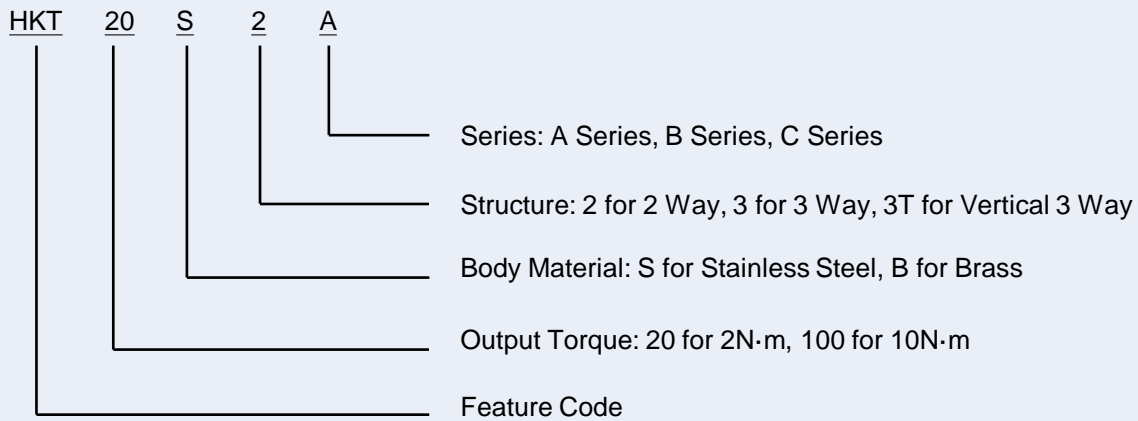


科威納 COVNA®
— VALVE —

HKT Miniature Ball Valves

Ordering Code



Series

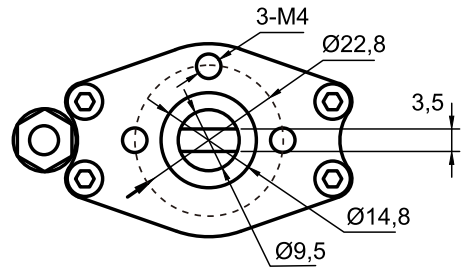
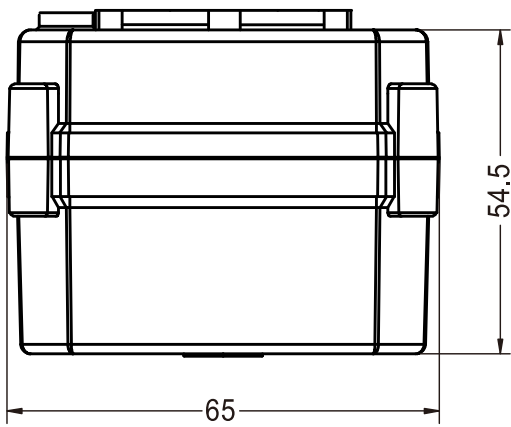
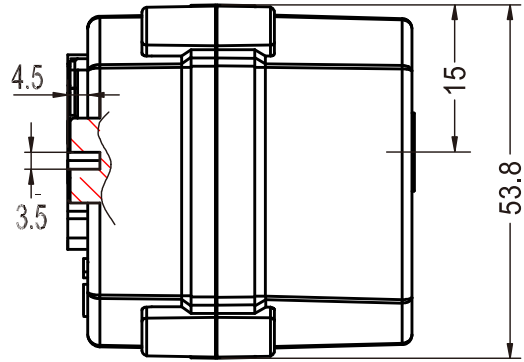
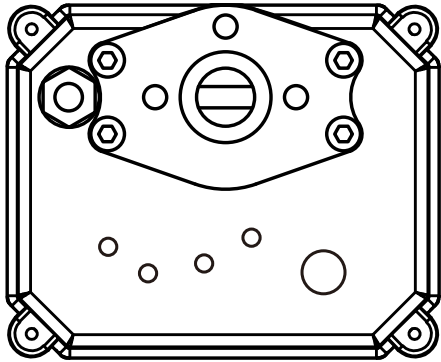
A Series <input checked="" type="checkbox"/> Indicator <input checked="" type="checkbox"/> Manual Override	B Series <input checked="" type="checkbox"/> Indicator <input checked="" type="checkbox"/> Manual Override	C Series <input checked="" type="checkbox"/> Indicator <input checked="" type="checkbox"/> Manual Override

