

# J4C 55 ON – OFF INFORMATION



## GENERAL CHARACTERISTICS

**Housing:** Anticorrosive polyamide (lid & body)  
**Main external shaft:** stainless steel  
**External screws:** stainless steel  
**Gears:** Steel and polyamide  
**Visual position indicator:** Polyamide  
**Dome:** Polycarbonate  
**Adjustable internal cams:** Polyamide  
**Electric motor:** 24VDC Brushless motor  
**Insulation:** Class B  
**(IEC 60034) Service:** S4

## DATASHEET

Model	S55	B55
Voltage VDC/VAC 50/60Hz -0/+5%	24 a 240 (Patent Pending)	12 V <b>ONLY</b>
Operation time unload	13 Sec./90°	13 Sec./90°
Maximum torque break	60 Nm / 530 lb/in	60 Nm / 530 lb/in
Maximum operational torque	55 Nm / 486 lb/in	55 Nm / 486 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	EN175301-803 FORM A	EN175301-803 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
Weight	2,4 Kg	2,4 Kg



## VALVE CONNECTION

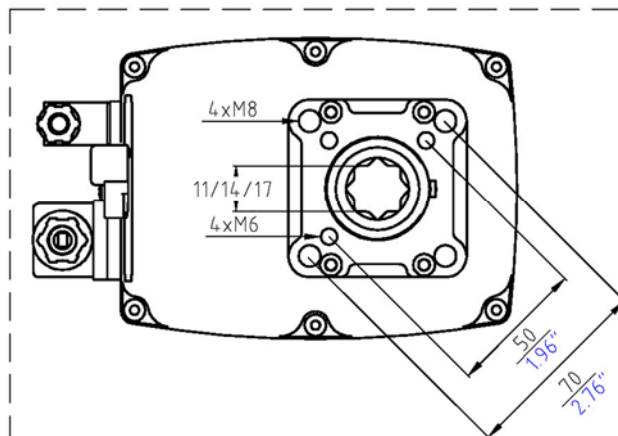
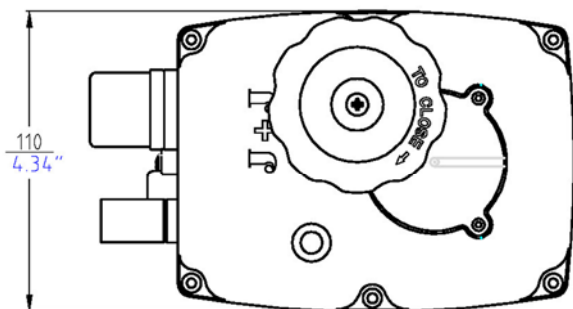
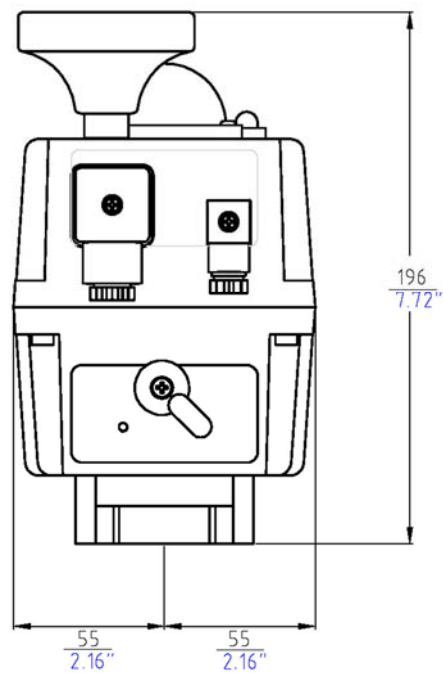
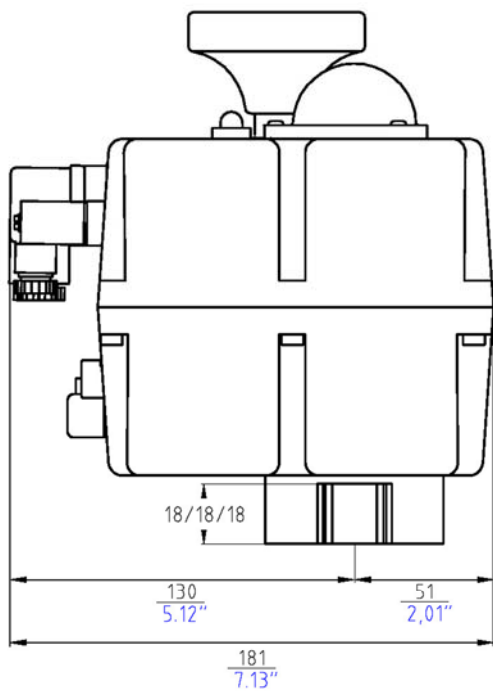
ISO 5211 Plate : F05/F07  
 DIN 3337 Female output drive : \*17 mm  
 Option:  
 DIN 3337 Female output drive: \*11 or \*14 mm



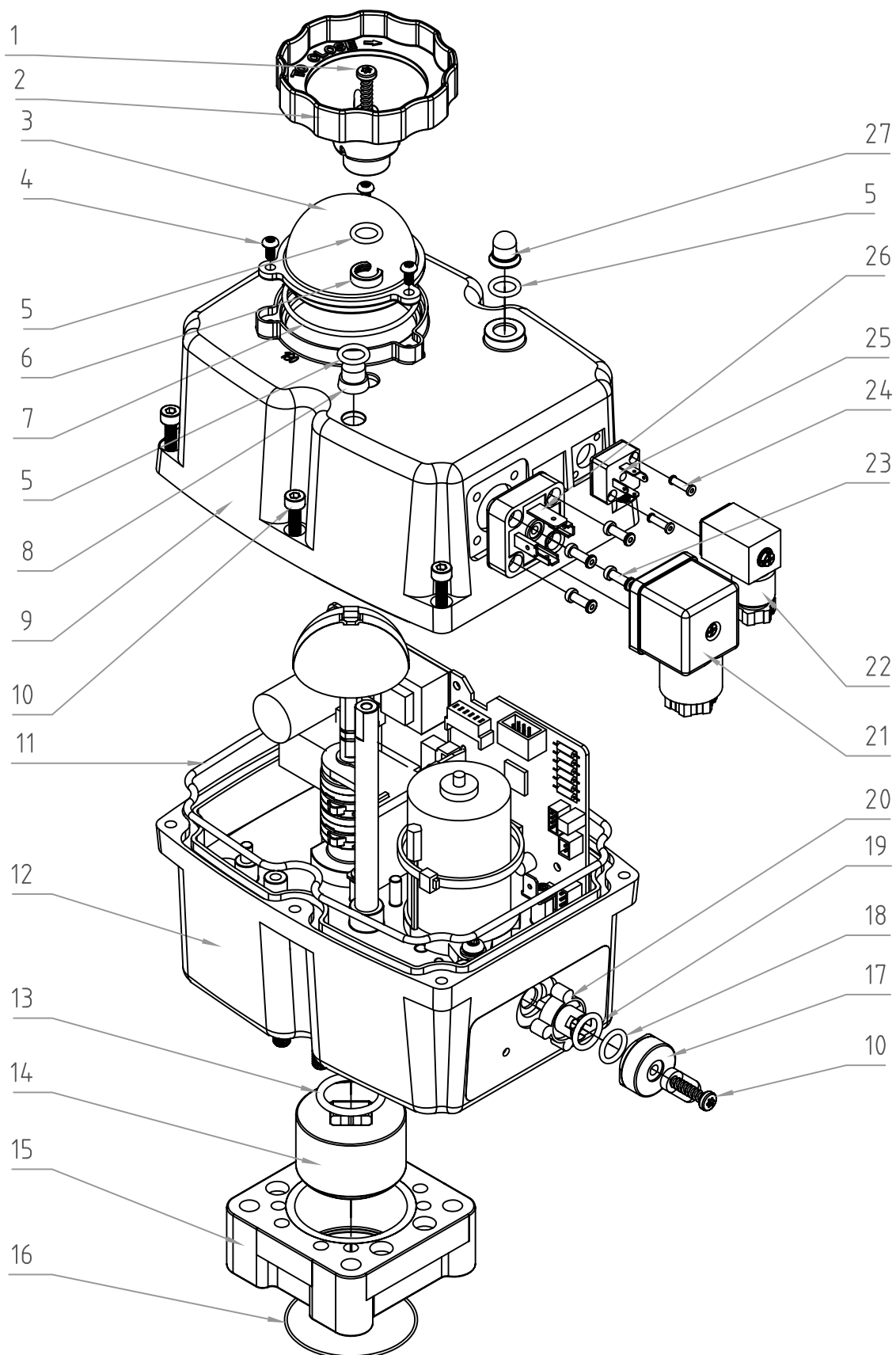
## OPTIONS

-J4C 20/85 DPS digital positioner: 4-20mA, 0-20mA, 0-10V or 1-10V.  
 -J4C 20/85 BSR emergency fail safe kit system by battery  
 -Digital potentiometer: 1K, 5K or 10K.  
 -3 position actuator: 0°-45°-90° or 0°-90°-180°

