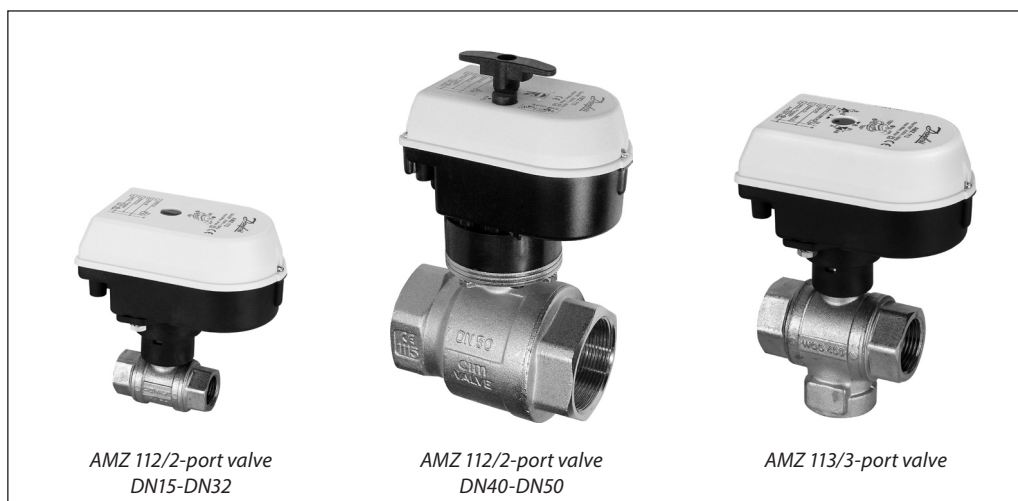


Data sheet

ON/OFF zone valves (PN 16)

AMZ 112, AMZ 113

Description



The ON/OFF zone valves type AMZ 112 and AMZ 113 are typically used in connection with:

- Domestic and commercial central heating applications
- Domestic hot water applications
- Solar energy plants
- Priority control of hot water supply and heating (diverting function)
- Priority control of boiler and solid fuel installations (diverting function).

The ON/OFF zone valves can be applied together with most Danfoss Room Thermostats, particularly type RET 230 (single poled switch) and programmable Room Thermostats type TP 5000/7000. Other compatible room thermostats are available, please see www.danfoss.com/heating for details.

The actuator can be controlled by a SPST or SPDT switch.

The limit stop switch can be used for start/stop of a fan or a circulation pump in an entirely open valve.

