## Penny+Giles

A Curtiss-Wright Company

The Penny+Giles PG FM9000 series fader builds on the reputation and strengths of the 3000 series fader. With an innovative design that provides improved environmental protection, the robust PG FM9000 series fader continues the Penny+Giles long standing tradition of excellence.
With a sleek, low under panel profile the PG FM9000 series is perfectly suited to applications where under panel space is limited

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


## PG FM 9000 SERIES

LINEAR MOTO RISED FADERS

## PGFM9000 linear motorised fader

## SELECT THE FADER OPTIONS YOU REQUIRE



## 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) $\square$
No switch
No switch, rubber stop fitted *
$\square$
*The fader mechanical stroke will be reduced if this option is selected

## ELECTRICAL DATA

Linearity
Maximum wiper current
Touch resistance

## $\pm 2 \%$

2 mA
$<300 \Omega$ at $0.1 \mathrm{~m} / \mathrm{sec}$
$20 \mathrm{M} \Omega$ at 50 V dec

## 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.


## dIMENSIONS AND KNOB BRACKET OPTIONS

All dimensions shown in mm


CIRCUIT DIAGRAMS/TERMINAIIONS


## SERVO DEIAILS

Long servo
The electrical length of the servo track is longer than the mechanical stroke of the fader so that $0 \% \mathrm{~V}$ and $100 \% \mathrm{~V}$ are never achieved.

## Short servo

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

## FADER KNOB OPIION



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

## TO ORDER OR OBTAIN A QUOTAIION 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: - PG FM 9000 motorised fader • 100 mm stroke • $10 \mathrm{k} \Omega$ resistance - M3 mounting inserts • no switch

- 4.1 mm knob bracket height • AMP connector • Iong servo track Penny+Giles would code this fader as:

| Fader type | series | stroke |  | ta |  | inserts |  | switc |  |  |  |  | ina |  | servo |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PGFM9 | 100 | / | D | / | M | / | N | / | A | / |  | A | / | L |

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| wwwrpennyandgiles.com |  | $\bigcirc$ |
| :---: | :---: | :---: |
| Penny \& Giles |  | $\bigcirc$ |
| Faders and controllers, position sensors, joysticks and solenoids for commercial and industrial applications. |  | 3 |
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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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