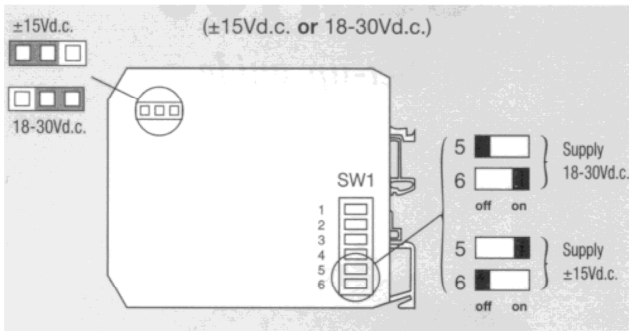


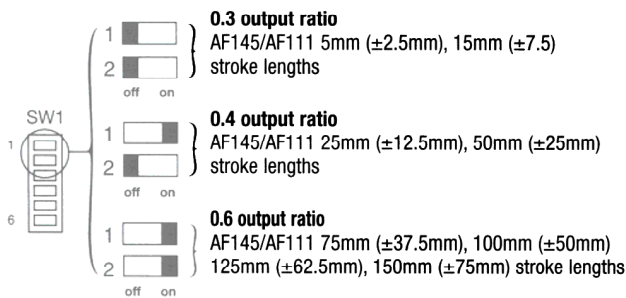
Note: It is essential that steps 1 to 4 must be carried out before connecting power supply or LVDT to SCM100 board.

Step 1 Set supply voltage option using link LK 1 and switches 5 and 6 on SW1 shown. The unit is supplied pre-set for 18-30Vd.c. operation. For ± 15 Vd.c. operation, remove blanking plug (if fitted) from terminal 2 before proceeding.



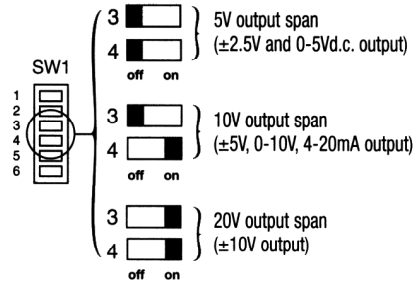
Step 2 Fit appropriate power supply label onto box.

Step 3 Select LVDT output ratio R using switches 1 and 2 on SW1 as shown.



Step 4 Set output span using switches 3 and 4 on SW1 as shown

Note: 4-20mA is available on SCM100/I only \pm voltages only available with ± 15 V power supply



Step 5 Establish LVDT null point
Connect multimeter or output monitoring device to pins 7+8 (voltage) or pins 8+9 (current)

Connect power supply to the SCM100
(+15V to pin 1, 0V to pin 2 and -15V to pin 3 or 24V to pin 1 and 0V to pin 3)
Do not connect 24V across pins 1 and 2.

If not already connected, link pin 4 to pin 10, and pin 5 to pin 12.

Adjust the null trim pot to give the chosen mid stroke output null value i.e.

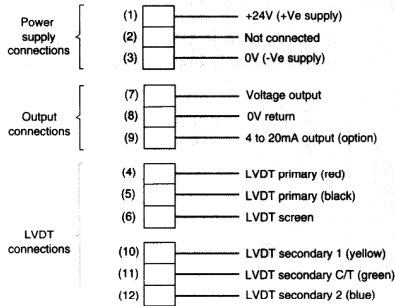
0.000V for ± 10 V, ± 5 V or ± 2.5 V output range
5.000V for 0-10V output range
2.500V for 0-5V output range
12.00mA for 4-20mA output range

Remove the links then connect the LVDT to the SCM100 - see page 4.

Reposition the LVDT shaft as necessary to achieve the mid-stroke output (0V, 5V, 2.5V or 12mA as above).

This shaft position corresponds to the LVDT mid stroke.

CONNECTION DETAILS
(24Vd.c. single rail supply)



Step 6 Gain calibration
Move LVDT shaft to the electrical extend position and adjust the gain trim pot to give the desired full scale output e.g.

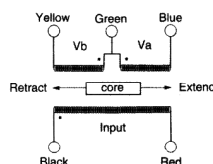
- +10V for ± 10 V or 0-10V configuration
- +5V for ± 5 V or 0-5V configuration
- +2.5V for ± 2.5 V configuration
- +20mA for 4-20mA configuration

Move LVDT shaft to electrical retract position and verify zero.

Note: this will be approx 50mV with 24V supply.

Step 7 Slope reversal
Swap over yellow and blue LVDT connections to reverse output slope.

AF111/145 LVDT SCHEMATIC



For technical assistance contact your local distributor or Penny+Giles Controls Ltd, UK Tel: +44 (0)1202 409409



SCM100

Set-up guide

