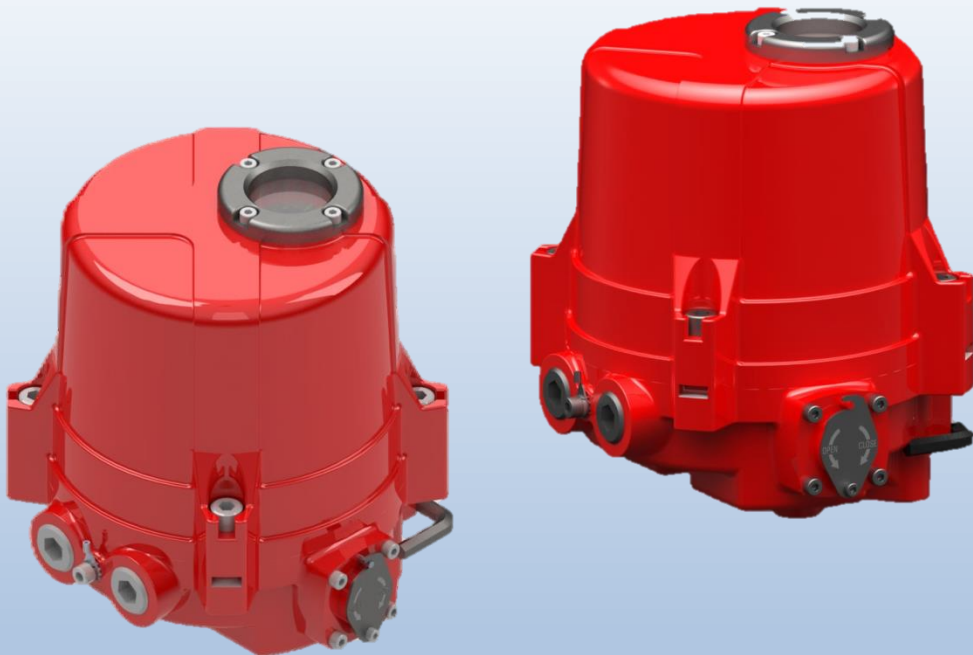




i-Tork Controls design, produces and provide high quality actuators

Electric Actuator

VEX0080 Explosion Proof



Vtek
Controls TM

Introduction

The new **VEX0080 Explosion Proof** from Vtek Controls has been developed for a wide range of applications with many years of experience with VEX explosion proof actuators used in various Valve Automation Field and to service reliable performance, long trouble free operation, more flexibility and maximized ability to integrate fully into sophisticated Explosion proof circumstances and hazardous area.



Advantage



Product Features (What are different?)

- Over Torque limiting by PCB
(To Prevent damage from excessive force)
- Over Torque warning can be checked on customer's PLC
by sending signal from PCB
- Self-Locking Gear System
- Free Voltage (AC100~240V) with BLDC motor
- Space heater on PCB
- Power ON LED on the PCB
- Built-in type Modulating card
- ISO 5211 Mounting Flange Size F05/F07
- Explosion proof : Ex d II C T4

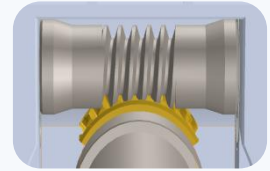
Inner structure



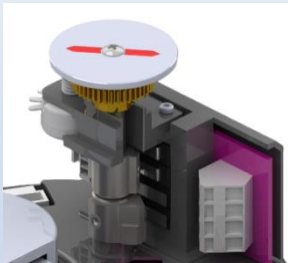
PCB with terminal blocks.
Torque limiting by PCB



Indicator



Worm Gear
(Self-Locking)



Limit switches



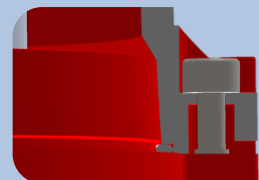
Manual operation
(with L-wrench)



Robust structures



ISO5211 Mounting Flange
(F05/F07)

