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Nidec Components Corporation
Sensor Division

Dear Valued Customers

**Product change notification for pressure indicators, PZ-30 series
(Electronic component change)**

This is to inform you that a product change will be made to pressure indicators, PZ-30 series. This notification is for your company to take appropriate action should your internal documentation for the products need to be updated.

1.Affected products

Product name	Product series name
Pressure Indicators	PZ-30 series

2.Change description

Electronic components used for PZ-30 will change. Beside that, two functions are to be added to PZ-30 series. Please see the table below for more in details

	Component	Part number and its manufacture	
		Current	New
1	Microcomputer	R5F10FLDANA#U0 (Renesas)	R5F513T3ADFL#30 (Renesas)
2*	Board-to-board connector	IMSA-9823B-16Y924 (Iriso)	DF12NC(5.0)-20DP-0.5V(51) (Hirose)
		ISMA-9820S-16Y940 (Iriso)	DF12NC-20DS-0.5V(51) (Hirose)
3	PCB materials	Core: MCL-E-67 (Hitachi Chemical) Pre-preg: GEA-67N (Hitachi Chemical)	Core: R-1766 (Panasonic) Pre-preg: R-1661 (Panasonic)
4	LED (Green)	L-90XPGT (Kingbright)	L-90XPGD (Kingbright)
5	Board-to-board Wires <small>*used inside the product</small>	SMVJ-B-7/0.16(0M-CP)x3x13-P2.5- S2.5-M UL2651 (Sumitomo)	HP-XXP-26#-7/0.16TC-2.5 UL2651 (YINGHUA INTERNATIONAL)
6	Others		Microcomputer peripheral circuit Circuit pattern and layout Firmware (Microcomputer)

* For the connector, the change implementation date is different from that for other components.

See the following page for more details about the schedule.

New functions

1) To detect disconnection of cable and excessive voltage/current caused by malfunction of pressure sensor

If input signal coming from pressure sensor (amplifier) is either below about 0.1V (0.4mA) or above 6V(24mA), the display of PZ-30 will show “E-5”, indicating the mentioned problem is happening. The solution to the problem is to turn off the power and check the load condition. Once the problem is solved, PZ-30 will restart to function normally.

2) To strengthen its reverse connection protection function by adding “Fold Back Characteristic”.

If input signal coming from pressure sensor (amplifier) is over about 100mA, power supply output circuit with the “Fold Back Characteristic” will start to function.

3.Reason for change

Due to EOL of those mentioned components, Nidec decides to replace them with the corresponding electronic components.

4.Evaluations

Nidec has conducted evaluations of the new components and confirmed they are fine. Please see the appendix for evaluation testing conditions and results.

5. Implementation date

The estimated implementation date is from October 2024 onward. For the connector, the estimated implementation date is from October 2026. The actual schedule may change, dependent on how fast the inventory of the current products will be consumed.

6. Others

Please contact your sales rep should you have any concern on this product change.

Appendix : Testing conditions and results

Test sample : PZ-30-PVST (with new components)

	Test items	Test conditions	Specification	Result
1	LIN/HYS	Ambient Temp 25°C Supply voltage 24VDC	± 1%FS	Pass
2	Thermal characterisitic	Ambient Temp 0°C,25°C,50°C Supply voltage 24VDC	± 0.5%FS	Pass
3	Repeatability	Ambient Temp 25°C Supply voltage 24VDC	± 0.2%FS	Pass
4	Short circuit protection	Ambient Temp 25°C Supply voltage 24VDC	Short circuit protection function works correctly.	Pass
5	Consumption current /Supply voltage	Constant voltage between 10.8 and 30V DC and consumption current 50mA max	The product functions correctly to meet its spec.	Pass
6	Withstand voltage	Ambient Temperature : 25°C	500VAC 1 minute Leakage current : 1mA max	Pass
7	Insulation resistance	Ambient Temperature : 25°C	500VDC 100M Ω minimum	Pass

Revision mark	Revision date	Content
	2023.10.23	First edition