

Valve Series Selection

DMIC's modular part numbering system lets designers precisely specify and override the connection style

DMIC has earned recognition for being able to furnish the customer's exact requirement quickly and accurately. We have fine-tuned the flow of our Factory to accommodate special and custom orders on the standard production line, and with this catalog release we now enable the Buyer to directly benefit from this flexibility with new DMIC Ordering Codes.

BVAL - 1000 SM - 4 3 2 1



The following valve models are replaced by connection options on a valve series:

BVFM, BVFH, BVSM, BVSH, BVF-S, BVFA, BVFD, BVAW

Fewer models with more connection choices

We have consolidated the previous 18 valve series into 9 series, and added a comprehensive connection option program.

You can now order any valve series with any connection style that is appropriate to the functional characteristics of the valve. Buyers of specialty products may even specify the connection style on an end-by-end basis, for production in days - not months.

For application and part number cross reference assistance please feel welcome to call the Factory toll-free at 1-800-248-3642.

Greater Commonality of Pre-Engineered Accessories, Seal Kits, and Actuation Options

It's now easier than ever to select, specify, and stock DMIC Valves and Accessories. In these updated designs, **we have paid specific attention to accessory commonality, resulting in fewer part numbers and lower cost for the Buyer.** Refer to the Accessory Selection section of the valve specification sheets for accessory part numbers and compatibility information.

Streamlined option codes and reapplication of previous solutions saves you time and money

For years, DMIC has formulated an online database of thousands of specialty valves under the part numbers in this catalog. Our Customer Care Reps are ready to quote you price and accurate delivery for standard production, AND special purpose valves.

New for 2001, almost all DMIC Ball Valve options including actuation and special mountings can be specified through Construction and Accessory codes.

Please see pages 10 through 13.

DMIC Ball Valve Series Cross Reference

Old Series	New Series	Description of Changes
BVL	BVAL	Upgraded design in lightweight aluminum, three geometries span size ranges from 1/2"-6", accepts SAE and ISO6149 'SSW' layout adapters.
BVH		Connection in thread and flange types is now specified with CONNECTION SUFFIX.
BVAM	BVAM	All new ! Design derived from BVAL lightweight series in carbon steel for 2000 PSI max. rated pressure.
BVAH		Connection in thread and flange types is now specified with CONNECTION SUFFIX.
BVHH	BVHH	All new ! Ultra heavy duty design derived from OEM water hydraulic series. Enhanced safety factor.
BV3D BV3L		Connection specified with CONNECTION SUFFIX. New 400 PSI version in aluminum.
BV3H BV4H	BV3H BV4H	All new ! Design upgraded from experience with aircraft/military OEMs
BVFM	BVH BVAH	Use connection suffix "FM" to select SAE 4-B C.61 Companion connection (UNC) on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVFH	BVH BVAH	Use connection suffix "FH" to select SAE 4-B C.62 Companion connection (UNC) on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVSM	BVH BVAH	Use connection suffix "SM" to select SAE Split Flange C.61 connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVSH	BVH BVAH	Use connection suffix "SH" to select SAE Split Flange C.62 connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVFM-SM	BVH BVAH	Use connection suffix "CM" to select Combo 4-Bolt/Split C.61 connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve..
BVFH-SH	BVH BVAH	Use connection suffix "CH" to select Combo 4-Bolt/Split C.62 connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVFA	BVH BVAH BVAL	Select connection suffix "A*" to correspond to desired ANSI Class Flange connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve. For Class 150 the BVAL valve can also be selected.
BVFD	BVH BVAH	Select connection suffix "D*" to correspond to desired DIN Class Flange connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVAW	BVH BVAH	Use connection suffix "W4" to select EZ-Weld Sch.40 Socket Weld connection on selected BVH (1/2"-1") or BVAH (1/4"-4") valve.
BVMM	BVMM BVMM-4	All new ! Design upgraded from experience with aircraft/military OEMs. New aluminum model (-411) for 3000 PSI use on aluminum manifolds.



Valve Size Selection

DMIC's Ball Valve product line includes sizes spanning commonly used pressure ranges from 1/4" to 6" and up

If merely being able to convert existing valves to meet your requirement were a satisfactory achievement to us, then DMIC's Engineering and Production departments would never have developed our unique factory architecture that lets standard and custom Ball Valve orders be manufactured side-by-side in our American Factory.

DMIC Ball Valves offer the industry's most flexible size range with deliveries that are often a fraction of what you would expect.

When your need for a specialty ball valve meets our modest production criteria, we will gladly design, prototype, test, and warranty the subject valve.

The result is reduced delivery times, development expense, and a direct partnership with the manufacturer which DMIC customers value greatly in those rare instances where the need for troubleshooting and corrections arise.

