

Modular Switches - continued

Sub-Miniature Push Button - PE Series - continued

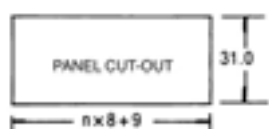
100mA @ 50V ac/dc - continued

Output Code	Readout	Order Code	1+	25+	100+	250+	+
Switch Modules							
Decimal	0-9	118-0020	478.00	401.00	353.00	324.00	--
BCD+Complement	0-9	118-0021	540.00	453.00	400.00	367.00	--
Hex	0-9, A-F	118-0023	553.00	464.00	408.00	374.00	--
Accessories							
LH end cheek		118-0007	63.00	55.00	46.00	41.00	--
RH end cheek		118-0011	63.00	55.00	46.00	41.00	--
			5+	25+	100+	+	+
2.5mm spacer		118-0012	46.00	41.00	36.00	--	--

213085

Standard Thumbwheel and LED Readout Module

84210/84216 Series



H=33.0, W=8.0 (switch),
W=9.0 (end plates per pair)
W=8.0 (accessories), D=28.5,
Board length=18.5
Max panel thickness=3.5, Pad pitch=2.54

- Front panel mounting by retaining clips on end plates and separators
- Modules and end plates all snap together
- Standard thumbwheel switches
- Long board fitted to modules to accommodate diodes and resistors
- Matching 7-segment LED display is common cathode, decodes BCD to 7-segment, has memory and handles ripple blanking
- Spacer: blank module used to replace a module assembly
- Separator: used to fit 2 switches into one unit (complete with 2 clips)

Mfrs. List No.	84210056 = 143-616	84216005 = 145-217	79211745 = 143-619
	84210054 = 143-617	79211759 = 143-618	79211760 = 143-620

213347

Output Code	Readout	Order Code	1+	50+	100+	250+
Switch Modules						
BCD	0 - 9	143-616	1,020.00	932.00	888.00	732.00
Decimal	0 - 9	143-617	1,020.00	932.00	888.00	732.00
LED Readout Module						
BCD with memory, +5V		145-217	3,517.00	3,241.00	3,078.00	2,558.00
Accessories						
End plates, pair		143-618	116.00	111.00	103.00	91.00
Spacer		143-619	58.00	54.00	50.00	39.00
Separator		143-620	93.00	88.00	83.00	74.00

Joystick Controllers

Dual Axis (Potentiometer)



Panel Cut Out

- Potentiometric dual axis control
- Self centering to zero position
- Precision ground stainless steel ball pivot and shaft
- Special blended plastics reduce friction on the bearing surfaces
- Supplied with a square black textured bezel

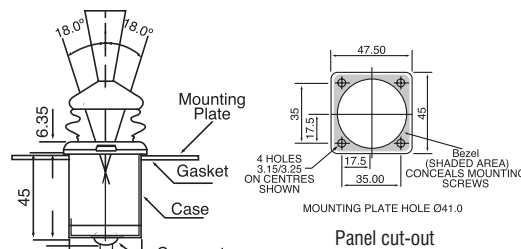
Joystick travel 25% from centre in all directions
Return to centre repeatability ±1%
Potentiometer 5KR, 1W conductive plastic, set at centre of resistance

Panel thickness 1.25mm to 4.75mm
Mechanical life > 5 million operations
Operating temperature -10°C to +65°C

213190

Mfrs. List No.	Order Code	1+	10+	25+	+
M11Q061P	112-4084	3,854.00	3,547.00	3,506.00	--

Dual Axis (Non-Contacting)



- EMC protected
- Sealed to IP65
- Inductive joystick with non-contacting sensor system
- Excellent proportional dual axis control
- Internal dual amplifier circuit for additional operational safety
- Connection by 200mm flying leads

Performance details:

Input voltage 5 to 14V
Output impedance, signal 1.8kR
Output impedance, centre tap 0.34kR
Life in normal use 15 million cycles

Connections:

Red Positive supply
Black Negative supply
Green Centre tap
Blue X Axis
Yellow Y axis

Characteristics with 10V dc supply:

Current drain 15mA max.
Ripple 10mV max.
Centre tap voltage (V centre) 5V ± 30mV
Self centre within V centre ± 20mV
Voltage swing ±1V ± 10%
output voltage, normal range 4 to 6V ± 0.1V
Operating voltage on detected failure < 3.5V, > 6.5V

Operating temperature range -25°C to +70°C

213203

Mfrs. List No.	Order Code	1+	5+	10+	25+
JC200BS1K1Y	119-1278	3,636.00	3,329.00	3,201.00	3,056.00

Single, Dual and Three Axis (Non-Contacting)



(All heights=above panel), Below panel depth=32.4 max.

- Single, dual and three axis joysticks
- Uses non-contacting hall effect technology
- Small compact housing
- Sealed to IP65
- RFI and EMI resistant
- Durable rubber boot and sealing gasket
- Precision ground stainless steel shaft

Input Voltage 5V
Centre Output voltage 2.5V
Operating life 15000000 ops
Supply current 8mA (2 axis), 12mA (3 axis)
Travel 40° (±20°) self centering

213308

Axis	Handle type	Order Code	1+	10+	25+
Single	Taper	112-4089	4,452.00	4,229.00	4,007.00
Dual	Ball	112-4087	4,452.00	4,229.00	4,007.00
Dual	Taper	112-4088	4,452.00	4,229.00	4,007.00
Dual	Standard+switch	112-4090	5,175.00	4,915.00	4,657.00
Three	Standard	112-4091	8,210.00	7,799.00	7,389.00
Three	Standard+switch	112-4093	8,866.00	8,423.00	7,979.00
Three	Low profile	112-4094	8,210.00	7,799.00	7,389.00