Ordering

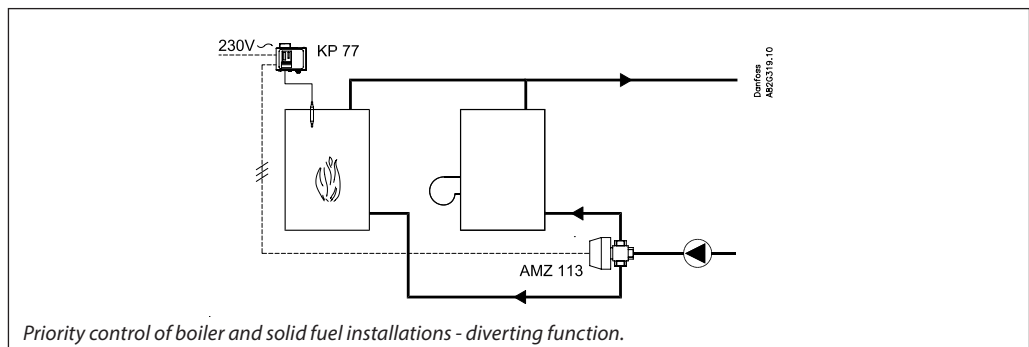
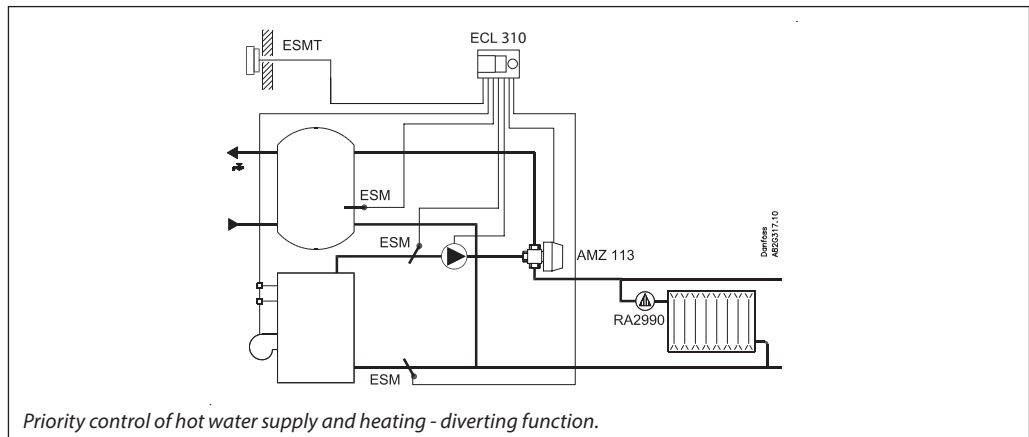
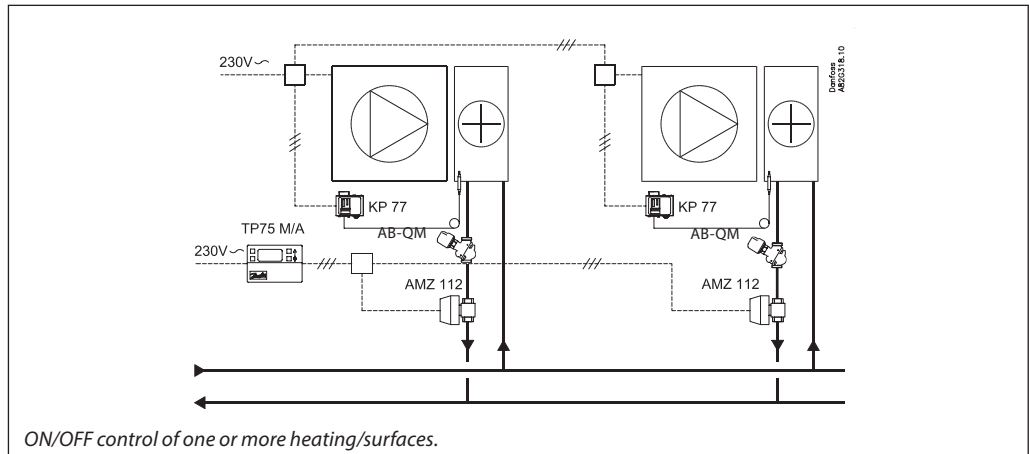
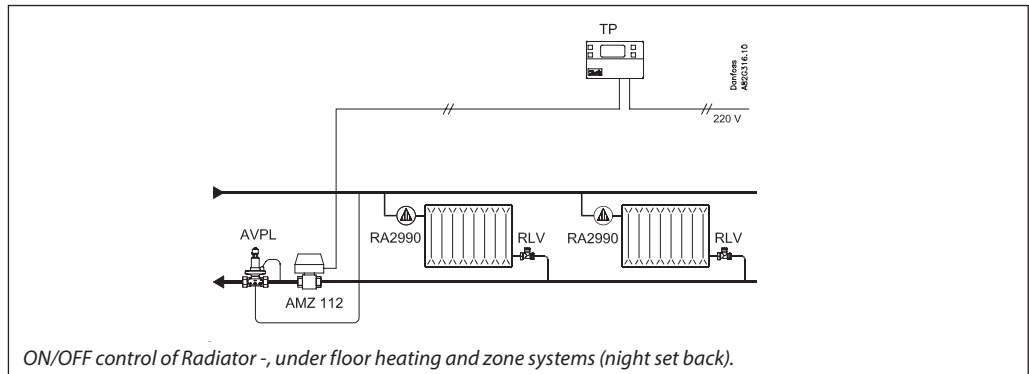
AMZ 112 2-port valve/actuator

