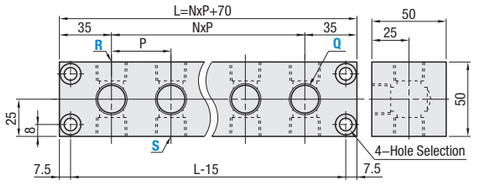
Manifold Blocks (Hydraulic / Pneumatic)

High Pressure / Compact

Hydraulic Manifold Block – High Pressure

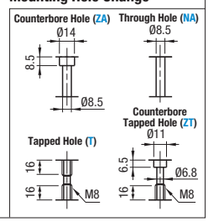
Type	Material	Surface Treatment	Max. Operating Pressure
BMAH	General Structural Steel	Trivalent Chromate	34.5 MPa = 350 kgf/cm² or Less

Thread: JIS B0203 Rc (PT)
JIS B0202 G (PF): ISO 228-1 Compatible



6.3

Mounting Hole Change



RoHS 10

ⓘ Mounting hole can be selected.

Part Number			Rc (PT)	P	No. of Pitches N	Q, R & S Total No. of Threads
Type	Mounting Hole Selection	Circuits	Q, R & S			
BMAH	ZA (Counterbore)	1	1 (1/8) 2 (1/4) 3 (3/8) 4 (1/2)	50	0	3
	NA (Through hole)	2			1	6
	T (Tapped)	3			2	9
	ZT (Counterbore Tapped)	4			3	12
		5			4	15
		6			5	18

ⓘ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMAH) For ordering, see the Ordering Example.
ⓘ For Q, R and S, specify 1, 2, 3, or 4 indicated before ( ).
ⓘ Only 6 Circuit Type has an additional mounting hole at the midpoint of the overall length.

Part Number Example

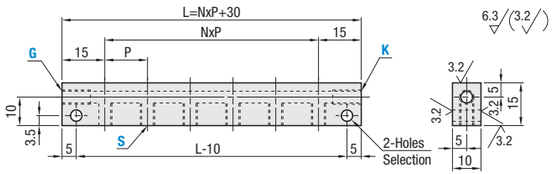
Part Number			- Q	- R	- S
Type	Mounting Holes	No. of Circuits			
BMAH	ZT	4	- Q2	- R2	- S2
G-BMAH	ZT	4	- Q2	- R2	- S2 (G Thread)

Pneumatic Manifold Block – Compact

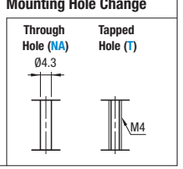
RoHS 10

Type	Material	Surface Treatment	Normal Pressure
SBMA	6063 Aluminum Alloy	—	1 MPa = 10 kgf/cm² or Less
SBMAA		Clear Anodize	

ⓘ Mounting holes can be selected.
* Drawing for 6 Circuit Type is selected.



Mounting Hole Change



Part Number			*M (Coarse)	P	No. of Pitches N	S, G & K Total No. of Threads
Type	Mounting Hole Selection	No. of Outlets	S, G & K			
SBMA	NA (Through hole)	1	3 (M3) 5 (M5)	15	0	3
		2			1	4
SBMAA	T (Tapped)	3			2	5
		4			3	6
		5			4	7
		6			5	8

ⓘ For S, G and K, specify 3 or 5 indicated before ( ). ⓘ N indicates number of pitches.

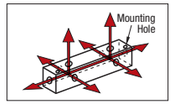
Part Number Example

Part Number			- S	- G	- K
Type	Mounting Holes	No. of Circuits			
SBMAA	T	4	- S3	- G3	- K3

Part Number & Spec.Change Printed in Purple

Manifold Blocks (Hydraulic / Pneumatic)

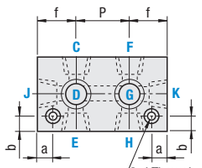
Selectable Thread Size



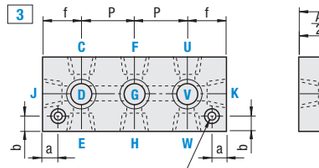
Manifold Block – Selectable Thread Size

Type	Material	Surface Treatment	Max. Operating Pressure
BMFRS	General Structural Steel	Trivalent Chromate	20.6 MPa = 210 kgf/cm² or Less
BMFRA	5052 Aluminum Alloy	—	1 MPa = 10 kgf/cm² or Less
BMFRAA		Clear Anodize	

