

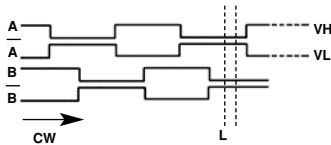
Series PHD/Pendant Hand-held

with E-Stop(2-Contacts) / Enable SW / Push Button SW capability



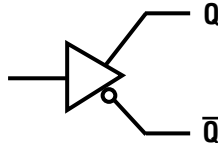
US \$870.00
S.R.P.
List Price

OUTPUT WAVE FORMS



Relation between output signals and click stop position.

OUTPUT CIRCUIT



26LS31 or equivalent
Recommended line receiver: 26LS32

FEATURES

- New! 2-Contacts E-Stop SW (2B-Options are pre-wired)
selection of wiring either 1A or 2B available
- New! Durable thick-wall case & reliable thread mold with brass inserts
- New! Durable thick multiplier & axis selector Blue SW's
- New! Push Button SW's by IDEC (Sold Separately)
- 5v Linedriver and 5v TTL outputs (Point to point)
- IP 65, NEMA 4 enclosure protection
- Std. 16ft.extended spiral cable
- Std. Magnets attached in rear
- Circular Plastic Size 17 & Amphenol Alloy Size 24 Connector Kits

SPECIFICATIONS

Electrical

Outputs	Line Driver	TTL Voltage Output for FANUC
Pulse per Revolution	100 PPR	
Supply Voltage	5 v±0.25 v dc	5 v±0.25 v dc
Output Voltage (VH)	≥2.5 v	≥4.0 v
Output Voltage (VL)	≤0.5 v	≤0.5 v
Current Requirement	≤60 mA (No Loading)	
Sink Current	≤20 mA	
Output Capacity	Sync. Current: 20 mA, Residual Voltage: ≤0.5 v	
Phase Difference	Quadrature Square Wave A & B: 90°±45° (T/4±T/8)	
Rise/Fall Time	≤2 μs	
Frequency Response	5 kHz	
Insulation Resistance	20 MΩ At 500 v dc Megger (Circuit-Body)	
Spiral Cable	16 ft. extended, 25 pol., 22-24 AWG	

Mechanical

Dial Rotating Speed	500 r/min.-Max., 200 r/min.-Normal (Continuous)
Starting Torque	5 ozf-in (360 gf-cm) at 25°C
Rotational Life	10x 6 bits turns at ≤ 200 rpm
Weight	3 lbs (1.5 kg)

Environmental

Operating Temperature	0° to 60° C
Humidity	RH 35% to 90% no condensation
Storage Temperature	0° to 80° C
Vibration	2G
Shock	0.5G
Enclosure	IP65/NEMA 4

Rotary Switch (PTP, Step Angle 30 Degree)

Max. Voltage	30 v dc
Current / Switch Life	50 mA / ≥25,000 cycles

Emergency Stop Switch (Omron, 2B, A165E-S-02)

DC Load Resistance	30 vdc, 1.0 A OMRON # A165E-S-02
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Enable Switch (Dailywell, 1A, PAS6B1M1CES-5)