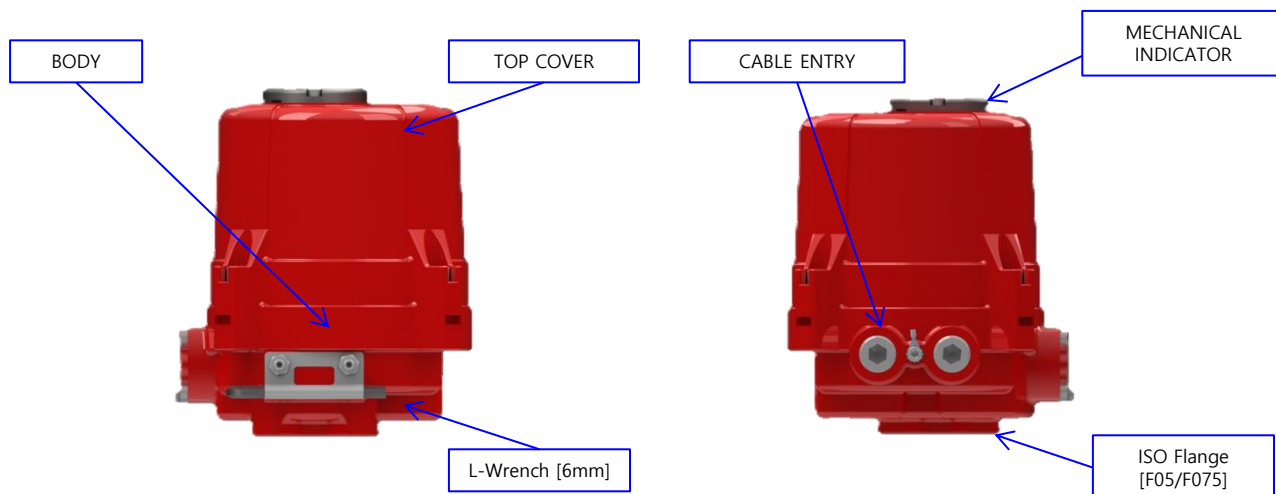


Explosion-proof structures

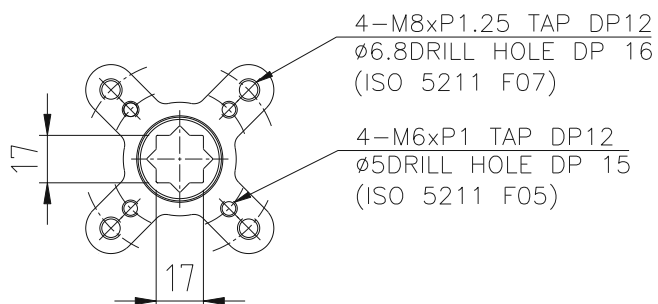
