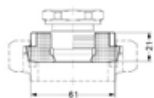


## Accessories & spare parts - pressure transmitters

### Connection adapters - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Conn. std.	Application
Accessory bag	060-333266	20	0.06	ISO 228-1	KPS / CAS
Accessory	060G0252	6	0.11	-	MBS G 1/2
Welding nipple	060G2501	60	0.21	-	MBS 4510
Accessory	060G2505	45	0.21	DIN 11851 Dairy DN 40	MBS 4510
Accessory	060G2506	20	0.42	DIN 11851 Dairy DN 50	MBS 4510
Accessory	060G2502	45	0.16	Clamp ISO 2852 G1 1/2	MBS 4510
Accessory	060G2510	24	0.37	Clamp ISO 2852 G 2	MBS 4510
Accessory	060G2503	45	0.19	SMS 1145 G 1 1/2	MBS 4510

### Damping coils - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Conn. type	Conn. size	Conn. std.	Capillary tube length [mm]	Prot. tube mat.	Application
Armoured damping coil	060-333366	15	0.22	Pipe thread	G 3/8 A	ISO 228-1	1.000 mm	-	CAS
Damping coil	060-016966	14	0.20	Pipe thread	G 1/2 A	ISO 228-1	1.000 mm	Stainless steel	MP
Damping coil	060-104766	25	0.17	Pipe thread	G 3/8 A	ISO 228-1	1.500 mm	-	CAS / KP

### Plug-in displays - for pressure transmitters



Type	Code No	Pack Size	Weight [kg]	Description	Electrical connection [kg]
MBD 1000	060G2850	23	0.11	Plug-in display unit MBD	EN 175301-803

### MBV 2000 isolation valves - for pressure transmitters



The MBV 2000 isolation valve is designed for mounting between a Danfoss pressure transmitter and fluid-filled systems and offers a fast and efficient method of connection and removal. The isolation valve automatically closes when a pressure transmitter is removed, so transmitters can be changed easily without having to first drain a system. The valve re-opens when a transmitter is connected. The valve meets demands for fast installation, simple and effective isolation and easy connection.

- Operating pressure: Up to 600 bar
- Burst pressure: 1500 bar
- Temperature: -20° C to 200° C
- Wetted parts: All metal parts in contact with medium DIN 17440-1.4404 (AISI 316L)
- Gasket: Viton
- Designed to fit between Danfoss pressure transmitters and fluid-filled systems and offers a fast and efficient method of connection and removal of Danfoss products

Type	Code No	Pack Size	Weight [kg]	Ext. connection	Width across flats [mm]	Max. working pressure [bar]	Max. burst pressure [bar]	Operating temp. [°C]
MBV 2000	061B6001	60	0.11	G 1/4 A DIN3852E	24 mm	600,0 bar	1500 bar	-20 - 200 °C
MBV 2000	061B6002	60	0.11	G 1/2 A DIN3852E	30 mm	600,0 bar	1500 bar	-20 - 200 °C
MBV 2000	061B6003	60	0.12	G 1/2 A DIN3852E	30 mm	600,0 bar	1500 bar	-20 - 200 °C

# Plug-in display, type MBD 1000 for pressure/temperature transmitters with output 4-20 mA

## Introduction



A microprocessor controlled plug-in display that can be universally applied to all MBS, AKS and MBT transmitters with a 4-20 mA output and DIN 43650 plug.

The MBD 1000 is simply inserted between the transmitter and its connector by means of the integral DIN cubic plug adaptor.

Measurement range, decimal point and filtering can be comfortably adjusted with 3 push-button keys after removal of the front cover.

The display provides a simple and effective solution for local monitoring of pressure and temperature.

