

# RCI 200 Series Actuators



The Remote Control RCI 200 Series Pneumatic Actuator features a modern scotch yoke mechanism for high starting and ending torques in a very compact package. The RCIO Series have adjustable travel stops in both directions. Available in both double acting and spring return in 8 sizes with torques to 38,720 in. lbs., it offers great flexibility. The spring return actuator features a spring module with the spring(s) safely contained and epoxy powder coated for maximum corrosion resistance. Our pistons are guided in two places with reinforced Teflon™ bearings which insure positive alignment and long seal life. All RCI 200 Series Actuators carry a 3-year warranty.

## TECHNICAL DATA

**Body**  
Extruded aluminum, anodized finish  
Spring Housings, End Caps  
Cast aluminum, anodized finish

**Pistons**  
Anodized aluminum

**Drive Shaft**  
Stainless steel thru RCI 260 size, plated steel in sizes RCI 270 , RCI 280

**Seals**  
Buna N

**Fasteners**  
Stainless steel thru size RCI 260 Plated  
Steel sizes 270 + 280

**Pressure Rating**  
150 PSI continuous

**Temperature**  
Range -20° F to +170° F

**Optional Exterior Finishes**  
Epoxy or tufram

**Optional Constructions**  
Low temperature or high temperature seals, low pressure hydraulic service, water hydraulic service, fast opening/ closing speed

**Operating Medium**  
Compressed air or inert gas

**Mounting Dimensions**  
ISO 5211 standard

## AIR CONSUMPTION – Displacement Stroke

### SPRING RETURN

SIZE	CUBIC INCHES
RCI 210-SR	10
RCI 220-SR	11.5
RCI 230-SR	36
RCI 240-SR	45
RCIO 250-SR	115
RCIO 260-SR	142
RCIO 270-SR	478
RCIO 280-SR	593

### DOUBLE ACTING

SIZE	CCW CUBIC INCHES	CW CUBIC INCHES
RCI 210-DA	5.5	10
RCI 220-DA	10	11.5
RCI 230-DA	20	36
RCI 240-DA	39	45
RCIO 250-DA	62	115
RCIO 260-DA	122	142
RCIO 270-DA	292	478
RCIO 280-DA	584	593

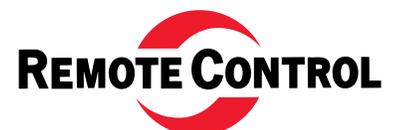
## OPERATION TIME – At 80 PSI Operating Pressure

### SPRING RETURN

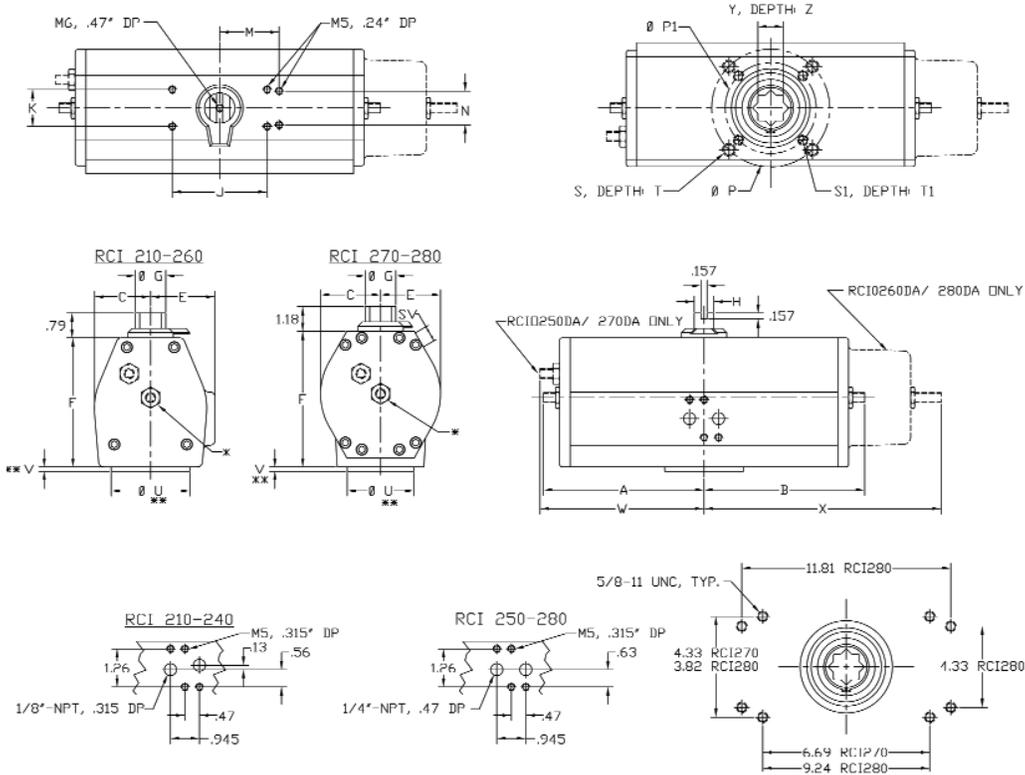
SIZE	SECONDS
RCI 210-SR	0.5
RCI 220-SR	0.3
RCI 230-SR	0.25
RCI 240-SR	1.0
RCIO 250-SR	2.5
RCIO 260-SR	2.5
RCIO 270-SR	6
RCIO 280-SR	5

