

AquaNet^{Plus}® AC/DC

The professional electric/hydraulic valve line

FEATURES

- **Agriculture:** for all applications
- **Landscape:** for all applications
- **Industry:** water supply system

BENEFITS

- Patented hydraulic 3-way control
- Designed to operate with all types of water, including effluent water (2 mm command orifice)
- Wide pressure & flow range
- Manual override: CLOSE-AUTO-OPEN
- Built-in pressure regulator with adjustable knob 0.7 – 4.5 bar (optional 1 1/2" & 2" Electrical models only)
- Low energy consumption for maximal wire distance
- Flow control handle – standard on all models
- EPDM diaphragm resistant against chemicals used in agriculture



3/4" – 1"
electric
AC & DC



1 1/2" – 2"
Globe
electric
AC & DC w/ or
w/o pressure
regulator



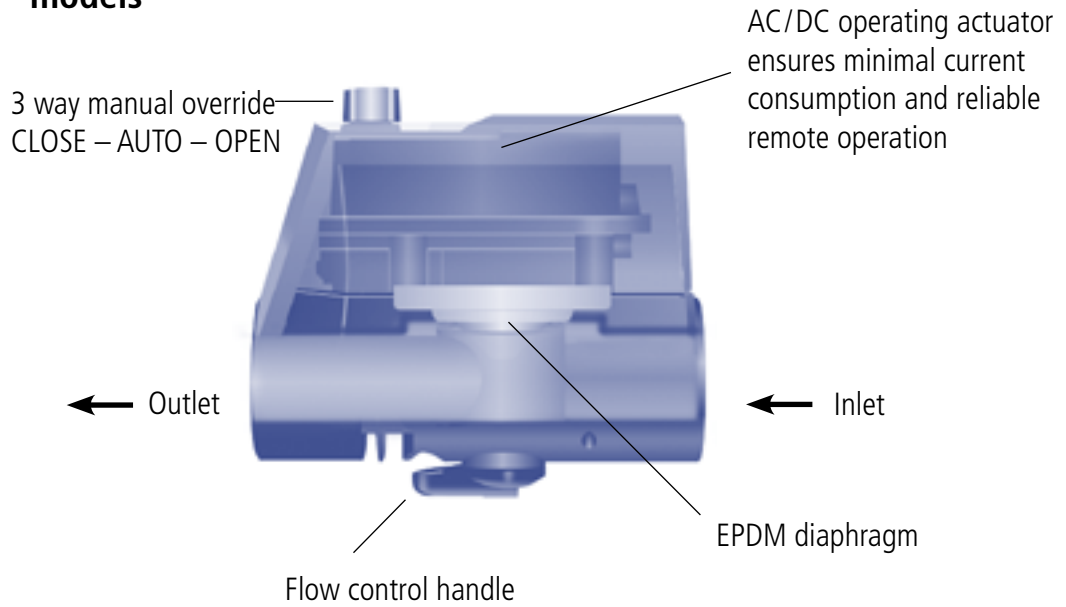
1 1/2" – 2"
Angle
electric
AC & DC w/ or
w/o pressure
regulator



