

Electrically driven 2-way-stainless steel ball valve,
3-part body, full bore

EKH.EP.E3.I.ROM
11-38-2e

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Electrically driven 2-way-stainless steel ball valve with
3-part body, size DN15 to DN50 for various industrial
and general applications.

Also available with welding ends.



Technical data

SIZE

DN15 (1/2") to DN50 (2")

NORMS

- Internal thread Rp acc. ISO 7/1
- Mounting flange acc. ISO 5211
- Face to face DIN 3203 - M3

FLOW MEDIUM

Neutral gases and fluids. For aggressive medium see material
resistance table. Medium which to an increase of operating torque
could require other actuator size.

FLOW DIRECTION

Random

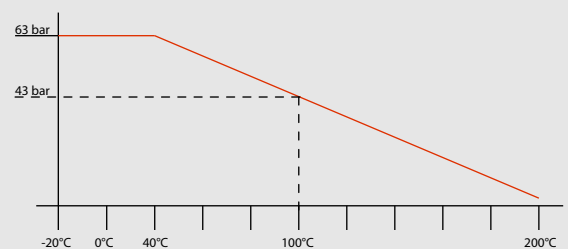
MATERIALS

- Body and thread: 1.4408
- Ball and shaft: 1.4401
- Seal - ball and shaft: PTFE, fibreglass-reinforced

TEMPERATURE - MEDIUM

-10° to +200°C (depending on operating pressure)

PRESSURE-/TEMPERATURE DIAGRAM



OPERATION METHOD

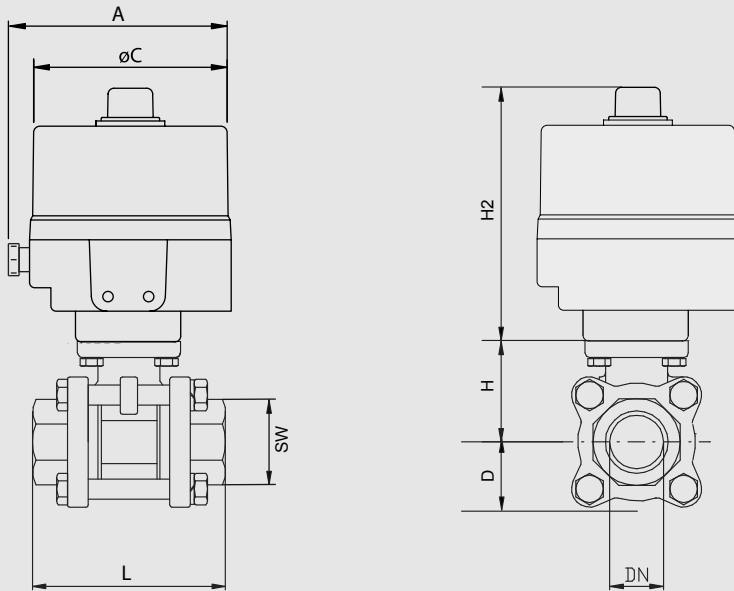
Electric actuator 24 AC, 24 DC or 230 AC, other voltages on request.
Duty cycle of the motor = 30% ED

ACCESSORIES (Options)

- Potentiometer (1 KOhm)
- 4-20mA remote feedback signal
- Local control unit
- Anti-condensation heating
- Positioner

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TECHNICAL DATA - ACTUATOR

- Casing: Aluminium Alloy, dry powder coated
- Protection class IP67 (NEMA 4, NEMA 4X)
- Ambient temperature: -20°C to +60°C
- Humidity: 30% to 95%
- Continuous position indicator
- Manuell Override

For more technical information about the actuator see datasheet for electric actuators ROM.

Available operating voltages

	ROM & ROMpak				ROMpak only		
	12 VDC	24 VDC	110 V/1	220 V/1	220 V/3	380 V/3	440 V/3
ROM-A	✓	✓	✓	✓	✗	✗	✗
ROM-1	✓	✓	✓	✓	✗	✗	✗
ROM-2	✓	✓	✓	✓	✓	✓	✓
ROM-3	✓	✓	✓	✓	✓	✓	✓
ROM-4	✓	✓	✓	✓	✓	✓	✓

nominal width [mm]		max. press. [bar] PN	M(1) + 30% [Nm]	flange	square	electric actuator	dimensions [mm] and weight [kg]								order code 230 V 50 Hz
DN	Rp						L	H	H2	ØC	SW	A	D	weight	
15	1/2"	63	9,1	F04	9	ROM 1	75	40	151	106	29	152	24	2,80	350.3810R
20	3/4"	63	11,7	F04	9	ROM 1	80	44	151	106	35	152	26	2,90	350.3811R
25	1"	63	16,9	F04/F05	11	ROM 1	90	52	151	106	41	152	29	3,35	350.3812R
32	1 1/4"	63	26,0	F04/F05	11	ROM 1	110	58	151	106	50	152	36	4,05	350.3813R
40	1 1/2"	63	36,4	F05/F07	14	ROM 1	120	68	151	106	58	152	40	2,95	350.3814R
50	2"	63	48,1	F05/F07	14	ROM A	140	77	198	106	72	152	48	7,75	350.3815R