### DOUBLE ACTING

SIZE	CCW SECONDS	CW SECONDS
RCI 210-DA	0.25	0.5
RCI 220-DA	0.25	0.3
RCI 230-DA	1.0	0.25
RCI 240-DA	1.0	1.0
RCIO 250-DA	1.5	2.5
RCIO 260-DA	2	2.5
RCIO 270-DA	4	6
RCIO 280-DA	5	5



### RCI 200DA DIMENSIONAL DATA



#### NOTES

SV – MOUNTING HOLES FOR SOLENOID VALVE FOR RCI 270-280

ALL DIMENSIONS ARE IN INCHES

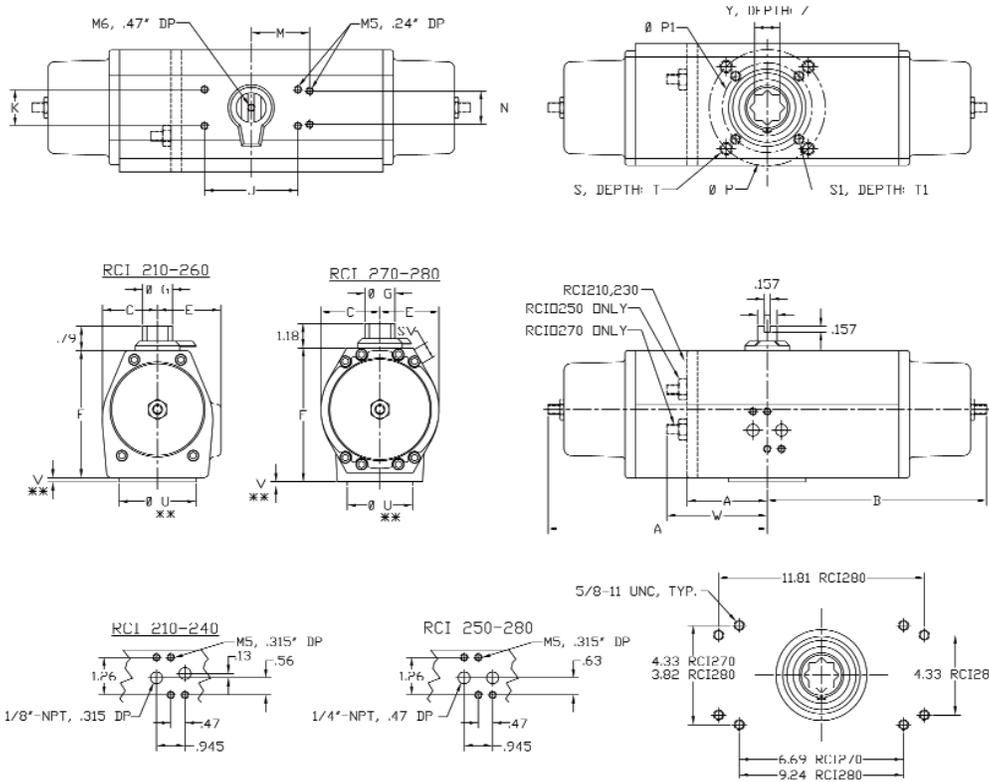
\* NOT PRESENT ON RCI250DA/270DA ACTUATORS

