

J4M HANDBOOK



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Handbook (EN) 25-03 V1

J+J

J.J. BCN INTERNACIONAL S.A.

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01 ACTUATOR PART LIST

MODELS: S2, S6, S10, B2, B6, B10



MODELS: S25, S40, B25, B40



02 J4M SERIES



Read these instructions before connecting the actuator. Damage caused by non compliance of these instructions is not covered by our warranty.

J4M Electric actuators operate with the use of live electricity. It is recommended that only qualified electrical engineers be allowed to connect or adjust these actuators.

VOLTAGE TO BE CONNECTED

All our actuators model S2 to S40 are ready to work from 24-240 VDC/VAC.

All our actuators model B2 to B40 are ready to work at 12 VDC/VAC ONLY.

ELECTRICAL CONNECTORS

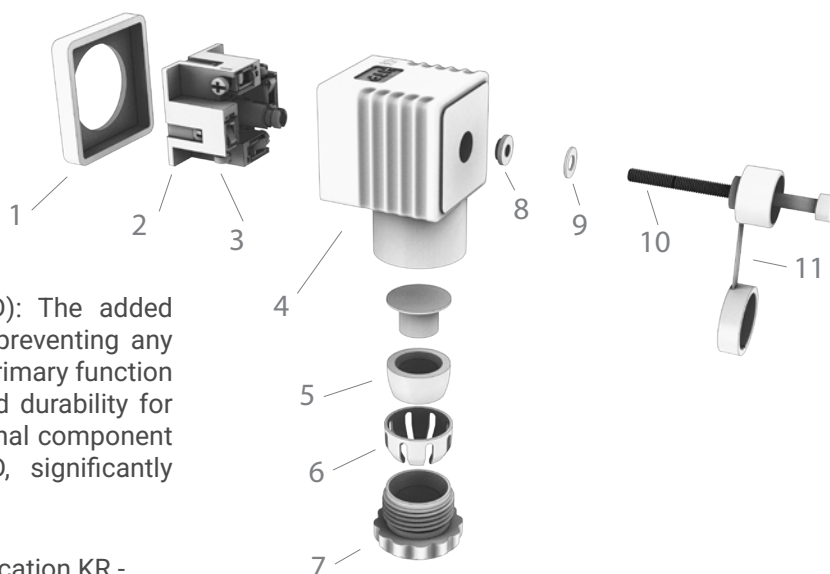
Warning: Before connecting ensure that the voltage to be applied to the actuator is within the range shown on the identification label. The supplied electrical connectors, used to connect to the actuator are DIN plugs. Ensure the diameter of cable to be used conforms to the maximum and minimum requirements of the DIN plugs to maintain water tightness (Fig.1).

Connector	Small Black		Big Grey or Black	
	Din43650/C		EN175301-803 Form A	
Model	min. Ø	max. Ø	min. Ø	max. Ø
J4M 2 to 10	5 mm	6 mm	8 mm	10,5 mm
J4M 25 to 40	--	--	8 mm	10,5 mm

Warning: Ensure that the square rubber seal is in place when fixing each DIN plug to the actuator. Failure to do so could allow water ingress and damage caused by this installation error will invalidate any warranty. The DIN plugs are fixed to their respective bases on the actuator housing with a screw. Do not over tight the screw (8) when assembling (Max. 0.5Nm).

1. Gasket
2. Terminal strip
3. Cable fixing screws
4. Housing
5. Washer
6. Grommet

7. Gland - nut
8. Gasket
9. Washer
10. Fixing screw
11. ESD cap



ELECTROSTATIC DISCHARGE IMMUNITY (ESD): The added ESD cap (11) serves as component aimed at preventing any adverse effects of electrostatic discharges. Its primary function is to ensure optimal performance and extended durability for the actuator. Acting as a safeguard, this additional component strengthens the actuator's immunity to ESD, significantly enhancing its overall lifespan.

The improvement allowed us to obtain the certification KR - Korean Register.

ID ACTUATOR LABEL

1	MOD.:	SERIE: J4M	11
2	CONFIRMATIONS: MAX.24V 1A		
3	VOLTAGE: 24 - 240 DC OR AC (50/60HZ).	DUTY:75%	12
4	TEMPERATURE: - 20°C + 70°C----		13
5	WORKING TIME: 3 SEC / TURN		
6	WORKING ANGLE: MAX. 14 TURNS		
7	14 F03/04/05 IP67		14
8	MAX. TORQUE: 9 Nm		15
9	SERIAL N°: 000000000000		16
10		Made In Spain	17
	DPS CONFIGURATION: IN/OUT 4-20mA ☐ 0-20mA ☐ NC ☐ NO ☐ 0-10V ☐ 1-10V ☐ STAYS PUT ☐ OUT different of IN:	BLUETOOTH User 000000000000 Password: 12345	18
			19
			20

- | | |
|--|---|
| 1. Actuator Model. | 11. Actuator series. |
| 2. Voltage to be connected. | 12. Duty: 75%. |
| 3. Actuator ready to bear between -20°C / +70°C. | 13. QR code for manufacturing. |
| 4. Time/Turn. | 14. Actuator with CE certificate. |
| 5. Working angle. | 15. This product should not be disposed of as unsorted waste. |
| 6. Plate to fix the valve to the actuator, following ISO 5211. | 16. UK Conformity Assessed. |
| 7. Actuator with the IP67 protection. | 17. Quality Control Conformity. |
| 8. Maximum operational torque. | 18. Country where the equipment was manufactured. |
| 9. Actuator serial number. | 19. Bluetooth configuration |
| 10. Bar code of the serial number. | 20. DPS configuration |

LOCAL VISUAL POSITION INDICATOR

All J4M actuators are supplied with a local visual position indicator (Fig.6).

The OPEN position shows the indicator in BLACK and at the end of the stroke (max 14 turns) shows the full indicator in RED.



Fig. 6 OPEN



Fig. 6 MAX. 14 TURNS

EMERGENCY MANUAL OVERRIDE FACILITY

The J4M has 2 operating modes, automatic and manual, the required mode is selected by using a lever on the lower half of the actuator housing (Fig 7).

The 2 positions are marked:

AUTO = Automatic operation

MAN = Manual operation

Warning: Do not remove the selector lever securing screw, as this will allow its internal mechanism to become loose and will cause irreparable damage to the actuator's gearbox. Removing this screw will invalidate the warranty.

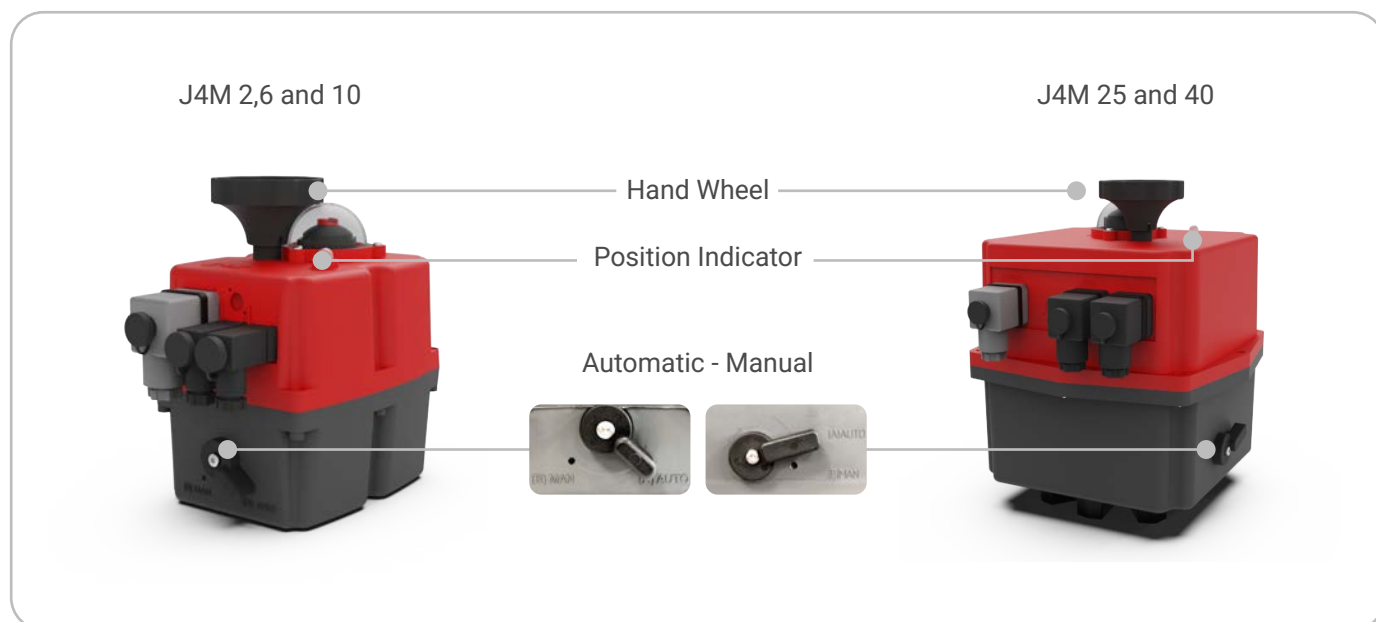
When "AUTO" position is selected: The hand wheel rotates automatically, it is very important not to block it, otherwise the actuator could suffer unrepairable damages.



Fig. 7 J4M 2,6 and 10



Fig. 7 J4M 25 and 40



When "MAN" function is selected:

1. The electronic system cuts the power to the motor after a few minutes.
2. The mechanical connection between the motor and the output shaft is disconnected.
3. The desired position can be achieved by using the hand wheel.
4. There are two ways to re-active the motor after being isolated whilst in "MAN" position:
 - a) Change from "MAN" mode to "AUTO". Deactivate the supply voltage for a few seconds which resets the actuator and it could operate automatically again.

TABLE OF CONSUMPTIONS ON-OFF ACTUATOR

J4M S2 Consumption		Minimum operational torque - 2 Nm		Maximum operational torque - 5,5 Nm	
Voltage	Model	A	W	A	W
12 VDC	S2	1,62	19,50	2,17	26,00
24 VDC	S2	0,81	19,30	1,28	30,70
48 VDC	S2	0,39	18,60	0,57	27,10
110 VDC	S2	0,63	69,00	0,96	105,50
12 VAC	S2	2,31	27,70	2,70	32,40
24 VAC	S2	1,04	25,00	1,80	43,10
48 VAC	S2	0,64	30,80	1,08	52,00
110 VAC	S2	0,23	25,40	0,35	38,50
240 VAC	S2	0,16	38,50	0,23	56,00

J4M S6 Consumption		Minimum operational torque - 5 Nm		Maximum operational torque - 9 Nm	
Voltage	Model	A	W	A	W
12 VDC	S6	2,43	29,20	3,03	36,30
24 VDC	S6	1,36	32,60	1,66	39,30
48 VDC	S6	0,61	29,40	0,73	35,10
110 VDC	S6	0,18	19,60	0,22	24,70
12 VAC	S6	2,89	34,60	4,33	52,00
24 VAC	S6	1,75	42,10	2,25	54,10
48 VAC	S6	0,98	47,10	1,27	60,70
110 VAC	S6	0,36	39,20	0,45	49,60
240 VAC	S6	0,23	54,40	0,28	68,10

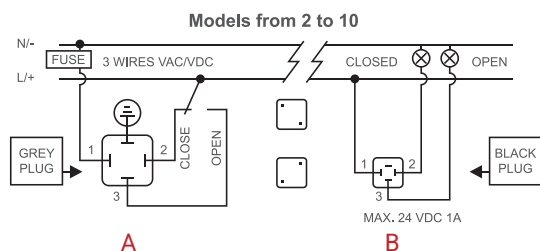
J4M S10 Consumption		Minimum operational torque - 7 Nm		Maximum operational torque - 15 Nm	
Voltage	Model	A	W	A	W
12 VDC	S10	2,39	28,60	3,13	37,60
24 VDC	S10	1,21	28,90	1,70	40,80
48 VDC	S10	0,55	26,60	0,78	37,30
110 VDC	S10	0,15	16,70	0,22	24,20
12 VAC	S10	2,55	30,60	6,97	83,70
24 VAC	S10	1,69	40,60	2,41	57,90
48 VAC	S10	0,99	47,50	1,69	81,20
110 VAC	S10	0,31	34,10	0,44	47,90
240 VAC	S10	0,21	50,70	0,28	68,10

TABLE OF CONSUMPTIONS ON-OFF ACTUATOR

J4M S25 Consumption		Minimum operational torque - 10 Nm		Maximum operational torque - 30 Nm	
Voltage	Model	A	W	A	W
12 VDC	S25	3,08	37,00	7,46	89,60
24 VDC	S25	2,20	52,90	3,53	84,70
48 VDC	S25	0,96	46,10	1,66	79,60
110 VDC	S25	0,35	38,00	0,59	64,90
12 VAC	S25	5,16	61,90	10,11	121,30
24 VAC	S25	2,70	64,80	4,58	110,00
48 VAC	S25	1,55	74,30	2,12	101,70
110 VAC	S25	0,58	63,90	1,03	113,50
240 VAC	S25	0,51	122,00	0,77	185,30

J4M S40 Consumption		Minimum operational torque - 16 Nm		Maximum operational torque - 50 Nm	
Voltage	Model	A	W	A	W
12 VDC	S40	3,27	39,30	9,85	118,20
24 VDC	S40	2,04	49,10	3,87	92,80
48 VDC	S40	0,91	43,70	1,85	89,00
110 VDC	S40	0,32	35,60	0,66	72,10
12 VAC	S40	4,37	52,50	12,04	144,50
24 VAC	S40	2,48	59,40	5,43	130,40
48 VAC	S40	1,35	64,80	2,65	127,10
110 VAC	S40	0,61	67,00	1,19	130,90
240 VAC	S40	0,48	115,60	0,84	202,80

EXTERNAL CONNECTING DIAGRAM



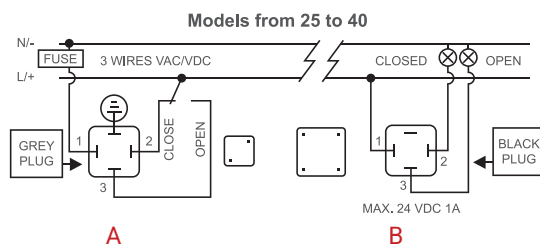
ON - OFF VAC / VDC

The power supply is connected to the grey "A" DIN plug.

- Neutral or negative PIN 1 + Phase or positive PIN 2 = Actuator close
- Neutral or negative PIN 1 + Phase or positive PIN 3 = Actuator open
- Earth/ground connection - Flat PIN $\oplus$

The volt free connection (conf. of position) black "B" DIN plug.

- Common PIN 1 + PIN 2 = Confirmation of close position
- Common PIN 1 + PIN 3 = Confirmation of open position.



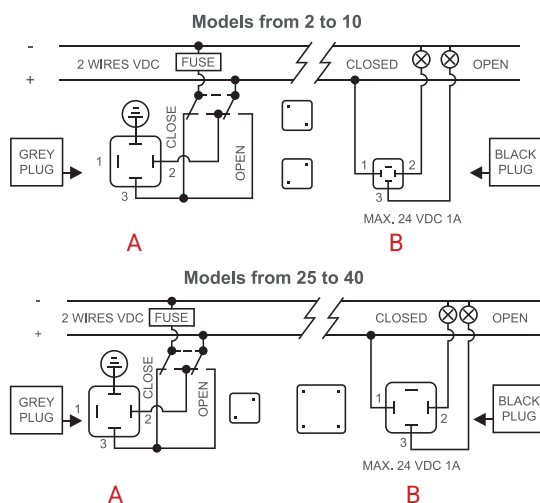
ON - OFF VAC / VDC

The power supply is connected to the grey "A" DIN plug.

- Negative PIN 3 + Positive PIN 2 = Actuator close
- Negative PIN 2 + Positive PIN 3 = Actuator open
- Earth/ground connection - Flat PIN $\oplus$

The volt free connection (conf. of position) black "B" DIN plug.

