



ROM and ROMpak Range



Quarter-turn Direct Drive Electric Actuators

Established Leaders in Actuation Technology

Contents



Section	Page
Product Overview	3
Features of the ROM and RBM Range	4
Mechanical and Electrical	5
Circuit Diagram and Optional Extras	6
Dimensional Data	8
Projects, Services and Retrofit	11



Rotork is the global market leader in valve actuation products, with a fifty-year track record serving the oil and gas, power, water and waste treatment industries.

We strive always for technical excellence, innovation and the highest quality standards in everything we do. As a result, our people and products remain at the forefront of actuation technology.

Uncompromising reliability is a feature of our entire product range, from our flagship electric actuator range through to our pneumatic, hydraulic and electro-hydraulic actuators, as well as gear boxes and valve accessories.

Rotork is committed to providing first class support to each client throughout the whole life of their plant, from initial site surveys to installation, maintenance, audits and repair. From our network of national and international offices, our engineers work around the clock to maintain our position of trust.

Rotork. Established leaders in actuation technology.

Product Overview

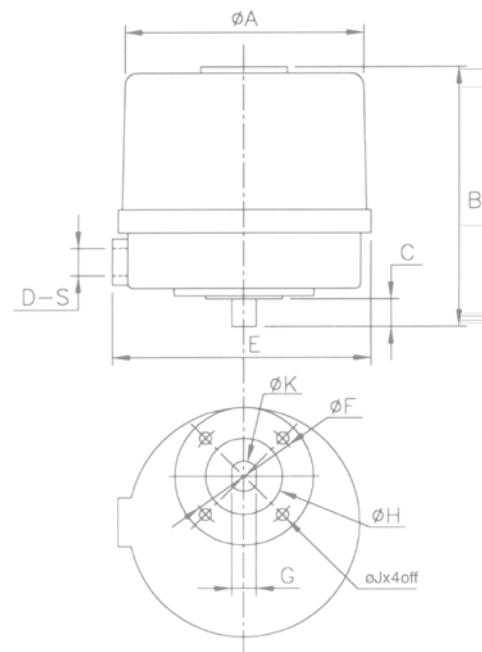
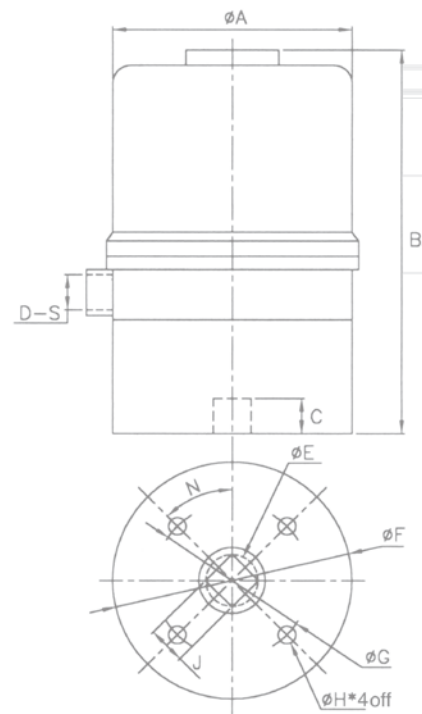
As one of the world's leading manufacturers of actuation products, Rotork has built up an enviable reputation as the supplier of equipment which is both well developed and durable.

With over fifty years of experience of long term installation in all environments we have evolved a design of uncompromising reliability. With the addition of the ROM and ROMpak range, Rotork is complementing its offering of quarter-turn actuators with simple specification for small valves.

Rotork ROM and ROMpak Range Actuators:

- Small
- Compact
- Lightweight
- Efficient yet simple gearing
- On-off
- Single phase, 3-phase and DC versions
- Local control
- Phase rotation correction*

* Rompak only.



