

VMM ROTARY VALVE ACTUATORS

PRODUCT DATA

- Protected against overload and blocking
- Maintenance-free electrical actuator for rotary valves
- Clear position indicator
- Direct mounting on rotary valves
- Manual operation
- High torque
- Large wiring cabinet
- Long lifetime

Specifications

Power supply	230 Vac / 24 Vac; 50 Hz depending on type (see table)
Power consumption	VMMxx-24: 3.5 VA VMM40-24F: 9.0 VA VMMxx: 3.5 VA VMM40F: 6.0 VA
Control signal	230 Vac / 24 Vac, floating, depending on type (see table)
Run-time	depending on type (see table)
Nominal torque	20 Nm / 30 Nm / 40 Nm, depending on type (see table)
Angle of rotation	90°
Protection standard	IP 54 per EN 60529
Insulation class	I per EN 60730
Ambient operating temp.	0 to 60 °C
Water temp. in valve	2 to 130 °C
Relative humidity	non-condensing
Weight	1.5 kg

Suitable Valves

DRxxxGMLA; DRxxxGFLA; ZRxxxMA; ZRxxxFA, DRU.

Mounting on the Valve

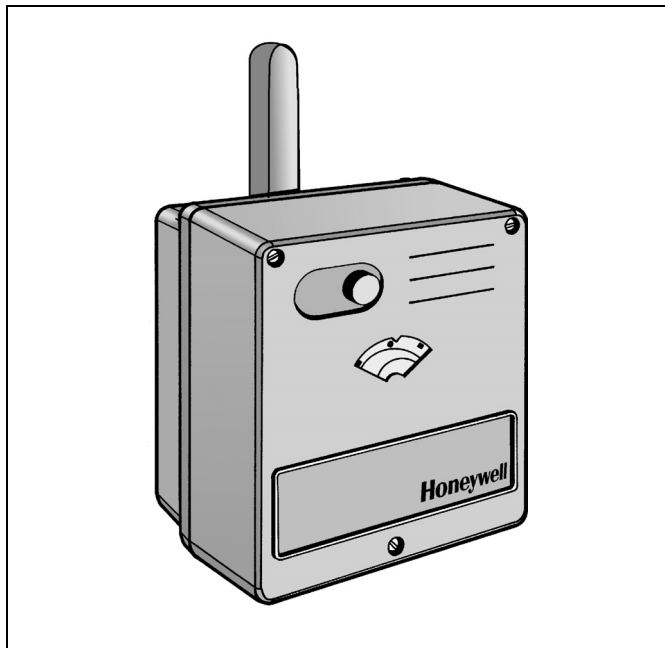
Before mounting the actuator, position the rotary valve according to its installation instruction. In the case of boiler applications, it is recommended that the actuator be mounted in a vertical position. If the actuator is mounted in the horizontal position, one should position an isolation shield between the top of the valve and the actuator; this is to protect it against radiant heat and to ensure ambient temperatures of below 60 °C.

Operation

The actuator is powered by a synchronous motor. The spindle of the actuator rotates 90°. In the end positions, the motor is switched off by end switches.

Manual operation declutches the gear from the valve. As soon as the actuator is powered, the valve is driven by the actuator again.

No adjustment necessary. The actuator is maintenance-free.



Application

The Honeywell VMM actuator is designed to provide floating control in heating and air conditioning systems. High control performance and a robust design are standard. In combination with the valves DR/ZR/DRU, it is possible to control very exact heating and cooling water temperatures. The mechanical interface between actuator and valve is designed for reliable operation. Actuators with torques from 20 Nm up to 40 Nm are available for a wide range of rotary mixing valves (DN 15...200).

