

We can make bespoke indicators to your requirements, with a manufacturing technique honed to reduce the heavy cost penalties normally associated with non-standard products. Much of our bespoke work is provided using features of standard products, tailored to meet specifications. Tranilamp has the benefit of more than 50 years experience in this market, and can draw on this to find an economic solution to your problem.

Bespoke

Data Sheet	Page No	Issue No	Product Description	Product Range
Panel Control Units - Standard Range				
200	1&2	3	Housing and Lens Assemblies	JY and H Series
201	1	3	Lamps - MES MBC	Filament LED7 LED4 LEDM1
201	2	3	Audible Alarms, Neons, OptoLED7	AK NB2 NG2 NW2 Optoled
202	1&2	3	Transformer Lamp Indicator	TMU TEMU
203	1&2	3	Multi-Test Transformer Indicator (AC)	MTMU
204	1&2	3	Multi-Test Diode Indicator (DC)	DTMU
205	1&2	3	Direct Voltage Indicator	LMU
206	1&2	3	Neon / Fluorescent Indicator	NBMU NGMU NWMU
207	1&2	3	Direct Current Indicator	RMU IRMU
208	1	3	LED Mimic Indicators	SEM SEMP LMURGY ROL ROT
208	2	3	Flashing Indicator / Power Failure	FACTMU FDCIRMU PFTMU
209	1	3	Single LED Indicators 6-12mm	LMR
209	2	3	Direct Low Voltage Indicators / Legend	LMU/MES/2 LMU/MBC/2 Legend Plates

Tranilamp Transformers - Available from www.amethyst-designs.co.uk

Tranilamp transformers are manufactured by our sister company

Amethyst Designs Ltd

9 Trafalgar Way

Bar Hill

Cambridge

CB3 8SQ

Tel 01954 789696

Fax 01954 789662

Email paul.weallans@amethyst-designs.co.uk

Conditions of Sale

Our terms are net monthly and where previous payments are outstanding for 45 days any new orders will not be commenced until the account is cleared. Special terms and agreed quantity discounts will only be given on the understanding that payment of the invoice is made within 45 days, otherwise a further invoice will be issued for the appropriate discount shown and full payment demanded.

We reserve the right to alter prices and specifications of any articles in the catalogue.

A minimum order charge will be applied.

Improvement in design from time to time may alter the present illustrations or descriptions. Every care has been taken to ensure that the data and dimensions are correct as shown but we accept no liability in respect of contingencies arising from errors. Where dimensions are critical a check should be made for the latest data.

Wherever possible BS grade materials are used in our products and all units undergo tests before despatch. We will replace or repair free of charge under guarantee any of our products returned within 24 months of the date of sale providing there is prior agreement and they have been properly used and defects are solely due to faulty workmanship or materials. We will not replace lamps or any units that have been overloaded or otherwise damaged. We do not accept responsibility for any consequential damage whatsoever arising from, or said to arise from, the use of our products.

Notwithstanding delivery, all goods supplied by us will remain our absolute property until you pay in full for them and for all other goods previously supplied by us. You will store the goods in such a way that they are readily identifiable as our property, but you may, as trustees for us, sell them to a third party in the normal course of your business. Upon any sale by you of the goods (either alone or with other items) all rights which you have against the buyer shall automatically vest in us. We shall be entitled, immediately after giving notice of our intention to repossess, to enter upon any premises with such transport as may be necessary and repossess any goods to which we have title under this clause.

Interchangeable housing/lens for Indicator Lamp Body Units.

Use table overleaf to check compatibility and correct housing length for the required lamp/LED.















JY Series

Housings:- Black glass reinforced nylon.

Lens:- Polycarbonate welded to bezels.

Bezels:- BJ & BY - Nickel plated brass; BKY - Black plastic.

Protection:- with BJ & BY - IP64; with BKY - IP65.

Hole Dia mm	19			22.5			30.5	BKY
Lens Dia mm	22.3	30	30	22.3	30	30	30	
Lens	BJ(Colour)	BY(Colour)	BKY(Colour)	BJ(Colour)	BY(Colour)	BKY(Colour)	BY(Colour)	
A = Amber B = Blue G = Green R = Red C = Clear W = White								
Panel Hole Adaptor				ADMF 			ADFD 	BY 
Housing	MP 			FP 				BJ 
Complete Assembly	MJ Lens Colour	MY Lens Colour	MKY Lens Colour	FJ Lens Colour	FY Lens Colour	FKY Lens Colour	DY Lens Colour	
Options	Protection to IP65			Protection to IP65			Protection to IP65	
	Not available	Not available	IP65 standard	Not available	Not available	IP65 standard	Not available	
DIN Keyway	M KEYWAY WASHER (Specify "DIN Keyed")			F KEYWAY WASHER (Specify "DIN Keyed")			Not available	








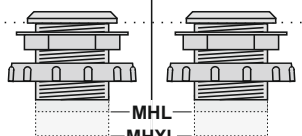
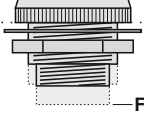
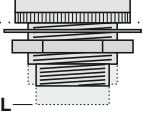
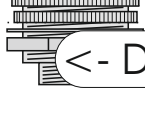
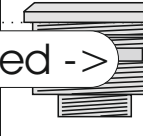
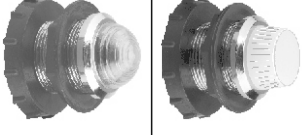



Product Code Example:- FY Blue or FYB = FP Housing + BY Blue Lens

H Series

Housings & Bezels:- Nickel plated brass.

Lens:- Polystyrene (lamps more than 2W use Polycarbonate).

Protection:- IP64.

Hole Dia mm		19		22.5		26.5		30.5
Lens Dia mm		17.5	17	21.5	23.5	23.5	23.5	26
Lens		MA(Colour)	MC(Colour)	FA(Colour)	FB(Colour) Note: FB=LB	LA(Colour)	LB(Colour) Note: FB=LB	DA(Colour)
A = Amber B = Blue G = Green R = Red C = Clear W = White								
Housing		MH	MH	FH	FHB	LH	LHB	DH
Panel Front								
Check overleaf for correct length of housing to use with lamp/LED.		MHL MHLX		FHL		<- Discontinued ->		
Complete Assembly								
		MHA MHLA	MHC MHL MHLX	FHA FHLA	FHB FHLB	LHA	LHB	DHA
		Lens Colour	Lens Colour	Lens Colour	Lens Colour	Lens Colour	Lens Colour	Lens Colour
Protection to IP65		O RING 19x2.5 locking nut-panel	Not available	O RING 19x2.5 housing shoulder-panel	Not available	WASHER RUBBER LH metal ring-panel LH PTT WHITE INSERT inside housing O RING 22x1.5 lens to white insert		WASHER RUBBER DH bezel-panel
Options	Lens Material	Polycarbonate available for FB (Specify "Polycarbonate Lens")						
	Black Bezels	Black Epoxy Coating (Specify "Black Bezel")						
	Legend Plates	Available for all housings either blank or engraved, as required. (Data Sheet 209/2)						
	DIN Keyway	Available on all housings. (Specify "DIN Keyed")						

Product Code Example:- "MHL Red" or "MHLR" = MHL Housing + MC Red Lens

X Series

Housing & Lens Assemblies



www.tranilamp.co.uk

Product Data Sheet 200/2 Issue 3

Interchangeable Housing/Lens for Indicator Lamp Body Units

Use table below to check compatibility with the required lamp/LED.

