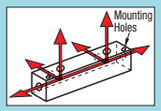
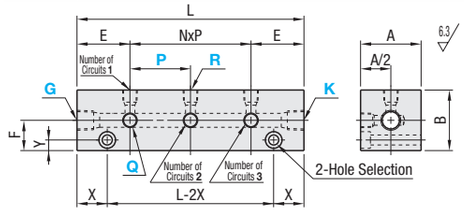
Manifold Blocks - Hydraulic

Lateral Through Hole, L-Shaped Hole

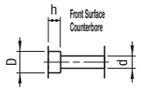


For details of recommended tapered male thread tightening torque and through pilot holes, see **P.1224**.
By inserting "**G-**" before part number, "PT Threads (Tapered Female Threads)" can be changed to "PF Threads (Parallel Female Threads)" in compliance with "JIS B 0202" (Unit Price remains the same).

Type						M Material	S Surface Treatment	Max. Operating Pressure
Pitch (P) Standard			Pitch (P) Configurable					
30x35 Sq.	40 Sq.	60 Sq.	30x35 Sq.	40 Sq.	60 Sq.			
BMUS	BMUF	BMUFL	BMUSP	BMUFP	BMUFLP	EN 1.0038 Equiv.	Trivalent Chromate	20.6MPa≈210kgf/cm² or less
-	BMUFM	BMUFLM	-	-	-		Electroless Nickel Plating	
BMUSR	BMUFR	BMUFLR	-	BMUFRP	BMUFLRP	EN 1.4301 Equiv.	-	
-	BMUFS	-	-	BMUFSP	-	EN 1.4401 Equiv.		
-	BMUFC	-	-	-	-	Brass		1MPa≈10kgf/cm² or less



· Standard hole shape



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 EN 1.4301 Equiv., d1 dimension is 4.3.

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

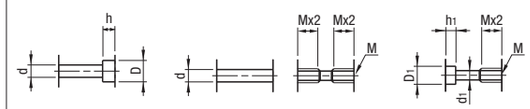
* Drawing for **3 Circuit Type** is selected.
The total number of Q, R, G and K threads is 8.

- 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

Back Surface Counterbore (ZB) | Through Hole (NA) | Tapped Hole (T) | Counterbore Tapped Hole (ZT)



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Part Number				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
Type	Mounting Hole Change	Number of Circuits		Q, R	G, K	Standard	Configurable 1mm Increment									M
(30x35 Sq.)		1				-	-	0	4							
		2						1	6							
		3						2	8							
Pitch Standard BMUS / Pitch Configurable BMUSP		4		1 (1/8) 2 (1/4)	1 (1/8) 2 (1/4)	30	20~50	3	10	30	35	20	20	15	6	M5
		5						4	12							
BMUSR		6						5	14							
		7						6	16							
	ZB (Back Surface Counterbore)	8					20~40	7	18							
(40 Sq.)		1				-	-	0	4							
		2		1 (1/8) 2 (1/4)	2 (1/4) 3 (3/8)			1	6							
Pitch Standard BMUF / Pitch Configurable BMUFP	NA (Through)	3		3 (3/8)	4 (1/2)	40	25~50	2	8	40	40	35	20	20	7	M6
BMUFM		4		1N (NPT1/8)	2N (NPT1/4)			3	10							
BMUFR / BMUFRP	T (Tapped)	5		2N (NPT1/4)	3N (NPT3/8)			4	12							
BMUFS / BMUFSP		6		3N (NPT3/8)	4N (NPT1/2)			5	14							
BMUFC	ZT (Counterbore Tapped)	7					25~45	6	16							
		8					25~40	7	18							
(60 Sq.)		1				-	-	0	4							
		2						1	6							
Pitch Standard BMUFL / Pitch Configurable BMUFLP		3		2 (1/4)	2 (1/4)			2	8							
BMUFLM		4		3 (3/8)	3 (3/8)			3	10							
BMUFLR / BMUFLRP		5		4 (1/2)	4 (1/2)	60	35~60	4	12	60	60	30	30	20	8	M8
		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, 6, 1N, 2N, 3N or 4N indicated before ( ).
- Specify the pitch taking into consideration the necessary dimensions for fitting the couplings.
- Single Circuit is not available for Pitch Configurable Type.
- 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.
- SUS316 or Brass is for up to 6 connections.