## Features

- Polarity protected
- No auxiliary energy source required
- Can be tilted to any position
- High accuracy and minimal temperature drift
- Easy installation
- Instant monitoring of transmitter
- CE approved

## Technical data

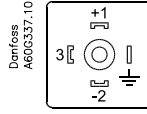
Input signal	4 - 20 mA (2-wire)
Max. allowed input current	40 mA
Reverse voltage protection	polarized installation
Voltage drop	approx. 3 V
Display	10 mm high LCD-display
Display range	start and end value freely programmable
Maximum display value	9999
Minimum display value	-1999
Decimal point	any position
Measuring accuracy	0.2% ± 1 digit
Temperature drift	100 ppm / °C
Measuring interval	approx. 3 measurements / sec.
Filtering	selectable in 3 stages
Nominal temperature	25°C
Ambient temperature	0 to 50°C
Humidity	0 to 80% RH (non condensing)
Electromagnetic compatibility additional error	according to EN61000-6-2 and EN61000-6-3 < 1%
Housing Dimensions	ABS. Front screen made of polycarbonate 48.5 x 48.5 x 35.5 mm (L x W x D)
Connection	DIN 43650 adaptor
IP rating	IP65

## Ordering

Type	Code no.
MBD 1000	<b>060G2850</b>

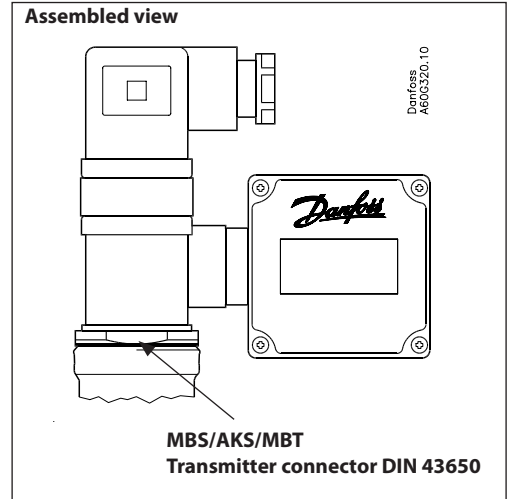
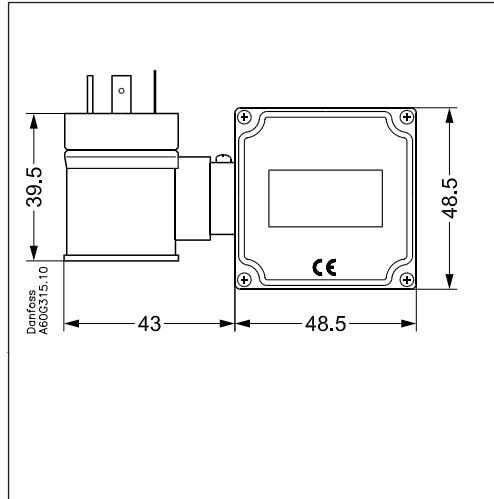
Electrical connection

Pin assignment of 4-pin adaptor plug according to DIN 43650



Pin	
1	Supply +
2	Supply -
3	NC
	Connection to transmitter housing

Dimensions



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## MBV 5000 test valves - for MBS and MBC



The MBV 5000 is a part of a block concept covering block pressure switches, block pressure transmitters, block test valves and accessories.

The block concept has been developed to save space, weight, and costs and meet the strict demands on marine equipment, including EU stipulations on such products.

MBV 5000 is designed in many different configurations for use in many different marine applications, for example: Monitoring, alarm indication, shut-down, diagnosing on equipment such as motors, gears, thrusters, pumps, filters, compressors, etc.

The block valve meets demands for fast installation, simple isolation, and easy test pressure connection.

- The MBV block valves designed in many configurations are for use with the MBC pressure switch or the MBS block pressure transmitter within the marine industry
- The valve meets demands for fast installation, simple isolation and easy test pressure connection

Type	Code No	Pack Size	Weight [kg]	Inputs	Outputs	Ball valves	Pressure conn.	Test pressure conn.	Test function
MBV 5000	061B7000	15	0.43	1	1	1	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7001	18	0.87	2	2	2	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7002	12	1.32	3	3	3	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7005	18	0.86	1	2	2	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7006	12	1.31	1	3	3	G 1/4 DIN3852-E	M16 x 2	Separate
MBV 5000	061B7009	18	0.79	1	2	1	G 1/4 DIN3852-E	M16 x 2	Common
MBV 5000	061B7010	12	1.12	1	3	1	G 1/4 DIN3852-E	M16 x 2	Common