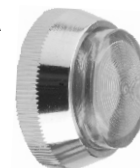
200

X Series		Housings:- Black glass reinforced nylon. Bezels:- Nickel plated brass.		
Hole Dia mm	19	19	22.5	22.5
Lens Dia mm	17.5	17	21.5	23.5
Lens	MA(Colour)	MC(Colour)	FA(Colour)	FB(Colour)
A = Amber B = Blue G = Green R = Red C = Clear W = White				
Housing	MX	FX	FXB	
Panel Front				
Complete Assembly	MXA Lens Colour	MXC Lens Colour	FXA Lens Colour	FXB Lens Colour
Protection	IP64	IP64	IP65	IP64
Lens Material	Polystyrene	Polystyrene	Polystyrene	Polystyrene

MXA



FXA



MXC



FXB



Housing/Lamp Compatibility Table

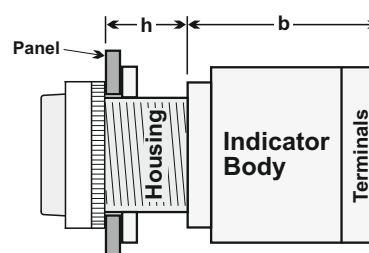
Compare the Housing/Lens assembly and the Lamp/LED chosen, to verify they are compatible.		MHA	MHLA	MHC	MHLC	MHXL	MJ	MY or MKY	MXA	MXC	FHA	FHLA	FHB	FHLB	FJ	FY or FKY	FXA	FXB	DY
Lamp/LED Type																			
Panel Hole Dia.		19	19	19	19	19	19	19	19	19	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	30.5
MES	Filament	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LED7 & LED4	X	X	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LEDM1 & LEDM4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LED1F	X	✓	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Neon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MBC	Filament	X	X	X	X	✓	X	X	X	X	X	✓	X	✓	X	X	X	X	X
	LED7 & LED4	X	X	X	X	✓	X	X	X	X	X	✓	X	✓	X	X	X	X	X
	LEDM1 & LEDM4	X	✓	X	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LED1F	X	X	X	X	✓	X	X	X	X	X	✓	X	✓	X	X	X	X	X
	Neon	X	X	X	X	✓	X	X	X	X	X	✓	X	✓	X	X	X	X	X
h - Housing Depth		13	15	13	15	22	13	13	13	13	11	15	11	15	11	13	14	14	11

Dimension Key

h = housing depth shown in table above

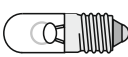
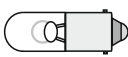
b = body depth shown on Data Sheet for the Indicator lamp body

h + b = front of panel to back of indicator depth



Filament









Transformer indicators with 6V lamps are run at reduced voltage, giving up to 400% extra life

Volts AC or DC	Watts	MA	Product Code		Typical Life (hours) - AC volts (for DC reduce by 40%)	Typical Brightness (Lumen)	Dimensions
			MES	MBC			
6	1.2 Flash	50	6V1.2 Flash	-	-	-	MES  Weight: 2 g
6	1.8	300	6V1.8	6V1.8 MBC	4,000	11	
12	1.2	100	12V1.2	12V1.2 MBC	5,000	5	
24	1.2	50	24V1.2	24V1.2 MBC	5,000	4	
24	2.8	120	24V2.8	-	3,000	12	
28	1.0	40	28V1.0	28V1.0 MBC	3,000	12	MBC  Weight: 2 g
50	2.5	50	50V2.5	-	5,000	9	
60	1.2	20	60V1.2	60V1.2 MBC	3,000	2.2	
130	2.6	20	130V2.6	130V2.6 MBC	3,000	3	

Lamp lives given here are typical only. Actual lives depend on environmental conditions such as shock, vibration, temperature and voltage fluctuations.

LED Clusters

Long life, bright lamps at lower currents. The LED's are configured where possible in parallel circuits. This means that the functionality of the lamp is maintained in the event of a diode failure. Where the lowest possible current is required the LED's are put in series.

Type	Voltage		Current mA			Product Code Make-up					Dimensions	Typical Brightness
	AC/DC	Volts	AGR	B	W	Type	Colour	Voltage	Current	Cap		
LED7 Wide light spread for indicator lamps	AC	4.5	60	80	80	LED7	A G R B W	4.5AC	20mA	MES or MBC	LED7 MES  13.4  27 Weight: 3 g MBC	LED clusters are designed to give a brightness similar to filament bulbs. We manufacture 7 or 4 LED clusters. The more LED's in the cluster, then the better the light spread through lenses.
		24	40	40	40			24AC				
		110	8	8	8			110AC				
	DC	4.5	80	-	-			4.5DC				
		24	40	40	40			24DC				
		24	20	20	20			24DC				
LED4 For indicator lamps	AC	4.5	40	40	40	LED4	A G R B W	4.5AC	20mA	MES or MBC	LED4 MES  14.4  28 Weight: 3 g MBC	Normal configurations of multi-LED clusters use parallel connected circuits of LED's. If one LED fails the lamp still functions through a healthy circuit. Continuity of operation and visibility of a failure is a considerable aid to maintenance. However, some applications demand minimum current, eg IRMU's. In these instances a single series circuit may be used.
		24	40	40	40			24AC				
		110	8	8	8			110AC				
	DC	4.5	40	40	80			4.5DC				
		24	40	40	40			24DC				
		24	20	20	20			24DC				
LEDM4 For illuminated actuating assemblies	AC	4.5	40	40	40	LEDM4	A G R B W	4.5AC	20mA	MES or MBC	LEDM4 MES  10.5  22 Weight: 2 g MBC	
		24	40	40	40			24AC				
		110	8	8	8			110AC				
	DC	24	40	40	40			24DC				
		24	20	20	20			24DC				
		24	20	20	20			24DC				
LEDM1 For indicator lamps	AC	4.5	20	20	20	LEDM1	A G R B W	4.5AC	20mA	MES or MBC	LEDM1 MES  10.5  24 Weight: 2 g MBC	LEDM1 is a range of single LED lamps chosen for their brightness and field of vision.
		24	20	20	20			24AC				
		110	8	8	8			110AC				
	DC	24	20	20	20			24DC				
		24	20	20	20			24DC				
		24	20	20	20			24DC				

* Blue and White clusters are not available at 4.5VDC for the LED7.

Other AC/DC voltages on application.

Colour Key:- A=Amber, G=Green, R=Red, B=Blue, W=White

Example 1: LED7A 4.5AC MES = LED7 Amber cluster 4.5VAC with E10 Miniature Edison Screw cap.

Example 2: LED4R 24DC 20mA MBC = LED4 Red cluster 24VDC (20mA option) with BA9s Miniature Bayonet Cap.

Example 3: LEDM1W 24AC MBC = LEDM1 White single LED 24VAC with BA9s Miniature Bayonet Cap.

Lamp Cap Types:

MES = Miniature Edison Screw - E10. Supplied as standard unless otherwise specified.
MBC = Miniature Bayonet Cap - BA9s. Available for most lamp types. Specify if required.

Alarms Lamps

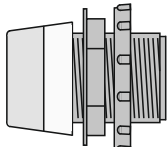
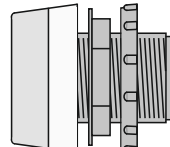
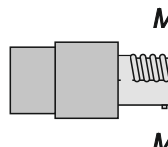
Audible Alarms Neon/Fluorescent Optoled7

Tranilamp www.tranilamp.co.uk

Product Data Sheet 201/2 Issue 3


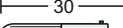
Audible Alarms

Typical sound output 88 dB @ 10 cm.

			HOUSING WITH ALARM	PANEL HOLE DIAMETER	6V AC/DC UNIT - FOR USE WITH TRANSFORMER LAMP HOLDER TO 550V AC or INTERNAL RESISTOR HOLDER TO 110V DC e.g. AKMJ/TMU240/4 AKFY/IRMU24/4
AKMJ	AKMY	MES MBC AK	AKMJ	19 mm	
			AKMY	19 mm	
			AKFJ	22.5 mm	
			AKFY	22.5 mm	
Voltages up to 110V DC or 550V AC			AKDY	30.5 mm	

Neon, Fluorescent

A very low current alternative, if low brightness is acceptable. Neon's can be used with opal, clear, red and amber lenses; fluorescent's only their own colour lenses.