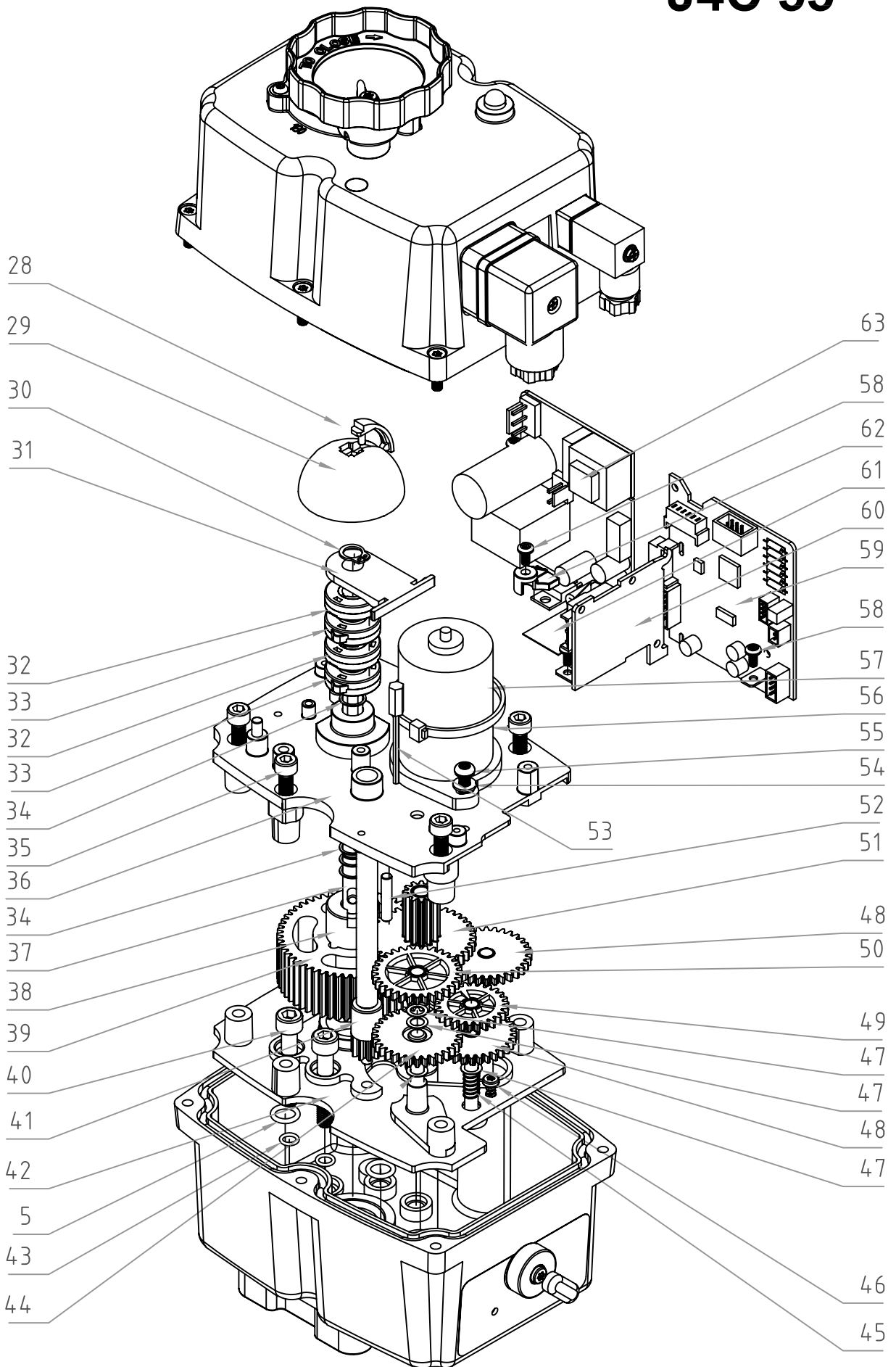
# J4C 55 SIZES



# J4C 55



# J4C 55



# J4C 55

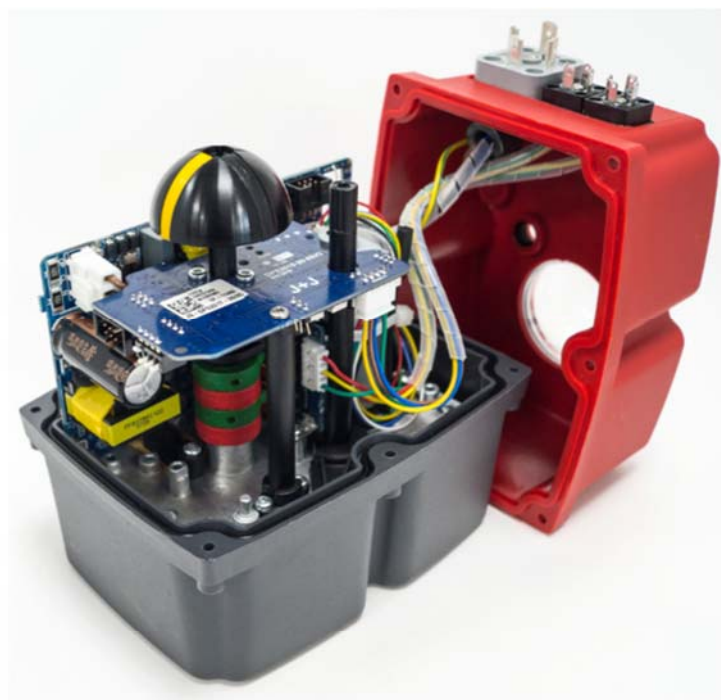
Number	Code	Units	
1	AP00162	1	
2	AP00083	1	
3	AP00372	1	
4	AP00345	3	
5	AP00053	7	
6	AP00037	1	
7	AP00346	1	
8	AP00133	1	
9	AP00340	1	
10	AP00541	7	
11	AP00048	1	
12	AP00036	1	
13	AP00049	1	
14	AP00046	1	(*17)
14	AP00045	1	(*14)
14	AP00150	1	(*11)
15	MM00140	1	
16	AP00016	1	
17	AP00457	1	
18	AP00054	1	
19	AP00056	1	
20	AP00110	1	
21	AP00067	1	
22	AP00068	1	
23	AP01098	4	
24	AP01099	2	
25	MM00004	1	
26	MM01382	1	
27	AP00023	1	
28	AP00374	1	
29	MM01138	1	
30	AP00159	1	
31	AP00161	1	
32	MM01211	2	
33	MM01210	2	
34	AP01000	4	
35	AP00492	6	
36	AP00059	1	
37	AP00377	1	
38	AP00378	1	

Number	Code	Units	
39	AP00212	1	
40	AP00077	4	
41	MM00099	1	
42	AP00064	1	
43	AP00052	4	
44	AP00655	1	
45	AP00866	1	
46	AP00539	1	
47	AP00014	4	
48	AP00145	2	
49	AP00745	1	
50	AP00249	1	
51	AP00881	1	
52	AP00281	1	
53	AP00926	1	
54	AP00291	2	
55	AP00911	2	
56	AP00079	1	
57	AP01056	1	
58	AP00080	4	
59	AP01066	1	
60	MM01324	1	
61	AP01045	1	
62	AP01047	1	
63	AP00533	1	S TYPE
63	AP01059	1	B TYPE



