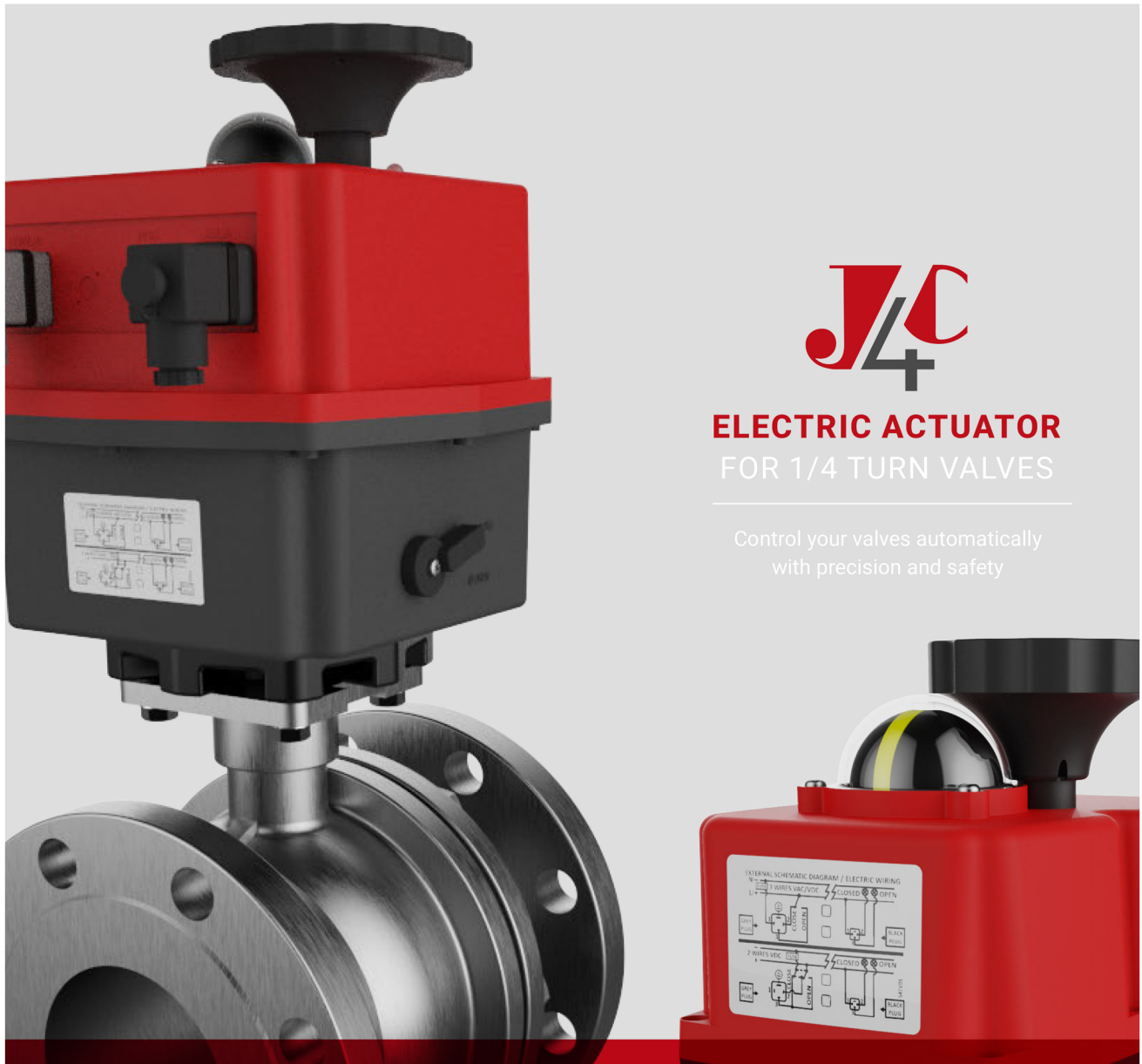




ELECTRIC ACTUATOR FOR 1/4 TURN VALVES

Control your valves automatically
with precision and safety

20/300
Nm

20 to 300 Nm



Automatic
temperature

75%

75% Duty
rating



Electronic torque
operation

IP67

IP67



Battery system
returns



Digital positioner
system



Bluetooth



Modbus system

J+J

J.J. BCN INTERNACIONAL S.A.

