

a) DC ampérmetry t.p.0,5% nebo 1%



MOVING COIL DC INSTRUMENTS

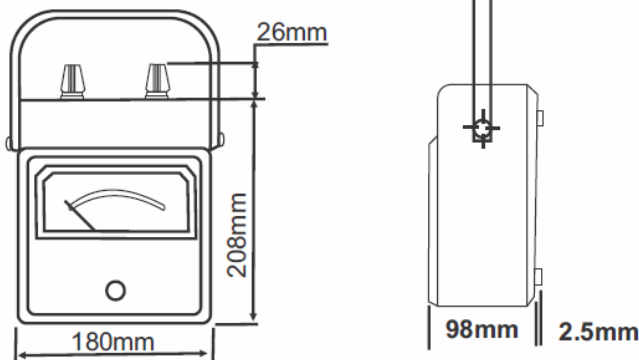
* Rated Accuracy : Class 0.5% or 1.0% of Full Scale value as per IS 1248/84, between 10% - 100% of scale.

STANDARD RANGES
D.C. AMMETERS
0-1mA, 2mA, 5mA, 10mA, 20mA, 50mA, 100mA, 200mA, 500mA, 750mA, 1A, 2A, 2.5A, 5A, 10A, 20A, 30A
0-1/2mA, 2.5/5mA, 5/10mA, 10/20mA, 15/30mA, 25/50mA, 50/100mA, 75/150mA, 100/200mA, 150/300mA, 250/500mA, 300/600mA, 500/1000mA, 1/2A, 2.5/5A, 5/10A, 10/20A, 15/30A
0-1/2mA, 2.5/5mA, 5/10mA, 10/20mA, 15/30mA, 25/50mA, 50/100mA, 75/150mA, 100/200mA, 150/300mA, 250/500mA, 300/600mA, 500/1000mA, 1/2A, 2.5/5A, 5/10A, 10/20A, 15/30A
0.1/0.3/1/3mA, 1/3/10/30mA, 10/30/100/300mA, 0.1/0.3/1/3A, 1/3/10/30A

Délka stupnice: cca 140mm
ISO 9001-2015 Certified

Portable Voltmeters are designed for the use in laboratories, field & test room where precision measurement is required. These portable instruments can be used in precision research laboratories where carefully controlled atmospheric conditions are secured, in educational institutions where possible misuses exist and in factories where these instruments are important for making calibration check on switchboard and panel instruments.

DIMENSIONS




Plastové pouzdro-plášť přístroje:

b) DC ampémetry t.p.0.5%

These are Moving Coil or Moving Iron type instruments or dynamometric type instruments, specially designed to be operated in horizontal position (also in inclined position upto 45°) & can be carried along safely.

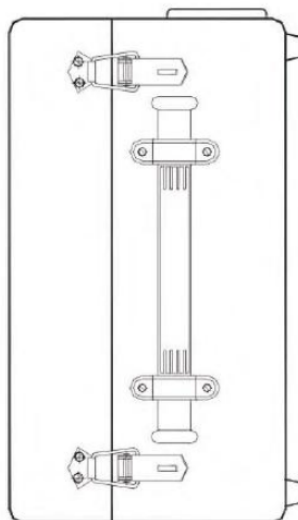
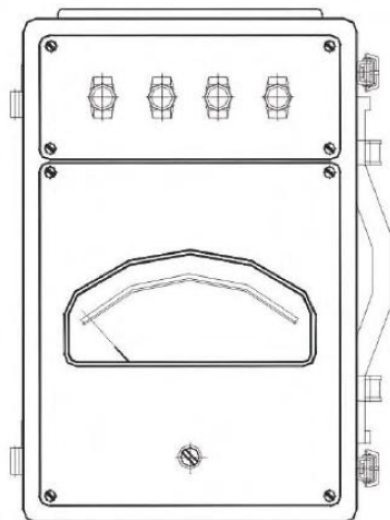
FEATURES / ADVANTAGES:

- ◆ Instruments with 0.5% accuracy class.
- ◆ Instruments with multiple scale available (refer table).
- ◆ Robust housing suitable for schools, workshops, field operations for continuous use.
- ◆ Precision instruments suitable for standard laboratories (Size: 1).

