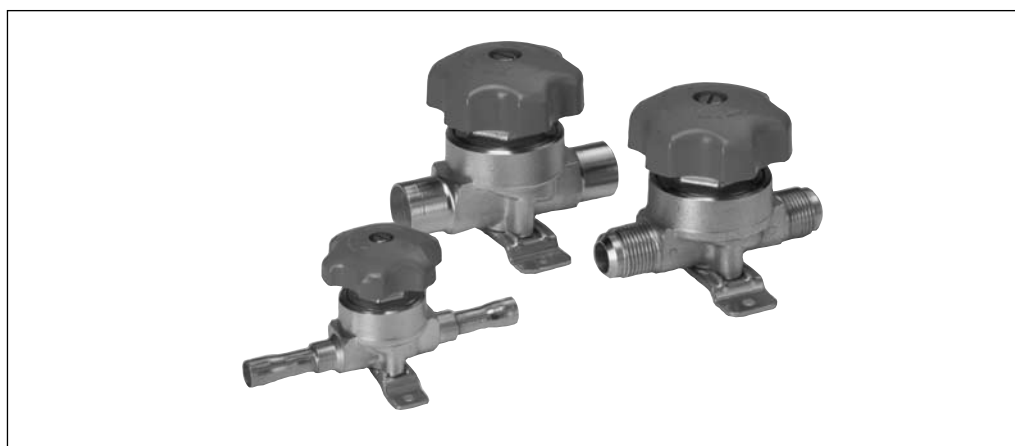


**Refrigerant Valve  
Shut-off valves,  
type BM**

## Introduction



The BM is a manual shut-off valve designed for installation in the liquid, suction and hot gas lines of refrigeration plant.

## Features

- Can be used for all fluorinated refrigerants
- Fitted with three stainless steel diaphragms that prevent leakage throughout the operating life of the valve.
- Valve plate of polyamide nylon to give complete shut-off with minimum torque.
- Valve cover with counter-seat to prevent the ingress of moisture.

## Technical data

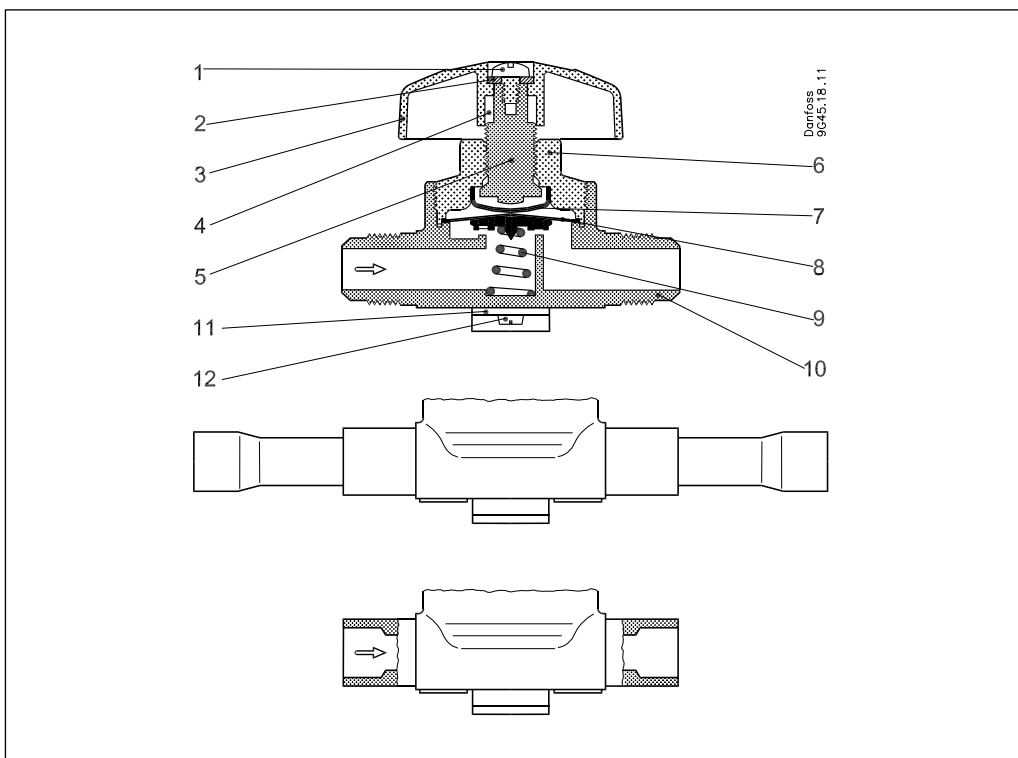
Temperature range	-55 → +100°C
Working range	$\Delta p = -1 \rightarrow 21$ bar
Max. working range	PS = 28 bar
Max. test pressure	$p' = 30.8$ bar
Approvals	

