

RDx-S-xxxPx- Spring Return

For ball valves

Wiring:

Connect wires according to chart below. Full schematic found on next page:

Terminal #	Colour	Description
6	White	+24VDC +/- 20%
5	Black	Power Gnd
4	Blue	Signal (provide 24V)
3	Brown	Limit Switch Common
2	Grey	Limit Switch - Valve Closed
1	Pink	Limit Switch - Valve Open

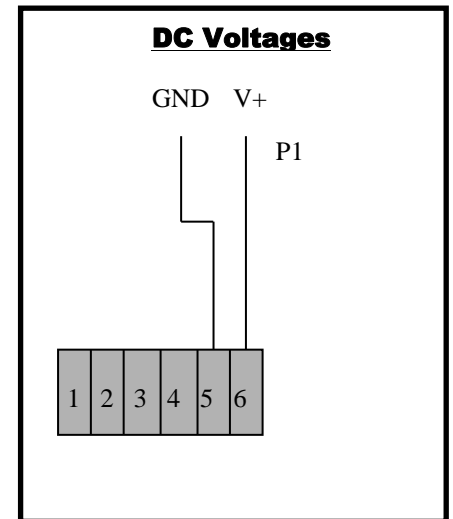
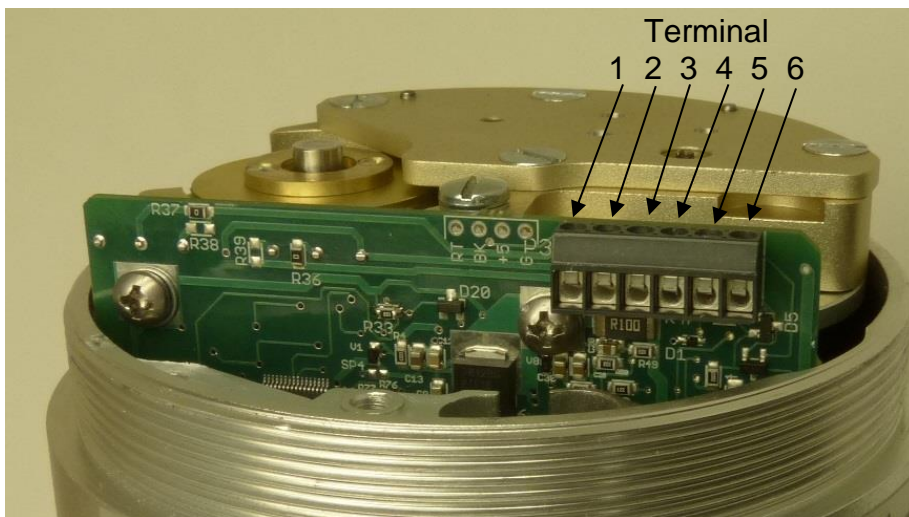


Connect the power:

The **RDx-S-xxxPx** may be connected to voltages ranging from 20– 24 VDC

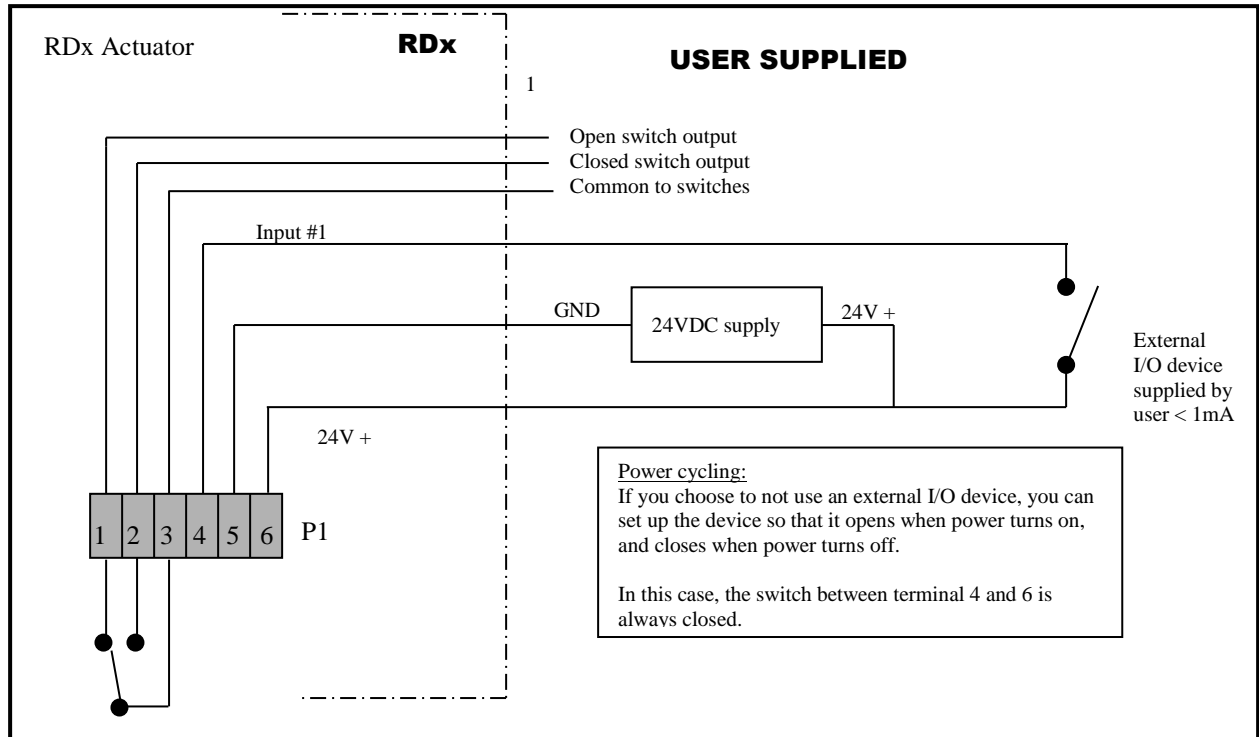
The power consumption will range from max. 4.0 to approx. min. 100mA when the actuator is active. When not moving, the actuator draws less than 60mA.