nominal width [mm]		max. press. [bar] PN	M(1) + 30% [Nm]	flange	square	electric actuator	dimensions [mm] and weight [kg]								order code 24 VDC
DN	Rp						L	H	H2	ØC	SW	A	D	weight	
15	1/2"	63	9,1	F04	9	ROM 1	75	40	151	106	29	152	24	2,80	350.4810R
20	3/4"	63	11,7	F04	9	ROM 1	80	44	151	106	35	152	26	2,90	350.4811R
25	1"	63	16,9	F04/F05	11	ROM 1	90	52	151	106	41	152	29	3,35	350.4812R
32	1 1/4"	63	26,0	F04/F05	11	ROM 1	110	58	151	106	50	152	36	4,05	350.4813R
40	1 1/2"	63	36,4	F05/F07	14	ROM 1	120	68	151	106	58	152	40	2,95	350.4814R
50	2"	63	48,1	F05/F07	14	ROM A	140	77	198	106	72	152	48	7,75	350.4815R

(1) Max. ball valve torque + safety factor 30%. Operating cycles, sealant and medium which to an increase of operating torque could require other actuator size.

TIME FOR 90° - ROTATIONAL MOTION

actuator	time [sec.]	
	AC / 50Hz	DC
ROM 1	13	15
ROM A	24	28

The ROM actuators provide quiet and reliable operation for all kinds of small ball valves and butterfly valves, as well as dampers and ventilation louvers.

Because of his powder-coated metal-body he is perfectly suitable for the use in demanding industrial applications.

They provide self-locking as standard, local visual indicators and manual override options together with a wide range of voltages.



TECHNICAL DATA

Casing

- IP 67 (NEMA 4, NEMA 4X) Waterproof - Dustproof
- Material: Aluminium Alloy, dry powder coated

Motor

- Standard duty cycle induction motor.
- H insulation class for ROM-1 and ROM-A;
- F class for ROM-2 to ROM-4
- Thermal overload protection (135°).

Position Indicator

- All models have continuous position indication on the actuator top cover.

Manual Override

- Non-clutch design, the manual operation can be operated without any lever, clutch or brake upon power outage.
- When the electric motor is operating, the manual override will not rotate.

Gear Train

- High alloy steel gear trains provide self-locking function to avoid valve back drive.
- Gear trains are factory lubricated with a wide temperature rated lubricant.

Mechanical Stops

- Externally adjustable mechanical stops are provided on ROM-2, 3 and 4 Actuators.

Working Conditions

- Ambient temperature: -20°C to +60°C
- Humidity: 30% to 95%

Cable gland

- M20 (1/2" NPT on request)

Limit switches

- 2 limit switches for end position switch off
- 2 limit switches for end position feedback (output)

Coupling

- By default square designed coupling,
- 2-flat couplings on request.

Certificates

- CE, CSA

Various Options

- Torque switches, (for ROM-2, 3 and 4, excluding ROM1)
- Potentiometer (1kOhm feedback)
- 4-20 mA controller
- Local control unit, (local/remote, on/off)
- Anti-condensation heater
- Current position transmitter (output 4-20 mA)

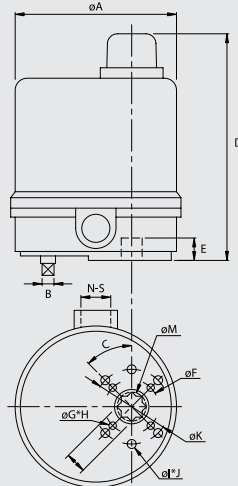
DIMENSIONS
ROM-1

A	B	C	D	E	F	G
106	8	45°	151	15	36	m5

H	I	J	K	L _{Max}	M	N
4	m6	6	50	14	19	1

S	Flange
1/2 NPT m20	F03 / F05

All dimensions in mm

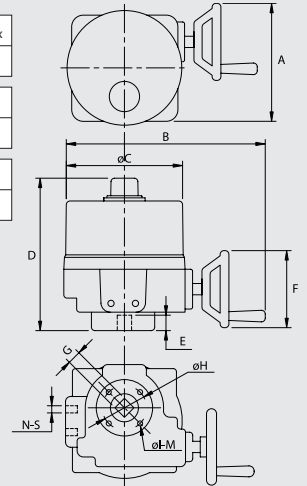
 * Other coupling on request
 (1) L=11, M=15 / (2) L=9, M=12

