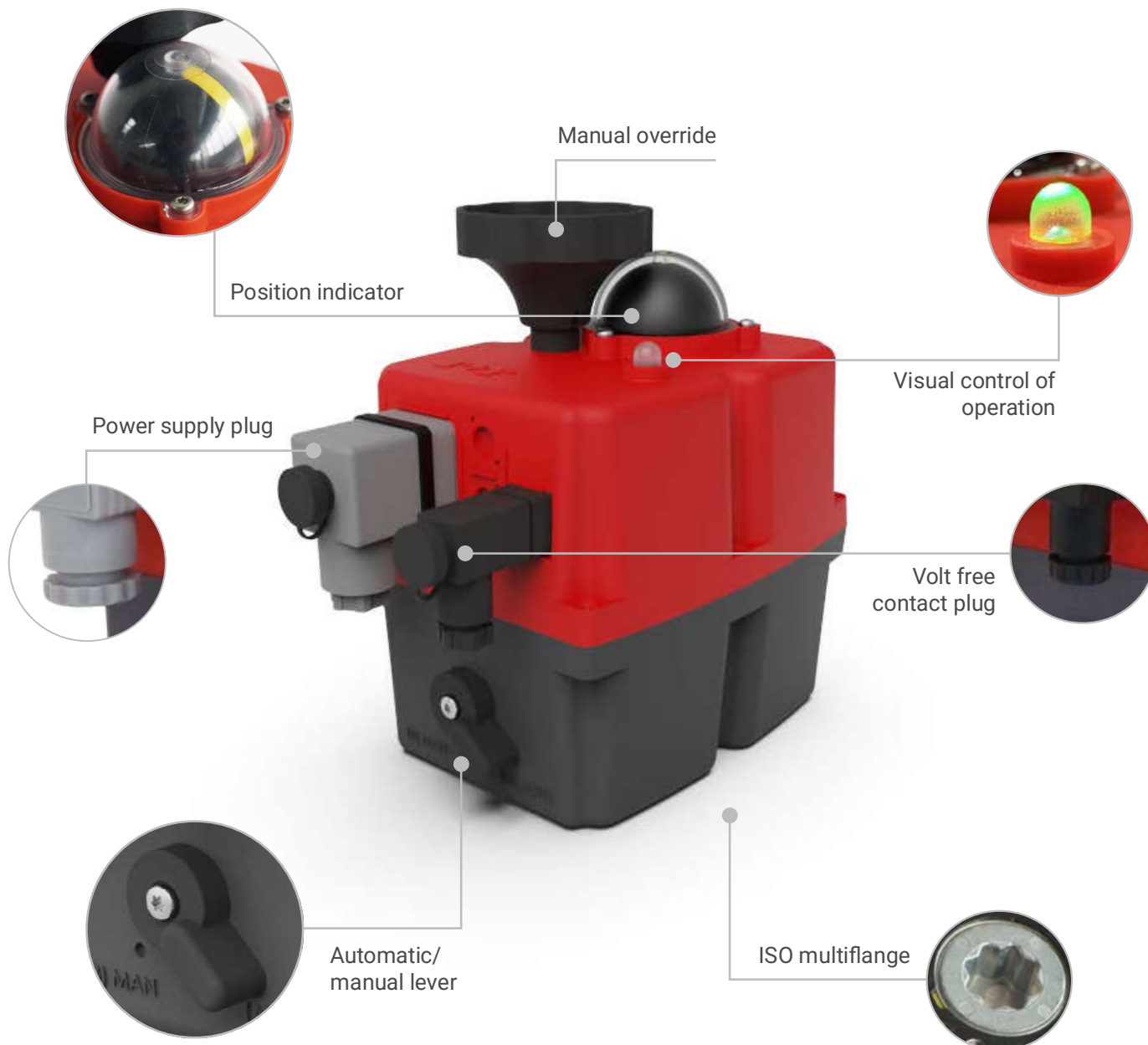


ACTUATOR PART LIST

MODELS: S20, S35, S55, S85, B20, B35, B55, B85





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

J4C 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 S20 to S300 are ready to work from 24-240 VDC/VAC 50/60Hz-0/+5%

All our actuators model B20 to B300 are ready to work at 12 VDC/VAC ONLY, 50/60Hz-0/+5%

