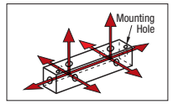
Manifold Blocks (Hydraulic / Pneumatic)

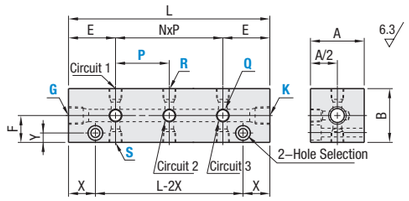


Manifold Blocks – Hydraulic

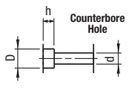
RoHS 10

Usage	Type: Pitch (P) Standard 40 Sq	60 Sq	25 Sq	30 x 40 Sq	50 Sq	Pitch (P) Configurable 40 Sq	60 Sq	Material	Surface Treatment	Max. Operating Pressure
Hydraulic	BMTF	BMTFL	—	—	—	—	BMTFLP	General Structural Steel	Trivalent Chromate	20.6 MPa = 210 kgf/cm² or Less
	BMTFM	—	—	—	—	BMTFMP	—		Electroless Nickel Plating	
	BMTFR	BMTFLR	—	—	—	BMTFRP	—	304 Stainless Steel	—	
	BMTFS	—	—	—	—	—	—	316 Stainless Steel		
	BMTFC	—	—	—	—	—	—	Brass		1 MPa = 10 kgf/cm² or Less
Pneumatic	—	—	BMTAC	BMTAF	BMTAL	—	—	5052 Aluminum Alloy	—	
	—	—	—	BMTAFA	BMTALA	—	—		Clear Anodize	

ⓘ BMTFLRP (304 Stainless Steel, 60 Square, Pitch Configurable) is available on our website.



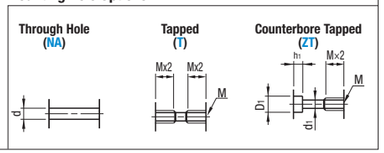
Standard Mounting Hole



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

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

Mounting Hole Options



* Drawing is for when 3-Circuit type is selected.
The total no. of Q, R, S, G and K threads is 11.

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

L Dimension Calculation
An Example of BMTFLP3-P35
L = N x P + 2E = (No. of Circuits 3-1) x 35 + 2 x 30 = 130

Part Number: Type	Mounting Hole Change	Circuits	*Rc(PT), NPT, M (Coarse): Q, R & S	G / K	Pitch P: Standard	Configurable 1mm Inc.	No. of Pitches N	Q, R, S, G & K Total No. of Threads	A	B	E	F	X	Y	Mounting Hole: M
Hydraulic Type 40 SQ		1			—	—	0	5							
Pitch Standard: BMTF		2	1 (1/8)	2 (1/4)	40	25–50	1	8							
Pitch Configurable: BMTFM BMTFMP	NA (Through)	3	2 (1/4)	3 (3/8)			2	11	40	40	35	20	20	7	M6
BMTFR BMTFRP		4	3 (3/8)	4 (1/2)			3	14							
BMTFS	T (Tapped)	5	1N (NPT 1/8)	2N (NPT 1/4)			4	17							
BMTFC		6	2N (NPT 1/4)	3N (NPT3/8)		30–50	5	20							
			3N (NPT3/8)	4N (NPT 1/2)											
Hydraulic Type 60 SQ.		1			—	—	0	5							
Pitch Standard: BMTFL		2	2 (1/4)	2 (1/4)	60	35–60	1	8							
Pitch Configurable: BMTFLR BMTFLP	ZT (Counterbore Tapped)	3	3 (3/8)	3 (3/8)			2	11	60	60	30	30	7.5	8	M8
		4	4 (1/2)	4 (1/2)			3	14							
		5	6 (3/4)	6 (3/4)			4	17							
		6				40–60	5	20							
Pneumatic 25 SQ		1			—		0	5							
Pitch Standard: BMTAC		2	1 (1/8)	1 (1/8)	15	—	1	8							
		3	M3 (M3)	M3 (M3)			2	11	25	25	20	12.5	10	4	M5
	T (Tapped)	4	M4 (M4)	M4 (M4)			3	14							
		5	5 (M5)	5 (M5)			4	17							
		6					5	20							
Pneumatic 30 x 40 SQ		1			—		0	5							
Pitch Standard: BMTAF		2	1 (1/8)	1 (1/8)	30	—	1	8							
BMTAFA	NA (Through)	3	2 (1/4)	2 (1/4)			2	11	35	40	20	20	7.5	7	M5
		4	5 (M5)	5 (M5)			3	14							
		5	1N (NPT 1/8)	1N (NPT 1/8)			4	17							
	T (Tapped)	6	2N (NPT 1/4)	2N (NPT 1/4)			5	20							
Pneumatic 50 SQ.		1			—		0	5							
Pitch Standard: BMTAL		2	2 (1/4)	2 (1/4)	40	—	1	8							
BMTALA		3	3 (3/8)	3 (3/8)			2	11	50	50	25	25	8.5	8.5	M8
	ZT (Counterbore Tapped)	4	4 (1/2)	4 (1/2)			3	14							
		5					4	17							
		6					5	20							

