

## Catalog Correction Notice

Manual

Issue Date  
August 3, 2015  
No. 2015009DE

The mistake of the print and the description is found in the manual that our company issued. It apologizes.

### [ Name of manual ]

“ G9SP Series Safety Controller OPERATION MANUAL” < Publication in June, 2014 >  
< Manual number Z922-E1-04 >

### [ Page of publishing ]

Page 54 “ 3-2-2 Local Input and Local Output Reaction Times” Reaction Time Formula

### [ Correction method ]

We revise the manual.

### [ Content of correction ]

To modify the reaction times of OMRON Safety Sensors/Switches, please verify all safety chains.

<b>Before</b>	<p>The safety sensor/switch reaction times are given below for when OMRON Safety Sensors or Switches are connected directly to the G9SP-series Controller.</p> <p>E3ZS or E3FS Single Beam Safety Sensor: <u>10 ms</u></p> <p>D40A Non-contact Switch: <math>6 \text{ ms} + 0.4 \text{ ms} \times \text{Number of connected Switches}</math></p> <p>D40Z Non-contact Switch: <u><math>6 \text{ ms} + (\text{Cycle time} \times 2) \text{ ms}</math></u></p> <p>UM Safety Mat: <u>10 ms</u></p>																											
<b>After</b>	<p>The safety sensor/switch reaction times are given below for when the following OMRON Safety Sensors or Switches are connected directly to the G9SP-series Controller.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Connected device</th> <th style="text-align: left;">Safety Sensor/Switch reaction time</th> <th style="text-align: left;">Cycle Time</th> </tr> </thead> <tbody> <tr> <td rowspan="3">E3ZS/E3FS Single-beam Safety Sensors</td> <td><u><math>2 \text{ ms} + (\text{Cycle Time} \times 3) \text{ ms}</math></u></td> <td><u>Cycle Time = 4 ms</u></td> </tr> <tr> <td><u><math>2 \text{ ms} + (\text{Cycle Time} \times 2) \text{ ms}</math></u></td> <td><u><math>5 \text{ ms} \leq \text{Cycle Time} \leq 9 \text{ ms}</math></u></td> </tr> <tr> <td><u><math>2 \text{ ms} + (\text{Cycle Time} \times 1) \text{ ms}</math></u></td> <td><u><math>10 \text{ ms} \leq \text{Cycle Time}</math></u></td> </tr> <tr> <td>D40A Non-contact Switch</td> <td><math>6 \text{ ms} + 0.4 \text{ ms} \times \text{Number of connected Switches}</math></td> <td style="text-align: center;">---</td> </tr> <tr> <td rowspan="2">D40Z Non-contact Switch</td> <td><u>31 ms</u></td> <td><u>Cycle Time <math>\leq</math> 10 ms</u></td> </tr> <tr> <td><u><math>(\text{Cycle Time} \times 3) \text{ ms}</math></u></td> <td><u><math>11 \text{ ms} \leq \text{Cycle Time}</math></u></td> </tr> <tr> <td rowspan="3">UM Safety Mat</td> <td><u><math>(\text{Cycle Time} \times 3) \text{ ms}</math></u></td> <td><u>Cycle Time = 4 ms</u></td> </tr> <tr> <td><u><math>(\text{Cycle Time} \times 2) \text{ ms}</math></u></td> <td><u><math>5 \text{ ms} \leq \text{Cycle Time} \leq 8 \text{ ms}</math></u></td> </tr> <tr> <td><u><math>(\text{Cycle Time} \times 1) \text{ ms}</math></u></td> <td><u><math>9 \text{ ms} \leq \text{Cycle Time}</math></u></td> </tr> </tbody> </table>			Connected device	Safety Sensor/Switch reaction time	Cycle Time	E3ZS/E3FS Single-beam Safety Sensors	<u><math>2 \text{ ms} + (\text{Cycle Time} \times 3) \text{ ms}</math></u>	<u>Cycle Time = 4 ms</u>	<u><math>2 \text{ ms} + (\text{Cycle Time} \times 2) \text{ ms}</math></u>	<u><math>5 \text{ ms} \leq \text{Cycle Time} \leq 9 \text{ ms}</math></u>	<u><math>2 \text{ ms} + (\text{Cycle Time} \times 1) \text{ ms}</math></u>	<u><math>10 \text{ ms} \leq \text{Cycle Time}</math></u>	D40A Non-contact Switch	$6 \text{ ms} + 0.4 \text{ ms} \times \text{Number of connected Switches}$	---	D40Z Non-contact Switch	<u>31 ms</u>	<u>Cycle Time <math>\leq</math> 10 ms</u>	<u><math>(\text{Cycle Time} \times 3) \text{ ms}</math></u>	<u><math>11 \text{ ms} \leq \text{Cycle Time}</math></u>	UM Safety Mat	<u><math>(\text{Cycle Time} \times 3) \text{ ms}</math></u>	<u>Cycle Time = 4 ms</u>	<u><math>(\text{Cycle Time} \times 2) \text{ ms}</math></u>	<u><math>5 \text{ ms} \leq \text{Cycle Time} \leq 8 \text{ ms}</math></u>	<u><math>(\text{Cycle Time} \times 1) \text{ ms}</math></u>	<u><math>9 \text{ ms} \leq \text{Cycle Time}</math></u>
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