

# PRODUCT CODES JOYSTICKS

## Explanation of Product Codes

Each product code begins with the model name. After that, for each axis, the sensor technology, the interface, and the mechanical option are specified. This is followed by the limiter, the electrical connection, the handle design, and the handle function.

Example:

**MJ-F12\_XP02\_A01\_YP02\_A01\_Z000\_A00\_B01\_C02\_D07\_E01**

- MJ-F12** Model name MJ-F12
- XP02\_A01** X-axis with potentiometer 0–100 % with directional switch and center contact; spring return to center
- YP02\_A01** Y-axis with potentiometer 0–100 % with directional switch and center contact; spring return to center
- Z000\_A00** No Z-axis
- B01** Square limiter
- C02** Connector
- D07** Handle with rubber boot, closed
- E01** Push button / Deadman switch, internal

Model name MJ-	Axes	Sensor technology	Interface	Mechanical options
<b>T</b> Thumb	<b>X</b> X-axis	<b>0</b> None	<b>00</b> None	<b>A00</b> None
<b>F</b> Finger	<b>Y</b> Y-axis	<b>H</b> Hall	<b>01</b> Potentiometer 0–100 % with directional switch	<b>A01</b> Spring return to center
<b>H</b> Hand	<b>Z</b> Z-axis	<b>P</b> Potentiometer	<b>02</b> Potentiometer 0–100 % with directional switch and center contact	<b>A02</b> Spring return to center, reduced operating force
		<b>M</b> Membrane potentiometer	<b>03</b> Potentiometer 0–100 % redundant	<b>A03</b> 1 detent step, spring return to center
			<b>04</b> Potentiometer 0–100 % redundant, center contact	<b>A04</b> 2 detent steps, spring return to center
			<b>05</b> Potentiometer 0–100 % reverse redundant	<b>A05</b> 3 detent steps, spring return to center
			<b>06</b> Potentiometer 0–100 % reverse redundant, center contact	<b>A06</b> 4 detent steps, spring return to center
			<b>07</b> Potentiometer 10–90 % with directional switch	<b>A07</b> 5 detent steps, spring return to center
			<b>08</b> Potentiometer 10–90 % with directional switch and center contact	<b>A08</b> Detent step in center, return to center
			<b>09</b> Potentiometer 10–90 % redundant	<b>A09</b> Detent steps in end position, return to center
			<b>10</b> Potentiometer 10–90 % redundant, center contact	<b>A10</b> Detent steps in end and center position, return to center
			<b>11</b> Potentiometer 10–90 % reverse redundant	<b>A11</b> 1 detent step, locking
			<b>12</b> Potentiometer 10–90 % reverse redundant, center contact	<b>A12</b> 2 detent steps, locking
			<b>13</b> Potentiometer for detent steps, digital	<b>A13</b> 3 detent steps, locking
			<b>14</b> Potentiometer for detent steps, center contact, digital	<b>A14</b> 4 detent steps, locking
			<b>15</b> Potentiometer Gray Code and center contact	<b>A15</b> 5 detent steps, locking
			<b>16</b> Hall ratiometric 0.5–4.5 V	<b>A16</b> Stepless locking
			<b>17</b> Hall ratiometric 0.5–4.5 V, redundant	<b>A17</b> Stepless locking, with detent step in center
			<b>18</b> Hall ratiometric 0.5–4.5 V, reverse redundant	<b>A18</b> Stepless locking, with detent step in end position
			<b>19</b> SPI	<b>A19</b> Stepless locking, with detent step in end and center position
			<b>20</b> CANOpen	<b>A99</b> Custom
			<b>21</b> SAE J1939	
			<b>22</b> SENT	
			<b>23</b> Profibus	
			<b>24</b> PWM	
			<b>25</b> Membrane potentiometer	
			<b>26</b> Potentiometer 7.5–92 %	
			<b>99</b> Custom	

Limiter	Electrical connection	Handle design	Handle function
<b>B00</b> None	<b>C00</b> None	<b>D00</b> No handle, only base	<b>E00</b> None
<b>B01</b> Square	<b>C01</b> Solder connection	<b>D01</b> MJ-T10 shape A	<b>E01</b> Push button / Deadman switch, internal
<b>B02</b> Square, soft guided feel	<b>C02</b> Connector	<b>D02</b> MJ-T11 shape A	<b>E02</b> Push button / Deadman switch, external
<b>B03</b> Round	<b>C03</b> Cable	<b>D03</b> MJ-F03	<b>E03</b> LED Illumination
<b>B04</b> Round, soft guided feel	<b>C04</b> Cable with connector	<b>D04</b> MJ-F11	<b>E04</b> Vibration
<b>B05</b> Cross gate	<b>C99</b> Custom	<b>D05</b> MJ-F16 shape A	<b>E05</b> LED Illumination and vibration
<b>B06</b> Single axis		<b>D06</b> MJ-F16 shape B	<b>E06</b> Configurable control panel
<b>B07</b> Single axis, Y locked, X active		<b>D07</b> Handle with rubber boot, closed	<b>E99</b> Custom
<b>B08</b> Single axis, X locked, Y active		<b>D08</b> Handle with rubber boot, open	
<b>B99</b> Custom		<b>D09</b> Handle MJ-H10	
		<b>D10</b> Handle MJ-H11	
		<b>D11</b> Handle MJ-H12	
		<b>D99</b> Custom	