2501V1

THE J4C ACTUATOR IS DESIGNED TO AUTOMATE MAINLY 1/4 TURN VALVES



Without leaving our philosophy of total multivoltage actuators, we would like to introduce, in our range of electric actuators, the new **J4C series**, which works, for the first time, with a brushless motor. The **brushless motor** is stronger, more efficient and with less maintenance than a brushed motor. It definitely contributes to enlarge our actuators life.

We are launching a complete range of torques, from 20Nm to 300Nm, which B models work at 12 VDC/VAC and S models do the same from 24 to 240 VDC/VAC 50/60Hz.

Its high level technology, makes our actuators capable to intelligently communicate, using both the **MODBUS** protocol or via **BLUETOOTH**. The mentioned communication systems appear as "factory options" in our catalogue.

MATERIALS

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 (J4C20) Stainless Steel (J4C 35 to 300)	-
External screws	Stainless Steel	-
Gears	Steel and Polyamide	-
Visual position indicator	Polyamide	-
Dome	Polycarbonate	-
Adjustable internal cams	Polyamide	-

ACTUATOR PART LIST

MODELS

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



ACTUATOR PART LIST

MODELS
S140, S300, B140, B300





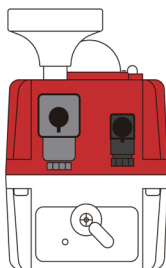
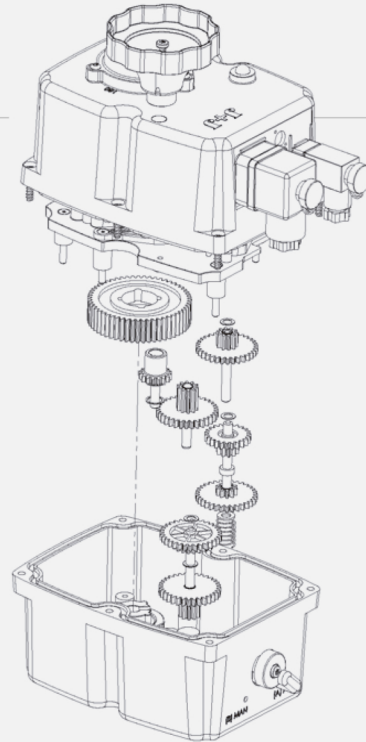
BRUSHLESS TECHNOLOGY

Since there are no brushes rubbing against anything, no energy is lost due to friction. That means brushless motors are more energy efficient than brushed ones.

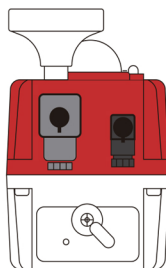
This type of brushless motor allows us to guarantee the actuators for 60,000 operations or 3 years from the date of shipment.

In short, brushless motors are better than brushed units. Users can take advantage of reduced maintenance, improved efficiency, and reduced heat and noise.

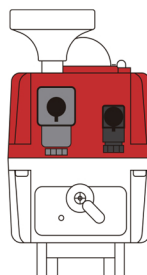
Brushless motors are synchronous units with one or more permanent magnets. Power tools with brushless motors are now considered high-end products.