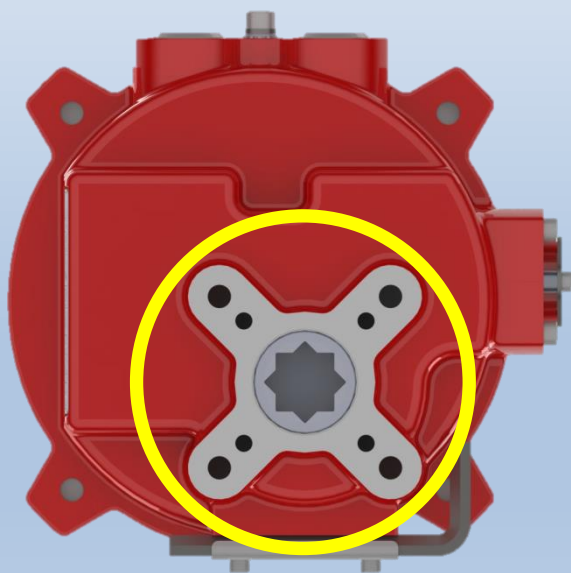
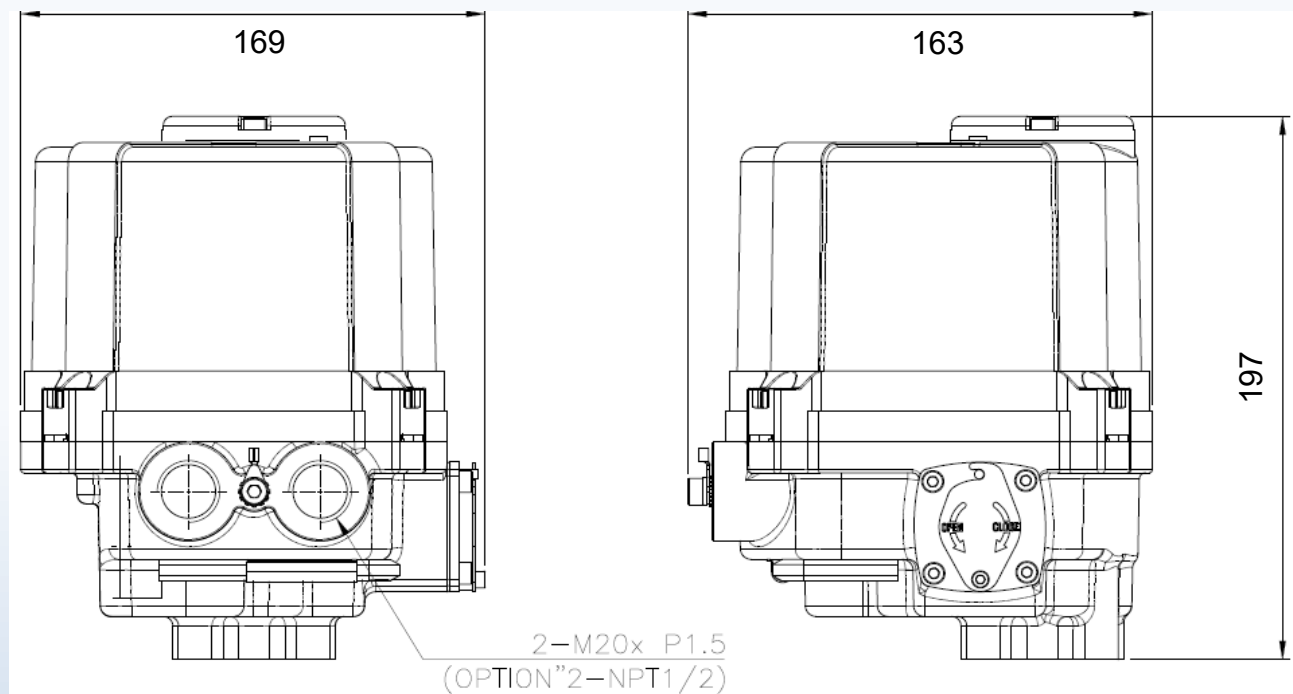
VEX0080 Explosion Proof