DPS

# J4C 20/35/55/85 POSITIONER INFORMATION (DPS)

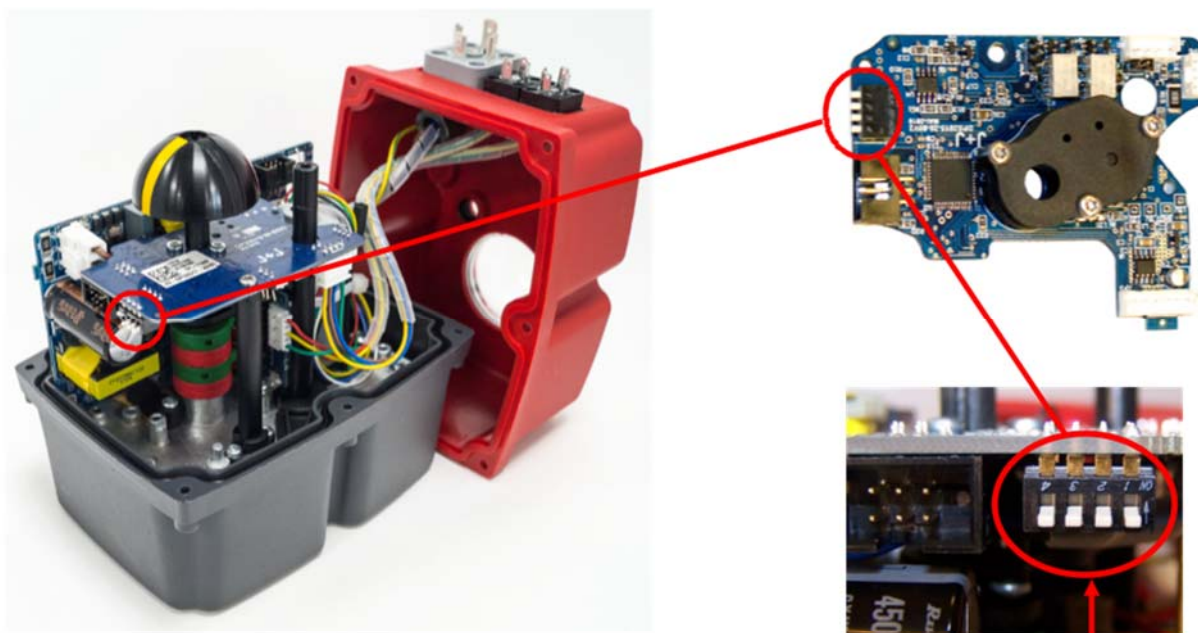


## SPECIFICATIONS

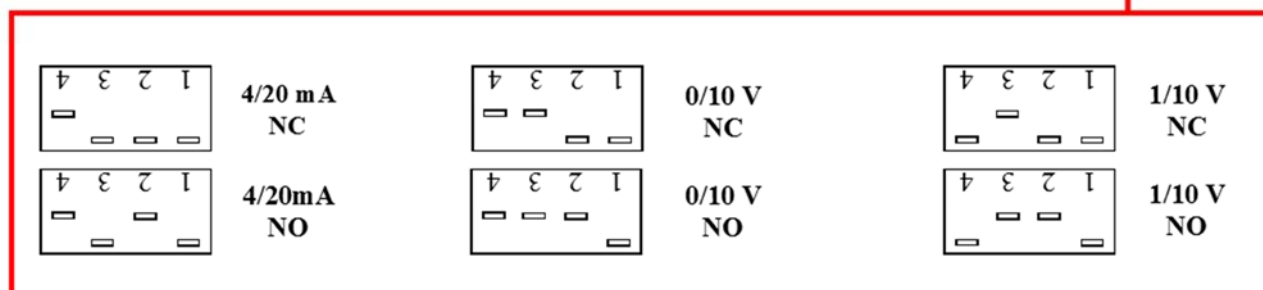
MODEL	S20-B20	S35-B35	S55-B55	S85-B85
Accuracy	3 % F.S.	3 % F.S.	3 % F.S.	3 % F.S.
Linearity	2 % F.S.	2 % F.S.	2 % F.S.	2 % F.S.
Hysteresis	3 % F.S.	3 % F.S.	3 % F.S.	3 % F.S.
Steps at 4/20mA	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°
Steps at 0/10V	Min.98 steps 90°	Min.98 steps 90°	Min.98 steps 90°	Min.98 steps 90°
Steps at 0/20mA	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°
Steps at 1/10V	Min.87 steps 90°	Min.87 steps 90°	Min.87 steps 90°	Min.87 steps 90°
4/20mA or 0/20mA Input signal impedance	100 Ohm	100 Ohm	100 Ohm	100 Ohm
0/10V or 1/10V Input signal impedance	25 KOhm	25 KOhm	25 KOhm	25 KOhm
CLASS	B+C to E DIN EN 15714 Inching + Modulation			

F.S. Full Scale

# J4C 20/35/55/85 POSITIONER CONFIGURATION (DPS)

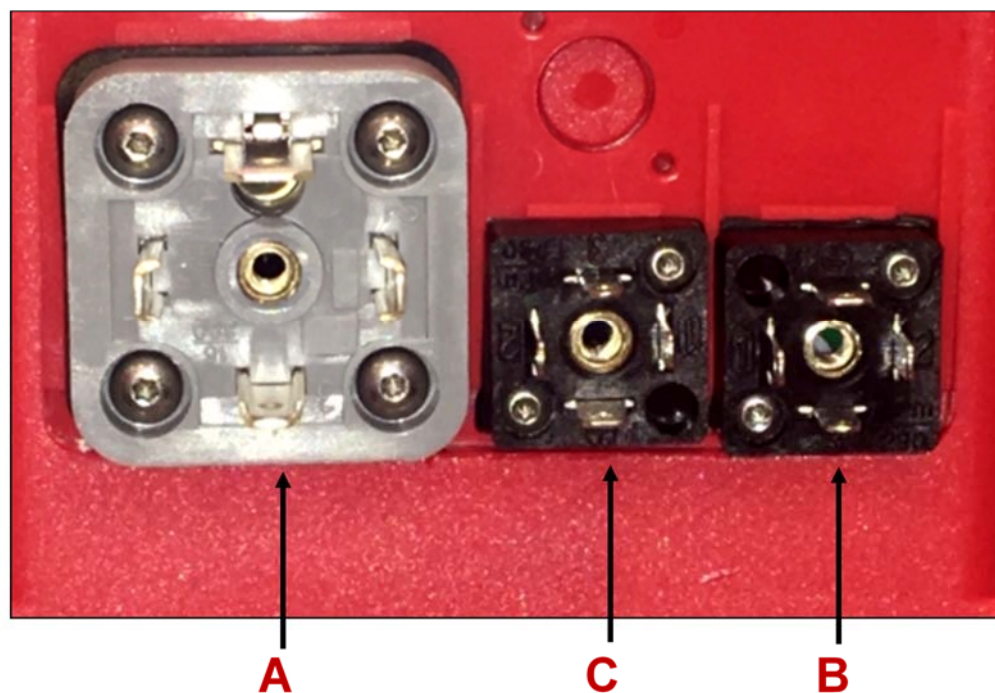


Use the configuration you need by moving the DIPs:  
Different possibilities of configuration:



OTHER OPTIONS TO BE SET-UP BY THE MANUFACTURER OR WITH A J4C INTERFACE	
OUTPUT ONLY	4/20 mA, 0/10 V, 0/20 mA, 1/10 V
INPUT & OUTPUT	0/20 mA
MOTOR STOP, WITHOUT INSTRUMENTATION	4/20 mA, 0/10 V, 0/20 mA, 1/10 V

## J4C 20/35/55/85 POSITIONER SELF-ADJUSTMENT (DPS)



**A**- Power supply plug.

**B**- Volt free contact plug.

**C**- Input / Output signal (4/20mA,0/10V,0/20mA o 1/10V) plug.

**1- C** plug - connect a cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

**2- A** plug - connect:

VAC: PIN1 (neutral) and PIN2 (phase).

VDC: PIN1 (negative) and PIN2 (positive).

**\*VERY IMPORTANT: BEFORE CONNECTING "A" PLUG TO THE ACTUATOR, CHECK THAT THE VOLTAGE IS THE SAME AS THE ONE SPECIFIED ON THE LABEL (CARTER).**

**3- C** plug - disconnect the cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

The actuator will make a complete maneuver and stay in the close position.

The actuator is ready to connect the (4/20mA,0/10V,0/20mA o 1/10V) signal to the **C** plug.



**BSR**

# J4C 20/35/55/85 BSR INFORMATION



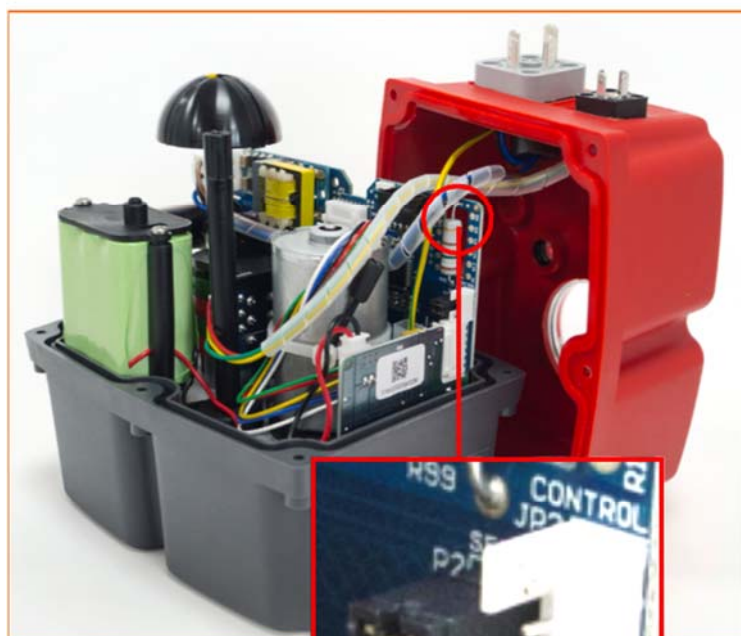
## SPECIFICATIONS

ACTUATOR MODEL	S20-B20	S35-B35	S55-B55	S85-B85
N° Working operation without recharge, with 100% battery charge	10	10	10	10
Recharge time/working operation	15 min	21 min	48 min	58 min
Battery consumption/working operation	2,2 W	3,0 W	6,8 W	8,3 W
Full charge time 100%	28 h	28 h	28 h	28 h
Nominal capacity +/- 5%	2200 mA	2200 mA	2200 mA	2200 mA
NO or NC Features (*)	Jumper	Jumper	Jumper	Jumper
Current/one working operation with battery	10,1 mA	14 mA	31,6 mA	38.6 mA
Battery charge	40 mA/h	40 mA/h	40 mA/h	40 mA/h

# J4C 20/35/55/85 BSR CONFIGURATION

CONFIGURATIONS	A	B
PREFERRED POSITION IN CASE OF POWER CUT	(NC) NORMALLY CLOSE	(NO) NORMALLY OPEN

## (\* NO or NC Set-Up



Jumper 1  
SELDIR

### NC Set-Up

NC - If, in case of a power supply failure, we need the actuator go to the CLOSE position, we need to put the **jumper 1** on the SELDIR position.