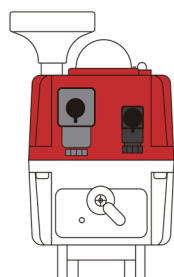
J4C 20



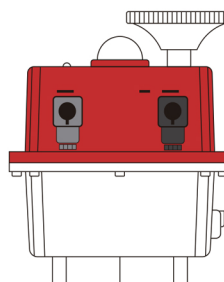
J4C 35



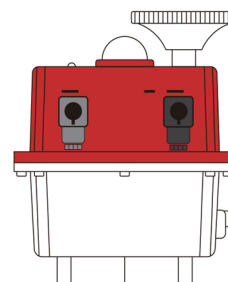
J4C 55



J4C 85



J4C 140



J4C 300

SIZES

OPERATING TORQUE

20 Nm to 300 Nm

SPECIFICATIONS J4C 20/35

Voltage VDC/VAC 50/60Hz -0%+5%	
S	24-240 VDC/VAC
B	12 VDC/VAC ONLY

MODEL	J4C 20	J4C 35
Operation time unload	9 Sec. /90° (+/- 10%)	9 Sec. /90° (+/- 10%)
Maximum torque break	25 Nm / 221 lb/in	38 Nm / 359,3 lb/in
Maximum operational torque	20 Nm / 177 lb/in	35 Nm / 309 lb/in
Duty rating	75%	75%
Max. Working angle	0° to 270°	0° to 270°
Limit switch	4 SPST NO micro (2 motor stop and 2 confirmations)	4 SPST NO micro (2 motor stop and 2 confirmations)
Automatic heater	3,5 W	3,5 W
Big Plug	EN 175301-803 FORM A	EN 175301-803 FORM A
Small Plug	DIN43650/C	DIN43650/C
Protection IEC 60529 rating	IP67	IP67
Temperature	-20°C +70°C / -4°F +158°F	-20°C +70°C / -4°F +158°F
ISO 5211 Plate	Standard: F03/F04/F05 Optional: F07 *17mm	Standard: F03/F04/F05 Optional: F07 *17mm
DIN 3337 Female output drive	Standard: *14 Optional: *9, *11mm	Standard: *14 Optional: *9, *11mm
Weight	1,75 kg	1,79 kg

OPTIONS	J4C 20	J4C 35
J4C 20/85 DPS KIT digital positioner	4-20mA, 0-20mA, 0-10V or 1-10V	4-20mA, 0-20mA, 0-10V or 1-10V
J4C 20/85 BSR KIT emergency fail safe kit system by battery	NC - NO	NC - NO
Potentiometer	1K, 5K or 10K	1K, 5K or 10K
3 position actuator	0°-45°-90° or 0°-90°-180°	0°-45°-90° or 0°-90°-180°

J4C 20 consumption		Unload		Max. Operational Torque 20 Nm		Max. Torque Break 25 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B20	0,75	9,06	1,80	21,60	1,95	23,36
24 VDC	S20	0,45	10,77	0,90	21,49	0,97	23,39
48 VDC	S20	0,21	9,93	0,42	20,38	0,46	22,07
110 VDC	S20	0,07	8,00	0,13	14,30	0,14	15,70
12 VAC	B20	1,04	12,51	1,85	22,18	2,28	27,32
24 VAC	S20	0,59	14,20	1,12	26,77	1,28	30,62
48 VAC	S20	0,34	16,37	0,69	33,16	0,75	36,22
110 VAC	S20	0,14	15,73	0,27	29,52	0,30	32,67
240 VAC	S20	0,10	23,76	0,15	36,43	0,16	39,07

J4C 35 consumption		Unload		Max. Operational Torque 35 Nm		Max. Torque Break 38 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B35	0,75	9,06	2,38	28,62	2,62	31,50
24 VDC	S35	0,45	10,77	1,28	30,78	1,37	32,79
48 VDC	S35	0,21	9,93	0,56	26,72	0,59	28,20
110 VDC	S35	0,07	7,70	0,17	18,90	0,18	20,10
12 VAC	B35	1,04	12,51	2,75	33,00	3,19	38,28
24 VAC	S35	0,59	14,20	1,58	37,80	1,67	40,13
48 VAC	S35	0,34	16,37	0,92	44,04	0,99	47,31
110 VAC	S35	0,14	15,73	0,36	39,45	0,38	41,87
240 VAC	S35	0,10	23,76	0,19	45,41	0,20	47,52



Suministros Industriales Arbaiza, S.L.

SPECIFICATIONS J4C 55/85

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

S 24-240 VDC/VAC

B 12 VDC/VAC ONLY

MODEL	J4C 55	J4C 85
Operation time unload	13 Sec. /90° (+/- 10%)	29 Sec. /90° (+/- 10%)
Maximum torque break	60 Nm / 530 lb/in	90 Nm / 796,3 lb/in
Maximum operational torque	55 Nm / 486 lb/in	85 Nm / 752 lb/in
Duty rating	75%	75%
Max. Working angle	0° to 270°	0° to 270°
Limit switch	4 SPST NO micro (2 motor stop and 2 confirmations)	4 SPST NO micro (2 motor stop and 2 confirmations)
Automatic heater	3,5 W	3,5 W
Big Plug	EN 175301-803 FORM A	EN 175301-803 FORM A
Small Plug	DIN43650/C	DIN43650/C
Protection IEC 60529 rating	IP67	IP67
Temperature	-20°C +70°C / -4°F +158°F	-20°C +70°C / -4°F +158°F
ISO 5211 Plate	Standard: F05/F07	Standard: F05/F07
DIN 3337 Female output drive	Standard: *17 Optional: *11, *14mm	Standard: *17 Optional: *14mm
Weight	2,32 kg	2,84 kg