DN	k _{vs} (m ³ /h)	Connection	Max. Δp Valve	Code No.	
				230 V	24 V
15	17	R _p ½	6 bar	082G5501	082G5520
20	41	R _p ¾		082G5502	082G5521
25	68	R _p 1		082G5503	082G5522
32	123	R _p 1¼		082G5514	082G5523
40	198	R _p 1½		082G5515	082G5524
50	290	R _p 2		082G5516	082G5525

AMZ 113 3-port valve/actuator

DN	k _{vs} (m ³ /h)	Connection	Max. Δp Valve	Code No.	
				230 V	24 V
15	3,8	R _p ½	6 bar	082G5511	082G5526
20	7,7	R _p ¾		082G5512	082G5527
25	11,6	R _p 1		082G5513	082G5528

Application principles



Technical data

Actuator

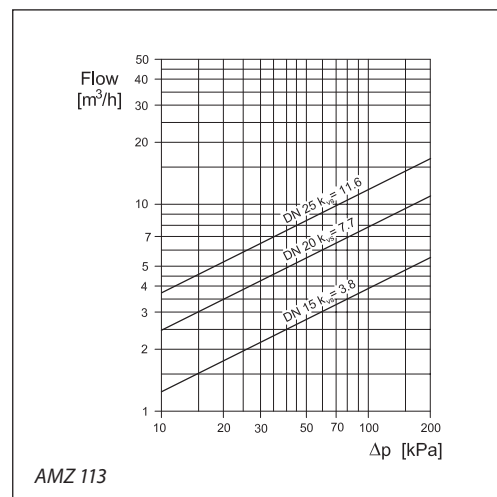
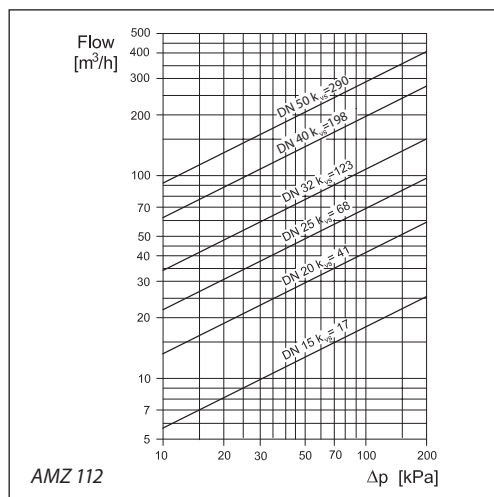
Type	AMZ 112 (230 VAC, DN 15-32)	AMZ 112 (230 VAC, DN 40/50)	AMZ 113 (230 VAC)
Supply voltage	230 V, 50/60 Hz		
Micro switch	1 (1) A, 250 VAC		
Power consumption	9,3 VA @ By operation 5 VA @ Open position 0 VA @ Closed position	9 VA @ By operation 5 VA @ Open position 0 VA @ Closed position	9,3 VA @ By operation 5 VA @ Open position 0 VA @ Closed position
Electrical protection class	Class II acc. EN-60335-1		
Enclosure	IP 44 acc. IEC 60529		
Rotation time	30 sec/90°	32 sec/90°	60 sec/90°
Ambient temperature	0 ... 50 °C		
Humidity	RH 0 % ... 80 % Non condensed		
Wire	4 x 0,5 mm ² , L= 1,5 m	4 x 0,5 mm ² , L= 2 m	4 x 0,5 mm ² , L=1,5 m

Type	AMZ 112 (24 VAC, DN 15-32)	AMZ 113 (24 VAC)
Supply voltage	24 V, 50 Hz	
Micro switch	1 (1) A, 250 VAC	
Power consumption	6 VA @ By operation 1 VA @ Open position 0 VA @ Closed position	
Electrical protection class	Class II acc. EN-60335-1	
Enclosure	IP 44 acc. IEC 60529	
Rotation time	30 sec/90°	60 sec/90°
Ambient temperature	0 ... 50 °C	
Humidity	RH 0 % ... 80 % Non condensed	
Wire	4 x 0,5 mm ² ; L= 1,5 m	4 x 0,5 mm ² ; L= 1,5 m