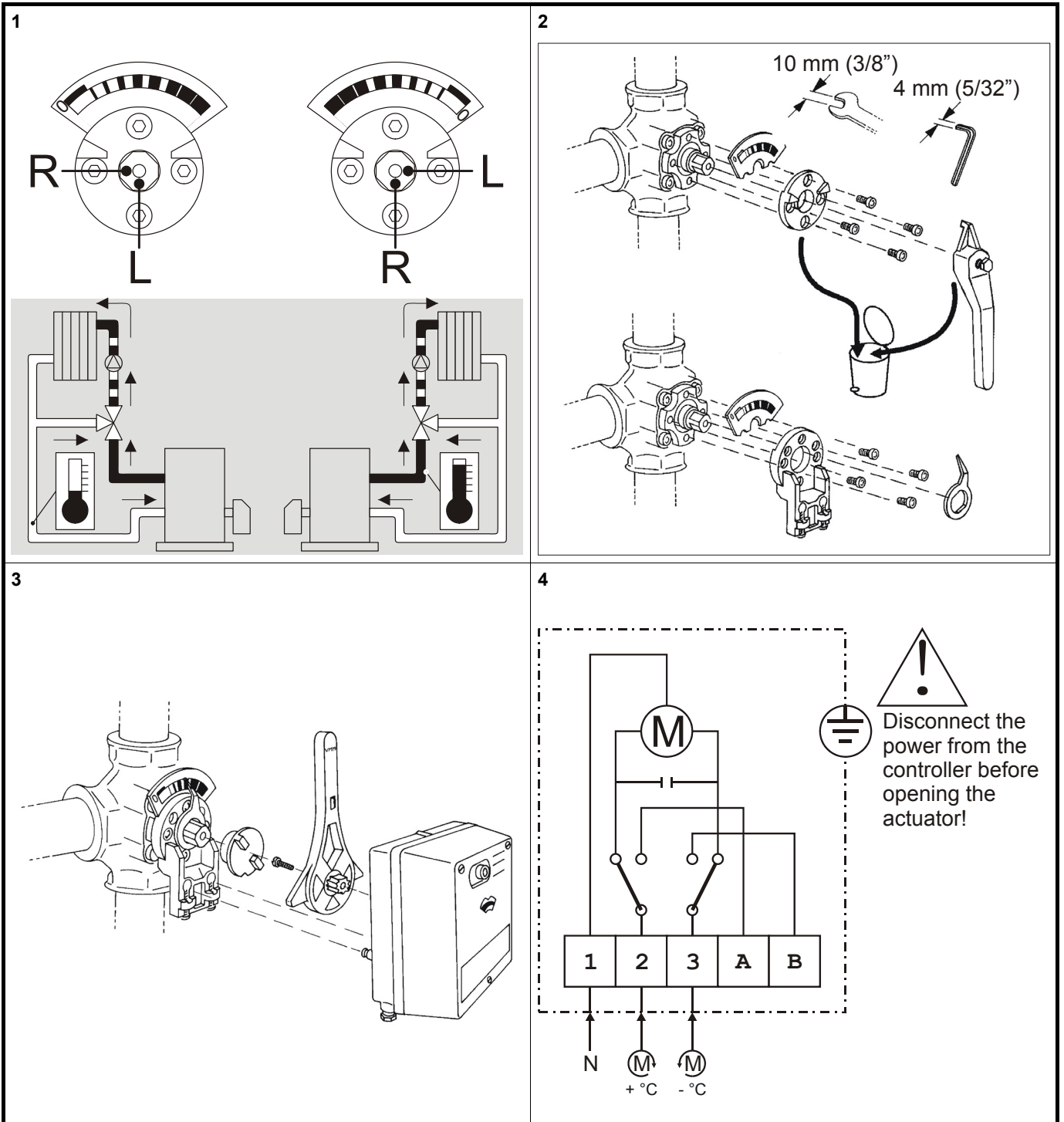
Specification per Actuator

torque (Nm)	order no. actuator		run-time (min./90°)
	24Vac floating	230Vac floating	
20	VMM20-24	VMM20	1.6
30	VMM30-24	VMM30	2.3
40	VMM40-24	VMM40	3.5
40	VMM40-24F	VMM40F	1.2

Attention (VMM40-24F)

Higher temperatures (>50 °C) combined with the min. voltage (19.2 Vac) could reduce the output torque by approx. 10%. Higher temperatures (>60 °C) combined with the max. voltage (28.8 Vac) allow only three full strokes to be carried out without interruption.

Features



Dimensions (mm)

Table 1. DRxxxGMLA, dimensions (in mm)

type	DN	a	c	SW	h	i
DR15GMLA	15	110	179	41	55	R1/2"
DR20GMLA	20	110	179	46	55	R3/4"
DR25GMLA	25	115	179	50	58	R1"
DR32GMLA	32	140	188	60	70	R1 1/4"
DR40GMLA	40	150	188	65	75	R1 1/2"

