

Data sheet

Shut-off Valve Types BML and BMT



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 HCFC, HFC and HC 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	$\Delta p = -1 - 21$ bar
Max. working pressure	PS/MWP = 28 bar/406 psig
Max. test pressure	Pe = 36.4 bar/528 psig

Approvals

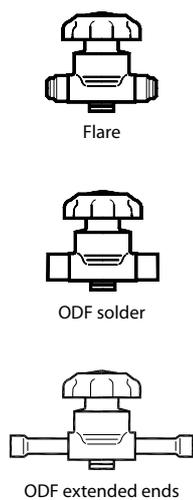
UL
CE

Ordering

Straightway version

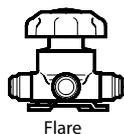


Only solder versions are allowed for flammable refrigerants



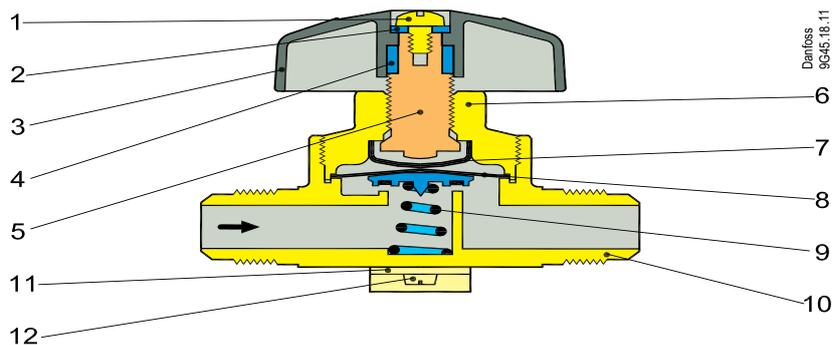
Type	Connection	Code no.			K _v value (calculated value) [m ³ /h]
		Flare	ODF solder	ODF extended ends	
BML 6	1/4 in.	009G0101	009G0102	009G0202	0.3
	6 mm	—	009G0108	009G0208	0.3
BML 10	3/8 in.	009G0127	009G0122	009G0222	0.84
	10 mm	—	009G0128	009G0228	0.84
BML 12	1/2 in.	009G0141	009G0142	009G0242	1.5
	12 mm	—	009G0148	009G0248	1.5
BML 15	5/8 in.	009G0168	009G0170	009G0262	2.2
	16 mm	—	009G0170	009G0262	2.2
BML 18	3/4 in.	—	009G0181	—	2.9
	18 mm	—	009G0184	—	2.9
BML 22	7/8 in.	—	009G0191	009G0291	2.9
	22 mm	—	009G0191	009G0291	2.9

Threeway version



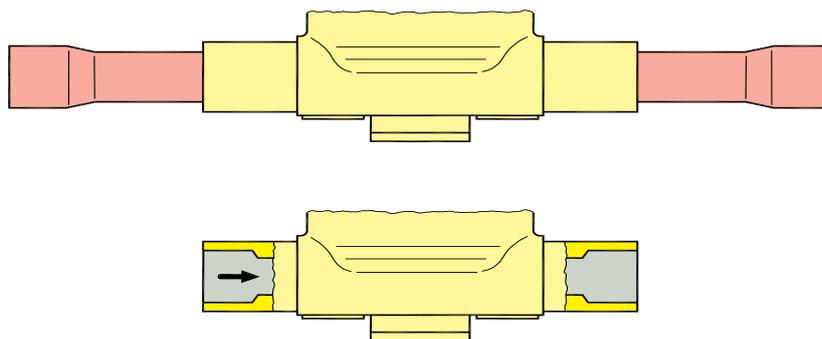
Type	Connection	Code no.			K _v value (calculated value) [m ³ /h]
		Flare	ODF solder	ODF extended ends	
BMT 6	1/4 in.	009G0105	—	—	0.3