Current Rating All 1.8mA		Product Code						Dimensions mm	
		For Tranilamp 'N' type indicators bodies only Data Sheet 206		For direct connection to Supply (internal resistor fitted). For 'LMU' type Indicator bodies, Data Sheets 205 & 209				MES <div><div>10</div></div>	MBC <div><div>10</div></div>
Colour	Type			Supply 240V (AC or DC)					
Orange	Neon	NB2 MES	NB2 MBC		NB2R 240 MES	NB2R 240 MBC			
Green	Fluorescent	NG2 MES	NG2 MBC		NG2R 240 MES	NG2R 240 MBC			
Blue	Fluorescent	NW2 MES	NW2 MBC		NW2R 240 MES	NW2R 240 MBC			
Typical Life				10,000 hours on AC Supply - 6,000 hours on DC Supply		Typical Brightness		All 0.27 lumen	
								Weight: 3 g	

Optoled7

Designed as a replacement for pigmy lamps on control panels where low power consumption and long life are desirable.

By using 7 ultra-bright LED's the total brightness is typically 2,000 mcd (25 lumen). The arrangement of LED's ensures the optimum diffusion of light through a lens, minimising light concentrations. Available in 24V, 110V, 230V AC at 50/60Hz and 24V, 110V DC. Less than 25mA per lamp. The plastic body is to flame retardant to UL94V0.

Type	Colour	Voltage	Cap
OPTOLED7	A	24AC	BC SBC
	G	24DC	
	R	110AC	
	B	110DC	
	W	230AC	

A=Amber, G=Green, R=Red, B=Blue, W=White

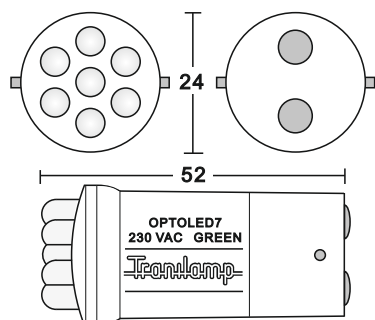
Examples 1. OPTOLED7A 110AC BC
2. OPTOLED7W 24DC SBC

BC



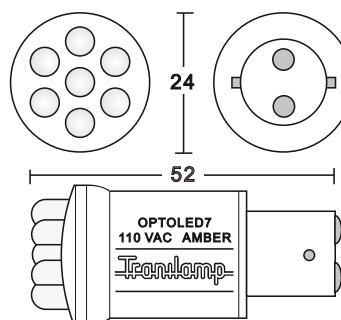
SBC

BC
Bayonet Cap
- B22d



Weight
11g

SBC
Small Bayonet Cap
- B15d



Weight
16g

Tranilamp TMU's

● *increase life expectancy of lamps*

Running the lamp at below rated voltage increases the typical running life of a filament lamp from 4000 hours to beyond 16,000 hours. Tranilamp LED clusters offer an extended reliable life.

● *increase safety*

Lamp voltages are isolated and at low safe levels.

Standard Specification

Types

TMU - Transformer Indicator Lamp Body.

TEMU - As TMU with earthed secondary.

Standard Input Voltages

24, 110, 240V AC 50/60Hz

Surrounding Air Temperature

Maximum 50 C when operating.

Lamp

6V, 1.8W MES - Miniature Edison Screw E10

Mounting

Use JY, H or X Series housings and lenses.

See Data Sheet 200. TMU's screw onto the housings.

Terminations

M3.5 cable clamps with fixed terminal covers to IP20.

Construction

Transformers are encapsulated in mouldings.

ABS/Polycarbonate grey, flame retardant to UL94V0.

Tests

TMU's and TEMU's conform to BS EN 60947-5-1

CE labelled in conformance with L.V. Directive.

Weight (Body Only)

TMU - 114g, TEMU - 115g



TMU Indicator Body and Lamp
(without lens/housing)

Optional Extras

Operating Frequency

400Hz.

Input Voltages

440, 550V and others available on request.

Lamps

LED4 cluster lamp

LED7 cluster lamp

LEDM1 single LED lamp

See Data Sheet 201 for full list of lamps

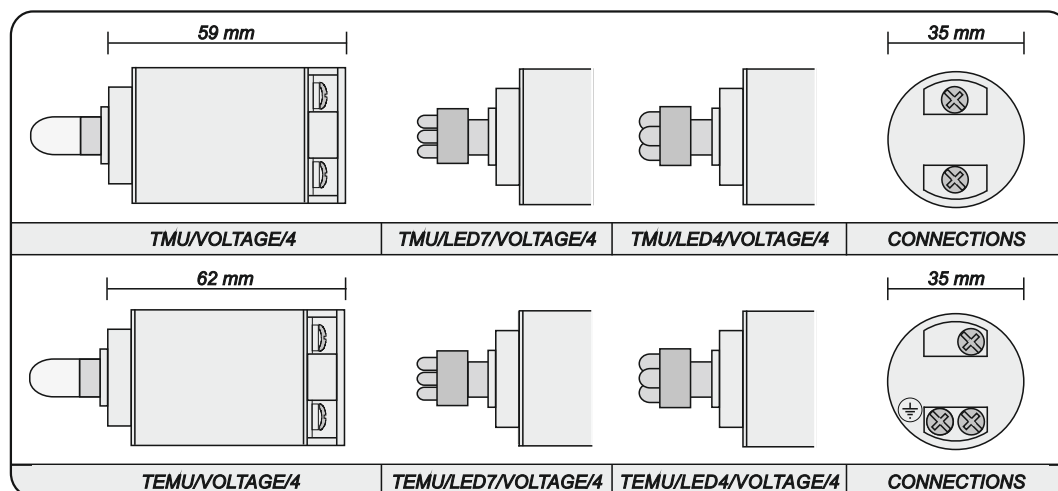
Lamp Caps

BA9s Miniature Bayonet Cap - MBC

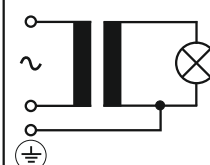
Protection to IP65

Additional seals may be necessary for housings and lenses, see Data Sheet 200.

To find the correct Product Code for ordering, please turn to the reverse side.



TMU



TEMU

How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (see Product Data Sheet 200)	/	Body Type	/	Lamp Type	/	Input Volts	/	Cap Type	/	4	Lens Colour (If applicable)
--	---	-----------	---	-----------	---	-------------	---	----------	---	---	--------------------------------

B O D Y	Transformer Lamp Body	TMU
	Transformer Lamp Body with Earthed Secondary	TEMU

L A M P	Filament Lamp 6V 1.8W		-
	LED7 Cluster 4.5V AC	RED	LED7R
		AMBER	LED7A
		GREEN	LED7G
		BLUE	LED7B
		WHITE	LED7W
	LED4 Cluster 4.5V AC	RED	LED4R
		AMBER	LED4A
		GREEN	LED4G
		BLUE	LED4B
		WHITE	LED4W
	LEDM1 4.5V AC single LED lamp	RED	LEDM1R
		AMBER	LEDM1A
		GREEN	LEDM1G
		BLUE	LEDM1B
WHITE		LEDM1W	

INPUT VOLTAGES	Standard Voltages available	24V	24
		110V	110
		240V	240
	Optional Voltages (Others on application)	440V	440
		550V	550

LAMP CAPS	Standard: Miniature Edison Screw (E10) - MES	-
	Optional: Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	3.5mm captive cable clamp with cover	4
--------------	--------------------------------------	---

OPTIONAL	400 Hz Operation	Specify 400Hz after Code
----------	------------------	---------------------------------

Example 1
Product Code:-
TMU/LED7R/240/MBC/4

TMU lamp body
LED7 Red 4.5V AC MBC
Input: 240V AC, 50/60 Hz.

Example 2
Product Code:-
FHA/TEMU/110/4 Blue

TEMU lamp body
with earthed secondary
6V MES filament lamp
mounted on an FH housing
FA blue lens.
Input: 110V AC, 50/60 Hz.

