







# DCL 05 Actuator Parameters

<b>Voltage</b>	<b>DC24V</b>	<b>AC110V</b>	<b>AC220V</b>
<b>Motor Power</b>	<b>13W</b>	<b>10W</b>	<b>10W</b>
<b>Rated Current</b>	<b>1.28A</b>	<b>0.24A</b>	<b>1.16A</b>
<b>Standard Time/Torque</b>	<b>20 Seconds / 50Nm (2050) - 445 In-lbs</b>		
<b>Optional Time/Torque</b>	<b>04 Seconds / 20Nm (0420) - 177 In-lbs</b>		
<b>Optional Time/Torque</b>	<b>10 Seconds / 30Nm (1030) 265 In-lbs</b>		
<b>Optional Time/Torque</b>			<b>60 Seconds / 50Nm (6050) 445 In-lbs</b>
<b>Control Circuit</b>	<b>Circuit B, E, F, G (see page 7)</b>		
<b>Shaft Size</b>	<b>9mm, 11mm, 14mm Square</b>		
<b>Mounting Flange</b>	<b>F03, F05, F07</b>		
<b>Rotation</b>	<b>90° Standard. Custom ranges upon request</b>		
<b>Protection Class</b>	<b>IP 67 / NEMA 4</b>		
<b>Operating Temperature</b>	<b>-22° F- 140° F (-30° 660° C)</b>		

## Ordering Your DCL 05 Actuator

**DC105 - E - 2050 - E - 11**

### Voltage

D = 24V DC E =  
110V AC F =  
220V AC

Shaft Size 09-  
09x09mm 11-  
11x11mm 14-  
14x14mm

### Time/Torque (0-360° Acting Time)

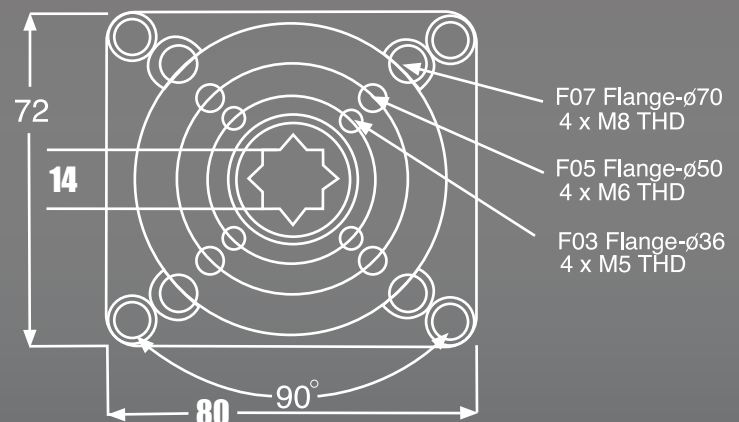
2050 = 20 Seconds / 50 Nm Torque (Standard) (445 In-lbs) 0420 = 04  
Seconds / 20 Nm Torque (177 In-lbs)  
1030 = 10 Seconds / 30 Nm Torque (265 In-lbs)  
6050 = 60 Seconds / 50 Nm Torque (220V AC only) (445 In-lbs)

### Control Circuit

B  
E  
F  
G



### Mounting Flange



# DCL 10 Actuator Parameters

<b>Voltage</b>	<b>DC24V</b>	<b>AC110V</b>	<b>AC220V</b>
<b>Motor Power</b>	<b>25W</b>	<b>25W</b>	<b>25W</b>
<b>Rated Current</b>	<b>2.03A</b>	<b>0.57A</b>	<b>0.35A</b>
<b>Standard Time/Torque</b>	<b>30 Seconds / 100Nm (30100) - 885 In-lbs</b>		
<b>Optional Time/Torque</b>	<b>15 Seconds / 50Nm (1550) - 445 In-lbs</b>		
<b>Optional Time/Torque</b>	<b>10 Seconds / 30Nm (1030) 265 In-lbs</b>		
<b>Optional Time/Torque</b>			<b>60 Seconds / 50Nm (6050) 445 In-lbs</b>
<b>Control Circuit</b>	<b>Circuit B, E, F, G (see page 7)</b>		
<b>Shaft Size</b>	<b>9mm, 11mm, 14mm Square</b>		
<b>Mounting Flange</b>	<b>F05, F07</b>		
<b>Rotation</b>	<b>90° Standard. Custom ranges upon request</b>		
<b>Protection Class</b>	<b>IP 67 / NEMA 4</b>		
<b>Operating Temperature</b>	<b>-22° F- 140° F (-30° C -60° C)</b>		