Standard Specification

	VEX0080	REMARK
TORQUE (Nm)	80 Nm	
OPERATING SPEED (sec)	20 sec	
MAIN POWER SUPPLY	AC 100 ~ 240 V (Free Voltage) AC/DC 24V	BLDC MOTOR
DUTY CYCLE (ON/OFF)	S2 : 30min	
DUTY CYCLE (MODULATING)	S4 : 50%	
CONTROL SIGNAL(MODULATING)	(RPC) 4~20mA / 4~20mA (Option : 0~10VDC, 0~5VDC, 1~5VDC, 2~10VDC)	Input / Output
SPACE HEATER	2W	
LIMIT SWITCH	2ea Open, Close	
AUX. LIMIT SWITCH	2ea Open, Close	
AMBIENT TEMPERATURE	-20°C~+60°C	
AMBIENT HUMIDITY	90%RH MAX(NON-CONDENSING)	
ENCLOSURE	IP 67 (OPTION : IP68)	
EXPLOSION PROOF	Ex d II C T4	
CABLE ENTRY	2-M20x1.5	
WEIGHT(kg)	8 lbs (3.5kg)	



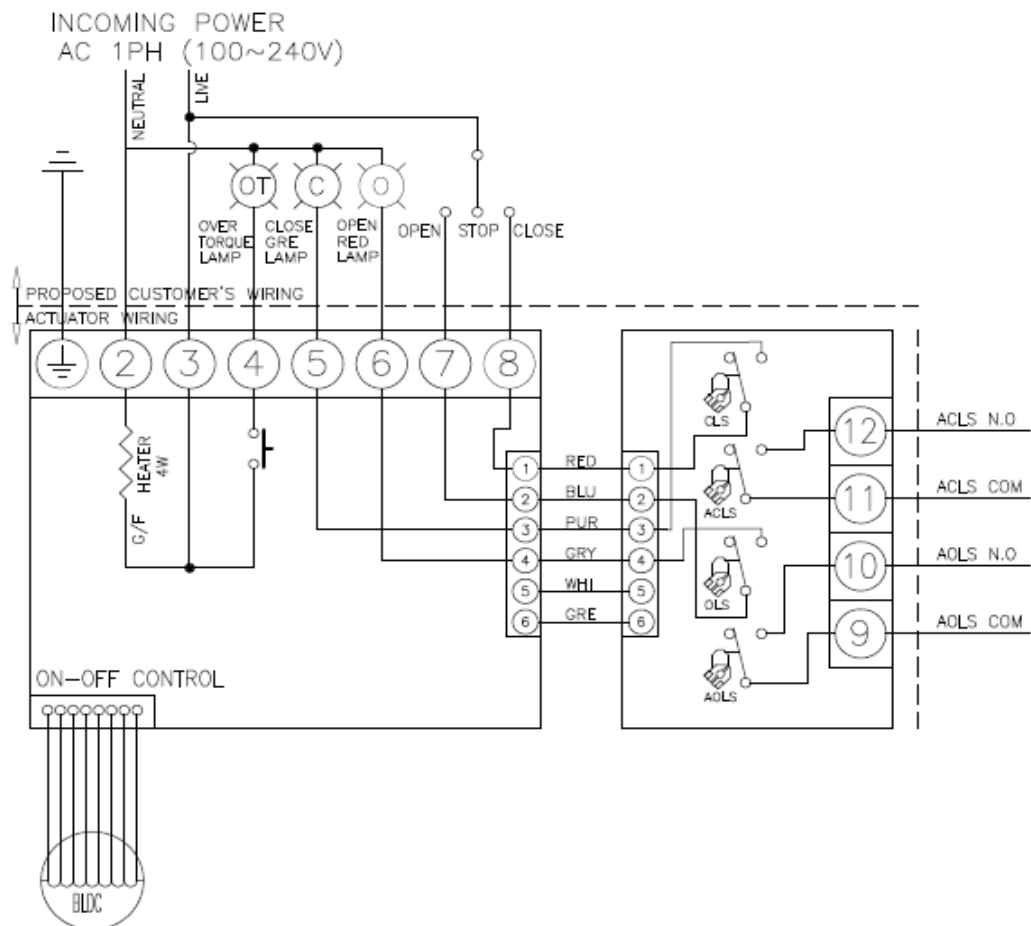
Dimension (mm) [is subject to change]



Wiring Diagram

CLS : CLOSE LIMIT SWITCH (250VAC 3A)
 OLS : OPEN LIMIT SWITCH (250VAC 3A)
 *EACH ACTUATOR SHOULD BE POWERED THROUGH ITS OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

LIMIT SWITCHES OPERATION		
SWITCH	CLOSE ← INTERMEDIATE → OPEN	
CLS 1-2		
CLS 1-3		
OLS 1-2		
OLS 1-3		
ACLS 1-3		
AOLS 1-3		

