



Series
ACT

Pneumatic and Electric Actuators

Actuators for Valve and Damper Automation



ACT-SR03



ACT-TD01-110VAC



ACT-MI02-110VAC

The W.E. Anderson Series ACT Actuators are available in either pneumatic or electric models. The wide range of torques and voltages means there is an actuator for almost any application. The standard ISO 5211 mounting configuration makes installation to any valve or damper quick and simple.

W.E. Anderson pneumatic ACT models are a compact rack-and-pinion design with a symmetrical structure that ensures fast and steady action, high precision and high output power. The corrosion resistant anodized aluminum body is designed to withstand the harsh and abusive industrial environments and provide reliable service. We offer double acting and spring return models in a variety of sizes to fit any application.

W.E. Anderson electric ACT models are available in two-position or modulating configurations and NEMA 4X or NEMA 7 rated enclosures. All electric actuators utilize a high grade powder coated aluminum enclosure with visual indicators.

SPECIFICATIONS

Pneumatic "DA" and "SR" Series

Type: DA series is double-acting and SR series is spring return (rack and pinion).

Normal Supply Pressure:

DA: 40 to 115 psi (2.7 to 7.9 bar);
SR: 80 psi (5.5 bar).

Maximum Supply Pressure: 120 psi (8.6 bar).

Air Connections:

DA01: 1/8" female NPT;
DA02 to DA5: 1/4" female NPT;
SR02 to SR07: 1/4" female NPT.

Housing Material: Anodized aluminum body and epoxy coated aluminum end caps.

Temperature Limits: -40 to 176°F (-40 to 80°C).

Accessory Mounting: NAMUR standard.

Electric "TD" and "MD" Series

Power Requirements: 110 VAC, 220 VAC, 24 VAC or 24 VDC (MD models not available in 24 VDC).

Power Consumption: See manual.

Cycle Time (per 90°):

TD01 4 s;
MD01: 10 s;
TD02 and MD02: 20 s;
TD03 and MD03: 30 s.

Duty Rating: 85%.

Enclosure Rating: NEMA 4X (IP67).

Housing Material: Powder coated aluminum.

Temperature Limits: -22 to 140°F (-30 to 60°C).

Electrical Connection: 1/2" female NPT.

Modulating Input: 4 to 20 mA.

Standard Features: Manual override, position indicator, and TD models come with two limit switches.

The two-position models come standard with two auxiliary switches, and modulating models offer an output for position monitoring. Certain models are equipped with manual overrides allowing the operator to cycle the valve manually for installation or maintenance checks.

FEATURES

- ISO 5211 Mounting configuration or easy installation
- Pneumatic actuators offer corrosion resistance anodized finish
- NAMUR mounting configuration on pneumatic actuators
- Two-position electric actuators include auxiliary limit switches
- Modulating electric actuators offer an output for position monitoring

Electric "TI" and "MI" Series

Power Requirements: 110 VAC, 220 VAC, 24 VAC or 24 VDC.

Power Consumption: See manual.

Cycle Time (per 90°):

TI01 and MI01: 2.5 s;
TI02 and MI02: 5 s;
TI03 and MI03: 5 s;
TI04 and MI04: 10 s;
TI05 and MI06: 15 s.

Duty Rating:

Two-Position: TI01-TI06: 25%.
Modulating: MI01-MI06: 75%.

Enclosure Rating: NEMA 7.

Housing Material: Powder coated aluminum.

Temperature Limits: -40 to 140°F (-40 to 60°C).

Electrical Connection: 1/2" female NPT.

Modulating Input: 4 to 20 mA.

Standard Features: Position indicator and two limit switches.

Popular Pneumatic Models

Pneumatic Models	Description
ACT-DA01	Double Acting Pneumatic Actuator, 98 in-lb
ACT-DA02	Double Acting Pneumatic Actuator, 207 in-lb
ACT-DA03	Double Acting Pneumatic Actuator, 365 in-lb
ACT-DA04	Double Acting Pneumatic Actuator, 603 in-lb
ACT-DA05	Double Acting Pneumatic Actuator, 792 in-lb
ACT-DA06	Double Acting Pneumatic Actuator, 1135 in-lb
ACT-DA07	Double Acting Pneumatic Actuator, 1690 in-lb
ACT-DA08	Double Acting Pneumatic Actuator, 2993 in-lb
ACT-DA09	Double Acting Pneumatic Actuator, 4506 in-lb
ACT-SR02	Spring Return Pneumatic Actuator, 95 in-lb
ACT-SR03	Spring Return Pneumatic Actuator, 176 in-lb
ACT-SR04	Spring Return Pneumatic Actuator, 274 in-lb
ACT-SR05	Spring Return Pneumatic Actuator, 381 in-lb
ACT-SR06	Spring Return Pneumatic Actuator, 536 in-lb
ACT-SR07	Spring Return Pneumatic Actuator, 815 in-lb
ACT-SR08	Spring Return Pneumatic Actuator, 1411 in-lb
ACT-SR09	Spring Return Pneumatic Actuator, 2460 in-lb
ACT-SR10	Spring Return Pneumatic Actuator, 3733 in-lb
ACT-SR11	Spring Return Pneumatic Actuator, 6166 in-lb