ELECTRICAL CONNECTORS

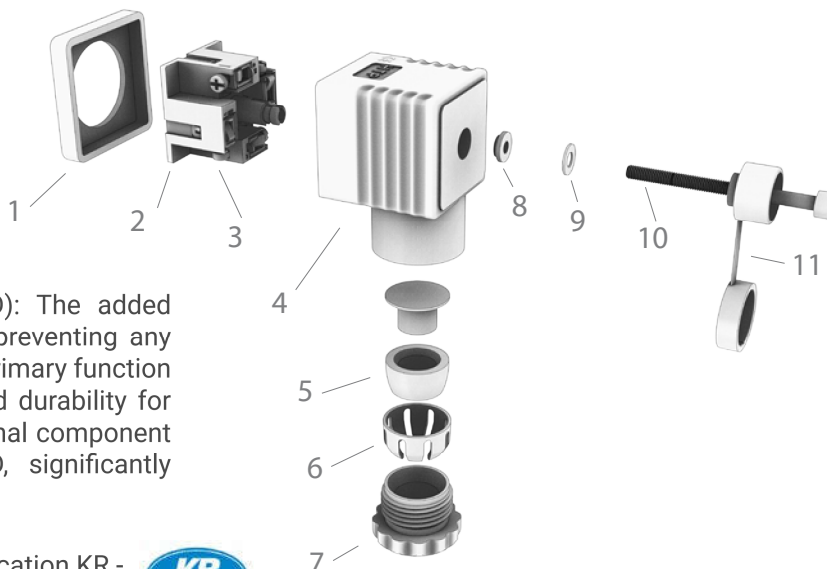
Warning: Before connecting ensure that the voltage to be applied to the actuator is within the range shown on the identification label. The supplied electrical connectors, used to connect to the actuator are DIN plugs. Ensure the diameter of cable to be used conforms to the maximum and minimum requirements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

Connector	Small Black		Big Grey or Black	
	EN175301-803 Form CI		EN175301-803 Form A	
Model	min. Ø	max. Ø	min. Ø	max. Ø
J4C 20 to 300	5 mm	6 mm	8 mm	10,5 mm

Warning: Ensure that the square rubber seal is in place when fixing each DIN plug to the actuator, also when installing the cable be sure that sealing 5 and 8 are well installed. 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 (10) 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

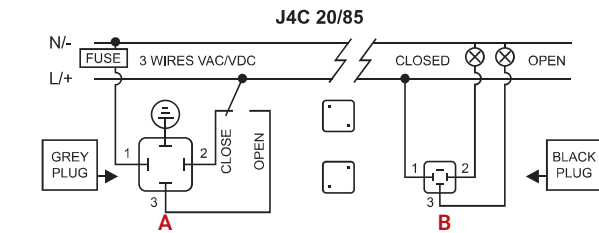


ELECTROSTATIC DISCHARGE IMMUNITY (ESD): The added ESD cap (11) serves as component aimed at preventing any adverse effects of electrostatic discharges. Its primary function is to ensure optimal performance and extended durability for the actuator. Acting as a safeguard, this additional component strengthens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

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



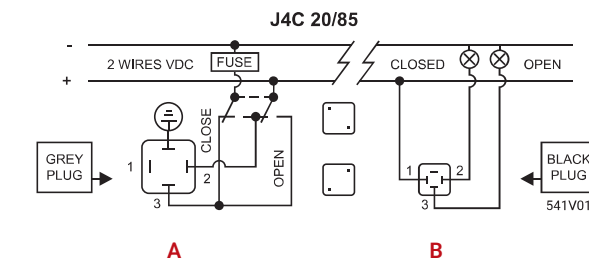
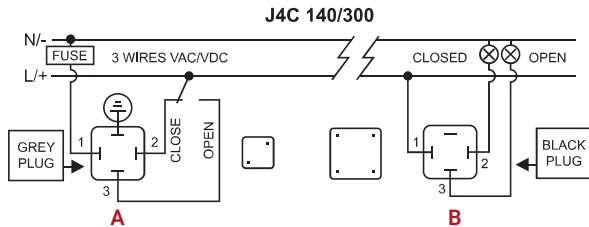
EXTERNAL CONNECTING DIAGRAM (STANDARD)



ON - OFF VAC

A = Power supply plug (Grey plug)
 Neutral PIN 1 + Phase PIN 2 = Close actuator.
 Neutral PIN 1 + Phase PIN 3 = Open actuator.
 Earth/ground connection - Flat PIN \oplus

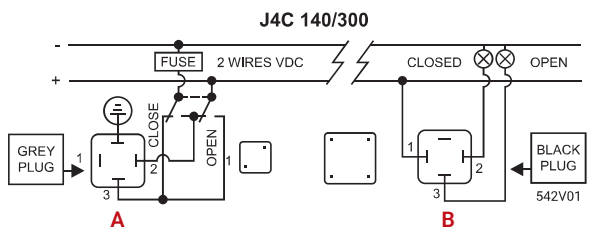
B = Volt free contact plug (Black plug)
 Common PIN 1 + PIN 2 = Close confirmation of position.
 Common PIN 1 + PIN 3 = Open confirmation of position.