Multi-Lamp Test Indicators enable groups of indicator lamps to be tested from a single pushbutton switch without interrupting normal operation.

Tranilamp MTMU's

- **increase life expectancy of lamps**

Running the lamp at below rated voltage increases the typical running life of a filament lamp from 4000 hours to beyond 16,000 hours. Tranilamp LED clusters offer an extended reliable life.

- **increase safety**

Isolates the Operating Line when in Test Mode. Lamp voltages are run at very low safe values.

Standard Specification

Input Voltages

24, 110, 240V. AC 50/60Hz

Ratings

Nominal current rating of MTMU's in Test Mode:

Input Voltage	24V	110V	240V
Current Rating	160mA	40mA	30mA

Surrounding Air Temperature

Maximum 50 C when operating.

Lamp

6V, 1.8W MES - Miniature Edison Screw E10

Mounting

Use JY, H or X Series housings and lenses. See Data Sheet 200. MTMU's screw onto housings.

Terminations

M3.5 cable clamps with fixed terminal covers to IP20

Construction

ABS/Polycarbonate grey, flame retardant to UL94VO Transformers are encapsulated in mouldings.

Tests

MTMU's conform to BS EN 60944-5-1

CE labelled in conformance with L.V. Directive.



MTMU Indicator Body and Lamp
(without lens/housing)

Weight (Body Only)

141 g

Optional Extras

Lamps

LED4 cluster lamp

LED7 cluster lamp

LEDM1 single LED lamp

See Data Sheet 201 for full list of lamps

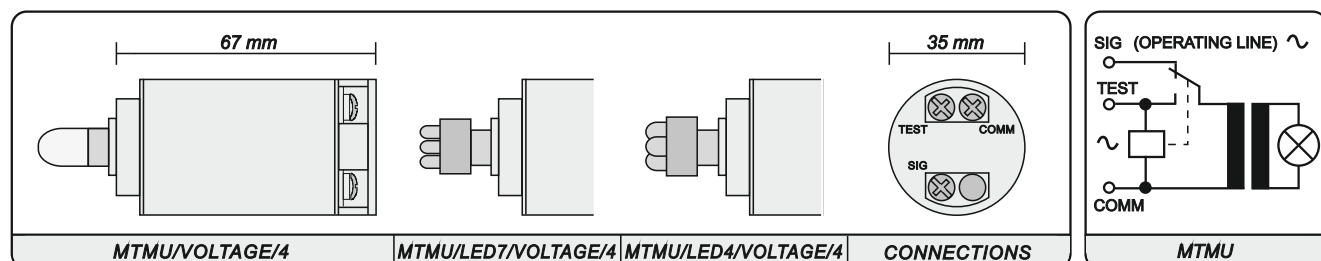
Lamp Caps

BA9s Miniature Bayonet Cap - MBC

Protection to IP65

Additional seals may be necessary for housings and lenses, see Data Sheet 200.

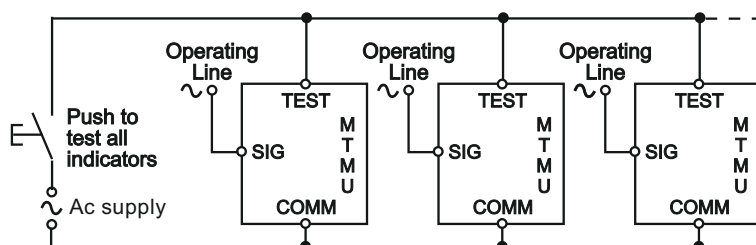
To find the correct Product Code for ordering, please turn to the reverse side.



MTMU's incorporate a single pole changeover relay to enable many units to be tested from one Test Pushbutton without interrupting normal operation.

The Control Circuit is entirely isolated from the Indicator when the Test Pushbutton is pressed, thus eliminating any feedback.

If a **3 phase** supply is used, the Test Circuit must be on the **same phase** as the Control Circuit.



MTMU

Multi-Test Transformer Indicator

Tranilamp

www.tranilamp.co.uk

Product Data Sheet 203/2 Issue 3

How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (see Product Data Sheet 200)	/	Body Type	/	Lamp Type	/	Input Volts	/	Cap Type	/	4	Lens Colour (If applicable)
--	---	--------------	---	--------------	---	----------------	---	-------------	---	---	--------------------------------

B O D Y	Transformer Multi-Test Lamp Body	MTMU
------------------	-------------------------------------	------

L A M P	Filament Lamp 6V 1.8W		-
	LED7 Cluster 4.5V AC	RED	LED7R
		AMBER	LED7A
		GREEN	LED7G
		BLUE	LED7B
		WHITE	LED7W
	LED4 Cluster 4.5V AC	RED	LED4R
		AMBER	LED4A
		GREEN	LED4G
		BLUE	LED4B
		WHITE	LED4W
	LEDM1 4.5V AC single LED lamp	RED	LEDM1R
		AMBER	LEDM1A
		GREEN	LEDM1G
		BLUE	LEDM1B
		WHITE	LEDM1W

INPUT VOLTAGES	Standard Voltages available	24V	24
		110V	110
		240V	240

LAMP CAPS	Standard: Miniature Edison Screw (E10) - MES	-
	Optional: Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	3.5mm captive cable clamp with cover	4
--------------	--------------------------------------	---

ACCESSORIES	Lamp Remover - suitable for all lamps	LR1 (packs of 10)
-------------	---------------------------------------	-------------------

Example 1
Product Code:-
MTMU/LED7R/240/MBC/4

MTMU Lamp body
Red LED7 4.5V AC MBC
Input: 240V AC, 50/60 Hz.

Example 2
Product Code:-
MHA/MTMU/110/4 Blue

MTMU lamp body
6V MES filament lamp
mounted on an MH housing
MA blue lens.
Input: 110V, 50/60 Hz.

Multi-Lamp Test Indicators enable groups of indicator lamps to be tested from a single pushbutton switch without interrupting normal operation.

Tranilamp DTMU's

● Offer an economic solution

Use of a simple diode blocking technique makes this multi-test indicator particularly suitable for DC control circuits at low cost.

Standard Specification

Input Voltages

6, 12, 24, 28, 50 or 60V DC supplies.
AC may be used but with reduced lamp brightness.

Test Mode Current Ratings

As Operating Mode i.e. Lamp rating.

Surrounding Air Temperature

Maximum 50 C when operating.

Lamps

Only supplied as Options. For LED's use only DC.

Lamp Cap

E10 Miniature Edison Screw - MES

Mounting

Use JY, H or X Series housings and lenses.
See Data Sheet 200. DTMU's screw onto housings.

Terminations

M3.5 cable clamps with fixed terminal covers to IP20

Construction

ABS/Polycarbonate, flame retardant UL94V0 non-drip

Tests

DTMU's conform to BS EN 60947-5-1.
CE labelled in conformance with the L.V. Directive.

Weight (Body Only)

29 g



DTMU Indicator Body and Lamp
(Lens/Housings/Lamps are Optional)

Optional Extras

Lamps

Filament Lamps up to 60V
LED4 cluster lamp
LED7 cluster lamp
LEDM1 single LED

All LED's must be DC

See Data Sheet 201 for list of lamps available.

Lamp Caps

BA9s Miniature Bayonet Cap - MBC

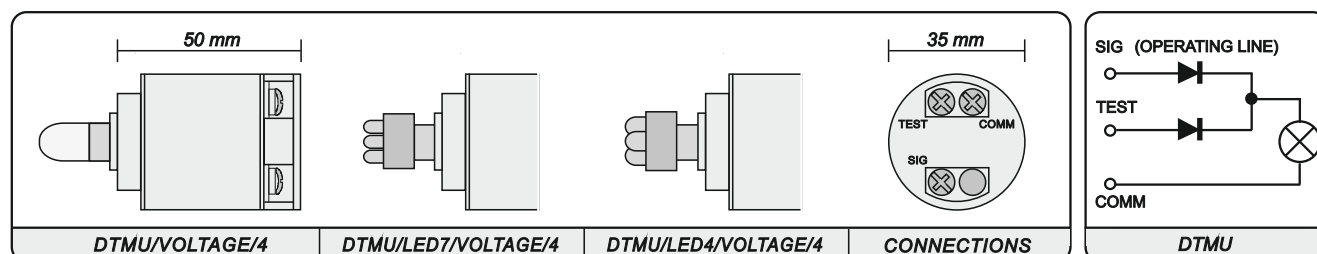
IP65 Protection

Additional seals may be necessary for housings and lenses, see Data Sheet 200.