BVAL - 1000 SM - 4 3 2 1

Valve Size			Size Availability By Valve Series								
NOMINAL			LOW PRES.			HIGH PRESSURE					
Inch	Order Code	Metric	BVAL	BV3L	BVL Brass	BVAM	BVH	BV3D	BVAH	BVHH	BV3H BV4H
1/4"	0250	6 mm	☺	☺	☺		☺	☺			☺
3/8"	0375	10mm	☺	☺	☺		☺	☺			☺
1/2"	0500	12mm	☺	☺	☺		☺	☺		☺	☺
3/4"	0750	20mm	☺	☺	☺		☺	☺		☺	☺
1"	1000	25mm	☺	☺	☺		☺	☺		☺	☺
1 1/4"	1250	32mm	☺	☺	☺	☎	☺	☺	☺	☺	☺
1 1/2"	1500	40mm	☺	☺	☺	☎	☺	☺	☺	☺	☺
2"	2000	50mm	☺	☺	☺	☎	✗	☺	☺	☺	☺
2 1/2"	2500	60 mm	☺	☎	☎	☺		☎	☺		☎
3"	3000	75 mm	☺	☎	☎	☺		☎	☺		☎
4"	4000	100 mm	☺	☎	☎	☺		☎	☺		
5"	5000	125 mm	☺	☎		☺		☎	☎		
6"	6000	150 mm	☺	☎		☺		☎	☎		

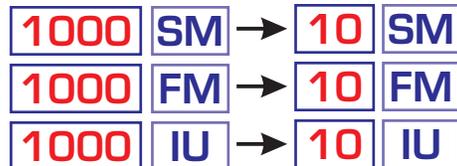
Customizing DMIC Valves

To specify "unlike connection" or step-size custom order valves, use DMIC "2+2" Ordering Codes

DMIC customers enjoy unparalleled availability of specialized and custom valves, in addition to stock offerings. We devised the "2+2 code" system to allow Buyers to uniformly specify unlike connections on otherwise standard valves.

Suppose you require a BV3D-1000 3-way diverter with one C.61 Split Flange connection for rigid mounting, one C.61 4-Bolt Companion port, and an ISO6149 Threaded port. Specifying this valve could become a nightmare (let alone the delivery waiting time from overseas), but not for DMIC customers. Please follow the example at right to see how this valve is requested, and how your quotation and production will proceed using the 2+2 codes and SAN system. To formulate a "2+2" code, take the FIRST TWO digits of the SIZE and append the CONNECTION CODE (next page).

- Determine the size and connection for each port of the valve. Contract into 2+2 codes:



It's easy!
Just chop the last two digits of the size code off and join up with the connection code

- Collate the connection codes (for multiway valves, in the published port sequence for accurate positioning at the Factory):



- Call your Distributor or DMIC with the composite valve p/n. We will search the SAN database and quote pricing/delivery. With your PO, if a SAN is req'd one will be assigned, and your valve is on the way!



Connection Availability

In-House Engineering and Manufacturing permits DMIC to furnish a wide variety of connection options

The previous 'BVMF', 'BVFH', 'BVSM', 'BVSH', 'BVF-S', 'BVFA', 'BVF-D', and 'BVAW' models are now specified as **connection options** on the selected valve series.

BVAL - 1000 **SM** - 4 3 2 1

Buyers may now specify the valve suitable to the application without being constrained by unnecessary connection restrictions. Valves checked with the "double diamond" below are composite valves made from threaded connections and 'SSW' / 'HSSW' System adaptors.

Connection Style		Connection Availability By Valve Series										
		LOW PRES.			HIGH PRESSURE							
Code	Desc	BVAL	BV3L	BVL Brass	BVAM	BVH	BV3D	BVAH	BVHH	BV3H	BV4H	BVMM
FEMALE THREADED CONNECTIONS												
S	SAE-F ORB	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	✗
N	NPT-F	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	✗
IU	ISO6149	☺	☺	✗	☺	☺	☺	☺	☺	☺	☺	✗
IA	ISO1179	☺	☺	✗	☺	☺	☺	☺	☺	☺	☺	✗
B	BSPP-F	☺	☺	☺	☺	☺	☺	☺	☺	☺	☺	✗
T	BSPT-F	☎	☎	✗	☎	☎	☎	☎	☎	☺	☺	✗
MALE THREADED CONNECTIONS												
MJ	JIC-M	☎	☎	✗	☎	☺	☺	☺	☎	☺	☺	✗
MD	DIN2353-M Tube (call)	☎	☎	✗	☎	☎	☎	☎	☎	☎	☎	✗
MS	SAE-M ORB (custom order)	☎	☎	✗	☎	☎	☎	☎	☎	☎	☎	✗
MN	NPT-M (custom order)	☎	☎	✗	☎	☎	☎	☎	☎	☎	☎	✗
SAE 4-BOLT COMPANION FLANGE												
FM	C.61 Companion, UNC Bolt Holes	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
FH	C.62 Companion, UNC Bolt Holes	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
GM	C.61 Companion, Metric B/H	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
GH	C.62 Companion, Metric B/H	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
SAE 4-BOLT STANDARD FLANGE												
FL	Universal C.61 Std., Thru B/H	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
FK	Universal C.62 Std., Thru B/H	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
SAE SPLIT FLANGE HEAD												
SM	SAE C.61 Split Flg Head	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
SH	SAE C.62 Split Flg Head	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
ANSI FLANGE												
AA	Class 150 (275 PSI @ 100°F)	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
AB	Class 300 (720 PSI @ 100°F)	✗	✗	✗	◊	☺	☺	☺	☎	◊	◊	✗
AC	Class 400 (960 PSI @ 100°F)	✗	✗	✗	◊	☺	☺	☺	☎	◊	◊	✗
AD	Class 600 (1440 PSI @ 100°F)	✗	✗	✗	◊	☺	☺	☺	☎	◊	◊	✗
AE	Class 900 (2160 PSI @ 100°F)	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
AF	Class 1500 (3600 PSI @ 100°F)	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
AG	Class 2500 (6000 PSI @ 100°F)	✗	✗	✗	☎	☺	☺	☺	☎	◊	◊	✗
DIN FLANGE												
DA	DIN 3202-F1 Flange, 4/8 Bolt	☎	☎	✗		☺	☺	☺	☎	◊	◊	✗
DB	DIN 3202-F4 Flange, 4/8 Bolt	☎	☎	✗		☺	☺	☺	☎	◊	◊	✗
DMIC REPAIRABLE/ORIENTABLE SOCKET WELD CONNECTION												
W4	Socket Weld for Pipe	◊	◊	✗	◊	☺	☺	☺	☎	◊	◊	✗
MANIFOLD MOUNT, 2- AND 3-WAY												
n/a	DMIC 2-Way Industry Std. Pad	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	☺
n/a	DMIC 3-Way Industry Std. Pad	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	☺



