

# GMMD, GMMV

3-way and 4-way mixing valves



Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

Available as three-way or four-way threaded mixing valve.

### > Easy installation

Easy connection by female threads.

### > Microprocessor controlled

MC-actuator multifunctional adjustable.



## > Technical description

### Application:

Chilled- and hot water, water with antifreeze and anticorrosive compounds (appr. 50%): glycol, glycerine, ethyl alcohol, propylene dichloride alcohol, mono ethyl alcohol, ethyl, methyl alcohol, glycerine, antidichloride uor methane® N+L.

### Function:

Mixing

### Characteristics:

Linear

### Dimensions:

DN 20-50

### Pressure class:

PN 10

### Temperature:

Max. working temperature: 110°C

Min. working temperature: 0°C

For lower and higher temperatures please contact TA Hydronics.

### Material:

Body: Brass CW617N

Inner trim: Brass CW617N

Shaft sealing: O-rings EPDM

### Marking:

DN, PN and flow direction arrows.

### Connection type:

Internal thread according to ISO 7/1.

### Leakage rate:

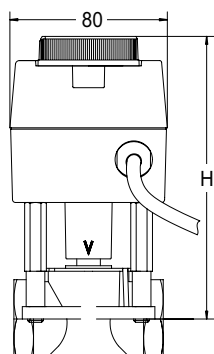
EN 1349 - seat-leakage I ( $\leq 2\%$  of Kvs-value).

## > Technical data valve with actuator

DN	Type		20		25	32	40	50
Kvs-value		m <sup>3</sup> /h	4	6	12	18	28	44
MC106Y	Actuating time <sup>1)</sup>	s	80*					
			150					
M106	Actuating time	s	130					
M125	Actuating time	s	130					

1) Actuating time freely adjustable, presetting marked with \*

## M106



DN	H	Kg
20-32	145	0,35
40-50	155	0,35

### Technical description

		M106
Actuating time at 50 Hz/90°	s	130
Nominal torque	Nm	6
Power supply	VAC	230 +6% -10%
Frequency	Hz	50/60 ±5%
Power consumption	VA	3,5
Input signal		3-point

### Enclosure class:

IP 43

### Ambient temperature:

0 - 50°C

### Operation mode:

S4-50% ED c/h 1200: EN 60034-1

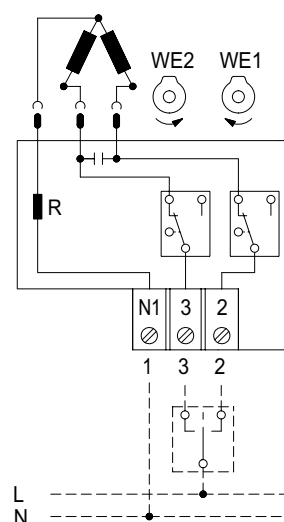
### End position switch-off:

Position dependent adjustable

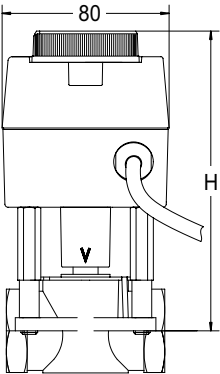
### Actuator variants:

- Voltage: 24 VAC

### Wiring diagram:



M106Y



DN	H	Kg
20-32	145	0,35
40-50	155	0,35

Technical description

		MC106Y
Actuating time at 50 Hz/90° <sup>1)</sup>	s	150 . 80*
Nominal torque	Nm	6
Power supply	VAC	24 ±10%
Frequency	Hz	50/60 ±5%
Power consumption	VA	3,0
Input signal <sup>2)</sup>		0(2)...10 VDC, 77 KΩ
Output signal <sup>2)</sup>		0...10 VDC max. 8 mA      min. 1200 Ω

- 1) Actuating time freely adjustable, presetting is marked with \*
- 2) Invertible input and output signal

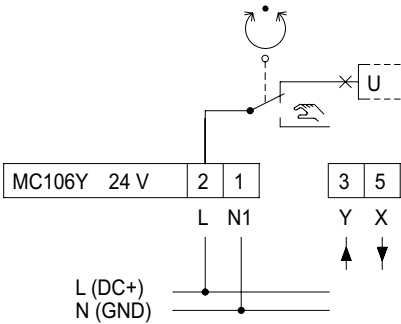
Enclosure class:  
IP 43

Ambient temperature:  
0 - 50°C

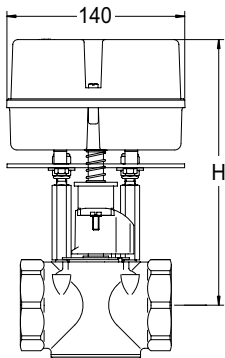
Operation mode:  
S4-50% ED c/h 1200: EN 60034-1

