

Sandwich Plates for Valves

SB-04 (06, 10)

Size 04, 06, 10 (D02, D03, D05) • p_{max} (G) 350 bar (5100 PSI) • p_{max} (ST) 420 bar (6100 PSI)



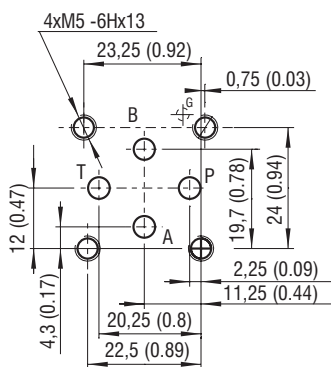
Technical Features

- › Designed for vertical assembly of built-in two-way and three-way valves in hydraulic circuits
- › Subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 02, 03 and 05) Size 04, 06 and 10
- › Wide range of functional versions available for standard ISO 4401, UNF or metric threaded cavities
- › All versions stackable on PD04, (06, 10) and DR04 (06) serial plates
- › Sandwich plates are available in cast iron and steel
- › In the standard version, cast iron plates are zinc-coated for 520 h protection acc. to ISO 9227, steel plates are phosphated

Technical Data

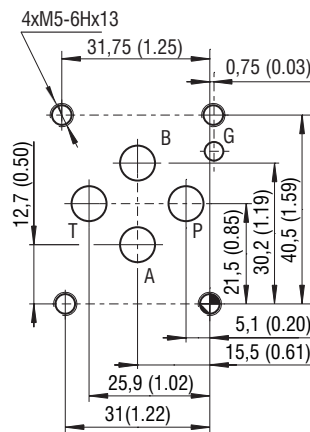
Valve size		04 (D02)	06 (D03)	10 (D05)
Max. operating pressure	bar (PSI)	cast iron - 350 (5080), steel - 420 (6100)		
Mass		see page 4-12		
		Data Sheet		Type
General information		GI_0060		Products and operating conditions
Cavity details		SMT_0019		SMT_A2*, A3*, B2*, B3*, BP3*, BPY3*, C2*, C3*, CP3*, Q3*, QG2*, R3*
Spare parts		SP_8010		

ISO 4401-02-01-0-05



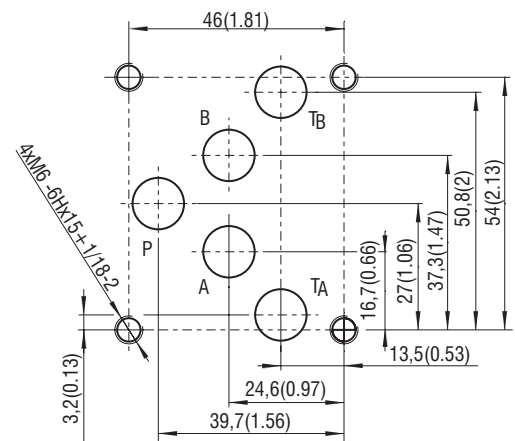
Ports P, A, B, T - max. \varnothing 4.5 mm (0.18 in)

ISO 4401-03-02-0-05



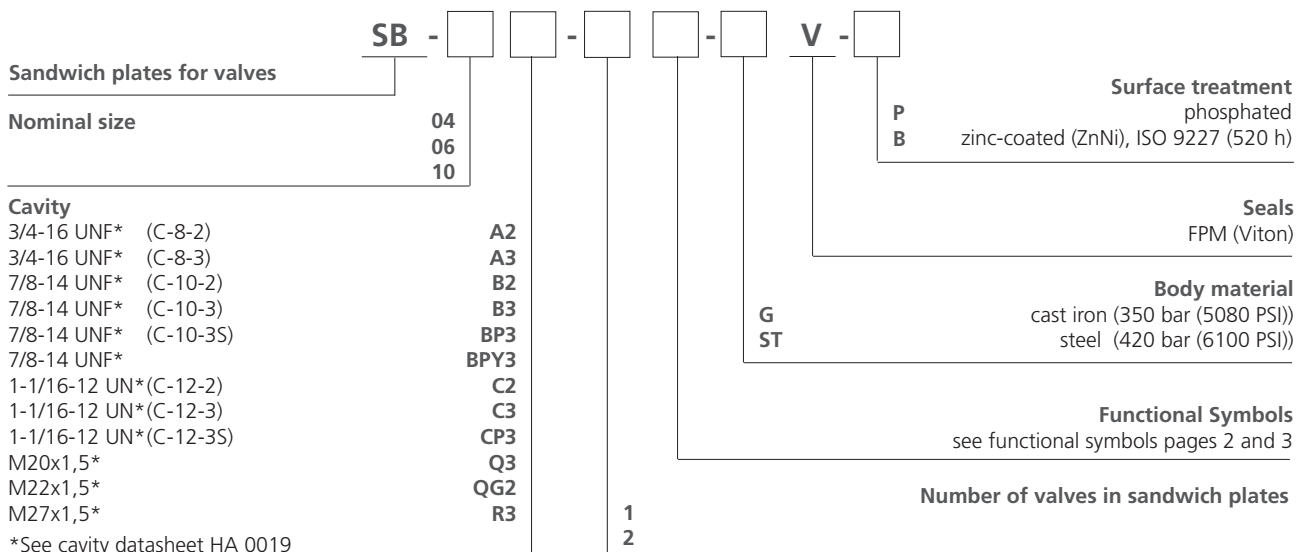
Ports P, A, B, T - max. \varnothing 7.5 mm (0.29 in)

ISO 4401-05-04-0-05



Ports P, A, B, T - max. \varnothing 11.2 mm (0.44 in)

Ordering Code



Not all combination of features are available as actual products. The standard versions are listed on pages 4 and 12
 For the identification and feasibility of other body versions consult our technical department.