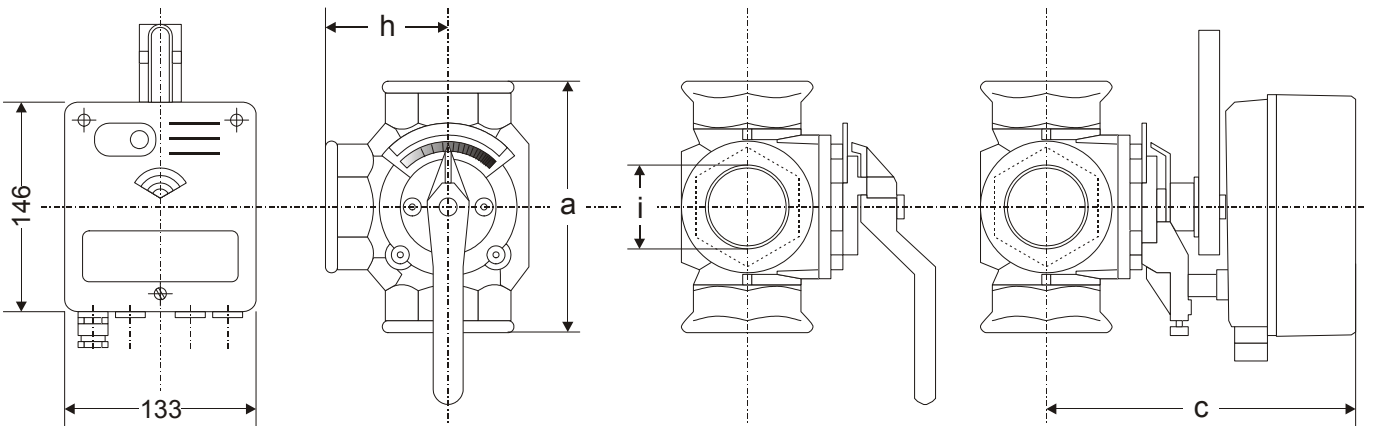


Fig. 1. VMM and DRxxxGMLA, dimensions (in mm)

Table 2. DRxxxGFLA, dimensions (in mm)

type	DN	a	b	c	d	e	f	g	h
DR20GFLA	20	140	15	179	65	90	50	4x11	70
DR25GFLA	25	150	15	179	75	100	60	4x11	75
DR32GFLA	32	160	17	188	90	120	70	4x14	80
DR40GFLA	40	170	16	188	100	130	80	4x14	85
DR50GFLA	50	190	16	202	110	140	90	4x14	95
DR65GFLA	65	210	16	219	130	160	110	4x14	105
DR80GFLA	80	250	18	219	150	190	128	4x18	125
DR100GFLA	100	270	18	240	170	210	148	4x18	135
DR125GFLA	125	310	20	267	200	240	178	8x18	155
DR150GFLA	150	330	20	274	225	265	202	8x18	165
DR200GFLA/ DR200GFLA1	200	390	22	314	280	320	258	8x18	195

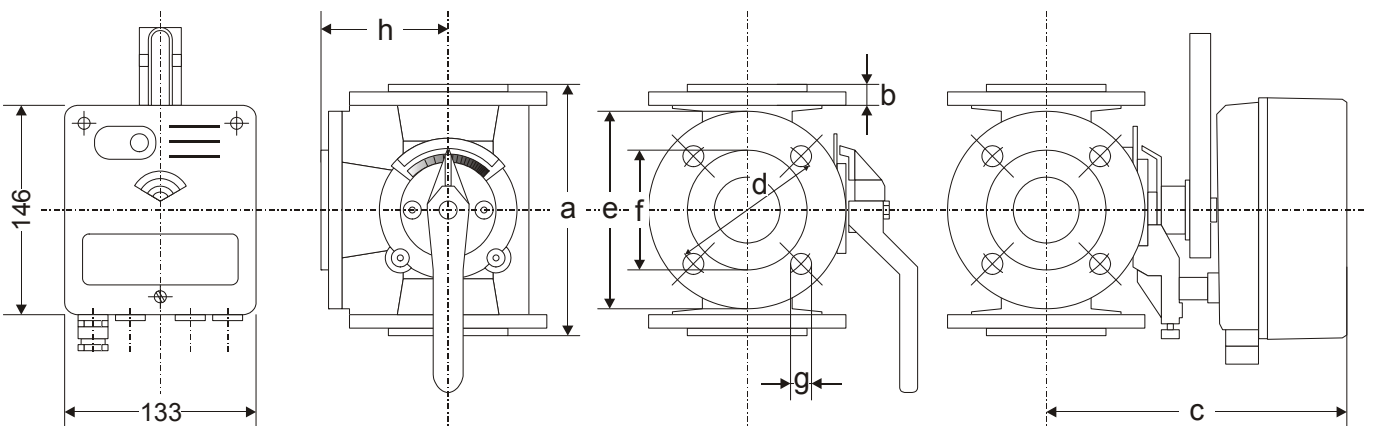


Fig. 2. VMM and DRxxxGFLA, dimensions (in mm)