Locate the correct connection terminals as shown in the picture below then connect power according to the connection schematics to the right.



Connect the signal:

Locate the correct connection terminals as shown in the picture above then connect your input signal on terminal 4 as shown below.



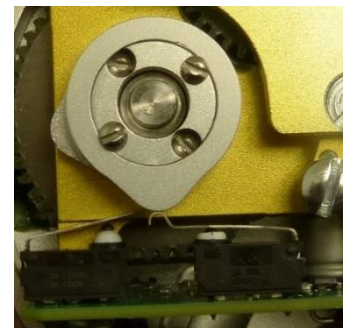
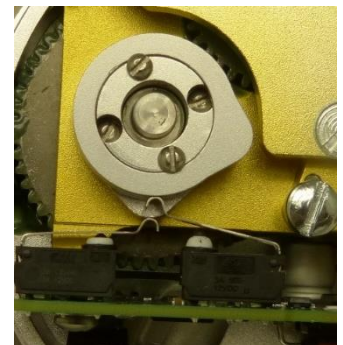
Functionality of the RDx-xxxPx

Input#1 (Terminal 4)	Action taken
Low (GND)	Moves to or remains in closed position
High (24V)	Moves to or remains in open position

Feedback via Limit Switches

IMPORTANT: Do not exceed 3A @ 125VAC, 12VDC

Actuator Position	Action taken
Open	Terminal 1 is connected to Terminal 3
Closed	Terminal 2 is connected to Terminal 3
In between	Nothing is connected to Terminal 3



Limit switches are triggered mechanically when the actuator is fully closed, and when fully open. See photos above.

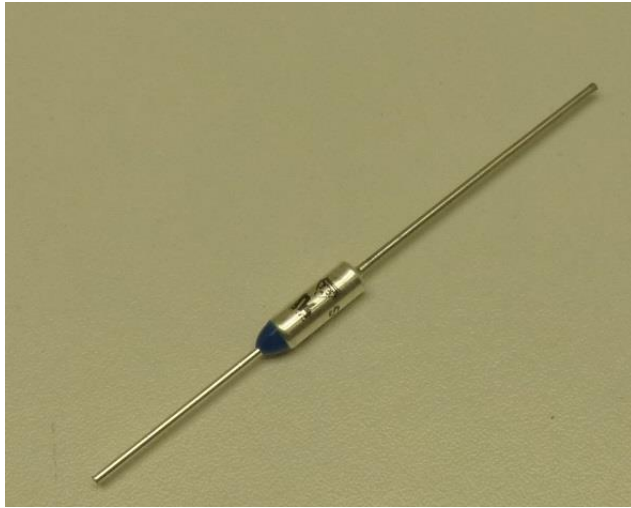
Torque and Speed

RDM Torque	90in-lbs
Time to open	4 seconds
Time to close	2 seconds (2 seconds when power is lost)

RDU Torque	600in-lbs
Time to open	10 seconds
Time to close	10 seconds (18 seconds when power is lost)

Note: Open and close times are for the actuator. The valve may be fully open or closed before the actuator reaches these limits.

Thermal Cutoff: This UL approved part is found inside the enclosure, connected to the circuit board. When overheated it will sever the electrical connection, allowing the actuator to close itself via spring return.



Spring Return: This unit is capable of closing the valve attached to it when power is turned off, or lost for any reason.