\*\* REMOVABLE SNAP-ON CENTERING RING, FOR USE ON ISO VALVES

#### DIMENSIONS (Inches)

MODEL	A	B	C	E	F	G	H	J	K	M	N	P	P1
RCI 210-DA	1.77	3.85	1.26	1.61	2.95	.63	.393	1.39	1.39	1.574	1.18	1.97	---
RCI 220-DA	3.85	3.85	1.26	1.61	2.95	.63	.393	3.15	1.18	---	---	1.97	---
RCI 230-DA	2.56	5.30	1.93	2.17	4.25	.98	.629	3.15	1.18	---	---	4.02	2.76
RCI 240-DA	5.30	5.30	1.93	2.17	4.25	.98	.629	3.15	1.18	---	---	4.02	2.76
RCIO 250-DA	3.54	7.48	2.71	2.95	6.10	1.377	.944	3.15	1.15	---	---	4.92	4.02
RCIO 260-DA	7.48	7.48	2.71	2.95	6.10	1.377	.944	3.15	1.18	---	---	4.92	4.02
RCIO 270-DA	5.70	11.60	4.33	4.33	9.76	2.36	1.574	5.12	1.18	---	---	5.51	---
RCIO 280-DA	11.80	11.60	4.33	4.33	9.76	2.36	1.574	5.12	1.18	---	---	6.496	4.92
MODEL	S	S1	T	T1	U	V	W	X	Y	Z	WT (lbs)	ISO 5211	
RCI 210-DA	1/4-20UNC	---	.43	---	1.378	.08	---	---	.553 .551	.74	3.1	F05	
RCI 220-DA	1/4-20UNC	---	.43	---	1.378	.08	---	---	.553 .551	.74	4.00	F05	
RCI 230-DA	3/8-16UNC	5/16-18 UNC	.67	.55	2.17	.118	---	---	.672 .669	1.18	8.00	F07/F10	
RCI 240-DA	3/8-16UNC	5/16-18 UNC	.67	.55	2.755	.118	---	---	.869 .866	1.18	10.60	F07/F10	
RCIO 250-DA	1/2-13UNC	3/8-16 UNC	.83	.67	2.75	.118	4.53	---	.869 .866	1.45	20.40	F10/F12	
RCIO 260-DA	1/2-13UNC	3/8-16 UNC	.83	.67	3.346	.118	---	11.81	1.066 1.063	1.45	28.00	F10/F12	
RCIO 270-DA	5/8-11UNC	---	.98	---	3.94	.16	7.09	---	1.420 1.417	2.52	69.00	F14	
RCIO 280-DA	3/4-10UNC	1/2-13 UNC	1.26	.98	5.11	.196	---	20.87	1.815 1.812	2.52	107.00	F16/F12	

## RCI 200SR DIMENSIONAL DATA



### NOTES

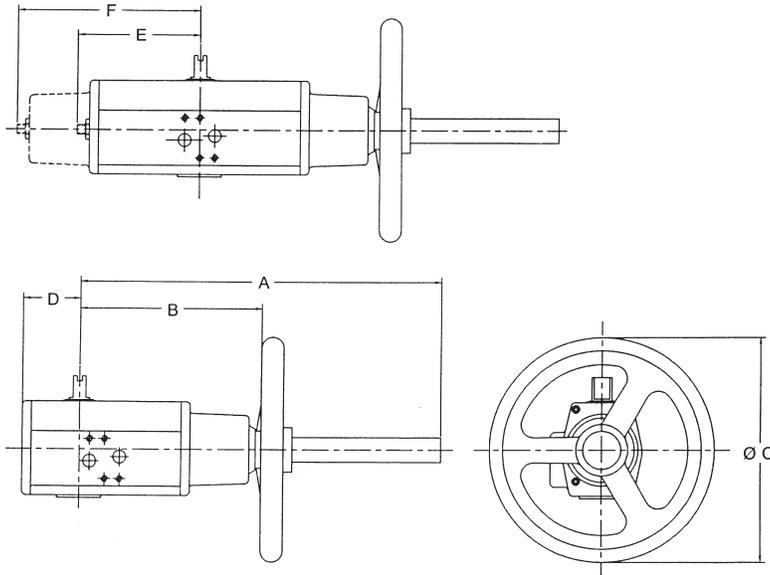
SV – MOUNTING HOLES FOR SOLENOID VALVE FOR RCI 270-280