Structures & Body Materials

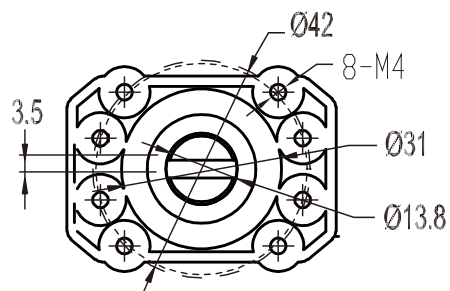
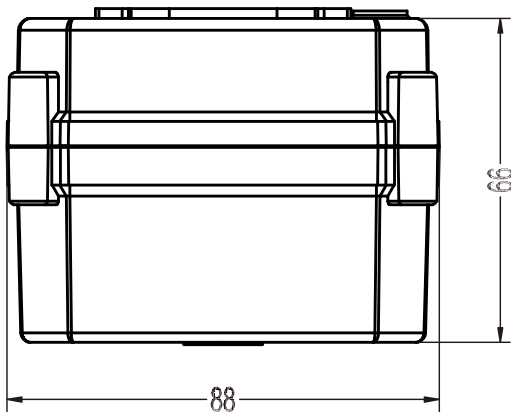
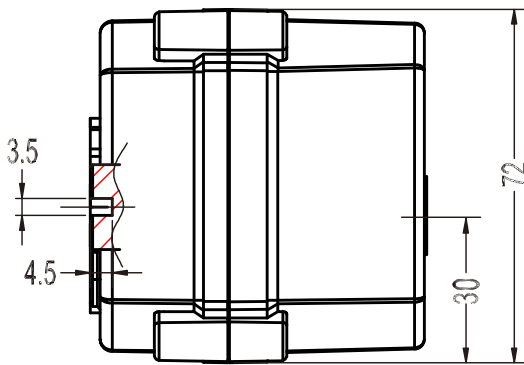
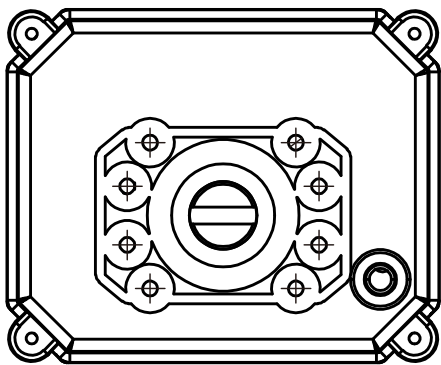
Stainless Steel, 3 Way	Stainless Steel, 2 Way	Brass, 2 Way	Brass, Vertical 3 Way

HKT Miniature Ball Valves

HKT20 Outline Size Dimension

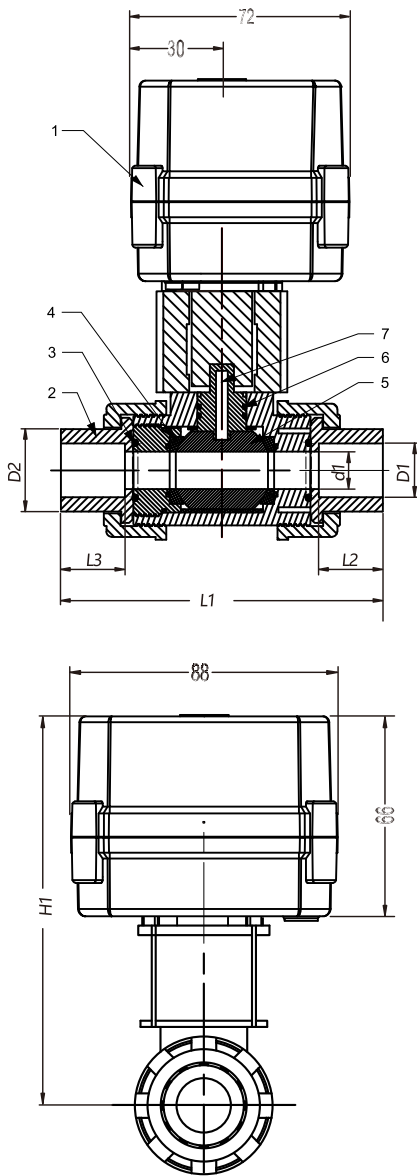
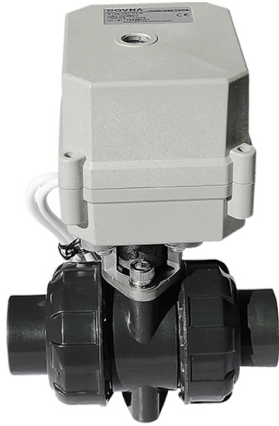


