

# CURRENT MEASUREMENT PROBES

## DIGITAL FLEXPROBE®

### MODELS 400D & 4000D

*Provide a welcomed solution when accessing electrical conductors in tight places*



**MINIFLEX:**  
400D-10 (10 in probe)



**MINIFLEX:**  
4000D-14 (14 in probe)



**MINIFLEX:**  
400D-24 (24 in probe)  
4000D-24 (24 in probe) (shown)

## SPECIFICATIONS

MODELS	400D-10 & 400D-24	4000D-14 & 4000D-24
<b>ELECTRICAL</b>		
Display Range	4 AAC, 40 AAC, 400 AAC	40 AAC, 400 AAC, 4000 AAC
Measurement Range	(0.020 to 3.999) A, (4.00 to 39.99) A (40.0 to 399.9) A	(0.20 to 39.99) A, (40.0 to 399.9) A, (400 to 3999) A
Resolution	1 mA, 10 mA, 100 mA	10 mA, 100 mA, 1 A
Sensor Diameter	400D-10: Ø 2.75 in (70 mm) 400D-24: Ø 8 in (203 mm)	4000D-14: Ø 3.94 in (100 mm) 4000D-24: Ø 8 in (203 mm)
Sensor Length	400D-10: Ø 10 in (254 mm) 400D-24: Ø 24 in (610 mm)	4000D-14: Ø 14 in (355 mm) 4000D-24: Ø 24 in (610 mm)
Bandwidth	10 Hz to 3 kHz	
<b>MECHANICAL</b>		
Power Supply	(2) 1.5 V AAA / LR3 batteries	
Weight	Approx. 0.29 lb (132 g) MiniFlex	
Casing Dimensions	(3.94 x 2.36 x 0.79) in (100 x 60 x 20) mm	
Connection Cable Length	6 ft (1.8 m)	
<b>ENVIRONMENTAL</b>		
Operating Temperature	(32 to 122) °F (0 to 50) °C	
<b>SAFETY</b>		
Safety Rating	IEC 61010, 600 V CAT IV	

Consult factory for NIST Calibration prices

## PRODUCT INCLUDES

Digital FlexProbe®, (2) 1.5 V AAA batteries and user manual.



## FEATURES

- Easy access and measurement, even in confined spaces
- Measurement from 20 mAac to 4000 AAC (model dependent)
- Available with (10, 14 and 24) inch sensor lengths
- Sensor diameter 2.75 in (70 mm) to 8 in (203 mm) (model dependent)
- Resolution down to 1 mA (model dependent)
- HOLD feature
- Direct reading
- Compact and simple to use
- Flexible current sensor
- True RMS
- Safety rating of 600 V CAT IV

## ACCESSORIES

### CATALOG #5000.44

MultiFix (universal mounting system) for use with models 5231, 5233, 400D, and 4000D

CATALOG NO.	DESCRIPTION
2153.31	Digital FlexProbe® Model 400D-10 w/6' Lead (TRMS, 4 AAC, 40 AAC, 400 AAC)
2153.36	Digital FlexProbe® Model 400D-24 w/6' Lead (TRMS, 4 AAC, 40 AAC, 400 AAC)
2153.32	Digital FlexProbe® Model 4000D-14 w/6' Lead (TRMS, 40 AAC, 400 AAC, 4000 AAC)
2153.35	Digital FlexProbe® Model 4000D-24 w/6' Lead (TRMS, 40 AAC, 400 AAC, 4000 AAC)








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## GENERAL PURPOSE PROBES SELECTION CHART

Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift**	Maximum Conductor Size		Output Connection	Catalog No.
			AC	DC	Current	Voltage		Ø Cable	Bus Bar		
	MN01	1000:1	(2 to 150) A	–	1 mA/A*	–	N/A	0.39 in (10 mm)	N/A	Leads	2129.17
	MN02	1000:1	50 mA to 100 A 50 mA to 90 A	–		–	N/A	0.39 in (10 mm)	N/A	Leads	2129.20
	MN05	–	5 mA to 10 A (1 to 100) A	–	–	1 mV/mA 1 mV/A	N/A	0.39 in (10 mm)	N/A	Leads	2129.19
	MN09	–	(1 to 150) A	–	–	100 mV <sub>DC</sub> /A <sub>AC</sub>	N/A	0.39 in (10 mm)	N/A	Leads	2129.21
	MN103	–	1 mA to 10 A (1 to 100) A	–	–	1 mV/mA 1 mV/A	N/A	0.47 in (12 mm)	N/A	Leads	1031.02
	MN114	–	1 mA to 10 A	–	–	100 mV/A	< 8 °	0.47 in (12 mm)	N/A	Leads	2110.71
	MN185	1000:1	50 mA to 120 A	–	1 mA/A	–	< 3.5 °	0.47 in (12 mm)	N/A	Jacks	100.185
	MN255	–	(0.1 to 24) A (0.1 to 240) A	–	–	100 mV/A 10 mV/A	< 2.5 °	0.78 in (20 mm)	N/A	Leads	2115.81
	MN261	–	(0.1 to 24) A (0.5 to 240) A	–	–	100 mV/A 10 mV/A	< 6 °	0.78 in (20 mm)	N/A	BNC	2115.82
	MN291	–	(0.5 to 240) A	–	–	100 mV <sub>DC</sub> /A <sub>AC</sub>	N/A	0.78 in (20 mm)	N/A	Leads	2115.84
	MN307	–	10 mA to 12 A	–	–	100 mV/A	< 2.5 °	0.78 in (20 mm)	N/A	Leads	2116.23
	MN312	1000:1	(0.1 to 200) A	–	1 mA/A*	–	< 2.5 °	0.78 in (20 mm)	N/A	Jacks	2116.24
	MN352	–	(0.1 to 150) A	–	–	10 mV/A	< 2.5 °	0.78 in (20 mm)	N/A	Jacks	2116.26
	MN353	–		–	–		< 2.5 °	0.78 in (20 mm)	N/A	Leads	2116.27
	MN373	–	(0.1 to 24) A (0.1 to 200) A	–	–	1000 mV/A 10 mV/A	< 3 °	0.78 in (20 mm)	N/A	Leads	2116.28
	MN375	–	(0.1 to 10) A	–	–	100 mV/A	< 1.5 °	0.78 in (20 mm)	N/A	Leads	2115.41
	MN379	–	5 mA to 6 A (0.1 to 120) A	–	–	200 mV/A 10 mV/A	< 4 °	0.78 in (20 mm)	N/A	Leads	2153.01
MN379T	–	5 mA to 6 A (0.1 to 120) A	–	–	200 mV/A 10 mV/A	< 4 °	0.78 in (20 mm)	N/A	Lead w/ BNC	2153.02	
	SL206	–	10 mA to 1.5 A 50 mA to 60 A	10 mA to 2 A 50 mA to 80 A	–	1 mV/mA <sub>AC</sub> /DC 10 mV/A <sub>AC</sub> /DC	< 1 °	0.46 in (12 mm)	N/A	Leads	1201.45
	MD301	1000:1	(2 to 500) A	–	–	1 mV <sub>DC</sub> /A <sub>AC</sub>	N/A	1.18 in (30 mm) (2 x 500) kcmil	(2.48 x 0.20) in (63 x 5) mm	Leads	1201.07

\*Output Protection for open secondary





\*\*Phase shift indicated at maximum rating

Note: Models MN103, MN106, MN114 & MN185 are not CE compliant. MN200 & MN300 series are UL approved except MN379.

Consult factory for NIST Calibration price.

# CURRENT MEASUREMENT PROBES

## GENERAL PURPOSE PROBES SELECTION CHART

SERIES	MODEL	RATIO	MEASUREMENT RANGE		OUTPUT SIGNAL		PHASE SHIFT**	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION	CATALOG NO.
			AC	DC	CURRENT	VOLTAGE		Ø CABLE	BUS BAR		
	MR415	–	(0.5 to 400) A	(0.5 to 600) A	–	1 mV/A	≤ 1.5 °	1.18 in (30 mm)	2 bus bar (1.24 x 0.39) in (31 x 10) mm	5 ft (1.5 m) Lead	1200.80
	MR416	–	(0.5 to 40) A (0.5 to 400) A	(0.5 to 60) A (0.5 to 600) A	–	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.95 x 0.19) in (50 x 5) mm	5 ft (1.5 m) Lead	1200.82
	MR526	–	(0.5 to 100) A (0.5 to 1000) A	(0.5 to 150) A (0.5 to 1400) A	–	10 mV/A 1 mV/A	≤ 2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.95 x 0.19) in (50 x 5) mm	5 ft (1.5 m) Lead	1200.83
	SR601	1000:1	(0.1 to 1200) A	–	1 mA/A*	–	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2113.43
	SR604	1000:1	(0.1 to 1200) A	–	1 mA/A*	–	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2113.44
	SR651	–	(0.1 to 1200) A	–	–	1 mV/A	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2113.45
	SR701	1000:1	1 mA to 1000 A	–	1 mA/A*	–	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2116.29
	SR704	1000:1	1 mA to 1000 A	–	1 mA/A*	–	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.30
	SR752	–	(0.1 to 1000) A	–	–	1 mV/A	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.32
	SR759	–	1 mA to 1 A 10 mA to 10 A (0.1 to 100) A (1 to 1000) A	–	–	1000 mV/A 100 mV/A 10 mV/A 1 mV/A	< 1 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.33
	K100	–	0.1 mA to 3 A	0.05 mA to ± 4.5 A	–	1 mV/mA	N/A	0.18 in (4.5 mm)	N/A	Plugs	1200.67
	K110	–	(0.1 to 300) mA	(0.05 to ± 450) mA	–	10 mV/mA	N/A		N/A	Plugs	2111.73
	LM102	1000:1	50 mA to 200 A	–	1 mA/A*	–	< 3 °	0.63 in (16 mm)	N/A	Leads	2153.04
	LM103	–	(0.1 to 200) A	–	–	1 mV/A	< 3 °		N/A	Leads	2153.05

\*Output Protection for open secondary

\*\*Phase shift indicated at maximum rating

Note: All SR probes listed on this chart are UL approved, however not all SR series probes are UL approved; please consult factory. Consult factory for NIST Calibration price.



