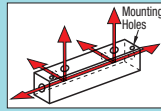


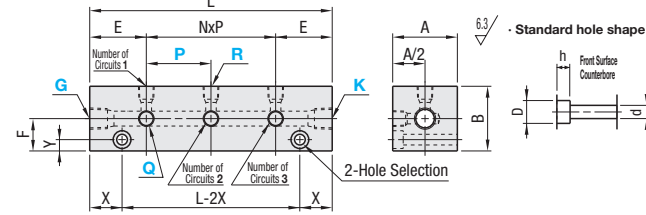
# Manifold Blocks - Hydraulic

## Lateral Through Hole, L-Shaped Hole



For details of recommended tapered male thread tightening torque and through pilot holes, see P.1224.  
By inserting "G-" before part number, "PT Threads (Tapered Female Threads)" can be changed to "PF Threads (Parallel Female Threads)" in compliance with "JIS B 0202" (Unit Price remains the same).

Type						Material	Surface Treatment	Max. Operating Pressure			
Pitch (P) Standard			Pitch (P) Configurable								
30x35 Sq.	40 Sq.	60 Sq.	30x35 Sq.	40 Sq.	60 Sq.	Steel for General Structure (BMUFM) / SS400 (BMUFLM)	Trivalent Chromate / Electroless Nickel Plating	20.6MPa≈210kgf/cm <sup>2</sup> or less			
BMUS	BMUF	BMUFL	BMUSP	BMUFP	BMUFLP				SUS304 / SUS316	-	1MPa≈10kgf/cm <sup>2</sup> or less
-	BMUFM	BMUFLM	-	BMUFRP	BMUFLRP						
BMUSR	BMUFR	BMUFLR	-	BMUFRP	BMUFLRP						
-	BMUFS	BMUFLS	-	BMUFRP	BMUFLRP	Brass	-	1MPa≈10kgf/cm <sup>2</sup> or less			



Mounting Hole Dimension	d	D	h	D1	d1	h1
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 for SUS304, d1 dimension is 4.3.

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

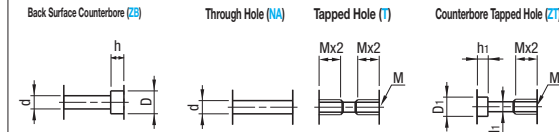
\* Drawing for 3 Circuit Type is selected.  
The total number of Q, R, G and K threads is 8.

- Mounting hole shape can be selected freely.
- Standard hole shape is selected when no hole shape modification is specified.

<L Dimension Calculation>  
Ex.: For BMUFP3- ~ -P35,  
L=NxP+2E= (Number of Circuits 3 - 1) x 35 + 2 x 35 = 140



### Mounting Hole Change



Part Number	Type	Mounting Hole Change	Rc (PT), NPT Selection		Pitch P		Number of Pitches N	Total Number of Q, R, G and K Threads	A	B	E	F	X	Y	Mounting Hole M
			Q, R	G, K	Standard	Configurable (mm increment)									
30x35 Sq.) Pitch Standard BMUS BMUSR Pitch Configurable BMUSP	ZB (Back Surface Counterbore)	1	-	-	-	-	0	4	30	35	20	20	15	6	M5
		2	1 (1/8)	1 (1/8)	20-50	1	6								
		3	2 (1/4)	2 (1/4)	2	8									
		4	3 (3/8)	3 (3/8)	3	10									
		5	4 (1/2)	4 (1/2)	4	12									
		6	5 (5/8)	5 (5/8)	5	14									
		7	6 (3/4)	6 (3/4)	6	16									
		8	7 (7/8)	7 (7/8)	7	18									
40 Sq.) Pitch Standard BMUF BMUFR Pitch Configurable BMUFP BMUFRP BMUFL BMUFLM BMUFLR BMUFLRP	NA (Through)	1	-	-	-	-	0	4	40	40	35	20	20	7	M6
		2	1 (1/8)	2 (1/4)	25-50	1	6								
		3	2 (1/4)	3 (3/8)	2	8									
		4	3 (3/8)	4 (1/2)	3	10									
		5	4 (1/2)	5 (5/8)	4	12									
		6	5 (5/8)	6 (3/4)	5	14									
		7	6 (3/4)	7 (7/8)	6	16									
		8	7 (7/8)	8 (1)	7	18									
60 Sq.) Pitch Standard BMUFL BMUFLM Pitch Configurable BMUFLP BMUFLRP	ZT (Counterbore Tapped)	1	-	-	-	-	0	4	60	60	30	30	20	8	M8
		2	2 (1/4)	2 (1/4)	35-60	1	6								
		3	3 (3/8)	3 (3/8)	2	8									
		4	4 (1/2)	4 (1/2)	3	10									
		5	5 (5/8)	5 (5/8)	4	12									
		6	6 (3/4)	6 (3/4)	5	14									

