

## ELECTRIC ACTUATOR

**4C 300**



**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	STD.300	ALT.300
Voltage VDC/VAC 50/60Hz -0/+5%	24 a 240 (Patent Pending)	12 V <b>ONLY</b>
Operation time unload	48 Sec./90°	48 Sec./90°
Maximum torque break	350 Nm / 3097,5 lb/in	350 Nm / 3097,5 lb/in
Maximum operational torque	300 Nm / 2655 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	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

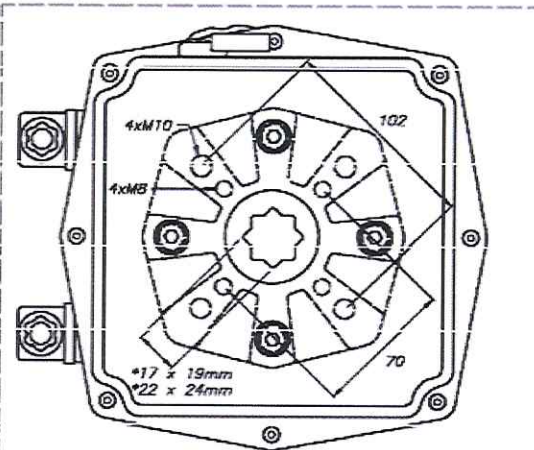
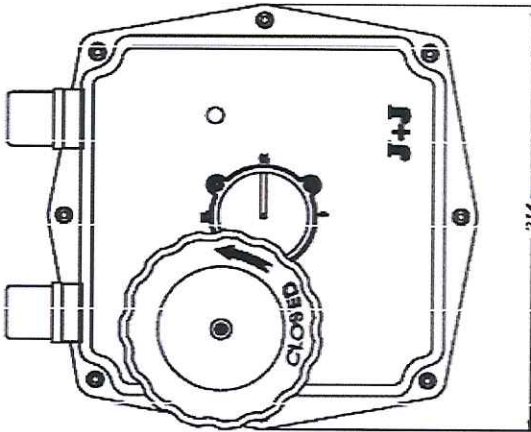
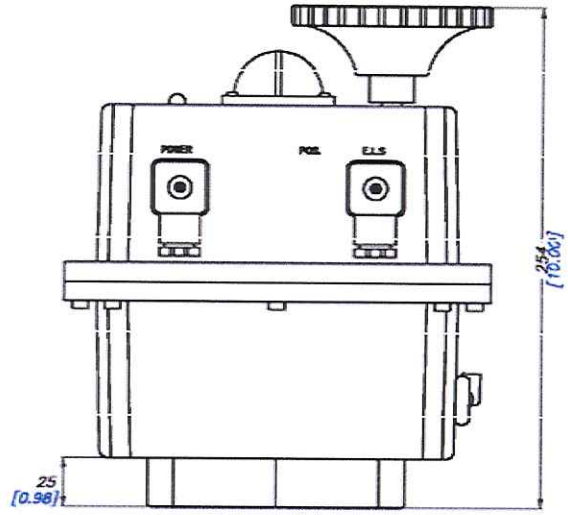
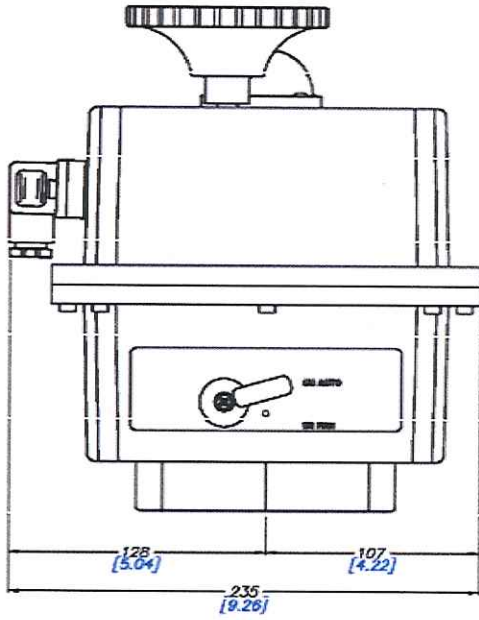
Option:  
 ISO 5211 Plate : F12  
 DIN 3337 Female output drive: \*17 mm