DC Load Resistance	50 vdc, 100 mA Dailywell # PAS6B1M1CES-5
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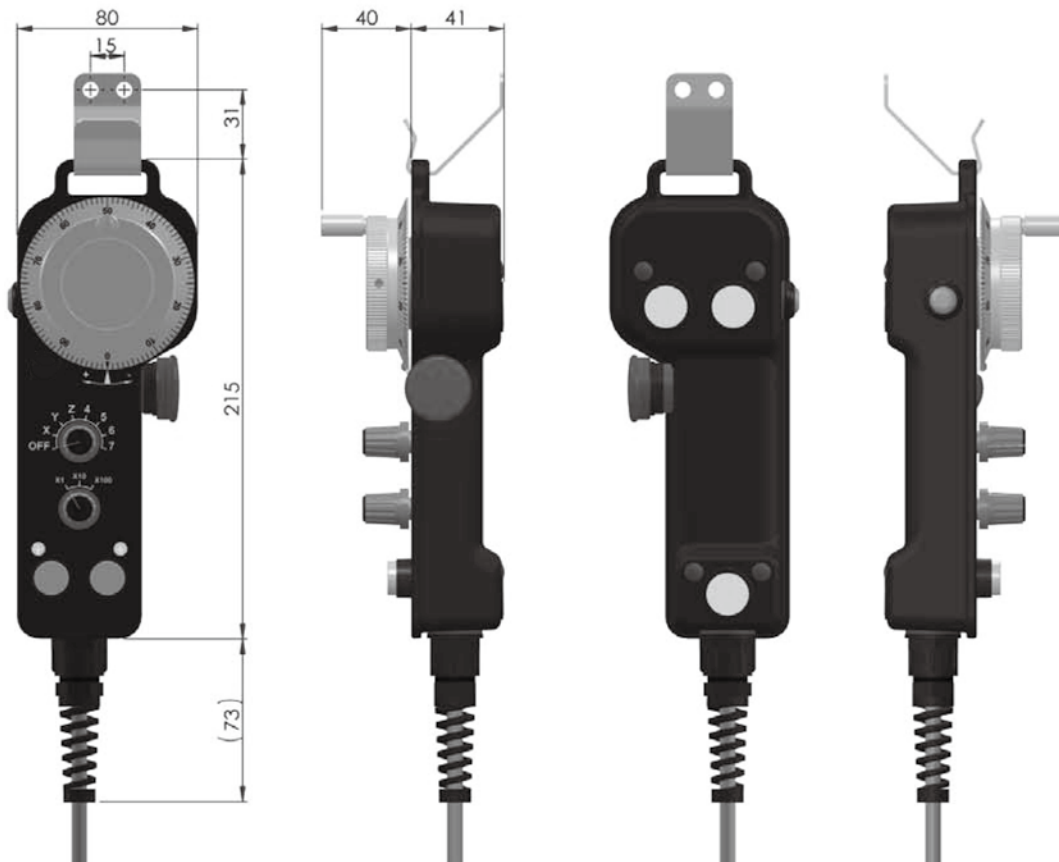
Series PHD / Pendent Hand-Held / 6 Axis / With E-Stop (2-Contacts) / Enable SW

MODEL NUMBER	SPECIFICATION	LIST PRICE
PHD-100-E-6-L	100 Pulse, 5v DC, Linedriver Output, E-Stop SW, Rear Magnets Two (2) Mode Switches. (6 axis and multiplier) 5m (16 ft.) Spiral Cable	\$870.00
PHD-100-E-6-L-EN (w/Push Button SW capability)	100 Pulse, 5v DC, Linedriver Output, E-Stop SW, Enable SW, Rear Magnets Two (2) Mode Switches. (6 axis and multiplier) 5m (16 ft.) Spiral Cable	\$950.00
PHD-100-E-6-T-EN (For FANUC w/Push Button SW capability)	100 Pulse, 5v DC, TTL Output, E-Stop SW, Enable SW, Rear Magnets Two (2) Mode Switches. (6 axis and multiplier) 5m (16 ft.) Spiral Cable	\$950.00

Series PHD / Pendent Hand-Held / 6 Axis / E-Stop (2-Contacts) / Push Button SW

MODEL NUMBER	SPECIFICATION	LIST PRICE
PHD-100-E-6-L-PB (w/Push Button SW capability)	100 Pulse, 5v DC, Linedriver Output, E-Stop SW, Push Button SW Capability. Order Separately. Rear Magnets Two (2) Mode Switches. (6 axis and multiplier) 5m (16 ft.) Spiral Cable	\$890.00
PHD-100-E-6-T-PB (For FANUC w/Push Button SW capability)	100 Pulse, 5v DC, TTL Output, E-Stop SW, Push Button SW Capability. SW Order Separately. Rear Magnets Two (2) Mode Switches. (6 axis and multiplier), 5m (16 ft.) Spiral Cable	\$890.00