Functional symbols

Single valve installation, 2-Way

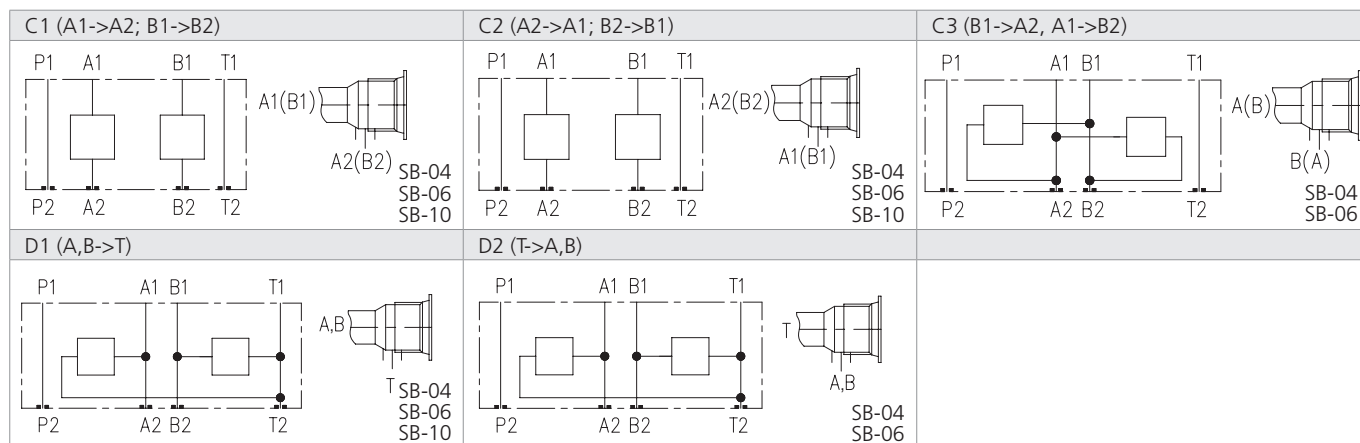
<p>A1 (A1->A2)</p> <p>SB-04 SB-06 SB-10</p>	<p>A2 (A2->A1)</p> <p>SB-04 SB-06 SB-10</p>	<p>B1 (B1->B2)</p> <p>SB-04 SB-06</p>
<p>B2 (B2->B1)</p> <p>SB-04 SB-06 SB-10</p>	<p>AB1 (A->B)</p> <p>SB-04 SB-06</p>	<p>AB2 (B->A)</p> <p>SB-04 SB-06</p>
<p>AT1 (A->T)</p> <p>SB-04 SB-06</p>	<p>AT2 (T->A)</p> <p>SB-04 SB-06</p>	<p>BT1 (B->T)</p> <p>SB-04 SB-06</p>
<p>BT2 (T->B)</p> <p>SB-04 SB-06</p>	<p>PT1 (P->T)</p> <p>SB-04 SB-06 SB-10</p>	<p>PT2 (T->P)</p> <p>SB-04 SB-06</p>
<p>P1 (P1->P2)</p> <p>SB-04 SB-06</p>	<p>P2 (P2->P1)</p> <p>SB-04 SB-06</p>	<p>T1 (T1->T2)</p> <p>SB-06 SB-10</p>
<p>T2 (T2->T1)</p> <p>SB-06</p>		

Single valve installation, 3-Way

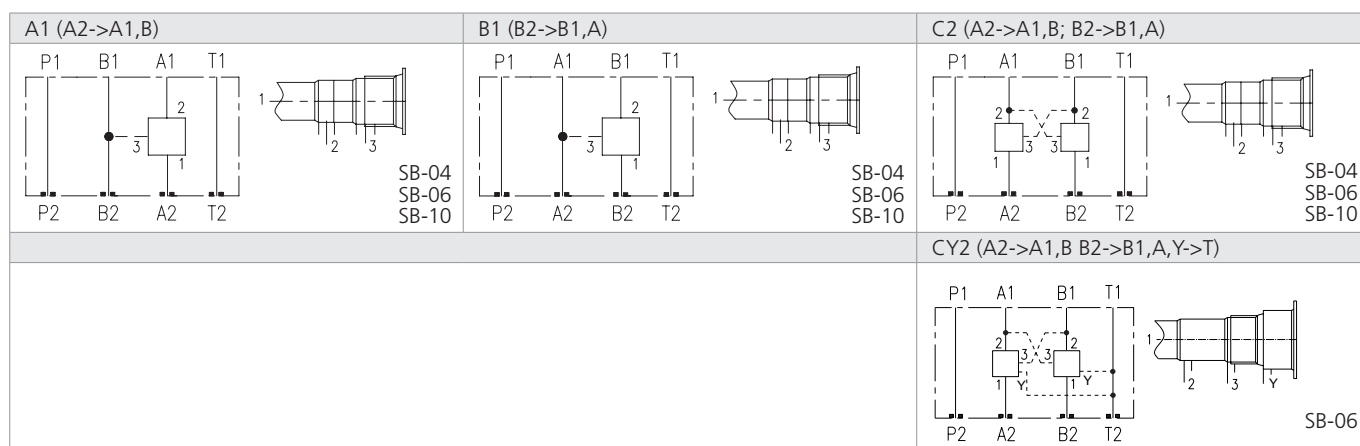
<p>A2 (A1->A2,T)</p> <p>SB-06</p>	<p>B2 (B1->B2,T)</p> <p>SB-06</p>	<p>P2 (P2->P1,T)</p> <p>SB-04 SB-06 SB-10</p>
<p>P3 (P2->P1,T)</p> <p>SB-06</p>	<p>P4 (P2->P1,T)</p> <p>SB-06 SB-10</p>	