The ROM and ROMpak Range

The ROM and ROMpak actuators provide quiet and reliable operation for all kinds of small ball valves and butterfly valves, as well as dampers and ventilation louvres. They provide self-locking as standard, local visual indicators and manual override options together with a wide range of voltages.

Features:

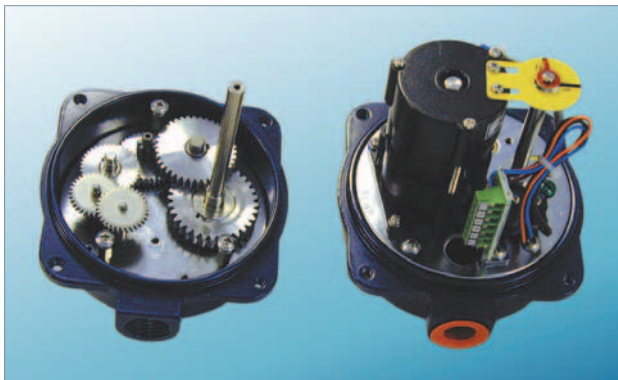
Enclosure	ROM	ROMpak
Enclosure	IP67 (Nema 4, 4x) Waterproof - Dustproof	IP67 (Nema 4, 4x) Waterproof - Dustproof
Material	Aluminium Alloy	Aluminium Alloy and plastic
Finish	Dry powder coated	Dry powder coated and wet spray

Motor

- Standard duty cycle induction motor. H insulation class for ROM-1 and ROM-A; F class for ROM-2 to ROM-4.
- All models have continuous position indication on the actuator top cover.

Position Indicator

- All models have continuous position indication on the actuator top cover. ROMpak also has an LED indicator.



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 & 4 Actuators.

Working Conditions

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

Various Options

- Status relays.*
- Anti-condensation heater.
- Additional limit switches.
- Serial bus connection.*
- Local control unit (local/remote, on/off).*
- Conduit entries 1/2" NPT or M20.
- Torque switches.
- 4-20 mA controller.
- Current position transmitter (output 4-20 mA).*

* ROMpak only.

Certificates

- ISO 9001, CE, CSA.

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	✓	✓	✓	✓	X	X	X
ROM-1	✓	✓	✓	✓	X	X	X
ROM-2	✓	✓	✓	✓	✓	✓	✓
ROM-3	✓	✓	✓	✓	✓	✓	✓
ROM-4	✓	✓	✓	✓	✓	✓	✓

Mechanical and Electrical Data

Mechanical Data ROM and ROMpak

Model	Power Watts	90° Travel time seconds 50Hz-60Hz		12/24 VAC/VDC	Weight (kg)	Manual override	Output Drive (mm)	Torque Nm/lbsft	Mounting base designation to ISO5211 imperial		
ROM-A	10	24	20	24	3.0	N/A	17 / 14	50 / 37	F07	or	FA07
ROM-1	10	13	12	15	2.0	Lever	14 / 11 / 9	35 / 26	F05 / F03		-
ROM-2	40	17	15	15	9.0	Handwheel	22	90 / 67	F07	or	FA07
ROM-3	40	26	22	22	9.0	Handwheel	22	150 / 110	F07	or	FA07
ROM-4	120	26	22	22	17.5	Handwheel	35	400 / 295	F10	or	FA10

Electrical Performance Data

12V/24V - ROM and ROMpak

Model No.	Torque (Nm)	Speed (sec / 90°)	Motor Power (W)	Motor Speed (rpm)		12 VDC/VAC (A)			24 VDC/VAC		
				12 V	24 V	Run	Start	Lock	Run	Start	Lock
ROM-A	50	24	3.3	6000	6000	0.5	3.0	3.0	0.27	1.8	1.8
ROM-1	35	15	3.3	6000	6000	0.5	3.0	3.0	0.27	1.8	1.8
ROM-2	90	15	70	1800	1800	3.4	5.0	8.5	2.0	3.0	5.0
ROM-3	150	22	70	1800	1800	3.4	5.0	8.5	2.0	3.0	5.0
ROM-4	400	22	180	1800	1800	5.0	8.5	10.0	3.0	5.0	6.0