ⓘ BMTFMP, BMTFRP, and BMTFLP are not available with a Single Circuit (1). ⓘ For G (PF) Thread please place an order specified with G- before part number. (Ex: G-BMTF) For ordering, see the Ordering Example.
ⓘ For Q, R, S, G and K, specify 1, 2, 3, 4, 5, 6, M3, M4, 1N, 2N, 3N or 4N indicated before ( ). ⓘ Single Circuit is not available for Pitch Confi gurable Type.
ⓘ Specify the pitch taking into consideration the necessary dimensions for fi tting the couplings. ⓘ 6 Circuit Type (only) has an additional mounting hole at the midpoint of the overall length. (Except for 25 SQ.)

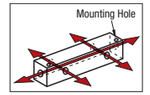
Part Number Example

Part Number			- Q - R - S - G - K - P
Type	Mounting Hole Options	No. of Circuits	
BMTFMP		2	- Q1 - R1 - S1 - G2 - K2 - P30
BMTAC	T	3	- QM3 - R1 - S1 - G1 - K1
G-BMTAC	T	3	- Q5 - R1 - S1 - G1 - K1

MiSUMi

Manifolds

Manifold Blocks (Hydraulic / Pneumatic)

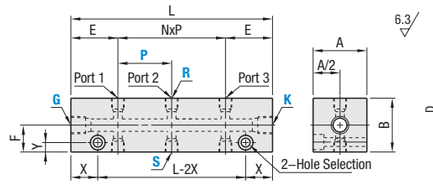


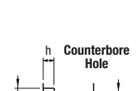
Manifold Blocks – Hydraulic

RoHS 10

Usage	Type: Pitch (P) Standard 30 x 35 Sq	40 Sq	60 Sq	70 Sq	30 x 40 Sq	50 Sq	70 Sq	Pitch (P) Configurable 30 x 35 Sq	40 Sq	60 Sq	Material	Surface Treatment	Max. Operating Pressure
Hydraulic	BMIS	BMIF	—	BMIL	—	—	—	BMISP	BMIFP	—	General Structural Steel	Trivalent Chromate	20.6 MPa= 210 kgf/cm² or Less
	—	BMIFR	BMIFLR	—	—	—	—	—	BMIFRP	BMIFLRP	304 Stainless Steel	—	
	—	BMIFS	—	—	—	—	—	—	—	—	316 Stainless Stee		
Pneumatic	—	—	—	—	BMIAF	BMIAL	BMIAB	—	—	—	5052 Aluminum Alloy	—	1 MPa=10 kgf/cm² or Less
	—	—	—	—	BMIAFA	—	—	—	—	—		Clear Anodize	

ⓘ Material of 70 Square is 6063 Aluminum Alloy.



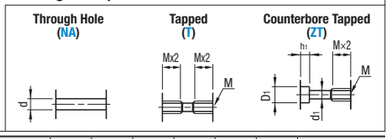


Mounting Holes Dimension	d	D	h	D_1	d_1	h_1
M5	5.5	9.5	5.5	8	*4.2	4.5
M6	6.6	11	6.5	9.5	5.1	5.5
M8	8.5	14	8.5	11	6.8	6.5

* Only 304 Stainless Steel 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



* Drawing for 3 Circuit Type is selected.
The total no. of R, S, G and K threads is 8.

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

L Dimension Calculation
Ex.: In the Case of BMIFP3–P35
L = N x P+2E = (No. of Ports 3-1) x 35 + 2 x 35 =140

ⓘ For details of recommended tapered male thread tightening torque and through pilot holes, see **P.3281**.