## OUTPUT TERMINATIONS

### Lead with BNC

Insulated 6.5 ft (2 m) coaxial cable with insulated BNC connector rated 600 Vrms



### Jacks

Two standard safety banana jacks (4 mm)



### Leads

Double/reinforced 5 ft (1.5 m) leads with 4 mm safety banana plug







### Shrouded Banana Plugs

Two 4 mm safety banana plugs; standard ¼ in (19 mm) spacing










# AMPFLEX® AND MINIFLEX® PROBES - SELECTION CHARTS

SERIES	MODEL	RATIO	MEASUREMENT RANGE	OUTPUT SIGNAL	MAXIMUM CONDUCTOR SIZE	CATALOG NO.
	MF 300-10-2-10-HF	–	30 A / 300 A	100 mV/A, 10 mV/A	2.95 in (75 mm)	2126.84
	MF 3000-14-1-1-HF	–	3000 A	1 mV/A	3.93 in (100 mm)	2126.86
	MA114	–	3 A / 30 A / 300 A / 3000 A	1 mV/mA, 100 mV/A 10 mV/A, 1 mV/A	4 in (101 mm)	2153.41
	300-24-2-10	–	30 A / 300 A	100 mV/A, 10 mV/A	7.48 in (190 mm)	2112.88
	1000-24-1-1	–	1000 A	1 mV/A	7.48 in (190 mm)	2112.39
	1000-24-2-1	–	100 A / 1000 A	10 mV/A, 1 mV/A	7.48 in (190 mm)	2112.98
	1000-36-2-1	–	100 A / 1000 A	10 mV/A, 1 mV/A	11 in (280 mm)	2113.00
	3000-24-1-1	–	3000 A	1 mV/A	7.48 in (190 mm)	2112.46
	3000-36-1-1	–	3000 A	1 mV/A	11 in (280 mm)	2112.48
	3000-24-2-1	–	300 A / 3000 A	10 mV/A, 1 mV/A	7.48 in (190 mm)	2113.05
	3000-48-2-1	–	300 A / 3000 A	1 mV/A	15 in (381 mm)	2112.01
	6000-36-2-0.1	–	600 A / 6000 A	1 mV/A, 0.1 mV/A	11 in (280 mm)	2113.21
	30000-24-2-0.1	–	3000 A / 30,000 A	1 mV/A, 0.1 mV/A	7.48 in (190 mm)	2113.33
	24-3001	–	300 A / 3000 Aac	10 mV/A, 1 mV/A	7.48 in (190 mm)	2120.81

Consult factory for NIST Calibration price

## OSCILLOSCOPE & BNC TERMINATED PROBES

MODEL	MEASUREMENT RANGE		OUTPUT SIGNAL VOLTAGE	PHASE SHIFT*	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION
	AC	DC			Ø CABLE	BUS BAR	
 SL261	100 mA to 10 A (1 to 100) A		100 mV/A 10 mV/A	< 1.5 °	0.46 in (12 mm)	N/A	6.5 ft (2 m) Lead w/BNC
 MN261	(0.1 to 24) A (0.5 to 240) A	–	100 mV/A 10 mV/A	< 2.5 °	0.78 in (20 mm)	N/A	6.5 ft (2 m) Lead w/BNC
 SR661	(0.1 to 12) A (0.1 to 120) A (1 to 1200) A	–	100 mV/A 10 mV/A 1 mV/A	< 1 °	2.05 in (52 mm)	(1.96 x 0.19) in (50 x 5) mm	6.5 ft (2 m) Lead w/BNC
 MN251T MN379T	(0.5 to 240) A	–	1 mV/A	< 2.5 °	0.78 in (20 mm)	0.78 in (20 mm)	10 ft (3 m) Lead w/BNC
	(0.005 to 6) A	–	200 mV/A	< 4 °			
	(0.1 to 120) A	–	10 mV/A	< 2.2 °			
 MH60	(0.5 to 100) A	(0.5 to 100) A	10 mV/A	< 1 °	1.02 in (26 mm)	N/A	6.6 ft (2 m) Lead w/BNC
 MR417	(0.5 to 40) A (0.5 to 400) A	(0.5 to 60) A (0.5 to 600) A	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.18 in (30 mm)	2 bus bar (1.24 x 0.39) in (32 x 10) mm	6.6 ft (2 m) Lead w/BNC
 MR527	(0.5 to 100) A (0.5 to 1000) A	(0.5 to 150) A (0.5 to 1400) A	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.96 x 0.19) in (50 x 5) mm	6.6 ft (2 m) Lead w/BNC

\*Phase shift indicated at maximum rating. Note: All probes are rated 600 V CAT III and CE compliant. Not all models are UL approved; please consult factory. Consult factory for NIST Calibration price.