

# CURRENT MEASUREMENT PROBES

## DIGITAL FLEXPROBE®

### MODELS 400D & 4000D

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



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



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



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



## SPECIFICATIONS

MODEL	400D-10 & 400D-24	4000D-14 & 4000D-24
<b>ELECTRICAL</b>		
Display Range	4A <sub>AC</sub> , 40A <sub>AC</sub> , 400A <sub>AC</sub>	40A <sub>AC</sub> , 400A <sub>AC</sub> , 4000A <sub>AC</sub>
Measurement Range	0.020 to 3.999A, 4.00 to 39.99A 40.0 to 399.9A	0.20 to 39.99A, 40.0 to 399.9A, 400 to 3999A
Resolution	1mA, 10mA, 100mA	10mA, 100mA, 1A
Sensor Diameter	400D-10: Ø 2.75" (70mm) 400D-24: Ø 8" (190mm)	4000D-14: Ø 3.94" (100mm) 4000D-24: Ø 8" (190mm)
Sensor Length	400D-10: Ø 10" (250mm) 400D-24: Ø 24" (610mm)	4000D-14: Ø 14" (350mm) 4000D-24: Ø 24" (610mm)
Bandwidth	10Hz to 3kHz	
<b>MECHANICAL</b>		
Power Supply	2 x 1.5V AAA / LR3 batteries	
Weight	Approx. 0.29lbs (130g) MiniFlex	
Casing Dimensions	3.94 x 2.36 x 0.79" (100 x 60 x 20mm)	
Connection Cable Length	6 ft (1.8m)	
<b>ENVIRONMENTAL</b>		
Operating Temperature	32° to 122°F (0° to 50°C)	
<b>SAFETY</b>		
Safety Rating	IEC 61010, 600V CAT IV	

Consult factory for NIST Calibration prices

## PRODUCT INCLUDES

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

## FEATURES

- Easy access and measurement, even in confined spaces
- Measurement from 20mA<sub>AC</sub> to 4000A<sub>AC</sub> (model dependent)
- Available with 10", 14" and 24" sensor lengths
- Sensor diameter 2.75" (70mm) to 8" (190mm) (model dependent)
- Resolution down to 1mA (model dependent)
- HOLD feature
- Direct reading
- Compact and simple to use
- Flexible current sensor
- True RMS
- Safety rating of 600V 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, 4A <sub>AC</sub> , 40A <sub>AC</sub> , 400A <sub>AC</sub> )
2153.36	Digital FlexProbe® Model 400D-24 w/6' Lead (TRMS, 4A <sub>AC</sub> , 40A <sub>AC</sub> , 400A <sub>AC</sub> )
2153.32	Digital FlexProbe® Model 4000D-14 w/6' Lead (TRMS, 40A <sub>AC</sub> , 400A <sub>AC</sub> , 4000A <sub>AC</sub> )
2153.35	Digital FlexProbe® Model 4000D-24 w/6' Lead (TRMS, 40A <sub>AC</sub> , 400A <sub>AC</sub> , 4000A <sub>AC</sub> )



# 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			
	MN01	1000:1	2 to 150A	-	1mA/A*	-	N/A	0.39" (10mm)	-	Leads	2129.17	
	MN02		50mA to 100A 50mA to 90A			-					2129.20	
	MN03	2 to 100A	-		1mV/A	2129.18						
	MN05	-	5mA to 10A 1 to 100A		-	1mV/A 1mV/A					2129.19	
	MN103	-	1mA to 10A 1 to 100A		-	1mV/A 1mV/A					1031.02	
	MN106	1000:1	2 to 150A	1mA/A	-	<10°	0.47" (12mm)	-	-	1031.17		
	MN114	-	1mA to 10A	-	100mV/A	<8°				2110.71		
	MN185	-	50mA to 120A	1mA/A	-	<3.5°				Jacks	100.185	
	MN213	1000:1	-	1mA/A*	-	<2.5°				-	-	2115.75
MN251	-	0.5 to 240A	-	1mV/A	2115.77							
MN253		-	-	10mV/A	2115.79							
	MN255	-	0.1 to 24A 0.1 to 240A	-	100mV/A 10mV/A	2115.81						
	MN291	-	0.5 to 240A	-	100mVdc/Aac	N/A	2115.84					
	MN307	-	10mA to 12A	-	100mV/A	2116.23						
	MN312	1000:1	0.1 to 200A	1mA/A*	-	<2.5°	-	Jacks	2116.24			
	MN313		-	-	Leads			2116.25				
	MN352	-	0.1 to 150A	-	10mV/A	Jacks	2116.26					
	MN353	-	-	-	-	2116.27						
	MN373	-	0.01 to 2.4A 0.1 to 200A	-	1000mV/A 10mV/A	<3°	2116.28					
	MN375	-	0.1 to 10A	-	100mV/A	<1.5°	2115.41					
	MN379	-	5mA to 6A 0.1 to 120A	-	200mV/A 10mV/A		2153.01					
		SL206	-	10mA to 1.5A 50mA to 60A	10mA to 2A 50mA to 80A	-	1mV/mAac/dc 10mV/Aac/dc	<1°	0.46" (11.8mm)	-	Leads	1201.45
		MD301	1000:1	2 to 500A	-	-	1mVdc/Aac	N/A	1.18" (30mm) 2 x 500kcmil	2.48 x 0.20" (63 x 5mm)	-	1201.07
		MD305		1 to 600A	1mA/A*	-	<1°	1201.36				

