



Applications

The digital panel meters **RISH DPM 96 x 96** & **48 x 96 4½ Digit** have been designed for industrial applications, which frequently require precise and on-site adjustment of the display range.

It can be used in industrial automation and for laboratory uses.

Features:

- Available in Size **96mm x 96mm** & **48mm x 96mm**.
- **DC Current ranges and DC Voltage ranges.**
- **4 ½ Digit ultra bright Display.**
- **User defined caption**
- **Auxillary Power Supply :**
AC – 230V (+10% / -15%).
AC – 110V (+10% / -15%).
DC – 110V (+10% / -15%).
DC – 24V (+/- 15%).

Highly adaptable DPMs suitable for a wide range of measuring applications.

Versions available for DC Current (mA) and DC voltage (mV & Volts) inputs.

The chosen input range is user adjustable, from 10% to 100% of the full-scale value for DC Current, mV DC and Voltage DC, for simple adaptation of the digital readout to the input value.

Specifications :

Display:

Display range	: 19999
Decimal point position	: Selectable by short links at the rear side of Display.
Negative display indication	: “-“
Digit height	: 14 mm / 7- segment digits.
Overload indication	: Last 4 digits blank. (1)

Measuring ranges:

[Max. Overload 120% of full-scale range value]

Model	RISH DPM 96 x 96 & 48 x 96 4½ DIGIT A DC
DC Current Ranges Available (Voltage drop < 600 mV)	0...20 mA and 4...20 mA (Range selection by input choice)
Model	RISH DPM 96 x 96 & 48 x 96 4½ DIGIT V DC
1) DC mV Ranges Available (Input current < 300uA)	0...60 mV, 0...75 mV, 0...150 mV and 0...200 mV (Range selection by input choice)
2) DC Voltage Ranges Available	0...2V or 0...20V or 0...200V or 0...500V or 0...1000V or Please specify any non - standard input Voltage range, available on request.

Description:

RISH DPM 96 x 96 A/V DC :

96 x96 A DC	DC Current measurement , 2 ranges
96 x 96 V DC	DC Voltage measurement 1) mV input, 4 ranges 2) Voltage input, 5 ranges

Applicable Regulations and Standards

Protection Class Front	IP 20 to IEC EN 60 529 IP 50
Device safety	IEC EN 61 010
EMC immunity	IEC/ EN 61 000-4-1 to 4
EMC radiated interference	IEC/ EN 61326 Class B

Accuracy :

RISH DPM 96 x 96 & 48x 96 4½ DIGIT A DC	Measuring Accuracy Current (Voltage drop < 600 mV)	: < 0.1% of range + 1 digit.
	Temperature coefficient	: 300 ppm / °C.
	Zero point drift	: 200 ppm / °C.
	Range adjustment span	: from 10% to 100% of range.

**RISH DPM 96 x 96 & 48x 96 4½
DIGIT V DC :**

1) milli Volt ranges	Measuring Accuracy milli volts (Input current < 300uA)	: < 0.1% of range + 1 digit.
	Temperature coefficient	: 300 ppm / °C.
	Zero point drift	: 200 ppm / °C.
	Range adjustment span	: from 10% to 100% of range.

2) Volt ranges	Measuring Accuracy Volts (Input current < 300uA)	: < 0.1% of range + 1 digit.
	Temperature coefficient	: 300 ppm / °C.
	Zero point drift	: 200 ppm / °C.
	Range adjustment span	: from 10% to 100% of range

Measuring input	DC Current input	: Terminal 1 (LO -) and 2, 3 (HI +).
	Display adjust (with external calibrator)	: With zero and span pots.
	Decimal point programming	: With short links at front side..

Power supply	4 ranges for power supply are available.	
	Direct voltage DC	: 24 V DC (+/- 15%) 5.5W approx. (isolated). : 110 V DC (+ 10% / -15%) 5.5W approx. (isolated).
	Alternating voltage AC	: 110 V AC (+ 10% / -15%) 5.5W approx. (isolated). : 230 V AC (+10 % / -15%) 5.5W approx. (isolated).
	Frequency	: 47 – 60 Hz.