HKT100 Outline Size Dimension



Design Feature

- All-copper gear design, high accuracy output torque, especially for multi-channel scaling system.
- Small size, compact structure.
- A variety of control methods, either to accept remote valve position control signal, but also the feedback Signal in place for computer intelligence unit testing.
- Good sealing performance



Miniature Motorized UPVC Ball Valve

Product Specification	1/2", 3/4", 1", NPT/BSP (Optional)
Max. Working Pressure	1.0MPa
Circulation Medium	Fluid, Air
Rated Voltage	AC/DC9~24V, AC110-230V (Optional)
Working Current	≤ 800mA
Open/Close Time	≤ 15 Sec
Life Time	70,000 times
Actuator Material	Engineering Plastics
Valve Body Material	UPVC
Sealing Material	PTFE
Actuator Rotation	90°
Max. Torque Output	10N.M
Ambient Temperature	-15°C ~ 50°C
Liquid Temperature	2°C ~ 90°C
Line Control	CR2-01, CR2-02, CR3-03, CR4-01, CR5-01, CR5-02, CR7-03, CR7-04 (Optional)
Cable Length	0.5m, 1.5m(Optional)
Manual Override	No
Indicator	Yes
Protection Class	IP67

Main Parts Materials

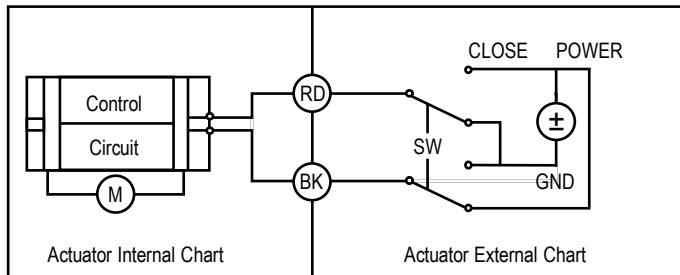
No.	Parts	Material	Quantity
1	Actuator	PPO	1
2	Body	Stainless Steel	1
3	O-ring	FKM	2
4	Sealing	PTFE	2
5	Ball	Stainless Steel	1
6	O-ring	FKM	2
7	Stem	Stainless Steel	2

Outline Size Dimension

Size	d1	D1	D2	L1	L2	L3
HKT15(1/2")	15	20	34	99	21	21
HKTs20(3/4")	20	25	40	117	25	25
HKT25(1")	25	32	47	132	29	29

Wiring Diagram

CR2-01 Wiring Diagram (2 Wires Control)



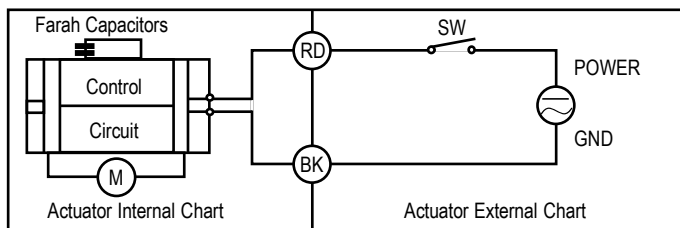
RD connect with positive, BK connect with negative, the valve closed, the actuator automatically power off after in place, the valve remains fully closed position .

BK connect with positive, RD connect with negative, the valve open, the actuator automatically power off after in place, the valve remains fully open position.

Suitable Working Voltage: DC12V/DC24V.

Exceeding the working voltage is forbidden.

CR2-02 Wiring Diagram (2 Wires Control-Spring Return in Case of Power Failure)



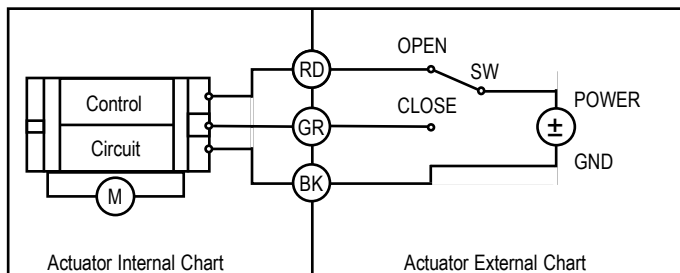
When the SW is closed , the valve open, the actuator automatically power off after in place.

When the SW is open, the valve closed, the actuator automatically power off after in place.

Suitable Working Voltage: AC/DC110V-230V, AC/DC9-35V.