Lamp Remover LR1

Suitable for all lamps

To find the correct Product Code for ordering, please turn to the reverse side.

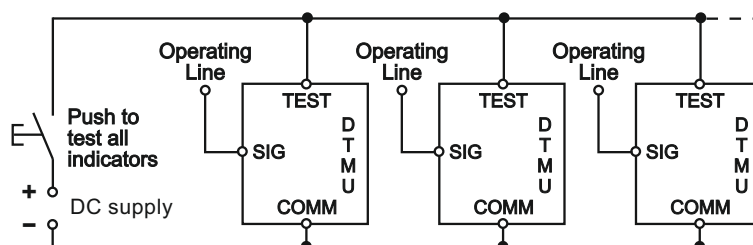


DTMU's incorporate blocking diodes to enable a group of units to be tested from one Test Pushbutton without interrupting normal operation.

The Control Circuit will usually be DC, but AC can be used with reduced brightness.

Please advise us if battery backup services are fitted to the supply.

LED cluster lamps must always be DC type.



DTMU

Multi-Test Diode Indicator



www.tranilamp.co.uk

Product Data Sheet 204/2 Issue 3

How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (See Product Data Sheet 200)	/	Body Type	/	Lamp Type	/	Input Volts	/	Cap Type	/	4	Lens Colour (If applicable)
--	---	-----------	---	-----------	---	-------------	---	----------	---	---	--------------------------------

B O D Y	Low Voltage Multi-Test Indicator Lamp Body	DTMU
------------------	--	------

Lamps for DTMU's are extra. If required Lamp Voltage is specified as Input Voltage. See data sheet 201 for list of lamps.		
L A M P	Filament Lamp: 6,12, 24, 28, 50, 60V	-
	LED7 Cluster 24V DC	RED LED7R
		AMBER LED7A
		GREEN LED7G
		BLUE LED7B
		WHITE LED7W
	LED4 Cluster 24V DC	RED LED4R
		AMBER LED4A
		GREEN LED4G
		BLUE LED4B
		WHITE LED4W
	LEDM1 24V DC single LED lamp	RED LEDM1R
		AMBER LEDM1A
		GREEN LEDM1G
		BLUE LEDM1B
		WHITE LEDM1W

INPUT VOLTAGES (identical to lamp voltage)	No Lamp fitted	-
	Filament Lamp suitable Voltages (DC Supply preferred. If AC Supply used lamp operates at reduced brightness)	6V 6
		12V 12
		24V 24
		28V 28
		50V 50
		60V 60
	LED7, LED4 or LEDM1	24V DC 24

LAMP CAPS	Miniature Edison Screw (E10) - MES (lamp fitted)	-
	Miniature Edison Screw (E10) - MES (no lamp fitted)	MES
	Optional: Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	3.5mm captive cable clamp with cover.	4
--------------	---------------------------------------	---

Example 1
Product Code:-
DTMU/LED7A/24/MBC/4

DTMU lamp body
 LED7 Amber 24V DC
 MBC
 Input: 24V DC.

Example 2
Product Code:-
FHA/DTMU/MES/4 Red

DTMU lamp body
 with no lamp supplied
 fitted with MES lamp holder
 mounted on an FH housing
 FA red lens.
 Input: Unspecified.

Direct Voltage Indicators enable indicator lamps to be connected directly to the Supply Voltage.

Tranilamp LMU's

● Offer an economic solution

The low cost way to accommodate most control circuit supplies, both AC and DC.

● Increase flexibility

Can use with Tranilamp's extensive range of:

- Filament Lamps
- LED cluster lamps
- Neon lamps
- Panel housings and lenses

Standard Specification

Input Voltages

Same as and determined by the lamp used.
Suitable for AC or DC supplies.

Maximum Voltage: 240V AC - (neon's only)

Surrounding Air Temperature

Maximum 50 C when operating.

Lamps

Only supplied as Optional Extra.

See Data Sheet 201 for list of lamps

Note: Lamps must not exceed 2W when used with polystyrene lenses.

Lamp Caps

E10 Miniature Edison Screw - MES

Mounting

Use JY, H or X Series housings and lenses.

See Data Sheet 200. LMU's screw onto housings.

Terminations

M3.5 cable clamps with fixed terminal covers to IP20
Solder tab terminals are available using Low Voltage LMU/MES/2 see Data Sheet 209/2.

Construction

Body constructed of ABS/Polycarbonate grey, flame retardant to UL94V0 non-drip.

Tests

LMU's conform to BS EN 60947-5-1.

CE labelled in conformance with the L.V. Directive.

Weight (Body Only)

LMU - 26 g.



LMU Indicator Body and Lamp
(Lens/Housings/Lamps are Optional)

Optional Extras

Lamps

Filament Lamps 6,12, 24, 50, 60 or 130V

LED4 cluster lamp

LED7 cluster lamp

LEDM1 or single LED

Neon's and Fluorescent's in orange, green and blue at 110V AC and 240V AC.

See Data Sheet 201 for full list of lamps

Lamp Caps

BA9s Miniature Bayonet Cap - MBC

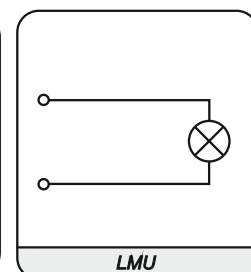
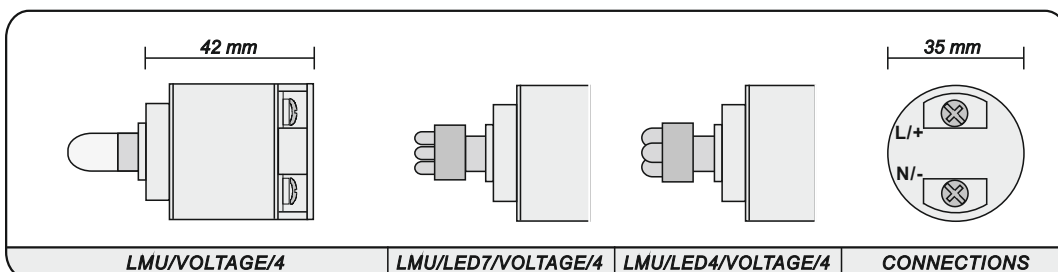
IP65 Protection

Additional seals may be necessary for housings and lenses see Data Sheet 200.

Lamp Remover LR1

Suitable for all lamps

To find the correct Product Code for ordering, please turn to the reverse side.