MODEL	TYPE	SCALE	RANGE	ACCURACY
 PORT LSPW – 1	D.C. μ -AMMETER	Single	500 μ A, 1000 μ A	0.5%
		Dual	500/1000 μ A,	
	D.C. MILLI-AMMETER	Single	1mA, 2.5mA, 3mA, 5mA, 7.5mA, 10mA, 25mA, 30mA, 50mA, 75mA, 100mA, 250mA, 300mA, 500mA, 750mA, 1000mA	
		Dual	1/2mA, 2.5/5mA, 5/10mA, 10/20mA, 15/30mA, 25/50mA, 50/100mA, 150/300mA, 250/500mA, 500/1000mA.	
	D.C. AMMETER	Single	0.5A, 1A, 2.5A, 3A, 5A, 10A, 15A, 20A, 25A, 30A	
		Dual	0.5/1A, 1/2A, 2.5/5A, 5/10A, 10/20A, 15/30A	

Dřevěný pouzdro-plášť přístroje:

MECHANICAL SPECIFICATIONS



SIZE 1


SIZE	LENGTH mm	WIDTH mm	HEIGHT mm	HOUSING MATERIAL	MODEL IDENTIFICATION	SCALE		WEIGHT kg. (Approx.)
						LENGTH mm (Approx.)	DIVISION nos.	
1	300	200	155	Wooden Box	LSPW —	150	100 ~ 150	4
2	300	200	190	Wooden Box	LSPW —	150	100 ~ 150	5

c) DC ampémetry t.p.1%

These are Moving Coil DC, Moving Coil rectifier type AC, Moving Iron AC ammeters & voltmeters which are suitable for use in school, laboratories, workshops & for field operation. Specially designed to be operated in horizontal position (also in inclined position upto 45°) & can be carried along safely.

FEATURES / ADVANTAGES

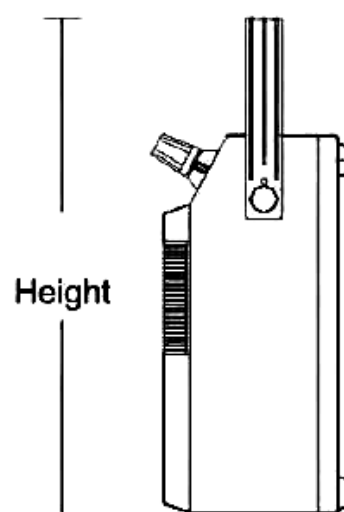
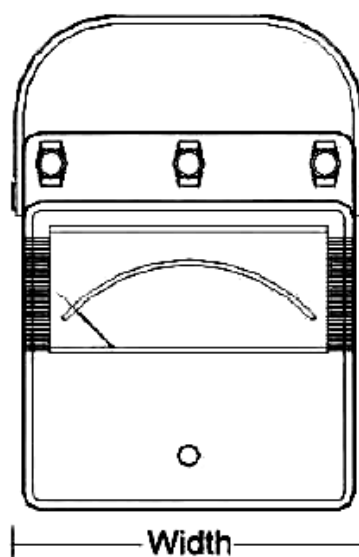
- ◆ Instruments with accuracy class 1.0% for DC/AC, 1.5% for Rectifier type AC.
- ◆ Instruments with multiple scale (refer table).
- ◆ Robust housing.