Part Number: Type	Mounting Hole Change	Circuits	*Rc(PT), NPT, M (Coarse): Q, R & S	G / K	Pitch P: Standard	Configurable 1mm Inc.	No. of Pitches N	Q, R, S, G & K Total No. of Threads	A	B	E	F	X	Y	Mounting Hole: M
Hydraulic 30 x 35 SQ.		1			—	—	0	4							
Pitch Standard: BMIS BMISP		2					1	6							
ⓘ d_1 dim.in ( ) is only applicable to 304 Stainless Steel.		3	1 (1/8)	1 (1/8)	30	20–50	2	8	30	35	30	17.5	17	6	M5
		4	2 (1/4)	2 (1/4)			3	10							
		5					4	12							
		6				25–50	5	14							
Hydraulic Type 40 SQ.		1	1 (1/8)	2 (1/4)	—	—	0	4							
Pitch Standard: BMIF		2	2 (1/4)	3 (3/8)			1	6							
Pitch Configurable: BMIFR BMIFRP		3	3 (3/8)	4 (1/2)	40	25–50	2	8	40	40	35	20	20	7	M6
BMIFS		4	1N (NPT 1/8)	2N (NPT 1/4)			3	10							
		5	2N (NPT 1/4)	3N (NPT 3/8)			4	12							
		6	3N (NPT 3/8)	4N (NPT 1/2)		30–50	5	14							
Hydraulic Type 60 SQ.		1			—	—	0	4							
Pitch Standard: BMIFL		2	2 (1/4)	2 (1/4)			1	6							
Pitch Configurable: BMIFLR BMIFLRP	NA (Through)	3	3 (3/8)	3 (3/8)	60	35–60	2	8	60	60	30	30	7.5	8	M8
		4	4 (1/2)	4 (1/2)			3	10							
		5	6 (3/4)	6 (3/4)			4	12							
		6				40–60	5	14							
Hydraulic Type 70 SQ.	T (Tapped)	1			—		0	4							
Pitch Standard: BMIL		2	3 (3/8)	6 (3/4)	60	—	1	6							
		3	4 (1/2)	8 (1)			2	8	70	70	40	35	16.5	8	M8
	ZT (Counterbore Tapped)	4	6 (3/4)				3	10							
Pneumatic 30 x 40 SQ		1			—		0	4							
Pitch Standard: BMIAF		2	1 (1/8)	1 (1/8)	40	—	1	6							
BMIAFA		3	2 (1/4)	2 (1/4)			2	8	30	40	20	20	7.5	7	M5
		4	5 (M5)	5 (M5)			3	10							
		5	1N (NPT 1/8)	1N (NPT 1/8)			4	12							
		6	2N (NPT 1/4)	2N (NPT 1/4)			5	14							
Pneumatic 50 SQ		1			—		0	4							
Pitch Standard: BMIAL		2	2 (1/4)	2 (1/4)			1	6							
		3	3 (3/8)	3 (3/8)	40	—	2	8	50	50	25	25	8.5	8.5	M8
		4	4 (1/2)	4 (1/2)			3	10							
		5					4	12							
		6					5	14							
Pneumatic 70 SQ.		1			—		0	4							
Pitch Standard: BMIAB		2	4 (1/2)	4 (1/2)			1	6							
		3	6 (3/4)	6 (3/4)	60	—	2	8	70	70	40	35	16.5	8	M8
		4		8 (1)			3	10							

ⓘ BMIL and BMIAB are not available with 5 and 6 Circuits. ⓘ BMISP, BMIFP, BMFRP, and BMIFLRP are not available with a Single Circuit (1).
ⓘ For G (PF) Thread please place an order specifi ed with G- before part number. (Ex: G-BMIF) For ordering, see the Ordering Example.
ⓘ For R, S, G and K, specify 1, 2, 3, 4, 6, 8, 1N, 2N, 3N or 4N indicated before ( ). ⓘ Single Circuit is not available for Pitch Confi gurable Type.
ⓘ Specify the pitch taking into consideration the necessary dimensions for fi tting the couplings. ⓘ Only 6 Circuit Type has an additional mounting hole at the midpoint of the overall length.

Part Number Example

Part Number			- R - S - G - K - P
Type	Mounting Hole Options	No. of Circuits	
BMIAF	ZT	3	- R1 - S2 - G2 - K2
BMIFRP	ZT	3	- R2 - S1 - G2 - K2 - P25
G-BMIFRP	ZT	3	- R2 - S1 - G2 - K2 - P25 (G Thread)