LMU

Direct Voltage Indicator



www.tranilamp.co.uk

Product Data Sheet 205/2 Issue 3

How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (See Product Data Sheet 200)	/	Body Type	/	Lamp Type	/	Input Volts	/	Cap Type	/	4	Lens Colour (If applicable)
--	---	-----------	---	-----------	---	-------------	---	----------	---	---	--------------------------------

B O D Y	Direct Voltage Indicator Lamp Body	LMU
------------------	---------------------------------------	-----

L A M P	Lamps for LMU's are extra		
	Filament: 6,12, 24, 28, 50, 60, 130V		-
	LED7 Cluster 24V AC or DC or 110V AC	RED	LED7R
		AMBER	LED7A
		GREEN	LED7G
		BLUE	LED7B
		WHITE	LED7W
	LED4 Cluster 24V AC or DC or 110V AC	RED	LED4R
		AMBER	LED4A
		GREEN	LED4G
		BLUE	LED4B
		WHITE	LED4W
	LEDM1 single LED lamp 24V AC or DC, 110V AC	RED	LEDM1R
		AMBER	LEDM1A
		GREEN	LEDM1G
		BLUE	LEDM1B
		WHITE	LEDM1W
	Neon or Fluorescent Lamp 110V AC, 240V AC	NEON	NB2R
		GREEN	NG2R
		BLUE	NW2R

INPUT VOLTAGES (identical to lamp voltage)	No Lamp fitted		-
	Filament Lamp suitable AC or DC	6V	6
		12V	12
		24V	24
		28V	28
		50V	50
		60V	60
		130V	130
	LED7, LED4 or LEDM1	24V AC	24AC
		110V AC	110
		24V DC	24DC
	Neon or Fluorescent Lamps suitable for AC	110V	110
		240V	240

LAMP CAPS	Miniature Edison Screw (E10) - MES (lamp fitted)	-
	Miniature Edison Screw (E10) - MES (no lamp fitted)	MES
	Optional: Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	3.5mm captive cable clamp with cover.	4
--------------	---------------------------------------	---

Other voltages on application

See Data Sheet 201
for list of standard
Lamps
LED's
Neon's

Example 1 Product Code:- LMU/LED4A/24AC/MBC/4

LMU Lamp body
LED4 Amber 24V AC MBC
Input: 24V AC.

Example 2 Product Code:- MHA/LMU/MES/4 White

LMU Lamp body
with no lamp supplied
fitted with MES lamp holder
mounted on an MH housing
MA white lens.
Input: Unspecified.

'N' Type indicators are body units complete with neon/fluorescent lamps covering a range of AC voltages.

Tranilamp 'N' Types

● *low loading*

Where the total allowable lamp load current is low, the N Type may be the solution.

● *no half light pickup*

In-built blocking resistors eliminate pickup.

Standard Specification

Types

NBMU - Indicator body with neon lamp (orange).

NGMU - Indicator body with fluorescent lamp (green).

NWMU - Indicator body with fluorescent lamp (blue).

Input Voltages

110, 240V AC 50/60 Hz

Rating

All current ratings 1.8mA

Surrounding Air Temperature

Maximum 50 C when operating.

Lamps

NBMU fitted with NB2 neon lamp (orange)

NGMU fitted with NG2 fluorescent lamp (green)

NWMU fitted with NW2 fluorescent lamp (blue)

See Data Sheet 201/2 for spare lamp data

Lamp Cap

E10 Miniature Edison Screw - MES

Mounting

Use JY, H or X Series housings and lenses.

See Data Sheet 200. NBMU's screw onto housings.

Terminations

M3.5 cable clamp with fixed terminal covers to IP20

See Data Sheet 209/2 for neon indicators with solder tab terminals.

Construction

ABS/Polycarbonate, flame retardant UL94VO non drip

Tests

NBMU's conform to BS EN 60947-5-1

CE labelled in conformance with the L.V. Directive.

Weight (Body Only)

28g



NBMU Indicator Body and Neon Lamp
(Lens/Housings are optional)

Optional Extras

Input Voltages

440V AC, other voltages on application.

Lamp Caps

BA9s Miniature Bayonet Cap - MBC

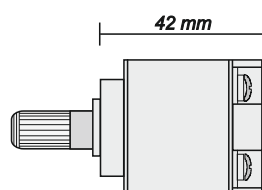
Protection to IP65

Additional seals may be necessary for housings and lenses, see Data Sheet 200.

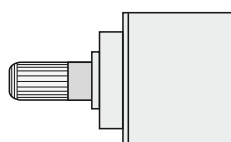
Lamp Remover LR1

Suitable for all lamps

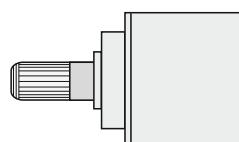
To find the correct Product Code for ordering, please turn to the reverse side.



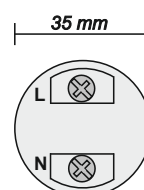
NBMU/VOLTAGE/4



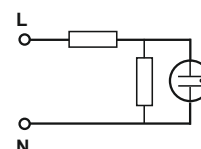
NGMU/VOLTAGE/4



NWMU/VOLTAGE/4



CONNECTIONS



NBMU NGMU NWMU

'N'
Type

Neon/Fluorescent
Indicator

Tranilamp www.tranilamp.co.uk

Product Data Sheet 206/2 Issue 3

How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (see Product Data Sheet 200)	/	Body Type	/	Input Volts	/	Cap Type	/	4	/	Lens Colour (if applicable)
--	---	-----------	---	-------------	---	----------	---	---	---	--------------------------------

B O D Y	Indicator Body with NB2 neon lamp (orange)	NBMU
	Indicator Body with NG2 fluorescent lamp (green)	NGMU
	Indicator Body with NW2 fluorescent lamp (blue)	NWMU

INPUT VOLTAGES	Standard Voltage	100/120V	110
		220/240V	240
	Optional Voltage	400/440V	440

LAMP CAPS	Miniature Edison Screw (E10) - MES	-
	Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	3.5mm captive cable clamp with cover. See Data Sheet 209/2 for neon indicators with Solder tab terminals.	4
--------------	--	---

NBMU
Use white, clear, red or amber lens only
NGMU
Use green lens only
NWMU
Use blue lens only

Example 1

Product Code:- NGMU/240/MBC/4

NGMU Lamp body
NG2 MBC green fluorescent lamp
Input: 240V AC.

Example 2

Product Code:- FHA/NBMU/110/4 White

NBMU Lamp body
NB2 MES neon lamp
mounted on an FH housing
FA white lens.
Input: 110V AC.

Indicator lamp body units for use with DC Supplies only.

Tranilamp IRMU's & RMU's

- **provide a safe solution**

DC Voltages can be directly connected to the unit. In the event of a lamp failure these indicators limit the degree of potential overload on devices within the power supply.

- **enable a choice of lamps**

Can use with a selection of Tranilamp's range of:
Filament lamps
LED cluster lamps

Standard Specification

Types

IRMU - with internal resistor (2W or less).

RMU - with external resistor (greater than 2W) .

Type used is determined by Supply Voltage, Lamp Voltage and Lamp type selected.

Input Voltages

24,50,110V DC. Other voltages on application.

Surrounding Air Temperature

Maximum 50 C when operating.

Lamps

Select from Lamp list on page 2.

Lamp Cap

E10 Miniature Edison Screw - MES

Mounting

Use JY, H or X Series housings and lenses

See Data Sheet 200. IRMU's & RMU's screw onto housings.

Terminations

M3.5 cable clamps with fixed terminal covers to IP20 on IRMU's. RMU terminals are uncovered.

Construction

ABS/Polycarbonate, flame retardant UL94VO non drip



IRMU Indicator
Body and Lamp

Lens/Housings
are optional

RMU with
external resistor



Tests

IRMU's and RMU's conform to BS EN 60947-5-1.
CE labelled in conformance with L.V. Directive.

Weight (Body Only)

IRMU - 33g

RMU - 37g

Optional Extras

Lamp Caps

BA9s Miniature Bayonet Cap - MBC

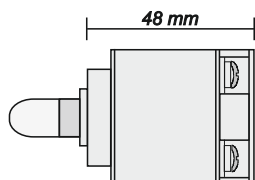
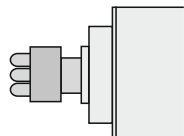
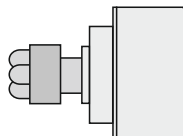
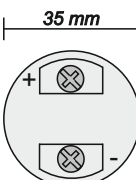
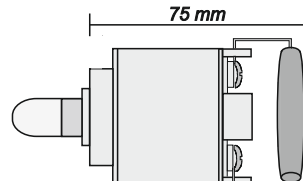
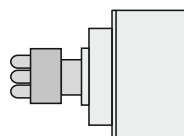
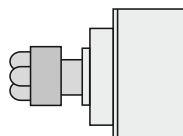
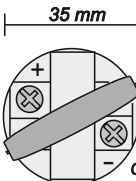
Terminal Protection

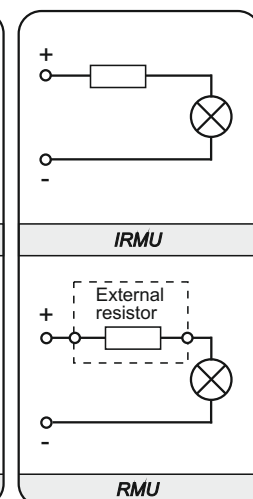
Shrouds cannot be fitted to RMU's.