## Ordering Your DCL 10 Actuator

**DCL10 - F - 30100 - B - 11**

### Voltage

D = 24V DC  
E = 110V AC  
F = 220V AC

### Shaft Size

09- 09x09mm  
11- 11x11mm  
14- 14x14mm

### Time/Torque (0-360° Acting Time)

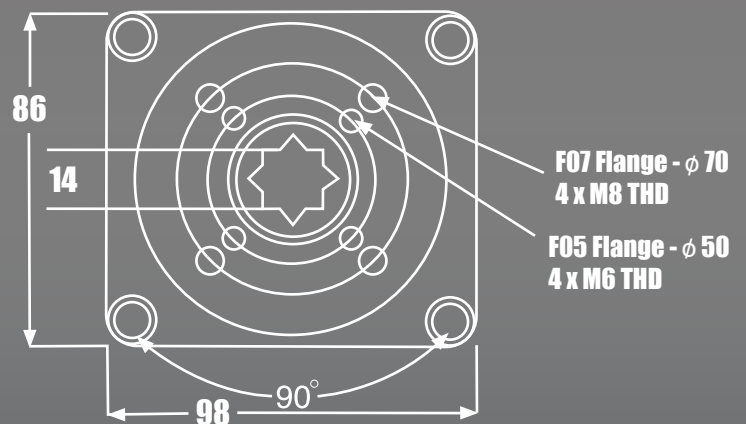
30100 = 30 Seconds / 100 Nm Torque (Standard) (885 In-lbs)  
1550 = 15 Seconds / 50 Nm Torque (445 In-lbs)  
6050 = 60 Seconds / 50 Nm Torque (220V AC only) (445 In-lbs)

### Control Circuit

B  
E  
F  
G



### Mounting Flange

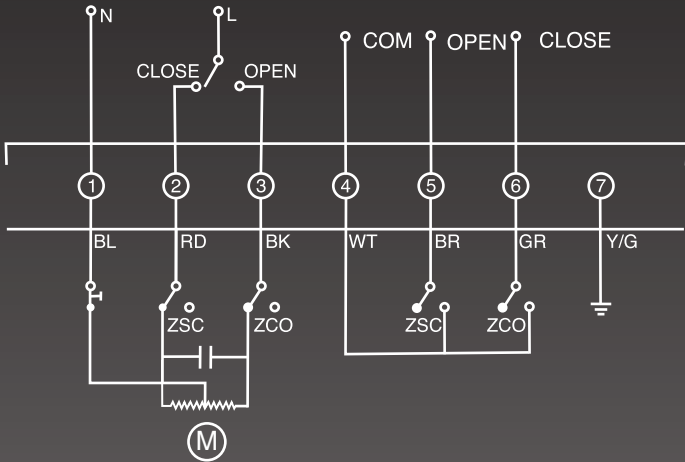


# STANDARD CONTROL CIRCUIT OPTIONS

CIRCUIT B: DISCRETE CONTROL w/LIMIT SWITCHES  
AC MOTOR, SINGLE PHASE

## Customer Wiring

PIN	Neutral
1	AC power to close actuator
2	AC power to open actuator
3	Light switch common
4	Open Unit switch
5	Closed Unit switch signal

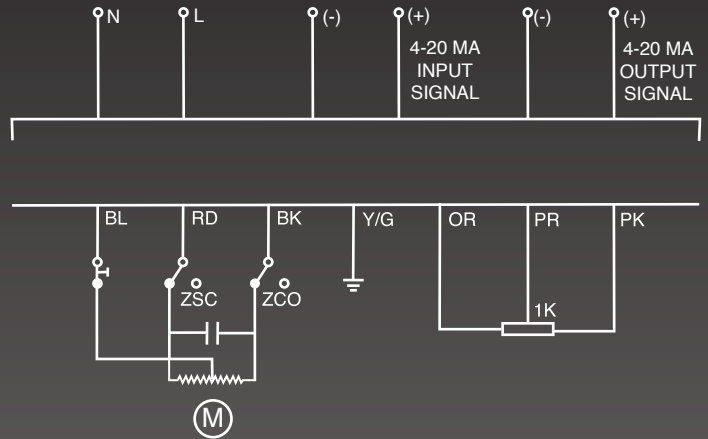


ACTUATOR MOTOR CIRCUIT

CIRCUIT E: 4-20mA CONTROL & POSITION FEEDBACK  
AC MOTOR, SINGLE PHASE

## Customer Wiring

PIN	
+ OUT	+ 4-20mA Feedback Loop
-OUT	- 4-20 mA Feedback Loop
+IN	+ 4-20mA Control Loop
-IN	- 4-20mA Control Loop
L	AC power
N	Neutral