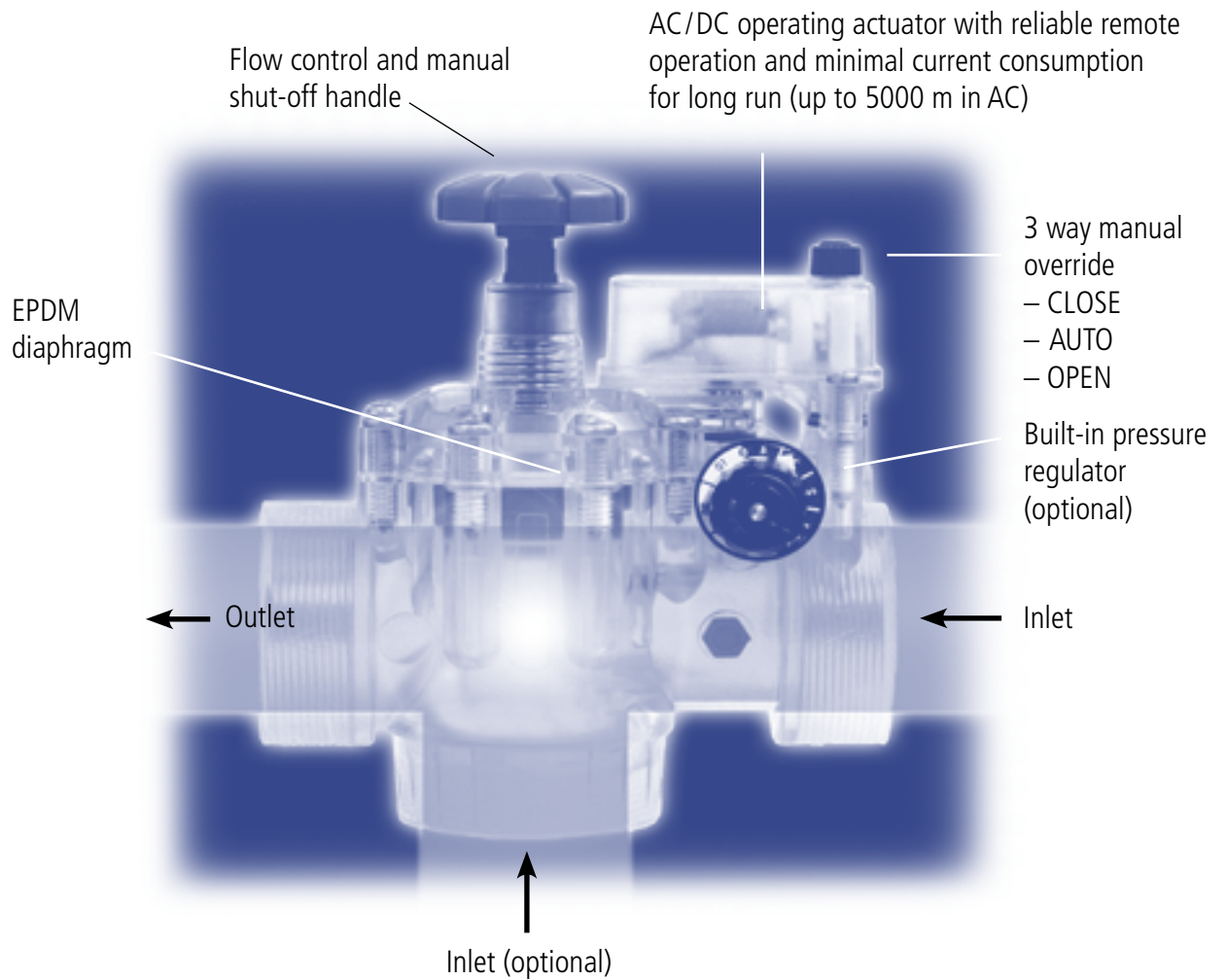
1 1/2" – 2"
Angle / Globe
Hydraulic

CONTROL VALVES

3/4" & 1" models



1 1/2" & 2" models



GENERAL SPECIFICATIONS

3/4" & 1" globe models

Flow:	0.025 – 7.0 m ³ /h
Working pressure:	0.2 -10 bar
Ambient temp. max:	60°C (140°F)
Fluid temp. max:	60°C (140°F)
Plastic parts:	Reinforced nylon
Diaphragms:	EPDM
Leads:	2 x AWG 22 (80 cm)

1 1/2" & 2" globe & angle models

Flow:	0.1 – 34.0 m ³ /h
Working pressure:	0.3 -10 bar
Ambient temp. max:	60°C (140°F)
Fluid temp. max:	60°C (140°F)
Plastic parts:	Reinforced nylon
Diaphragms:	EPDM
Leads:	2 x AWG 22 (120 cm)