### NO Set-Up

NO - If, in case of a power supply failure, we need the actuator go to the OPEN position, be sure that the **jumper 1** is not on the SELDIR position.

# J4C 85 ON – OFF INFORMATION



## GENERAL CHARACTERISTICS

**Housing:** Anticorrosive polyamide (lid & body)  
**Main external shaft:** stainless steel  
**External screws:** stainless steel  
**Gears:** Steel and polyamide  
**Visual position indicator:** Polyamide  
**Dome:** Polycarbonate  
**Adjustable internal cams:** Polyamide  
**Electric motor:** 24VDC Brushless motor  
**Insulation:** Class B  
**(IEC 60034) Service:** S4

## DATASHEET

Model	S85	B85
Voltage VDC/VAC 50/60Hz -0/+5%	24 a 240 (Patent Pending)	12 V <b>ONLY</b>
Operation time unload	29 Sec./90°	29 Sec./90°
Maximum torque break	90 Nm / 796,3 lb/in	90 Nm / 796,3 lb/in
Maximum operational torque	85 Nm / 752 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	EN175301-803 FORM A	EN175301-803 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
Weight	3 Kg	3 Kg



## VALVE CONNECTION

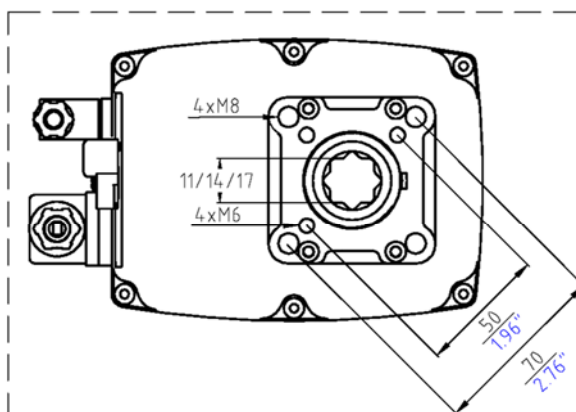
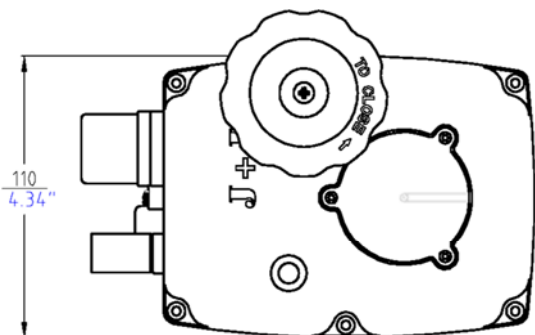
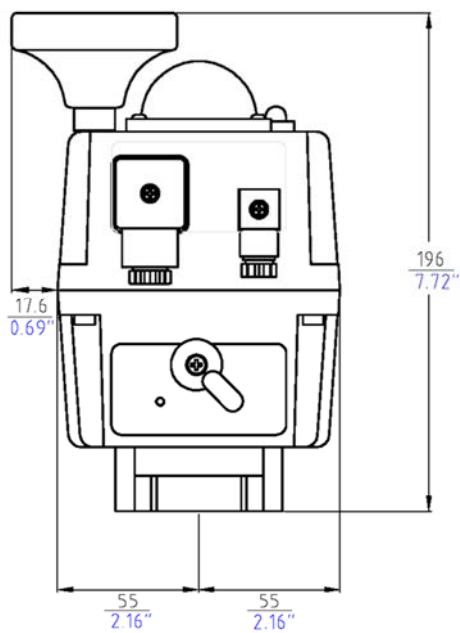
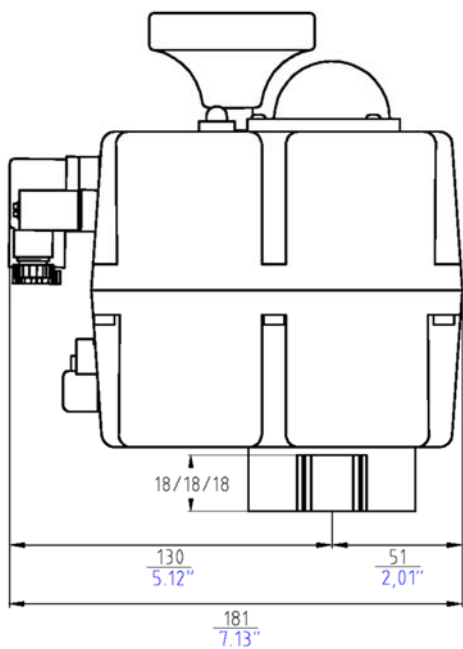
ISO 5211 Plate : F05/F07  
 DIN 3337 Female output drive : \*17 mm  
 Option:  
 DIN 3337 Female output drive: \*11 or \*14 mm



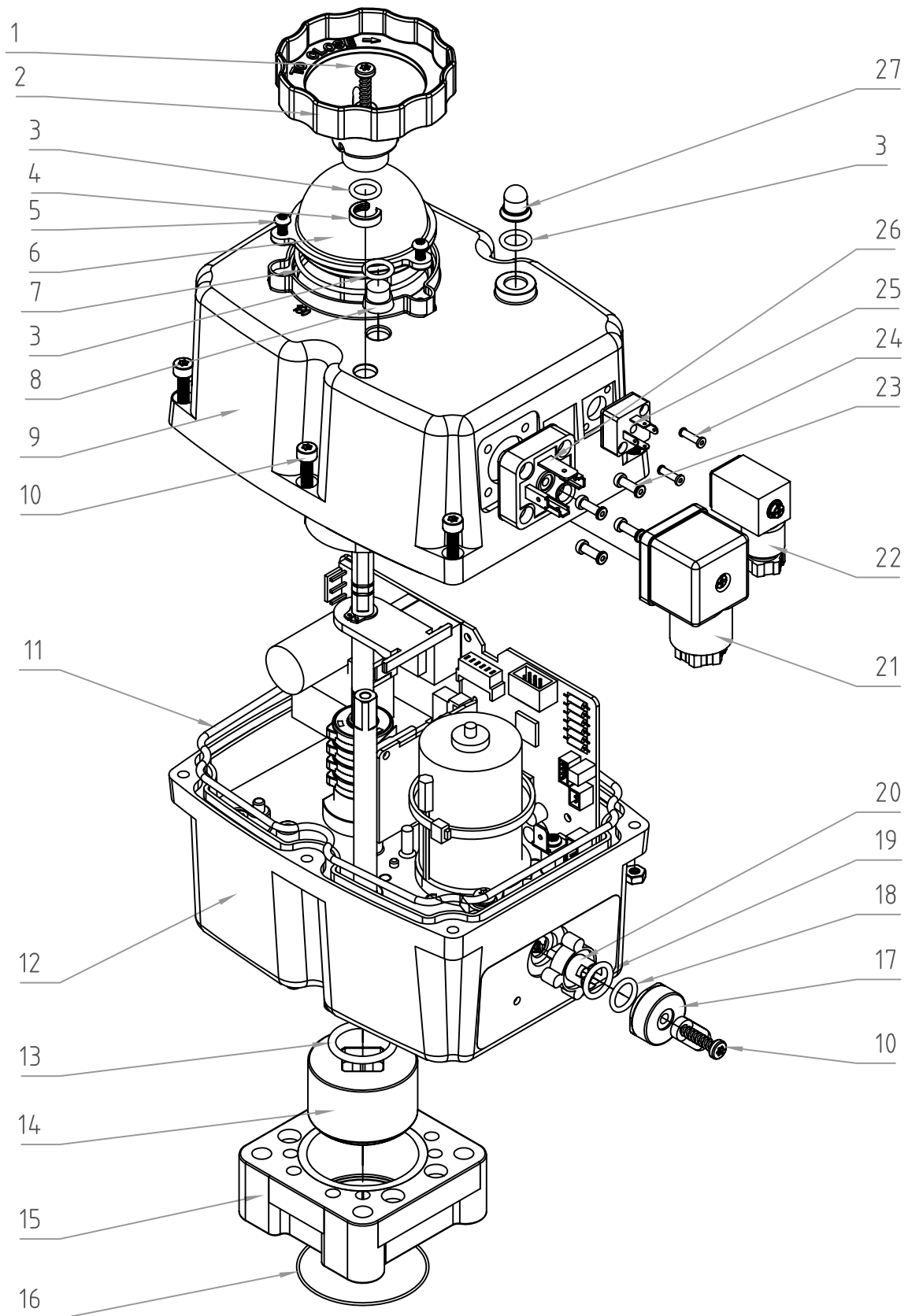
## OPTIONS

-J4C 20/85 DPS digital positioner: 4-20mA, 0-20mA, 0-10V or 1-10V.  
 -J4C 20/85 BSR emergency fail safe kit system by battery  
 -Digital potentiometer: 1K, 5K or 10K.  
 -3 position actuator: 0°-45°-90° or 0°-90°-180°