Environmental conditions	Climatic class	: Class 2 to VDE / DIN 3540.
	Operating temperature	: 0 ... 55 °C.
	Storage temperature	: -25 °C ... +65 °C.
	Safety class	: II to IEC 348 / VDE 0411.
	IP Protection	: IEC EN 60 529. For Back : IP 20. Front : IP 50 (IP 54 on request)
	Device safety	: According to IEC EN 61 010.
	High Voltage Test	: For AC Aux.: 2 kV AC, 50 Hz for 1 minute. For DC Aux. : 1 kV AC, 50 Hz for 1 minute.
	EMC immunity	: According to IEC / EN 61 000-4-1 up to 4.
	EMC radiated interference	: According to IEC / EN 61326 class B.

RISH DPM 96 x 96 4½ DIGIT V DC / A DC :

Dimensions and Weights	Bezel size	: 96 mm x 96 mm DIN 43 718
	Panel cut-out	: 92 + 0.8 mm x 92 + 0.8 mm
	Overall depth	: 55 mm.
	Weight	: 500 gm. Approx.

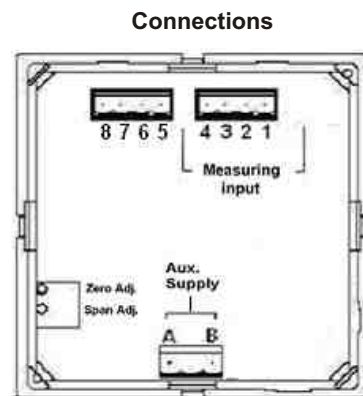
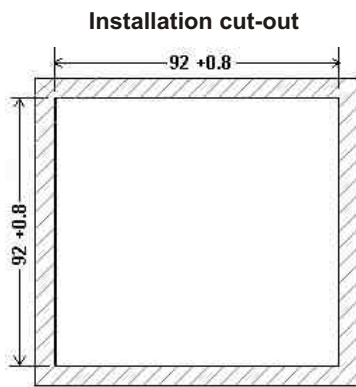
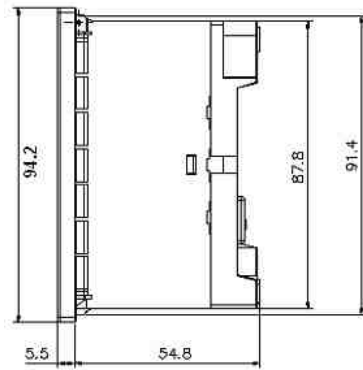
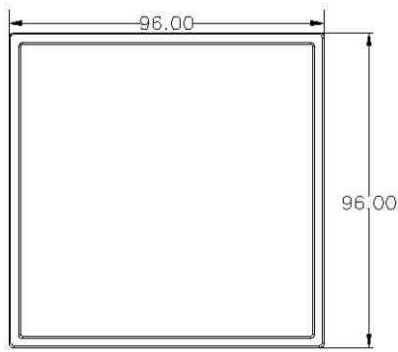
RISH DPM 48x 96 4½ DIGIT V DC / A DC :

Dimensions and Weights	Bezel size	: 96 mm x 48 mm DIN 43 718
	Panel cut-out	: 92 + 0.8 mm x 43.5 + 0.6 mm
	Overall depth	: 138 mm.
	Weight	: 500 gm. Approx.

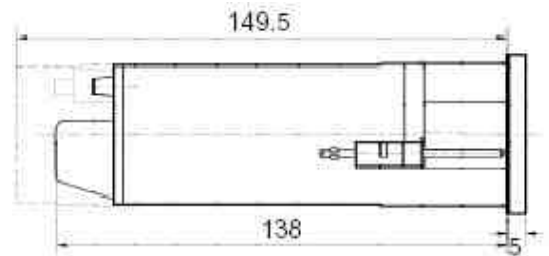
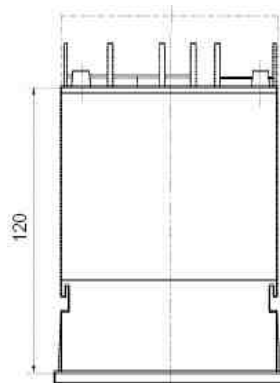
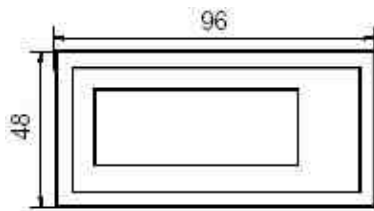
Sundry:	Connections	: Plug-in screw terminal blocks.
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Design & Installation