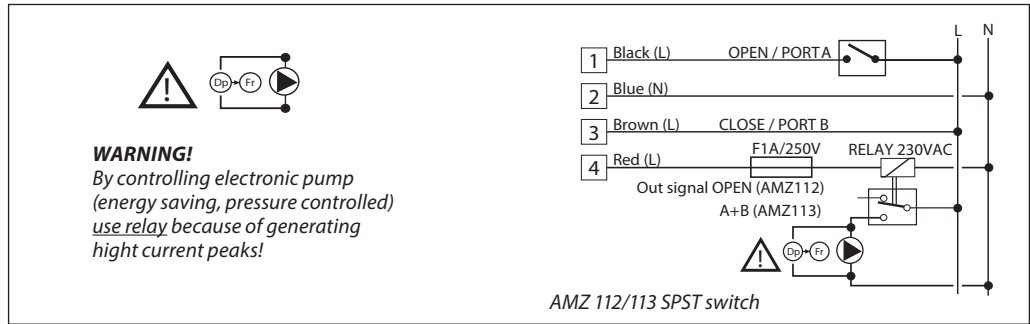
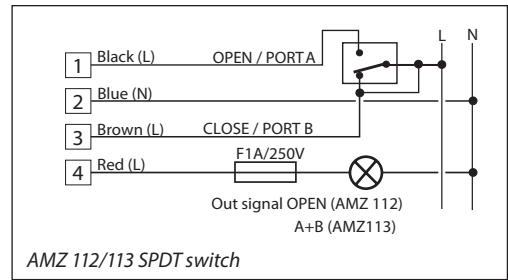
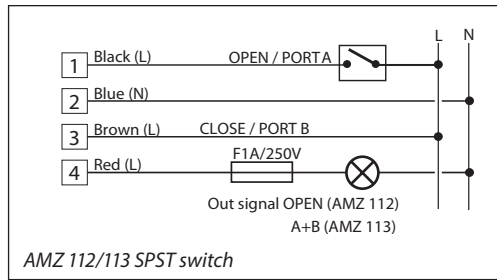
Valve

Type	AMZ 112, AMZ 113
Medium temperature	2 ... 130 °C
Nominal pressure	PN 16
Medium	Circulation water/glycolic water up to 30 %
Max. operating torque	8 Nm
Max. Δp valve	6 bar
Materials	
Body - stem	Hot stamped brass CuZn40Pb2 Ni plated
Ball	Hot stamped brass CuZn40Pb2 Cr plated
Gaskets	PTFE - FPM - EPDM
Connection	Internal thread Rp ISO 7/1