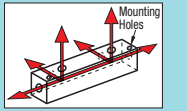
- By inserting "G-" before part number, the thread type can be changed to the G (PF) Thread as part of ordering. (Ex.: G-BMUF) For ordering, see the Ordering Example.
- For Q, R, G and K, specify 1, 2, 3, 4, 5, 6, 1N, 2N, 3N or 4N indicated before ( ).
- Single Circuit is not available for Pitch Configurable Type.
- SUS316 or Brass is for up to 6 connections.
- 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 of the 2 - 3 port pitch, and 5 - 6 port pitch from the left to the right.

Part Number	Type	Mounting Hole Change	Number of Circuits	Q	R	G	K	P
BMUF	NA	4	Q3	R2	G3	K3	P45	
BMUFLP	NA	3	Q3	R4	G4	K4	P45	
G-BMUFLP	NA	3	Q3	R4	G4	K4	P45 (G Thread)	

Number of Circuits	Pitch (P) Standard Unit Price						Pitch (P) Configurable Unit Price						
	30x35 Sq.		40 Sq.		60 Sq.		30x35 Sq.		40 Sq.		60 Sq.		
	BMUS	BMUSR	BMUF	BMUFM	BMUFR	BMUFS	BMUFL	BMUFLM	BMUFLR	BMUSP	BMUFP	BMUFRP	BMUFLRP
1													
2													
3													
4													
5													
6													
7													
8													

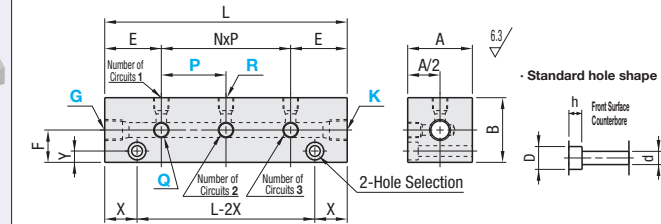
# Manifold Blocks - Pneumatic

## Lateral Through Hole, L-Shaped Hole



For details of recommended tapered male thread tightening torque and through pilot holes, see P.1224.  
By inserting "G-" before part number, "PT Threads (Tapered Female Threads)" can be changed to "PF Threads (Parallel Female Threads)" in compliance with "JIS B 0202" (Unit Price remains the same).

Type						Material	Surface Treatment	Max. Operating Pressure
Pitch (P) Standard			Pitch (P) Configurable					
25 Sq.	30x40 Sq.	50 Sq.	25 Sq.	30x40 Sq.	50 Sq.	Aluminum Alloy	Clear Anodize	1MPa≈10kgf/cm <sup>2</sup> or less
BMUAC	BMUAF	BMUAL	BMUACP	BMUAFP	BMUALP			
BMUACA	BMUFA	BMUALA	BMUACAP	BMUFAFP	BMUALAP			
-	-	-	-	-	-			



Mounting Hole Dimension	d	D	h	D1	d1	h1
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 Rc(PT)  
JIS B0202 G(PF): ISO 228-1 Compatible  
ANSI/ASME B.1.20.1-1983(NPT)

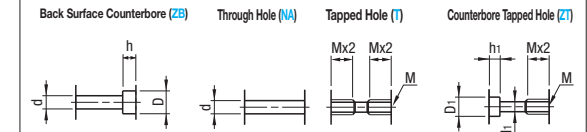
\* Drawing for 3 Circuit Type is selected.  
The total number of Q, R, G and K threads is 8.