\*\* REMOVABLE SNAP-ON CENTERING RING, FOR USE ON ISO VALVES

### DIMENSIONS (Inches)

MODEL	A	B	C	E	F	G	H	J	K	M	N	P	P1
RCI 210-SR	1.77	5.70	1.26	1.61	2.95	.63	.393	1.39	1.39	1.574	1.18	1.97	---
RCI 220-SR	5.91	5.91	1.26	1.61	2.95	.63	.393	3.15	1.18	---	---	1.97	---
RCI 230-SR	2.56	7.87	1.93	2.16	4.25	.98	.629	3.15	1.18	---	---	4.02	2.76
RCI 240-SR	7.70	7.70	1.93	2.16	4.25	.98	.629	3.15	1.18	---	---	4.02	2.76
RCIO 250-SR	3.54	11.22	2.72	2.95	6.10	1.377	.944	3.15	1.18	---	---	4.92	4.02
RCIO 260-SR	11.22	11.81	2.72	2.95	6.10	1.377	.944	3.15	1.18	---	---	4.92	4.02
RCIO 270-SR	5.70	20.08	4.33	4.33	9.76	2.36	1.574	5.12	1.18	---	---	5.511	---
RCIO 280-SR	20.08	20.87	4.33	4.33	9.76	2.36	1.574	5.12	1.18	---	---	6.496	4.92
MODEL	S	S1	T	T1	U	V	W	Y	Z	WT (lbs)	ISO 5211		
RCI 210-SR	1/4-20UNC	---	.43	---	1.378	.08	---	.553 .551	.74	4.0	F05		
RCI 220-SR	1/4-20UNC	---	.43	---	1.378	.08	---	.553 .551	.74	5.85	F05		
RCI 230-SR	3/8-16UNC	5/16-18UNC	.67	.55	2.17	.118	---	.672 .669	1.18	10.40	F07/F10		
RCI 240-SR	3/8-16UNC	5/16-18UNC	.67	.55	2.755	.118	---	.869 .866	1.18	15.50	F07/F10		
RCIO 250-SR	1/2-13UNC	3/8-16UNC	.83	.67	2.755	.118	4.53	.869 .866	1.45	26.80	F10/F12		
RCIO 260-SR	1/2-13UNC	3/8-16UNC	.83	.67	3.346	.118	---	1.066 1.063	1.46	40.00	F10/F12		
RCIO 270-SR	5/8-11UNC	---	.98	---	3.93	.157	7.09	1.420 1.417	2.52	100.00	F14		
RCIO 280-SR	3/4-10UNC	1/2-13UNC	1.26	1.00	5.12	.196	---	1.814 1.811	2.52	142.00	F12/F16		

### OPTIONAL MI MANUAL OVERRIDE DIMENSIONAL DATA



#### DIMENSIONS (Inches)

MODEL	A	B	C	D	E	F	WT/LBS
RCI 210 DA/MI*	11.4	5.7	7.1	1.77			1.5
RCI 220 DA/MI	11.4	5.7	7.1		3.85		1.5
RCI 220 SR/MI	11.4	5.7	7.1			5.70	1.5
RCI 230 DA/MI*	13.4	7.5	7.1	2.56			2.5
RCI 240 DA/MI	13.4	7.5	7.1		5.30		2.5
RCI 240 SR/MI	13.4	7.5	7.1			7.70	2.5
RCIO 250 DA/MI*	19.7	11.6	12.6	3.54			6.5
RCIO 260 DA/MI	19.7	11.6	12.6		7.48		6.5
RCIO 260 SR/MI	19.7	11.6	12.6			11.20	6.5
RCIO 270 DA/MI*	31.5	20.3	15.7	5.70			26
RCIO 280 DA/MI	31.5	20.3	23.6		11.80		26
RCIO 280 SR/MI	31.5	30.3	23.6			20.0	26

\* NOTE: For models 210, 230, 250, & 270, M-1 dimension for SR actuators are the same as DA actuators.

#### RIM PULL FORCES (LB.)

To obtain an output torque equal to an air pressure of 80 PSI on the actuator

##### DOUBLE ACTING

RCI 210-DA	14.3
RCI 220-DA	28.6
RCI 230-DA	26.5
RCI 240-DA	53.0
RCIO 250-DA	14.9
RCIO 260-DA	30.0
RCIO 270-DA	47.5
RCIO 280-DA	55.4

##### SPRING RETURN

RCI 210-SR	14.3
RCI 220-SR	32.3
RCI 230-SR	26.5
RCI 240-SR	60.0
RCIO 250-SR	14.9
RCIO 260-SR	33.6
RCIO 270-SR	47.5
RCIO 280-SR	62.5

# RCI 200 Series

## TORQUE CHARTS

### SPRING RETURN RCI-SR SERIES

Air Stroke Counterclockwise to Open – Spring Stroke Clockwise to Close

#### 40 PSIG AIR SUPPLY

Model #	AIR STROKE			SPRING STROKE		
	0°	60°	90°	90°	30°	0°
RCI 210-SR	40 PSI N/A			40 PSI N/A		
RCI 220-SR	168	71	88	124	62	97
RCI 230-SR	318	124	150	248	115	177
RCI 240-SR	637	257	319	513	239	363
RCIO 250-SR	1062	380	487	761	363	549
RCIO 260-SR	2124	805	1018	1549	761	1150
RCIO 265-SR	2938	1142	1545	2490	1224	1691
RCIO 270-SR	4248	1681	2035	3186	1549	2301
RCIO 280-SR	8496	3363	4248	6549	3186	4779

