



J2

Actuadores Eléctricos Multivoltaje

Multivoltage Electric Actuators



J2 MULTIVOLTAGE REVERSIBLE ELECTRIC ACTUATOR

The J2 reversible electric actuators are the most modern representation of the future generations of the actuators for the electric valve control.

The range of the actuators J2 series "L and "H is a true revolution in the field of the reversible electric actuators. Incorporating the most modern available technology to our advanced electronic designs and the great experience of our human team, we have obtained a product where the security of operation, economy in cost and long life have been caress to the most minimum detail.

Especially developed for applications of 1/4 turn (with possibilities of angle of manoeuvre up to 270°) and torques since 20 Nm up to 300 Nm, this new range is the accessory ideal for the electric automation of ball valves, butterfly valves, plug valves, dumpers, ectra. ALL THE J2 MODELS series "L" & "H" are fitted with the following elements:

ATC AUTOMATIC TEMPERATURE CONTROL:

A 4 W anti-condensation heater is thermostatically controlled to maintain the actuator's internal between 20° and 30°C(68°F – 86°F)

AVS AUTOVOLTAGE SENSING:

*Accepts a range of AC or DC voltajes
Series "L" accepts 12 to 48 V AC or VD
Series "H" accepts 80 to 240 V AC or VD*

ETL ELECTRONIC TORQUE LIMITER:

Continuously monitors and controls the motor producing smooth operation and accurate control over the maximum permissible torque. Should the torque requirement exceed this. The ETL system will automatically cut the power to the motor preventing possible internal damage.

ETL also provides automatic relaxing con the actuator's gear box to facilitate simple operation of manual override.

An internal visible led provides indication on ETL's status.

Continuously lid led means normal actuator operation.

Flashing led indicates ETL has activated and cut the power of motor.

MO MANUAL OVERRIDE:

For emergency use, with automatic motor power tripping when selected.

PES PROTECTED ELECTRICAL SUPPLY:

Accepts the same wiring connection for AC or DC. Incorrect electrical connection will not damage the actuator internals. All external plugs eliminate the need to remove the actuator cover to connect. See the wiring diagram outside the actuator.

VFC VOLT FREE CONTACTS:

1 set of open and closed volt free contacts are provided.



MULTIVOLTAGE ELECTRIC ACTUATOR series J2

MATERIALS

Enclosure :	Anticorrosive Polyamide	Gears :	Steel and Polyamide
Internal cams :	Polyamide	Position indicator :	Glass filled Polyamide
Main external shaft :	Stainless Steel	Fastening :	Stainless Steel

SPECIFICATIONS	Mod. J2-L20	Mod. J2-H20
VOLTAGE (v)	12 a 48 VAC / VDC -0 / +5% 12 to 48 VAC / VDC -0 / +5%	80 a 240 VAC / VDC 80 to 240 VAC / VDC
OPERATION TIME (s / 90°) NO LOAD + / - 10%	8 sec	8 sec
MAXIMUM OPERATIONAL TORQUE (Nm -- lb/in)	20 Nm 177 lb/in	20 Nm 177 lb/in
MAXIMUM TORQUE BREAK (Nm-lb/in)	25 Nm 221 lb/in	25 Nm 221 lb/in
DUTY RATING (%)	75	75
IP RATING IEC 60529	IP-65	IP-65
WORKING ANGLE (°)	90° - 180° - 270°	90° - 180° - 270°
TEMPERATURE °F	-20° + 70° C -4° + 158° F	-20° + 70° C -4° + 158° F
LIMIT SWITCH	4 SPDT micro	4 SPDT micro
HEATER (W)	4	4
CONSUMPTION AT MAXIMUM TORQUE + / - 5%	24 VAC 1900 mA - 45,6 W 24 VDC 900 mA - 21,6 W 48 VAC 900 mA - 43,2 W 48 VDC 400 mA - 19,2 W	110 V 180 mA - 19,8 W 220 V 85 mA - 20,9 W
PLUGS	DIN 43650 ISO 4400 & C192	DIN 43650 ISO 4400 & C192
WEIGHT (Kg)	1,5	1,5