Design / Function



Danfoss
96345,18,11

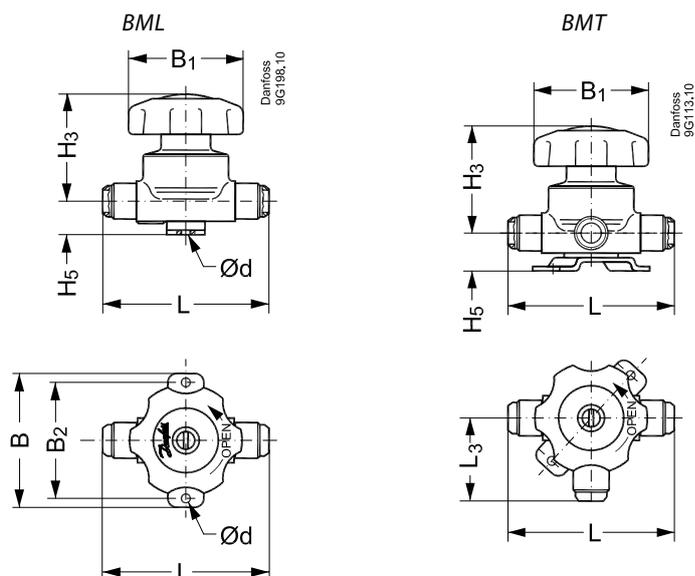
- 1. Screw
- 2. Washer
- 3. Handwheel
- 4. Driver
- 5. Spindle
- 6. Cover
- 7. Thrust pad
- 8. Diaphragm with valve plate
- 9. Spring
- 10. Valve body
- 11. Bracket
- 12. Screw



The shut-off valves are fitted with three diaphragms of stainless steel which ensure long operating life. BM valves are available in straightway, and three-way versions (BMT). The side connection of the three-way BMT 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.

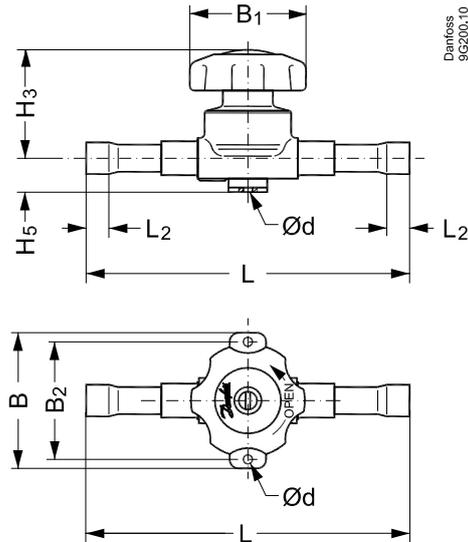
Dimensions [mm]
and weights [g]



Flare version

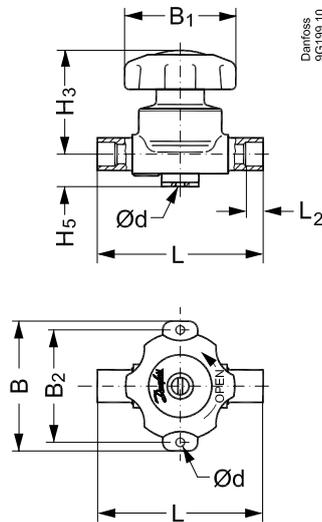
Type	H ₃	H ₅	L	L ₃	B	B ₁	B ₂	Ød	Net weight
BML 6	46	15	77	—	62	50	50	5	290
BML 10	49	15	85	—	62	50	50	5	328
BML 12	56	18	102	—	70	60	56	6	568
BML 15	66	19	118	—	83	71	69	6	846
BMT 6	46	19	65	32.5	62	50	50	5	290

Dimensions [mm]
and weights [g]



ODF solder extended ends version

Type	H ₃	H ₅	L	L ₂	B	B ₁	B ₂	Ød	Net weight
BML 6	46	17	117	7	62	50	50	5	282
BML 10	49	16	117	9	62	50	50	5	312
BML 12	55	18	128	10	70	60	56	6	522
BML 15	66	20	165	12	83	71	69	6	816
BML 22	66	22	181	17	83	71	69	6	902



ODF solder version

Type	H ₃	H ₅	L	L ₂	B	B ₁	B ₂	Ød	Net weight
BML 6	46	17	65	7	62	50	50	5	274
BML 10	49	16	72	9	62	50	50	5	308
BML 12	55	18	87	10	70	60	56	6	508
BML 15	65	20	106	12	83	71	69	6	790
BML 18	66	22	103	14	83	71	69	6	816
BML 22	66	22	103	17	83	71	69	6	828

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