- Common PIN 1 + PIN 2 = Confirmation of close position
- Common PIN 1 + PIN 3 = Confirmation of open position



POSITIONER VAC / VDC

The power supply is connected to the grey "A" DIN plug

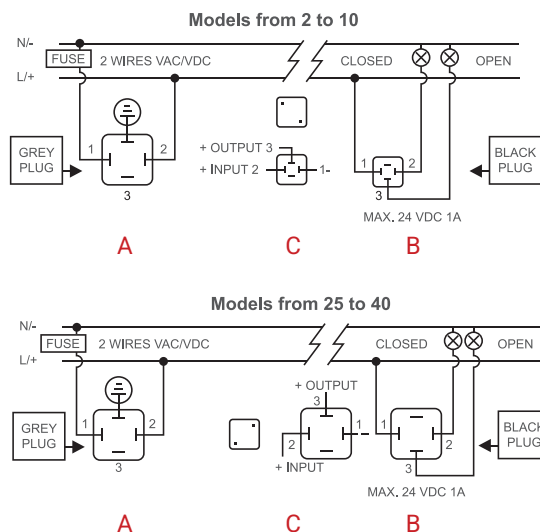
- Neutral or negative PIN 1 + Phase or positive PIN 2 = Power supply
- Earth/ground connection - Flat PIN $\oplus$

Input/output signal is connected to the black "C" DIN plug

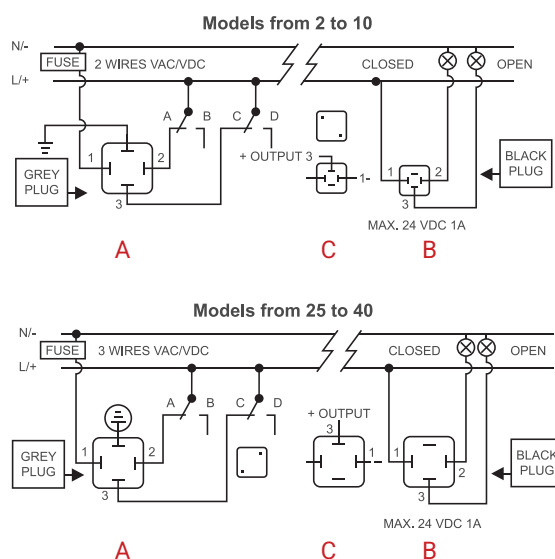
- Negative PIN 1 + positive PIN 2 = Input signal
- Negative PIN 1 + positive PIN 3 = Output signal

The volt free connection - black "B" DIN plug

- Common PIN 1 + PIN 2 = Confirmation of close position
- Common PIN 1 + PIN 3 = Confirmation of open position



C= Instrumentation signal, **NO VOLTAGE**



POSITIONER VAC / VDC ONLY OUTPUT

The power supply is connected to the grey "A" DIN plug

- Neutral/negative PIN 1 + Phase/positive PIN 2 = Close position
- Neutral/negative PIN 1 + Phase/positive PIN 3 = Open position
- Neutral/negative PIN 1 + Phase/positive PIN 2 + Phase/positive PIN 3 = Stop

Output signal is connected to the black "B" DIN plug

- Negative PIN 1 + positive PIN 3 = Positive = Output signal

The volt free connection - black "C" DIN plug

- Common PIN 1 + PIN 2 = Close confirmation of position
- Common PIN 1 + PIN 3 = Open confirmation of position



C= Instrumentation signal, **NO VOLTAGE**

03 DATASHEET

J4M 2 - GENERAL CHARACTERISTICS



Technical Data	
Operation time unload	4 Sec / turn
Minimum operational torque	2 Nm / 17,70 lb/in
Maximum operational torque	5,5 Nm / 48,68 lb/in
Duty rating	75%
Maximum number turns	13.5
Confirmations	Standard_Analogue: 2 Relays 24VDC 1Amp. (1 Open and 1 Close) / Optional: Digitals (1 Open and 1 Close)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Interface	App and PC Program
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5210 Plate	Standard: F03/F04/F05 Optional: F07 *17 mm
DIN 3337 Female output drive	Standard: *14 Optional: *9, *11 mm
Weight	1,9 kg

Actuator with Bluetooth Configurations:

- 1) On-Off
- 2) Digital positioner (input / output) 4-20mA, 0-20mA, 0-10V or 1-10V

Electronic Data	
Electronic Torque Limiter function	
Electric motor	24VDC Brushless motor
Insulation	Class B
(IEC 60034) Service	S4

Voltage VDC/VAC 50/60Hz 0%/5%	
S2	24-240 VDC/VAC
B2	12 VDC/VAC ONLY

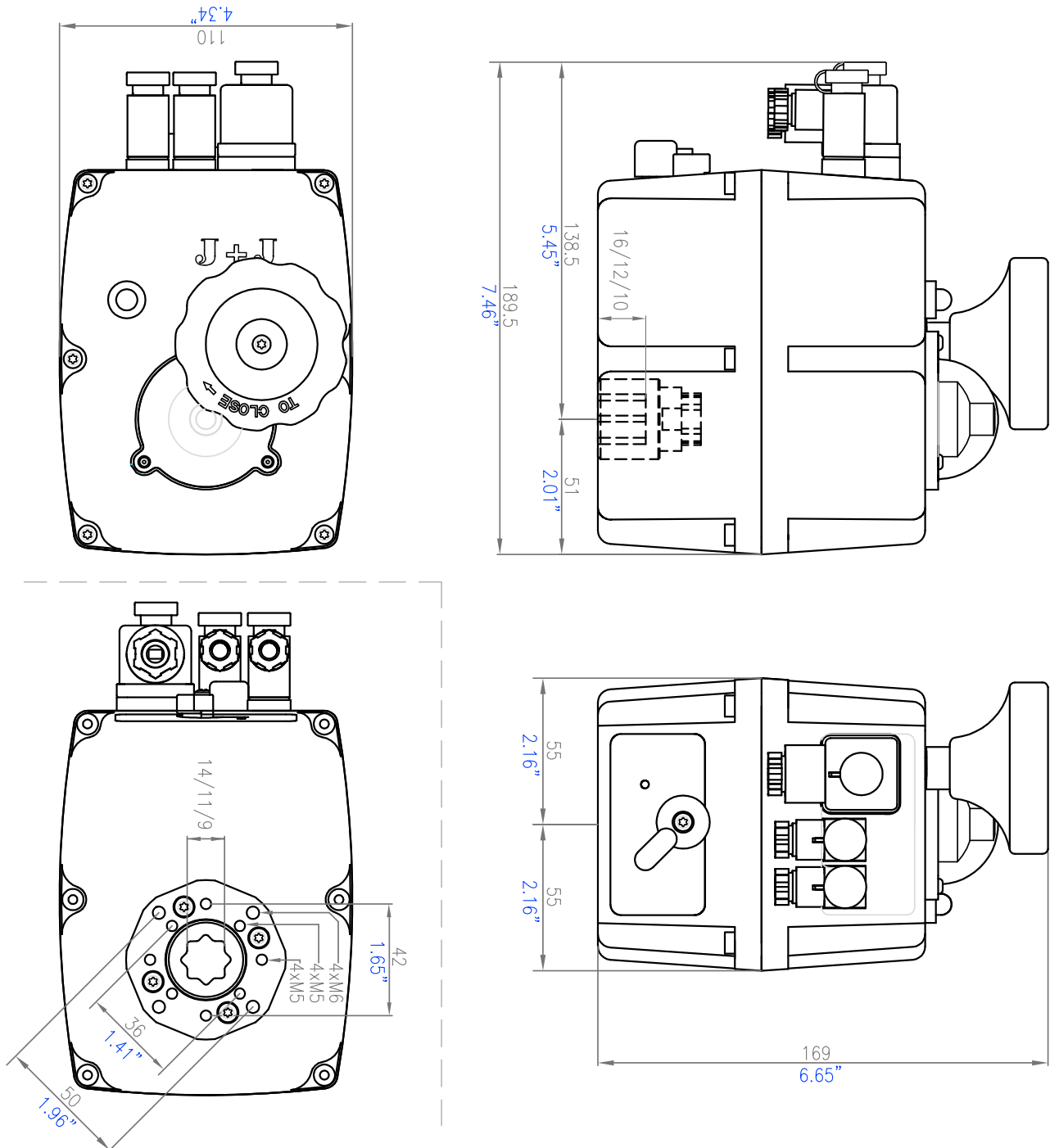
Materials	Standard	Optional
Body	Anticorrosive Polyamide, Grey colour	Polypropilene V0, Black colour
Cover	Anticorrosive Polyamide, Red colour	Polypropilene V0, Natural colour
Output drive	Zamak, Zinc plated	Zamak, TEFLON coated
Flange	Zamak and Zinc plated	Zamak and TEFLON coated
Main external shaft	Anticorrosive Polyamide	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-

Manufacturer option

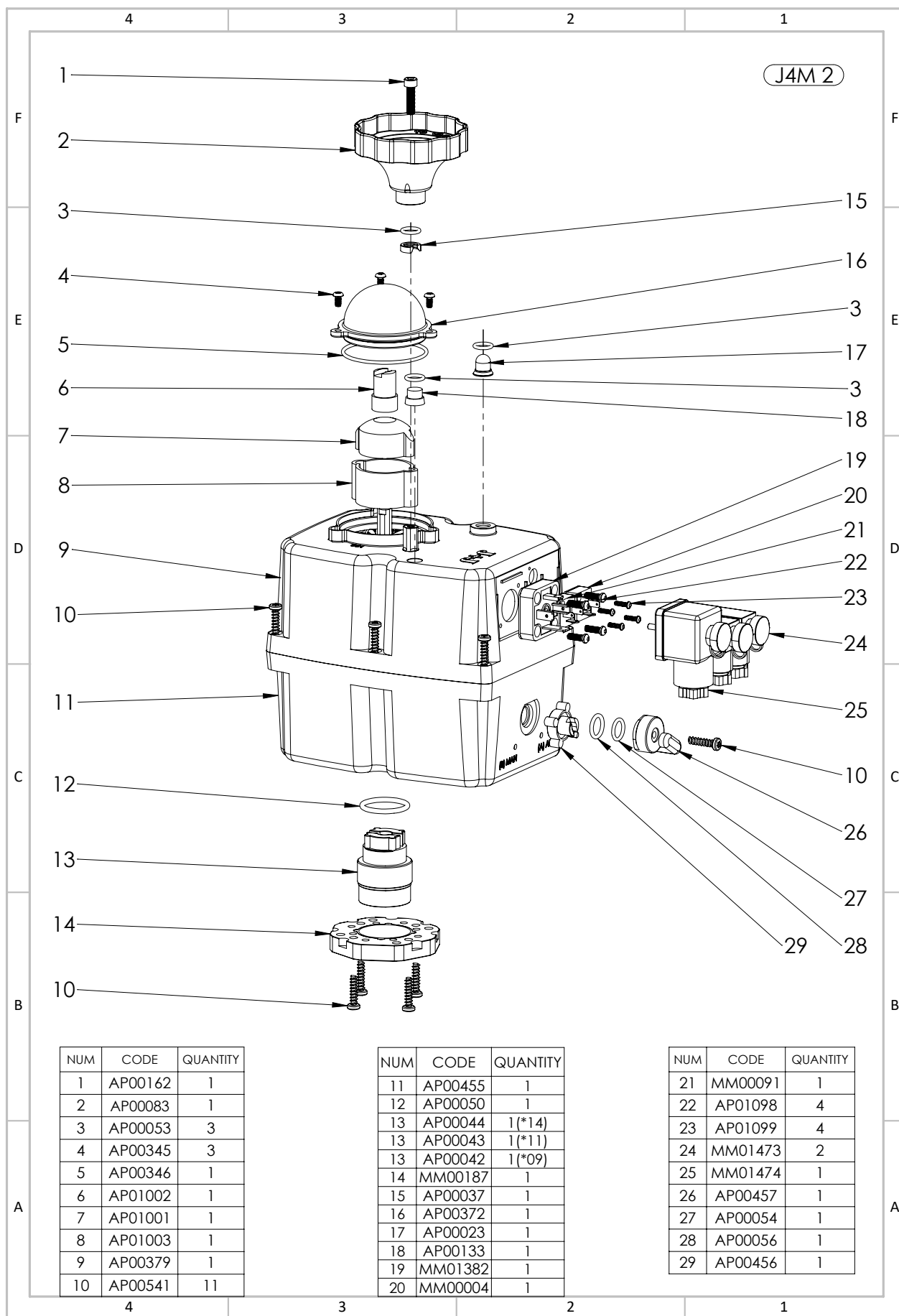


Note: Technical data are the same despite the different casings.

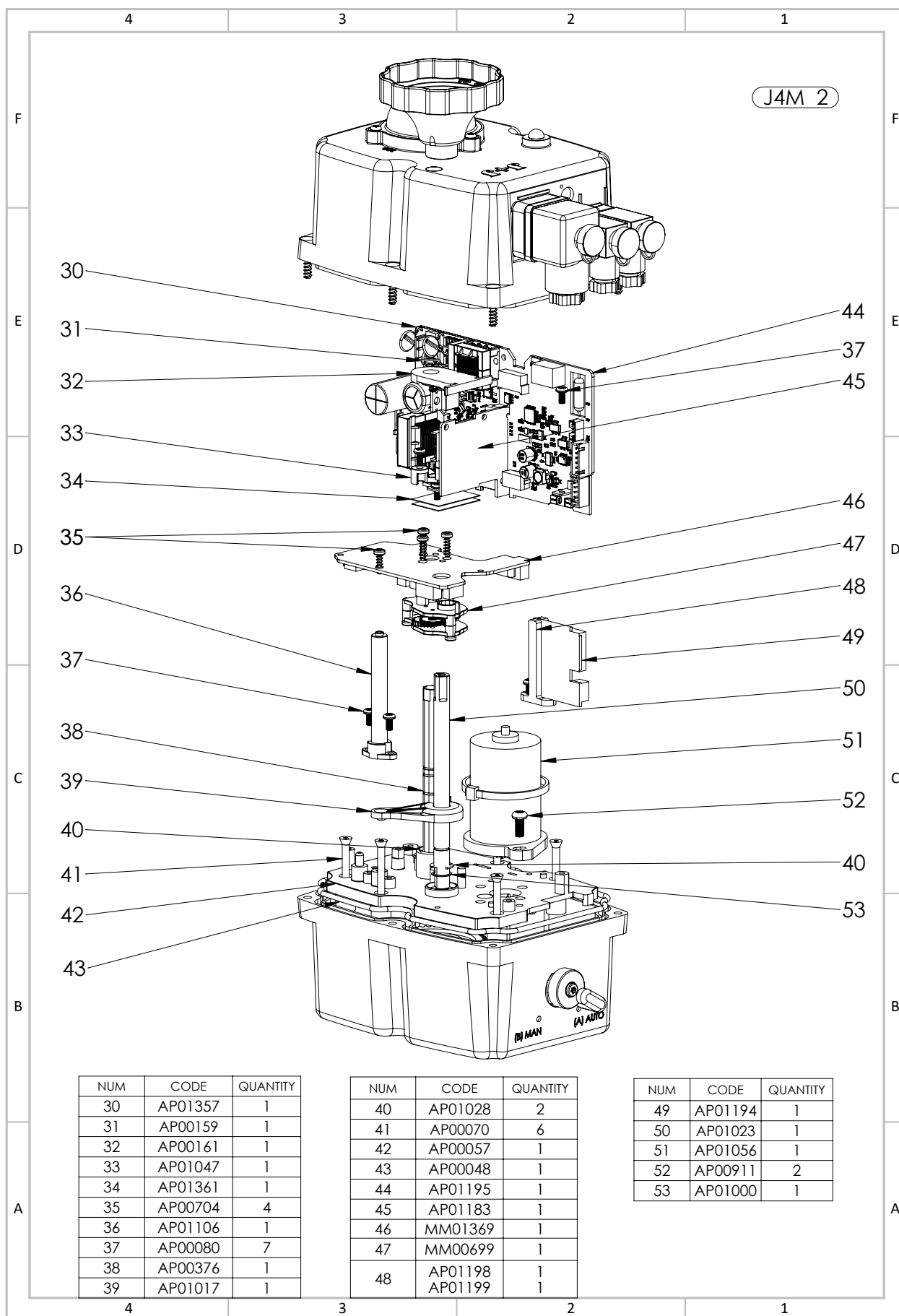
J4M 2 SIZES



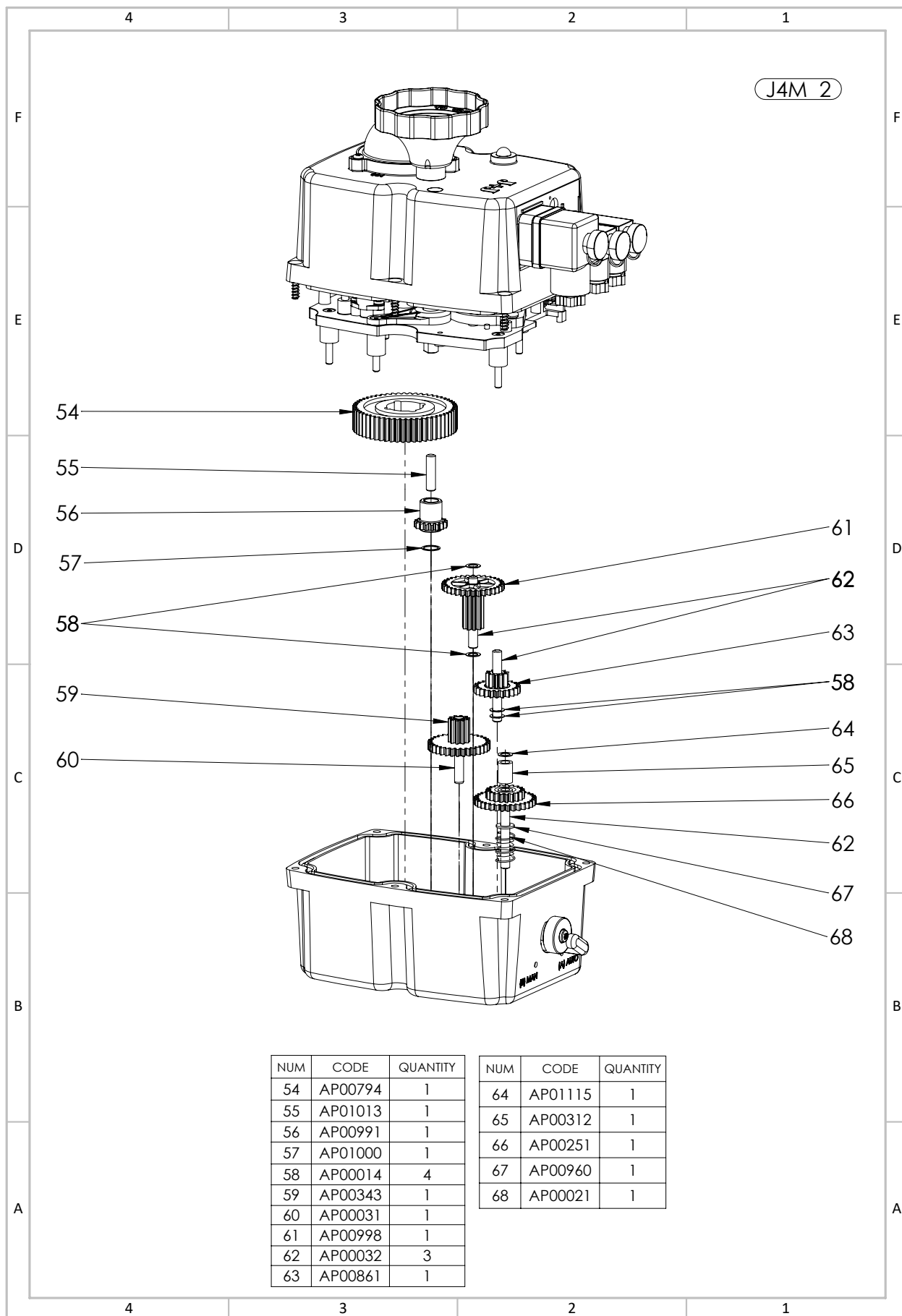
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