EXTRA OPTIONS

DPS 2000 positioner 4÷20 mA or 0÷10 V

INTERFACE

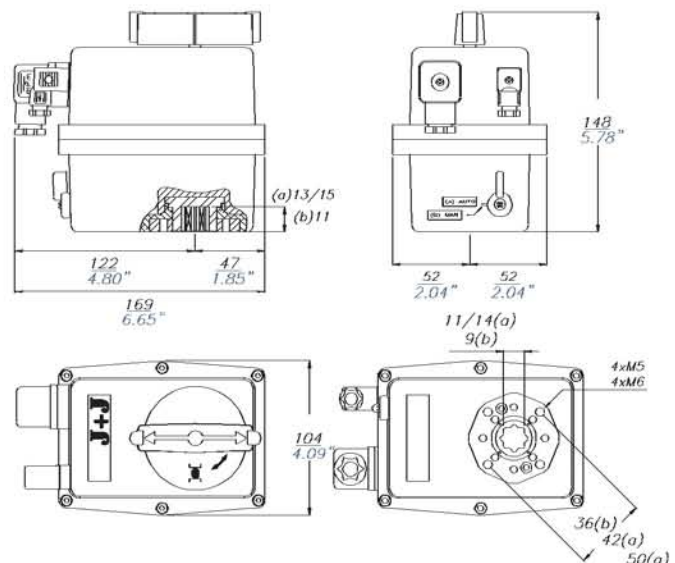
ISO 5211

Multiflange F-03, F-04 and F-05

DIN 3337

Double sq. hole 14 mm

Double sq. hole 9 or 11 mm OPTION



J2-L55 / J2-H55



MULTIVOLTAGE ELECTRIC ACTUATOR series J2

MATERIALS

Enclosure :	Anticorrosive Polyamide	Gears :	Steel and Polyamide
Internal cams :	Polyamide	Position indicator :	Glass filled Polyamide
Main external shaft :	Stainless Steel	Fastening :	Stainless Steel

SPECIFICATIONS	Mod. J2-L55	Mod. J2-H55
VOLTAGE (v)	12 a 48 VAC / VDC -0 / +5% 12 to 48 VAC / VDC -0 / +5%	80 a 240 VAC / VDC 80 to 240 VAC / VDC
OPERATION TIME (s / 90°) NO LOAD + / - 10%	10 sec	10 sec
MAXIMUM OPERATIONAL TORQUE (Nm -- lb/in)	55 Nm 486 lb/in	55 Nm 486 lb/in
MAXIMUM TORQUE BREAK (Nm-lb/in)	60 Nm 540 lb/in	60 Nm 540 lb/in
DUTY RATING (%)	75	75
IP RATING IEC 60529	IP-65	IP-65
WORKING ANGLE (°)	90° - 180° - 270°	90° - 180° - 270°
TEMPERATURE °F	-20° + 70° C -4° + 158° F	-20° + 70° C -4° + 158° F
LIMIT SWITCH	4 SPDT micro	4 SPDT micro
HEATER (W)	4	4
CONSUMPTION AT MAXIMUM TORQUE + / - 5%	24 VAC 3100 mA - 74,4 W 24 VDC 2800 mA - 67,7 W 48 VAC 1300 mA - 62,4 W 48 VDC 1000 mA - 48,0 W	110 V 400 mA - 44,0 W 220 V 125 mA - 27,5 W
PLUGS	DIN 43650 ISO 4400 & C192	DIN 43650 ISO 4400 & C192
WEIGHT (Kg)	1,8	1,8

EXTRA OPTIONS

DPS 2000 positioner 4÷20 mA or 0÷10 V

INTERFACE

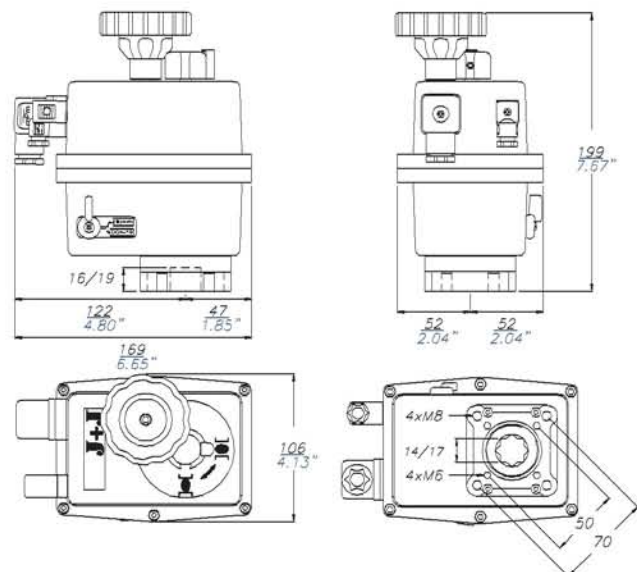
ISO 5211

Flange F-05 / F-07

DIN 3337

Double sq. hole 17 mm

Double sq. hole 14 mm OPTION



J2-L140 / J2-H140



MULTIVOLTAGE ELECTRIC ACTUATOR series J2

MATERIALS

Enclosure : Anticorrosive Polyamide
 Internal cams : Polyamide
 Main external shaft : Stainless Steel

