

## J150/J158 GENERAL ORDERING GUIDE

Build part number first by selecting **Housing Style** (code 1), **MagElec** (code 2), and **Connection** (code 3). Add **Special Codes** (code 4) to the end of the Joral part number. Refer to 'Special Part Number Information' for explanation of modifiers.

**Examples:** **J150-A-0080-SEPP-M12-41** - 50mm Red aluminum (J150), 10mm round shaft (modifier 41), 13 bit incremental quadrature @ 80 PPR

**J150-A-1939-SC72-90** - 50mm Red aluminum (J150), 72" Shielded cable (SC72), 13 bit J1939 @ 8192 counts per rotation (modifier 90)

**J158-V1-0-180-0-5-CW-C72** - 58mm Red alu. (J158), 72" Cable (C72), 5v input (V1) @ 0-180°, 0v to 5v out, clockwise direction (CW)

Code 1: Housing Style	Code 2: MagElec (Sensor Output)	Code 3: Connection	Code 4: Special Codes
<b>J150</b> J150 = 50mm shafted made out of red aluminum, Connector orientation BACK EXIT only.  <b>Modifier Flange Mount: Special Code - 63</b> Add special code 63 to the end of J150 P/N for flange mount <i>Flange drawing found on S1; I3 / 4</i>	<b>A - SEPP</b>	13 bit single ended quadrature - A B Z	<b>40</b> 1/4" (0.250") w/ flat
	<b>A - DIPP</b>	13 bit differential quadrature - A B Z, A' B' Z'	<b>41</b> 10mm round
	<b>A - 1939</b>	13 bit J1939 @ 1000 positions	<b>42</b> M8 male
	<b>B - PWM</b>	Absolute position PWM	<b>43</b> M12 male
	<b>A - MOD1</b>	13 bit Modicon MODBUS @ 8192 positions	<b>44</b> M12 male on 18' pigtail
			<b>45</b> Flying lead cable (enter XX as inches)
			<b>51</b> Red aluminum
			<b>53</b> Black aluminum
			<b>63</b> Flange Mount
			<b>90</b> 13 bit @ 8192 counts per rotation (Typical J1939 option)
<b>J158</b> J158 = 58mm shafted made out of red aluminum, Connector orientation BACK EXIT only.	<b>A - SSI1</b>	Absolute position SSI @ 8192 positions	<b>91</b> 13 bit @ 1000 counts per rotation (Typical MODBUS option)
	<b>V1</b>	5 VDC IN, 0-5 VDC OUT	
	<b>V2</b>	6-36 VDC IN, 0-5 VDC OUT	
	<b>V3</b>	0-24 VDC IN, 4-20 mA OUT x2 (Redundant output)	
	<b>I1</b>	0-24 VDC IN, 4-20 mA OUT	
<i>* More outputs and connection options available, contact Joral if desired configuration is not listed</i>		<b>I2</b>	0-24 VDC IN, 4-20 mA OUT x2 (Redundant output)

## Special Part Number Information *Review below code sections for important P/N build information*

### Code 1: Housing Style

- **Modifier 63** - For flange mount (J150 only) add code 63 to end of Joral P/N
- **J150** - 50mm, Red aluminum / Back exit connections only
- **J158** - 58mm, Red aluminum / Back exit connections only

### Code 2: MagElec

(A - SEPP) or (A - DIPP)

- Enter Quadrature PPR in place of \_\_\_\_\_
- A = 13 bit PPR
- **Available 13 bit PPR:** 0008, 0010, 0016, 0020, 0025, 0032, 0040, 0050, 0064, 0080, 0100, 0125, 0128, 0200, 0250, 0256, 0400, 0500, 1024, 2048

#### A - 1939

- Standard J1939 output is 1000 positions
- A = 13 bit
- **MODIFIER 90** - for 8192 positions (max resolution) add code 90 to end of J150/J158 P/N

#### A - MOD1

- Standard MOD1 output is 8192 positions
- A = 13 bit
- **MODIFIER 91** - for 1000 positions add code 91 to end of J150/J158 P/N

#### V1, V2, and I1 (Analog MagElec P/N Guide)

- First select MagElec code (**V1, V2 or I1**) then Angle Range (**A1-A2**), Voltage Range (**VR1-VR2**) and Signal Direction (**Clockwise [CW] or Counter [CCW]**)
- **PART NUMBER FORMULA** (MagElec)-(A1-A2)-(VR1-VR2)-(CW or CCW)
- **EXACT V1, V2, and I1 EXAMPLES**  
 J150 - **V1 - 0-360 - 0.5-4.5 - CW - C72**  
 J158 - **V2 - 0-180 - 0-5 - CCW - DE4**  
 J158 - **I1 - 180-270 - 4-20 - CW - M12**

### Code 3: Connections

- **All Outputs, All Connections** - Connector exit back exit only (sensor epoxy side) for housing style J150 and J158
- **J1939 Output** - Addressing via varying value resistor in connection requires at least five conductors (*M12, DE6 and Cables addressing compatible*)
- **All Outputs w/ Deutsch** - DE4 and DE6 connection Deutsch connectors add \$20 to J150/J158 list