Outline Drawings (mm)



Series PHD / Pendant Hand-held

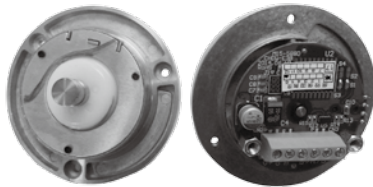
with E-Stop(2-Contacts) / Enable SW / Push Button SW capability

Push Button SW (-Sold Separately) -D.I.Y.Work



MODEL NUMBER	SPECIFICATION	LISTPRICE
AL6M-M14PWC	Momentary Push Button SW -IDEC, Hole dia 16 mm, SW dia 16-18 mm. Direct replacement for our previous Deca #D16LMR2 comes with One(1) set -(2) flying 3" wires w/2-pin conn. on the end	\$24.00
AL6M-A14PWC	Alternate Push Button SW-IDEC, Hole dia 16 mm, SW dia 16-18 mm. Direct replacement for our previous Deca #D16LAR2 comes with One(1) set -(2) flying 3" wires w/2-pin conn. on the end	\$24.00

Replacement MPG for PHD-100-E-6 Series-Yellow SW's



MODEL NUMBER	SPECIFICATION	LIST PRICE
HDW-AE-80-CHM	Replacement MPG for 5v Line Driver outputs such as PHD-100-E-6-L, PHD-100-E-6-L-EN, PHD-100-E-6-L-PB, D.I.Y.Work	\$250.00
HDW-AA-80-CHM	Replacement MPG for 5v TTL-Fanuc models outputs such as PHD-100-E-6-T-EN, PHD-100-E-6-T-PB, D.I.Y.Work	\$250.00

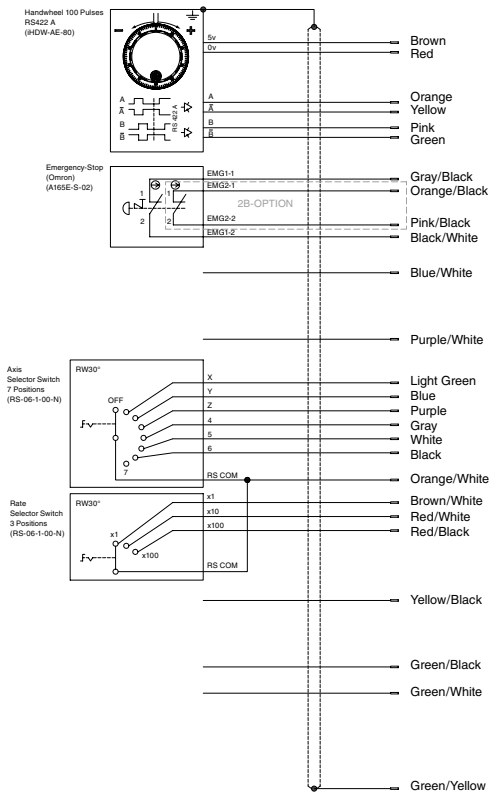
How to install a Replacement MPG to the old Pendant 2006-2016 model (Yellow SW's, Symmetrical Design)