J4M 6 - GENERAL CHARACTERISTICS

Technical Data	
Operation time unload	3 Sec / turn
Minimum operational torque	5 Nm / 44,25 lb/in
Maximum operational torque	9 Nm / 79,66 lb/in
Duty rating	75%
Maximum number turns	13.5
Confirmations	Standard_Analogue: 2 Relays 24VDC 1Amp. (1 Open and 1 Close) / Optional: Digitals (1 Open and 1 Close)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Interface	App and PC Program
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5210 Plate	Standard: F03/F04/F05 Optional: F07 *17 mm
DIN 3337 Female output drive	Standard: *14 Optional: *9, *11 mm
Weight	1,9 kg

Actuator with Bluetooth Configurations:

1) On-Off
2) Digital positioner (input / output) 4-20mA, 0-20mA, 0-10V or 1-10V

Materials	Standard	Optional
Body	Anticorrosive Polyamide, Grey colour	Polypropylene V0, Black colour
Cover	Anticorrosive Polyamide, Red colour	Polypropylene V0, Natural colour
Output drive	Zamak, Zinc plated	Zamak, TEFLON coated
Flange	Zamak and Zinc plated	Zamak and TEFLON coated
Main external shaft	Stainless Steel	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-

Manufacturer option

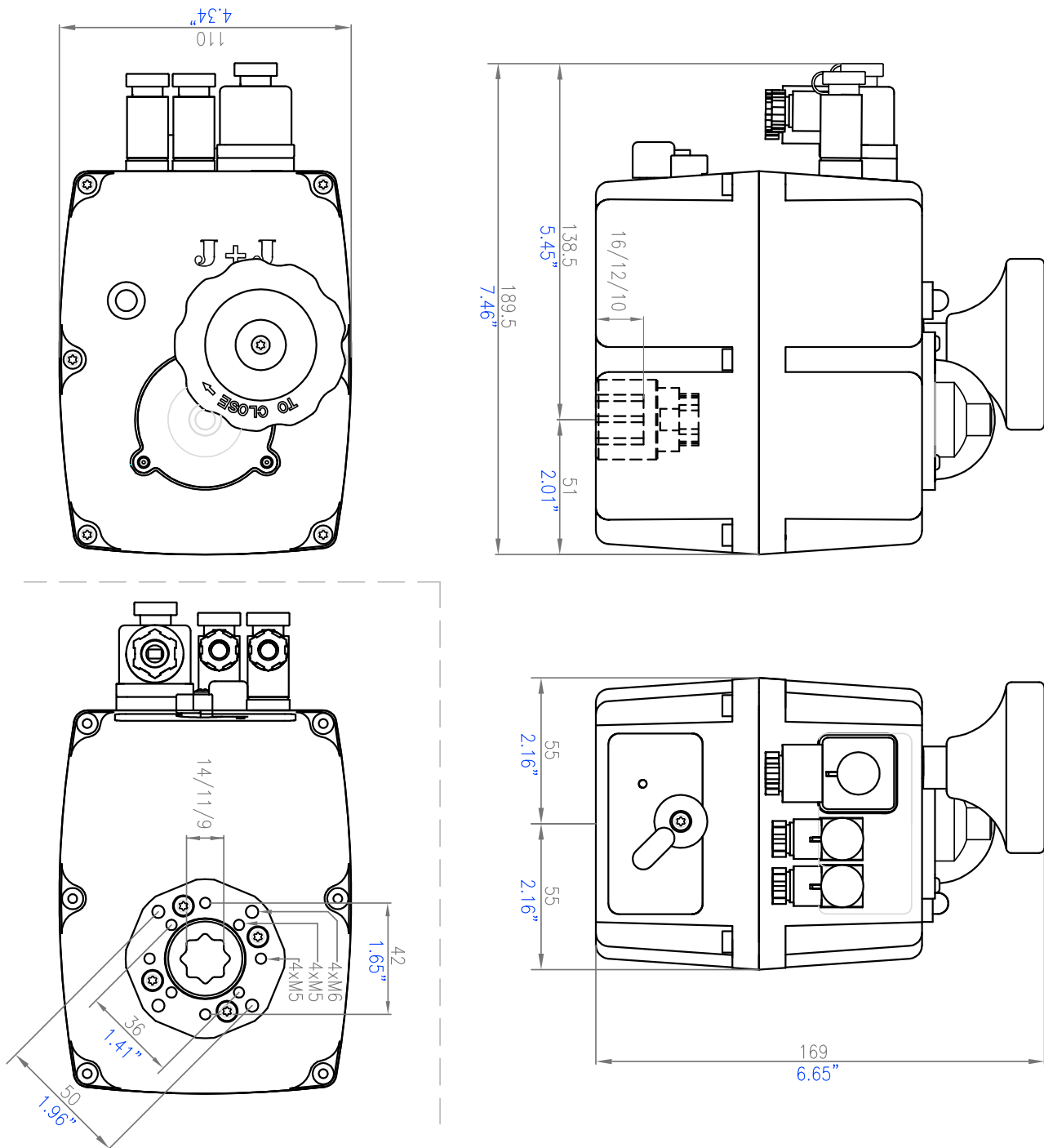


Note: Technical data are the same despite the different casings.

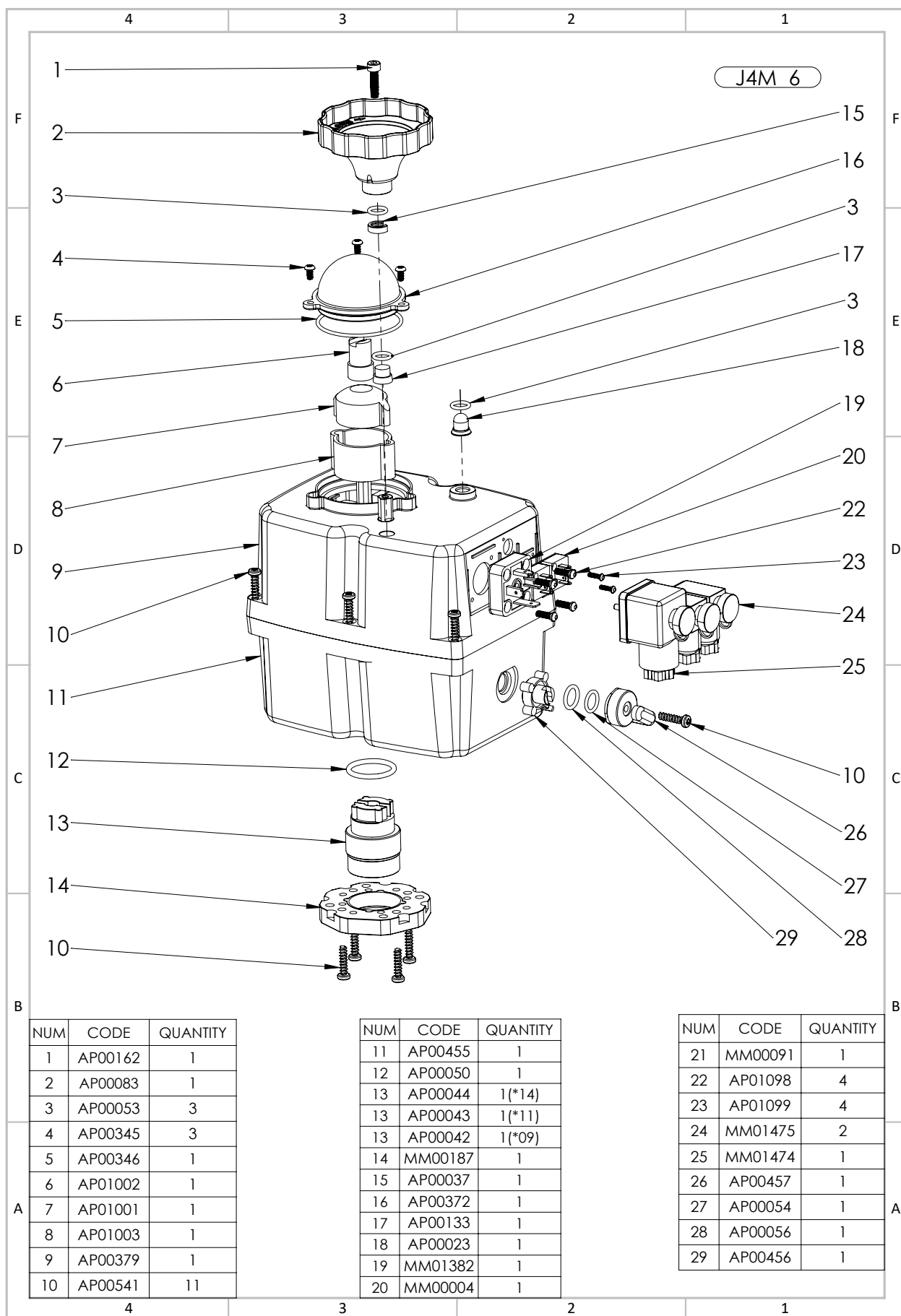


Electronic Data	
Electronic Torque Limiter function	
Electric motor	24VDC Brushless motor
Insulation	Class B
(IEC 60034) Service	S4
Voltage VDC/VAC 50/60Hz 0%/5%	
S6	24-240 VDC/VAC
B6	12 VDC/VAC ONLY

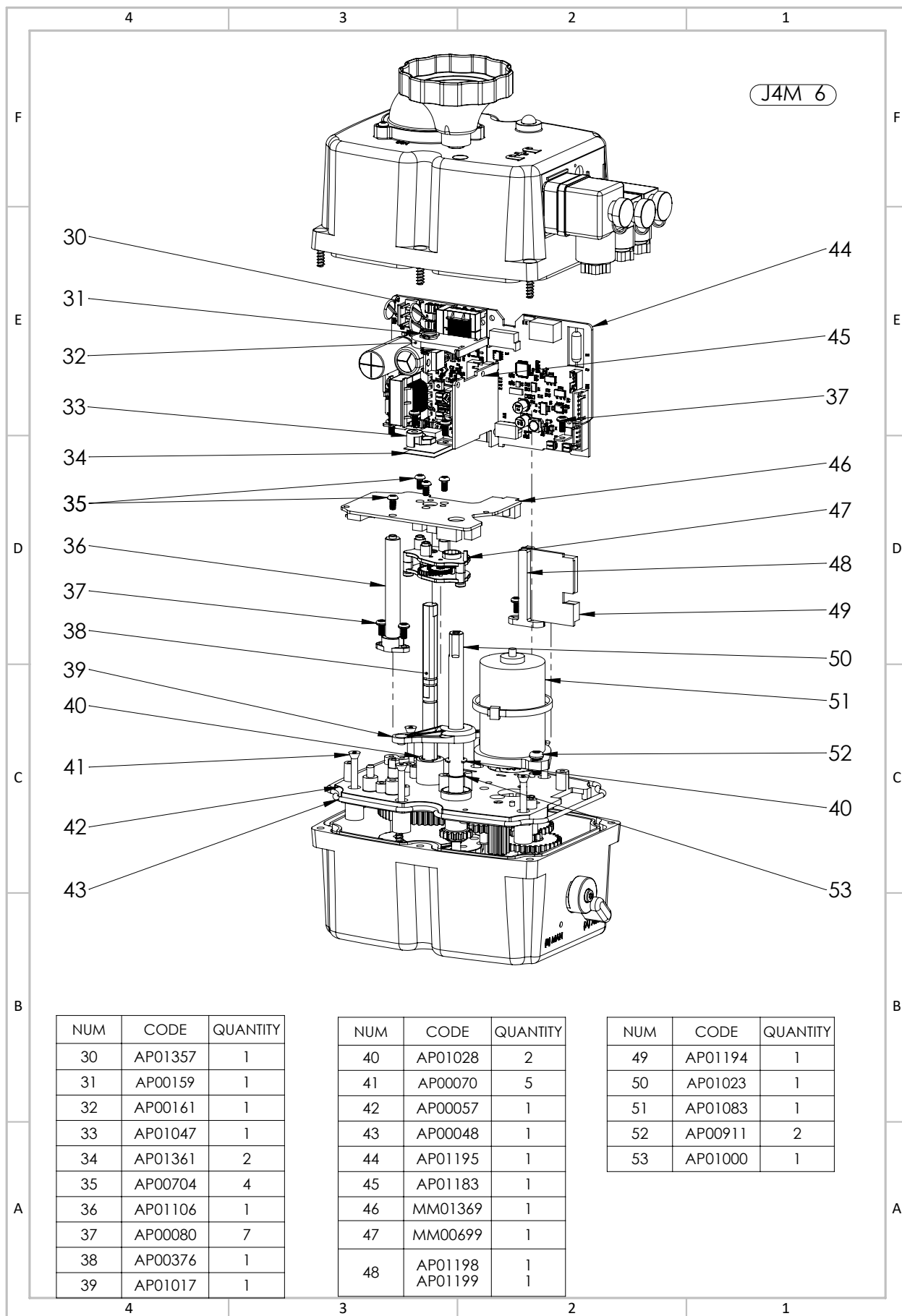
J4M 6 SIZES



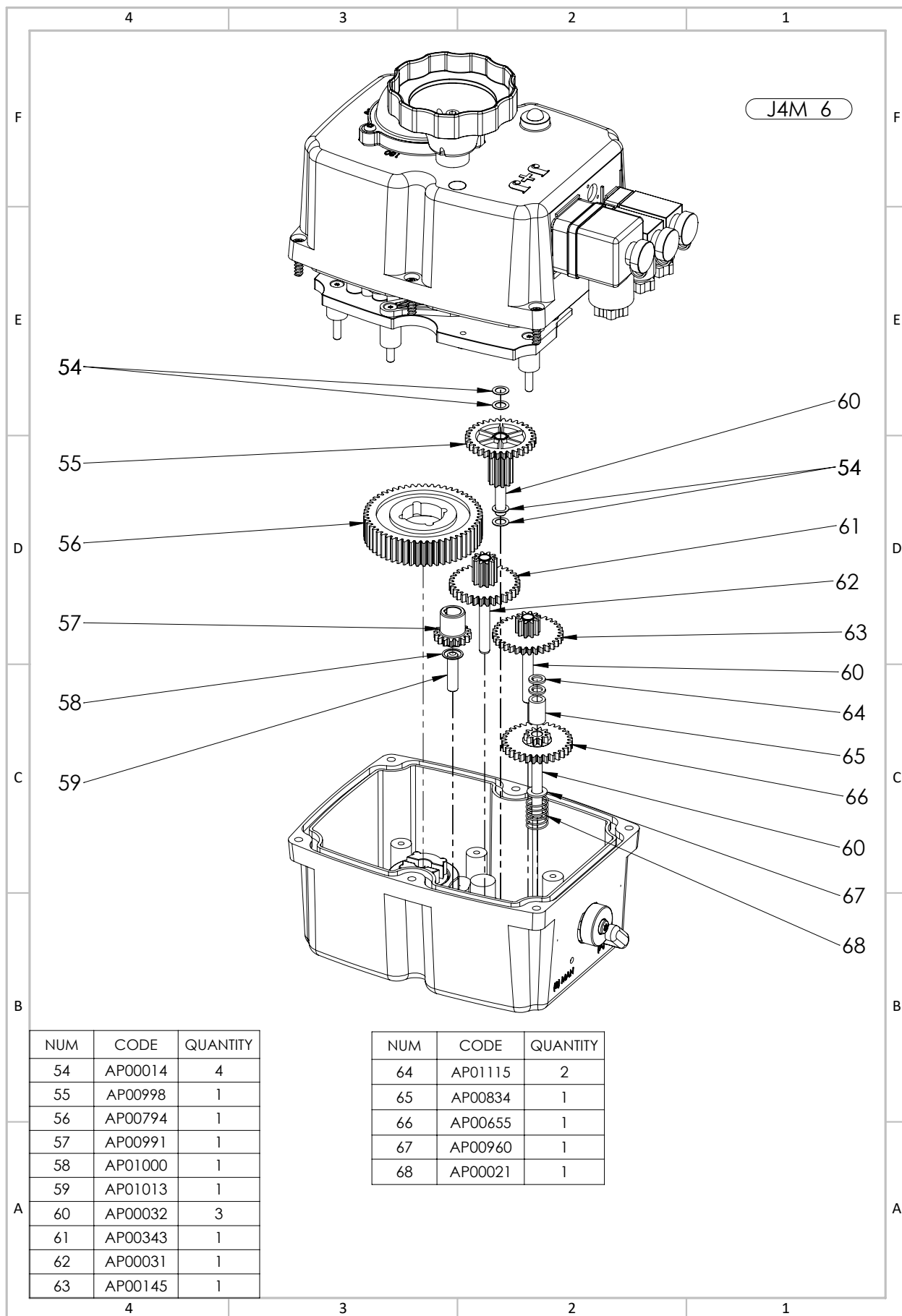
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