Table 3. ZR...MA, dimensions (in mm)

type	DN	a	c	SW	h	i	net wt. (kg)
ZR15MA	15	110	179	41	55	R1/2"	2.4
ZR20MA	20	110	179	46	55	R3/4"	2.5
ZR25MA	25	115	179	50	58	R1"	2.6
ZR32MA	32	140	188	60	70	R1 1/4"	4.3
ZR40MA	40	150	188	65	75	R1 1/2"	4.5

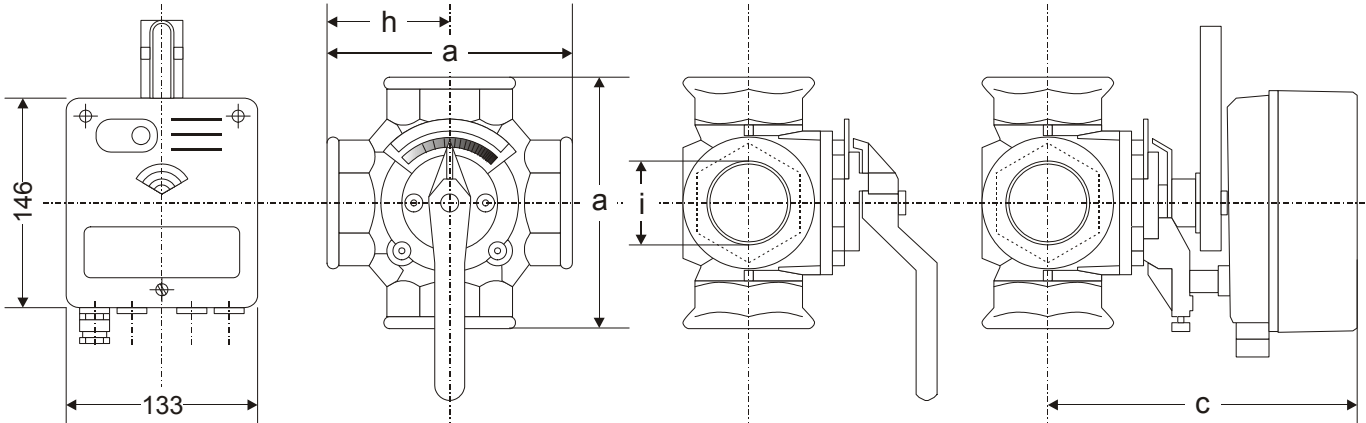


Fig. 3. VMM and ZRxxxMA, dimensions (in mm)

Table 4. ZRxxxFA, dimensions (in mm)

type	DN	a	b	c	d	e	f	g	net wt. (kg)
ZR25FA	25	150	15	179	75	100	60	4x11	4.8
ZR32FA	32	160	16	188	90	120	70	4x14	7.6
ZR40FA	40	170	16	188	100	130	80	4x14	8.5
ZR50FA	50	190	16	202	110	140	90	4x14	11.0
ZR65FA	65	210	16	219	130	160	110	4x14	14.4
ZR80FA	80	250	18	219	150	190	128	4x18	24.3
ZR100FA	100	270	18	240	170	210	148	4x18	32.9
ZR125FA	125	310	18	267	200	240	178	8x18	49.0
ZR150FA	150	330	20	274	225	265	202	8x18	57.0
ZR200FA	200	390	22	314	280	320	258	8x18	84.0