ACCESSORIES

- R2-2120, Air Regulator
- AFR2-2, Instrument Air Filter Regulator
- VB-01, Volume Booster
- SN-5A, 5/2 NAMUR 110 VAC Solenoid
- SN-3A, 3/2 NAMUR 110 VAC Solenoid

Electric Models	Description
ACT-TD01-110VAC	Electric Two-Position, 177 in-lb, 110 VAC
ACT-TD02-110VAC	Electric Two-Position, 442 in-lb, 110 VAC
ACT-TD03-110VAC	Electric Two-Position, 885 in-lb, 110 VAC
ACT-TD04-110VAC	Electric Two-Position, 1770 in-lb, 110 VAC
ACT-TD05-110VAC	Electric Two-Position, 3540 in-lb, 110 VAC
ACT-MD01-110VAC	Electric Modulating, 265 in-lb, 110 VAC
ACT-MD02-110VAC	Electric Modulating, 442 in-lb, 110 VAC
ACT-MD03-110VAC	Electric Modulating, 885 in-lb, 110 VAC
ACT-MD04-110VAC	Electric Modulating, 1770 in-lb, 110 VAC
ACT-MD05-110VAC	Electric Modulating, 3540 in-lb, 110 VAC
ACT-TI01-110VAC	EXP Electric Two-Position, 100 in-lb, 110 VAC
ACT-TI02-110VAC	EXP Electric Two-Position, 200 in-lb, 110 VAC
ACT-TI03-110VAC	EXP Electric Two-Position, 300 in-lb, 110 VAC
ACT-TI04-110VAC	EXP Electric Two-Position, 400 in-lb, 110 VAC
ACT-TI05-110VAC	EXP Electric Two-Position, 675 in-lb, 110 VAC
ACT-TI06-110VAC	EXP Electric Two-Position, 1000 in-lb, 110 VAC
ACT-TI07-110VAC	EXP Electric Two-Position, 1500 in-lb, 110 VAC
ACT-TI08-110VAC	EXP Electric Two-Position, 2000 in-lb, 110 VAC
ACT-TI09-110VAC	EXP Electric Two-Position, 3840 in-lb, 110 VAC
ACT-TI10-110VAC	EXP Electric Two-Position, 5000 in-lb, 110 VAC
ACT-MI01-110VAC	EXP Electric Modulating, 100 in-lb, 110 VAC
ACT-MI02-110VAC	EXP Electric Modulating, 200 in-lb, 110 VAC
ACT-MI03-110VAC	EXP Electric Modulating, 300 in-lb, 110 VAC
ACT-MI04-110VAC	EXP Electric Modulating, 400 in-lb, 110 VAC
ACT-MI05-110VAC	EXP Electric Modulating, 675 in-lb, 110 VAC
ACT-MI06-110VAC	EXP Electric Modulating, 1000 in-lb, 110 VAC
ACT-MI07-110VAC	EXP Electric Modulating, 1500 in-lb, 110 VAC
ACT-MI08-110VAC	EXP Electric Modulating, 2000 in-lb, 110 VAC
ACT-MI09-110VAC	EXP Electric Modulating, 3840 in-lb, 110 VAC
ACT-MI10-110VAC	EXP Electric Modulating, 5000 in-lb, 110 VAC

Spring Return Actuator Torque

		SR Single Acting Pneumatic Actuator (lb-in)													
		Air Pressure													
		70 psi		80 psi		90 psi		100 psi		110 psi		115 psi		Spring Torque	
Model	Spring Quantity	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	90° Start	0° End
ACT-SR02	10	111	86	137	112	163	138	189	164	215	189	231	205	96	70
ACT-SR03	10	199	143	245	189	291	235	336	280	382	326	409	353	176	120
ACT-SR04	10	348	254	424	330	499	405	575	481	650	556	695	601	274	180
ACT-SR05	10	430	312	529	411	628	510	727	609	826	708	885	767	381	263
ACT-SR06	10	608	458	750	599	891	741	1033	883	1175	1025	1260	1110	536	386
ACT-SR07	10	783	663	994	874	1206	1085	1417	1297	1628	1508	1755	1635	817	696
ACT-SR08	10	1682	1208	2056	1583	2430	1957	2804	2331	3178	2705	3403	2930	1416	938
ACT-SR09	10	2303	1483	2866	2046	3429	2609	3992	3173	4556	3736	4894	4074	2363	1575
ACT-SR10	10	3479	2274	4337	3133	5195	3991	6053	4849	6911	5707	7426	6222	3549	2407

Double Acting Actuator Torque

		DA Double-Action Output Torque (lb-in)								
		Air Pressure								
		40 psi	50 psi	60 psi	70 psi	80 psi	90 psi	100 psi	110 psi	115 psi
ACT-DA01	49	61	74	86	98	110	123	135	142	
ACT-DA02	104	130	155	181	207	233	259	285	300	
ACT-DA03	182	228	274	319	365	411	456	502	529	
ACT-DA04	302	377	453	528	603	679	754	830	875	
ACT-DA05	396	495	594	693	792	891	990	1089	1148	
ACT-DA06	567	709	851	993	1135	1277	1419	1561	1649	
ACT-DA07	845	1056	1267	1478	1690	1901	2112	2323	2450	
ACT-DA08	1497	1871	2245	2619	2993	3367	3742	4116	4340	
ACT-DA09	2253	2816	3379	3942	4506	5069	5632	6195	6533	