Pressure Regulating Range: 0.7-4.5 bar
(1 1/2" & 2" electric models only)

ELECTRICAL SPECIFICATIONS 24VAC

Voltage:	18-28 VAC
Inrush:	90 mA
Holding:	75 mA

- In AC models, 2-5 seconds delay from command to activation

Max. distance between Aquanet^{Plus} AC and controllers

Cable gauge (awg)	diameter (mm)	cross section (mm ²)	max. distance (m)
20	0.8	0.5	1250
18	1.0	0.8	2000
17	1.1	1.0	2500
16	1.3	1.3	3500
15	1.4	1.5	5000

ELECTRICAL CONNECTIONS

3/4" & 1" DC Red + /Black common

3/4" & 1" AC Black/Black

1 1/2" & 2" DC Orange + /Black & white common

1 1/2" & 2" AC Black & white/Black & white

(changing DC wire connections will change NC to NO)

It is recommended to isolate wires connections from water to prevent corrosion).

Aquanet^{Plus} DC is compatible with most DC latch controllers MOTOROLA, ELDAR-GAL ,TALGIL, PROGRES with two or three wire output (3-to-2 wire converter). For specific models please contact your Netafim representative.

ELECTRICAL SPECIFICATIONS DC

Discharge capacitor mode

Voltage:	12-40 VDC
Min. pulse width:	80 ms

Recommended working condition capacitor mode

Voltage (VDC)	Capacitor (µf)	Min. pulse (ms)
12-18	4700	80
18-28	3300	80
28-40	2200	80

Max. distance between Aquanet^{Plus} DC valves and controller (13.5 VDC, 80 ms, 4700 µ f)

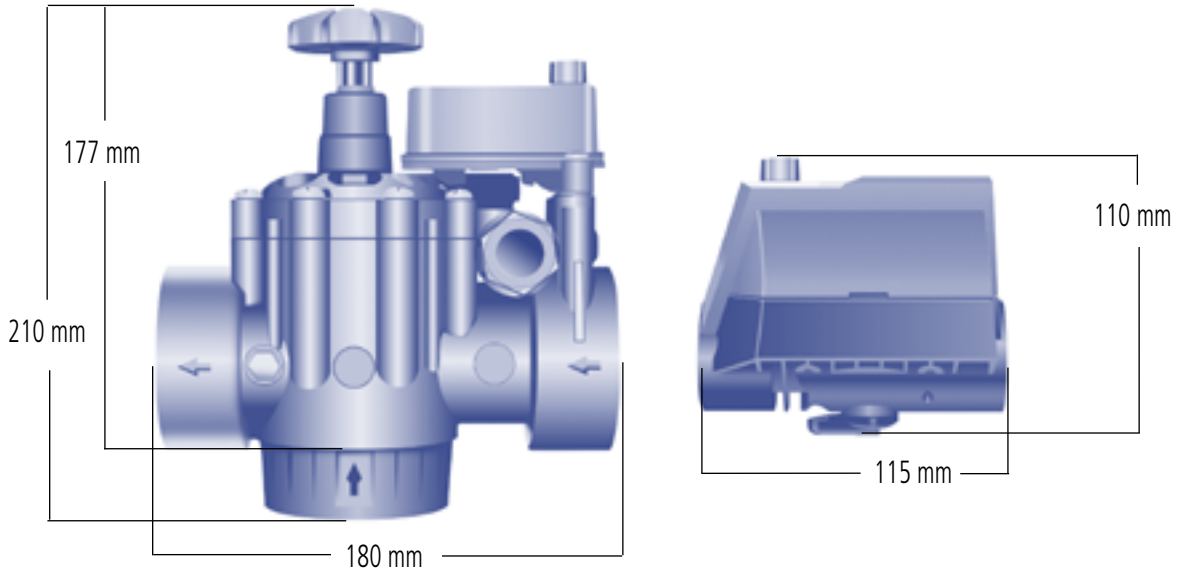
Cable gauge (awg)	diameter (mm)	cross section (mm ²)	max. distance (m)
20	0.8	0.5	150
17	1.1	1.0	240
15	1.4	1.5	380