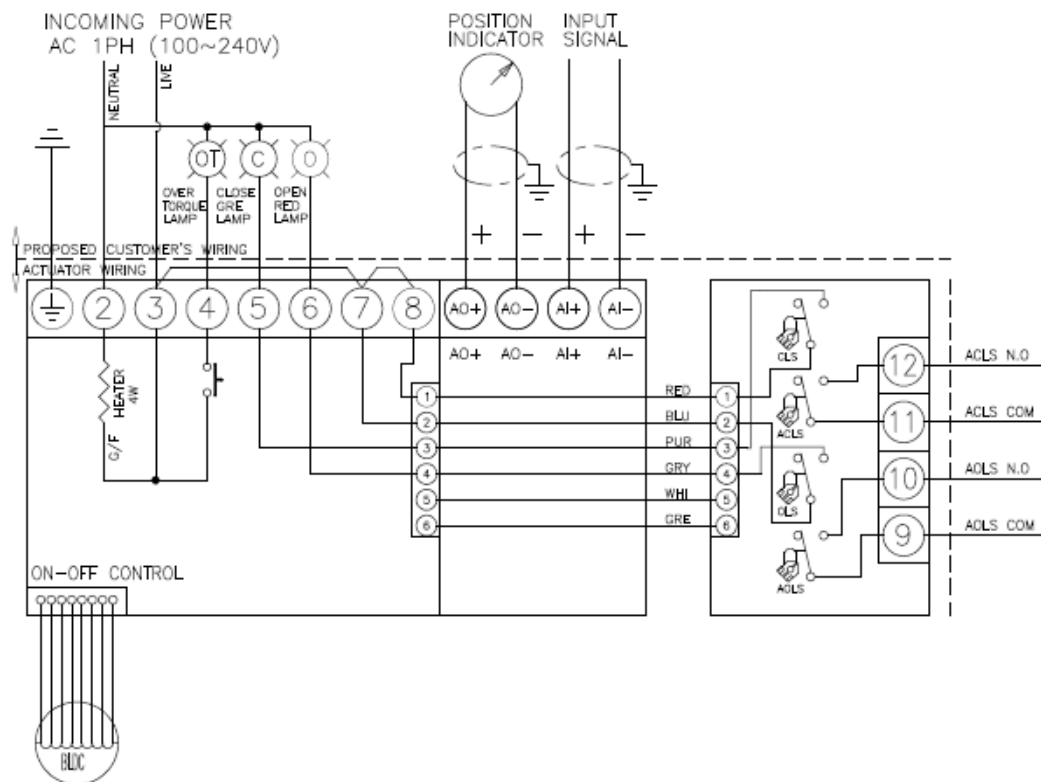


		ITORK CONTROLS http://www.i-tork.com	DRAWN	DESIGN	CHECKED	APPROVER
			K.S.PARK2			K.S.PARK2
		PART NAME 1PH WIRING DIAGRAM	ISSU. DEPT.	DATE	SIZE	PROGRAM
			ITCDR	2024.11.12	A4	AUTOCAD LT 2010
ITX-0080 APP'L FILE		OPTION NAME STANDARD	WIR No. ITX0080-70000-A			

Wiring Diagram

CLS : CLOSE LIMIT SWITCH (250VAC 3A)
 OLS : OPEN LIMIT SWITCH (250VAC 3A)
 *EACH ACTUATOR SHOULD BE POWERED THROUGH ITS OWN INDIVIDUAL SWITCH OR RELAY CONTACTS TO PREVENT CROSS FEED BETWEEN TWO OR MORE ACTUATORS.

LIMIT SWITCHES OPERATION		
SWITCH	CLOSE ←	INTERMEDIATE → OPEN
CLS 1-2		
CLS 1-3		
OLS 1-2		
OLS 1-3		
ACLS 1-3		
AOLS 1-3		



		 http://www.i-tork.com	DRAWN	DESIGN	CHECKED	APPROVER
			K.S.PARK2			K.S.PARK2
		PART NAME 1PH WIRING DIAGRAM	ISSU. DEPT.	DATE	SIZE	PROGRAM
			ITCDR	2024.11.12	A4	AUTOCAD LT 2010
ITX-0080 APP'L FILE		OPTION NAME RPC	WIR No. ITX0080-70500-A			

VEX Explosion Proof Series

Standard Specification

	VEX0050	VEX0080	REMARK
TORQUE (Nm)	50 Nm	80 Nm	
OPERATING SPEED (sec)	13 sec	20 sec	
MAIN POWER SUPPLY	AC 100 ~ 240 V (Free Voltage) AC/DC 24V		
DUTY CYCLE (ON/OFF)	S2 : 30min		
DUTY CYCLE (MODULATING)	S4 : 50%		
CONTROL SIGNAL(MODULATING)	4~20mA / 4~20mA (Option : 0~10VDC, 0~5VDC, 1~5VDC, 2~10VDC)		Input / Output
SPACE HEATER	4W	2W	
LIMIT SWITCH	2ea Open, Close		
AUX. LIMIT SWITCH	2ea Open, Close		
AMBIENT TEMPERATURE	-20℃~+60℃		
AMBIENT HUMIDITY	90%RH MAX(NON-CONDENSING)		
ENCLOSURE	IP 67 (OPTION : IP68)		
EXPLOSION PROOF	Ex d II C T4		
CABLE ENTRY	2-M20x1.5		
WEIGHT(kg)	3	3.5	



VEX0050



VEX0080

VEW & VEX Explosion proof series
Quarter Turn Actuators for butterfly and ball valves



VEW0020

VEW0040

VEW0080

VEX0050

VEX0080



VTEK CONTROLS
PERFECT SOLUTION IN VALVE AUTOMATION!

Vtek
Controls TM

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