

# Yokogawa ToughMeter Analog Panel Meters

Obsolete - call for suitable replacement

## Designed to Operate in Harsh Environments

- Metal Case and Polycarbonate Window
- Gasket Sealed Bezel
- Dust & Moisture Protection on Terminals & Zero Adjust
- IP66 Environmental Rating
- Made in the USA



270

## SPECIFICATIONS

Case Size	2 1/2"	3 1/2"
Size (dia x depth)	2.70" x 1.88"	3.50" x 1.88"
Cutout (dia)	2.23"	2.55"
Mounting studs	4-40 on 2.44" BCD x3	4-40 on 3.16" BCD x3
Terminals	1/4 - 28	1/4 - 28
Accuracy	±2% DC, ±3% AC	
Repeatability	±2%	
Overload	120% continuous	
Overshoot	10% max	
Response Time	2 sec max	
Vibration Sine	3G 10-80 Hz	
Vibration Random	3G (P&J), 5G (TB) 10-1000 Hz	
Shock	50G	
Operating Temperature	-45 to +70°C	

Vibration, temperature and environmental specifications exceed ANSI C39.1

## ORDERING INFORMATION

Use Ordering Code Guide to complete Part #. Insert Model Code in box [1] and Case Sizes in box [2].  
Example: 270220LSLS is taut band, 2 1/2" meter, 5VDC.

### DC Ammeters - Zero Left

20 µA	[1][2]	00CFCF
50 µA	[1][2]	00CYCY
100 µA	[1][2]	00DRDR
1 mA	[1][2]	00FAFA
2 mA	[1][2]	00FGFG
4 mA	[1][2]	00FSFS
500 mA	[1][2]	00KMKM
4-20 mA	[1][2]	00HEHE

### DC Ammeters - Zero Left, 50 mV Shunt Rated (Lead Resistance 0.05-0.07Ω)

20 A	[1][2]	24ECNG
30 A	[1][2]	24ECNL
50 A	[1][2]	24ECNT
75 A	[1][2]	24ECPB
100 A	[1][2]	24ECPK
150 A	[1][2]	24ECPZ
200 A	[1][2]	24ECRL
250 A	[1][2]	24ECRS
300 A	[1][2]	24ECRX
400 A	[1][2]	24ECSC
500 A	[1][2]	24ECSE
600 A	[1][2]	24ECSJ
800 A	[1][2]	24ECSN
1.0 kA	[1][2]	24ECVA
1.5 kA	[1][2]	24ECVC
2.0 kA	[1][2]	24ECVE

### DC Voltmeters - Zero Left

1 V	[1][2]	24GBGB
5 V	[1][2]	20LSLS
10 V	[1][2]	20MTMT
15 V	[1][2]	20NDND
30 V	[1][2]	20NLNL
50 V	[1][2]	20NTNT
80 V	[1][2]	20PDPD
100 V	[1][2]	20PKPK
150 V	[1][2]	20PZPZ
200 V	[1][2]	20RLRL
300 V	[1][2]	20RXRX
500 V	[1][2]	20SFSE
600 V	[1][2]	20SJSJ

### AC Ammeters - Self-Contained, Iron Vane

1 A	271 [2]	40LALA
5 A	271 [2]	40LSLS

### AC Ammeters - Transformer Rated, 0-5A Iron Vane

Scale		
50 A	271 [2]	40LSNT
75 A	271 [2]	40LSPB
100 A	271 [2]	40LSPK
150 A	271 [2]	40LSPZ
200 A	271 [2]	40LSRL
300 A	271 [2]	40LSRX
500 A	271 [2]	40LSSF
600 A	271 [2]	40LSSJ
800 A	271 [2]	40LSSN
1000 A	271 [2]	40LSSS
1500 A	271 [2]	40LSTC
2000 A	271 [2]	40LSTM

### AC Voltmeters - Iron Vane

10 V	271 [2]	44MTMT
15 V	271 [2]	44NDND
25 V	271 [2]	44NJNJ
50 V	271 [2]	44NTNT
100 V	271 [2]	44PKPK
150 V	271 [2]	44PZPZ
300 V	271 [2]	44RXRX
500 V	271 3	44SFSE
600 V	271 3	44SJSJ

### AC Voltmeters - Transformer Rated, 0-150V Iron Vane

Scale		
600 V	271 [2]	44PZSJ
750 V	271 [2]	44PZSM
3000 V	271 [2]	44PZVJ

### AC Ammeters - Rectifier type

1 mA	[1][2]	10FAFA
2 mA	[1][2]	10FGFG
5 mA	[1][2]	10FXFX
10 mA	[1][2]	10GZGZ
20 mA	[1][2]	10HFHF
50 mA	[1][2]	10HYHY
100 mA	[1][2]	10JRJR
500 mA	[1][2]	10KMKM
1 A	[1][2]	10LALA
5 A	[1][2]	10LSLS

### AC Voltmeters - Rectifier type

10 V	[1][2]	30MTMT
15 V	[1][2]	30NDND
25 V	[1][2]	30NJNJ
50 V	[1][2]	30NTNT
100 V	[1][2]	30PKPK
150 V	[1][2]	30PZPZ
300 V	[1][2]	30RXRX

## OPTIONS

- Zero Center (DC meters)
- Custom Scaling
- Non-standard Ranges
- Color Bands

## ORDERING CODE GUIDE

[1] Insert Model Number

270	Taut Band
271	Pivot & Jewel

[2] Insert Case Size

2	2 1/2 inches
3	3 1/2 inches