MATERIALS

Gears : Steel and Polyamide
 Position indicator : Glass filled Polyamide
 Fastening : Stainless Steel

SPECIFICATIONS	Mod. J2-L140	Mod. J2-H140
VOLTAGE (v)	12 a 48 VAC / VDC -0 / +5% 12 to 48 VAC / VDC -0 / +5%	80 a 240 VAC / VDC 80 to 240 VAC / VDC
OPERATION TIME (s / 90°) NO LOAD + / - 10%	33 sec	33 sec
MAXIMUM OPERATIONAL TORQUE (Nm -- lb/in)	140 Nm 1239 lb/in	140 Nm 1239 lb/in
MAXIMUM TORQUE BREAK (Nm-lb/in)	170 Nm 1504 lb/in	170 Nm 1504 lb/in
DUTY RATING (%)	75	75
IP RATING IEC 60529	IP-65	IP-65
WORKING ANGLE (°)	90° - 180° - 270°	90° - 180° - 270°
TEMPERATURE °F	-20° + 70° C -4° + 158° F	-20° + 70° C -4° + 158° F
LIMIT SWITCH	4 SPDT micro	4 SPDT micro
HEATER (W)	4	4
CONSUMPTION AT MAXIMUM TORQUE + / - 5%	24 VAC 3600 mA - 86,4 W 24 VDC 3000 mA - 72,0 W 48 VAC 1300 mA - 62,4 W 48 VDC 1000 mA - 48,0 W	110 V 700 mA - 77,0 W 220 V 230 mA - 50,6 W
PLUGS	DIN 43650 ISO 4400 & C192	DIN 43650 ISO 4400 & C192
WEIGHT (Kg)	5,2	5,2

EXTRA OPTIONS

DPS 2000 positioner 4÷20 mA or 0÷10 V

INTERFACE

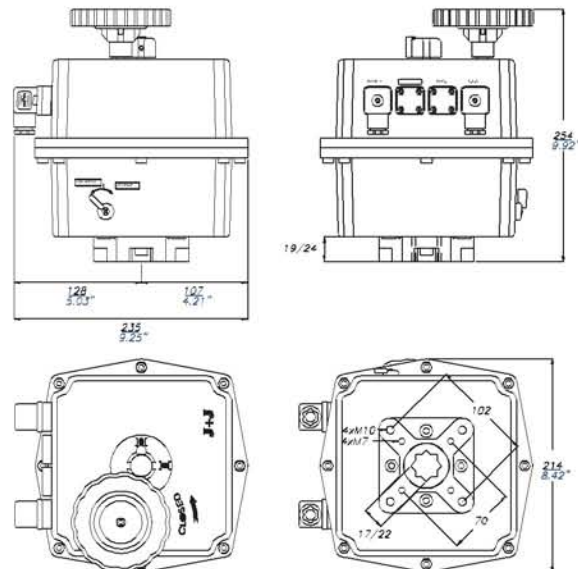
ISO 5211

Flange F-07 / F-10

DIN 3337

Double sq. hole 22 mm

Double sq. hole 17 mm OPTION



J2-L300 / J2-H300



MULTIVOLTAGE ELECTRIC ACTUATOR series J2

MATERIALS

Enclosure : Anticorrosive Polyamide
 Internal cams : Polyamide
 Main external shaft : Stainless Steel

MATERIALS

Gears : Steel and Polyamide
 Position indicator : Glass filled Polyamide
 Fastening : Stainless Steel

SPECIFICATIONS	Mod. J2-L300	Mod. J2-H300
VOLTAGE (v)	12 a 48 VAC / VDC -0 / +5% 12 to 48 VAC / VDC -0 / +5%	80 a 240 VAC / VDC 80 to 240 VAC / VDC
OPERATION TIME (s / 90°) NO LOAD + / - 10%	60 seg 60 sec	60 seg 60 sec
MAXIMUM OPERATIONAL TORQUE (Nm -- lb/in)	300 Nm 2655 lb/in	300 Nm 2655 lb/in
MAXIMUM TORQUE BREAK (Nm-lb/in)	350 Nm 3097 lb/in	350 Nm 3097 lb/in
DUTY RATING (%)	75	75
IP RATING IEC 60529	IP-65	IP-65
WORKING ANGLE (°)	90° - 180° - 270°	90° - 180° - 270°
TEMPERATURE °F	-20° + 70° C -4° + 158° F	-20° + 70° C -4° + 158° F
LIMIT SWITCH	4 SPDT micro	4 SPDT micro
HEATER (W)	4	4
CONSUMPTION AT MAXIMUM TORQUE + / - 5%	24 VAC 3600 mA - 86,4 W 24 VDC 3000 mA - 72,0 W 48 VAC 1300 mA - 62,4 W 48 VDC 1000 mA - 48,0 W	110 V 700 mA - 77,0 W 220 V 230 mA - 50,6 W
PLUGS	DIN 43650 ISO 4400 & C192	DIN 43650 ISO 4400 & C192
WEIGHT (Kg)	5,2	5,2