Functional symbols

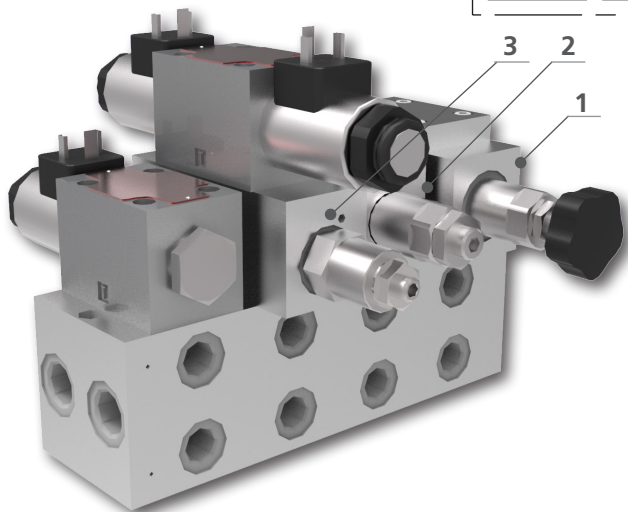
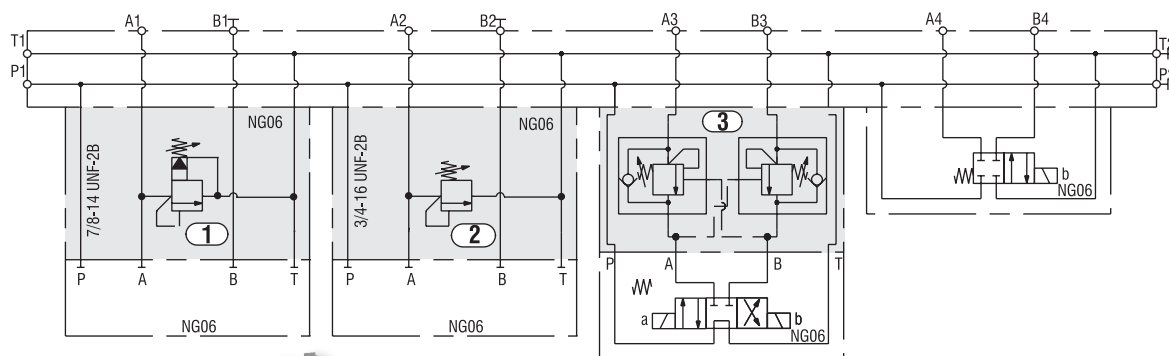
Dual valve installation, 2-Way



Piloted valve installation, 3-Way



An Example of Sandwich Plate Installations



Pos.	Ordering code
1	SB-06B2-AT1-GV-B
2	SB-06A2-AT1-GV-B
3	SB-06Q3-2C2-GV-B

Dimensions in millimeters (inches)

Single valve installation, 2-Way

3D picture shown is for illustration purpose only.

A1 (A1->A2)

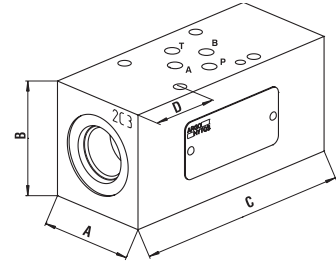
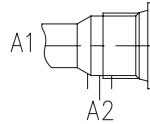
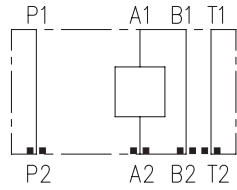


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1A1-GV-B		cast iron	350 (5080)	36x40x74/37 (1.41x1.57x2.91/1.46)	0.70 (1.54)	30978800
	QG2	M22x1.5	SB-04QG2-1A1-STV-P	MA04-ROE3/V	steel	420 (6090)	35x40x76/36 (1.42x1.56x2.99/1.42)	0.70 (1.54)	28592100
06	A2	3/4-16 UNF	SB-06A2-1A1-GV-B		cast iron	350 (5080)	45x50x73.5/19 (1.77x1.97x2.89/0.75)	1.05 (2.32)	28063500
	B2	7/8-14 UNF	SB-06B2-1A1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.22 (2.68)	30021500
	QG2	M22x1.5	SB-06QG2-1A1-STV-P	MA06-ROE3/V	steel	420 (6090)	38x40x80/28 (1.50x1.56x3.15/1.10)	0.95 (2.10)	28593400
10	B2	7/8-14 UNF	SB-10B2-1A1-GV-B		cast iron	350 (5080)	70x50x84/15 (2.76x1.97x3.31/0.59)	1.89 (4.17)	34249300

A2 (A2->A1)

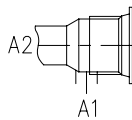
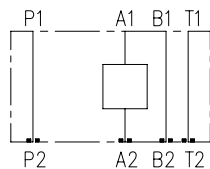


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1A2-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.41x1.57x2.91/1.24)	0.68 (1.50)	32360000
06	A2	3/4-16 UNF	SB-06A2-1A2-GV-B		cast iron	350 (5080)	45x50x73.5/18 (1.77x1.97x2.89/0.71)	1.05 (2.32)	32184500
	B2	7/8-14 UNF	SB-06B2-1A2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.22 (2.68)	32067900
10	C2	1-1/16 UN	SB-10C2-1A2-GV-B		cast iron	350 (5080)	70x50x100/33 (2.76x1.97x3.94/1.30)	2.25 (4.96)	43380500

B1 (B1->B2)

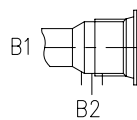
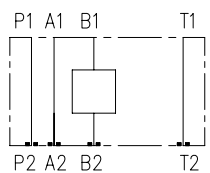


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1B1-GV-B		cast iron	350 (5080)	36x40x74/18 (1.41x1.56x2.91/0.71)	0.68 (1.50)	31113000
	QG2	M22x1.5	SB-04QG2-1B1-STV-P	MB04-ROE3/V	steel	420 (6090)	35x40x76/36 (1.42x1.56x2.99/1.42)	0.70 (1.54)	28592500
06	A2	3/4-16 UNF	SB-06A2-1B1-GV-B		cast iron	350 (5080)	45x50x73.5/12.5 (1.77x1.98x2.89/0.49)	1.06 (2.35)	30677500
	B2	7/8-14 UNF	SB-06B2-1B1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.22 (2.68)	30708100
	QG2	M22x1.5	SB-06QG2-1B1-STV-P	MB06-ROE3/V	steel	420 (6090)	45x40x80/68.5 (1.77x1.57x3.15/2.69)	0.70 (1.54)	28593700

Dimensions in millimeters (inches)

Single valve installation, 2-Way

3D picture shown is for illustration purpose only.