Single-Phase - ROM and ROMpak

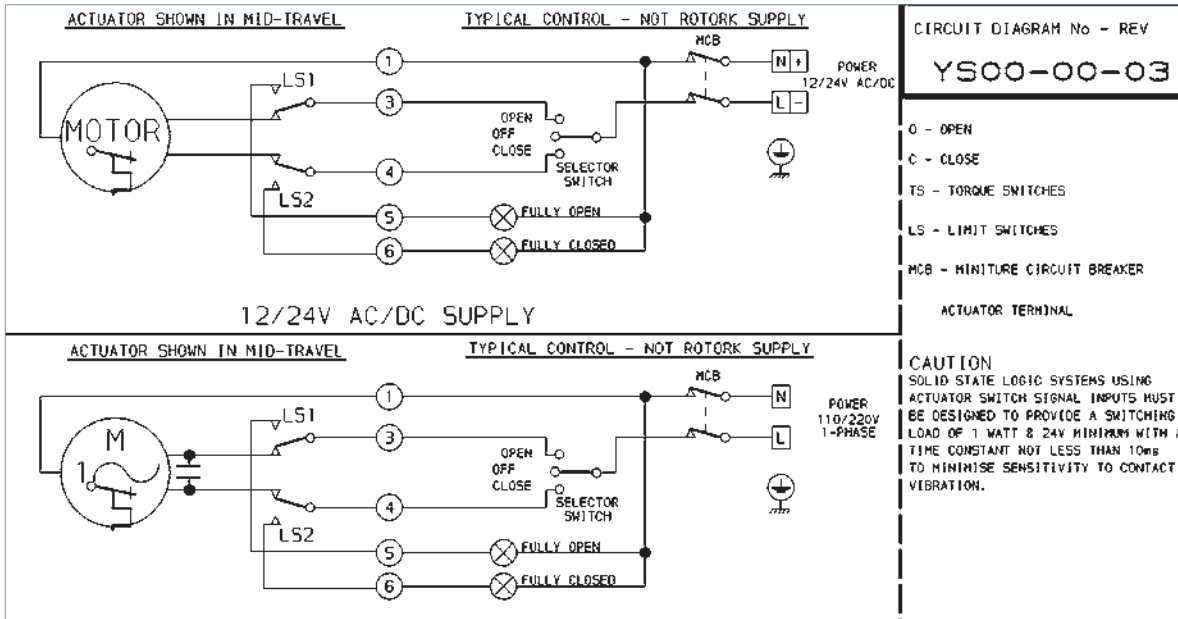
Model No.	Torque (Nm)	Speed (sec)		Motor Power (W)	Motor Speed (rpm)		110 V Current			220 V Current		
		50Hz	60Hz		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock
ROM-A	50	24	20	10	3000	3600	0.5	1.5	0.6	0.3	1.0	0.5
ROM-1	35	13	12	10	3000	3600	0.5	1.5	0.6	0.3	1.0	0.5
ROM-2	90	17	15	40	1450	1720	1.0	3.0	1.8	0.5	1.5	0.9
ROM-3	150	26	22	40	1450	1720	1.0	3.0	1.8	0.5	1.5	0.9
ROM-4	400	26	22	120	1450	1720	1.0	3.0	3.6	0.5	1.5	1.8

Three-Phase - ROMpak only

Model No.	Torque (Nm)	Speed (sec)		Motor Power (W)	Motor Speed (rpm)		220 V Current			380 V Current			440 V Current		
		50Hz	60Hz		50Hz	60Hz	Run	Start	Lock	Run	Start	Lock	Run	Start	Lock
ROMpak-2	90	17	15	40	1450	1720	0.6	1.8	1.1	0.3	1.0	0.7	0.4	1.3	0.7
ROMpak-3	150	26	22	40	1450	1720	0.6	1.8	1.1	0.3	1.0	0.7	0.4	1.3	0.7
ROMpak-4	400	26	22	120	1450	1720	1.0	3.0	3.5	0.7	2.2	2.0	0.8	2.5	2.0