OPTIONS	J4C 55	J4C 85
J4C 20/85 DPS KIT digital positioner	4-20mA, 0-20mA, 0-10V or 1-10V	4-20mA, 0-20mA, 0-10V or 1-10V
J4C 20/85 BSR KIT emergency fail safe kit system by battery	NC - NO	NC - NO
Potentiometer	1K, 5K or 10K	1K, 5K or 10K
3 position actuator	0°-45°-90° or 0°-90°-180°	0°-45°-90° or 0°-90°-180°

J4C 55 consumption		Unload		Max. Operational Torque 55 Nm		Max. Torque Break 60 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B55	0,70	8,45	3,04	36,43	3,42	41,05
24 VDC	S55	0,42	10,19	1,55	37,17	1,63	39,02
48 VDC	S55	0,20	9,72	0,61	29,25	0,67	32,31
110 VDC	S55	0,07	7,50	0,19	20,80	0,21	23,20
12 VAC	B55	0,94	11,30	3,43	41,18	3,78	45,41
24 VAC	S55	0,58	13,89	1,87	44,88	1,98	47,52
48 VAC	S55	0,33	15,73	1,10	52,80	1,21	58,29
110 VAC	S55	0,14	15,73	0,40	43,80	0,43	46,95
240 VAC	S55	0,09	22,70	0,20	47,52	0,21	50,16

J4C 85 consumption		Unload		Max. Operational Torque 85 Nm		Max. Torque Break 90 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B85	0,62	7,42	2,11	25,34	2,28	27,32
24 VDC	S85	0,36	8,55	1,08	25,87	1,22	29,30
48 VDC	S85	0,17	8,24	0,48	22,92	0,53	25,56
110 VDC	S85	0,05	5,80	0,14	15,20	0,16	17,90
12 VAC	B85	0,81	9,69	2,38	28,51	2,65	31,81
24 VAC	S85	0,50	11,88	1,36	32,74	1,50	36,01
48 VAC	S85	0,25	11,83	0,77	37,07	0,86	41,18
110 VAC	S85	0,12	12,83	0,31	33,64	0,33	36,54
240 VAC	S85	0,08	20,06	0,17	40,13	0,18	42,77



Suministros Industriales Arbaiza, S.L.

SPECIFICATIONS J4C 140/300

Voltage VDC/VAC 50/60Hz -0%+5%	
S	24-240 VDC/VAC
B	12 VDC/VAC ONLY

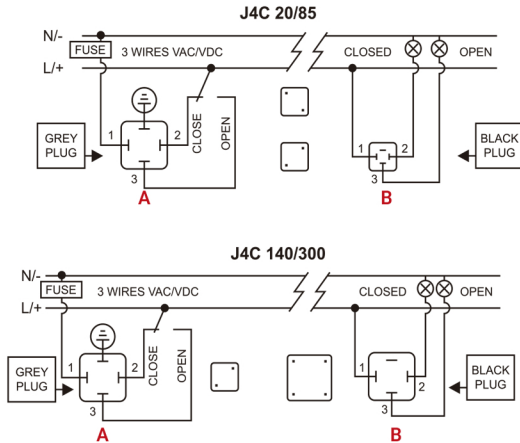
MODEL	J4C 140	J4C 300
Operation time unload	34 Sec. /90° (+/- 10%)	58 Sec. /90° (+/- 10%)
Maximum torque break	170 Nm / 1504,5 lb/in	350 Nm / 3097,5 lb/in
Maximum operational torque	140 Nm / 1239 lb/in	300 Nm / 2655 lb/in
Duty rating	75%	75%
Max. Working angle	0° to 270°	0° to 270°
Limit switch	4 SPST NO micro (2 motor stop and 2 confirmations)	4 SPST NO micro (2 motor stop and 2 confirmations)
Automatic heater	3,5 W	3,5 W
Big Plug	EN 175301-803 FORM A	EN 175301-803 FORM A
Small Plug	DIN43650/C	DIN43650/C
Protection IEC 60529 rating	IP67	IP67
Temperature	-20°C +70°C / -4°F +158°F	-20°C +70°C / -4°F +158°F
ISO 5211 Plate	Standard: F07/F10 Optional: F12	Standard: F07/F10 Optional: F12
DIN 3337 Female output drive	Standard: *22 Optional: *17mm	Standard: *22 Optional: *17mm
Weight	4,72 kg	4,72 kg

