

Rotary Actuator Products



COMPACT[®]
AUTOMATION PRODUCTS



Table of Contents

Compact (CA) Series

Overview.....	pg. 2
How to Order.....	pg. 3
Dimensions	pg. 4

Turn-Act (TA) Series

Overview.....	pg. 6
How to Order.....	pg. 7
Dimensions	pg. 8

Brute Series

Overview.....	pg. 10
How to Order.....	pg. 11
Dimensions	pg. 12

Options

Actuators for Special Environments.....	pg. 13
Flange	pg. 14
Combination Flange.....	pg. 15
Side Angle Mounts.....	pg. 16
Conveyor Mounting.....	pg. 17-18
Extended Tie Rods	pg. 19
Side Mounts	pg. 20
Dowel Pin Locator	pg. 21
Three Hole Face Mount and Low Profile Actuators.....	pg. 22
Adjustable Stroke Control	pg. 23
Thrust Protection	pg. 24
Internal Rotation Stop	pg. 25
Urethane Bumpers.....	pg. 25
Motion Control Package	pg. 25
Switches.....	pg. 26-30
Potentiometers & Encoders	pg. 31
Port Locations/Types.....	pg. 32
Namur Mount	pg. 32
Shaft Modifications.....	pg. 34-35
Shaft Accessories.....	pg. 36-37
Three Position Actuator Systems.....	pg. 38
Hydraulic Service Rotary Actuators.....	pg. 39
Stainless Steel Actuators.....	pg. 38
Clean Series.....	pg. 40
Systems.....	pg. 41

Turn-Dex

Turn-Dex1-1/4" Bore	pg. 42
How to Order.....	pg. 43
Dimensions	pg. 44

Turn-Dex 2-1/2" Bore	pg. 45
How to Order.....	pg. 46
Dimensions	pg. 47
Adjustable Stroke Control (ASC)	pg. 48

Turn-Dex Options

Flange Mount.....	pg. 49
Side Angle Mounts.....	pg. 50
Side Mounts	pg. 51
Thrust Protection	pg. 52
Cap Sensor Systems.....	pg. 53
Trantorque®.....	pg. 54
Hub Adapter	pg. 55

Class Act (CL) Valve Operator

Specifications	pg. 56
How to Order	pg. 57

Value-U-Act (VA) Valve Operator

Specifications	pg. 58
How to Order	pg. 59

Val-U-Act (VS) Spring Return

How to Order	pg. 60
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Warranty Statement.....	pg. 62
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Comp-Act (CA) Series

ROTARY VANE ACTUATORS:

- 15 base models with torque outputs from 9 in. lbs. to 100 in. lbs.
- Rotations 90, 180 & 270 degrees.

As compared to other rotary devices... Turn-Act Vane Actuators have:

- One moving part providing:
 - ZERO Backlash.
 - No loss of motion.
 - Smooth Rotation.
 - Precise Repeatability.
 - Continuous full torque throughout rotation.
- Turn-Act Patented Urethane seals for:
 - Long cycle life and Non-lube service.
 - Actual applications with 25 million cycles and more.
- 100s of standard options and modifications.

Just imagine... How TURN-ACT Answer Engineering can work for you!



**COMP-ACT ACTUATOR
WITH OPTIONAL ADJUSTABLE
STROKE CONTROL**

Torque Chart (IN. LBS.)			
180° and 270° Rotations ²			
Actuator Model	Actuator Torque at		
	100 PSI	80 PSI	60 PSI
011 (270°)	9	7	5
013 (180°)			
021 (270°)	13	10	8
023 (180°)			
031 (270°)	25	20	15
033 (180°)			
041 (270°)	32	26	19
043 (180°)			
061 (270°)	50	40	30
063 (180°)			

Torque Chart (IN. LBS.)			
90° Rotations ²			
Actuator Model	Actuator Torque at		
	100 PSI	80 PSI	60 PSI
012	17	14	10
022	25	20	15
032	44	35	26
042	60	48	36
062	100	80	60

SPECIFICATIONS

Unit Materials

Stator/Rotor Seals... Urethane
 Shaft/Tube Seals..... Buna¹
 Shaft.....303 Stainless Steel
 BodyAnodized Alum.
 Bearings.....Full Comp. Needle

Miscellaneous

Inlets1/8 NPT
 Min. Pressure35 psi
 Max. Pressure200 psi
 Cylinder Bore1-1/4"

Shaft Load Capacities

Max. Side Load.....250 lbs.
 Max. End Load.....10 lbs.