## Miscellaneous accessories & spare parts - for MBV

Type	Code No	Pack Size	Weight [kg]	Conn. size	Conn. std.	Conn. type	Application
Adaptor	061B720601	70	0.11	G 1/4	ISO 228-1	Pipe thread	MBV 5000
Adaptor	061B720201	70	0.11	G 1/8	ISO 228-1	Pipe thread	MBV 5000

## Miscellaneous accessories & spare parts - for pressure transmitters

Type	Code No	Pack Size	Weight [kg]	El. conn.	Conn. std.
PLUG	060G1034	8	0.39	Plug with 5 meter cable (EN 145301-803)	DIN 43650-A
PLUG	060G0007	8	0.03	Pg 11 plug (EN 145301-803)	-
PLUG	060G0005	8	0.06	Pg 13.5 plug (EN 145301-803)	DIN 43650
PLUG	060G0008	8	0.03	Pg 9 plug (EN 145301-803)	-

**Introduction**



The MBV 2000 isolation valve is designed for mounting between Danfoss pressure transmitters with DIN 3852 - E pressure connection and fluid-filled systems and offers a fast and efficient method of connection and removal.

The isolation valve automatically closes when a transmitter is removed, so transmitters can be changed easily without having to first drain a system. The valve re-opens when a transmitter is connected.

The valve meets demands for fast installation, simple and effective isolation and easy connection.

**Technical data**

*Performance*

Pressure:  
 Operating pressure: Up to 600 bar.  
 Burst pressure: 1500 bar.

Temperature:  
 Operating temperature: -20°C to 200°C

*Materials*

Wetted parts:  
 All metal parts in contact with the medium:  
 DIN 17440-1.4404 (AISI 316 L)

Gasket:  
 Viton

System medium:  
 The valve is impervious to fuel oil, oil, water and air.  
 It is not recommended for use with petroleum, combustible gasses or corrosive chemicals.

*Mounting*

Packaging:  
 Isolation valves are supplied with two plastic protective covers which should be removed prior to use.

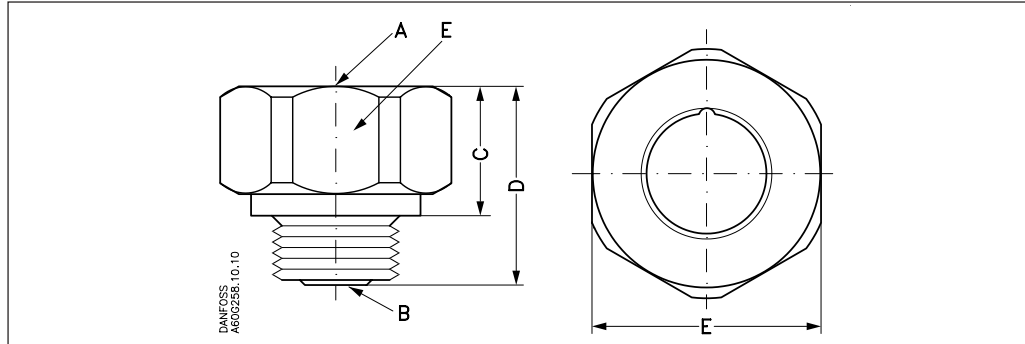
Locking/fixing:  
 For safety, it is essential that the isolation valve is thoroughly secured to the system prior to connecting/disconnecting a transmitter. The valve must not become loose when a transmitter is being removed.

Fitting & removal:  
 It is recommended to remove or fit transmitters at a system pressure below 40 bar.

Application note:

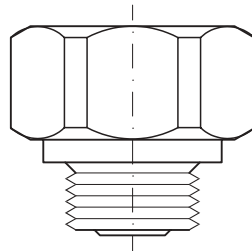
The MBV 2000 must only be used to connect Danfoss transmitters with a pressure connection in compliance to DIN-3852-E.

