

Data Sheet

Test valve
Type **MBV 5000**

Heavy duty marine applications



The pressure test valve, type MBV 5000 is a part of the block concept which has been developed to save space, weight and costs. The test valve is intended for use in many applications, for example monitoring, alarm indication, shut-down, diagnosing on equipment such as motors, gears, thrusters, pumps, filters, compressors etc.

The block valve is designed in many different configurations for use in the marine industry. The valve meets demands for fast installation, simple isolation and easy test pressure connection. In addition to the test valves the block concept consists of block pressure and temperature controls – type MBC, block pressure transmitters – type MBS and accessories.

The test valves meet the strict demands on marine equipment, including EU stipulations on such products.

Features

- Compact design
- Many configuration possibilities
- Low installation cost
- Fast and easy to operate
- Aluminum version suitable for liquid media only. Stainless steel version for liquid and air

Product specification

Technical data

Table 1: Performance

Pressure	Operating pressure	0 – 180 bar 0 – 60 bar ⁽¹⁾
	Burst pressure	720 bar 240 bar ⁽¹⁾
Temperature	Operating temperature	-20 – 120 °C
	Ambient temperature	-20 – 120 °C
	Temperature of medium	-20 – 120 °C

⁽¹⁾ For 061B7055 MBV 5000-2211S only

Table 2: Mechanical specification

Material	Housing	AW-6082T6 (AlMgSi1)
	Nipple	AW-6082T6 (AlMgSi1)
	Ball	Stainless steel 1.4404
	Gasket	PEEK/FPM
Material for stainless steel version	Housing	Stainless steel 1.4401
	Nipple	Stainless steel 1.4401
	Ball	Stainless steel 1.4404
	Gasket	PEEK/FPM
Pressure connection	Input	G 1/4
	Output	Flange / M5 x 8

Standard specification and code numbers

Table 3: Pressure connection: G 1/4. Test pressure connection: M16 x 2

Type no.	Symbol	Type	Output no.	Weight [kg]	Length [mm]	Height [mm]	Width [mm]	Code no.	
MBV5000-1111		DANFOSS A93Z02.11	1	x1	0.40	36	80	40	061B7000
MBV5000-1111S			1	x1	0.85	36	80	40	061B7051
MBV5000-1211			1	x2	0.80	76	80	40	061B7001
MBV5000-1311			1	x3	1.20	116	80	40	061B7002
MBV5000-1411			1	x4	1.60	156	80	40	061B7003
MBV5000-1511			1	x5	2.00	196	80	40	061B7004
MBV5000-2211		DANFOSS A93Z03.11	2	x2	0.80	76	80	40	061B7005
MBV5000-2211S			2	x2	2.00	76	80	40	061B7055
MBV5000-2311			2	x3	1.20	116	80	40	061B7006
MBV5000-2411			2	x4	1.60	156	80	40	061B7007
MBV5000-2511				2	x5	2.00	196	80	40
MBV5000-3211		DANFOSS A93Z04.11	3	x2	0.70	76	80	40	061B7009
MBV5000-3311			3	x3	1.00	116	80	40	061B7010
MBV5000-3411			3	x4	1.30	156	80	40	061B7011
MBV5000-3511			3	x5	1.60	196	80	40	061B7012



Test pressure connection



Shut-off valve

Code numbers for standard flange → G $\frac{1}{8}$ (aluminium) or G $\frac{1}{4}$ (stainless steel)

Table 4: Aluminium adapters

Description	Code no.
Cover	061B720066
Angleway adapter	061B720166
Straightway adapter	061B720266

Table 5: Stainless steel adapters

Description	Code no.
Angleway adapter	061B721766
Straightway adapter	061B720866

Dimensions [mm]