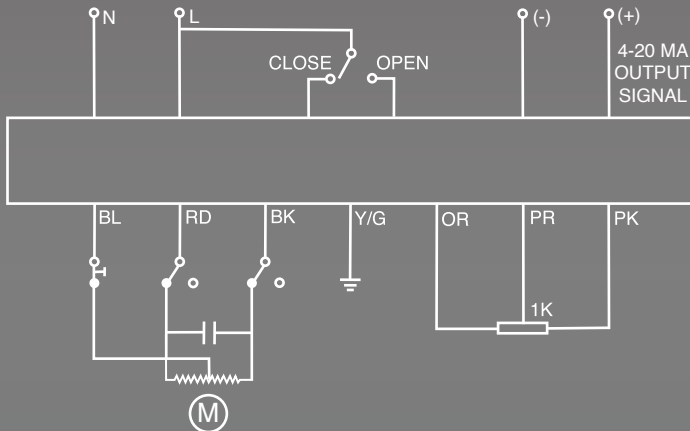


ACTUATOR MOTOR CIRCUIT

CIRCUIT F: DISCRETE CONTROL w/ 4-2mA POSITION  
FEEDBACK AC MOTOR, SINGLE PHASE

## Customer Wiring

PIN	
+ OUT	+ 4-20mA Feedback Loop
-OUT	- 4-20 mA Feedback Loop
CLOSE	AC power to close actuator
OPEN	AC power to open actuator
L	AC power
N	Neutral

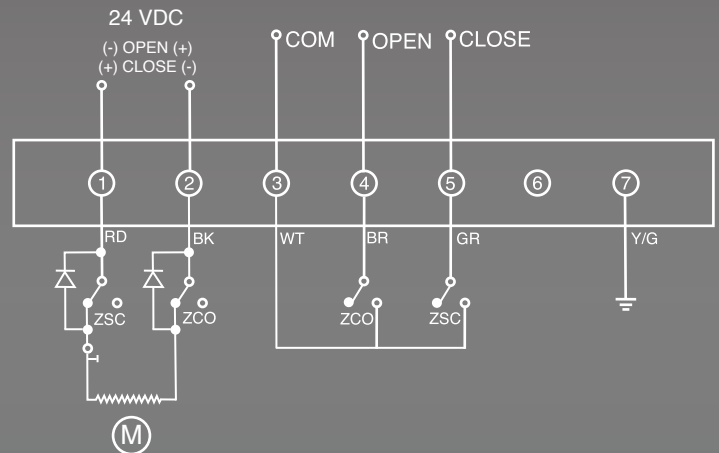


ACTUATOR MOTOR CIRCUIT

CIRCUIT G: DISCRETE CONTROL w/ LIMIT  
SWITCHES DC MOTOR, SINGLE PHASE

## Customer Wiring

PIN	
1	DC power for actuator
2	DC power for actuator
3	Limit switch common
4	Open Unit switch signal
5	Closed Unit switch signal



ACTUATOR MOTOR CIRCUIT

The DCL product line has several options to handle even greater torque requirements. They are widely used in various industrial fields such as the ferrous, non-ferrous, petroleum, chemical, power generation, and water treatment applications.

This compact series actuator is an ideal choice to electrically actuate ball valves and butterfly valves, used to control flow.



Electrically Actuated Ball Valve



Electrically Actuated Butterfly Valve



Electric Control Valve

## Reference Chart

DCL Actuator Series	Butterfly Valve	Ball Valve
DCL 02	< 1 - 1/2"	< 1 - 1/4"
DCL 05	2" - 2-1/2"	1-1/2"
DCL 10	3" - 4"	2" - 2-1/2"
DCL 20	5" - 6"	3" - 4"
DCL 40*	8"	5"
DCL 60*	10"	6"
DCL 100*	12"	8"

Note: The data listed in the table above is for reference only. The actuator chosen shall be based on the torque values provided by valve manufacturer x 1.2 (for safety factor).

\*Special Order