2



3



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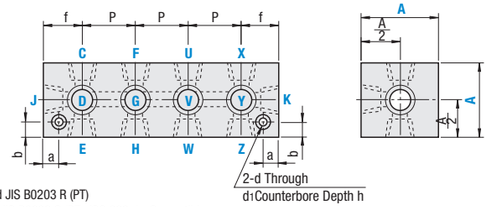


Thread JIS B0203 R (PT)
JIS B0202 G (PF): ISO 228-1 Compatible

RoHS 10

Part Number		Block Square A	Standard Thread Size Rc (PT), M (Coarse)	Alternative Thread Size Rc (PT), M (Coarse) JK (0 only), CDEFGHUVWXYZ	P	f	a	b	d	d_1	h
Type	Circuits										
BMFRS BMFRA BMFRAA	2 3 4	25	5 (M5) 1 (1/8)	0 (No Hole) 5 (M5) 1 (1/8)	20	16	8	5	4.5	8	4.5
		30	1 (1/8) 2 (1/4)	0 (No Hole) 5 (M5) 1 (1/8) 2 (1/4)	25	15	5		4.5	8	4.5
		35	1 (1/8) 2 (1/4)	0 (No Hole) 5 (M5) 1 (1/8) 2 (1/4) 3 (3/8) ⓘ 3 and 3 at right angles is not applicable.	30	20	6		5.5	9.5	5.5
		40	2 (1/4) 3 (3/8)	0 (No Hole) 5 (M5) 1 (1/8) 2 (1/4) 3 (3/8) 4 (1/2) ⓘ 4 and 4 at right angles is not applicable.	40	22	6.5		6.6	11	6.5
		50	2 (1/4) 3 (3/8) 4 (1/2)	0 (No Hole) 5 (M5) 1 (1/8) 2 (1/4) 3 (3/8) 4 (1/2) 6 (3/4) ⓘ 6 and 6 at right angles is not applicable.	50	30	8		8.5	14	8.5
(Standard Change: 60N)		60N	3 (3/8) 4 (1/2) 6 (3/4)	0 (No Hole) 5 (M5) 1 (1/8) 2 (1/4) 3 (3/8) 4 (1/2) 6 (3/4)	60	30	8		8.5	14	8.5

ⓘ A=25 is applicable to BMFRA and BMFRAA only, and A=60 to BMFRS only.
ⓘ For thread diameter selection, specify 0, 5, 1, 2, 3, 4 or 6 indicated before ( ).

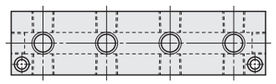
ⓘ For the purposes of improved standardization, the former A dimension 60 has been changed to "60N." The a/b dimension standard of 8 mm was formerly 10 mm. The 10-mm standard will be discontinued in September 2022.
Old: BMFRS□□-60-□ New: BMFRS□□-60N-□

Part Number Example

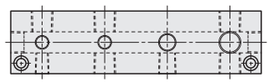
Part Number	- A	- Standard Thread size.	- J	- K	- C	- D	- E	- F	- G	- H	- U	- V	- W	- X	- Y	- Z
BMFRS4	- 60	- 4				- D2	- E2		- G2		- U0	- V3	- W3	- X1	- Y1	- Z1 (G Thread)
G-BMFRA4	- 30	- 2					- E1	- F1		- H1						

Selection Method

Step I: Select the most frequently used thread diameter as basic thread diameter.
Order Example: Select 4 (1/2).



Step II: Select ports to change from Standard Thread to desired thread size.
Order Example: D2-E2-G2-U0-V3-W3

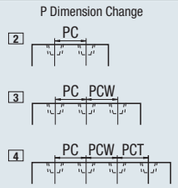


ⓘ Diameter of J and K is not changeable. Specify J0-K0 when J and K is not necessary (No through hole for them. Empty values for J and K dimensions are not acceptable. Examples below:

(Ex.)
Right **BMFRS4-60-4-J0-K0-D2**
Right **BMFRS4-60-4 -D2**
Wrong **BMFRS4-60-4-J0 -D2**
Wrong **BMFRS4-60-4 -K0-D2**

Part Number Alterations

Part Number	- A	...	- Z	- (PC / PCW / PCT)
BMFRS4	- 60	...		- PC40

Alterations	Code	Spec.
P Dimension Change 	PC PCW PCT	Changes the P dimension in 1mm increment. (Ex.) PC38-PCW30 ⓘ 20≤PC , PCW , PCT≤50 ⓘ In the case of BMFRS, normal pressure falls below 1 MPa = 10 kgf/cm² when the pitch is shorter than default value. ⓘ L dimension changes as much as the changes in P dimension.