Protection to IP65

Additional seals may be necessary for housings and lenses. See Data Sheet 200.

To find the correct Product Code for ordering, please turn to the reverse side.

			
IRMU/VOLTAGE/4	IRMU/LED7/VOLTAGE/4	IRMU/LED4/VOLTAGE/4	CONNECTIONS
			
RMU/VOLTAGE/4	RMU/LED7/VOLTAGE/4	RMU/LED4/VOLTAGE/4	CONNECTIONS



How to derive the correct Product Code

Indicator Body Lamp Product Code

Lens Housing (See Product Data Sheet 200)	/	Body Type	/	Lamp Type	/	DC Supply	/	Cap Type	/	4	Lens Colour (If applicable)
--	---	-----------	---	-----------	---	-----------	---	----------	---	---	--------------------------------

B O D Y	Internal Resistor Lamp Body (Resistor below 2W)	IRMU
	External Resistor Lamp Body (Resistor above 2W)	RMU

L A M P	Filament Lamp		-
	LED7 Cluster	RED	LED7R
		AMBER	LED7A
		GREEN	LED7G
		BLUE	LED7B
		WHITE	LED7W
	LED4 Cluster	RED	LED4R
		AMBER	LED4A
		GREEN	LED4G
		BLUE	LED4B
		WHITE	LED4W
	LEDM1 Single LED lamp	RED	LEDM1R
		AMBER	LEDM1A
		GREEN	LEDM1G
		BLUE	LEDM1B
WHITE		LEDM1W	

INPUT VOLTAGES	Standard Voltages available	24V	24
		50V	50
		110V	110

LAMP CAPS	Miniature Edison Screw (E10) - MES	-
	Miniature Bayonet Cap (BA9s) - MBC	MBC

TERMINATIONS	IRMU - 3.5mm captive cable clamp with cover	4
	RMU - 3.5mm captive cable clamp with no cover	

Many combinations of input and lamp voltages exist for this product.

The IRMU with the internal resistor is limited to a maximum heat dissipation of 2W. Above that the RMU has to be used.

Where possible, the IRMU will always be supplied in preference.

From the tables, first select the type of lamp needed, then the DC supply (input) voltage. If LEDs are required, a colour will also have to be selected.

Example 1

Product Code:- IRMU/LED4A/110/MBC/4

IRMU Indicator Lamp body
LED4 Amber 24DC 20mA MBC
Supply: 110V DC.

Example 2

Product Code:- FHA/RMU/50/4 White

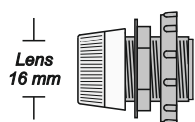
RMU Indicator lamp body
24V 50mA MES filament lamp
mounted on an FH housing
FA white lens.
Supply: 50V DC.

HOUSING ASSEMBLIES WITH FLAT CLEAR LENS

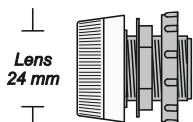
Interchangeable housings for LED lamp body units shown below. Housings meet IP64 as standard.

IP65 with sealing washers available for all except DYD, DYKD and MHAD.

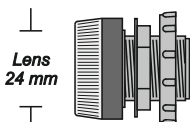
Bezels nickel plated except MKYD, FKYD and DKYD which are black plastic.



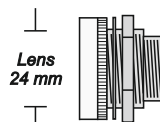
MJD 19 mm
FJD 22.5 mm



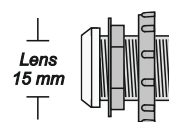
MYD 19 mm
FYD 22.5 mm
DYD 30.5 mm



MKYD 19 mm
FKYD 22.5 mm
DKYD 30.5 mm

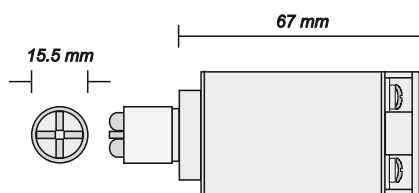


FHLD 22.5 mm

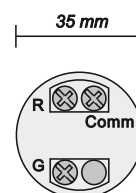


MHAD 19 mm

LED MIMIC INDICATORS



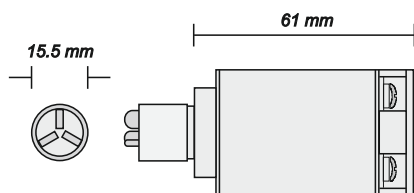
This unit has been designed to give visual open or closed indication of valves or gates and can be used as a separate bicolour unit on mimic panels. Colours: Red / Green standard. Red, Yellow or Green are optional.



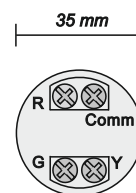
Input Voltages

24, 110, 240V AC
24, 110, 130V DC
-
Red/Green Standard
-
Combinations of Red, Yellow, Green are optional
-
2 built in supplies

SEMAPHORE LED INDICATOR	SEMMU/ AC or DC VOLTAGE/4		CONNECTIONS	DTSEMMU/DC available with test facility
	SEMPMU/ AC or DC VOLTAGE/4			



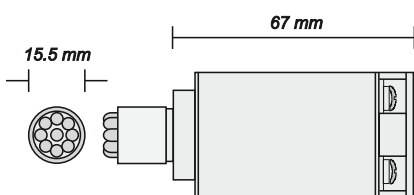
This unit has separate inputs to each LED to allow one, two or three colours to be on at once. Colours: Red / Yellow / Green standard. Other colours / voltages on application.



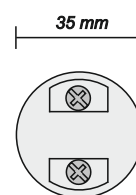
Input Voltages

24V AC
24V, 110, 130V DC
-
Red/Yellow/Green Standard
-
Combinations of Red, Yellow, Green, Blue or White optional
-
3 built in supplies

THREE COLOUR LED INDICATOR	LMURGY/ AC or DC VOLTAGE/4		CONNECTIONS	DTIRMURGY/DC available with test facility
	IRMURGY/110DC/4 IRMURGY/130DC/4			



This indicator consists of a cluster of 8 LED's mounted symmetrically around a central one. The peripheral LED's are lit in sequence. This gives the appearance of a moving light orbiting a fixed central point. Clockwise std, anticlockwise available. The unit can be supplied with an external potentiometer to control the rotational speed of the peripheral LED's.



Input Voltages

24, 110, 240V AC or 24V DC
-
LED colours Red, Yellow, Green, Blue or White
-
Two colour available
-
Other voltages on application

ROTATING LED INDICATOR	ROLMU/ AC or DC VOLTAGE/4 - UP TO 30V		CONNECTIONS	
	ROTMU/ AC VOLTAGE/4 - UP TO 440V AC			

FLASHING LED INDICATORS

Flashing rate nominally 2Hz.

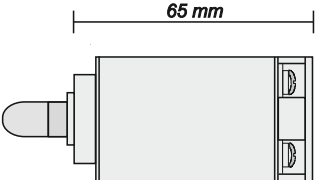
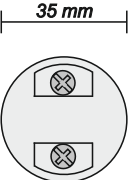
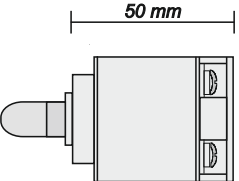
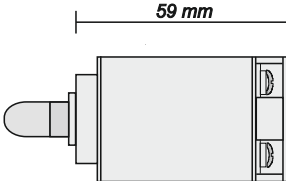
Housings:- see Data Sheet 200.