EXTRA OPTIONS

DPS 2000 positioner 4÷20 mA or 0÷10 V

INTERFACE

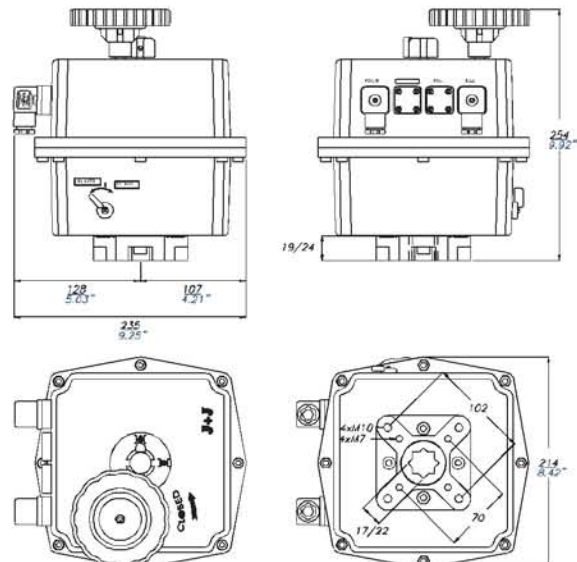
ISO 5211

Flange F-07 / F-10

DIN 3337

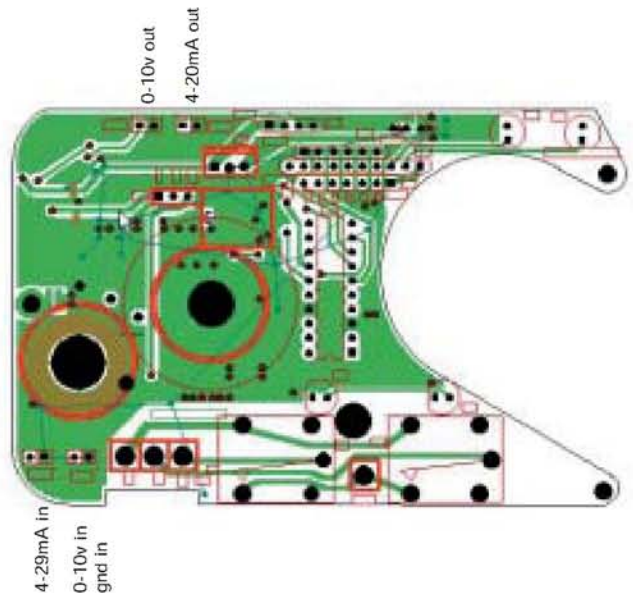
Double sq. hole 22 mm

Double sq. hole 17 mm OPTION



DPS 2000 DIGITAL POSITIONING SYSTEM

GENERAL FEATURES	
VOLTAGE RANGE	220 VAC - 110 VAC - 24 VAC 24 VDC - 12 VDC
INPUT SIGNAL	4 ÷ 20 mA ÷/or 0 ÷ 10 V
OUTPUT SIGNAL	4 ÷ 20 mA ÷/or 0 ÷ 10 V
PRECISION	0,3% - 256 positions in 90°
SETTINGS	Max. - min. - deadband
LINEALITY	3%
HYSTERESIS	2%
MINIMUM RESOLUTION	1%



DPS 2000 is a fitting for the **J+J** electric actuator to convert the actuator in a selfcontrol valve positioner.

DPS 2000 is a microprocessor module with analogical input and output but does all the calibrations and working performance through a microinformatic digital algorithm system.

Sign position input is converted to a digital numerical value and is continuously compared with the position of a potentiometer which is mechanically fitted to the valve shaft. The programme in the microchip makes all the necessary calculations to determine which way the motor should turn so that the potentiometer position and the valve corresponds to the required signs. Once the valve corresponds to the position, it keeps the motor in stopped position until it receives a new input signal.

SERIE "H" May 2003

SERIE "L" -----

N.B 180 degrees actuators available on request