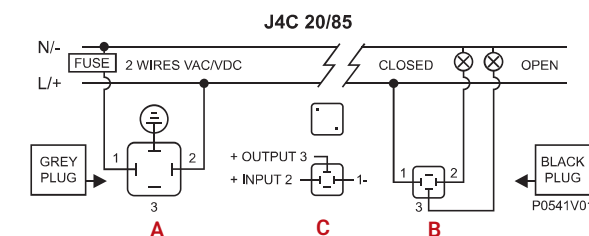
ON - OFF VDC

A = Power supply plug (Grey plug)
 Negative PIN 3 + Positive PIN 2 = Close actuator.
 Negative PIN 2 + Positive PIN 3 = Open actuator.
 Earth/ground connection - Flat PIN \oplus

B = Volt free contact plug (Black plug)
 Common PIN 1 + PIN 2 = Close confirmation of position.
 Common PIN 1 + PIN 3 = Open confirmation of position.



STANDARD POSITIONER EXTERNAL CONNECTING DIAGRAM

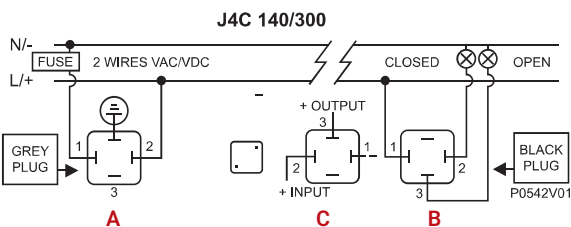


POSITIONER VAC VDC

A = Power supply plug (Grey plug)
 Neutral/negative PIN 1 + Phase/positive PIN 2 - Power supply.
 Earth/ground connection - Flat PIN \oplus

B = Volt free contact plug (Black plug)
 Common PIN 1 + PIN 2 = Close confirmation of position.
 Common PIN 1 + PIN 3 = Open confirmation of position.

C = Input/output signal (Black plug)
 Negative PIN 1 + positive PIN 2 = Input signal.
 Negative PIN 1 + positive PIN 3 = Output signal.



C= Instrumentation signal MAX 10V



Important! Earth connector on DPS plug should not be connected
 (risk of self adjustment)

J4C 20 - GENERAL CHARACTERISTICS



Technical Data

Operation time unload	9 Sec. /90° (+/- 10%)
Maximum torque break	25 Nm / 221 lb/in
Maximum operational torque	20 Nm / 177 lb/in
Duty rating	75%
Max. Working angle	0° to 270°
Limit switch	4 SPST NO micro (2 motor stop and 2 confirmations)
Automatic heater	3,5 W
Big Plug	EN 175301-803 FORM A
Small Plug	DIN43650/C
Protection IEC 60529 rating	IP67
Temperature	-20°C +70°C / -4°F +158°F
ISO 5211 Plate	Standard: F03/F04/F05 Optional: F07 *17mm
DIN 3337 Female output drive	Standard: *14 Optional: *9, *11mm
Weight	1,75 kg