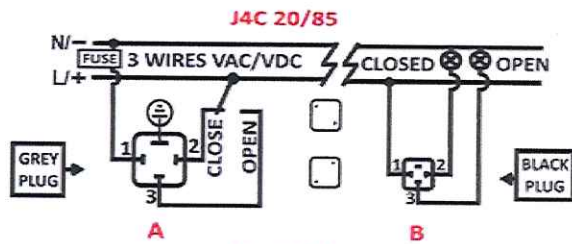
**OPTIONS**

-4C 140/300 DPS digital positioner: 4 -20mA, 0-20mA, 0-10V or 1-10V.  
 -4C 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°

# 4C 300 SIZES



# EXTERNAL CONNECTING DIAGRAM



## 3 WIRES ON - OFF

**A** = Power supply plug

**A:** VAC 3 WIRES (Grey plug)

PIN 1 = Neutral + PIN 2 = Phase = Close

PIN 1 = Neutral + PIN 3 = Phase = Open

**A:** VDC 3 WIRES (Grey plug)

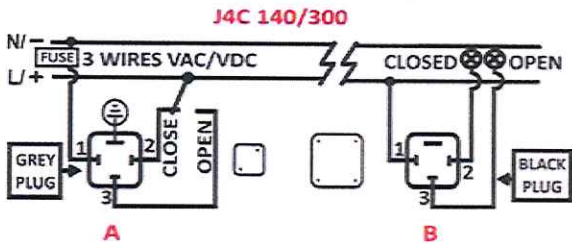
PIN 1 = (-) Negative + PIN 2 = (+) Positive = Close

PIN 1 = (-) Negative + PIN 3 = (+) Positive = Open

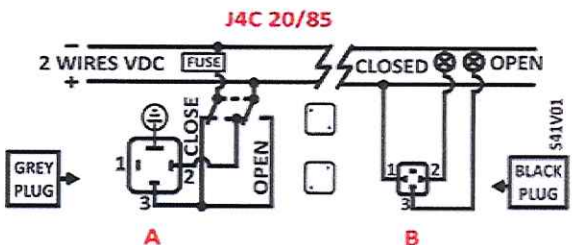
**B** = Volt free contact, plug

PIN 1 / PIN 2 = Close

PIN 1 / PIN 3 = Open



## 2 WIRES ON - OFF



**A** = Power supply plug

**A:** VDC 2 WIRES (Grey plug)

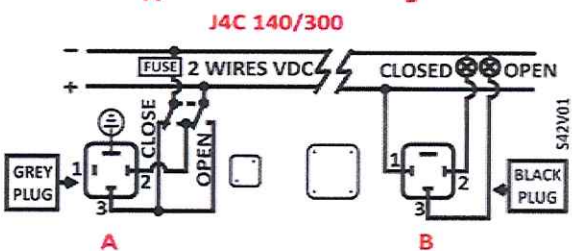
PIN 2 = (+) Positive + PIN 3 = (-) Negative = Close