Specification and code numbers for standard types



A	B	C	D	E	Code no.	Type
G $\frac{1}{4}$ DIN 3852	G $\frac{1}{4}$ A DIN 3852-E	17.5 mm	29.4 mm	24	<b>061B6001</b>	MBV 2000-111
G $\frac{1}{4}$ DIN 3852	G $\frac{1}{2}$ A DIN 3852-E	15.4 mm	29.4 mm	30	<b>061B6002</b>	MBV 2000-123
G $\frac{1}{2}$ DIN 3852	G $\frac{1}{2}$ A DIN 3852-E	20.4 mm	34.4 mm	30	<b>061B6003</b>	MBV 2000-223
G $\frac{1}{4}$ DIN 3852	$\frac{1}{4}$ -18 NPT DIN 3866-A	16.4 mm	29.4 mm	24	<b>061B6004</b>	MBV 2000-131

Ordering of special versions



Type no: **MBV 2000-**

Female thread:

- G $\frac{1}{4}$  DIN 3852 ..... 1
- G $\frac{1}{2}$ \* DIN 3852 ..... 2
- Others ..... X

Male thread:

- G $\frac{1}{4}$  DIN 3852-E ..... 1
- G $\frac{1}{2}$ \* DIN 3852-E ..... 2
- $\frac{1}{4}$ -18 NPT DIN 3866-A ..... 3
- Others ..... X

Width across flats:

- E 24 ..... 1
- E 27 ..... 2
- E 30 ..... 3
- Others ..... X

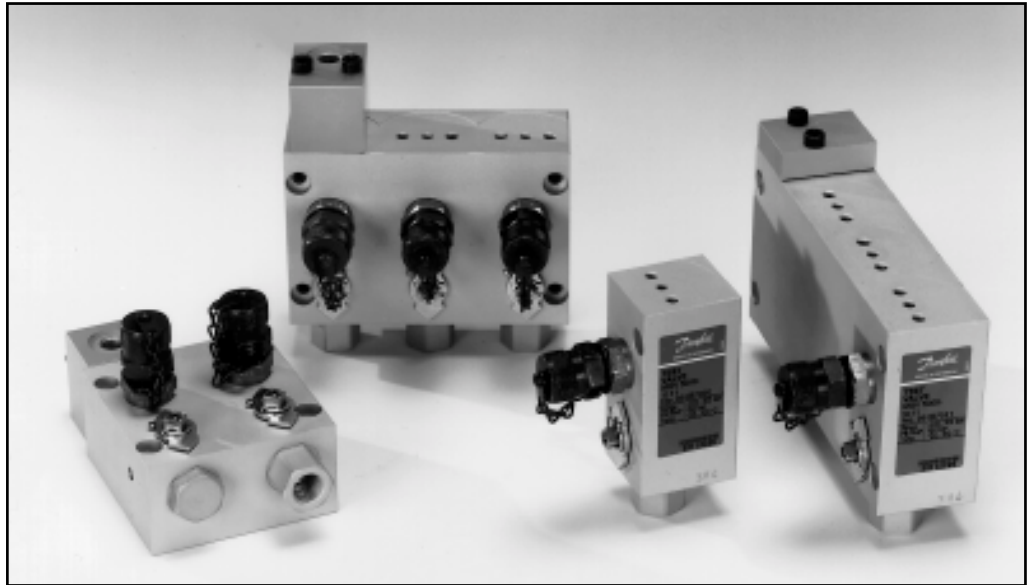
\* E 27 & E 30 only

Ordering of special versions will impose an additional cost and extended delivery times. Minimum order quantity: 12 parts.

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# Pressure test valve MBV 5000

Danfoss block components



The block concept has been developed to save space, weight, and costs. The product 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 range contains block pressure controls, block pressure transmitters, block test valves and accessories.

The concept meets the strict demands on marine equipment, including EU stipulations on such products.