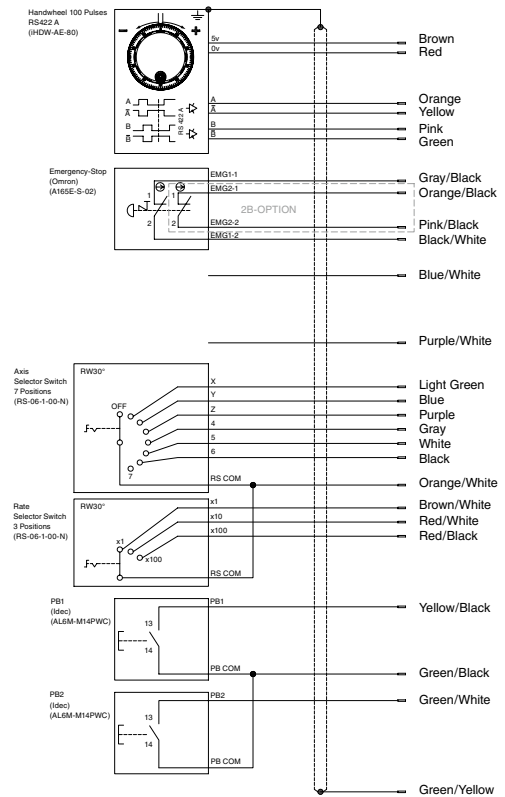
1. Take MPG dial out either side Hex. 2mm set screw of dial or remove the center aluminum plate out using a mini-flat screw driver.
2. Also, take (2) SW's out.
3. Take all screws (8) out from the front panel.
4. Cut over-sized 1.65" hole on the existing 1" hole of the front plastic panel.
5. Cut previous 6-wires and those flying wires insert into the new MPG.
6. Wire-color code:
5v – Brown
0v – Red
Ch.A – Orange
Ch.B – Pink
Ch.Anot – Yellow(Line Driver only)
Ch.Bnot – Green (Line Driver only)

Wiring Diagram-5v Line driver output (2B-Options are pre-wired)

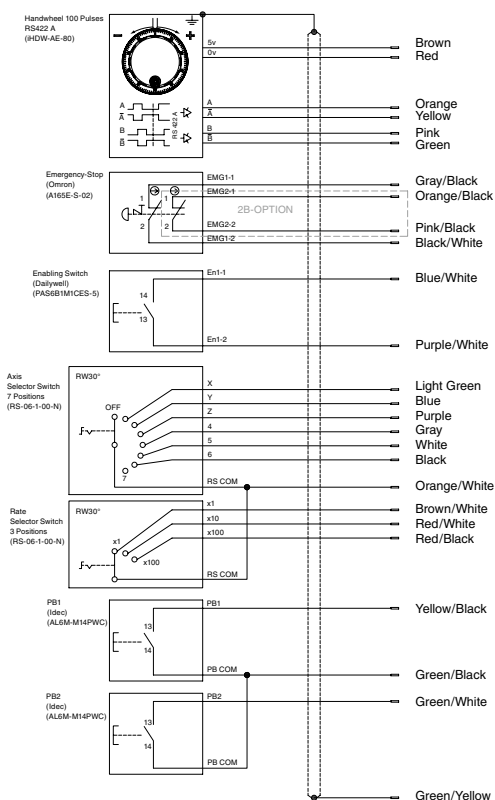
PHD-100-E-6-L



PHD-100-E-6-L-PB



PHD-100-E-6-L-EN

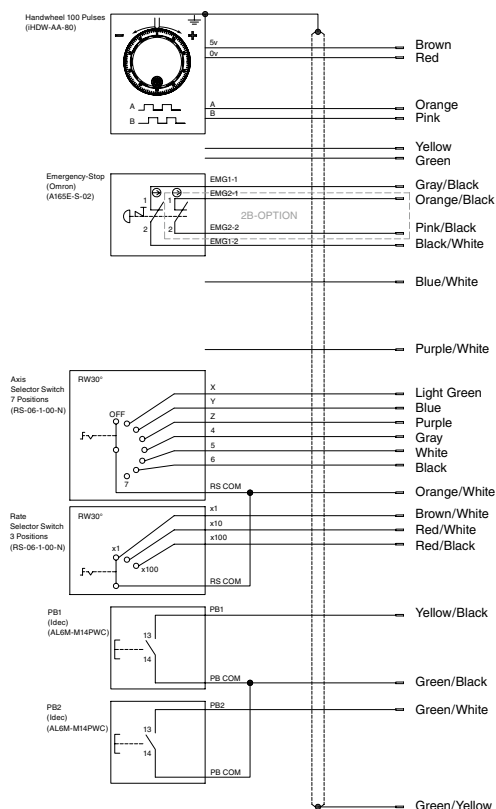


Wiring Diagram-5v TTL(Fanuc) output (2B-Options are pre-wired)

