



VZ Torque™

By Vanzandt Controls

VZ TORQUE™

Industry's Broadest Electric Actuator Offering



221 in-lbs



442 in-lbs



**885 in-lbs
1,770 in-lbs**



**3,540 in-lbs
5,310 in-lbs**



**8,850 in-lbs
13,276 in-lbs**



26,550 in-lbs

FROM 221 in-lb TO 26k in-lb!!

Electric Quarter Turn
Battery Backup Fail Safe Actuator

High Speed Options Available

Less than 5 seconds stroke speed

Notes:

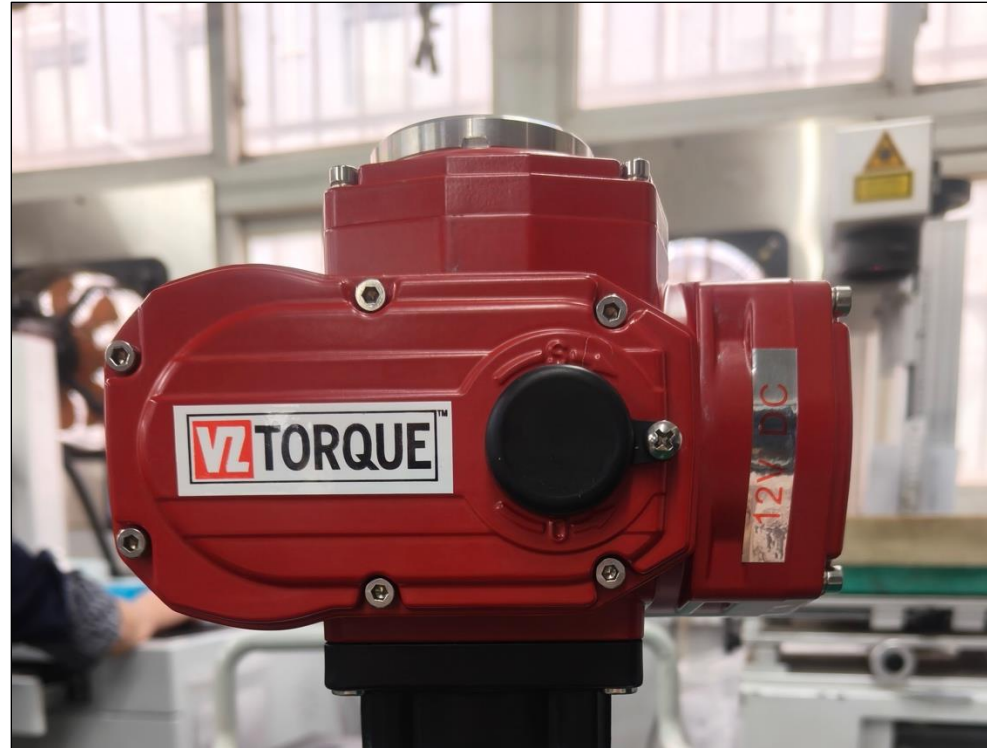
1. Super Capacitors are used for 442, 885 and 1,700 in-lb regular speed models. All other sizes use Lithium Ion batteries including all High Speed options.
2. 221 in-lb model has NEMA 4 rating only and is NOT Failsafe.

Key Features

Quarter Turn Electric
180 Degree available
Up to 575 In-Lbs
12VDC, 24VDC, 120VAC
12VDC for up to 1770 In-Lbs, FIP
On/Off, 4-20mA or Modbus
Over Torque Protection
Simple Calibration Procedure

Fail Safe

24 VDC only
Fail In Place: Any Model



Super Capacitor

Handles Low Temperatures Better
Than Lithium or Acid Batteries
Much Longer Life of Operation

Packaging Features

CSA C1D1 Groups C & D
Visual Position Indicator
Handwheel for Manual Operation
ISO Mounting Flange Pattern

VZ TORQUE™

STANDARD SPEED Actuator Details



STANDARD Speed Type	VZT-885-30	VZT-1770-30	VZT-3540-30	VZT-5310-45
Output Torque in-lbs.	885	1,770	3,540	5,310
No Load Stroke Time [sec]	17	21	22	26
Full load Stroke Time [sec]	30	30	30	45
Rotation Angle	0-90°	0-90°	0-90°	0-90°
Motor Watts	40	40	90	90
Power	24DC			
Rated Current	2.2 amps	3.1 amps	7.8 amps	8.0 amps
Total Weight	11 lbs.	12.1 lbs.	20.9 lbs.	22 lbs.
Control Type	On/Off or 4-20 Modulating/Modbus			
Output Signal	On/Off has Dry Contacts, Modulating has Dry Contacts & 4-20ma/Modbus			
Basic Error/Reciprocating Error	Not more than ±1% (Modulating Unit)			
Deadband	0.5%-5.0% adjustable (Modulating Unit)			
Repeating Error in Actuator	≤1% (Modulating Unit)			
Insulating Resistance	100M Ω /500VDC (Modulating Unit)			
Withstand Voltage Class	1500VAC 1 minute (Modulating Unit)			
Electric Interface	2-M20*1.5 explosion-proof plug			
Ambient Temperature	-25℃~+55℃			