MES standard MBC optional extra.



FDCIRMU Indicator Body and LED
(without Lens/Housing)

208

			Input Voltages 24, 110, 240V 50/60Hz Optional Voltages 440, 550V 50/60Hz LED1F 12V DC Red, Green, Amber MES standard MBC optional
TRANSFORMER FLASHING LED	FACTMU/LED1F/VOLTAGE/4 Colour	CONNECTIONS	
			Input Voltage 24V DC Optional Voltages 110V DC Others on application LED1F 12V DC Red, Green, Amber MES standard MBC optional
LOW VOLTAGE DC FLASHING LED	FDCIRMU/LED1F/24/4 Colour	FDCIRMU/LED1F/110/4 Colour	CONNECTIONS

POWER FAILURE INDICATOR or ALARM

This indicator, which incorporates a relay, provides a warning when the normal Control Circuit Power Supply fails. The unit requires a Permanent Live Signal, if the Circuit Supply fails the indicator illuminates or sounds the alarm. The Control Circuit at all times remains isolated from the Permanent Live Supply.

Input Voltages

24, 110 or 240V 50/60Hz

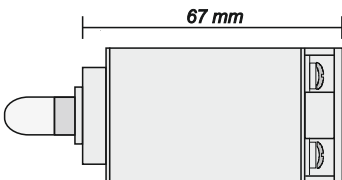
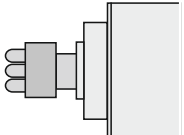
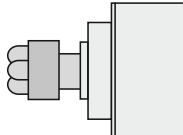
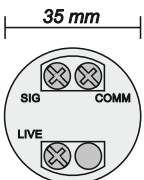
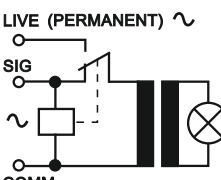
Options

MES standard MBC optional

Filament lamp 6V 1.8W

LED4, LED7 or LEDM1 4.5V AC - See Data Sheet 201

Audible Alarm 6V

					
PFTMU/VOLTAGE/4	PFTMU/LED7/VOLTAGE/4	PFTMU/LED4/VOLTAGE/4	CONNECTIONS		PFTMU

A distinctive quality range of panel mounting single LED indicators.

Standard Specification

Housings: Nickel plated brass

Black optional

Input: Voltages set by in-built resistor

Product Code Make-up

Body / Voltage / Terminals / Colour
e.g. LMR10/24DC/ 6 / R

LMR12



LMR10



LMR6



209

Body / Voltage / Terminals / Colour e.g. LMR10/24DC/ 6 / R		Body Voltage Terminals Colour				Body Voltage Terminals Colour				Body Voltage Terminals Colour			
Panel Hole Diamter		12.7mm (1/2")				9.5mm (3/8")				6.4mm (1/4")			
Concave Bezel		✓	LMR12			✓	LMR10			✓	LMR6		
Supply Volts	AC	12	✓	12AC		✓	12AC		✓	12AC			
		24	✓	24AC		✓	24AC		✓	24AC			
		50	✓	50AC		N/A			N/A				
		110	✓	110AC		N/A			N/A				
	DC	12	✓	12DC		✓	12DC		✓	12DC			
		24	✓	24DC		✓	24DC		✓	24DC			
		50	✓	50DC		N/A			N/A				
Terminals	Wire Ends	N/A			✓		6	✓			6		
	Flying Leads	✓		3	✓		3	✓			3		
LED Colour	Amber	✓		A	✓		A	✓			A		
	Green	✓		G	✓		G	✓			G		
	Red	✓		R	✓		R	✓			R		
	Blue	✓		B	✓		B	✓			B		
	White	✓		W	✓		W	✓			W		
Flying Lead Colour Codes		12VAC = black/blue, 24VAC = black/orange, 50VAC = black/black, 110VAC = black/white 6VDC = red(+)/black, 12VDC = red(+)/blue, 24VDC = red(+)/orange, 50VDC = red(+)/white											
Dimensions		LMR12				LMR10				LMR6			
Weights g		 LMR12/Voltage/3 (LEADS approx 290mm long)				 LMR10/Voltage/6 (WIRE END)				 LMR6/Voltage/6 (WIRE END)			
						 LMR10/Voltage/3 (LEADS approx 290mm long)				 LMR6/Voltage/3 (LEADS approx 290mm long)			
Options	IP65	Add seals - Specify: "IP65"				Not available				Not available			
	Black	Black epoxy coating available on all bodies. Specify: "Black"											
	Ultra Bright	Ultra Bright Diodes can be fitted on all sizes. Specify: "Ultra Bright"											
	Special Volts	Non-standard supply voltages will be considered on application.											

LMU/MES/2
LMU/MBC/2

Low Voltage Indicator Legend Plates

Tranilamp www.tranilamp.co.uk

Product Data Sheet 209/2 Issue 3

A low direct voltage, low cost range of lamp holders with changeable lenses and lamps.

Standard Specification

- Housings:** Nickel plated brass.
See Data Sheet 200 for full range
- Terminations:** Solder Tabs .187 (5mm).
- Lamps:** Filament, LEDs and neons MES or MBC optional.
See Data Sheet 201
Lamps are changed from the front.



MHA/LMU/MES/2

209

Product Code Make-up

Housing/Body/Lamp/Terminals/Colour

eg MHA/LMU/24V MES/2/R	Housing	Body	Lamp	Terminals	Colour
MH Housing c.w. MA Lens	MHA				
Body Only		LMU			
Lamps only supplied as extras. Select any type from Data Sheet 201 and enter its Product Code Maximum Voltage: 240V AC - (neons only)			Product Code of lamp see Data Sheet 201		
If no lamp required specify Cap type.	MES		MES		
Optional	MBC		MBC		
Terminations	Solder Tabs .187 (5mm)			2	

A = Amber
B = Blue
G = Green
R = Red
C = Clear
W = White

Options

BA9s Miniature Bayonet
Cap - MBC available.
Specify as above.

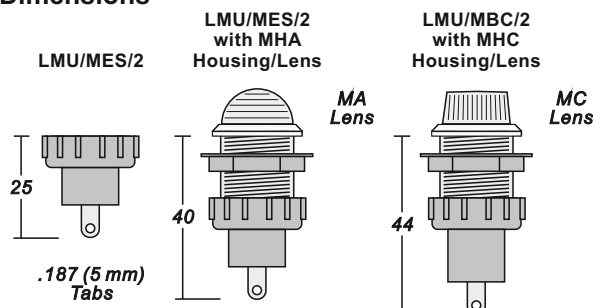
All LMU/MES/2 and LMU/MBC/2
bodies will fit any housing on
Data Sheet 200.

Weight

g

MHA/LMU/MES/2	21
MHC/LMU/MES/2	21
LMU/MES/2	4
MBC same weight	

Dimensions



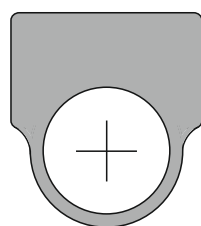
Examples:-

1. MHC/LMU/LED7R 24AC MES/2/R
2. LMU/MES/2
3. MHA/LMU/24V 1.2W MBC/2/W

LEGEND PLATES

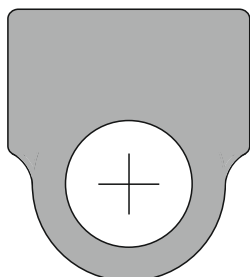
Black Anodised Aluminium - Engraved to order. For H Series Housings

35



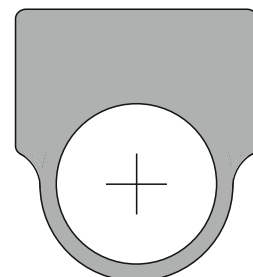
MHLF - 19mm
FHLF - 22.5mm

45



FHLG - 22.5mm

45



LHLF - 26.5mm
DHLF - 30.5mm

25

30

30