B2 (B2->B1)

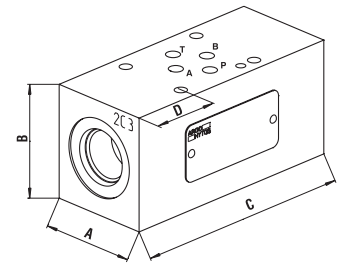
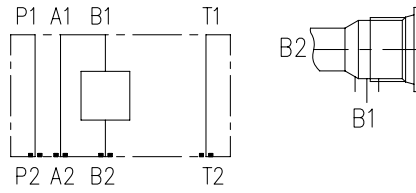


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	A2	3/4-16 UNF	SB-06A2-1B2-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	0.70 (1.54)	41836500
	B2	7/8-14 UNF	SB-06B2-1B2-GV-B		cast iron	350 (5080)	45x50x86/12.5 (1.77x1.97x3.39/1.20)	0.90 (1.98)	31062900
10	C2	1-1/16 UN	SB-10C2-1B2-GV-B		cast iron	350 (5080)	70x50x100/13 2.76x1.97x3.94/0.51)	2.25 (4.96)	43382000

AB1 (A->B)

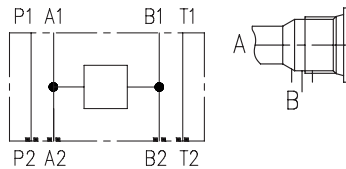


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1AB1-GV-B		cast iron	350 (5080)	36x40x74/18.5 (1.41x 1.57x2.91/0.73)	0.80 (1.76)	32016600
06	A2	3/4-16 UNF	SB-06A2-1AB1-GV-B		cast iron	350 (5080)	45x50x73,5/12.5 (1.77x1.97x2.89/0.49)	1.06 (2.34)	32702000
	B2	7/8-14 UNF	SB-06B2-1AB1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30380500

AB2 (B->A)

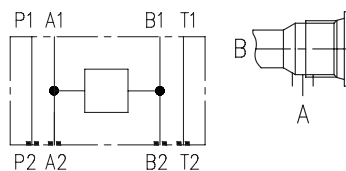


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1AB2-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.41x1.57x2.91/0.73)	0.67 (1.48)	31509300
	QG2	M22x1.5	SB-04QG2-1AB2-STV-P	MX04-ROE3/V	steel	420 (6090)	35x40x76/36 (1.38x1.39x2.99/1.42)	0.70 (1.54)	28592600
06	A2	3/4-16 UNF	SB-06A2-1AB2-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	1.05 (2.32)	30122800
	B2	7/8-14 UNF	SB-06B2-1AB2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30987000
	QG2	M22x1.5	SB-06QG2-1AB2-STV-P	MX06-ROE3/V	steel	420 (6090)	45x40x80/28 (1.77x1.56x3.15/1.10)	0.70 (1.54)	28594000

Dimensions in millimeters (inches)

Single valve installation, 2-Way

3D picture shown is for illustration purpose only.

AT1 (A->T)

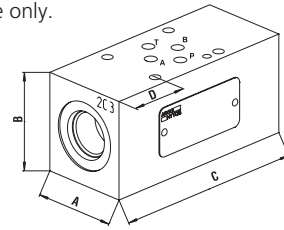
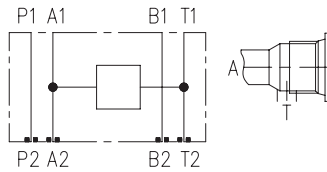


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1AT1-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.41x1.57x2.91/1.24)	0.65 (1.43)	30138300
	QG2	M22x1.5	SB-04QG2-1AT1-STV-P	MA04-VP/V	steel	420 (6090)	35x34,6x80/40 (1.38x1.36x3.15/1.57)	0.70 (1.54)	22501800
06	A2	3/4-16 UNF	SB-06A2-1AT1-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	1.05 (2.32)	29513200
	B2	7/8-14 UNF	SB-06B2-1AT1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30003800
	QG2	M22x1.5	SB-06QG2-1AT1-STV-P	MA06-VP/V	steel	420 (6090)	45x40x80/14 (1.77x1.57x3.15/1.01)	0.95 (2.09)	22949600

AT2 (T->A)

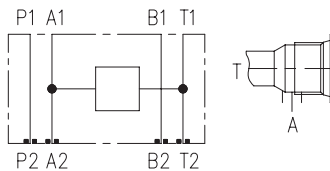


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1AT2-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.41x1.57x2.91/1.24)	0.70 (1.54)	30150000
	QG2	M22x1.5	SB-04QG2-1AT2-STV-P	MD04-ROE3/V	steel	420 (6090)	35x40x76/36 (1.38x1.57x2.99/1.42)	0.70 (1.54)	28592700
06	A2	3/4-16 UNF	SB-06A2-1AT2-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	1.05 (2.32)	30159400
	B2	7/8-14 UNF	SB-06B2-1AT2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30568900
	QG2	M22x1.5	SB-06QG2-1AT2-STV-P	MD06-ROE3/V	steel	420 (6090)	45x40x80/28 (1.77x1.57x3.15/1.10)	0.95 (2.09)	28594300