## Ordering

## BM with hand wheel

Version	Type	Connection	Code no.			$k_v$ -value <sup>1)</sup> m <sup>3</sup> /h
			 Flare	 ODF solder	 ODF extended ends	
Straightway	BML 6	1/4 in.	<b>009G0101</b>	<b>009G0102</b>	<b>009G0202</b>	0.3
		6 mm		<b>009G0108</b>	<b>009G0208</b>	
	BML 10	3/8 in.	<b>009G0127</b>	<b>009G0122</b>	<b>009G0222</b>	0.84
		10 mm		<b>009G0128</b>	<b>009G0228</b>	
	BML 12	1/2 in.	<b>009G0141</b>	<b>009G0142</b>	<b>009G0242</b>	1.5
		12 mm		<b>009G0148</b>	<b>009G0248</b>	
	BML 15	5/8 in.	<b>009G0168</b>	<b>009G0162</b>	<b>009G0262</b>	2.2
		16 mm		<b>009G0170</b>		
	BML 18	3/4 in.	<b>009G4004</b>	<b>009G0181</b>	<b>009G4009</b>	2.9
		18 mm		<b>009G0184</b>		
BML 22	7/8 in.		<b>009G0191</b>	<b>009G0291</b>	2.9	
	22 mm		<b>009G0194</b>			
Three-way	BMT 6	1/4 in.	<b>009G0105</b>			0.3

Design / Function



- 1. Screw
- 2. Washer
- 3. Handwheel
- 4. Driver
- 5. Spindle
- 6. Cover
- 7. Thrust pad
- 8. Diaphragm with valve plate
- 9. Spring
- 10. Valve body
- 11. Bracket
- 12. Screw

The shut-off valves are fitted with three diaphragms all of stainless steel which ensure long operating life.