ROM-2, ROM-3

A	B	C	D	E	F	G _{Max}
175	310	180	250	30	125	22

H	I	M	N
70	m8	4	2

S	Flange
1/2 NPT m20	F07

All dimensions in mm


MECHANICAL DATA

Model	Torque [Nm / lbsft]	90° Travel time [sec.]			Output Drive [mm]	Flange		Manual override	Weight [kg]
		50 Hz	60Hz	DC		ISO 5211	Imperial (br.)		
ROM-1	35 / 26	13	12	15	14 / 11 / 9	F05 / F03	-	Lever	2,0
ROM-2	90 / 67	17	15	15	22	F07	FA07	Handwheel	9,0
ROM-3	150 / 110	26	22	22	22	F07	FA07	Handwheel	9,0

ELECTRICAL DATA

12V/24V Model	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC / DC) [A] at 12V			Current consumption (AC / DC) [A] at 24V		
		12V	24V	Run	Start	Lock	Run	Start	Lock
		ROM-1	10	6000	6000	0,5	3,0	3,0	0,7
ROM-2	70	1800	1800	3,4	5,0	8,5	3,0	5,0	13,0
ROM-3	70	1800	1800	3,4	5,0	8,5	3,0	5,0	13,0

Single Phase	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC) [A] at 110V			Current consumption (AC) [A] at 220V-240V		
		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock
		ROM-1	10	3000	3600	0,5	1,5	0,6	0,3
ROM-2	40	1450	1720	1,0	3,0	1,8	0,5	1,5	0,9
ROM-3	40	1450	1720	1,0	3,0	1,8	0,5	1,5	0,9

Three Phase	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC) [A] at 220V-240V			Current consumption (AC) [A] at 400V			Current consumption (AC) [A] at 440V		
		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock	Run	Start	Lock
		ROM-2	40	1450	1720	0,6	1,8	1,1	0,3	1,0	0,7	0,4
ROM-3	40	1450	1720	0,6	1,8	1,1	0,3	1,0	0,7	0,4	1,3	0,7

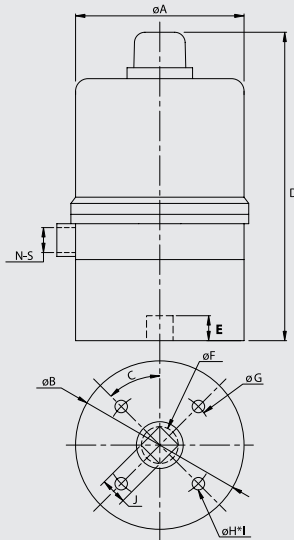
DIMENSIONS
ROM-A

A	B	C	D	E	F	G
106	106	45°	198	16	24	70

H	J _{max}	N	S	Flange
m8	17	1	1/2 NPT	m20 F07

All dimensions in mm

* drive Insert Option: J=14, E=19

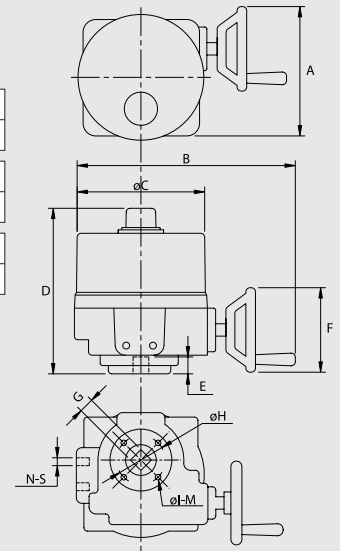

ROM-4

A	B	C	D	E	F
265	375	215	320	50	195

G _{Max}	H	I	M	N
m5	102	m10	4	2

S	Flange
1/2 NPT	m20 F07

All dimensions in mm


MECHANICAL DATA

Model	Torque [Nm / lbsft]	90° Travel time [sec.]		Output Drive [mm]	Flange		Manual override	Weight [kg]
		50 Hz	60Hz		ISO 5211	Imperial (br.)		
ROM-4	400 / 295	18	16	35	F10	FA10	Handwheel	17,5
ROM-A	50 / 37	24	20	17 / 14	F07	FA07	N/A	3,0

ELECTRICAL DATA

12V/24V Model	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC / DC) [A] at 12V			Current consumption (AC / DC) [A] at 24V		
		12V	24V	Run	Start	Lock	Run	Start	Lock
ROM-4	180	1800	1800	12,0	8,5	30,0	6,0	8,0	30,0
ROM-A	10	6000	6000	0,5	3,0	3,0	0,7	0,8	1,4

Single Phase	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC) [A] at 110V			Current consumption (AC) [A] at 220V-240V		
		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock
ROM-4	120	1420	1720	1,3	3,1	3,6	0,6	1,5	1,8
ROM-A	10	3000	3600	0,5	1,5	0,6	0,3	1,0	0,5

Three Phase	Motor Power [W]	Motor Speed [U/min] [rpm]		Current consumption (AC) [A] at 220V-240V			Current consumption (AC) [A] at 400V			Current consumption (AC) [A] at 440V		
		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock	Run	Start	Lock
ROM-4	120	1450	1720	1,0	3,0	3,5	0,7	2,2	2,0	0,8	2,5	2,0