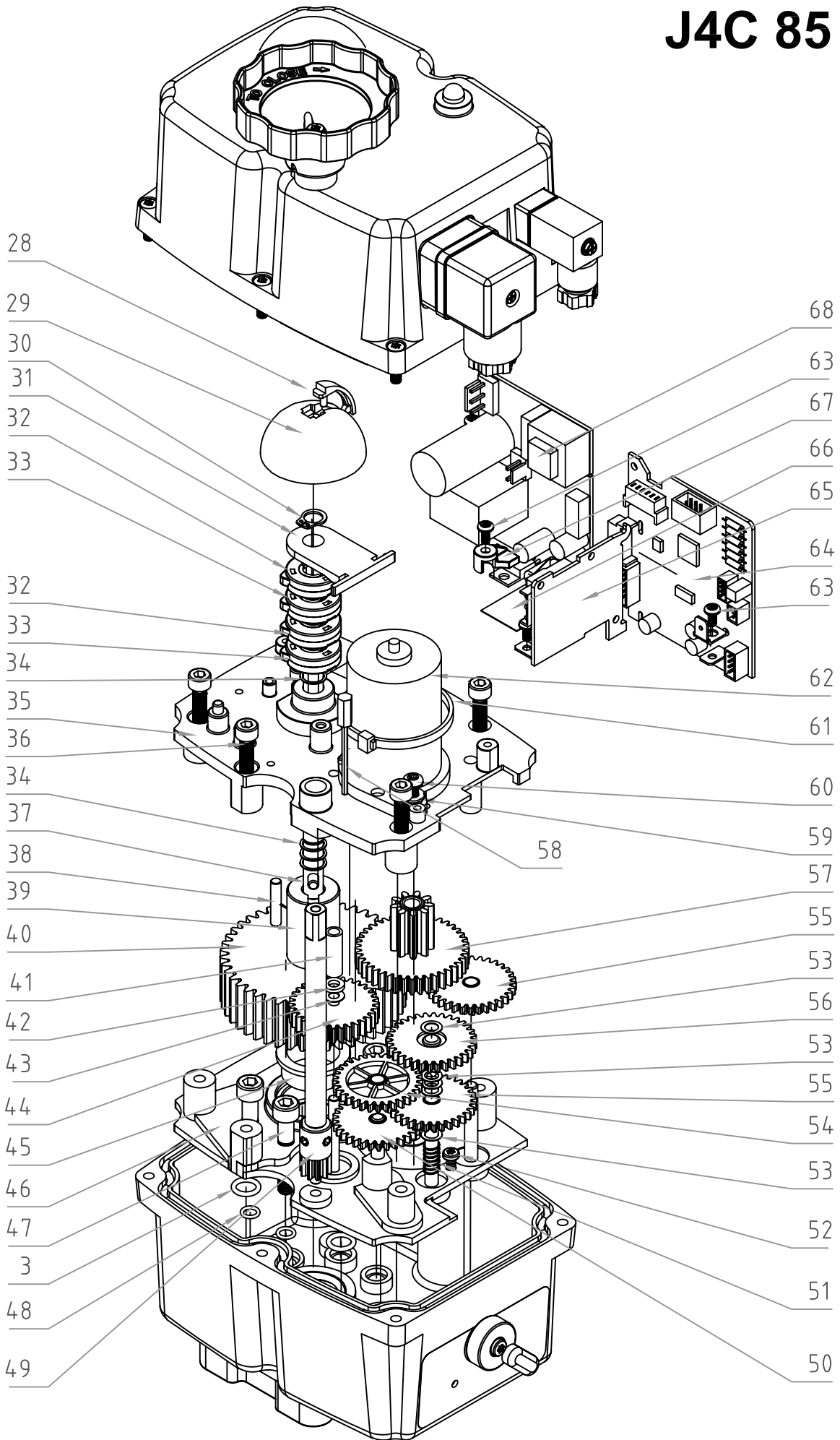
# J4C 85 SIZES



# J4C 85



# J4C 85



# J4C 85

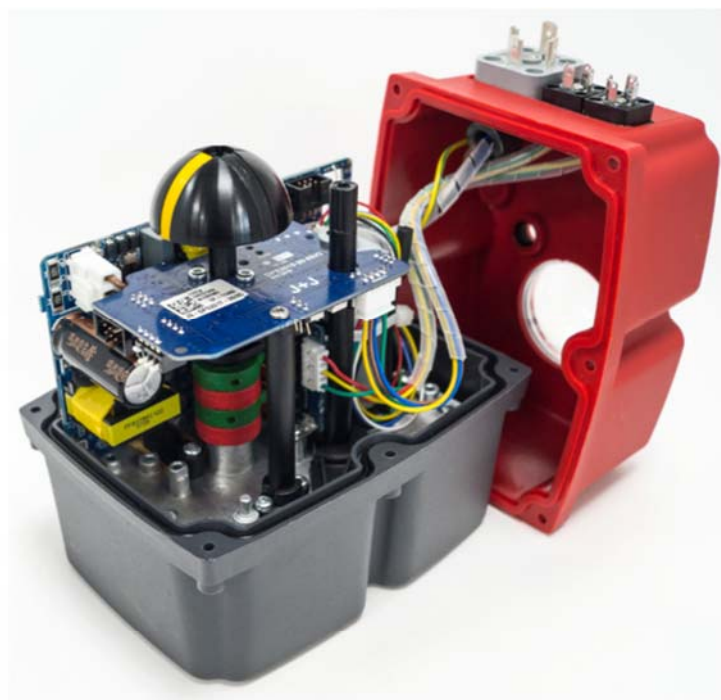
Number	Code	Units	
1	AP00162	1	
2	AP01103	1	
3	AP00053	7	
4	AP00037	1	
5	AP00345	3	
6	AP00372	1	
7	AP00346	1	
8	AP00133	1	
9	AP00340	1	
10	AP00541	7	
11	AP00048	1	
12	AP00036	1	
13	AP00049	1	
14	AP00045	1	(*14)
14	AP00046	1	(*17)
14	AP00150	1	(*11)
15	MM00140	1	
16	AP00016	1	
17	AP00457	1	
18	AP00054	1	
19	AP00056	1	
20	AP00110	1	
21	AP00067	1	
22	AP00068	1	
23	AP01098	4	
24	AP01099	2	
25	MM00004	1	
26	MM01382	1	
27	AP00023	1	
28	AP00374	1	
29	AP01138	1	
30	AP00159	1	
31	AP00161	1	
32	MM01211	2	
33	MM01210	2	
34	AP01000	4	
35	AP00058	1	
36	AP00492	6	
37	AP00377	1	
38	AP00281	1	

Number	Code	Units	
39	AP00378	1	
40	AP00874	1	
41	AP00263	1	
42	AP00437	1	
43	AP00015	1	
44	AP00875	1	
45	AP00039	1	
46	AP00065	1	
47	AP00077	4	
48	AP00052	4	
49	MM00099	1	
50	AP00143	1	
51	AP00866	1	
52	AP00539	1	
53	AP00014	5	
54	AP00790	1	
55	AP00145	2	
56	AP00655	1	
57	AP00873	1	
58	AP00926	1	
59	AP00291	2	
60	AP00911	2	
61	AP00079	1	
62	AP01056	1	
63	AP00080	4	
64	AP01066	1	
65	MM01324	1	
66	AP01045	1	
67	AP01047	1	
68	AP00533	1	S TYPE
68	AP01059	1	B TYPE