Temperature Range

40°F to 180°F
 For applications below 40°F, a variety of seal options are available based upon cycle rates, temperatures and frequency of use. Consult the factory to discuss your cold temperature application for your optimum solution.

Filtration

Air.....25-50 microns

Cycle Rates³

Max. non-lubed rate:

90° Rot.....40 cpm
 180°, 270° Rot.....20 cpm

Max. lubed rate:

Consult Factory

Rotary Motion Backlash

All models0 degree

Leak Rates

Air4 cfm or less@100 psi

- 1 Viton Optional
- 2 All rotations are nominal +4/-0 actual
- 3 Cycle = Start position to end of rotation and returning to the start position.
Stroke = 1/2 cycle

Capacity per Stroke ³ (IN ³)			
270° Rotation ²		90° Rotation ²	
011	0.50	012	0.42
021	0.99	022	0.84
031	1.49	032	1.26
041	1.99	042	1.68
061	3.49	062	2.96

Weights (OZs)			
270° Rotation ²		90° Rotation ²	
011	8	012	8
021	10	022	10
031	12	032	12
041	14	042	14
061	18	062	18

How to Order: Comp–Act (CA)

MODEL END CAPS SHAFT UNIT MATERIAL OPTIONS OPTIONS

011 – 1 Y 1 – XXX – XXX

1 2 3 4 5 5

1

Model			
Model	Series	Torque	Rotation
011	CA	- 09	- 270
012	CA	- 17	- 90
013	CA	- 09	- 180
021	CA	- 13	- 270
022	CA	- 25	- 90
023	CA	- 13	- 180
031	CA	- 25	- 270
032	CA	- 44	- 90
033	CA	- 25	- 180
041	CA	- 32	- 270
042	CA	- 60	- 90
043	CA	- 32	- 180
061	CA	- 50	- 270
062	CA	- 100	- 90
063	CA	- 50	- 180

2

End Caps	
To Specify other modifications; Consult Factory	
1	Pneumatic
2	Pneumatic - Low Profile
4	Pneumatic - w/ Vacuum Ports

3

Shaft	
To Specify other modifications; Consult	
Y	Single End - No Keyway
M	Double End - No Keyway Each End
W	Single End - Woodruff Key
V	Double End - Woodruff Key Each End
U	Single End - Shaft Flat
T	Double End - Shaft Flat Each End
S	Single End - Keyway
R	Double End - Keyway Each End

4

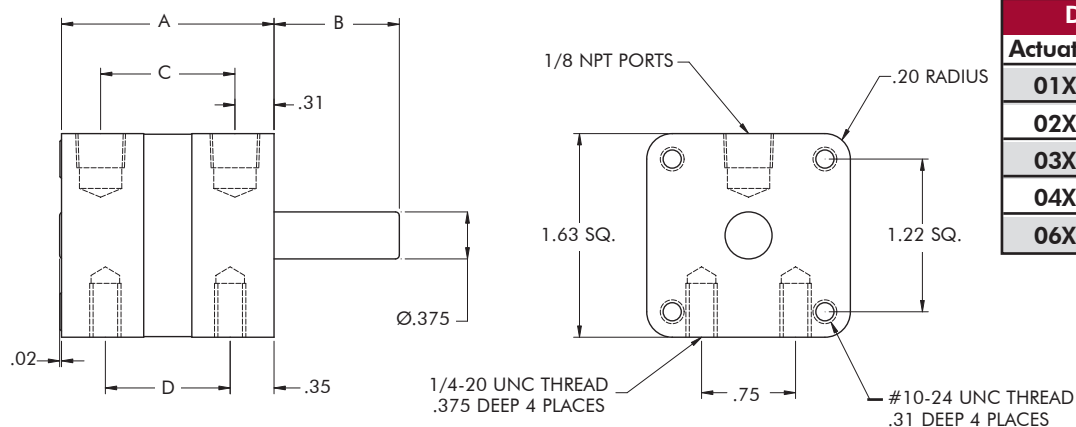
Unit Materials	
Shaft - Body - Trim	
1	303 Stainless Steel - Anodized Aluminum - Carbon Steel
3	303 Stainless Steel - Anodized Aluminum - Stainless Steel
4	303 Stainless Steel - Stainless Steel - Stainless Steel
6	316 Stainless Steel - 316 Stainless Steel - Stainless Steel