End position switch-off:  
Position dependent adjustable

Wiring diagram:



## M125



DN	H	Kg
20-32	198	1,2
40-50	210	1,2

### Technical description

M125		
Actuating time at 50 Hz/90°	s	130
Nominal torque	Nm	25
Power supply	VAC	230 +6% -10%
Frequency	Hz	50/60 ±5%
Power consumption	VA	6,5
Input signal		3-point

### Enclosure class:

IP 43

### Ambient temperature:

0 - 50°C

### Operation mode:

S1-100% ED c/h 1200 EN 60034-1

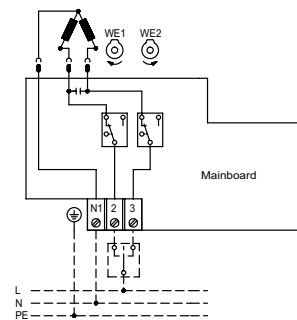
### End position switch-off:

Position dependent adjustable

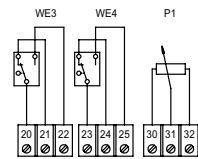
### Actuator variants:

- Voltage: 24 VAC
- Position switch unit:
  - 2 switches (WE3/WE4), potential free, infinitely adjustable.
  - Rated load: 10 A / 250 VAC
- Potentiometer with attachment: 0.2 / 1 / 10 kΩ (1.5 VA)