DPS

# J4C 20/35/55/85 POSITIONER INFORMATION (DPS)

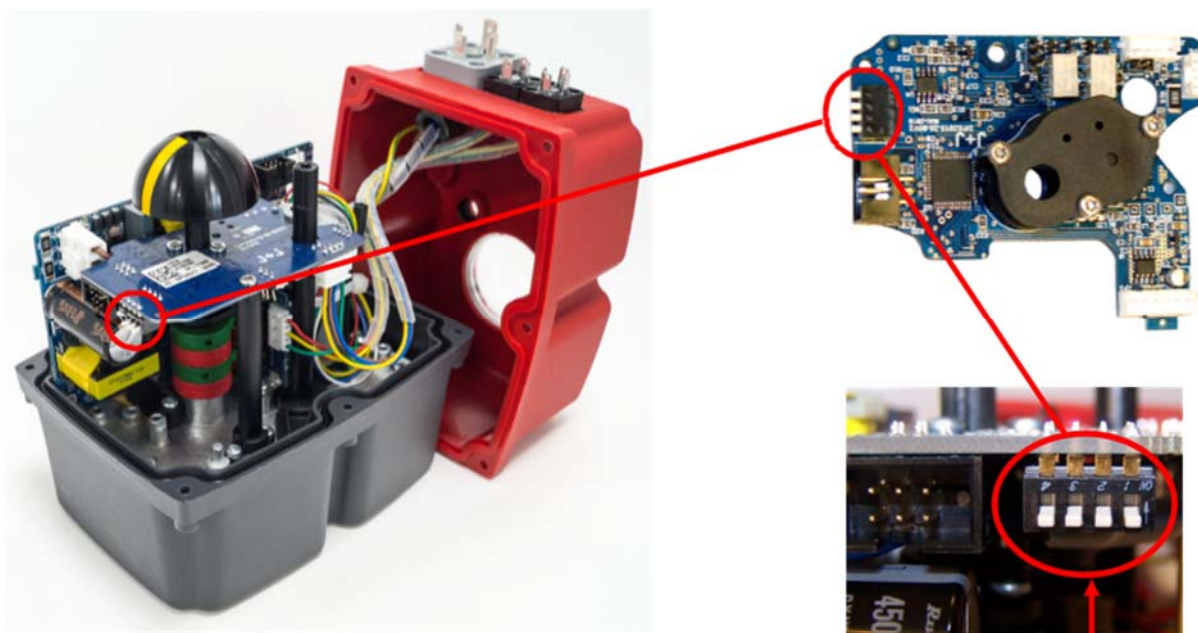


## SPECIFICATIONS

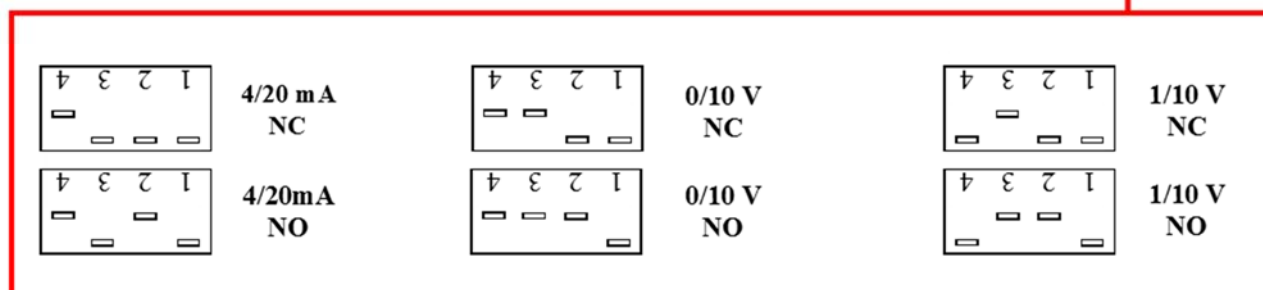
MODEL	S20-B20	S35-B35	S55-B55	S85-B85
Accuracy	3 % F.S.	3 % F.S.	3 % F.S.	3 % F.S.
Linearity	2 % F.S.	2 % F.S.	2 % F.S.	2 % F.S.
Hysteresis	3 % F.S.	3 % F.S.	3 % F.S.	3 % F.S.
Steps at 4/20mA	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°
Steps at 0/10V	Min.98 steps 90°	Min.98 steps 90°	Min.98 steps 90°	Min.98 steps 90°
Steps at 0/20mA	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°	Min.150 steps 90°
Steps at 1/10V	Min.87 steps 90°	Min.87 steps 90°	Min.87 steps 90°	Min.87 steps 90°
4/20mA or 0/20mA Input signal impedance	100 Ohm	100 Ohm	100 Ohm	100 Ohm
0/10V or 1/10V Input signal impedance	25 KOhm	25 KOhm	25 KOhm	25 KOhm
CLASS	B+C to E DIN EN 15714 Inching + Modulation			

F.S. Full Scale

# J4C 20/35/55/85 POSITIONER CONFIGURATION (DPS)

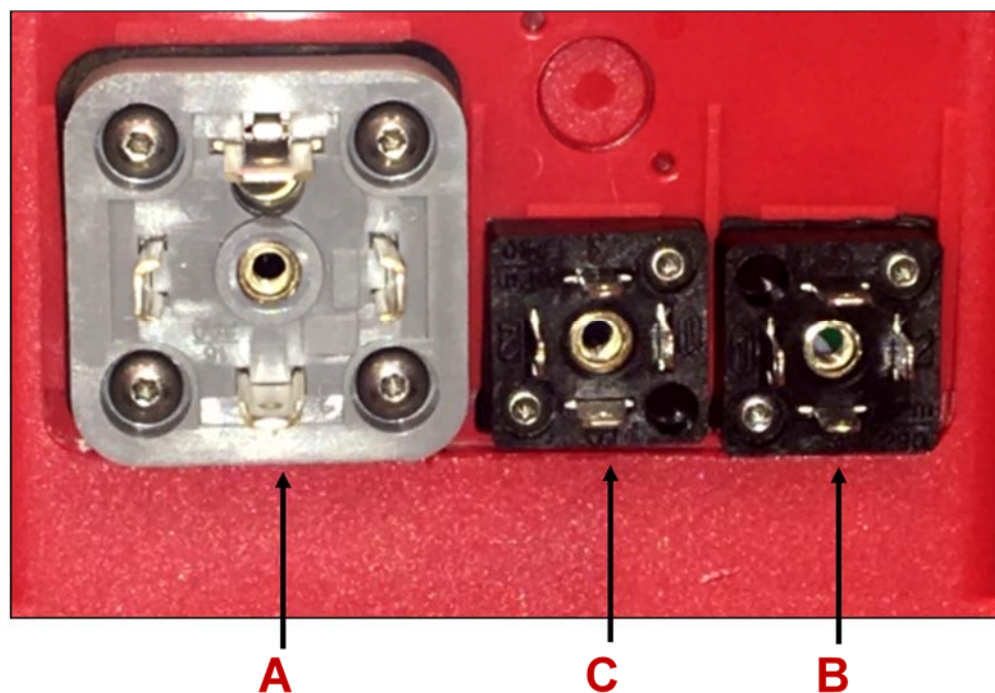


Use the configuration you need by moving the DIPs:  
Different possibilities of configuration:



OTHER OPTIONS TO BE SET-UP BY THE MANUFACTURER OR WITH A J4C INTERFACE	
OUTPUT ONLY	4/20 mA, 0/10 V, 0/20 mA, 1/10 V
INPUT & OUTPUT	0/20 mA
MOTOR STOP, WITHOUT INSTRUMENTATION	4/20 mA, 0/10 V, 0/20 mA, 1/10 V

## J4C 20/35/55/85 POSITIONER SELF-ADJUSTMENT (DPS)



**A**- Power supply plug.

**B**- Volt free contact plug.

**C**- Input / Output signal (4/20mA,0/10V,0/20mA o 1/10V) plug.

**1- C** plug - connect a cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

**2- A** plug - connect:

VAC: PIN1 (neutral) and PIN2 (phase).

VDC: PIN1 (negative) and PIN2 (positive).

**\*VERY IMPORTANT: BEFORE CONNECTING "A" PLUG TO THE ACTUATOR, CHECK THAT THE VOLTAGE IS THE SAME AS THE ONE SPECIFIED ON THE LABEL (CARTER).**

**3- C** plug - disconnect the cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

The actuator will make a complete maneuver and stay in the close position.

The actuator is ready to connect the (4/20mA,0/10V,0/20mA o 1/10V) signal to the **C** plug.



**BSR**

# J4C 20/35/55/85 BSR INFORMATION



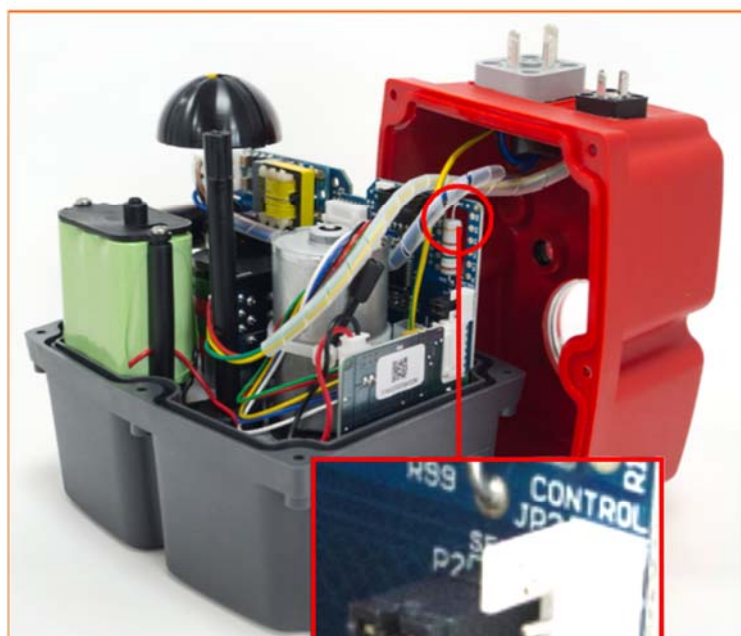
## SPECIFICATIONS

ACTUATOR MODEL	S20-B20	S35-B35	S55-B55	S85-B85
N° Working operation without recharge, with 100% battery charge	10	10	10	10
Recharge time/working operation	15 min	21 min	48 min	58 min
Battery consumption/working operation	2,2 W	3,0 W	6,8 W	8,3 W
Full charge time 100%	28 h	28 h	28 h	28 h
Nominal capacity +/- 5%	2200 mA	2200 mA	2200 mA	2200 mA
NO or NC Features (*)	Jumper	Jumper	Jumper	Jumper
Current/one working operation with battery	10,1 mA	14 mA	31,6 mA	38.6 mA
Battery charge	40 mA/h	40 mA/h	40 mA/h	40 mA/h