BT1 (B->T)

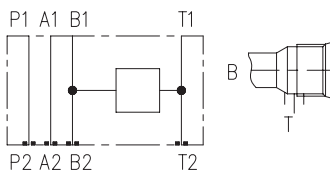


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1BT1-GV-B		cast iron	350 (5080)	36x40x74/18.5 (1.41x 1.57x2.91/0.73)	0.65 (1.43)	29230100
	QG2	M22x1.5	SB-04QG2-1BT1-STV-P	MB04-VP/V	steel	420 (6090)	35x34,6x80/64 (1.38x1.36x3.15/1.57)	0.70 (1.54)	22501900
06	A2	3/4-16 UNF	SB-06A2-1BT1-GV-B		cast iron	350 (5080)	45x50x73,5/12.5 (1.77x1.97x2.89/0.49)	1.05 (2.31)	29527400
	B2	7/8-14 UNF	SB-06B2-1BT1-GV-B		cast iron	350 (5080)	45x50x86/12.5 (1.77x1.97x3.39/0.49)	1.22 (2.25)	30021200
	QG2	M22x1.5	SB-06QG2-1BT1-STV-P	MB06-VP/V	steel	420 (6090)	45x40x80/28 (1.77x1.57x3.15/1.10)	0.95 (2.09)	16661700

Dimensions in millimeters (inches)

Single valve installation, 2-Way

3D picture shown is for illustration purpose only.

BT2 (T>B)

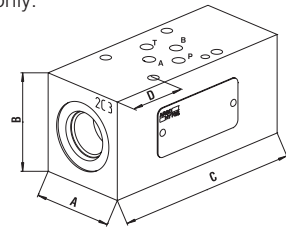
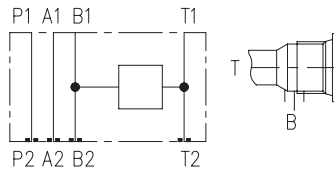


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1BT2-GV-B		cast iron	350 (5080)	36x40x74/18.5 (1.41x 1.57x2.91/0.73)	0.70 (1.54)	31509500
	QG2	M22x1.5	SB-04QG2-1BT2-STV-P	ME04-ROE3/V	steel	420 (6090)	35x40x76/16 (1.38x1.57x2.99/0.63)	0.70 (1.54)	28593000
06	A2	3/4-16 UNF	SB-06A2-1BT2-GV-B		cast iron	350 (5080)	45x50x73,5/12.5 (1.77x1.97x2.89/0.49)	1.07 (2.37)	30677800
	QG2	M22x1.5	SB-06QG2-1BT2-STV-P	ME06-ROE3/V	steel	420 (6090)	45x40x80/68.5 (1.77x1.57x3.15/2.70)	0.95 (2.09)	28594400
	B2	7/8-14 UNF	SB-06B2-1BT2-GV-B		cast iron	350 (5080)	45x50x86/12.5 (1.77x1.97x3.39/0.49)	1.25 (2.76)	30708400

PT1 (P->T)

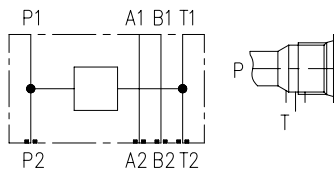


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1PT1-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.42x1.57x2.91/1.24)	0.70 (1.54)	30979100
	QG2	M22x1.5	SB-04QG2-1PT1-STV-P	MP04-VP/V	steel	420 (6090)	35x34,6x80/64 (1.38x1.36x3.15/2.52)	0.65 (1.43)	22502000
06	A2	3/4-16 UNF	SB-06A2-1PT1-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	1.05 (2.32)	29527600
	B2	7/8-14 UNF	SB-06B2-1PT1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.20 (2.65)	30003600
	QG2	M22x1.5	SB-06QG2-1PT1-STV-P	MP06-VP/V	steel	420 (6090)	45x40x80/28 (1.77x1.57x3.15/1.10)	0.82 (1.81)	22949800
10	B2	7/8-14 UNF	SB-10B2-1PT1-GV-B		cast iron	350 (5080)	70x50x84/15 (2.76x1.97x3.31/0.59)	1.85 (4.08)	30568300

PT2 (T->P)

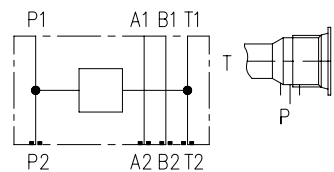


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1PT2-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.42x1.57x2.91/1.24)	0.70 (1.54)	31509800
	QG2	M22x1.5	SB-04QG2-1PT2-STV-P	MG04-ROE3/V	steel	420 (6090)	35x40x76/36 (1.38x1.57x2.99/1.42)	0.70 (1.54)	20717800
06	A2	3/4-16 UNF	SB-06A2-1PT2-GV-B		cast iron	350 (5080)	45x50x73,5/18 (1.77x1.97x2.89/0.71)	1.08 (2.39)	31474200
	B2	7/8-14 UNF	SB-06B2-1PT2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30052800
	QG2	M22x1.5	SB-06QG2-1PT2-STV-P	MG06-ROE3/V	steel	420 (6090)	45x40x80/28 (1.77x1.57x3.15/1.10)	0.95 (2.09)	20690500

Dimensions in millimeters (inches)

Single valve installation, 2-Way

3D picture shown is for illustration purpose only.