Exceeding the working voltage is forbidden.

CR3-01 Wiring Diagram (3 Wires Control)



RD & GR connect with positive, BK connect with negative.

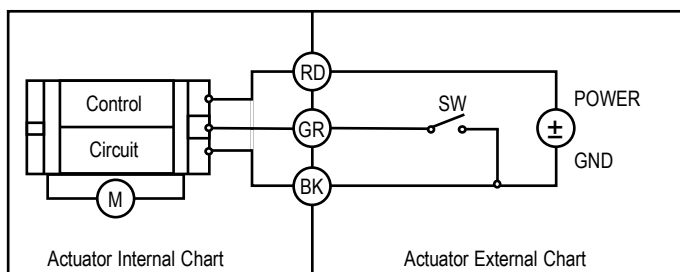
When RD & SW connected , the valve open, the actuator automatically power off after in place, the valve remains fully open position.

When GR & SW connected, the valve closed, the actuator auto matically power off after in place, the valve remains fully closed position.

Suitable Working Voltage: DC5V/DC12V/DC24V.

Exceeding the working voltage is forbidden.

CR3-02 Wiring Diagram (3 Wires Control)



RD connect with pasitive, BK & GR connect with negative.

When the SW is closed, the valve open, the actuator automatically power off after in place.

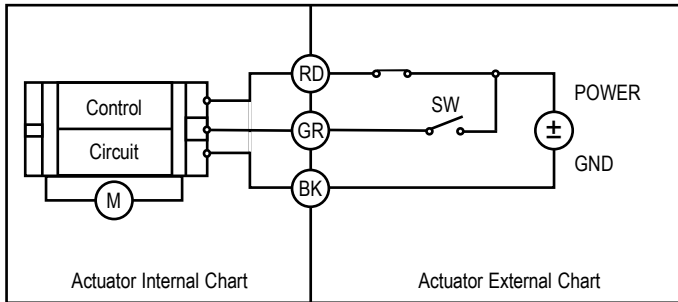
When the SW is open, the valve closed, the actuator automatically power off after in place.

Suitable Working Voltage: DC7V-35V.

Exceeding the working voltage is forbidden.

Wiring Diagram

CR3-03 Wiring Diagram (3 Wires Control)



RD connect with positive, GR connect with SW with positive, BK connect with negative.

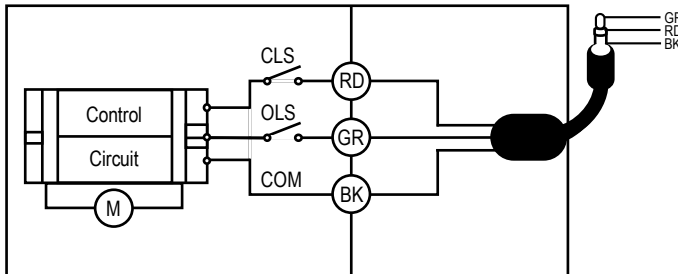
When the SW is closed, the valve open, the actuator automatically power off after in place, the valve remains fully closed position.

When the SW is open, the valve closed, the actuator automatically power off after in place, the valve remains fully open position.

Suitable Working Voltage: AC/DC24V.

Exceeding the working voltage is forbidden.

CR3-04 Wiring Diagram (3 Wires Control)



RD & GR connect with positive, BK connect with negative.

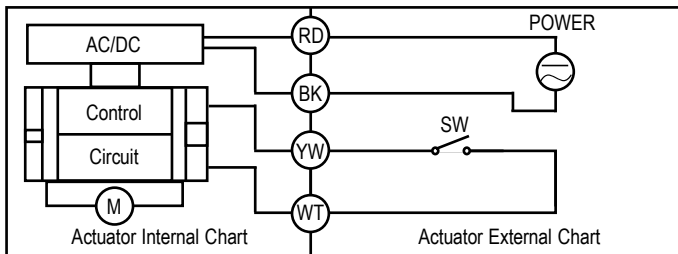
When RD & SW connected, the valve closed, the actuator automatically power off after in place, the valve remains fully closed position.

When GR & SW connected, the valve open, the actuator automatically power off after in place, the valve remains fully open position.

Suitable Working Voltage: DC5V/DC12V/DC24V.

Exceeding the working voltage is forbidden.

CR4-01 Wiring Diagram (4 Wires Control)



RD & BK are connected to the power, YW & WT are connected to the controlled wiring.

When the SW is closed, the valve open.