— HEAD LOSS (m) Flow m³/l —

Model	1	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
3/4" G	1.00	1.30	2.00	2.50	4.50														
1" G	1.00	1.30	2.00	2.40	4.00														
1 1/2" G	0.52	0.64	0.77	0.92	1.28	1.70	2.21	2.79	3.46	4.22	5.06	6.00	7.00	8.17	9.41	10.75	12.20	13.77	15.46
1 1/2" A	0.90	0.93	0.98	1.05	1.23	1.48	1.80	2.18	2.64	3.18	3.79	4.49	5.26	6.12	7.06	8.08	9.20	10.40	11.70
1 1/2" A-G	0.00	0.10	0.40	0.70	1.30	1.92	2.57	3.25	3.98	4.76	5.61	6.53	7.54	8.64	9.84	11.16	12.6	14.17	15.90
1 1/2" HYG	0.36	0.36	0.42	0.43	0.72	1.06	1.49	2.04	2.68	3.44	4.30	5.26	6.33	7.50	8.77	10.15	11.63	13.22	14.90
1 1/2" HYA	-	-	0	0	0.30	0.57	0.87	1.21	1.60	2.04	2.52	3.05	3.63	4.26	4.94	5.67	6.45	7.28	8.18
2" G	0.63	0.74	0.86	1.00	1.33	1.71	2.16	2.69	3.28	3.96	4.72	5.56	6.50	7.54	8.67	9.91	11.26	12.72	14.30
2" A	1.41	1.30	1.23	1.18	1.15	1.23	1.41	1.68	2.04	2.50	3.03	3.65	4.35	5.12	5.97	6.88	7.85	8.89	9.99
2" A-G	1.40	1.69	1.97	2.25	2.80	3.35	3.92	4.50	5.12	5.77	6.48	7.24	8.00	8.99	9.98	11.09	12.30	13.60	15.06
2" HYG	-	-	-	0	0.38	0.83	1.34	1.93	2.60	3.34	4.16	5.07	6.06	7.15	8.33	9.60	10.97	12.45	14.02
2" HYA	-	0.02	0.06	0.12	0.27	0.47	0.73	1.04	1.40	1.81	2.28	2.80	3.36	3.98	4.65	5.37	6.14	6.96	7.84

- G = Globe • A = Angle • A-G = Angle valve globe flow • HYG = Hydraulic globe valve • HYA = Hydraulic angle valve

MEASUREMENTS



ORDERING GUIDE

Model	AC	DC	BSP	NPT	Globe	Angle	w/ P/R	w/ F/C
3/4"	+	+	+	+	+			+
1"	+	+	+	+	+			+
1 1/2"	+	+	+	+	+	+	+	+
1 1/2" hydr.			+	+	+	+		+
2"	+	+	+	+	+	+	+	+
2" hydr.			+	+	+	+		+

Example: Aquanet^{Plus} 1" electric valve, DC, BSP.

Remarks:

- * Aquanet^{Plus} 3/4" and 1" models available in globe type only.
- ** Pressure regulated available in 1 1/2" and 2" electric models only.

PACKAGING DATA

Model	Quantity	Dimensions (cm)	Weight (kg)
Aquanet ^{Plus} 3/4", 1"	12	47.0x26.0x12.0	4.45
Aquanet ^{Plus} 1 1/2" G	1	21.5x12.5x19	1.18
Aquanet ^{Plus} 1 1/2" A	1	21.5x12.5x19	1.29
Aquanet ^{Plus} 2" G	1	21.5x12.5x19	1.16
Aquanet ^{Plus} 2" A	1	21.5x12.5x19	1.24
Pressure Regulator Kit	1	12.0x9.0x7.0	0.11