### Wiring diagram: Standard design



### Special accessories



## Application examples

Fig. 1

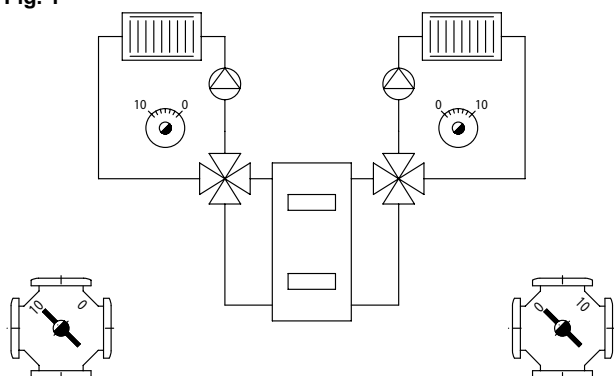


Fig. 2

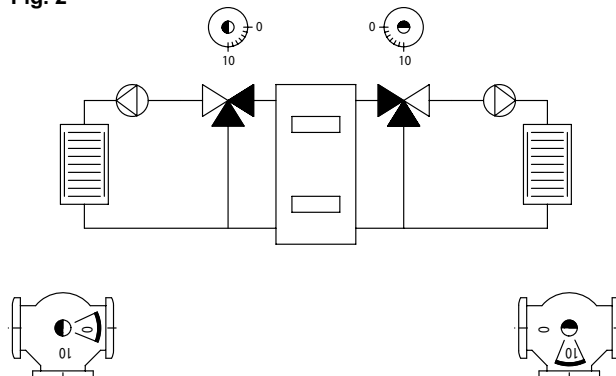


Fig. 3

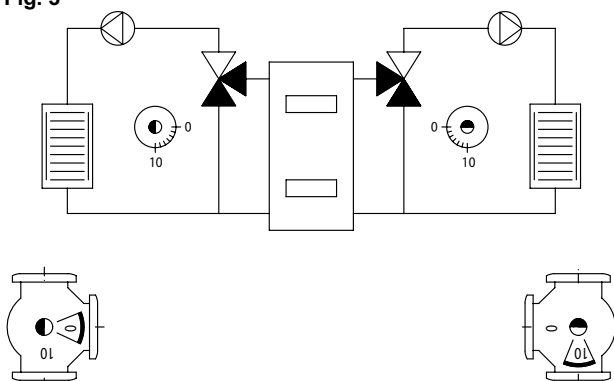


Fig. 4

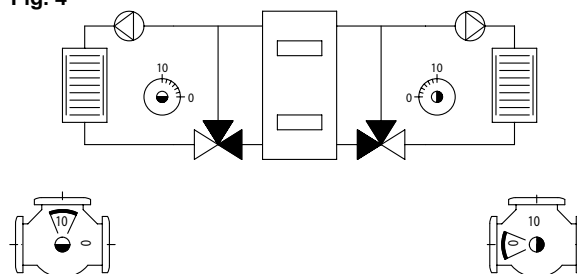


Fig. 5

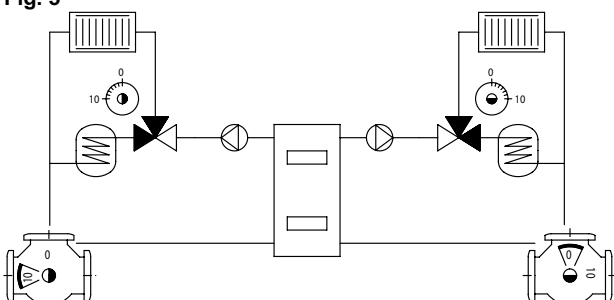


Fig. 6

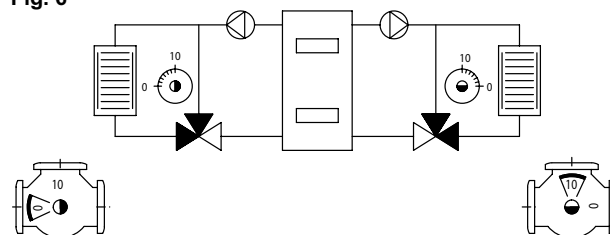
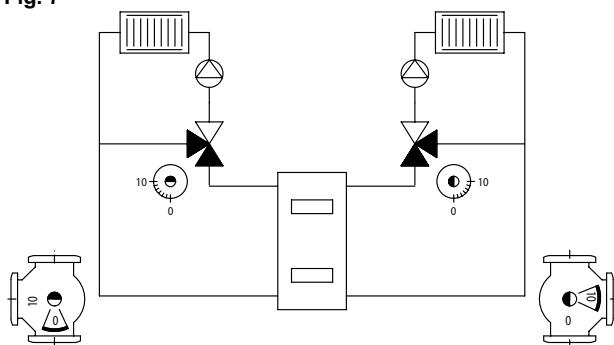
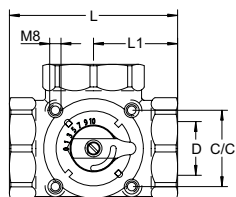


Fig. 7



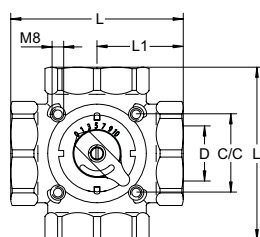
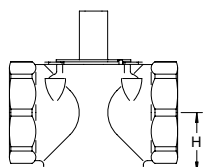
## Articles



### GMMD

3-way

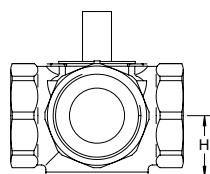
DN	D	L	L1	H	C/C	Kvs	Kg	Article No
20	Rp3/4	76	38	20	54	4	0,75	60-523-020
20	Rp3/4	76	38	20	54	6	0,75	60-523-120
25	Rp1	76	38	20	54	12	0,75	60-523-025
32	Rp1 1/4	82	41	25	54	18	0,95	60-523-032
40	Rp1 1/2	112	56	42	54	28	3,15	60-523-040
50	Rp2	119	59,5	42	54	44	3,15	60-523-050



### GMMV

4-way

DN	D	L	L1	H	C/C	Kvs	Kg	Article No
20	Rp3/4	76	38	20	54	4	0,75	60-524-020
20	Rp3/4	76	38	20	54	6	0,75	60-524-120
25	Rp1	76	38	20	54	12	0,75	60-524-025
32	Rp1 1/4	82	41	25	54	18	0,95	60-524-032
40	Rp1 1/2	112	56	42	54	28	3,15	60-524-040
50	Rp2	119	59,5	42	54	44	3,15	60-524-050



## Actuators

Type	Power supply	Nominal torque [Nm]	Input signal	Article No
M106	230 VAC	6	3-point	65-106-001
MC106Y	24 VAC	6	0(2)-10 V	65-106-002
M125	230 VAC	25	3-point	65-125-001

## Attachments

For actuator	Article No
M125	68-568-000
M106 / MC106Y	68-569-000

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3-50-5 GMMD, GMMV 03.2011