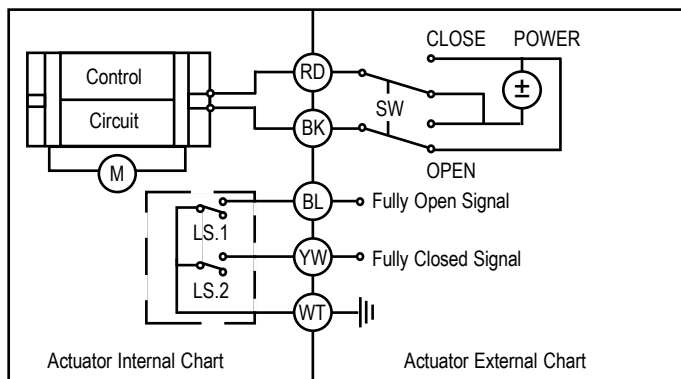
When the SW is open, the valve closed.

Suitable Working Voltage: AC110V-230V.

Exceeding the working voltage is forbidden.

Wiring Diagram

CR5-01 Wiring Diagram (With Feedback Signal)



RD connect with positive, BK connect with negative, the valve closed, the actuator automatically power off after in place.

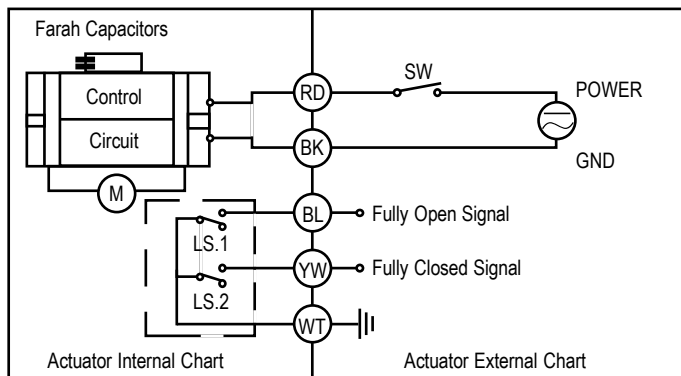
BK connect with positive, RD connect with negative, the valve open, the actuator automatically power off after in place.

BL & WT are connected when the valve fully open, YW & WT are connected when the valve fully closed.

Suitable Working Voltage: DC5V/DC12V/DC24V.

Exceeding the working voltage is forbidden.

CR5-02 Wiring Diagram (With Feedback Signal)



When SW is closed, the valve open, the actuator automatically power off after in place.

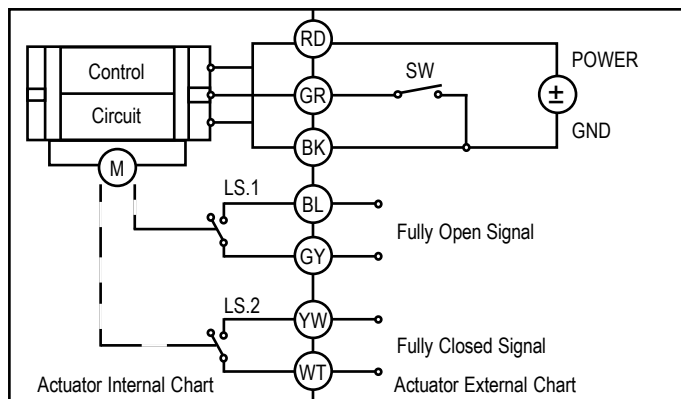
When SW is open, the valve closed, the actuator automatically power off after in place.

BL & WT are connected when the valve fully open, YW & WT are connected when the valve fully closed.

Suitable Working Voltage: AC/DC9-35V, AC110V-230V.

Exceeding the working voltage is forbidden.

CR7-01 Wiring Diagram (7 Wires Control With Feedback Signal)



RD connect with positive, GR connect with SW and negative wiring, BK connect with negative wiring.

When the SW is open, the valve open, and keeping fully open.

When the SW is closed, the valve closed, and keeping fully closed.

BL & GY connect with the valve's fully open signal wiring.

YW & WT connect with the valve's fully closed signal wiring.

Suitable Working Voltage: DC7-35V (Wide Input Range Voltage)

Exceeding the working voltage is forbidden.