MODEL	TYPE	SCALE	RANGE	ACCURACY
	D.C. μ -AMMETER	Single	50 μ A, 100 μ A, 150 μ A, 250 μ A, 500 μ A, 1000 μ A	1.0%
		Dual	50/100 μ A, 100/200 μ A, 150/300 μ A, 250/500 μ A, 500/1000 μ A,	
	D.C. MILLI-AMMETER	Single	1mA, 2.5mA, 3mA, 5mA, 7.5mA, 10mA, 25mA, 30mA, 50mA, 75mA, 100mA, 250mA, 300mA, 500mA, 750mA, 1000mA	
		Dual	0.5/1mA, 1/2mA, 2.5/5mA, 5/10mA, 10/20mA, 15/30mA, 25/50mA, 50/100mA, 150/300mA, 250/500mA, 500/1000mA	
	D.C. AMMETER	Single	0.5A, 1A, 2.5A, 3A, 5A, 10A, 15A, 20A, 25A, 30A, 50A(INT. SHUNT)	
		Double	1/2A, 2.5/5A, 5/10A, 10/20A, 15/30A, 25/50A(INT. SHUNT)	

MECHANICAL SPECIFICATIONS

Size	length	width	height	housing	model	Scale length	division	weight
1	250 mm	190 mm	80 mm	Black Engineering Plastic	MSSB	145 mm (approx)	60-150	1Kg (approx)

Plastové pouzdro-plášť přístroje:



d) DC ampérmetry t.p.0,5%

Name	Range	No.	
DC Ammeter	2 Ranges	50/100 μ A	1403
		100/500 μ A	1404
		500/1000 μ A	1405
		10/50mA	1406
		50/100mA	1407
		50/500mA	1408
	3 Ranges	10/30/100mA	1409
		0.1/0.3/1A	1410
		1/3/10A	1411
		3/10/30A	1412
	4 Ranges	0.1/0.3/1/3mA	1414
		1/3/10/30mA	1415
		10/30/100/300mA	1416
		0.1/0.3/1/3A	1417
		1/3/10/30A	1418
	30/100/300/1000mA	1419	



- **Principle :** Moving coil type
- **Accuracy :** $\pm 0.5\%$ F.S.
- **Scale Length :** Approx. 135mm(5-3/8")
- **Weight :** Approx. 1.7kg
- **Dimension :** 196(L) \times 170(W) \times 87(D)mm
- **Case Material :** Bakelite with glass window



e) DC/AC ampérometry t.p.1,5% / 2%

MS 300 SERIES

Feature

- .Sturdy, simple and extremely safe to use
- .High accuracy and reliability
- .Combination of electronic and mechanical advantage
- .Single switch for range selection
- .Safety sockets and dual insulation
- .Moulded, water-resistant casing

Technical data	MS-301
Function	AC/DC Current meter
Range	AC 10mA~10A(7Steps) DC 100uA~10A(11Steps)
Accuracy	1.5%(DC), 2%(AC)
Operating frequency	45~400Hz
Fuse	1A and 10A
Accessories	NA

Dimensions: 170×165×55 mm

Weight: 200g



f) DC ampérmetry t.p.1,5%

- Precision meters for plant maintenance, field servicing and educational purposes.
- Taut Band movement with rectifier type.
- Multi terminals (4mm socket) for range selection.
- Carbon pointer, mirror scale to eliminate parallax error.
- High resistance to shock and vibration.
- Accuracy: $\pm 1.5\%$ F.S.
- Scale length : 80mm.
- Dimension : 107(L) \times 117(W) \times 53(D)mm.
- Weight : Approx. 300g.
- Meets CE
EN 61010-1 CAT II 600V
EN 61326-1 (for 0~600V)



CE

Name	Range		No.
DC Ammeter Accuracy : $\pm 1.5\%$ F.S.	1 Range	200mA	305DCA 100
		500mA	305DCA 101
		1A	305DCA 102
		3A	305DCA 103
		5A	305DCA 104
	3 Ranges	1/3/5A	305DCA 301
		5/10/25A	305DCA 302
	4 Ranges	1/3/10/30mA	305DCA 400
		10/100/300/1000mA	305DCA 401
		10/30/300/1000mA	305DCA 402
		30/100/300/1000mA	305DCA 403
		50/250/500/1000mA	305DCA 404
		50mA/500mA/1A/10A	305DCA 405

g) DC ampérometry t.p.0,5% nebo 1%



Portable Ammeters & Voltmeters are designed for use in the field, test rooms and laboratories where precision measurement is required. These Portable Instruments can be used equally well in precision research laboratories where carefully controlled atmosphere conditions are secured, in educational institutions where possible misuses exist and in factories where these instruments are important for making calibration check on switchboard and panel instruments.