P1 (P1->P2)

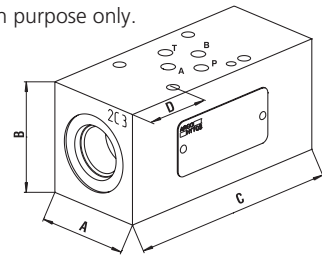
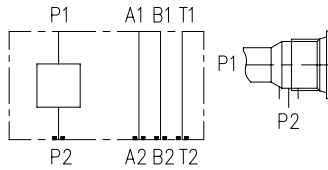


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1P1-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.42x1.57x2.91/1.24)	0.67 (1.48)	40035400
06	A2	3/4-16 UNF	SB-06A2-1P1-GV-B		cast iron	350 (5080)	45x50x73.5/18 (1.77x1.97x2.89/0.71)	1.20 (2.65)	30970100
	B2	7/8-14 UNF	SB-06B2-1P1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30069500

P2 (P2->P1)

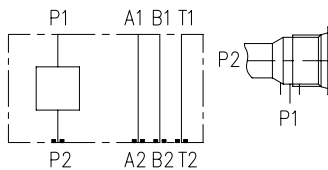


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-1P2-GV-B		cast iron	350 (5080)	36x40x74/31.5 (1.42x1.57x2.91/1.24)	0.68 (1.50)	31850600
06	A2	3/4-16 UNF	SB-06A2-1P2-GV-B		cast iron	350 (5080)	45x50x73.5/18 (1.77x1.97x2.89/0.71)	1.10 (2.43)	30800900
	B2	7/8-14 UNF	SB-06B2-1P2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.25 (2.76)	30018100
	QG2	M22x1.5	SB-06QG2-1P2-STV-P	MP06-ROE3/V	steel	420 (6090)	45x40x80/28 (1.77x1.57x3.15/1.10)	0.95 (2.09)	20690800

T1 (T1->T2)

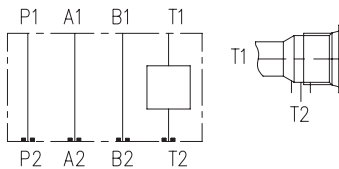


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	A2	3/4-16 UNF	SB-06A2-1T1-GV-B		cast iron	350 (5080)	45x50x73.5/18 (1.77x1.97x2.89/0.71)	1.06 (2.34)	31396300
	B2	7/8-14 UNF	SB-06B2-1T1-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.20 (2.65)	31648000
10	B2	7/8-14 UNF	SB-10B2-1T1-GV-B		cast iron	350 (5080)	70x50x84/15 (2.76x1.97x3.31/0.59)	1.85 (4.08)	32504500

T2 (T2->T1)

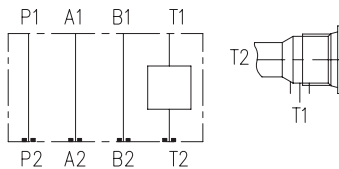


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	B2	7/8-14 UNF	SB-06B2-1T2-GV-B		cast iron	350 (5080)	45x50x86/30.5 (1.77x1.97x3.39/1.20)	1.20 (2.65)	30453800

Dimensions in millimeters (inches)

Single valve installation, 3-Way

3D picture shown is for illustration purpose only.

A2 (A1->A2,T)

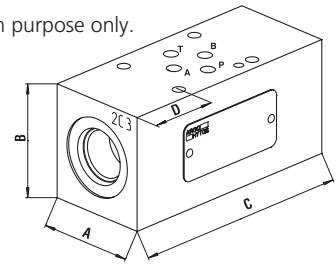
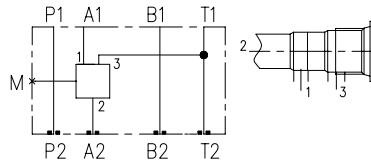


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	A3	3/4-16 UNF	SB-06A3-1A2-GV-B		cast iron	350 (5080)	45x50x80/18 (1.77x1.97x3.15/0.71)	1.16 (2.56)	28063900
	B3	7/8-14 UNF	SB-06B3-1A2-GV-B		cast iron	350 (5080)	45x50x86/25.5 (1.77x1.97x3.39/1.01)	1.20 (2.65)	28064400

B2 (B1->B2,T)

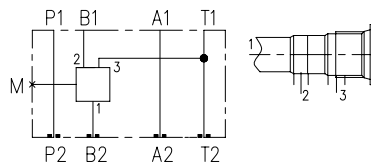


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	A3	3/4-16 UNF	SB-06A3-1B2-GV-B		litina	350 (5080)	45x50x75/12 (1.77x1.97x2.95/0.47)	1.06 (2.34)	40232200

P2 (P2->P1,T)

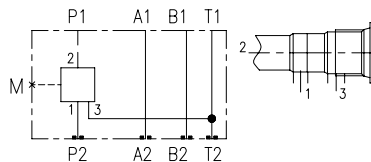


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A3	3/4-16 UNF	SB-04A3-1P2-GV-B		cast iron	350 (5080)	36x50x100/52.5 (1.42x1.97x3.94/2.07)	1.15 (2.54)	31665200
06	A3	3/4-16 UNF	SB-06A3-1P2-GV-B		cast iron	350 (5080)	45x50x75/7.5 (1.77x1.97x2.95/0.30)	1.02 (2.26)	28063800
	B3	7/8-14 UNF	SB-06B3-1P2-GV-B		cast iron	350 (5080)	45x50x98/43 (1.77x1.97x3.86/1.69)	1.40 (3.09)	30786400
10	B3	7/8-14 UNF	SB-10B3-1P2-GV-B		cast iron	350 (5080)	70x50x84/15 (2.76x1.97x3.31/0.59)	1.85 (4.07)	30533700

P3 (P2->P1,T)

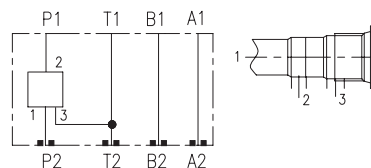


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	A3	3/4-16 UNF	SB-06A3-1P3-GV-B		cast iron	350 (5080)	45x50x75/7.5 (1.77x1.97x2.95/0.30)	1.08 (2.38)	31627600
	B3	7/8-14 UNF	SB-06B3-1P3-GV-B		cast iron	350 (5080)	45x60x98/43 (1.77x2.36x3.86/1.69)	1.70 (3.74)	32234600