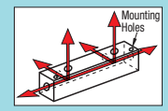
Ordering Example

Part Number												
Type	Mounting Hole Change	Number of Circuits	-	Q	-	R	-	G	-	K	-	P
BMUF		4	-	Q3	-	R2	-	G3	-	K3		
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	BMUFC	BMUFL	BMUFLM	BMUFLR	BMUSP	BMUFP	BMUFRP	BMUFSP	BMUFLP	BMUFLRP
1											-	-	-	-	-	-
2																
3																
4																
5																
6																
7						-	-	-	-	-				-	-	-
8						-	-	-	-	-				-	-	-

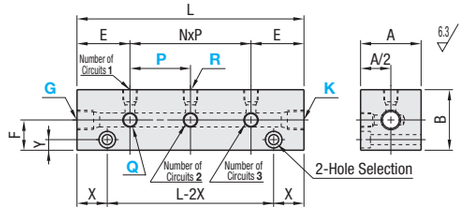
Manifold Blocks - Pneumatic

Lateral Through Hole, L-Shaped Hole

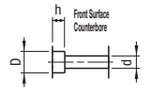


For details of recommended tapered male thread tightening torque and through pilot holes, see **P.1224**.
By inserting "**G-**" before part number, "PT Threads (Tapered Female Threads)" can be changed to "PF Threads (Parallel Female Threads)" in compliance with "JIS B 0202" (Unit Price remains the same).

Type						M Material	S Surface Treatment	Max. Operating Pressure
Pitch (P) Standard			Pitch (P) Configurable					
25 Sq.	30x40 Sq.	50 Sq.	25 Sq.	30x40 Sq.	50 Sq.			
BMUAC	BMUAF	BMUAL	BMUACP	BMUAFP	BMUALP	Aluminum Alloy 5000 series	-	1MPa≈10kgf/cm² or less
BMUACA	BMUAFA	BMUALA	BMUACAP	BMUAFAP	BMUALAP		Clear Anodize	



· Standard hole shape



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.I.20.1-1983(NPT)

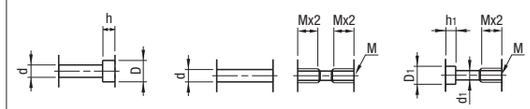
* Drawing for **3 Circuit Type** is selected.
The total number of Q, R, G and K threads is 8.

- 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

Back Surface Counterbore (ZB) | Through Hole (NA) | Tapped Hole (T) | Counterbore Tapped Hole (ZT)



RoHS10

Part Number				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
Type	Mounting Hole Change	Number of Circuits		Q, R, G, K	Standard	Configurable 1mm Increment									M
(25 Sq.)		1			-	-	0	4							
		2					1	6							
Pitch Standard BMUAC / Pitch Configurable BMUACP		3		1 (1/8)			2	8							
		4		M3 (M3)*			3	10							
	T (Tapped)	5		M4 (M4)*	15	15~50	4	12	25	25	20	12.5	10	4	M5
BMUACA / BMUACAP		6		5 (M5)*			5	14							
		7				15~40	6	16							
		8*				15~35	7	18							
(30x40 Sq.)		1			-	-	0	4							
		2		1 (1/8)			1	6							
Pitch Standard BMUAF / Pitch Configurable BMUAFP	ZB (Back Surface Counterbore)	3		2 (1/4)			2	8							
		4		5 (M5)*			3	10							
	NA (Through)	5		1N (NPT1/8)	30	20~50	4	12	30	40	20	20	7.5	7	M5
BMUAFA / BMUAFAP		6		2N (NPT1/4)			5	14							
		7*				15~40	6	16							
		8*				15~35	7	18							
(50 Sq.)		1			-	-	0	4							
		2					1	6							
Pitch Standard BMUAL / Pitch Configurable BMUALP		3		2 (1/4)			2	8							
	T (Tapped)	4		3 (3/8)			3	10							
	ZT (Counterbore Tapped)	5		4 (1/2)	40	35~60	4	12	50	50	25	25	8.5	8.5	M8
BMUALA / BMUALAP		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 ( ).
- Specify the pitch taking into consideration the necessary dimensions for fitting the couplings.
- When * marked 7 or 8 Circuit is selected from 25 Sq. / 30x40 Sq., M3, M4 and 5(M5) are not available for G or K.
- Single Circuit is not available for Pitch Configurable Type.
- 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.

Ordering Example

Part Number												
Type	Mounting Hole Change	Number of Circuits	-	Q	-	R	-	G	-	K	-	P
BMUAC	T	2	-	Q1	-	R5	-	G1	-	K1		
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	BMUAFA	BMUAL	BMUALA	BMUACP	BMUACAP	BMUAFP	BMUAFAP	BMUALP	BMUALAP
1							-	-	-	-	-	-
2												
3												
4												
5												
6												
7					-	-					-	-
8					-	-					-	-