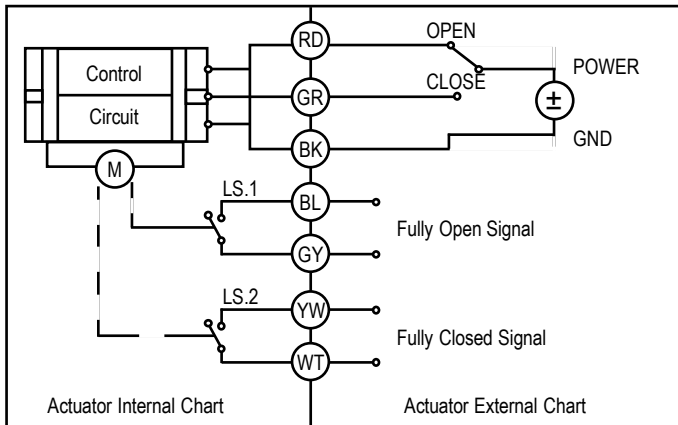
Feedback with load ability:

①The Max. Off Voltage: DC36V AC220V.

②The Max. Off Current: $\leq 0.4A$.

Wiring Diagram

CR7-02 Wiring Diagram (7 Wires Control With Feedback Signal)



RD & GR connect with positive, BK connect with negative.

When RD & SW connected, the valve open, the actuator automatically power off after the valve fully open.

When GR & SW connected, the valve closed, the actuator automatically power off after the valve fully closed.

BL & GY connect with the valve's fully open signal wiring.

YW & WT connect with the valve's fully closed signal wiring.

Suitable Working Voltage: DC5V/DC12V/DC24V.

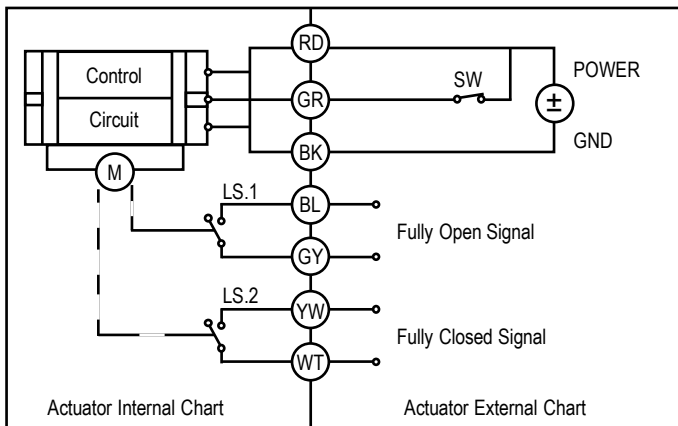
Exceeding the working voltage is forbidden.

Feedback with load ability:

①The Max. Off Voltage: DC36V AC220V.

②The Max. Off Current: ≤0.4A.

CR7-03 Wiring Diagram (7 Wires Control With Feedback Signal)



RD& GR connect with positive, BK connect with negative.

When SW is closed, the valve open, the actuator automatically power off after in place.

When SW is open, the valve closed, the actuator automatically power off after in place.

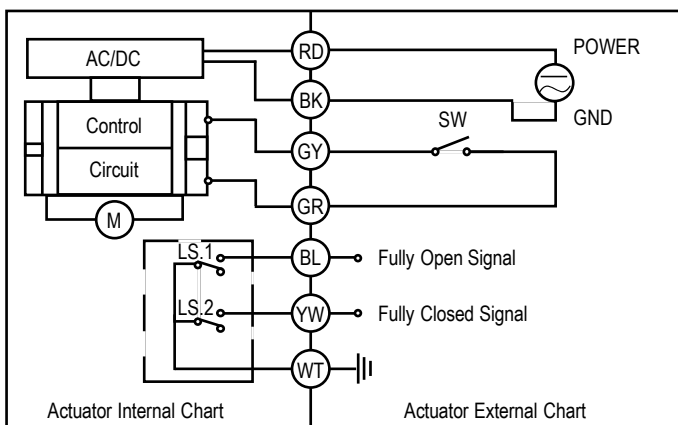
BL & GY connect with the valve's fully open signal wiring.

YW & WT connect with the valve's fully closed signal wiring.

Suitable Working Voltage: AC/DC12V AC/DC24V.

Exceeding the working voltage is forbidden.

CR7-04 Wiring Diagram (7 Wires Control With Feedback Signal)



RD & BK are connected to the power, WT & YW are connected to the controlled wiring.

When the SW is closed, the valve open.

When the SW is open, the valve closed.

BL & GY connect with the valve's fully open signal wiring.

YW & WT connect with the valve's fully closed signal wiring.

Suitable Working Voltage: AC110V-230V.

Exceeding the working voltage is forbidden.

科威納 COVNA[®] — VALVE —

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