

# J + J ® Deutschland GmbH

## Komponenten für die Armaturenautomatisierung

Elektrostromwerkanschlüsse - Endschaltvorrichtungen - Pneumatikantreiber - Stellungstreifer - Zubehör  
 Products - Service - Solutions

Data:

type	max. power consumption Type H 80-240V (+/- 5%)	max. power consumption Type L 12-60V (+/- 5%)	Breakaway torque Nm	Running time for 90° L sec. (+/- 10%)	Running time for 90° H sec. (+/- 10%)
20	180 mA - 85 mA	24VAC: 1800mA (45.6W) 24VDC: 900mA (21.6W) 48VAC: 900mA (43.2W) 48VDC: 400mA (19.2W)	25 Nm	8	8
55	400 mA - 125 mA	24VAC: 3100mA (74.4W) 24VDC: 2800mA (67.7W) 48VAC: 1300mA (62.4W) 48VDC: 1000mA (48.0W)	60 Nm	10	10
140	700 mA - 230 mA	24VAC: 3600mA (86.4W) 24VDC: 3000mA (72.0W) 48VAC: 1300mA (62.4W) 48VDC: 1000mA (48.0W)	170 Nm	33	33
300	700 mA - 230 mA	24VAC: 3600mA (86.4W) 24VDC: 3000mA (72.0W) 48VAC: 1300mA (62.4W) 48VDC: 1000mA (48.0W)	350 Nm	60	60

### Common data:

duty cycle	75%	temperature range	-20 / +70°C	power of heating	4W	safety class	IEC60529 IP65
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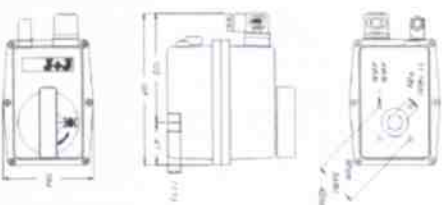
### Weight:

type "20"	1,25 Kg	type "55"	1,9 Kg	type "140"	5,0 Kg	type "300"	5,25 Kg
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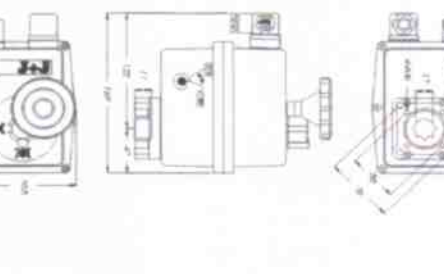
### Electric wiring:



### Dimensions J2 (H+L)20

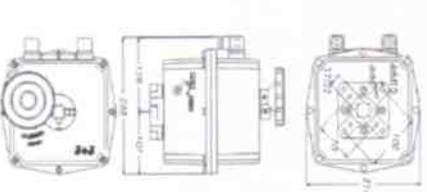


### J2 (H+L)55

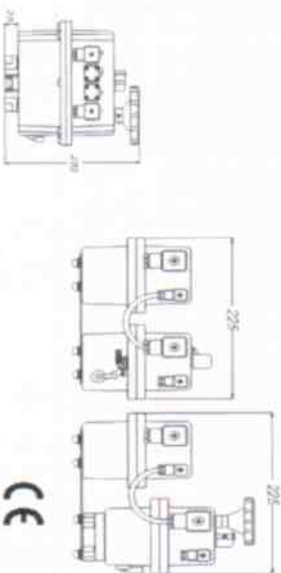


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### J2 (H+L) 140+300



### BSR Akku-Pack J2 20+55



unit interface ISO5211 / DIN 3337



### Malfunctions:

- ⚠ **The actuator does not operate when power is supplied**
  - △ Check circuit (AC or DC), and connection in accordance with the wiring diagram
  - △ Is the plug connected?
  - △ Is there voltage at the plug?
- ⚠ **The actuator starts and then cuts out.**
  - △ Torque limiter active, valve moves counter-clockwise, is jammed, or is not suitable for operation on the type of actuator