Circuit Diagram and Optional Extras

ROM Wiring Diagram



Optional Extras:

Torque Switches

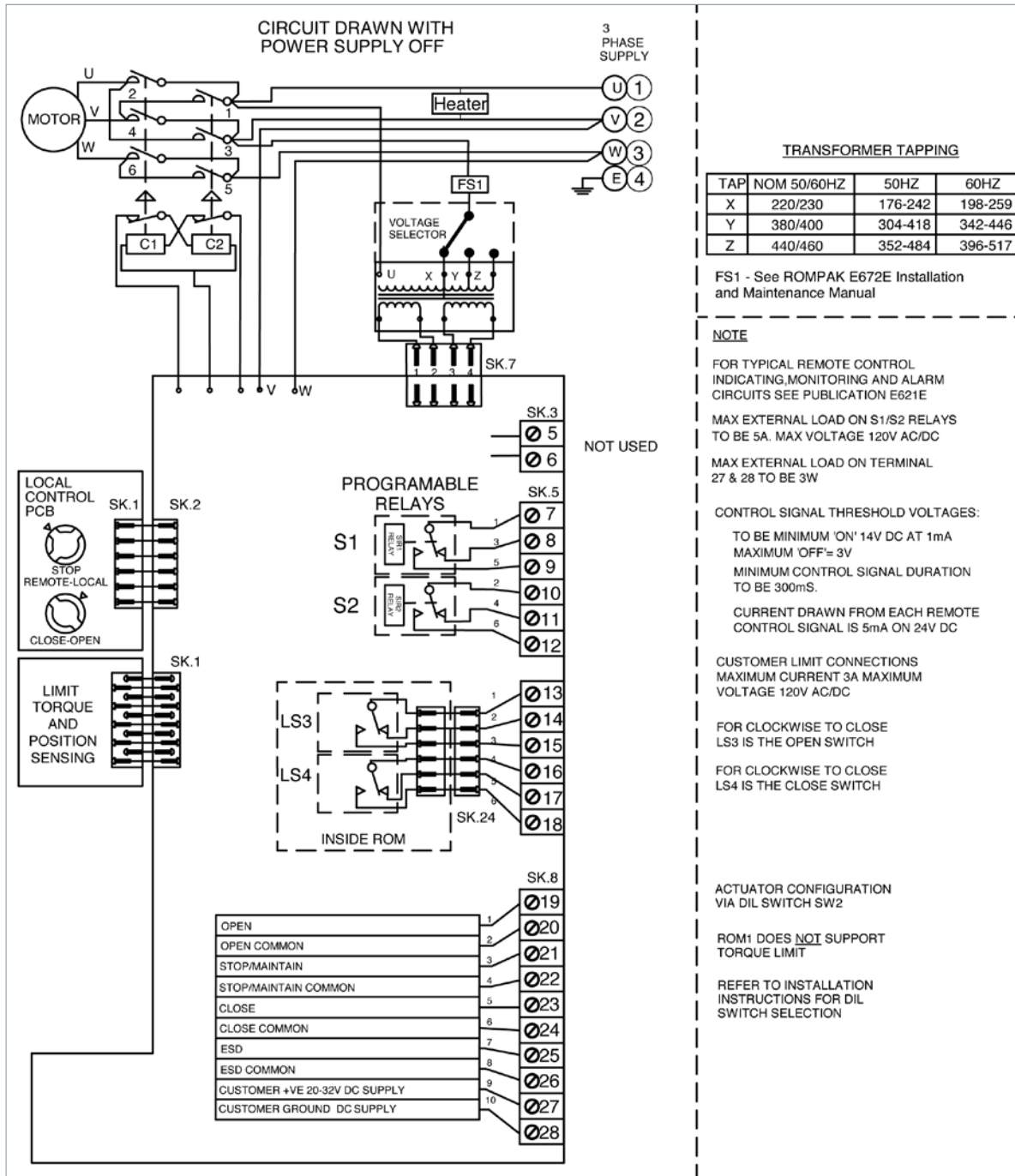
Cam activated torque switches to provide torque overload protection (available on ROM-2, 3 & 4).