J4M 10 - GENERAL CHARACTERISTICS



Technical Data	
Operation time unload	12,8 Sec. / turn
Minimum operational torque	7 Nm / 61,96 lb/in
Maximum operational torque	15 Nm / 132,76 lb/in
Duty rating	75%
Maximum number turns	13.5
Confirmations	Standard_Analogue: 2 Relays 24VDC 1Amp. (1 Open and 1 Close) / Optional: Digitals (1 Open and 1 Close)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Interface	App and PC Program
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5210 Plate	Standard: F05/F07
DIN 3337 Female output drive	Standard: *17 Optional: *11, *14 mm
Weight	1,9 kg

Actuator with Bluetooth Configurations:

1) On-Off
2) Digital positioner (input / output) 4-20mA, 0-20mA, 0-10V or 1-10V

Electronic Data	
Electronic Torque Limiter function	
Electric motor	24VDC Brushless motor
Insulation	Class B
(IEC 60034) Service	S4

Voltage VDC/VAC 50/60Hz 0%/5%	
S10	24-240 VDC/VAC
B10	12 VDC/VAC ONLY

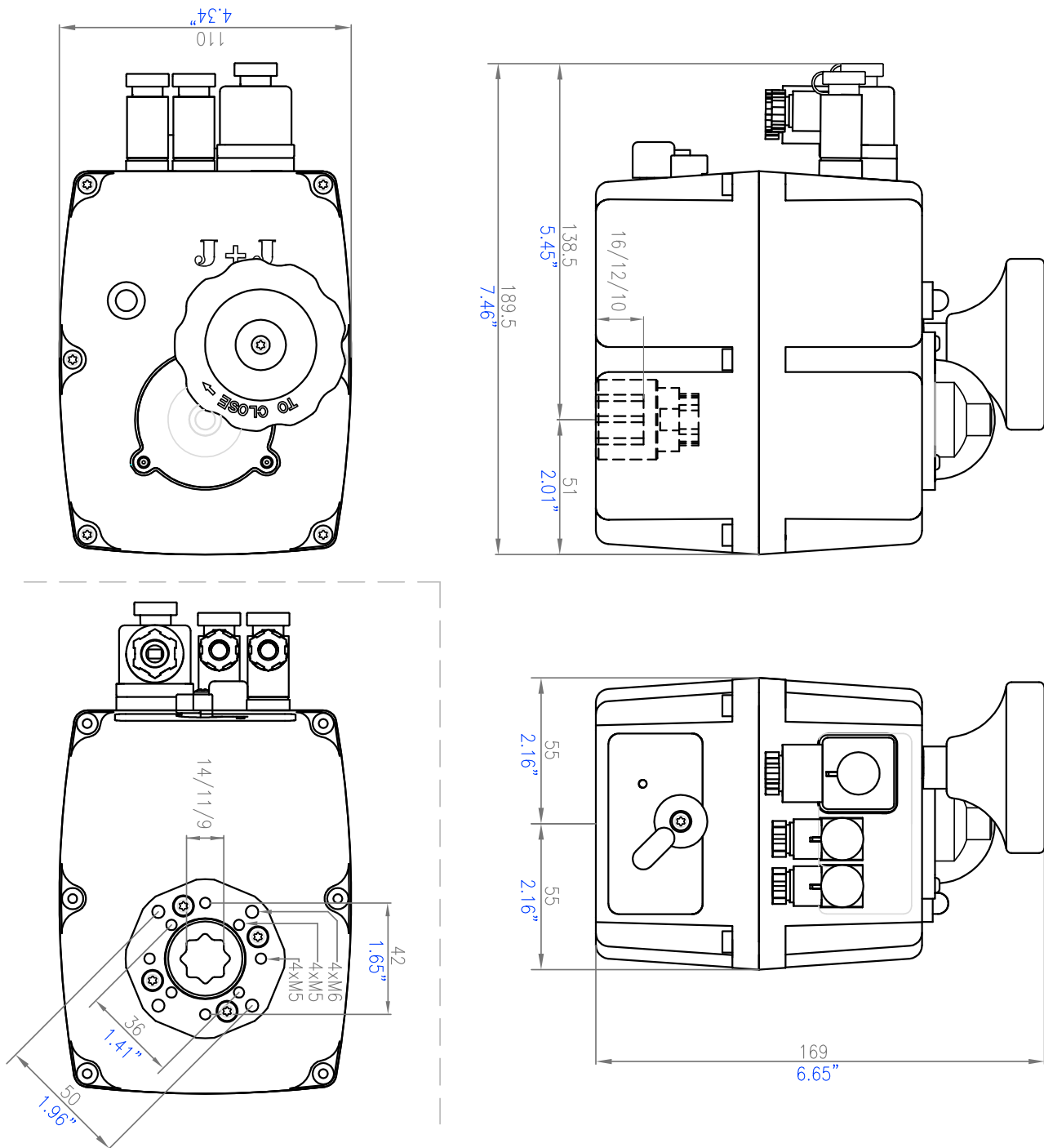
Materials	Standard	Optional
Body	Anticorrosive Polyamide, Grey colour	Polypropilene V0, Black colour
Cover	Anticorrosive Polyamide, Red colour	Polypropilene V0, Natural colour
Output drive	Zamak, Zinc plated	Zamak, TEFLON coated
Flange	Aluminium and Cataphoresis	Aluminium and TEFLON coated
Main external shaft	Stainless Steel	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-

Manufacturer option

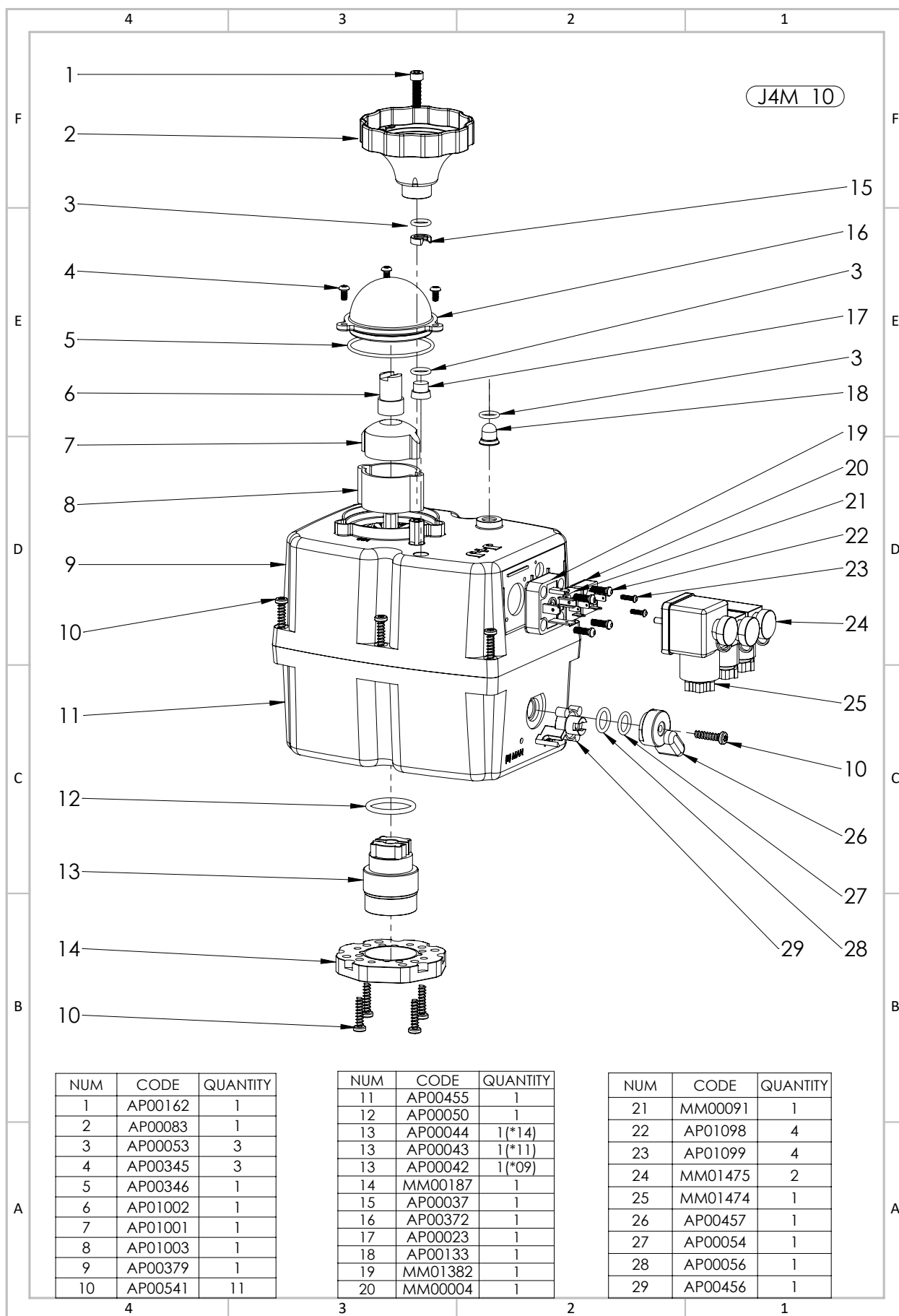


Note: Technical data are the same despite the different casings.

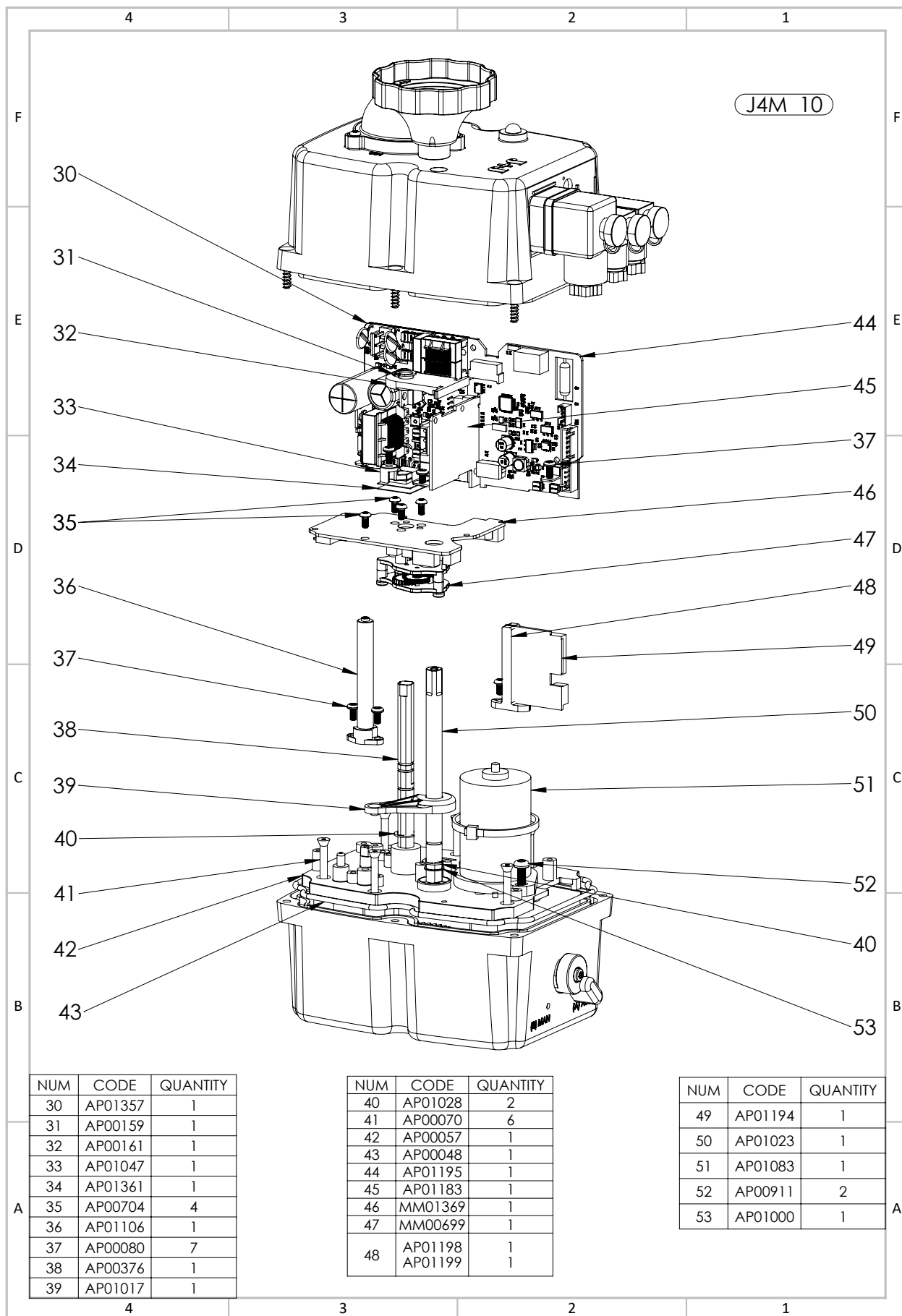
J4M 10 SIZES



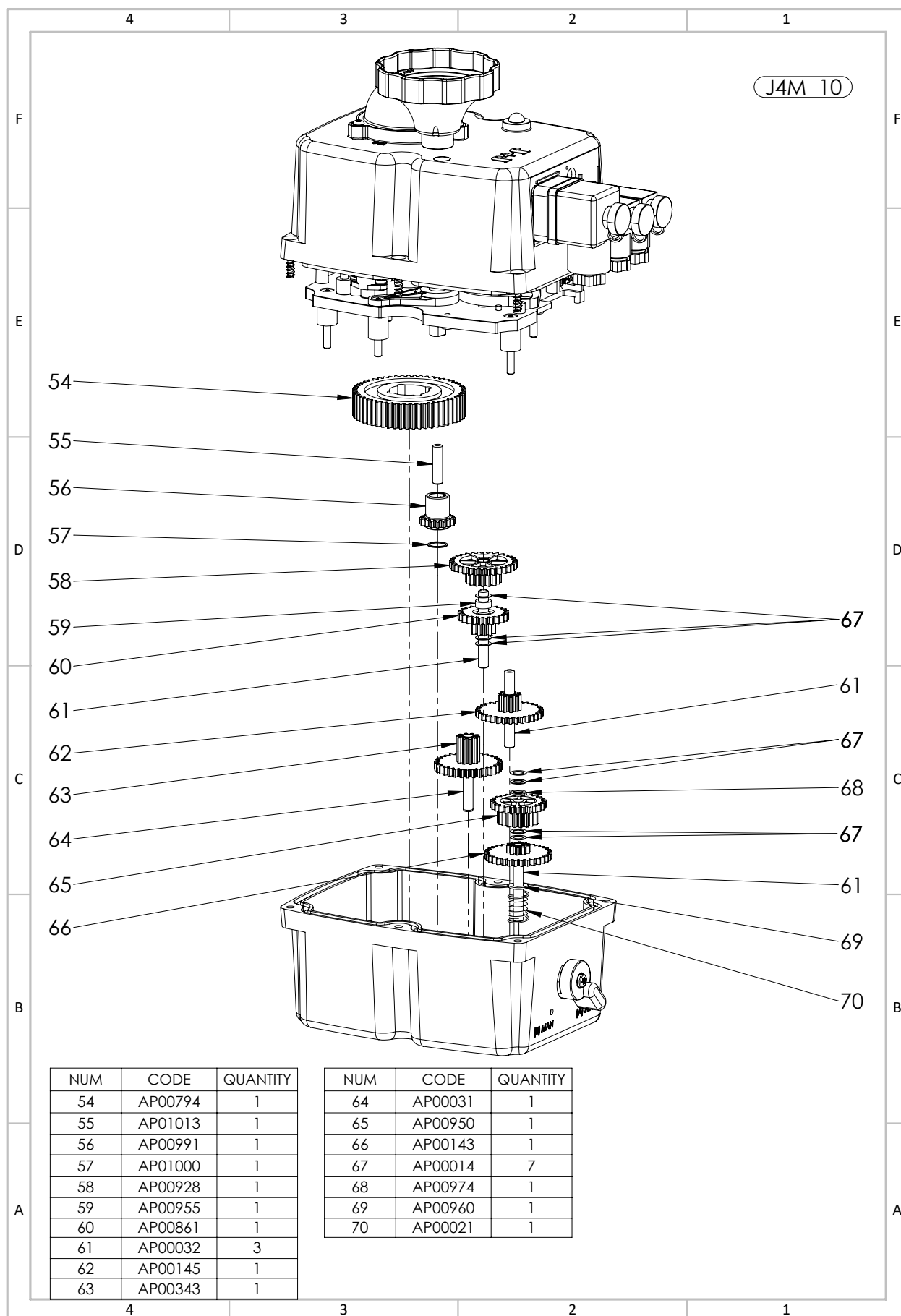
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