P4 (P2->P1,T)

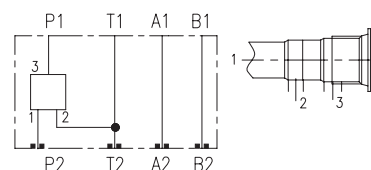


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	B3	7/8-14 UNF	SB-06B3-1P4-GV-B		cast iron	350 (5080)	45x60x98/43 (1.77x2.36x3.86/1.69)	1.70 (3.74)	33881200
10	C3	1-1/16 UN	SB-10C3-1P4-GV-B		cast iron	350 (5080)	70x70x128/58 (2.76x2.76x5.04/2.28)	3.99 (8.80)	43369400

Dimensions in millimeters (inches)

Dual valve installation, 2-Way

3D picture shown is for illustration purpose only.

C1 (A1->A2; B1->B2)

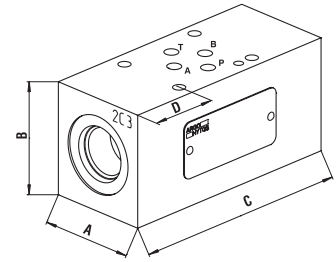
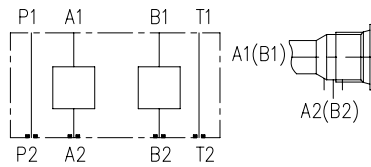


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-2C1-GV-B		cast iron	350 (5080)	36x40x98/37 (1.42x1.57x3.86/1.46)	0.80 (1.76)	28063300
	QG2	M22x1.5	SB-04QG2-2C1-STV-P	MC04-ROE3/V	steel	420 (6090)	35x40x96/36 (1.38x1.57x3.78/1.42)	0.80 (1.76)	28593100
06	A2	3/4-16 UNF	SB-06A2-2C1-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.50 (3.31)	28063600
	B2	7/8-14 UNF	SB-06B2-2C1-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.45 (3.20)	30119500
	QG2	M22x1.5	SB-06QG2-2C1-STV-P	MC06-ROE3/V	steel	420 (6090)	45x40x94/25.5 (1.77x1.57x3.70/1.01)	1.00 (2.21)	28594500
10	B2	7/8-14 UNF	SB-10B2-2C1-GV-B		cast iron	350 (5080)	70x50x92/19 (2.76x1.97x3.62/0.75)	3.64 (8.03)	34528800

C2 (A2->A1; B2->B1)

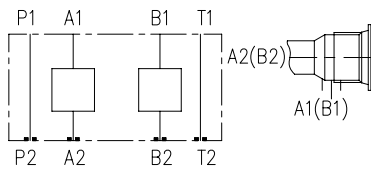


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-2C2-GV-B		cast iron	350 (5080)	36x40x98/37 (1.42x1.57x3.86/1.46)	0.90 (1.98)	30727200
06	A2	3/4-16 UNF	SB-06A2-2C2-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.48 (3.26)	32265200
	B2	7/8-14 UNF	SB-06B2-2C2-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.43 (3.16)	31761100
10	C2	1-1/16 UN	SB-10C2-2C2-GV-B		cast iron	350 (5080)	70x50x120/33 (2.76x1.97x4.72/1.30)	2.49 (5.49)	43380300

C3 (B1->A2, A1->B2)

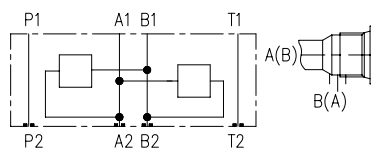


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-2C3-GV-B		cast iron	350 (5080)	36x40x98/37 (1.42x1.57x3.86/1.46)	0.65 (1.43)	30353600
	QG2	M22x1.5	SB-04QG2-2C3-STV-P	MC04-VP/V	steel	420 (6090)	35x34.6x104/40 (1.38x1.36x4.09/1.57)	0.75 (1.65)	22502100
06	A2	3/4-16 UNF	SB-06A2-2C3-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.57)	1.51 (3.33)	30122200
	B2	7/8-14 UNF	SB-06B2-2C3-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.57)	1.45 (3.20)	28064300
	QG2	M22x1.5	SB-06QG2-2C3-STV-P	MC06-VP/V	steel	420 (6090)	45x40x94/25.5 (1.77x1.57x3.70/1.01)	1.05 (2.32)	16758800

Dimensions in millimeters (inches)

Dual valve installation, 2-Way

3D picture shown is for illustration purpose only.

D1 (A,B->T)

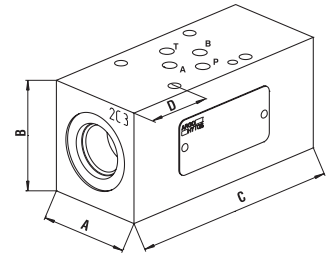
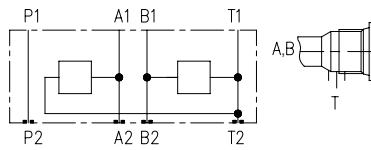


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-2D1-GV-B		cast iron	350 (5080)	36x40x98/37 (1.42x1.57x3.86/1.46)	0.85 (1.87)	29992200
	QG2	M22x1.5	SB-04QG2-2D1-STV-P	MD04-VP/V	steel	420 (6090)	35x35x76/36 (1.38x1.38x2.99/1.42)	0.75 (1.65)	22502200
06	A2	3/4-16 UNF	SB-06A2-2D1-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.50 (3.31)	28591400
	B2	7/8-14 UNF	SB-06B2-2D1-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.00 (2.21)	30755800
	QG2	M22x1.5	SB-06QG2-2D1-STV-P	MD06-VP/V	steel	420 (6090)	45x40x94/25.5 (1.77x1.57x3.70/1.01)	1.05 (2.32)	22950100
10	B2	7/8-14 UNF	SB-10B2-2D1-GV-B		cast iron	350 (5080)	45x50x100/23 (1.77x1.97x3.94/0.91)	2.21 (4.88)	34568000