OPTIONS	J4C 140	J4C 300
J4C 140/300 DPS KIT digital positioner	4-20mA, 0-20mA, 0-10V or 1-10V	4-20mA, 0-20mA, 0-10V or 1-10V
J4C 140/300 BSR KIT emergency fail safe kit system by battery	NC - NO	NC - NO
Potentiometer	1K, 5K or 10K	1K, 5K or 10K
3 position actuator	0°-45°-90° or 0°-90°-180°	0°-45°-90° or 0°-90°-180°

J4C 140 consumption		Unload		Max. Operational Torque 140 Nm		Max. Torque Break 170 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B140	1,93	23,10	4,73	56,76	5,39	64,68
24 VDC	S140	0,66	15,84	2,15	51,48	2,53	60,72
48 VDC	S140	0,30	14,25	0,88	42,24	1,10	52,80
110 VDC	S140	0,10	10,89	0,28	30,25	0,39	42,35
12 VAC	B140	2,75	33,00	6,60	79,20	8,47	101,64
24 VAC	S140	0,83	19,80	2,59	62,04	3,30	79,20
48 VAC	S140	0,48	23,23	1,43	68,64	1,79	86,06
110 VAC	S140	0,23	25,41	0,63	68,97	0,72	78,65
240 VAC	S140	0,18	42,24	0,39	90,40	0,44	105,60

J4C 300 consumption		Unload		Max. Operational Torque 300 Nm		Max. Torque Break 350 Nm	
VOLATGE	MODEL	A	W	A	W	A	W
12 VDC	B300	1,32	15,84	5,17	62,04	5,45	65,34
24 VDC	S300	0,50	11,88	2,31	55,44	2,70	64,68
48 VDC	S300	0,22	10,56	1,10	52,80	1,19	57,02
110 VDC	S300	0,09	9,68	0,33	36,30	0,39	42,35
12 VAC	B300	1,98	23,76	7,26	87,12	8,64	103,62
24 VAC	S300	0,66	15,84	2,75	66,00	3,30	79,20
48 VAC	S300	0,36	17,42	1,65	79,20	1,87	89,76
110 VAC	S300	0,19	20,57	0,66	72,60	0,77	84,70
240 VAC	S300	0,15	36,96	0,42	100,32	0,47	113,52

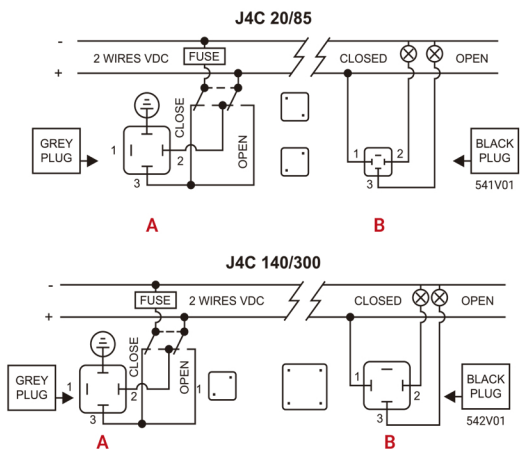
EXTERNAL CONNECTING DIAGRAM (STANDARD)



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.

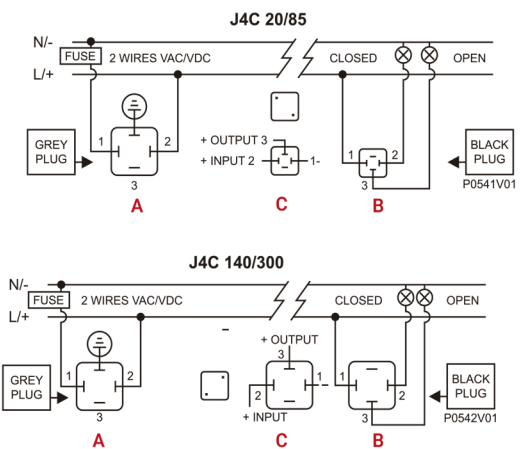


ON - OFF VDC

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)