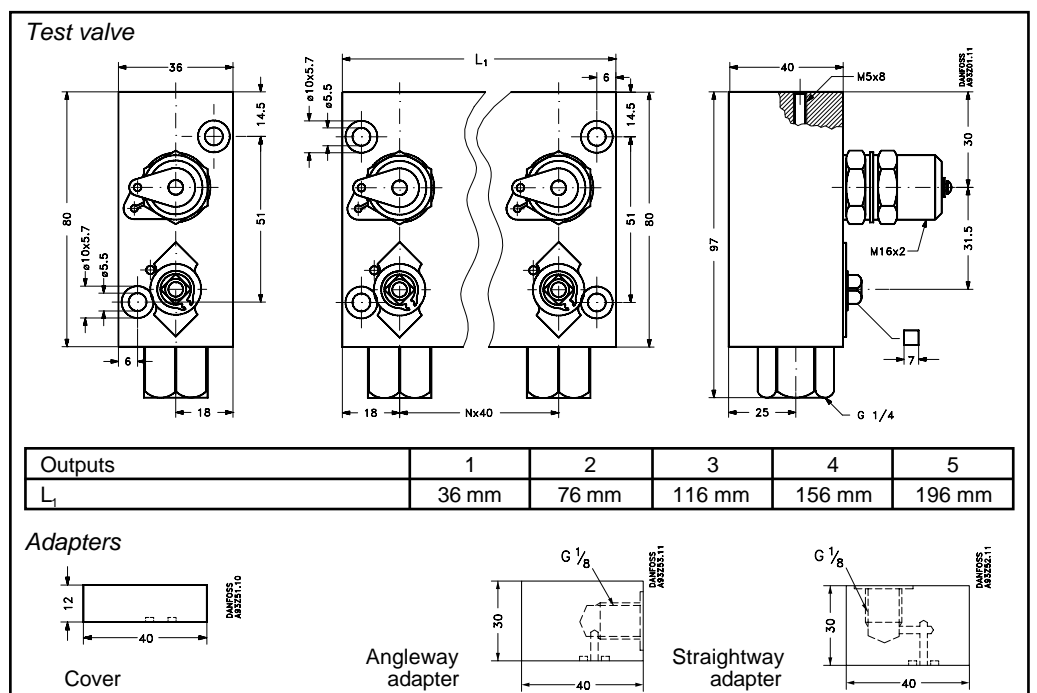
## Block valve MBV 5000

MBV 5000 is a block valve 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.

### Advantages

- Compact design
- Light material
- Many configuration possibilities
- Low installation costs
- Fast and easy to operate

## Dimensions



## Technical data

## Performance

Pressure	Overload pressure Burst pressure Operating pressure	180 bar 250 bar 0 to 120 bar
Temperature	Operating temperature Ambient temperature Temperature of medium	-20 to 120°C -20 to 120°C -20 to 120°C

## Mechanical

Material	Housing Nipple Ball Gasket	Anodized AlMgSi1 AlMgSi1 1.4571 PEEK/FPM
Pressure connection	Input Output	G 1/4 Flange / M5 x 8

## Specification and code numbers for standard types

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

Symbol	Type	Output no.	Weight kg	Length mm	Height mm	Width mm	Type no.	Code no.
	1	x1	0.4	36	80	40	MBV5000-1111	<b>061B7000</b>
		x2	0.8	76	80	40	MBV5000-1211	<b>061B7001</b>
		x3	1.2	116	80	40	MBV5000-1311	<b>061B7002</b>
		x4	1.6	156	80	40	MBV5000-1411	<b>061B7003</b>
		x5	2.0	196	80	40	MBV5000-1511	<b>061B7004</b>
	2	x2	0.8	76	80	40	MBV5000-2211	<b>061B7005</b>
		x3	1.2	116	80	40	MBV5000-2311	<b>061B7006</b>
		x4	1.6	156	80	40	MBV5000-2411	<b>061B7007</b>
		x5	2.0	196	80	40	MBV5000-2511	<b>061B7008</b>
			3	x2	0.7	76	80	40
x3	1.0			116	80	40	MBV5000-3311	<b>061B7010</b>
x4	1.3			156	80	40	MBV5000-3411	<b>061B7011</b>
x5	1.6			196	80	40	MBV5000-3511	<b>061B7012</b>

Test pressure connection

Shut-off valve

## Code numbers for standard flange → G 1/4 adapters

Description	Code no.
Cover	<b>061B7200</b>
Angleway adapter	<b>061B7201</b>
Straightway adapter	<b>061B7202</b>

## Ordering special versions

Type no: MBV 5000-

Type	x	x	x	x	Pressure connection
Separate inputs and separate test functions	1			1	G 1/4
Common input and separate test functions	2			2	M10 x 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 x 2
3 Outputs	3	X			Other
4 Outputs	4				
5 Outputs	5				
Other	X				