#### 60 PSIG AIR SUPPLY

Model #	AIR STROKE			SPRING STROKE		
	0°	60°	90°	90°	30°	0°
RCI 210-SR	133	44	62	97	44	71
RCI 220-SR	265	106	133	195	97	150
RCI 230-SR	495	186	239	380	186	274
RCI 240-SR	982	389	495	788	363	558
RCIO 250-SR	1637	593	752	1195	558	850
RCIO 260-SR	3274	1239	1593	2389	1195	1770
RCIO 265-SR	4298	1672	2263	3798	1878	2619
RCIO 270-SR	6649	2566	3097	4956	2354	3628
RCIO 280-SR	13098	5221	6549	10178	4956	7434

#### 80 PSIG AIR SUPPLY

Model #	AIR STROKE			SPRING STROKE		
	0°	60°	90°	90°	30°	0°
RCI 210-SR	175	62	88	135	62	95
RCI 220-SR	350	140	175	265	130	200
RCI 230-SR	665	255	320	515	250	370
RCI 240-SR	1330	530	665	1060	495	750
RCIO 250-SR	2210	795	1020	1590	750	1150
RCIO 260-SR	4420	1680	2120	3270	1590	2390
RCIO 265-SR	5734	2231	3020	5062	2502	3489
RCIO 270-SR	8850	3450	4250	6720	3190	4870
RCIO 280-SR	17700	7030	8850	13720	6640	10000

#### 100 PSIG AIR SUPPLY

Model #	AIR STROKE			SPRING STROKE		
	0°	60°	90°	90°	30°	0°
RCI 210-SR	220	80	110	170	80	125
RCI 220-SR	440	175	220	335	170	265
RCI 230-SR	830	310	400	635	309	460
RCI 240-SR	1665	665	840	1330	620	930
RCIO 250-SR	2745	975	1240	1990	930	1415
RCIO 260-SR	5530	2125	2655	4070	1990	3010
RCIO 265-SR	7149	2782	3767	6337	3135	4375
RCIO 270-SR	11154	4290	5310	8410	3980	6105
RCIO 280-SR	22125	8850	11060	17170	8320	12480



## DOUBLE ACTING RCI-DA SERIES Clockwise to Close

### 40 PSIG AIR SUPPLY

Model #	0°	50°	90°
RCI 210-DA	150	70	105
RCI 220-DA	310	140	220
RCI 230-DA	575	275	425
RCI 240-DA	1170	560	865
RCIO 250-DA	1815	860	1325
RCIO 260-DA	3715	1770	2745
RCIO 265-DA	5257	2474	3735
RCIO 270-DA	7520	3630	5575
RCIO 280-DA	15490	7300	11500

### 60 PSIG AIR SUPPLY

Model #	0°	50°	90°
RCI 210-DA	220	105	170
RCI 220-DA	470	220	335
RCI 230-DA	865	405	635
RCI 240-DA	1750	840	1310
RCIO 250-DA	2725	1285	1990
RCIO 260-DA	5575	2655	4115
RCIO 265-DA	7886	3710	5602
RCIO 270-DA	11280	5440	8360
RCIO 280-DA	23230	10975	17260

### 80 PSIG AIR SUPPLY

Model #	0°	50°	90°
RCI 210-DA	300	140	220
RCI 220-DA	620	290	450
RCI 230-DA	1150	550	850
RCI 240-DA	2340	1120	1740
RCIO 250-DA	3630	1720	2650
RCIO 260-DA	7430	3540	5490
RCIO 265-DA	10514	4947	7469
RCIO 270-DA	15040	7260	11150
RCIO 280-DA	30970	14600	23010

### 100 PSIG AIR SUPPLY

Model #	0°	50°	90°
RCI 210-DA	370	175	265
RCI 220-DA	780	354	565
RCI 230-DA	1430	690	1060
RCI 240-DA	2920	1415	2170
RCIO 250-DA	4510	2170	3320
RCIO 260-DA	9290	4425	6860
RCIO 265-DA	13142	6184	9336
RCIO 270-DA	18805	9070	13940
RCIO 280-DA	38720	18230	28760

