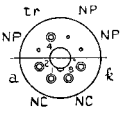
Ferranti

ED25

STROBOSCOPIC LIGHT SOURCE

A gas filled cold cathode arc discharge tube designed for use in stroboscopic applications at frequencies up to 150 flashes per second. It emits a white light.



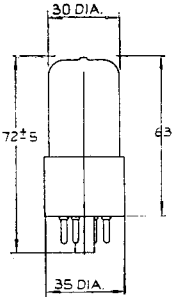
Underside View of Base

PHYSICAL DETAILS.

Base	International Octal.
Max. Seated Height	63 mm. (2·48")
Max. Overall Length	77 mm. (2·86")
Max. Diameter	35 mm. (1·38")
Mounting Position	Any (Vertical-base down preferred)

PIN CONNECTIONS.

Pin 1—Anode	Pin 5—Blank
Pin 2—Anode	Pin 6—Blank
Pin 3—Blank	Pin 7—Cathode
Pin 4—Trigger	Pin 8—Cathode



RATINGS.

Max. Anode Voltage	500 volts
Max. Flash repetition rate ...	150 per sec.
Max. Discharge Capacitor ...	8 μF

TYPICAL OPERATION.

D.C. Supply Voltage	450 volts
*Trigger Voltage	2 to 4 kV
Discharge Capacitor	0·5 μF
Charging Resistance	8000 ohms
Flash Repetition Rate	150 per sec.

Dimensions in Millimetres

See overleaf for a typical stroboscope circuit with suitable component values.

*A suitable trigger pulse transformer is Ferranti Type PT56.

Issue 2.
Aug. 1962.

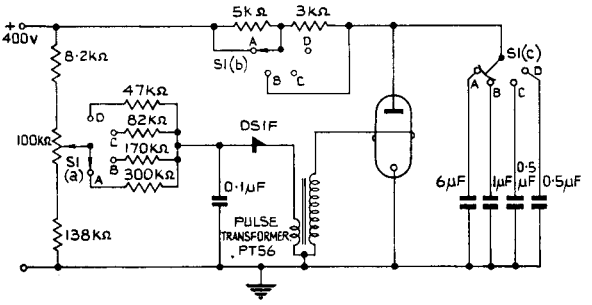
Ferranti

TYPICAL OPERATION (Continued).

The circuit of a Stroboscope offering repetition rates up to 150 flashes per second in 4 ranges is shown below.

The approximate frequency of the four ranges is as follows.

Switch in position	A ...	100–150 c/s (6000–9000 r.p.m.)
	B ...	30–100 c/s (1800–6000 r.p.m.)
	C ...	15– 30 c/s (900–1800 r.p.m.)
	D ...	1– 15 c/s (60– 900 r.p.m.)



The resistors R1 or R2 should be of the vitreous type with a dissipation rating of 14 watts.

The above range coverage is only applicable with an input voltage of 400 V D.C. and with resistors of close tolerance (5%).