\*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 400A	0.5 to 600A	-	1mV/A	≤1.5°	1.18" (30mm)	2 bus bar 1.24 x 0.39" (31.5 x 10mm)	5 ft (1.5m) Lead	1200.80
	MR416		0.5 to 40A 0.5 to 400A	0.5 to 60A 0.5 to 600A		10mV/A 1mV/A	≤2.2° ≤1.5°				1200.82
	MR525		0.5 to 1000A	0.5 to 1400A		1mV/A	≤1.5°	1200.81			
	MR526		0.5 to 100A 0.5 to 1000A	0.5 to 150A 0.5 to 1400A		10mV/A 1mV/A	≤2° ≤1.5°	1.53" (39mm)	2 bus bar 1.96 x 0.19" (50 x 5mm)		1200.83
	SR600	1000:1	0.1 to 1000A	-	1mA/A	-	<0.5°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	Jacks	2113.42
	SR601				1mA/A*						2113.43
	SR604				1mA/A*						Leads
	SR634	250:5 500:5 1000:5	1 to 250A 1 to 500A 1 to 1000A	20mA/A 10mA/A 5mA/A*	<1°	Jacks	2113.48				
	SR651	-	0.1 to 1000A	-	1mV/A		<0.5°			2113.45	
	SR701	1000:1	1mA to 1000A	-	1mA/A*		<0.7°			2116.29	
	SR704					2116.30					
	SR752	-	0.1 to 1000A	-	-	1mV/A	Leads			2116.32	
	SR759		1mA to 1A 10mA to 10A 0.1 to 100A 1 to 1000A			1000mV/A 100mV/A 10mV/A 1mV/A				<1°	2116.33
	K100	-	0.1mA to 3A	0.05mA to ±4A	-	1mV/mA	N/A	0.18" (4.5 mm)	N/A	Plugs	1200.67
	K110		0.1mA to 300mA	0.05mA to ±450mA		10mV/mA					2111.73
	LM102	1000:1	50mA to 200A	-	1mA/A*	-	<3°	0.63" (16 mm)	-	Leads	2153.04
	LM103	-	0.1 to 200A		-	1mV/A					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 (2m) coaxial cable with insulated BNC connector rated 600Vrms



### Jacks

Two standard safety banana jacks (4mm)



### Leads

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







### Shrouded Banana Plugs

Two 4mm safety banana plugs; standard 3/4" (19mm) spacing










# AMPFLEX® AND MINIFLEX® PROBES - SELECTION CHARTS

SERIES	MODEL	RATIO	MEASUREMENT RANGE	OUTPUT SIGNAL	MAXIMUM CONDUCTOR SIZE	CATALOG NO.
	MF 300-6-2-10-HF	—	30A / 300A	100mV/A, 10mV/A	1.77" (45mm)	2126.83
	MF 300-10-2-10-HF	—			2.95" (70mm)	2126.84
	MA114	—	3A / 30A / 300A / 3000A	1mV/mA, 100mV/A 10mV/A, 1mV/A	4" (101mm)	2153.41
	300-24-2-10	—	30A / 300A	100mV/A, 10mV/A	7.48" (190mm)	2112.88
	1000-24-1-1	—	1000A	1mV/A		2112.39
	1000-24-2-1	—	100A / 1000A	10mV/A, 1mV/A	11" (290mm)	2112.98
	1000-36-2-1	—			11" (290mm)	2113.00
	3000-24-1-1	—	3000A	1mV/A	7.48" (190mm)	2112.46
	3000-36-1-1	—			11" (290mm)	2112.48
	3000-24-2-1	—	300A / 3000A	10mV/A, 1mV/A	7.48" (190mm)	2113.05
	3000-36-2-1	—			11" (290mm)	2112.00
	3000-48-2-1	—			15" (390mm)	2112.01
	6000-36-2-0.1	—	600A / 6000A	1mV/A, 0.1mV/A	11" (290mm)	2113.21
30000-24-2-0.1	—	3000A / 30,000A	2113.33			
	24-3001	—	300A / 3000AAC	10mV/A, 1mV/A	7.48" (190mm)	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	100mA to 10A 1 to 100A		100mV/A 10mV/A	<1.5°	0.46" (11.8mm)	N/A	6.6 ft (2m) Lead w/BNC
 MN261	0.1 to 24A 0.5 to 240A	—		<2.5°	0.78" (19.8mm)		
 SR661	0.1 to 12A 0.1 to 120A 1 to 1200A		<1°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)		
 MN251T MN379T	0.5 to 240A		1mV/A	<2.5°	0.78" (20mm)	0.78" (20mm)	10 ft (3m) Lead w/BNC
	0.005 to 6A	200mV/A	<4°				
	0.1 to 120A	10mV/A	<2.2°				
 MH60	0.5 to 100A	0.5 to 100A	10mV/A	<1°	1.02" (26mm)	N/A	6.6 ft (2m) Lead w/BNC
 MR417	0.5 to 40A 0.5 to 400A	0.5 to 60A 0.5 to 600A	10mV/A 1mV/A	≤2.2° ≤1.5°	1.18" (30mm)	2 bus bar 1.24 x 0.39" (31.5 x 10mm)	
 MR527	0.5 to 100A 0.5 to 1000A	0.5 to 150A 0.5 to 1400A		≤2.2° ≤1.5°	1.53" (39mm)	2 bus bar 1.96 x 0.19" (50 x 5mm)	

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