J4M 25 - GENERAL CHARACTERISTICS



Technical Data	
Operation time unload	9,3 Sec / turn
Minimum operational torque	10 Nm / 88,51 lb/in
Maximum operational torque	30 Nm / 265,52 lb/in
Duty rating	75%
Maximum number turns	13.5
Confirmations	Standard_Analogue: 2 Relays 24VDC 1Amp. (1 Open and 1 Close) / Optional: Digitals (1 Open and 1 Close)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Interface	App and PC Program
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5210 Plate	Standard: F05/F07
DIN 3337 Female output drive	Standard: *17 Optional: *11, *14 mm
Weight	3,8 kg

Actuator with Bluetooth Configurations:

1) On-Off
2) Digital positioner (input / output) 4-20mA, 0-20mA, 0-10V or 1-10V

Electronic Data	
Electronic Torque Limiter function	
Electric motor	24VDC Brushless motor
Insulation	Class B
(IEC 60034) Service	S4

Voltage VDC/VAC 50/60Hz 0%/5%	
S25	24-240 VDC/VAC
B25	12 VDC/VAC ONLY

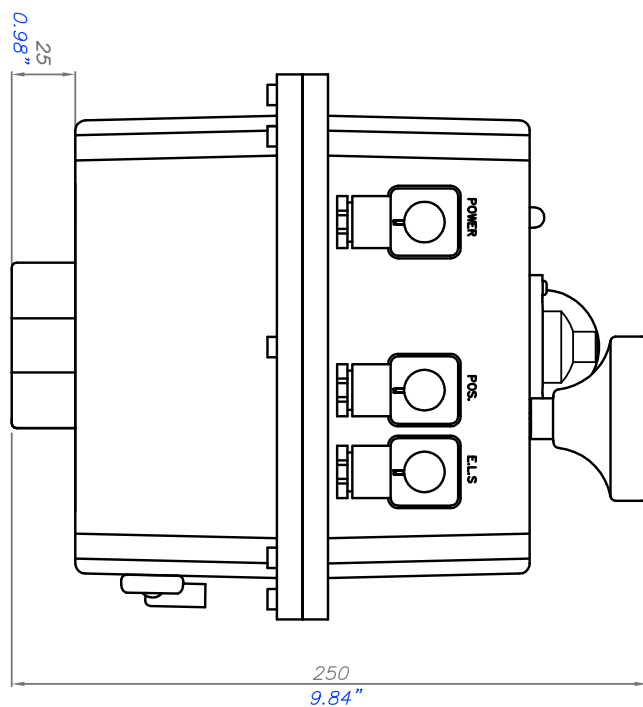
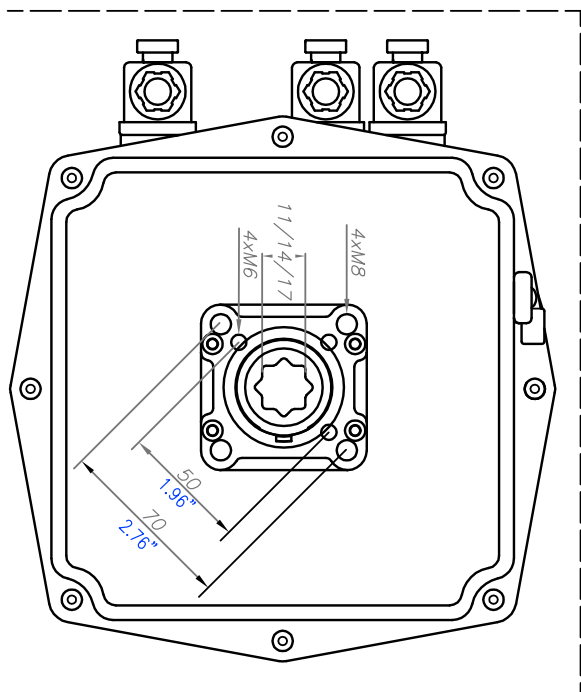
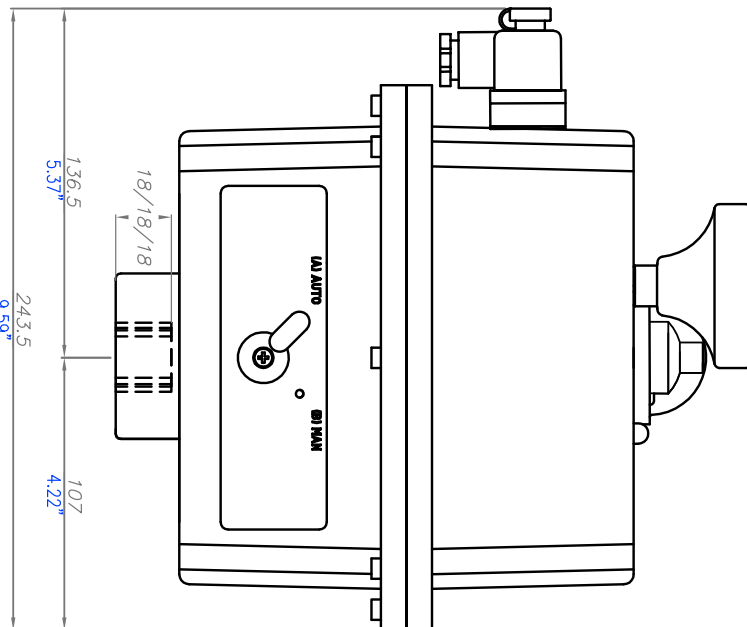
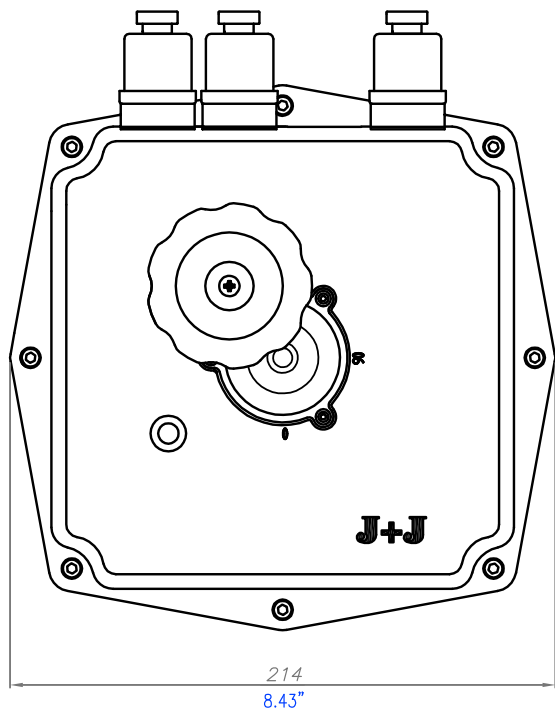
Materials	Standard	Optional
Body	Anticorrosive Polyamide, Grey colour	Polypropilene V0, Black colour
Cover	Anticorrosive Polyamide, Red colour	Polypropilene V0, Natural colour
Output drive	Zamak, Zinc plated	Zamak, TEFLON coated
Flange	Aluminium and Cataphoresis	Aluminium and TEFLON coated
Main external shaft	Stainless Steel	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-

Manufacturer option

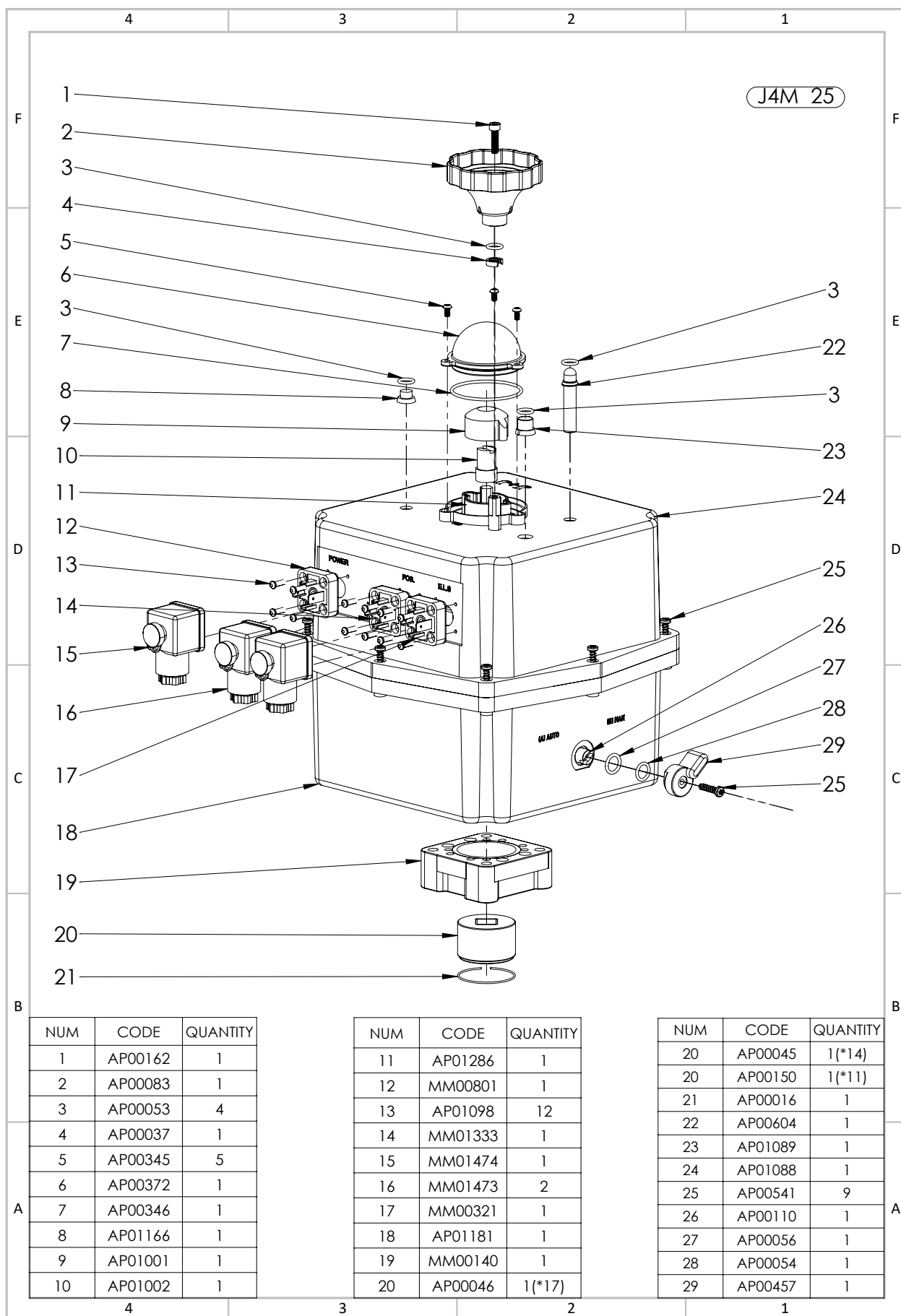


Note: Technical data are the same despite the different casings.

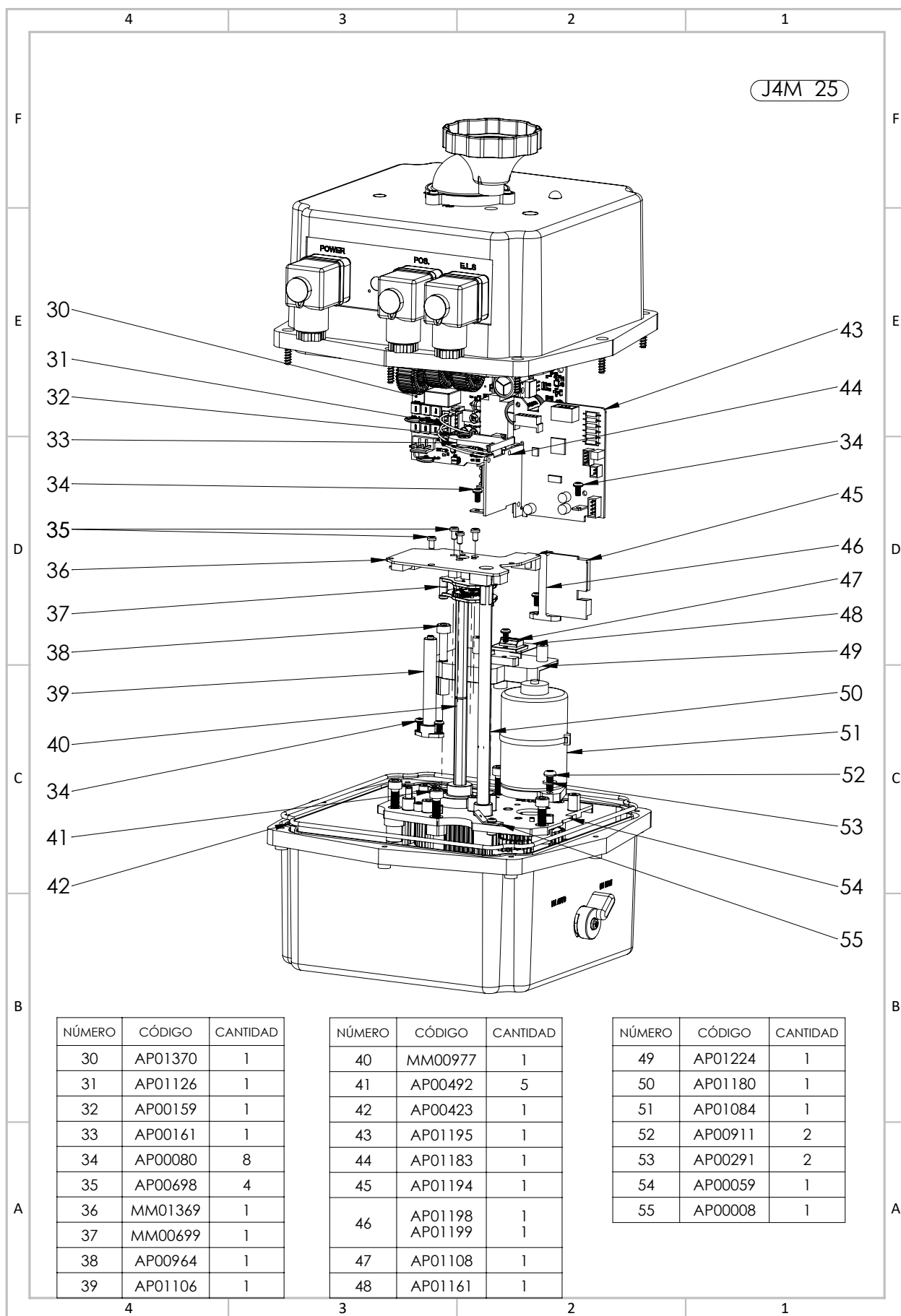
J4M 25 SIZES



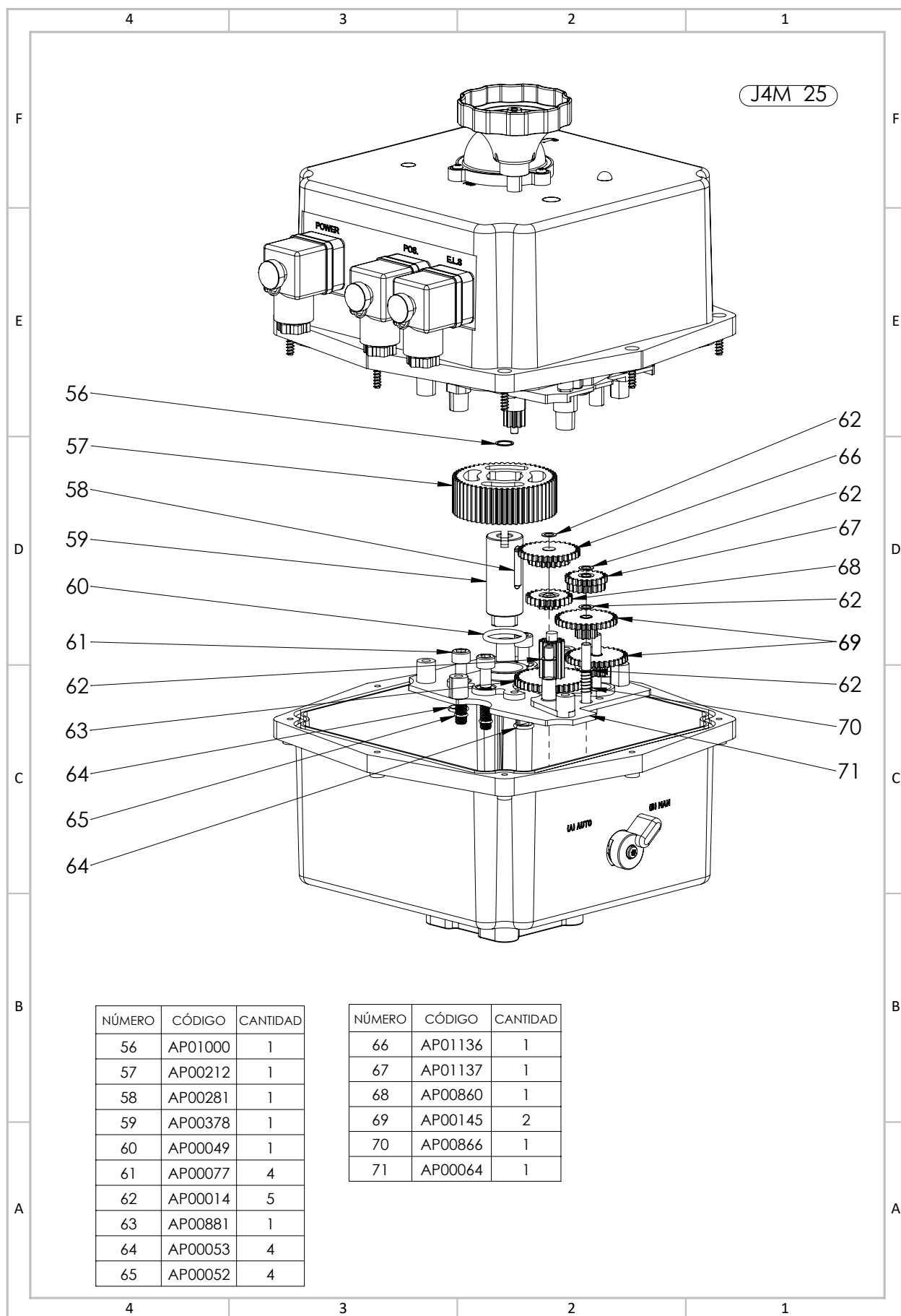
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