Anti-condensation Heater

This heater is available for all sizes.

Circuit Diagram and Optional Extras

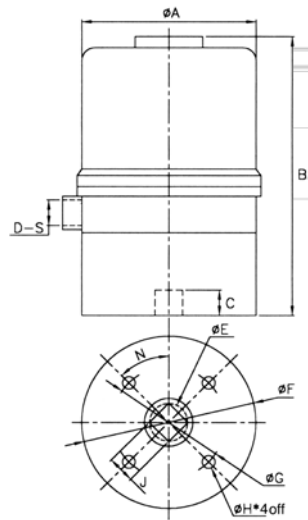
ROMpak 3 Phase Wiring Diagram



Dimensional Data

The ROM-A

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

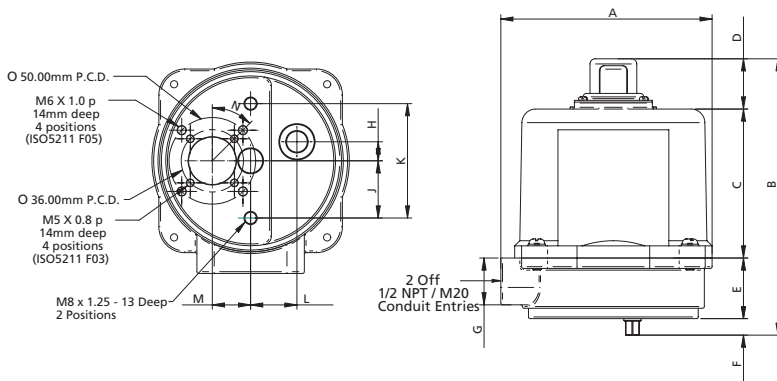


Dimension table:

Unit: mm

A	B	C	D	E	F	G	H	Jmax	N	S	Flange type
108	178	16	1	24	106	70	m8	17	45°	½ NPT/m20	F07

The ROM-1



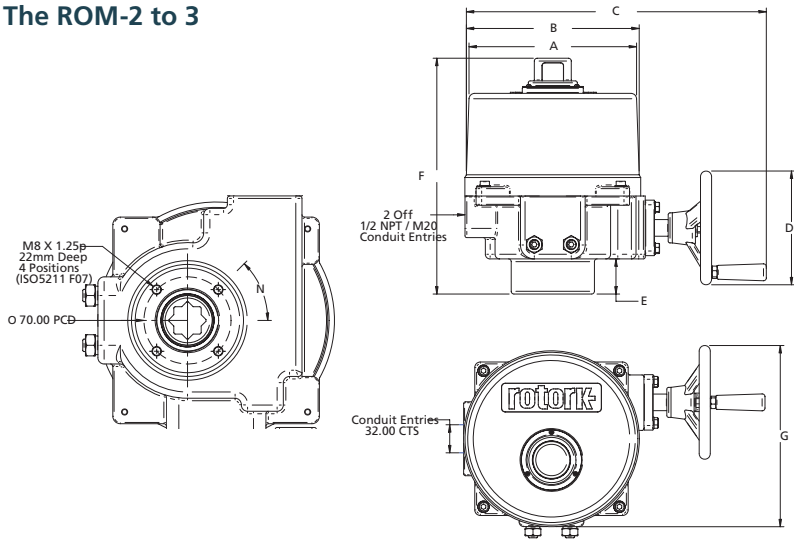
Dimension table:

Unit: mm

A	B	C	D	E	F	G	J	K	L	M	N	Flange type
122	159.5	86	29	35	9.5	27	33	66	26.7	22.1	45°	F03/F05

Dimensional Data

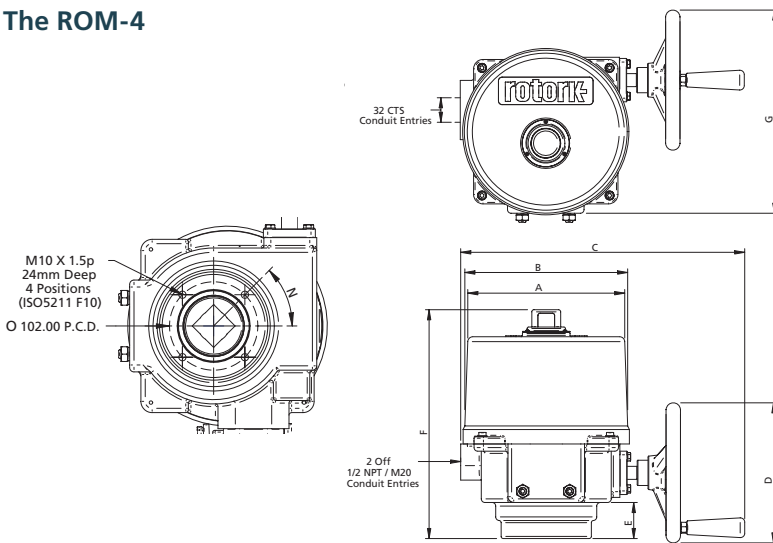
The ROM-2 to 3



Dimension table: Unit: mm

A	B	C	D	E	F	N	Flange type
181	187	324	123	38	255	45°	F07

The ROM-4



Dimension table: Unit: mm

A	B	C	D	E	F	G	N	Flange type
218	226	393	194	50	317	282	45°	F10

Dimensional Data

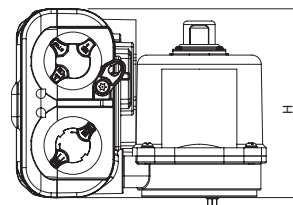
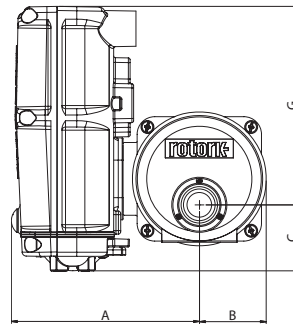
The ROMpak

The ROM range of actuators is now enhanced with the addition to of the ROMpak actuator. The ROMpak has a self contained control package with local controls, status indication relays, isolated control circuits and support for Rotork control options such as Folomatic, Pakscan and other bus systems.

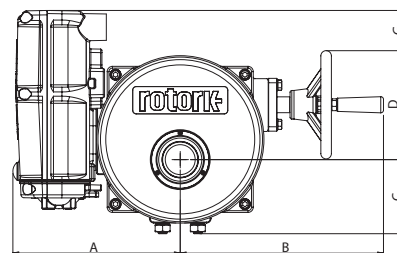
- Small, Compact & Lightweight.
- Manual override.
- Externally adjustable mechanical stops*.
- Local controls.
- Phase rotation correction.
- IP67.
- 12/24 VDC, 110/220 VAC single-phase and 220/380/440 VAC three-phase, 50 Hz and 60 Hz*.
- Position indication via local mechanical indicator and LED's.
- -30 to +60 °C operation.

For details of the ROMpak, see publication PUB008-002.