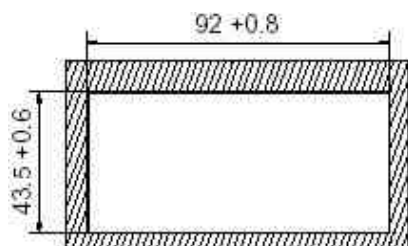
RISH DPM 96 x 96 4½ Digit



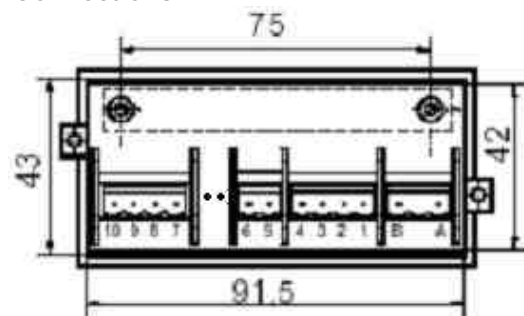
RISH DPM 48 x 96 4½ Digit



Installation Cutout



Connections



Connections

RISH DPM 96 x 96 4½ Digit

CONNECTION FOR RISH DPM 96 x 96 A DC

Current DC : 0... 20 mA : Terminals 1 and 2 with terminals 5 and 6 open.

4... 20 mA : Terminals 1 and 3 plus jumper between terminals 5 and 6.

CONNECTION FOR RISH DPM 96 x 96 V DC – milli Volts

Milli Volts DC : 0... 60 mV , 0... 75 mV : Terminals 1 and 2.
0...150 mV, 0... 200 mV : Terminals 1 and 3.

CONNECTION FOR RISH DPM 96 x 96 V DC –Volts

Volt s DC : 0...2 V or
0...20 V or
0...200 V or
0...500 V or
0...1000 V } : Terminals 1 and 3.

RISH DPM 48 x 96 4½ Digit

CONNECTION FOR RISH DPM 48 x 96 A DC

Current DC : 0... 20 mA : Terminals 1 and 2 with terminals 5 and 6 open.

4... 20 mA : Terminals 1 and 3 plus jumper between terminals 5 and 6.

CONNECTION FOR RISH DPM 48 x 96 V DC – milli Volts

Milli Volts DC : 0... 60 mV / 0... 75 mV : Terminals 1 and 2.
0...150 mV : Terminals 1 and 3.
0... 200 mV : Terminals 1 and 4.

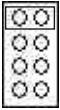
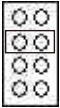
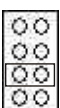
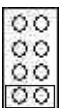
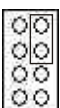
CONNECTION FOR RISH DPM 48 x 96 V DC –Volts

Volt s DC : 0...2 V or
0...20 V or
0...200 V or
0...500 V or
0...1000 V } : Terminals 1 and 4.

Decimal point Adjustment :

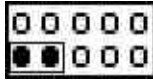
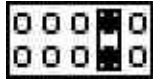
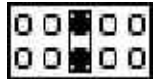
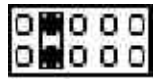
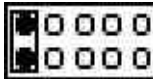
RISH DPM 96 x 96 4½ Digit

Decimal point position is selectable by short links at the Front side

Short Link Position	Decimal point position on Display
	X.XXXX
	XX.XXX
	XXX.XX
	XXXX.X
	XXXXX

RISH DPM 48 x 96 4½ Digit

Decimal point position is selectable by short links at the rear side

Short Link Position	Decimal point position on Display
	XXXXX
	X.XXXX
	XX.XXX
	XXX.XX
	XXXX.X

Ordering Information :

RISH DPM 96 x 96 4½ Digit V DC / A DC

Order Details	Example 1	Example 2
Type	RISH DPM 96 x 96 A DC	RISH DPM 96 x 96 V DC
Measuring Input	0 ... 20 mA	0...1000 V
Display Full-Scale	0 ... 19999	0...19999
Display caption	mA	mV
Aux. Supply	110V AC, 50HZ	230V AC, 50 Hz

RISH DPM 48 x 96 4½ Digit V DC / A DC

Order Details	Example 1	Example 2
Type	RISH DPM 48 x 96 A DC	RISH DPM 48 x 96 V DC
Measuring Input	0 ... 20 mA	0...500 V
Display Full-Scale	0 ... 19999	0...19999
Display caption	mA	V
Aux. Supply	110V DC.	230V AC, 50 Hz



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INSTRUMENTS

Measure, Control & Record with a Difference

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