J4M 40 - GENERAL CHARACTERISTICS



Technical Data

Operation time unload	12 Sec / turn
Minimum operational torque	16 Nm / 141,61 lb/in
Maximum operational torque	50 Nm / 422,54 lb/in
Duty rating	75%
Maximum number turns	13,5
Confirmations	Standard_Analogue: 2 Relays 24VDC 1Amp. (1 Open and 1 Close) / Optional: Digitals (1 Open and 1 Close)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Interface	 App and PC Program
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5210 Plate	Standard: F05/F07
DIN 3337 Female output drive	Standard: *17 Optional: *11, *14 mm
Weight	3,8 kg

Actuator with Bluetooth Configurations:

1) On-Off
2) Digital positioner (input / output) 4-20mA, 0-20mA, 0-10V or 1-10V

Electronic Data

Electronic Torque Limiter function

Electric motor	24VDC Brushless motor
Insulation	Class B
(IEC 60034) Service	S4

Voltage VDC/VAC 50/60Hz 0%/5%

S40	24-240 VDC/VAC
B40	12 VDC/VAC ONLY

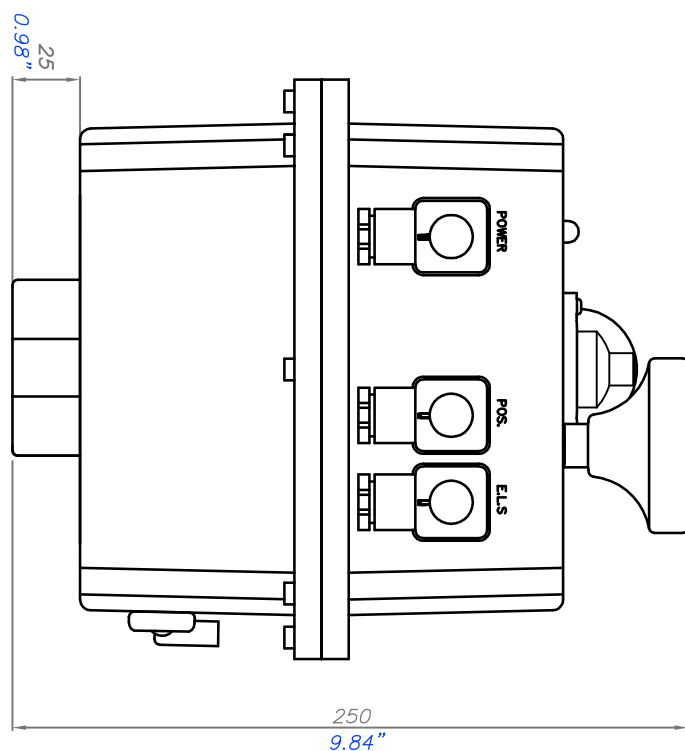
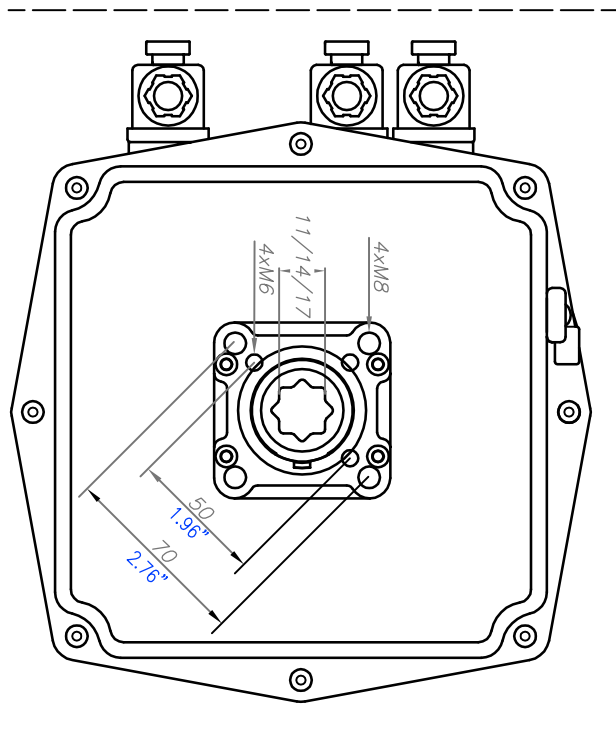
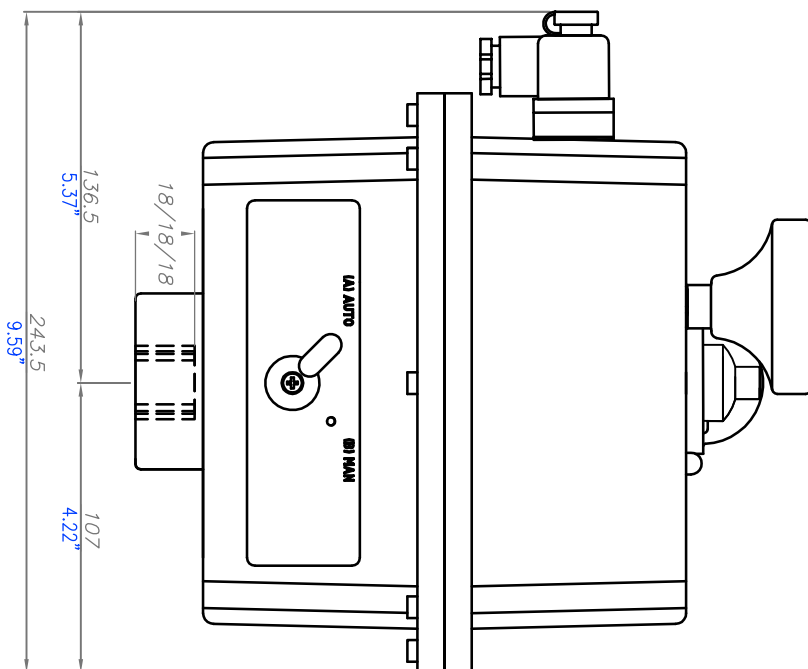
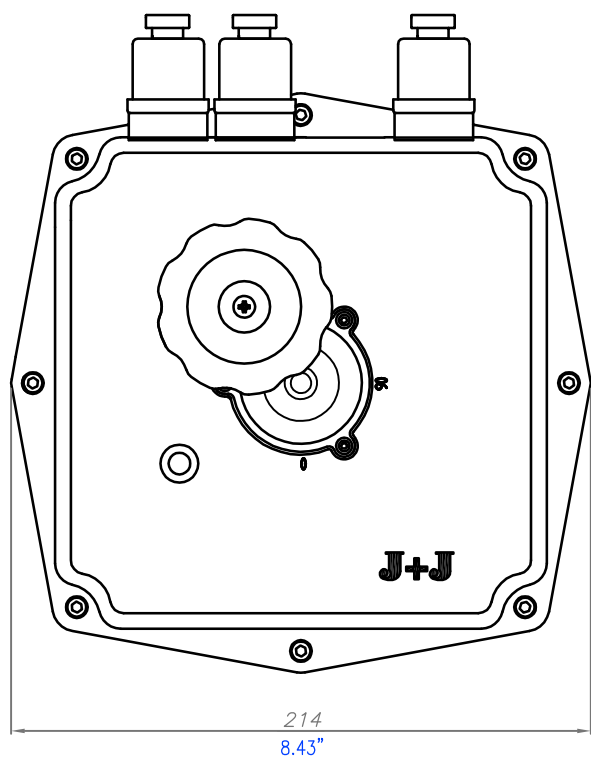
Materials	Standard	Optional
Body	Anticorrosive Polyamide, Grey colour	Polypropilene V0, Black colour
Cover	Anticorrosive Polyamide, Red colour	Polypropilene V0, Natural colour
Output drive	Zamak, Zinc plated	Zamak, TEFLON coated
Flange	Aluminium and Cataphoresis	Aluminium and TEFLON coated
Main external shaft	Stainless Steel	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-

Manufacturer option

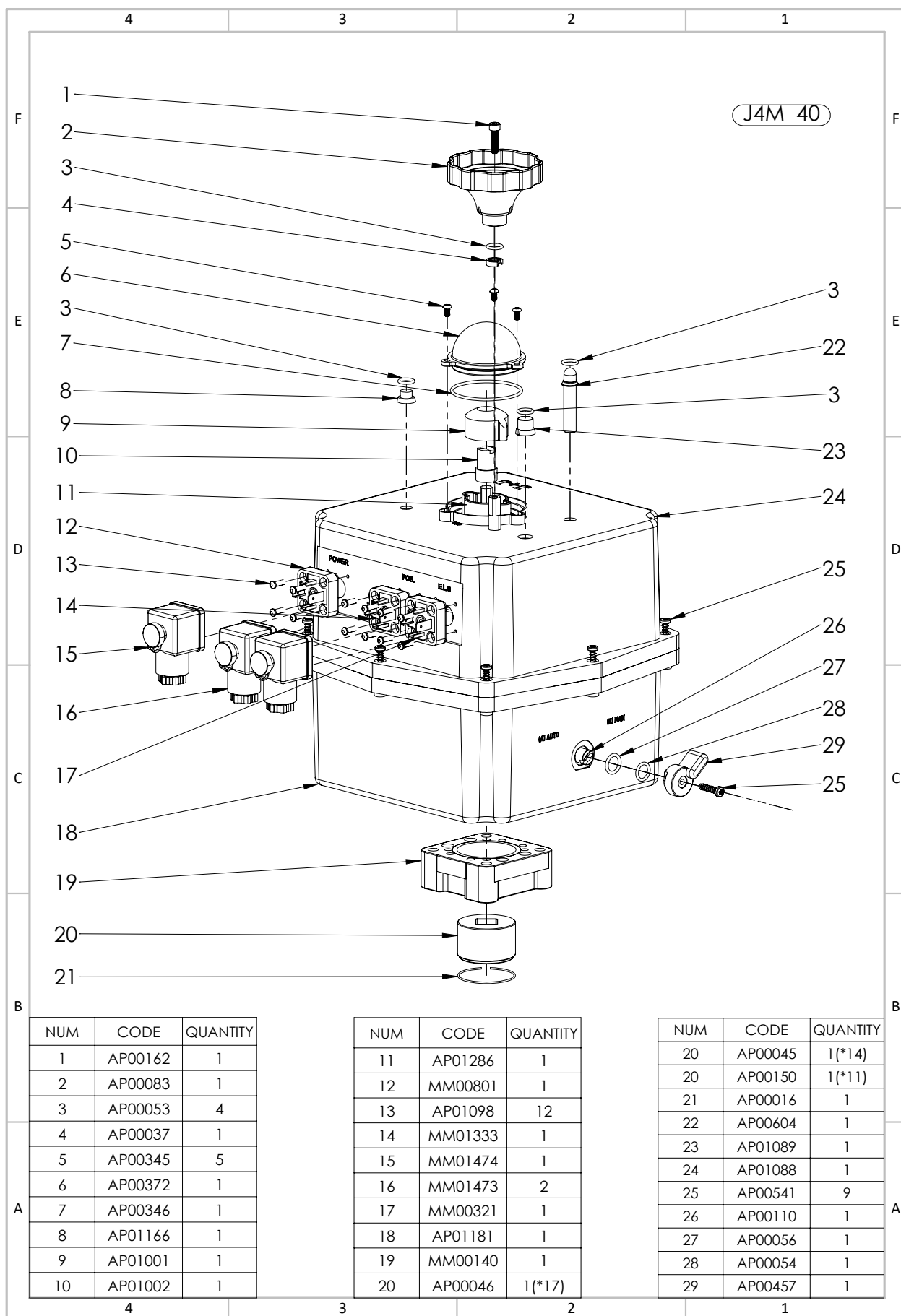


Note: Technical data are the same despite the different casings.

