFLK	BMAL	BMAFP	BMAFLP	BMAFLKP	General Structural Steel	Trivalent Chromate	20.6 MPa = 210 kgf/cm ² or Less	
—	BMAFM	BMAFLM	—	BMALM	—	BMAFLMP	—	304 Stainless Steel	Electroless Nickel Plating		
BMASR	BMAFR	BMAFLR	—	—	—	—	—	316 Stainless Steel	—	1 MPa = 10 kgf/cm ² or Less	
—	BMAFS	—	—	—	—	—	—	Brass	—		

* Drawing is for when 3-Circuit type is selected. The total number of Q, R and S threads is 9.



Mounting Holes 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 d₁ dimension is 4.3.

- ⊙ Mounting holes can be selected.
- ⊙ Standard hole shape is selected when no hold shape modification is specified.

L Dimension Calculation

Ex.: For BMAFP3- - P35
 $L = N \times P + 2E = (Circuits\ 3-1) \times 35 + 2 \times 20 = 110$

Type	Part Number	Mounting Hole Change	Circuits	Rc (PT), NPT	Pitch P	No. of Pitches N	Total No. of Q, R & S Threads	A	B	E	F	X	Y	Mounting Hole
														M
Pitch Standard BMAS BMAFR	25 x 32 SQ.	—	1	1 (1/8)	25	—	0	25	32	20	16	7.5	7	M5
			2											
			3											
			4											
			5											
			6											
			7											
			8											
Pitch Standard BMAF BMAFM BMAFR BMAFS BMAFC	40 SQ.	NA (Through)	1	1 (1/8)	40	25-50	0	40	40	20	20	7.5	7	M6
		2												
		3												
		4												
		5												
		6												
		7												
		8												
Pitch Standard BMAFL BMAFLM BMAFLR	50 SQ.	ZT (Counterbore tapped)	1	2 (1/4)	60	35-60	0	50	50	30	25	7.5	8	M8
		2												
		3												
		4												
		5												
		6												
Pitch Standard BMAFLK	60 SQ.	YN (Side Through)	1	2 (1/4)	60	35-60	0	60	60	30	30	7.5	8	M8
		2												
		3												
		4												
		5												
		6												
Pitch Standard BMAL BMALM	70 SQ.	—	1	6 (3/4)	60	—	0	70	70	40	35	10	10	M8
			2											
			3											
			4											

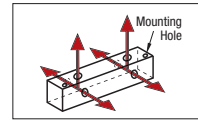
- ⊙ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMAF) For ordering, see the Ordering Example. ⊙ For Q, R and S, specify 1, 2, 3, 4, 6, 8, 1N, 2N or 3N indicated before ().
- ⊙ Single Circuit is not available for Pitch Configurable Type. ⊙ 316 Stainless Steel and 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.
- ⊙ For Block Square 50 Type, when 3 and 4 is selected for both tapered threads at right angles, the male threads may interfere with each other. Select Block Square 60 Type instead.
- ⊙ Select NA, T or ZT for 7 and 8 circuit types mounting hole shape.

Part Number Example

Type	Mounting Hole Options	No. of Circuits	Q	R	S	P
BMAF	—	4	Q3	R2	S3	—
G-BMAFLP	NA	3	Q3	R4	S4	P45

Circuits	Available Types													
	25 x 32 SQ.	40 SQ.			50 SQ.			60 SQ.	70 SQ.		80 SQ.			
	BMAS	BMAFR	BMAF	BMAFM	BMAFL	BMAFLM	BMAFLR	BMAFLK	BMAL	BMALM	BMAFP	BMAFLP	BMAFLMP	BMAFLKP
1	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•	•	•
7	•	•	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Manifold Blocks (Pneumatic)



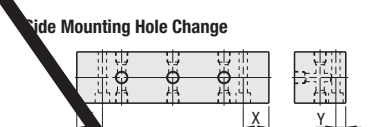
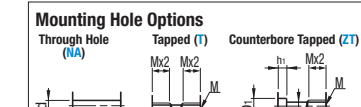
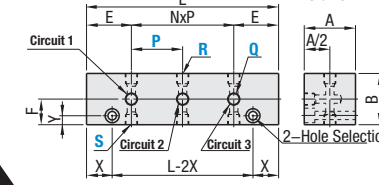
Manifold Blocks - Pneumatic



Type							Material	Surface Treatment	Max. Operating Pressure
Pitch (P) Standard			Pitch (P) Configurable						
20 Sq	25 Sq	35 Sq	50 Sq	20 Sq	25 Sq	35 Sq	Aluminum Alloy	Clear Anodize	1 MPa = 10 kgf/cm ² or Less
BMGFC	BMGF	BMGFK	BMGFL	BMGFCA	BMGF	BMGFK			
BMGFCA	BMGFA	—	BMGFLA	BMGFCA	BMGF	BMGFK			

* Drawing is for when 3-Circuit type is selected. The total number of Q, R and S threads is 9.

Thread
 JIS B0203 R (PT)
 JIS B0202 G (PF): ISO 228-1 Compatible
 ANSI / ASME B.1.20.1-1983 (NPT)



Mounting Holes Dimension	d	D	h	D ₁	d ₁	h ₁
M5	5.5	9.5	5.5	8	4.2	4.5
M8	8.5	14	8.5	11	6.8	6.5

- ⊙ Mounting hole can be selected.
- ⊙ When no shape modification is specified, standard mounting hole shape is selected. Except when 20 Square is not specified, through hole is selected.

L Dimension Calculation

Ex.: In the Case of BMGFP3-P25
 $L = NXP + 2E = (\text{Number of Circuits } 3-1) \times 25 + 2 \times 20 = 90$

Part Number	Rc (PT), NPT, M (Coarse)	Pitch P	No. of Pitches N	Total No. of Q, R & S Threads	A	B	E	F	X	Y	Mounting Hole	
											M	
Pitch Standard BMGFC BMGFCA	T (Tapped) YN (Side Through)	15	15-50	0-24	20	20	20	10	5	4	M5	
											1	
											2	
											3	
											4	
											5	
											6	
											7	
8												
Pitch Standard BMGFL BMGFLA	YN (Side Through)	40	—	0-18	50	50	30	25	25	8.5	8.5	M8
												1
												2
												3
												4
												5
6												

For the purposes of improved standardization, the 40 sq. type (BMAF, BMAFM, BMAFR, BMAFS, BMAFC and BMAFLP) will be discontinued after September 2022. After the standards are revised, the part numbers will be changed to BMAFA, BMAFMA, BMAFRA, BMAFSA, BMAFCA and BMAFLPA. (E Dimension will change from 20 mm to 25 mm.)

- ⊙ BMGFL and BMGFLA are not available with 7 and 8 Circuits.
- ⊙ BMGFC, BMGFCA, BMGF, BMGFK, and BMGFKP are not available with a Single Circuit (1)
- ⊙ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMGF) For ordering, see the Ordering Example.
- ⊙ For Q, R and S, 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 20 Square and 25 Square)
- ⊙ For Block Square 25 Type, when 1 and 4 is selected for both tapered threads at right angles, the male threads may interfere with each other. Select Block Square 35 Type instead.
- ⊙ Select NA, T or ZT for 7 and 8 circuit types mounting hole shape.

Part Number Example

Type	Mounting Hole Change	No. of Circuits	Q	R	S	P
BMGF	T	4	Q2	R5	S2	—
BMGFP	ZT	4	Q2	R2	S2	P50
G-BMGFP	ZT	4	Q2	R2	S2	P50 (G Thread)