Construction Codes

Buyers may easily specify optional material and physical features by appending a 4-digit suffix

DMIC Construction Codes are designed to be as universal as possible across the Ball Valve product line. Each of four positions determines the construction of a particular part of the valve.



Body Material
 Ball & Spindle Material
 Ball Seal Materials
 O-Ring & Backup Seal Materials

Refer to Spec Sheets for Standard Configuration by Valve Series

Standard materials are demonstrated in the Ordering Codes Summary for each series. Based on the service pressure and design intent of a particular valve model, DMIC supplies valves made from aluminum or steel with Delrin or PTFE ball sealing. Buna-N elastomer seals are standard on all DMIC Ball Valves.

Symbol Legend

- ☺ = Standard feature for this valve series
- ☑ = Rapid Delivery Option
- ☎ = Call to confirm leadtime
- ✕ = Not Available
- ◇ = Composite valve (made with SSW/HSSW)

Material Description		Availability By Valve Series										
Description	Code	LOW PRES.			HIGH PRESSURE							
		BVAL	BV3L	BVL Brass	BVAM	BVH	BV3D	BVAH	BVHH	BV3H	BV4H	BVMM
BODY MATERIAL - POSITION 1												
Carbon Steel	1	✕	✕	✕	☺	☺	☺	☺	☺	☺	☺	☺
Stainless Steel	2	☎	☎	✕	☑	☑	☑	☑	☑	☑	☑	☑
Brass	3	✕	✕	☺	✕	✕	✕	✕	✕	✕	✕	✕
Aluminum	4	☺	☺	✕	✕	✕	✕	✕	✕	✕	✕	☑
BALL AND SPINDLE MATERIAL - POSITION 2												
Carbon Steel	1	✕	✕	✕	☺	☺	☺	☺	☺	☺	☺	☺
Stainless Steel	2	✕	✕	✕	☑	☑	☑	☑	☑	☑	☑	☑
Brass	3	☺	☺	☺	✕	✕	✕	✕	✕	✕	✕	✕
THERMOPLASTIC BALL SEAL MATERIAL - POSITION 3												
Delrin	1	☑	☑	✕	☺	☺	☺	☺	☺	☺	☺	☺
PTFE Teflon (1500 PSI max)	2	☺	☺	☺	☑	☑	☑	☑	☑	☑	☑	☑
n/a - reserved	3	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
High Temp 400°F max	4	☑	☑	✕	☑	☑	☑	☑	☑	☑	☑	☑
n/a - reserved	5	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
Ultra Low Friction	6	☎	☎	✕	☑	☑	☑	☑	☑	☑	☑	☑
Glass Reinforced PTFE	7	☎	☎	✕	☑	☑	☑	☑	☑	☑	☑	☑
Hostile Media	9	☎	☎	✕	☎	☎	☎	☎	☎	☎	☎	☎
ELASTOMER O-RING SEAL MATERIAL - POSITION 4												
Buna-N	1	☺	☺	✕	☺	☺	☺	☺	☺	☺	☺	☺
EPR	2	☑	☑	✕	☑	☑	☑	☑	☑	☑	☑	☑
Viton	3	☑	☑	✕	☑	☑	☑	☑	☑	☑	☑	☑
High Temperature	4	☑	☑	✕	☑	☑	☑	☑	☑	☑	☑	☑