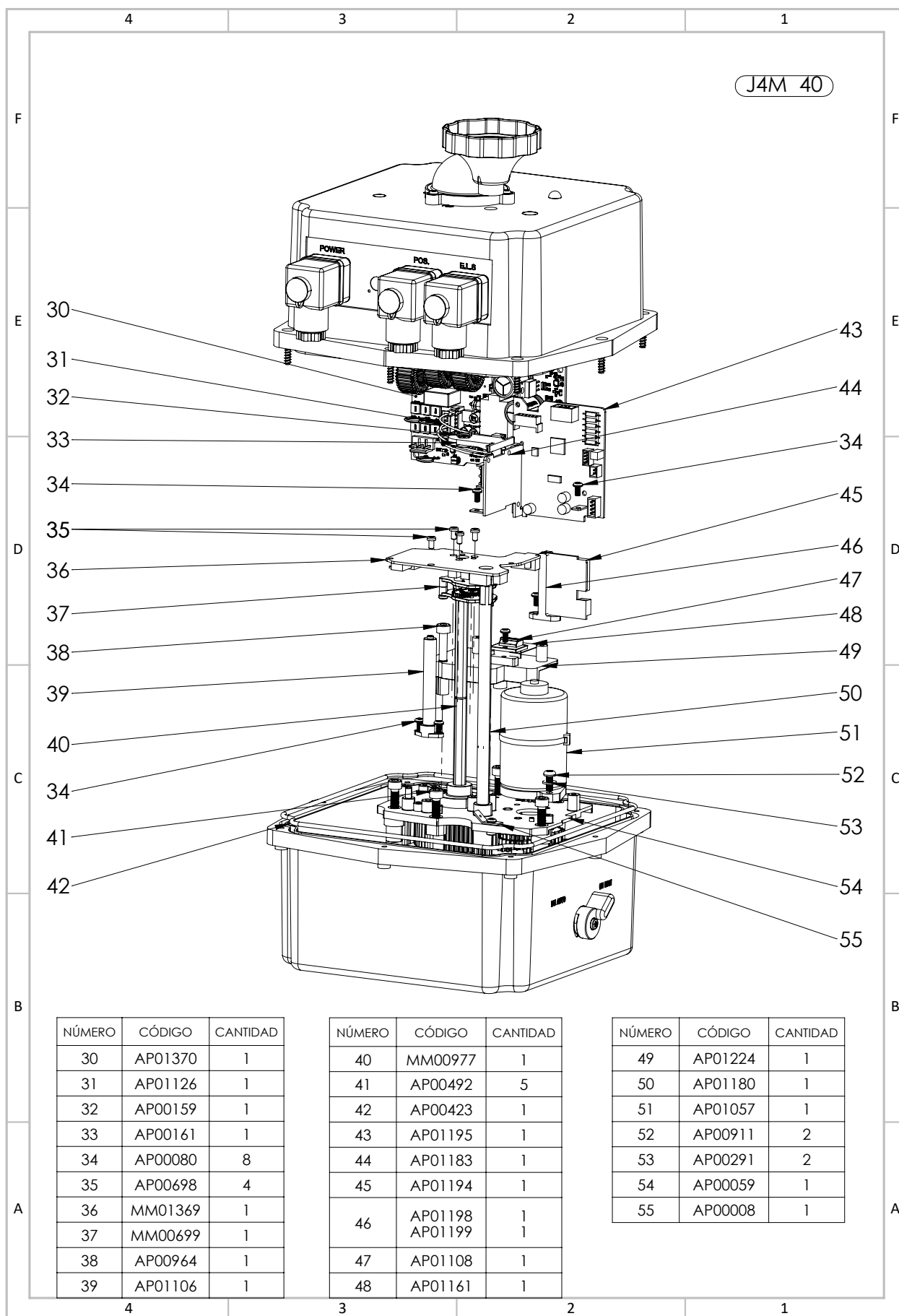
J4M 40 SIZES



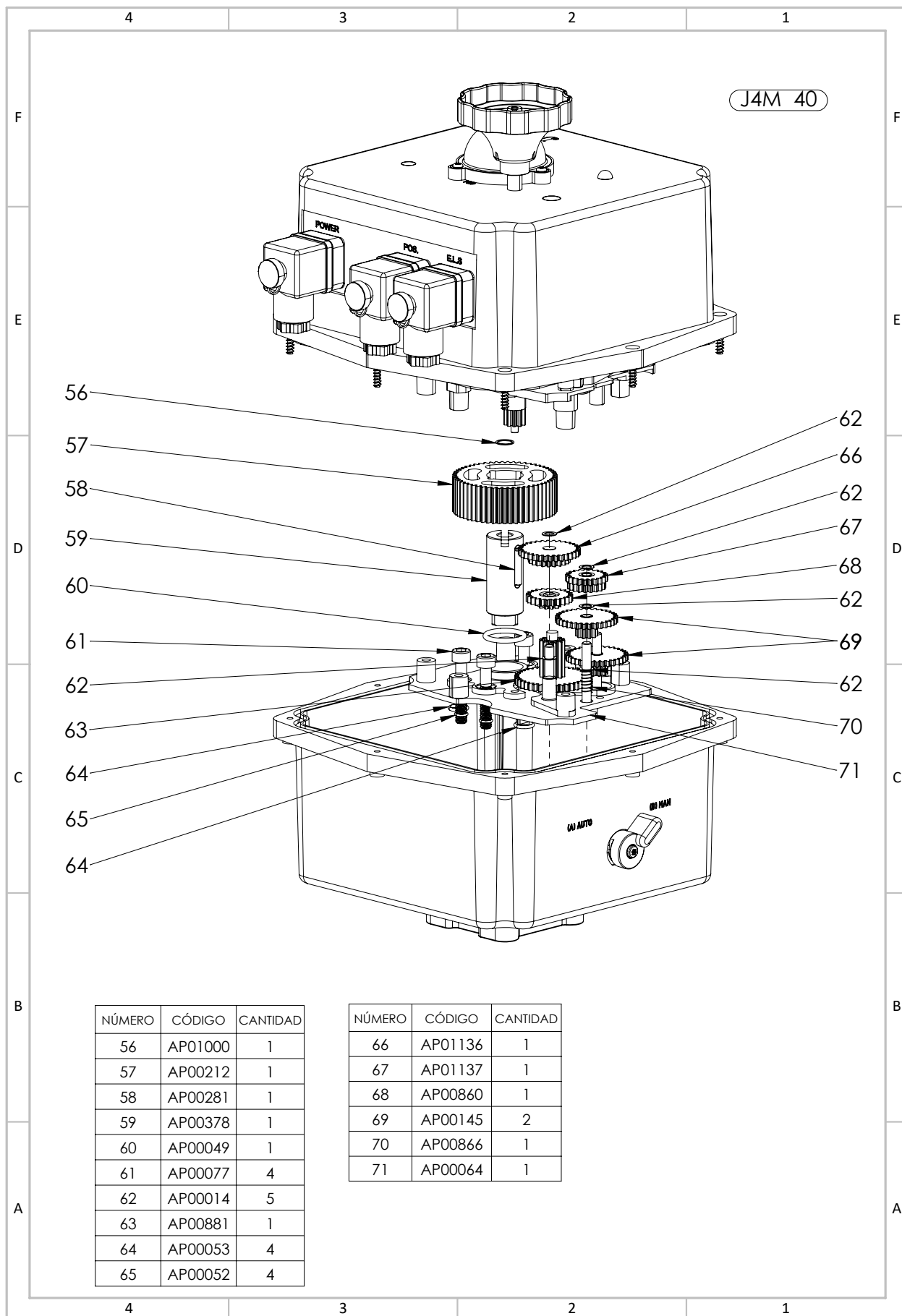
EXPLODED VIEW



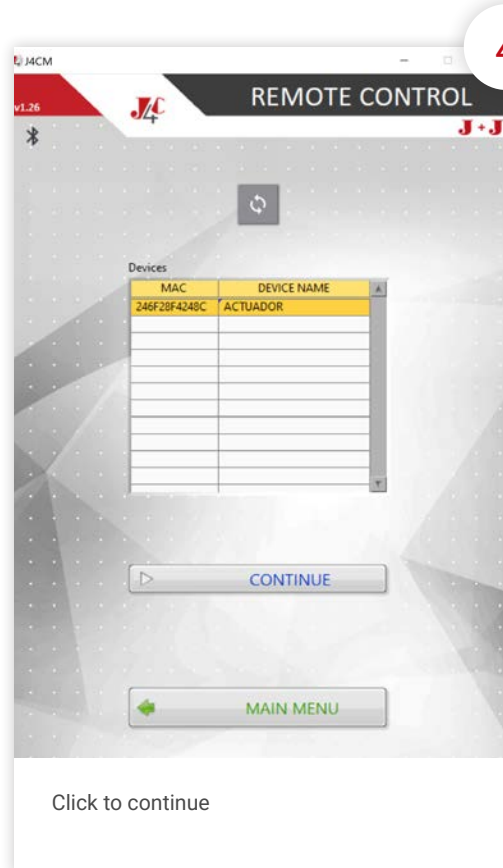
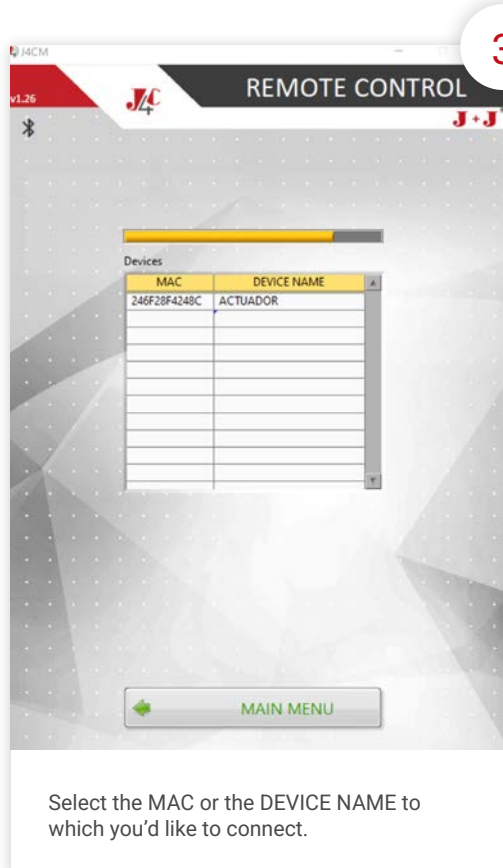
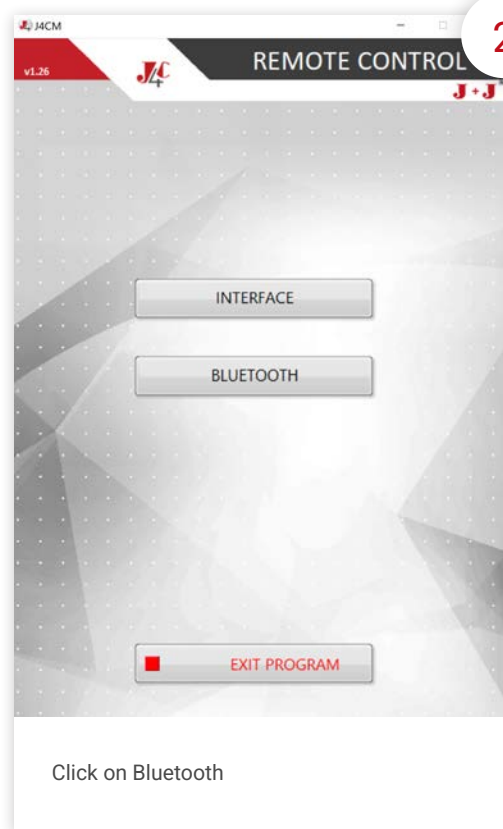
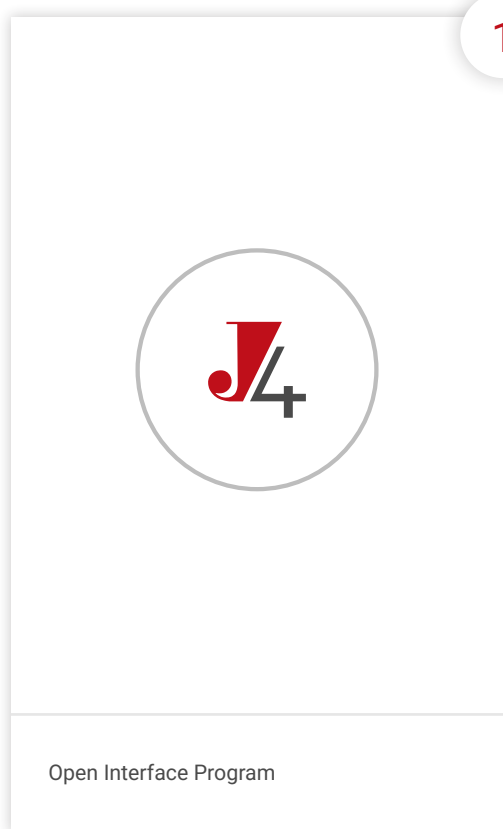
EXPLODED VIEW



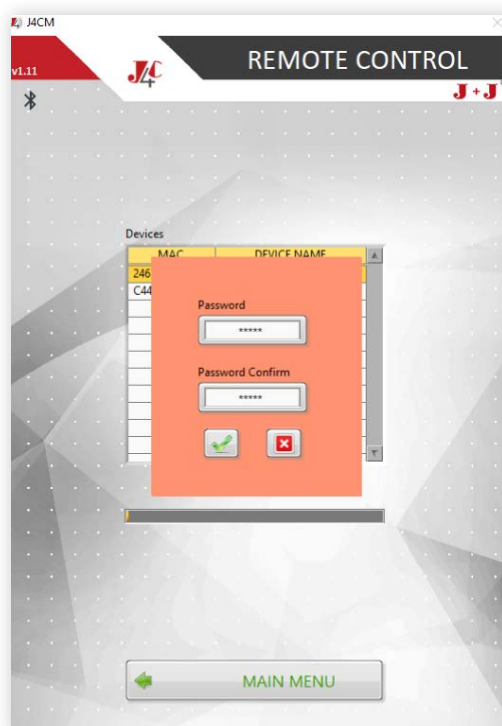
EXPLODED VIEW



04 INTERFACE BLUETOOTH PROGRAM



5

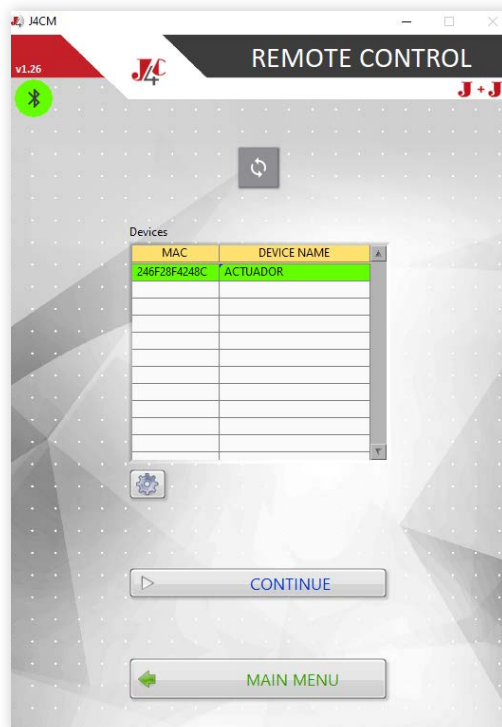


Enter the Password

Confirm the Password and ACCEPT

Password configured from the factory - 12345

6



The Bluetooth icon in green color, shows that the program is connected to the actuator.



The icon in red color means the program has lost connection with the actuator.



The icon in grey color means that none actuator has been connected to the program, since it has been opened.

7

BLUETOOTH

Firmware: 02.14 MAC: 246F28F4248C

Bluetooth: ACTUADOR

Bluetooth Password: Bluetooth Password Confirm:

WIFI

SSID: J+Jwifi

SSID Password: ***** SSID Password Confirm:

Min 8 char

[Refresh]

› Click on to configure the Bluetooth parameters.

› Read only parameters:

Firmware: Firmware version.
MAC: Bluetooth MAC.

› Adjustable parameters:

To change the Bluetooth and password, follow the steps:

1. Write the new name, on the Bluetooth field.
2. Write the new password, on the Password field.
3. Write the new password, on the Bluetooth Password Confirm field.

8

REMOTE CONTROL

v1.26

BLUETOOTH

Firmware: 02.14 MAC: 246F28F4248C

Bluetooth: ACTUADOR

Bluetooth Password: ***** Bluetooth Password Confirm: *****

WIFI

SSID: J+Jwifi

SSID Password: ***** SSID Password Confirm:

Min 8 char

[Save] [Refresh]

MAIN MENU

› Save all changes by clicking on .

› Click on **OK**, to confirm all changes.

CONFIRM CHANGES?

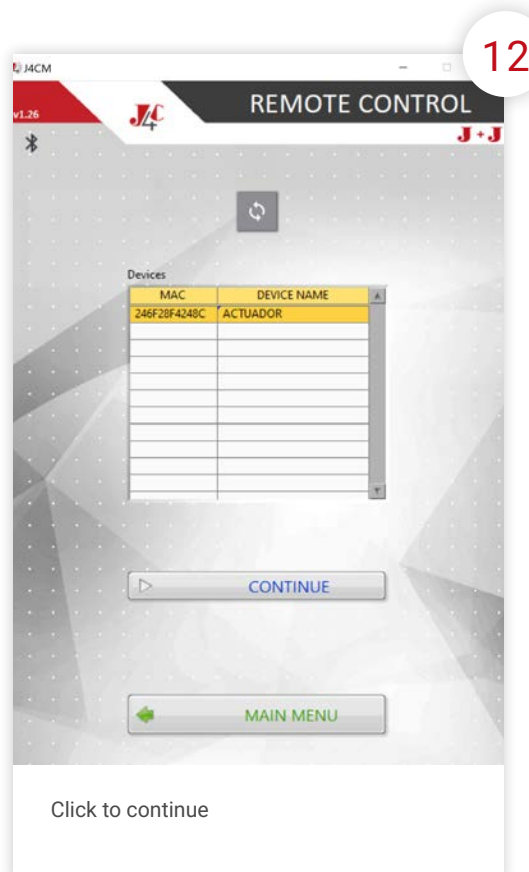
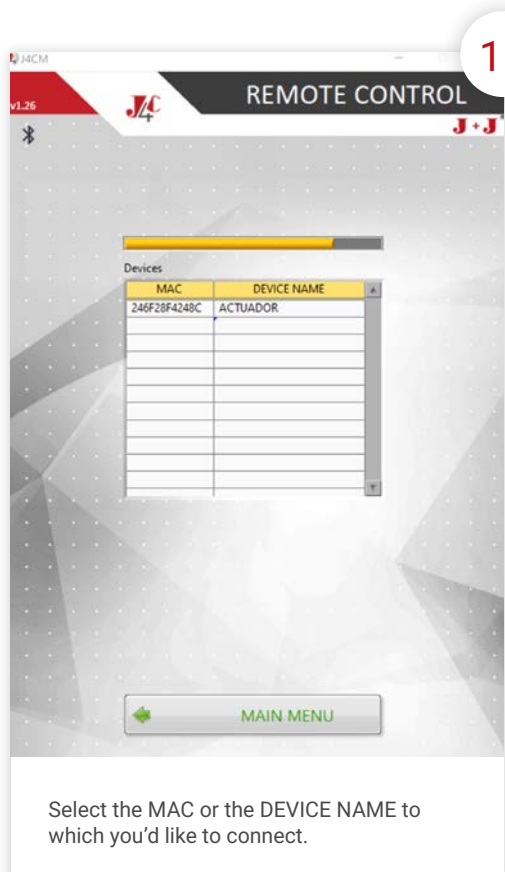
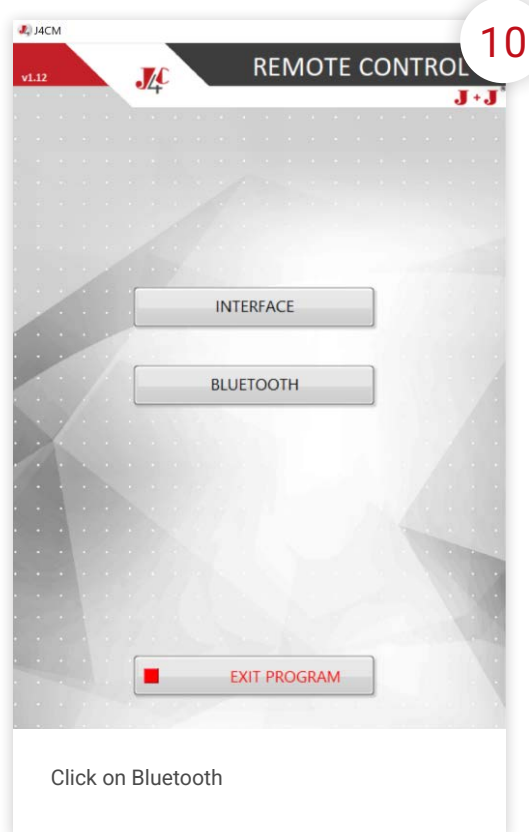
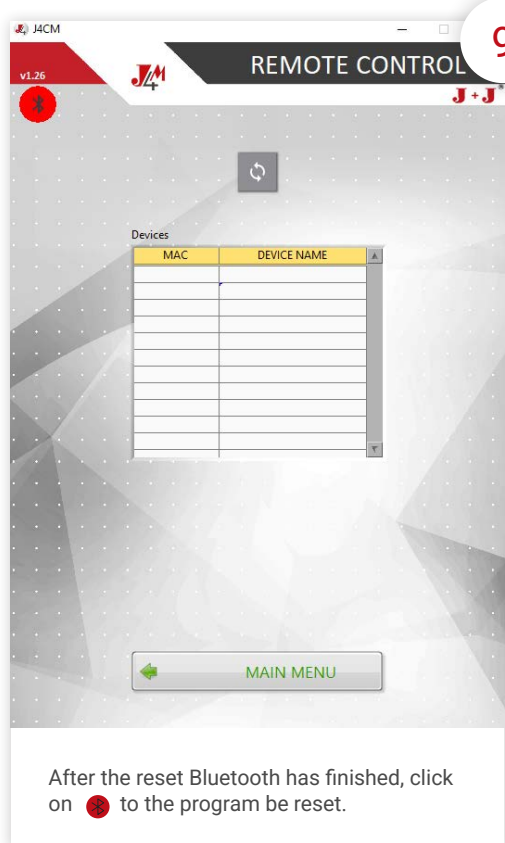
[OK] [Cancel]

› To apply all changes, the program will lose the connection with the actuator. To recover, click on **OK**.