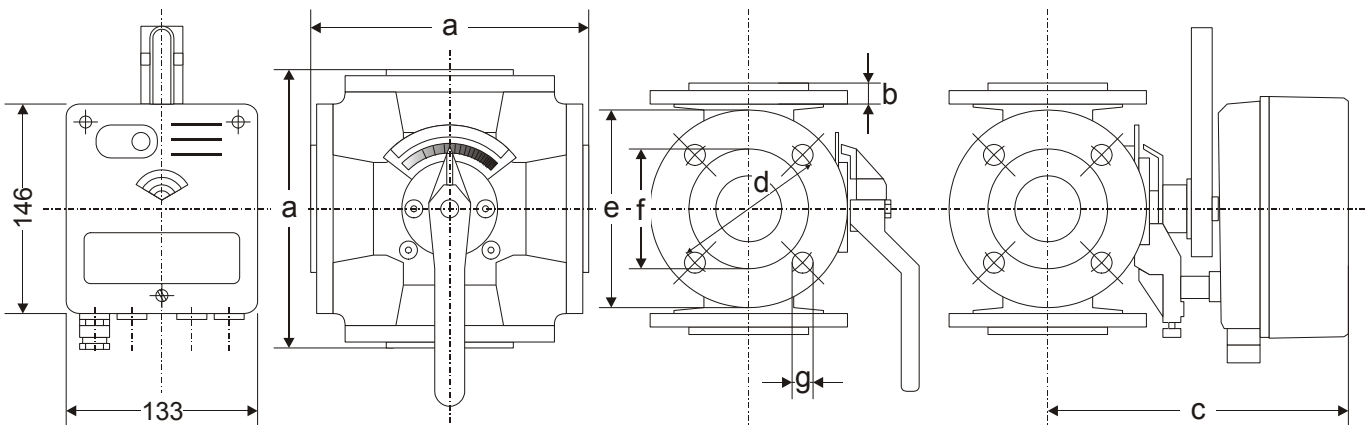


Fig. 4. VMM and ZRxxxFA, dimensions (in mm)

Table 5. DRU, dimensions (in mm)

type	DN	a	b	c	d	e	g	h	R	net wt. (kg)
DRU25-2.5	25	55	32	110	89	55	51	182	1 ½	2.2
DRU25-4.0	25	55	32	110	89	55	51	182	1 ½	2.2
DRU25-6.3	25	55	32	110	89	55	51	182	1 ½	2.2
DRU25-10	25	55	32	110	89	55	51	182	1 ½	2.2
DRU25-16	25	55	32	110	89	55	51	182	1 ½	2.2
DRU32-10	32	70	44	140	99	70	59	200	2	4.1
DRU32-16	32	70	44	140	99	70	59	200	2	4.1
DRU32-25	32	70	44	140	99	70	59	200	2	4.1

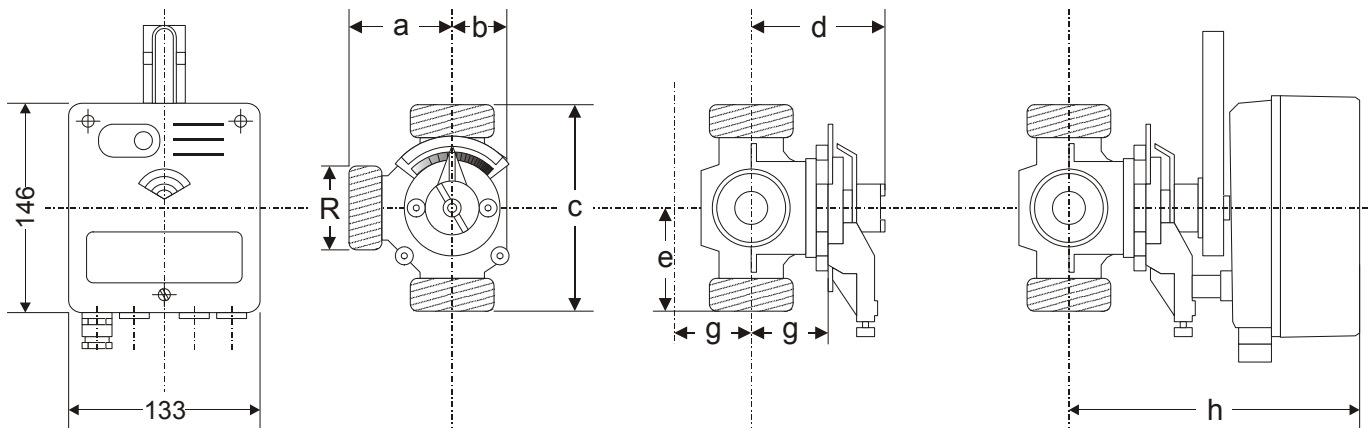


Fig. 5. VMM and DRU, dimensions (in mm)

ACCESSORIES

The VMM is suitable for use in conjunction with the following accessories.

Table 6. Accessories

accessory	description	remarks
VMP10-90	Feedback potentiometer 10 kOhm	Suitable only for VMM30, VMM40F, and VMM-40-24F
VMS2	Auxiliary switch package	Max. two per actuator

Honeywell

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Subject to change without notice. Printed in Germany

EN0B-0621GE51 R0812