

October, 30, 2019

SUBJECT: Product support statement for P-Series & PISC*

* ProAct Integrated Speed Control (PISC): the statement is application for PISC used in positioner/ actuator applications only. Statement is not applicable for PISC used in speed control function applications.

The ProAct Gen2 smart integrated actuator is an important product line for Woodward. Woodward has produced and supported P-series and PISC* product line for many years and will continue to offer new sales and support of this product line in the future.

Due to market demand for ROHS certification on the ProAct product line, Woodward plans to release the next generation ProAct Generation 3 actuator (24-pin connector variant) that would be backward compatible and meet ROHS, and marine compliance.

The ProAct Gen3 actuator will offer a more accurate position sensor, and hosts a much powerful processor core capable of implementing latest software requirements.

This support statement does not address the ProAct Gen3 equivalent of ProAct Analog, Digital Plus, P-Series FL (Flying Lead) position control or PISC* used as speed control. Later releases of ProAct Gen3 will address these product variants.

Table below provides the list of ProAct Gen3 general market part numbers that can be used to replace the PISC* and P-Series Actuators.

PAG 3 Part	Part Number Description	
Numbers		
8404-302	ACTUATOR - PROACT GEN3, MODEL II (GENERAL SALE)	
8404-303	ACTUATOR - PROACT GEN3, MODEL III (GENERAL SALE)	
8404-304	ACTUATOR - PROACT GEN3, MODEL IV (GENERAL SALE)	

Table 1: ProAct Gen3 Positioner General Market Part Numbers

The ProAct GEN3 actuator is designed to be backward compatible with the P-Series and PISC* as much as possible and designed to have improve functionality when possible.

Table 2 shows the comparison of some of the key functions of P-Series vs ProAct Gen3 positioner.



No No Yes	<u>Features</u>	ProAct Gen2 P-Series	ProAct Gen3 Positioner
Including ProAct Gen3 Positioner (24-pin connector version)	ROHS	No	Yes
after calibration and +/- 1.5% linearity. Communication RS-232 serial port for using service tools or loading software. CAN channel for customer interface. Discrete Input Discrete Input Discrete input of OFF' below 4V. Discrete input so be 'ON' above 7V and 'OFF' below 4V. Discrete input are all surgerated so they can be connected directly to the battery. See product spec sheet for details. Discrete output Low side (P-Series), High side (Digital Plus) Analog Input Analog output: intended to be an indicator of shaft position or alternatively, command input. It is not meant to be a controlling driver output PWM command Input Low Side and Push Pull with fixed internal pull up resistance (circuit population). Power Consumption Same Operating Parameters to 85°C including linearity. Two CAN ports – one with higher rate optimized for service tool usage and one optimized for command interface with adjustable rate. Operates within a 5V range, can be pulled long, can be pulled long optimized for command interface with adjustable rate. Discrete output Operates within a 5V range, can be pulled long, can be pulled	Marine	No – Only valid for Digital Plus	including ProAct Gen3 Positioner (24-pin connector
service tools or loading software. CAN channel for customer interface. Discrete Input Discre	Position Accuracy	after calibration and +/- 1.5%	· · · · · · · · · · · · · · · · · · ·
TV and 'OFF' below 4V. be pulled low, can be pulled high, and can go to a known third state with open-wire. Discrete inputs are all surge-rated so they can be connected directly to the battery. See product spec sheet for details. Discrete output Low side (P-Series), High side (Digital Plus) Analog Input Analog output: intended to be an indicator of shaft position or alternatively, command input. It is not meant to be a controlling driver output PWM command Input Low Side and Push Pull with fixed internal pull up resistance (circuit population). Low Side and Push Pull with pull or Low Side. Push Pull threshold is customer configurable as 0-5V or 0-12V. Power Consumption Same Will match ProAct Gen2 version. Modifications available upon	Communication	service tools or loading software. CAN channel for customer	higher rate optimized for service tool usage and one optimized for command
Analog Input Analog output: intended to be an indicator of shaft position or alternatively, command input. It is not meant to be a controlling driver output PWM command Input Low Side and Push Pull with fixed internal pull up resistance (circuit population). Low Side and Push Pull with Fixed internal pull up resistance (circuit population). Power Consumption Same Same Unit of Low Side and High Side (Software Configurable) Same Same Same Will match ProAct Gen2 version. Modifications available upon	Discrete Input	· ·	be pulled low, can be pulled high, and can go to a known third state with open-wire. Discrete inputs are all surgerated so they can be connected directly to the battery. See
Analog output: intended to be an indicator of shaft position or alternatively, command input. It is not meant to be a controlling driver output PWM command Input Low Side and Push Pull with fixed internal pull up resistance (circuit population). Power Consumption Same Same Same Same Same Will match ProAct Gen2 version. Modifications available upon	Discrete output		both Low Side and High Side
an indicator of shaft position or alternatively, command input. It is not meant to be a controlling driver output PWM command Input Low Side and Push Pull with fixed internal pull up resistance (circuit population). Power Consumption Same Same Will match ProAct Gen2 version. Modifications available upon	Analog Input	Same	Same
fixed internal pull up resistance (circuit population). Power Consumption Same Operating Parameters fixed internal pull up resistance (circuit population). Pull or Low Side. Push Pull threshold is customer configurable as 0-5V or 0-12V. Same Will match ProAct Gen2 version. Modifications available upon	an indicator of shaft position or alternatively, command input. It is not meant to be a controlling	Same	Same
Operating Parameters Will match ProAct Gen2 version. Modifications available upon	·	fixed internal pull up resistance	Pull or Low Side. Push Pull threshold is customer
Modifications available upon	Power Consumption	Same	
	Operating Parameters		Modifications available upon

 Table 2: P-Series vs ProAct Gen3 Comparison





The P-Series and PISC* will be slowly phased out. The support schedule for the P-series and PISC* is below.

Woodward does not recommend to use any P-Series or PISC* for actuator applications for new designs or upgrades since the product is in the last stage of the product lifecycle.

Woodward recommends ProAct Gen3 Actuators for new designed applications, or product upgrades.

Please contact Woodward, OEM supplier or Woodward Channel Partners to discuss this product support statement in more detail.

Now - Oct 1st, 2024:

- Unlimited New Sales
- Unlimited Spare Modules
- Unlimited Repairs
- Replacement Exchange with service stock

Oct 1st, 2024 - 2027:

- Unlimited Spare Modules
- Unlimited Repairs
- Replacement Exchange with service stock

Oct 1st, 2027 - 2029:

- Limited Spare Modules based on part availability
- Unlimited Repairs
- Replacement Exchange with service stock

Oct 1st, 2029 - 2031:

- Repairs based on parts availability
- Replacement Exchange with service stock
- Replacement product utilizing same algorithms and logic where applicable





Figure 1: ProAct Gen3 Positioner (24 pin connector version)

Yours Sincerely,

Sai Venkataramanan Product Line Manager – Engine Systems

Phone: +1 970-498-4686

Email: Sai.Venkataramanan@woodward.com