PIN 2 = (-) Negative + PIN 3 = (+) Positive = Open

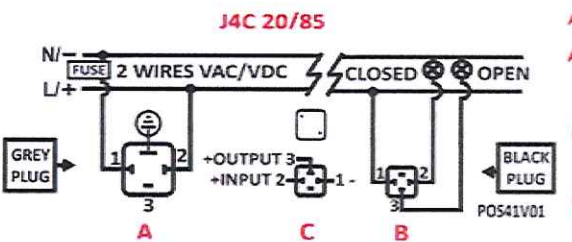
**B** = Volt free contact plug

PIN 1 / PIN 2 = Close

PIN 1 / PIN 3 = Open



## POSITIONER



**A** = Power supply plug

**A:** VAC 2 WIRES (Grey plug)

PIN 1 = Neutral + PIN 2 = Phase = Power supply plug

**A:** VDC 2 WIRES (Grey plug)

PIN 1 = (-) Negative + PIN 2 = (+) Positive = Power supply plug

**B** = Volt free contact plug

PIN 1 / PIN 2 = Closed

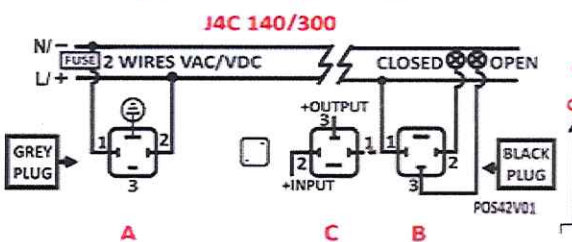
PIN 1 / PIN 3 = Open

**C** = Instrumentation Signal

**C:** Input signal : 4/20mA or 0/10V

PIN 1 = (-) Negative + PIN 2 = (+) Positive = Input signal

PIN 1 = (-) Negative + PIN 3 = (+) Positive = Output signal



**Instrumentation Signal  
NO VOLTAGE**



# TABLE OF CONSUMPTIONS

J4C 20 Consumption		Unload		Max. Operational Torque 20Nm		Max. Torque Break 25Nm	
Voltage	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 35Nm		Max. Torque Break 38Nm	
Voltage	Model	A	W	A	W	A	W
12 VDC	B20	0,75	9,06	2,38	28,62	2,62	31,50
24 VDC	S20	0,45	10,77	1,28	30,78	1,37	32,79
48 VDC	S20	0,21	9,93	0,56	26,72	0,59	28,20
110 VDC	S20	0,07	7,70	0,17	18,90	0,18	20,10
12 VAC	B20	1,04	12,51	2,75	33,00	3,19	38,28
24 VAC	S20	0,59	14,20	1,58	37,80	1,67	40,13
48 VAC	S20	0,34	16,37	0,92	44,04	0,99	47,31
110 VAC	S20	0,14	15,73	0,36	39,45	0,38	41,87
240 VAC	S20	0,10	23,76	0,19	45,41	0,20	47,52

J4C 55 Consumption		Unload		Max. Operational Torque 55Nm		Max. Torque Break 60Nm	
Voltage	Model	A	W	A	W	A	W
12 VDC	B20	0,70	8,45	3,04	36,43	3,42	41,05
24 VDC	S20	0,42	10,19	1,55	37,17	1,63	39,02
48 VDC	S20	0,20	9,72	0,61	29,25	0,67	32,31
110 VDC	S20	0,07	7,50	0,19	20,80	0,21	23,20
12 VAC	B20	0,94	11,30	3,43	41,18	3,78	45,41
24 VAC	S20	0,58	13,89	1,87	44,88	1,98	47,52
48 VAC	S20	0,33	15,73	1,10	52,80	1,21	58,29
110 VAC	S20	0,14	15,73	0,40	43,80	0,43	46,95
240 VAC	S20	0,09	22,70	0,20	47,52	0,21	50,16

J4C 85 Consumption		Unload		Max. Operational Torque -85Nm		Max. Torque Break -90Nm	
Voltage	Model	A	W	A	W	A	W
12 VDC	B20	0,62	7,42	2,11	25,34	2,28	27,32
24 VDC	S20	0,36	8,55	1,08	25,87	1,22	29,30
48 VDC	S20	0,17	8,24	0,48	22,92	0,53	25,56
110 VDC	S20	0,05	5,80	0,14	15,20	0,16	17,90
12 VAC	B20	0,81	9,69	2,38	28,51	2,65	31,81
24 VAC	S20	0,50	11,88	1,36	32,74	1,50	36,01
48 VAC	S20	0,25	11,83	0,77	37,07	0,86	41,18
110 VAC	S20	0,12	12,83	0,31	33,64	0,33	36,54
240 VAC	S20	0,08	20,06	0,17	40,13	0,18	42,77

J4C 140 Consumption		Unload		Max. Operational Torque 140Nm		Max. Torque Break 170Nm	
Voltage	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 300Nm		Max. Torque Break 350Nm	
Voltage	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