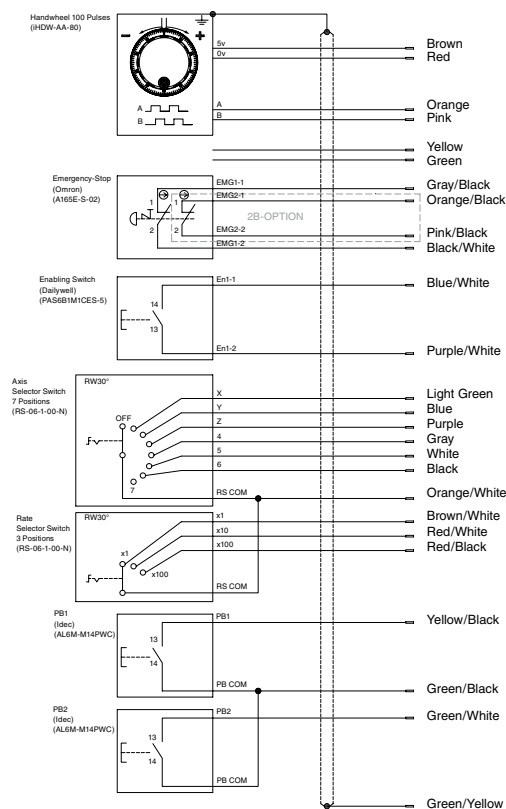
**WORLD
ENCODERS**

1-800-903-9093

PHD-100-E-6-T-PB



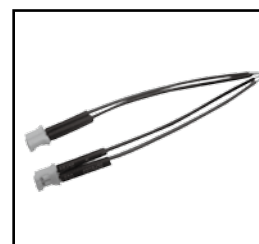
PHD-100-E-6-T-EN



MODEL	PRICE
EE-6C004-A01	\$280.00
Replacement *5 m (16 ft.) Spiral Cable (25 wires)D.I.Y.Work* 5 m (16 ft.)-Extended length. Shrunk length= approx. 6 ft.	



MODEL	PRICE
PH2.0-2P L8cm**	\$4.00
Two(2) sets 3" length flying wires w/2-pin conn.on the end for your own Push Button SW's (Not World Encoders Brand) **If use World Encoders Push Button SW, Not required .	



MODEL	PRICE
Amp CPC Size 17 connector kit	\$90.00
1.3"O.D., 0.75" I.D., 28 pos., #18-28 AWG Gold Solder 1-#206039-1 Plug, 28-#66570-3 Pin, 28-#66569-3 Socket, 1-#206038-1 Mating Receptacle 1-#207241-1 Cable Boot, 1-#207387 Cable Grip	



MODEL	PRICE
Amp CPC Size 23 connector kit	\$190.00
1.73"O.D., 1.20" I.D., 24 pos., #20-26 AWG Gold Solder 1-#206037-1 Plug, 24-#66182-1 Pin, 24-#66183-1 Socket, 1-#206038-Mating Receptacle, 1-#206138-8 Cable Clamp, 1-#CF20MA-BK Strain Relief	



MODEL	PRICE
Amphenol Alloy Size 24 connector kit	\$90.00
1.7"O.D., 1.21" I.D., 24 pos., Size 24-28, 1-1/2"-18 UNEF 1-#MS3106F24-28P Straight Cable Plug with 24 Pin-Solder-Contacts, 1-Cable Clamp Backshell, 1-Rubber Grommet 1-#MS3102E24-28S Mating Receptacle with 24 Socket-Solder-Contacts, 1-Rubber Washer 1-1/4"O.D.x 3/8" I.D. x 1/16" 1-#AN3420-16, 1-#AN3420-6 Rubber Bushing Boots	