- Mounting hole shape can be selected freely.
- Standard hole shape is selected when no hole shape modification is specified. Note that the default of 25 Sq. is Through Hole.

<L Dimension Calculation>  
Ex.: For BMUAFP3- ~ -P35,  
L=NxP+2E= (Number of Circuits 3 - 1) x 35 + 2 x 20 = 110



### Mounting Hole Change



Part Number	Type	Mounting Hole Change	Rc (PT), NPT, M (Coarse) Selection		Pitch P		Number of Pitches N	Total Number of Q, R, G and K Threads	A	B	E	F	X	Y	Mounting Hole M
			Q, R, G, K	Standard	Configurable (mm increment)										
25 Sq.) Pitch Standard BMUAC Pitch Configurable BMUACP	T (Tapped)	T	1 (1/8) M3 (M3) M4 (M4) M5 (M5)	15	15-50	1	0	4	25	25	20	12.5	10	4	M5
						2	1	6							
						3	2	8							
						4	3	10							
						5	4	12							
						6	5	14							
						7	6	16							
						8	7	18							
30x40 Sq.) Pitch Standard BMUAF Pitch Configurable BMUAFP	ZB (Back Surface Counterbore)	ZB	1 (1/8) 2 (1/4) 3 (3/8) 4 (1/2) 5 (5/8) 6 (3/4) 7 (7/8) 8 (1)	30	20-50	1	0	4	40	40	20	20	7.5	7	M5
						2	1	6							
						3	2	8							
						4	3	10							
						5	4	12							
						6	5	14							
						7	6	16							
						8	7	18							
50 Sq.) Pitch Standard BMUAL Pitch Configurable BMUALP	ZT (Counterbore Tapped)	ZT	2 (1/4) 3 (3/8) 4 (1/2)	40	35-60	1	0	4	50	50	25	25	8.5	8.5	M8
						2	1	6							
						3	2	8							
						4	3	10							
						5	4	12							
						6	5	14							

- By inserting "G-" before part number, the thread type can be changed to the G (PF) Thread as part of ordering. (Ex.: G-BMUAF) For ordering, see the Ordering Example.
- For Q, R, G and K, specify 1, 2, 3, 4, 5, M3, M4, 1N or 2N indicated before ( ).
- 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 of the 2 - 3 port pitch, and 5 - 6 port pitch from the left to the right.
- M3, M4 and 5(M5) are not available for 25 Sq., 30x40 Sq. Pitch Configurable Type G and K.
- Single Circuit is not available for Pitch Configurable Type.

Ordering Example	Part Number	Type	Mounting Hole Change	Number of Circuits	Q	R	G	K	P
	BMUAC	T	2	Q1	R5	G1	K1	P40	
	BMUAFP	ZT	3	Q1	R1	G2	K2	P40	
	G-BMUAFP	ZT	3	Q1	R1	G2	K2	P40 (G Thread)	

Number of Circuits	Pitch (P) Standard Unit Price						Pitch (P) Configurable Unit Price					
	25 Sq.		30x40 Sq.		50 Sq.		25 Sq.		30x40 Sq.		50 Sq.	
	BMUAC	BMUACA	BMUAF	BMUFA	BMUAL	BMUALA	BMUACP	BMUACAP	BMUAFP	BMUFAFP	BMUALP	BMUALAP
1												
2												
3												
4												
5												
6												
7												
8												