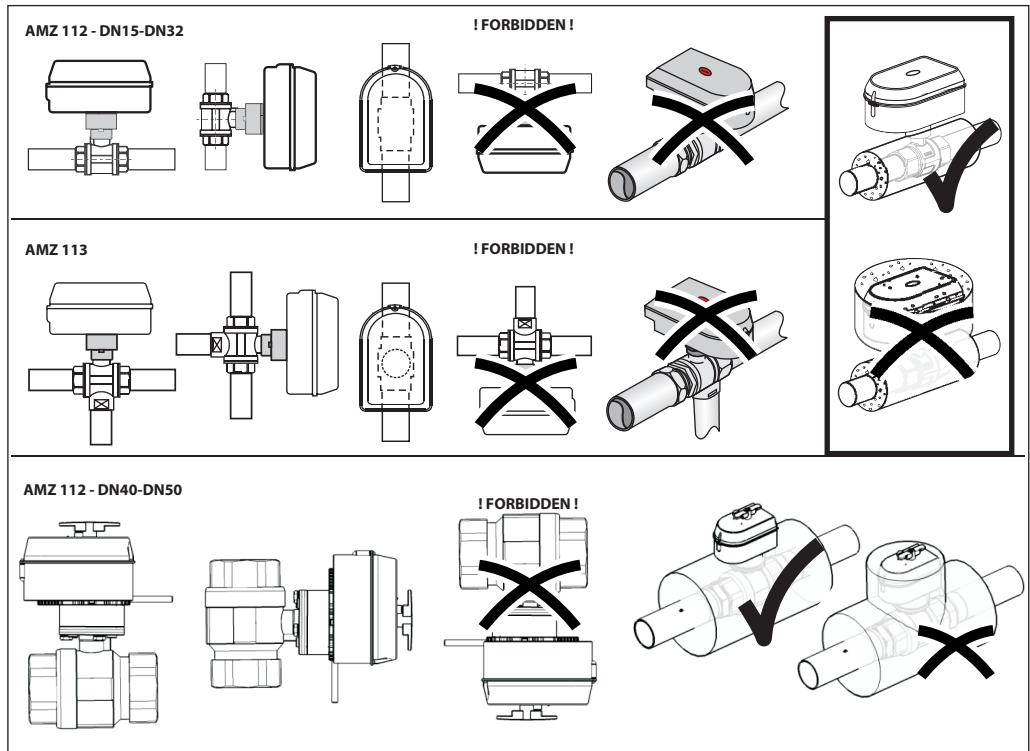
Sizing



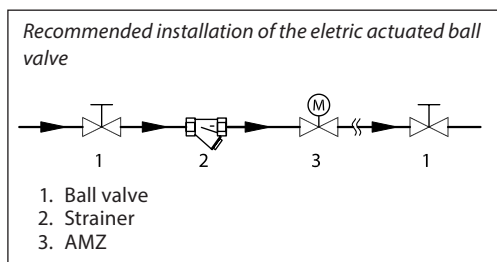
Wiring



Installation positions



Hydraulic installation



Manual control

Manual control - AMZ 1 12, DN15-DN32

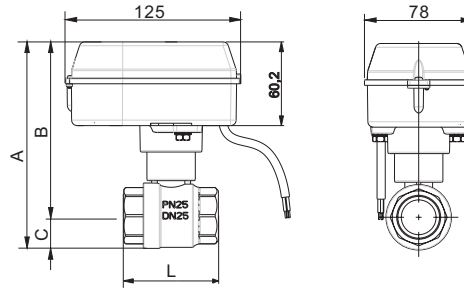
Manual control - AMZ 1 13

Manual control - AMZ 1 12, DN40, DN50

Note:
When button for manual operating is in <MAN> position, actuator stays in temporary position irrespective of control signal.

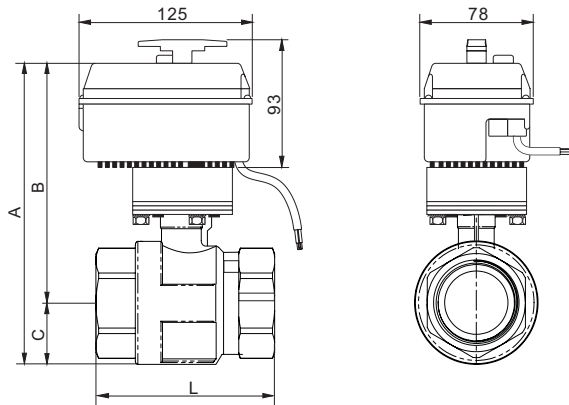
Dimensions

AMZ 112, DN 15-32



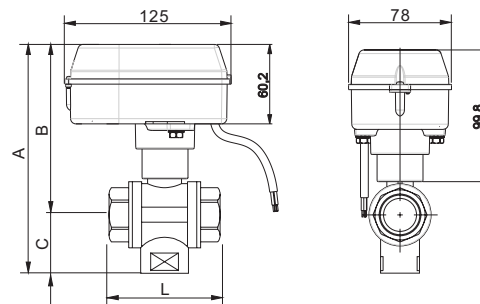
DN	Connection	A	B	C	L	Weight (kg)
	G	mm				
15	1/2"	139	121,5	17,5	63	0,84
20	3/4"	144	124,5	19,5	57	0,81
25	1"	153	129,5	23,5	68	0,97
32	1 1/4"	163	134,5	28,5	81	1,24

AMZ 112, DN 40/50



DN	Connection	A	B	C	L	Weight (kg)
	G	mm				
40	1 1/2"	212	176	36	107,5	2,32
50	2"	228	184	44	125	3,23

AMZ 113



DN	Connection	A	B	C	L	Weight (kg)
	G	mm				
15	1/2"	152	118	34	64	0,88
20	3/4"	164	125	39	74	1,10
25	1"	175	130	45	87	1,40