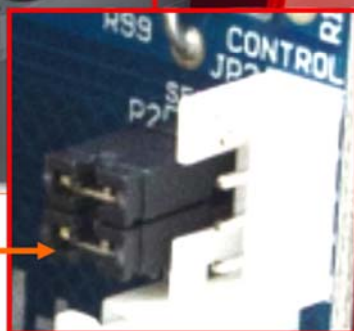
# J4C 20/35/55/85 BSR CONFIGURATION

CONFIGURATIONS	A	B
PREFERRED POSITION IN CASE OF POWER CUT	(NC) NORMALLY CLOSE	(NO) NORMALLY OPEN

## (\* NO or NC Set-Up



Jumper 1  
SELDIR



### NC Set-Up

NC - If, in case of a power supply failure, we need the actuator go to the CLOSE position, we need to put the **jumper 1** on the SELDIR position.

### NO Set-Up

NO - If, in case of a power supply failure, we need the actuator go to the OPEN position, be sure that the **jumper 1** is not on the SELDIR position.

# J4C 140 ON – OFF INFORMATION



## GENERAL CHARACTERISTICS

**Housing:** Anticorrosive polyamide (lid & body)  
**Main external shaft:** stainless steel  
**External screws:** stainless steel  
**Gears:** Steel and polyamide  
**Visual position indicator:** Polyamide  
**Dome:** Polycarbonate  
**Adjustable internal cams:** Polyamide  
**Electric motor:** 24VDC Brushless motor  
**Insulation:** Class B  
**(IEC 60034) Service:** S4

## DATASHEET

Model	S140	B140
Voltage VDC/VAC 50/60Hz -0/+5%	24 a 240 (Patent Pending)	12 V <b>ONLY</b>
Operation time unload	34 Sec./90°	34 Sec./90°
Maximum torque break	170 Nm / 1504,5 lb/in	170 Nm / 1504,5 lb/in
Maximum operational torque	140 Nm / 1239 lb/in	140 Nm / 1239 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	EN175301-803 FORM A	EN175301-803 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
Weight	5,2 Kg	5,2 Kg



## VALVE CONNECTION

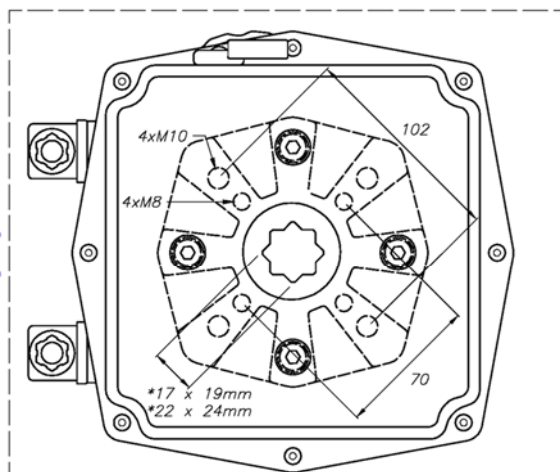
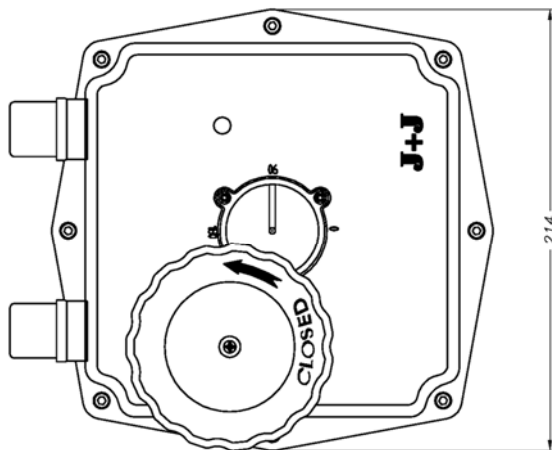
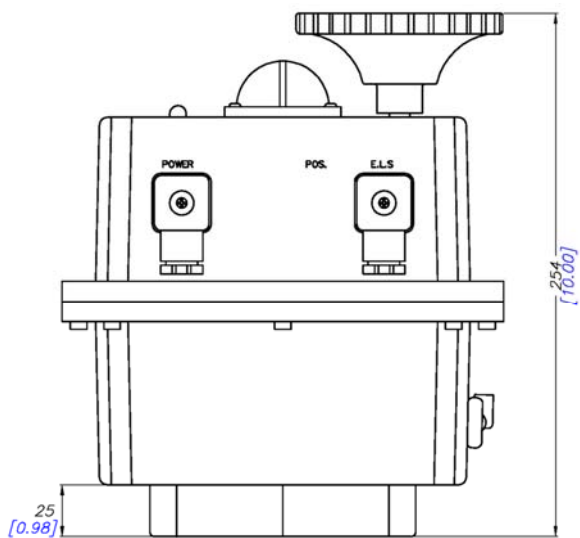
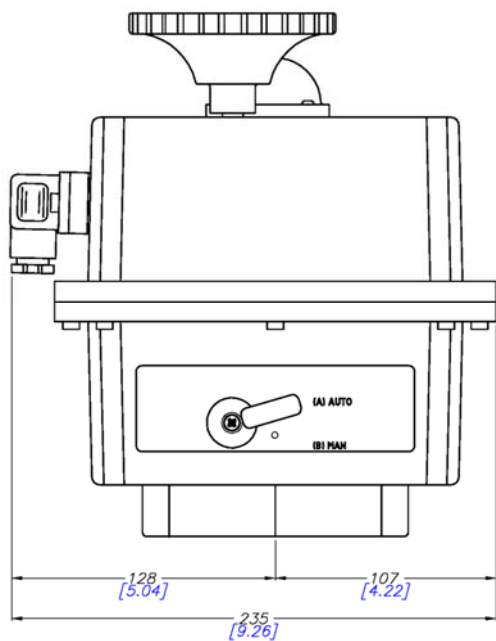
ISO 5211 Plate : F07/F10  
 DIN 3337 Female output drive : \*22 mm  
 Option:  
 ISO 5211 Plate : F12  
 DIN 3337 Female output drive: \*17 mm



## OPTIONS

-J4C 140/300 DPS digital positioner: 4-20mA, 0-20mA, 0-10V or 1-10V.  
 -J4C 140/300 BSR emergency fail safe kit system by battery  
 -Digital potentiometer: 1K, 5K or 10K.  
 -3 position actuator: 0°-45°-90° or 0°-90°-180°