* Excluding ROM 1

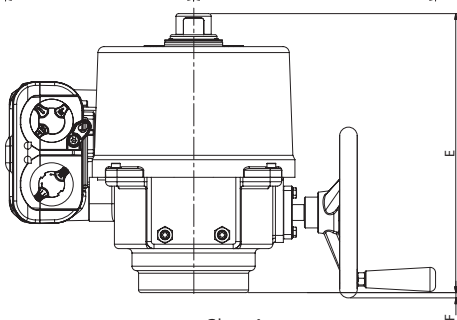
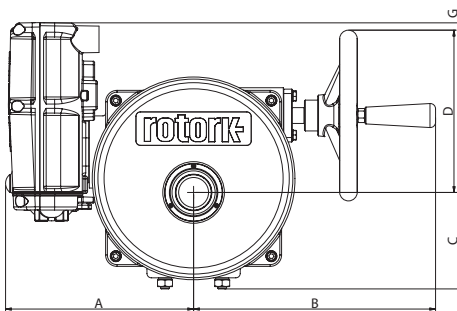


Size 1



Size 2 & 3

*Drive Insert Option:
as standard actuator



Size 4

Dimension table:

Unit: mm

Model	A	B	C	D	E	F	G	H
ROMpak 1	160	57	56	-	-	-	169	161
ROMpak 2	190	231	84	124	255	-	170	-
ROMpak 3	190	231	84	124	255	-	170	-
ROMpak 4	214	275	110	184	317	6	193	-

Projects, Services and Retrofit

rotork® Site Services

Rotork Site Services, the projects, service and retrofit division, is active in 47 service centres in over 20 countries around the world, with agents providing support services in another 55 countries, bringing the total number of expert technicians supporting Rotork customers to well over 1,000.

Rotork Site Services aims to further develop Rotork's services in the areas of maintenance, management and upgrading of installed actuation assets to ensure that Rotork can fully support and satisfy the increasing demands from its customers on a global basis.

Visit www.rotork.com to identify your nearest Rotork Site Services centre.

Emergency and Planned Service

Available for all types of actuator, in all areas (including hazardous environments). Some customers require guaranteed emergency response times, others require planned response for all types of actuator work, including installation, commissioning, upgrading, connection and installation of bus communication systems, troubleshooting and repair of damaged or deteriorating assets.

Actuator Overhauls

After a long service life customers may prefer their actuators to be completely overhauled rather than replacing them with new ones. In our workshops we completely strip and rebuild actuators, returning them to their original state.

Health Checks

Some customers lack detailed information on their assets, making it difficult to prioritise maintenance and replacement investment. We can carry out a detailed and intrusive inspection of the actuators and combine this with build data from our own databases to give customers a holistic view of their assets.

Preventative Maintenance

We provide preventative maintenance to enhance the integrity of actuators and their associated valves. We tailor programmes depending upon the type of actuators, the availability of asset information, and the criticality of the plant to maximise up-time whilst minimising operating costs.

Retrofitting actuators to existing valves

We have extensive experience in fitting actuators to valves, penstocks and dampers that are already installed as part of existing plant. Whether customers are replacing obsolete actuators, changing power sources or motorising manual valves, we offer a tailor made solution to meet customers' specific requirements.

Shutdown Outages

We can support customers in making sure that all their actuators are fully operational and that they meet tight shutdown deadlines. For example some power stations look for us to remove and overhaul in our workshops over 200 actuators when taking a unit out for maintenance. We do this, reinstall and commission the actuators and, where requested, carry out additional actuation projects simultaneously to ensure that customers make the most of their plant shutdown time.

Factory fitting of actuators to new valves

The careful assembly of valve and actuator is critical to ensure that an automated valve performs correctly and reliably. Whilst this service is often carried out by valve manufacturers, if there is a need we can provide this service.

Extended scope projects

This is a growing requirement and some of our service teams have the wide range of skills necessary to offer a "one-stop-shop" to automate part or all of a customer's process. Our capabilities cover all of the installation phases (scoping, design, procurement, manufacturing, installation, commissioning) on the broad scopes that typically surround actuation projects.





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