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HIGH TORQUE Actuator Details



HIGH TORQUE Type	VZT-8850-50	VZT-13276-60	VZT-26550-140
Output Torque in-lbs.	8,850	13,276	26,550
No Load Stroke Time [sec] DC	39/24	48/30	136/90
Full load Stroke Time [sec] DC	50/30	60/37	170/110
Rotation Angle	0-90°	0-90°	0-90°
Motor Watts DC	113	113	113
Power	24DC		
Rated Current	2.2	6.1	7.5
Total Weight	32 lbs.	46 lbs.	47 lbs.
Control Type	On/Off or 4-20 Modulating/Modbus		
Output Singal	On/Off has Dry Contacts, Modulating has Dry Contacts & 4-20ma/Modbus		
Basic Error/Reciprocating Error	Not more than ±1% (Modulating Unit)		
Deadband	0.5%-5.0% adjustable (Modulating Unit)		
Repeating Error in Actuator	≤1% (Modulating Unit)		
Insulating Resistance	100M Ω /500VDC (Modulating Unit)		
Withstand Voltage Class	1500VAC 1 minute (Modulating Unit)		
Electric Interface	2-M20*1.5 explosion-proof plug		
Ambient Temperature	-25℃~+55℃		



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FAST SPEED Actuator Details



FAST SPEED Type	VZT-442-5	VZT-1770-5	VZT-2655-10
Output Torque in-lbs.	442	1,770	2,655
No Load Stroke Time [sec] DC/AC	2.2@90 deg	4.7 @90 deg	9@90 deg
Full load Stroke Time [sec] DC/AC	4 @90 deg	5 @90 deg	10 @90 deg
Rotation Angle	0-90 or 0-180°	0-90°	0-90°
Motor Watts DC/AC			
Power	24DC		
Rated Current	4/0.8/.44		
Total Weight	12	22	30
Control Type	On/Off or 4-20 Modulating/Modbus		
Output Singal	On/Off has Dry Contacts, Modulating has Dry Contacts & 4-20ma/Modbus		
Insulating Resistance	100M Ω /500VDC (Modulating Unit)		
Withstand Voltage Class	1500VAC 1 minute (Modulating Unit)		
Electric Interface	2-M20*1.5 explosion-proof plug,		
Ambient Temperature	-25°C~+55°C		



VZ TORQUE™ VS VTORK

Key Differences



ISSUE	VTORK	VZ Torque
Loss of Position Feedback Issues	“Loss POS” issue known by manufacturer. Actuator loses position. Issue with the potentiometer. Fix is for customer to either send actuator back to factory or attempt to re-calibrate potentiometer in the field.	Built in sealed potentiometer circuit does not require re-calibration.
Non Self-locking	The VTMxS and VTMxH series are NON SELF-LOCKING actuators. VTORK uses parallel spur gears to increase their speed but that results in non self-locking. Also, the maximum torque for their high speed actuators is <ol style="list-style-type: none">1. 4424 in-lb at 8 sec (non self-locking)2. 1770 in-lb at 3 sec (non self-locking)3. 619 in-lb at 1 sec (non self-locking)	VZ Torque uses a modern, sophisticated gear train that results in most models being self locking .
High Amp Draw	For the VTM2 through VTM-6 series, VTORK uses a planetary gear structure with low transfer efficiency . This results in HIGH AMP DRAW .	VZ Torque amp draw is less than VTORK for all models .
Explosion Proof Certification	Only meets minimal ATEX standard for Europe .	Meets robust CSA Class I Div I standard for North America. More difficult explosion proof and cycle standards than ATEX.
Battery Leakage	Battery leakage ruins actuator electronics and motor.	NOW AVAILABLE WITH SUPERCAPACITORS

VZ TORQUE™ VS VTORK

Key Differences



FEATURE	VTORK	VZ Torque
Sealed/Tested Explosion Proof Housing	Actuator housing not pressure tested at factory	100% of actuator housings are pressure tested under water at factory. Remain sealed in field due to not having to open up actuator to field wire and calibration.
Programming	Must use thumbnail size digital display to set up actuator. Difficult in shop conditions, impossible in field conditions .	No programming required . Simple screwdriver type calibration and setup.
12V DC Option	No 12V DC Option	12V DC option for smaller actuators
Manual Override	Requires opening up enclosure, using thumbnail display, going into menu, and setting actuator to setup manual override	Simple slider switch.
Housing Distance From Circuit Board	When tech puts housing cover back on actuator, the housing can hit the board and put the actuator into manual mode!	No issue.