D2 (T>A,B)

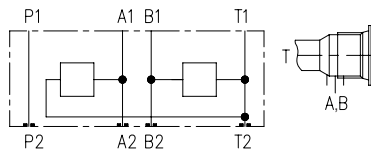


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	A2	3/4-16 UNF	SB-04A2-2D2-GV-B		cast iron	350 (5080)	36x40x98/37 (1.42x1.57x3.86/1.46)	0.50 (3.31)	28229200
	QG2	M22x1.5	SB-04QG2-2D2-STV-P	MF04-ROE3/V	steel	420 (6090)	35x40x96/36 (1.38x1.57x3.78/1.46)	0.82 (1.81)	28593200
06	A2	3/4-16 UNF	SB-06A2-2D2-GV-B		cast iron	350 (5080)	45x50x68/12.5 (1.77x1.97x2.68/0.49)	0.93 (2.05)	30855200
	B2	7/8-14 UNF	SB-06B2-2D2-GV-B		cast iron	350 (5080)	45x50x104/30.5 (1.77x1.97x4.09/1.20)	1.40 (3.09)	30143800
	QG2	M22x1.5	SB-06QG2-2D2-STV-P	MF06-ROE3/V	steel	420 (6090)	45x40x94/25.5 (1.77x1.57x3.70/1.01)	1.05 (2.32)	20690300

Dimensions in millimeters (inches)

Piloted valve installation, 3-Way

3D picture shown is for illustration purpose only.

A1 (A2->A1,B)

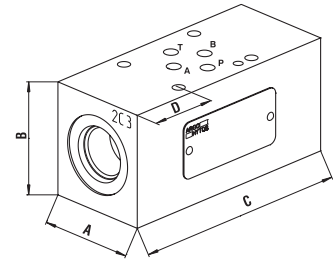
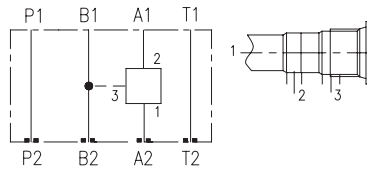


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	Q3	M20x1,5	SB-04Q3-1A1-GV-B		cast iron	350 (5080)	30x50x82/50 (1.18x1.97x3.23/1.97)	1.35 (2.98)	32475000
06	BP3	7/8-14UNF	SB-06BP3-1A1-GV-B		cast iron	350 (5080)	45x53x94.5/39.5 (1.77x2.09x3.72/1.56)	1.42 (3.13)	41072900
10	CP3	1-1/16-12 UF	SB-10CP3-1A1-GV-B		cast iron	350 (5080)	70x70x120 (2.76x2.76x4.72)	3.76 (8.29)	41722200

B1 (B2->B1,A)

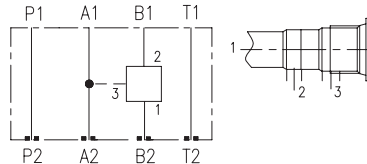


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	Q3	M20x1,5	SB-04Q3-1B1-GV-B		cast iron	350 (5080)	30x50x82/8 (1.18x1.97x3.23/0.32)	1.35 (2.98)	32043900
06	BP3	7/8-14UNF	SB-06BP3-1B1-GV-B		cast iron	350 (5080)	45x53x94.5/12 (1.77x2.09x3.72/0.47)	1.42 (3.13)	41054200
10	CP3	1-1/16-12 UF	SB-10CP3-1B1-GV-B		cast iron	350 (5080)	70x70x120 (2.76x2.76x4.72)	3.76 (8.29)	41723000

C2 (A2->A1,B; B2->B1,A)

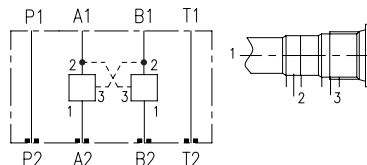


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
04	Q3	M20x1,5	SB-04Q3-2C2-GV-B		cast iron	350 (5080)	38x48.5x120/48 (1.50x1.91x4.72/1.89)	1.35 (2.98)	30846300
06	Q3	M20x1,5	SB-06Q3-2C2-GV-B		cast iron	350 (5080)	43,5x48.5x110/33.5 (1.71x1.91x4.33/1.32)	1.43 (3.16)	30851700
	R3	M27x1,5	SB-06R3-2C2-GV-B		cast iron	350 (5080)	46x70x150/49.5 (1.81x2.76x5.91/1.95)	2.90 (6.28)	30818000
	BP3	7/8-14UNF	SB-06BP3-2C2-GV-B		cast iron	350 (5080)	45x53x122/39.5 (1.77x2.09x4.80/1.56)	1.75 (3.86)	41047200
10	CP3	1-1/16-12 UF	SB-10CP3-2C2-GV-B		cast iron	350 (5080)	70x70x152 (2.76x2.76x5.98)	3.77(8.31)	41721800

CY2 (A2->A1,B B2->B1,A,Y->T)

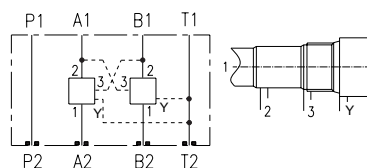


Plate size	Cavity size	Cavity thread	Ordering code	Ordering code - former	Plate material	Pressure bar (PSI)	Dimensions AxBxC/D mm (in)	Mass kg (lbs)	Ordering No.
06	BPY3	7/8-14 UNF	SB-06BPY3-2CY2-STV-B		steel	420 (6090)	45x60x148/52.5 (1.77x2.36x5.83/2.07)	2.62 (0.10)	43807900