

A Curtiss-Wright Company

The Penny+Giles PGFM9000 series fader builds on the reputation and strengths of the 3000 series fader. With an innovative design that provides improved environmental protection, the robust PGFM9000 series fader continues the Penny+Giles long standing tradition of excellence.

With a sleek, low under panel profile the PGFM9000 series is perfectly suited to applications where under panel space is limited

• environmentally protected

- 60mm and 100mm options
- low profile design
- linear servo output
- integrated motorised control

www.pennyandgiles.com

## PGFM9000 SERIES LINEAR MOTORISED FADERS

## PGFM9000 linear motorised fader



#### **SELECT THE FADER OPTIONS YOU REQUIRE**

Stroke length	60 <sup>300</sup> 100
Output channels	One
Resistance ±20%	<b>5k</b> Ω <b>C 10k</b> Ω
Mounting threads	M3 4-40 UNC
Terminations	AMP A JST J Flying leads
Output law	Servo short S Servo long

Safety warning

**50Vdc maximum voltage** The PGFM9000 is designed for operation at voltages not exceeding 50Vdc

#### **SWITCH OPTIONS**

#### Pre-fade listen (PFL)

The switch operates before the active track is reached. This is at the motor end of the fader and is always under spring load. Spring returns switch to off when knob is released.

Pre-fade listen track switch (2mA maximum)	Ρ
No switch	Ν
No switch, rubber stop fitted *	S

\*The fader mechanical stroke will be reduced if this option is selected

### 2 mm Travel 2 mm Pre Fade Listen

#### **DIMENSIONS AND KNOB BRACKET OPTIONS**

All dimensions shown in mm



#### ELECTRICAL DATA

Linearity Maximum wiper current Touch resistance Insulation resistance ±2% 2mA <300Ω at 0.1m/sec 20MΩ at 50V d.c

#### **DRIVE MOTOR DATA**

Motor type		Iron cored
Motor supply	Vdc	5.0 - 11.5
Nominal supply	Vdc	8 constant

It is important that the fader slider is NOT driven against the end stops.

#### **CIRCUIT DIAGRAMS/TERMINATIONS**

Function Motor positive

Switch

Motor negative

Switch wiper

Servo 100%

Servo wiper

Touch sense

Servo 0%

Ground

#### No Switch - N or S options

Pre-Fade Listen - P option

Colour

Red

Blue

White

Green

Red

Blue

Yellow

Black

Grey

Pin	Colour	Function
1	Red	Motor positive
2	Blue	Motor negative
3	Red	Servo 100%
4	Blue	Servo 0%
5	Yellow	Servo wiper
6	Grey	Touch sense

# Servo







#### Note

Pin

1

2

3

4

5

6

7

8

9

Faders are fitted with either flying leads, AMP (770602) connector on 100mm leads or JST (EHR-6 or EHR-9) connector on 100mm leads.

Mating connectors (board mounted)

Housing - JST type EH mating shrouded header or AMP type MTA-100 headers.

#### SERVO DETAILS

#### Long servo

The electrical length of the servo track is longer than the mechanical stroke of the fader so that 0%V and 100%V are never achieved.

#### Short servo

The electrical length of the servo track is shorter than the mechanical stroke of the fader so that 0%V and 100%V are achieved before reaching the limits of mechanical travel.

#### FADER KNOB OPTION



An 11mm satin finish chrome P+G knob is available to purchase separately

#### TO ORDER OR OBTAIN A QUOTATION PLEASE CONTACT YOUR NEAREST SALES OFFICE AND ADVISE:

The series number and description • the stroke length • resistance • fixing threads • switches • bracket height • connector type or flying leads • servo type

For example: • PGFM9000 motorised fader • 100mm stroke •  $10k\Omega$  resistance • M3 mounting inserts • no switch • 4.1mm knob bracket height • AMP connector • long servo track Penny+Giles would code this fader as:

Fader type	series	stroke	resistance		inserts	switches			bracket	ket termination		n	servo
	PGFM9	100	1	D	1	м	1	N	1	Α	1	Α	1



#### www.pennyandgiles.com

#### Penny & Giles

Faders and controllers, position sensors, joysticks and solenoids for commercial and industrial applications.

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#### **Quality Approvals**



Penny+Giles are accredited to BS EN ISO 9001:2008 Quality is at the heart of all our systems ensuring the reliability of our products from initial design to final despatch.

Certificate No. LRQ 0924881

#### EMC Directive 2004/108/EEC



The products detailed in this document are supplied as components for installation into an electrical apparatus or system. They are outside the scope of the EEC directive and will not be CE marked.

The information contained in this brochure on product applications should be used by customers for guidance only.

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Innovation In Motion