Figure 1: Test valve

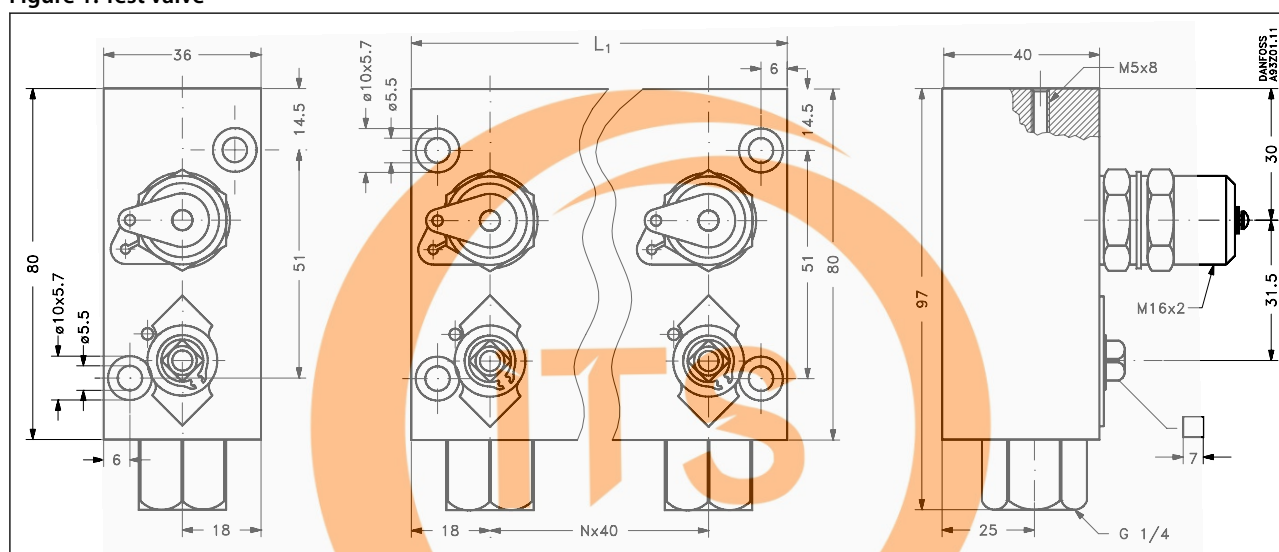


Table 6: Test valve

Outputs	1	2	3	4	5
L _i [mm]	36	76	116	156	196

Figure 2: Adapters (aluminium version)

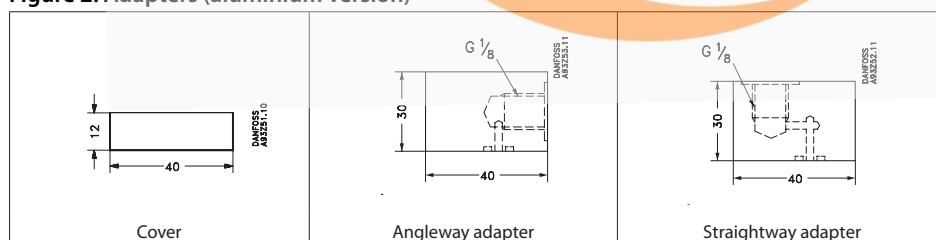
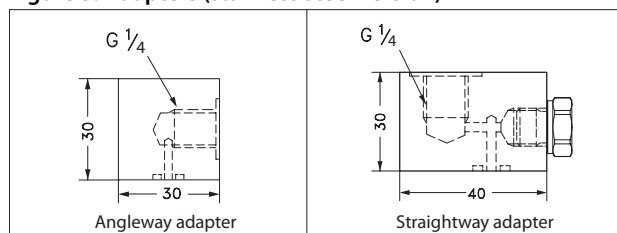


Figure 3: Adapters (stainless steel version)



Ordering

Ordering special versions

Type no: MBV 5000-	x	x	x	x	x
					— 6082 (AlMgSi1) version S Stainless steel (1.4401) version x Other
Type					Pressure connection
Separate inputs and separate test functions	1			1	G 1/4
Common input and separate test functions	2			2	M10 × 1
Common input and common test function	3			x	Other
Other	x				
Number of outputs (n)					Test pressure connection
1 Output (only for type 1)		1	0		Hole plug G 1/4
2 Outputs		2	1		Pressure gauge connection M16 × 2
3 Outputs		3	x		Other
4 Outputs		4			
5 Outputs		5			
Other		x			

Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.

Table 7: Declarations and approvals

File name	Document type	Document topic	Approval authority
EAC RU Д-ДК.БЛ08.В.03644	EAC Declaration	Machinery & Equipment	EAC