

# Codes Introduction detailed

## Absolute

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**Sensing Principle:**

- O:** Industrial Optical
- M:** Industrial Magnetic

**Mechanism:**

- B:** Battery Type
- P:** Plastic Gear
- C:** Copper Gear
- 0:** Single Turn

**Installation Type:**

- CF:** Clamping Flange  
(pitch circle diameter ø48mm)
- SF:** Synchro Flange  
(screw flute ø53mm, pitch circle diameter ø42mm)
- BHS:** Blind Hollow Shaft
- THS:** Through Hollow Shaft
- TEF:** EURO flange B10
- PS:** Plane-surface Coupling
- QCF:** Square Flange Adaptor  
(for 58mm Body and 10mm Shaft)

**Housing Diameter (mm):** 38,40,48,50,58,68,80,90,100

**Shaft/Hollow Size:**

- S6:** Solid Shaft ø6 x 10mm, Flat End
- S8:** Solid Shaft ø8 x 15mm, Flat End
- S10:** Solid Shaft ø10 x 20mm, Flat End
- S11:** Solid Shaft ø11 x 30mm, Flat End
- CS10:** Cone Taper shaft ø 9.25 mm; taper 1:10
- H6:** Hollow Shaft ø6mm, Clamping Ring
- H8:** Hollow Shaft ø8mm, Clamping Ring
- H10:** Hollow Shaft ø10mm, Clamping Ring
- H12:** Hollow Shaft ø12mm, Clamping Ring
- H14:** Hollow Shaft ø14mm, Clamping Ring
- H15:** Hollow Shaft ø15mm, Clamping Ring
- ...

**Output Format/Protocol:**

- P:** Parallel
- S:** SSI
- PF:** Profi-Bus
- PN:** Profi-Net
- D:** DeviceNet
- E:** EtherCAT
- C:** CANopen
- M:** Modbus-RTU / TCP
- BC:** BISS-C
- BB:** BISS-B
- I:** EtherNet/IP
- SJ:** SAE J1939
- PL:** POWERLINK
- SI:** SSI+Incremental
- ED:** EnDat

**Customization**

Incremental Pulse Resolution  
(for Dual Output Encoders)

**Protection Class:**

- 1:** IP 40
- 2:** IP 54
- 4:** IP 64
- 5:** IP 65
- 6:** IP 66
- 7:** IP 67
- 8:** IP 68
- 9:** IP 69
- K:** IP 69K

**Output:**

- B:** Binary Code
- G:** Gray Code
- E:** Gray Excess Code
- D:** BCD Code
- A:** Current Output 4...20mA
- V:** Voltage Output 0...+10V
- V2:** Voltage Output 0.5...+4.5V

**Connection:**

- R:** Cable Radial, 1m
- T:** Cable Axial, 1m
- P:** Cable tangential, 1m
- F:** Flange Socket Radial, M23, 12-pin, Male Contacts, CCW
- D:** Flange Socket Axial, M23, 12-pin, Male Contacts, CCW
- B:** Flange Socket Radial, M12, 8-pin, Male Contacts, CCW
- A:** Flange Socket Axial, M12, 8-pin, Male Contacts, CCW
- C:** Flylead Connector
- CB4:** PCB connector 14-pin
- CB2:** PCB connector 12-pin
- U:** Bus Cover
- O:** Terminal Box

**Supply Voltage:**

- 1:** 5V
- 2:** 12V
- 3:** 24V
- 4:** 4.75-30V

**Resolution:**

- ST X :** SingleTurn  
(X:Steps per turn in bits)
- MT X :** MultiTurn  
(X:Number of turns)
- P:** Programmable MT/ST

**Absolute Encoder**