RESET BLUETOOTH

[OK]

› WIFI: WIFI parameters are for factory use only.



13



The Bluetooth icon in green color, shows that the program is connected to the actuator.



The icon in red color means the program has lost connection with the actuator.



The icon in grey color means that none actuator has been connected to the program, since it has been opened.

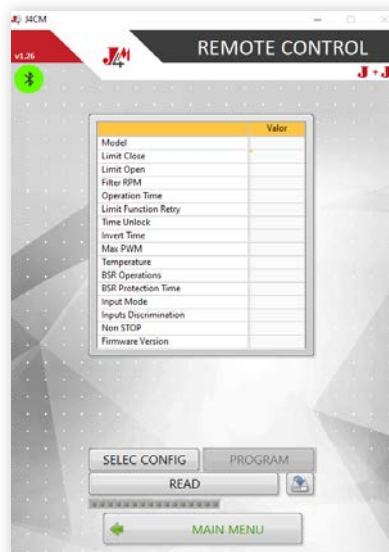
Click on "CONTINUE", to get into the actuator menu.

14



- PARAMETERS: Read all actuator parameters.
- COUNTERS: Read all actuator counters.
- DPS PARAM: Please do not use. For factory use only.
- DPS: For factory use only.
- REMOTE CONTROL: For on-off actuators only.
- MULTI TURN CONFIG: Set your J4M actuator up.
- EXIT: click on EXIT to leave the program.

15



Click on PARAMETERS, the screen will show all the parameters and values recorded in the factory.

Click on READ, to read parameters.

Short definition of PARAMETERS:

- Model: This is a 5-6-digit field. The first 2 or 3 digits are showing the actuator model.
- Firmware Version: Is the software version of the actuator Control PCB.

The rest of parameters are to optimize the working features of our actuators.

Should any of the mentioned parameters be modified, we would send you a file to be copied in your PC, and follow the steps:

Click on SELEC CONFIG and a new screen will be shown.

Click on PROGRAM.

The actuator will have loaded the new configuration.

To go back, click on MAIN MENU.

16



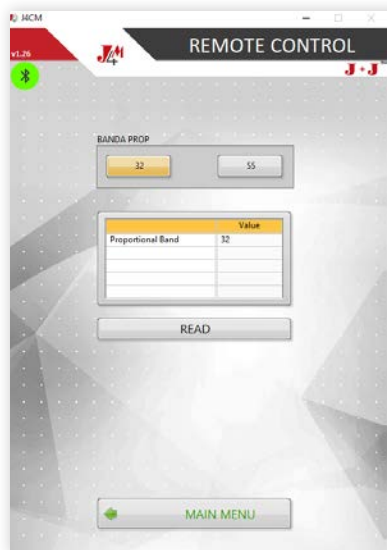
If you click on COUNTERS option, a screen will appear with all the COUNTERS values. To see the values, click on READ.

Short definition of the COUNTERS:

- Version: Is the software version of the actuator Control PCB.
- Options: Internal parameter for our engineers to work with.
- Operations: Number of times our actuator has pressed the micro switch and confirm the position.
- Limitations: Number of times the limiter torque function has been activated.
- End Order: Internal parameter for our engineers to work with.
- Time Error: Number of times the motor stopped, provably exceeding the "Working time" parameter value and the actuator is neither in the open, nor in the close position. Provably happening when the user has put the declutching lever in MAN position, to move the actuator manually
- Power On: Number of times the actuator has been powered on.
- BSR: Number of times the actuator has been powered on by the BSR system, due to an external power cut. It is compulsory to have a BSR System mounted on the actuator.

To go back, click on MAIN MENU.

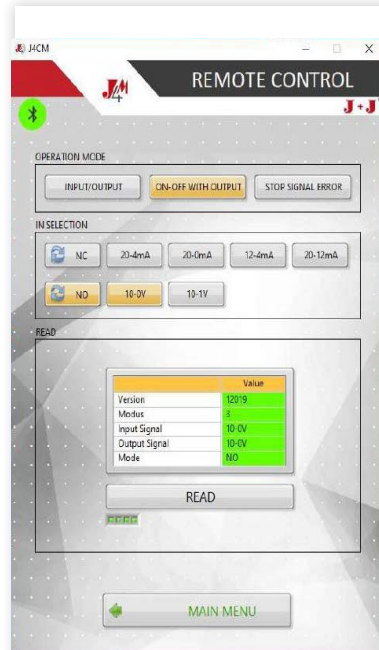
17



DPS PARAM: For factory use only.

To go back, click on MAIN MENU.

18



Click on DPS:

INPUT/OUTPUT: The actuator with DPS will be positioned by using an external mA or V signal. Automatically de DPS will generate an output signal showing the actuator position.

ON/OFF WITH OUTPUT: The actuator with DPS will work exactly the same as an ON-OFF. The only difference is that the DPS generates an OUTPUT mA or V with which it shows the actuator's position.

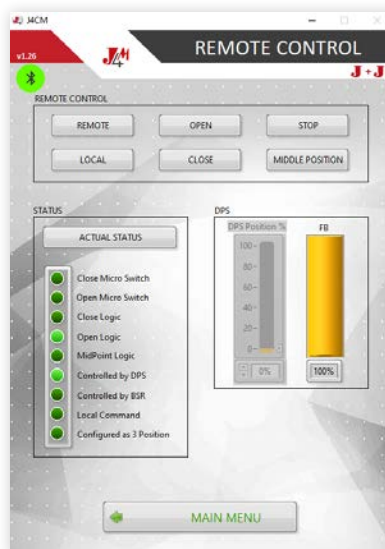
STOP SIGNAL ERROR: The actuator is working the same way as an INPUT/OUTPUT one, but in case of a mA or V signal failure, the actuator would stop, remaining in the same position as it was, prior to the signal failure. The configuration is only available when the actuator works with a 4/20mA, 1/10V, 4/12mA and 12/20mA signal.

Select configurations when IN SELECTION:

- INPUT Signal: Choose one type of requested signal. Both Output and Input signal will be the same. If you want to work with different signals, please ask the manufacturer.
- NO/NC: In case of an input signal failure, the actuator will go to the preferential position: No= Normally Open, NC= Normally Close.

Click on READ to see the DPS configuration. A table will show the DPS parameters.

To go back to the home menu, click on MAIN MENU.



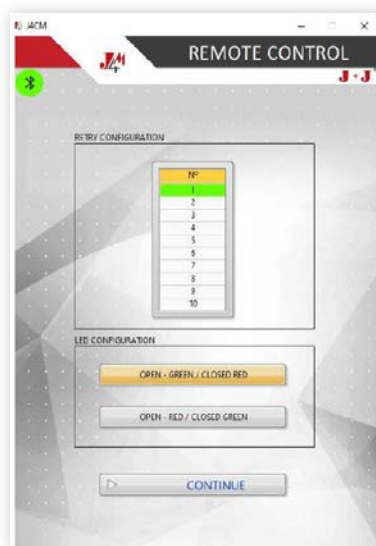
19

REMOTE CONTROL: For On-Off actuators only.

You could OPEN/CLOSE/ STOP OR MIDDLE POSITION by clicking on each option.

Click on "ACTUAL STATUS" to update the actuator status.

To go back, click on MAIN MENU.



20

Click on MULTI TURN CONFIG. The computer will show the following screen. Choose the number of times the actuator will try to achieve the CLOSE position, in case it couldn't.

Choose the LED light configuration by clicking on OPEN-GREEN / CLOSE-RED or OPEN-RED/CLOSE-GREEN.



21

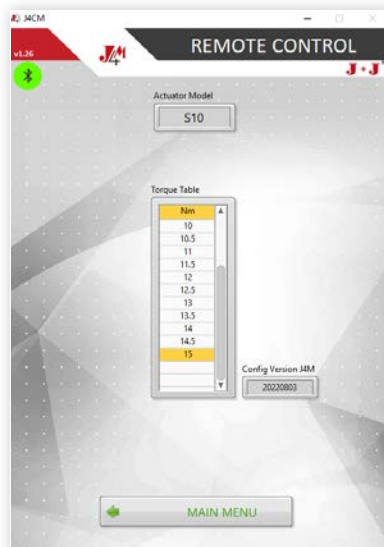
Click on CONTINUE. The computer will show the following screen. You could set the J4M actuator up, mounted on both a Needle or a Diaphragm valve.

VERY IMPORTANT: First of all, and before doing anything else, please drive the actuator to the OPEN position, and put the declutching lever in MAN position too.

Click on NEEDLE or DIAPHRAGM and later click on CONTINUE.

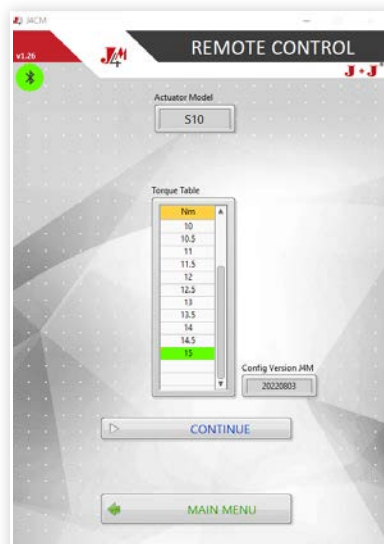
To go back, click on MAIN MENU.

22



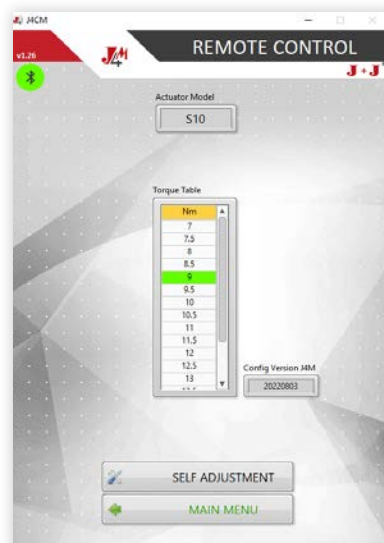
Select the value of the valve Closing torque.

23



Click on CONTINUE

24



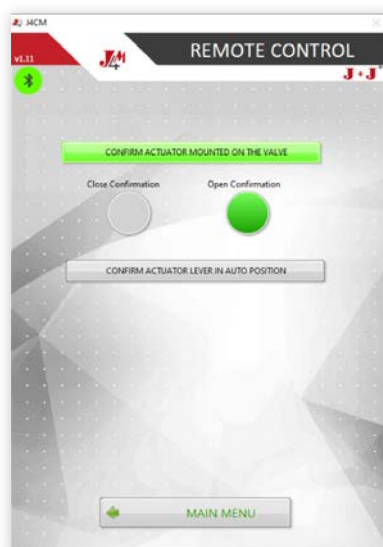
Click on SELF ADJUSTMENT.

25



Click on CONFIRM ACTUATOR MOUNTED ON THE VALVE.

26



If the actuator is in OPEN position, Open Confirmation button will be in green color. If not, drive the actuator to the OPEN position and the button will become green.

Put the declutching lever in AUTO position, and click on CONFIRM ACTUATOR LEVER IN AUTO POSITION.

27



Click on CONFIRM SELF-DJUSTMENT.

28



The actuator will make a complete maneuver set-up, loading all the configuration parameters and the OPEN & CLOSE position.

29



Self-adjustment done. To go back, click on MAIN MENU.

COMMUNICATION VIA BLUETOOTH

We have introduced the Bluetooth communication system in our actuators, in order to communicate with our actuators, from any IOS or Android devices.

From our phone, tablet or PC device we could order our actuator to open/close or stop, we could also be informed about additional data from our actuator.

The communication between our devices is protected by a password.

Via Bluetooth we could identify and communicate within a max distance of 20m.

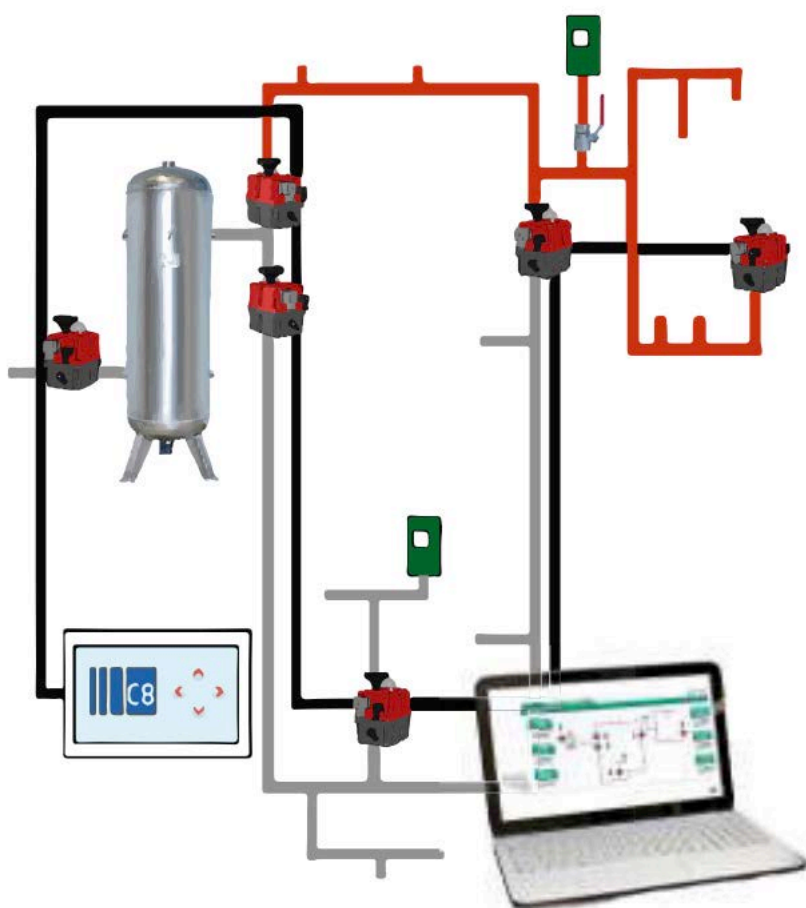


05 MODBUS

MODBUS SYSTEM



- › Plug and play.
- › Each device could be operated manually.
- › Could be seen from the control panel and PC.
- › Fast and flexible, starting by 1 actuator up to 255.
- › Up to 1.200m distance range.
- › Locally connect the device and communicate with a data cable.
- › Could name the devices, make a plant synoptic, send alarm mails.



06 GUARANTEE

OUR WARRANTY INCLUDES SOLELY AND EXCLUSIVELY THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS IN OUR WORKSHOP OR IN THE PLACEMENT OF THE INSTALLATION, AND DOES NOT COVER INDEMNIFICATIONS OR OTHER EXPENSES.

The warranty will be void if the device has been open, if the defects are the result of the misuse or if our products have been handled, repaired or modified outside our workshop or have been installed with materials or by methods not in accordance with our STANDARDS.

The party alleging the existence of a defect of workmanship shall accredit the suitable use of the product and, if appropriate the correct installation of the same. The expenses of the return and reshipment of the defective materials will be for the account of the buyer.

07 CONTACT

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