Please resolve the reason for overloading (eg valve jammed) or select the next size (stronger) actuator.
- ⚠ **There is no firm „click“.**
  - △ Please check external fuse and exchange if necessary, check guide of leads
- ⚠ **Actuator operates very slowly or slower than the time on the nameplate.**
  - △ Consultation with **J+J** service, adjusting of floating time in accordance with separate documentation/instructions.
- ⚠ **The limit switches for remote position confirmation (signal) do not work**
  - △ Check wiring is in accordance with diagram on side of actuator. If OK, check the adjustment of the operating cams and adjust them such that the switches are operated just before reaching the end of travel motor stop position.
- ⚠ **The actuator drives but the valve does not move**
  - △ The interface between valve and actuator is defective or damaged, please confer with the automater and if necessary check the complete disconnection of the first controlling element for details and indications.
- ⚠ **The end position is reached but the limiter is active (light flashes)**
  - △ Please mark the position of the position indicator, switch over to "Manual", turn the actuator carefully away from the end position and afterwards turn again back to the end position. If you meet with increased resistance the valve has to be checked.
- ⚠ **Are there mechanical end stops inside the armature which haven't been removed?** → remove end stops
- ⚠ **Are there also elements inside the valve (polishing cloth around the shut-off valve, solids inside, etc) or is the seal damaged?**
  - △ Repair the valve, confer with your supplier of the valve.
- ⚠ **The integrated limiter has a quadrant function to avoid damage caused by these kind of problems, however, driving on the valve limit may cause damages on actuator and valve. Because of this these problems have to be solved immediately.**

### Special executions:

- ⚠ **Potentiometer (Optional)**

With the special equipment potentiometer installed, it is possible to carry out position indication of the actuator depending on the resistance output from the potentiometer. Here the socket plan of the potentiometer is valid (see below). The potentiometer is driven by the main driving shaft with help of a toothed wheel, the min value represents the "CLOSE" position.
- ⚠ **Positioner (Optional)**

According to the identification plate the DPS positioner is configured on 4-20mA or 0-10V, a corresponding output for feedback is integrated. The connection takes place in accordance with the socket plan. The control signal has to be floating. To avoid errors in function in manual working the actuator must not be driven over the indicated end-points (0-90° or 0-180°). This causes no damage, but a reprogramming of the end-points may be necessary afterwards. (separate guidance required)
- ⚠ **Fail-safe system (Optional)**

The BSR fail-safe system contains a battery-pack including load electronics, to secure a safety adjustment (OPEN or CLOSE) in case of a power failure. A stay-out state in case of power failure is not possible with this option. Beyond that this actuator can be driven like all standard actuators. Please consider the different wiring (charging tension/ control tension and switching power). It is necessary to secure that the charging voltage is always connected to the BSR. In case of power failure the emergency adjustment will be released. If here current flows on and the make-and-break contact is discharged with voltage, the actuator drives inversely. The batteries have a high life expectancy but this depends on the operating conditions, therefore please plan a rate commination based on the safety requirements.

### Models J 20 + J 55

- 1 : Main plug – power supply
- 2 : Optional equipment plug – eg. plug for positioner (input and output), output potentiometer, auxiliary input
- 3 : Connection of additional limit switches (volt free remote end of travel indication)
- A : Manual override selector lever (from AUTOMATIC to MANUAL)
- B : Manual override hand lever / optical position indicator, manual emergency manipulation, on model J55 there is a handwheel and an optical position indicator
- D : Socket plan / circuit diagram



### Models J 140 + J 300

- 1 : Main plug – power supply
- 2 : Optional equipment plug
- 3 : Plug for positioner (input and output), or output of the potentiometer (optional)
- 4 : Connection of additional limit switches (volt free remote end of travel indication)
- A : Manual override selector lever (from AUTOMATIC to MANUAL)
- B : Hand wheel for manual emergency manipulation
- C : Visual local position indicator
- D : Socket plan / circuit diagram