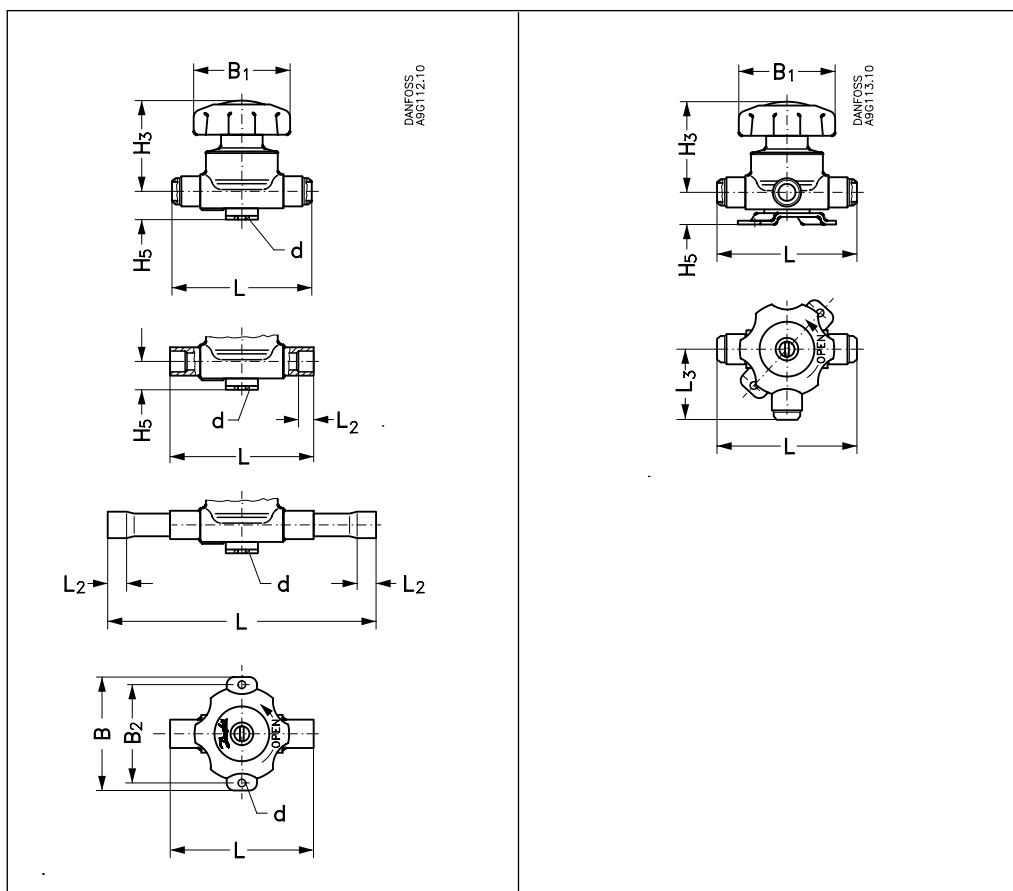
BM valves are available in straightway, and three-way versions. The three-way version side connection can be shut off, but the end connections will always remain open. The BM can be fitted with a mounting bracket. Valve body, cover and spindle are made of brass, the handwheel (3) of coloured plastic. BM valves have a triple diaphragm seal (8) which is designed in such a way that the tension in the diaphragms lift the valve plate from the seat when the valve is opened.

The valve plate itself is made of nylon and gives complete shut-off when the handwheel is lightly tightened.

The thrust pad (7) prevents direct contact between spindle (5) and diaphragms (8). This also contributes to increased valve life. The spring (9) is able to hold the valve open at operating pressures down to -1 bar (pe).

The counter-seat in the cover (6) prevents the ingress of moisture in fully open position. When the valve is opened, the pressure on the outlet side must not exceed the pressure on the inlet side by more than 1 bar.

Dimensions and weights



Version	Type	H <sub>3</sub> mm	H <sub>5</sub> mm	L mm	L <sub>2</sub> mm	L <sub>3</sub> mm	B mm	B <sub>1</sub> mm	B <sub>2</sub> mm	Ø d mm	Weight kg
Flare	BM 6	46	19	77			62	50	50	5	0.3
	BM 10	49	16	85			62	50	50	5	0.4
	BM 12	56	18	102			70	60	56	6	0.5
	BM 15	66	20	118			83	71	69	6	0.7
	BMT 6	46	19	77		32.5	62	50	50	5	0.3
ODF solder	BM 6	46	17	65	7		62	50	50	5	0.3
	BM 10	49	16	72	9		62	50	50	5	0.4
	BM 12	56	18	87	10		70	60	56	6	0.5
	BM 15	66	20	106	12		83	71	69	6	0.7
	BM 18-22	67	22	103	17		83	71	69	6	0.8
ODF solder extended ends	BM 6	46	19	117	7		62	50	50	5	0.3
	BM 10	49	16	117	9		62	50	50	5	0.4
	BM 12	56	18	127	10		70	60	56	6	0.5
	BM 15	66	20	165	12		83	71	69	6	0.7
	BM 18-22	67	22	181	17		83	71	69	6	0.8

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