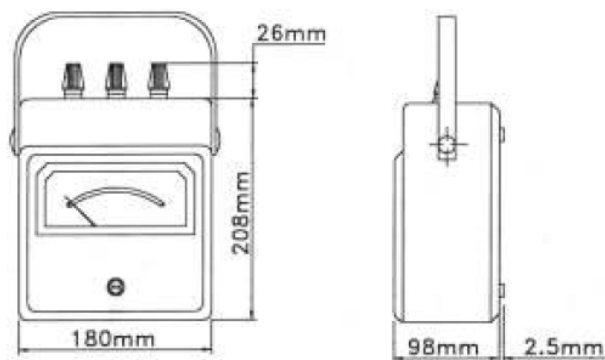
Features:

- **Knife edge Pointer & Anti-parallax mirror scale.**
- **Tough Bakelite Case :** The complete body of the instrument is made from superior grade of bakelite. Unique design makes it very strong in construction and at the same time provides very high insulation.
- **Shock resistant Pivot jewel movements :** The pivots are made from Carbon Steel hard chrome plated and are mounted in spring loaded sapphire jewels. This ensures shock resistance due to vibrations in transit and minimum friction during use.
- **Dust Proof :** The Movement is placed in a separate compartment making it completely dust proof, thus ensuring long life and years of trouble free service.
- **Minimised Heating of Voltmeters or less internal heating due to low VA-loss :** The resistance of voltmeters are housed separately in a ventilated compartment making heating problems negligible
- **Quick Response** due to unique damping.
- **Confirming to BS 89, IEC 51 & ISS 1248.**

Specifications:

- Scale Length** : 140mm approx
Test Voltage : 200VAC (rms) for 1 minute
Insulation Resistance : Over 20 Megohms at 500VDC
Sensitivity : 1000 ohms/V for DC Meters.

Dimensions:



Moving Coil / DC Ammeters:

Order Code	Accuracy	Range (Choose Any One)
20047	Class 0.5 as per ISS 1248/83	0-0.1/0.3/1/3, 1/3/10/30, 10/30/100/300mA 0-0.1/0.3/1/3A
20048	Class 0.5 as per ISS 1248/83	0-1/3/10/30A
20049	Class 1.0 as per ISS 1248/83	0-100, 150, 200, 250, 300, 500, 750uA
20050	Class 1.0 as per ISS 1248/83	0-1, 2.5, 5, 10, 15, 25, 50, 75, 100, 200, 250, 300, 500, 750mA
20051	Class 1.0 as per ISS 1248/83	0-1/2, 2.5/5, 5/10, 10/20, 15/30, 25/50, 75/150, 150/300, 250/500, 300/600, 500/1000mA
20052	Class 1.0 as per ISS 1248/83	0-1, 2, 2.5, 5, 10, 15, 20, 25, 30, 50A
20053	Class 1.0 as per ISS 1248/83	0-1/2, 2.5/5, 5/10, 10/20, 15/30, 25/50A
20054	Class 1.0 as per ISS 1248/83	0-75, 100, 150, 200, 250, 300, 500, 750, 1000, 1500A (With External Shunt)
20055	Class 1.0 as per ISS 1248/83	0-0.1/0.3/1/3, 1/3/10/30, 10/30/100/300mA 0-0.1/0.3/1/3, 1/3/10/30A