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%

S20	24-240 VDC/VAC
B20	12 VDC/VAC ONLY

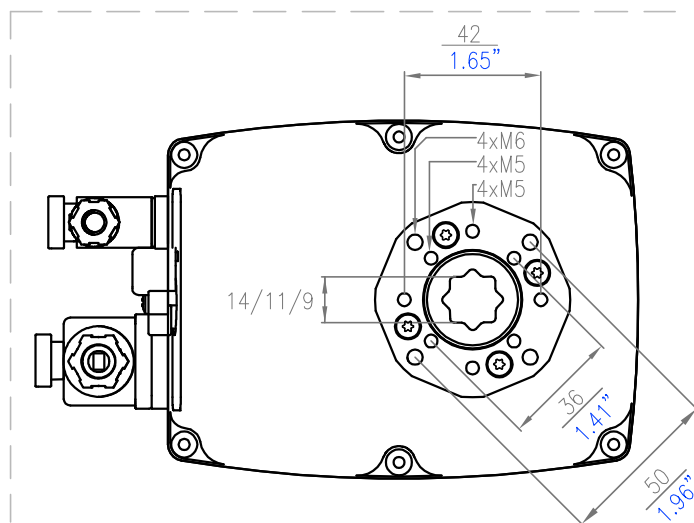
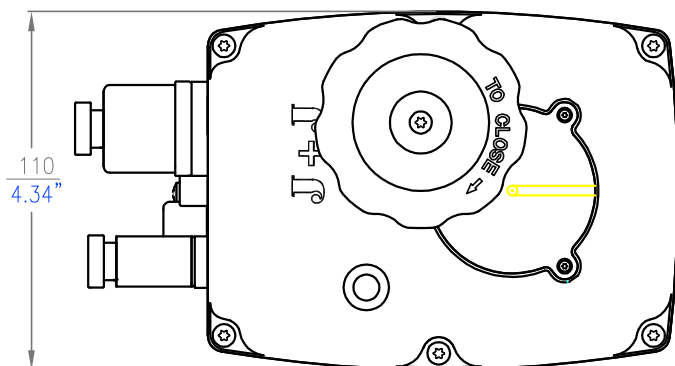
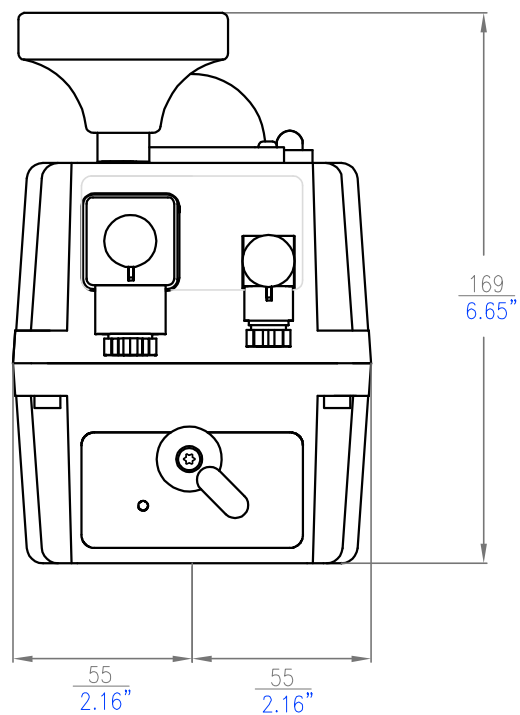
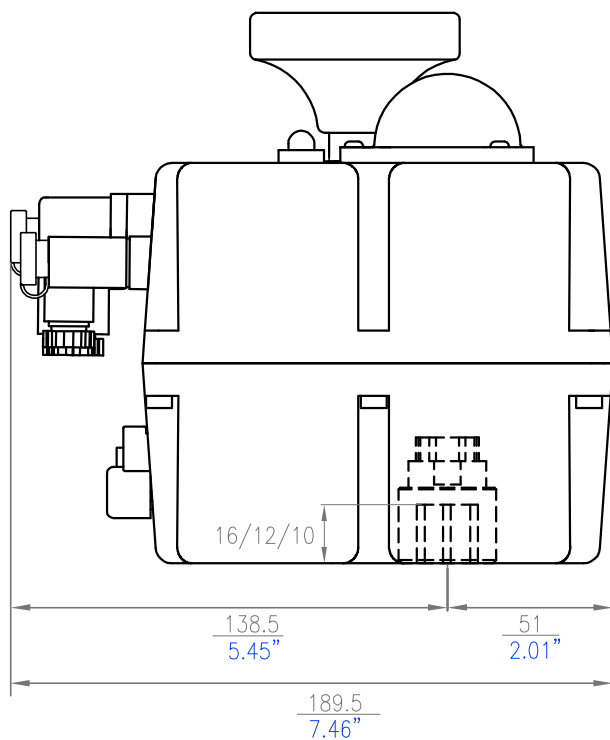
Options

J4C 20/85 DPS KIT digital positioner	4-20mA, 0-20mA, 0-10V or 1-10V
J4C 20/85 BSR KIT emergency fail safe kit system by battery	NC - NO
Potentiometer	1K, 5K or 10K
3 position actuator	0°-45°-90° or 0°-90°-180°

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	-
Adjustable internal cams	Polyamide	-

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

J4C 20 SIZES



EXPLODED VIEW