5

Options	
Additional options available on pgs. 14-33	
000	No Options
100	Flange Mount - Rod End
101	Flange Mount - Cap End
300	Extended Tie Rods - Rod End
301	Extended Tie Rods - Cap End
400	Adjustable Stroke Control - Cap End, Pos.5
401	Adjustable Stroke Control - Rod End, Pos.1
801	Side Mounts - Positions 2 & 6
803	Side Mounts - Positions 4 & 8
804	Side Mounts - Positions 2,4,6 & 8
900	Thrust Protection - Cap End, Pos.1
901	Thrust Protection - Rod End, Pos.1
B00	Urethane Bumpers
T01	3/8" Trantorque® Shaft Coupler - Carbon Steel
T02	3/8" Trantorque® Shaft Coupler - Stainless Steel Stainless Shaft Coupler has 1/3 the Transmissible Torque as T01 (see pgs. 34-35)
Switch Options	
Additional switch options available on pg. 24	
All Axx Switch Options are Single End Only	
A00	Switch Package - No Switches
A02	Switch Pkg. - 2 Reed Switches
A05	Switch Pkg. - 2 Sourcing Switches
A08	Switch Pkg. - 2 Sinking Switches
Double end switch options available on pgs. 25-26	

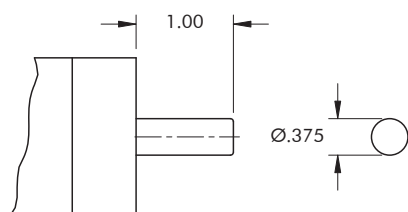
Dimensional Data: Comp-Act (CA)

Basic Dimensions

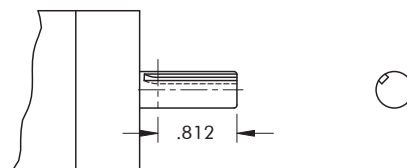


Dimensional Specifications				
Actuator	A	B	C	D
01X	1.70	1.00	1.07	1.00
02X	2.20	1.00	1.57	1.50
03X	2.70	1.00	2.07	2.00
04X	3.20	1.00	2.57	2.50
06X	4.75	1.00	4.12	4.05

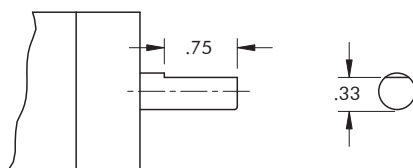
Shaft Options



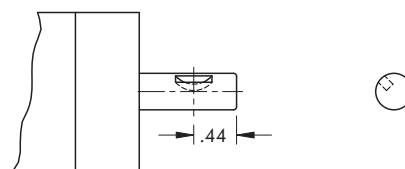
Basic Shaft



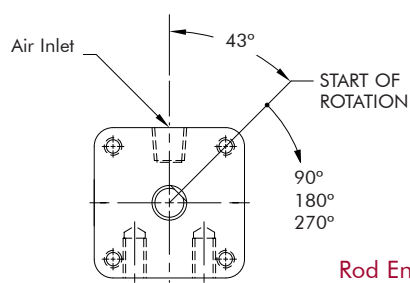
3/32" Square Keyway



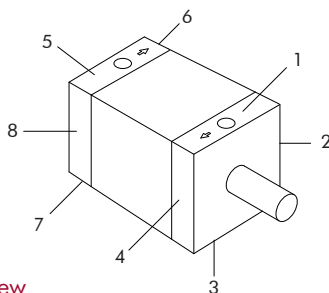
Shaft Flat



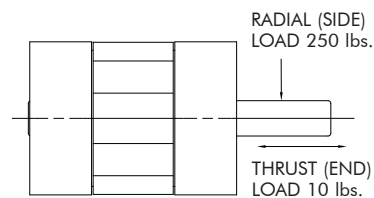
#303 Woodruff Key



Rod End View



Port & Mounting Position References



Shaft Load Capacity

Nominal Rotations (+4/-0 actual)

NOTE: The 43° start position is nominal. Tolerances are +/- 2 degrees.