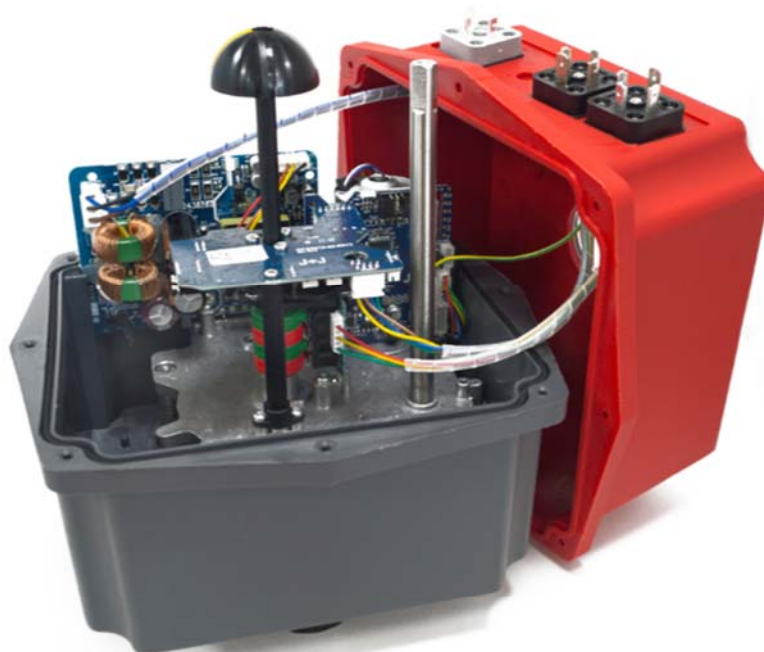
# J4C 140 SIZES





DPS

# J4C 140/300 POSITIONER INFORMATION (DPS)

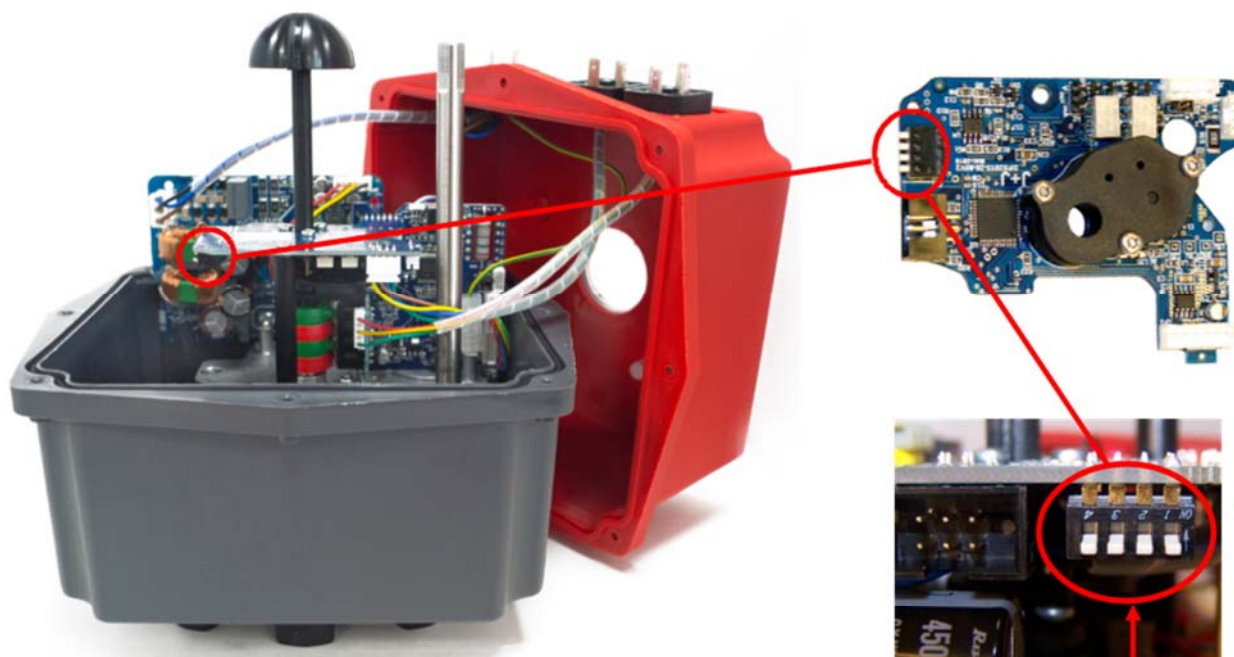


## SPECIFICATIONS

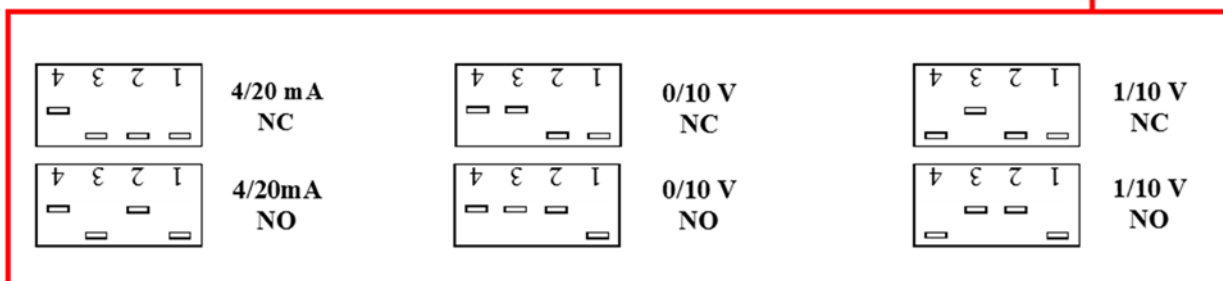
MODEL	S140-B140	S300-B300
Accuracy	3 % F.S.	3 % F.S.
Linearity	2 % F.S.	2 % F.S.
Hysteresis	3 % F.S.	3 % F.S.
Steps at 4/20mA	Min.150 steps 90°	Min.150 steps 90°
Steps at 0/10V	Min.98 steps 90°	Min.98 steps 90°
Steps at 0/20mA	Min.150 steps 90°	Min.150 steps 90°
Steps at 1/10V	Min.87 steps 90°	Min.87 steps 90°
4/20mA or 0/20mA Input signal impedance	100 Ohm	100 Ohm
0/10V or 1/10V Input signal impedance	25 KOhm	25 KOhm
CLASS	B+C to E DIN EN 15714 Inching + Modulation	

F.S. Full Scale

# J4C 140/300 POSITIONER CONFIGURATION (DPS)

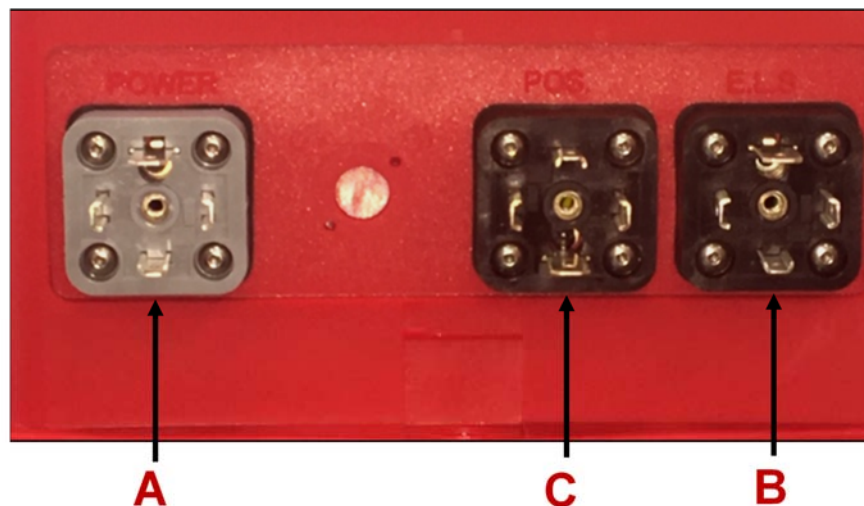


Use the configuration you need by moving the DIPs:  
Different possibilities of configuration:



OTHER OPTIONS TO BE SET-UP BY THE MANUFACTURER OR WITH A J4C INTERFACE	
OUTPUT ONLY	4/20 mA, 0/10 V, 0/20 mA, 1/10 V
INPUT & OUTPUT	0/20 mA
MOTOR STOP, WITHOUT INSTRUMENTATION	4/20 mA, 0/10 V, 0/20 mA, 1/10 V

## J4C 140/300 POSITIONER SELF-ADJUSTMENT (DPS)



**A**- Power supply plug.

**B**- Volt free contact plug.

**C**- Input / Output signal (4/20mA,0/10V,0/20mA o 1/10V) plug.

**1- C** plug - connect a cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

**2- A** plug - connect:

VAC: PIN1 (neutral) and PIN2 (phase).

VDC: PIN1 (negative) and PIN2 (positive).

**\*VERY IMPORTANT: BEFORE CONNECTING "A" PLUG TO THE ACTUATOR, CHECK THAT THE VOLTAGE IS THE SAME AS THE ONE SPECIFIED ON THE LABEL (CARTER).**

**3- B** plug - disconnect the cable between PIN 1 (on the left side) and PIN Earth (on the bottom).

The actuator will make a complete maneuver and stay in the close position.

The actuator is ready to connect the (4/20mA,0/10V,0/20mA o 1/10V) signal to the **B** plug.



**BSR**

# J4C 140/300 BSR INFORMATION



## SPECIFICATIONS

ACTUATOR MODEL	S140-B140	S300-B300
N° Working operation without recharge, with 100% battery charge	4	4
Recharge time/working operation	30 min	50 min
Battery consumption/working operation	23 W	23 W
Full charge time 100%	54 h	54 h
Nominal capacity +/- 5%	2200 mA	2200 mA
NO or NC Features (*)	Jumper	Jumper
Current/one working operation with battery	15,1 mA	25,7 mA
Battery charge	40 mA/h	40 mA/h

# J4C 140/300 BSR CONFIGURATION

CONFIGURATIONS	A	B
PREFERRED POSITION IN CASE OF POWER CUT	(NC) NORMALLY CLOSE	(NO) NORMALLY OPEN

## (\* ) NO or NC Set-Up



### NC Set-Up

NC - If, in case of a power supply failure, we need the actuator go to the CLOSE position, we need to put the **jumper 1** on the SELDIR position.

### NO Set-Up

NO - If, in case of a power supply failure, we need the actuator go to the OPEN position, be sure that the **jumper 1** is not on the SELDIR position.

Jumper 1  
SELDIR

