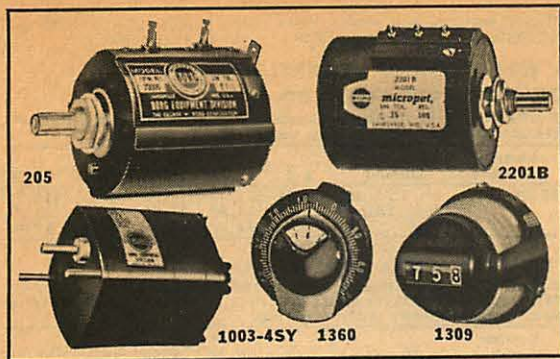




Micropots®, Motors, Dials



MICRODIALS®

Type 1300: Digital units for fast, accurate readings; indicates precise shaft position up to 1000 turns. Available in 3-digit 10-turn, 4-digit 1000-turn, and 5-digit 1000-turn models with counts to 6000 per minute. Optional finger-tip brakes. Knurled aluminum knobs; nylon counter wheels. Rugged, dust-sealed case. Continuous rotation. Numbers $\frac{3}{4}$ " high. **Prices below.***

Amphenol Number	Std. With Brake	No. Digits	No. Turns	Counts	Size, In. Dia. x Depth
1310	1309	3	10	000-999	1.8 x 1 $\frac{1}{2}$ "
1304	1314	4	100	0000-9999	2 $\frac{1}{4}$ x 1 $\frac{1}{2}$ "
1305	1315	5	1000	00000-99999	2 $\frac{1}{4}$ x 1 $\frac{1}{2}$ "

Type 1330: Superior 3-digit units with on-off switchable brake and magnified digits for widest versatility. Internally illuminated. Lens type window gives 1 $\frac{1}{2}$ X magnification of digits. Snap-on cap for easy lamp replacement. Sealed against dust and moisture. Five colors available. Machined aluminum knob with fluted rim. Numbers $\frac{3}{4}$ " high. Size, 1 $\frac{3}{4}$ " dia. x 1 $\frac{1}{2}$ " deep. **Prices below.***

Amphenol Number			Std. Color Cap and Arm
No Light	White Light	Red Light	
1331	1331LW	1331LR	Dark Gray
1332	1332LW	1332LR	Light Gray
1333	1333LW	1333LR	Red
1334	1334LW	1334LR	Black
1335	1335LW	1335LR	White

Type 1320: Concentric 10-turn type may also be used to indicate angular position of other multiturn devices. Two concentric dials: One indicates full turn; other 1/100th of a turn. Won't backlash; smooth action without stepping; fingertip brake. Size, 1 $\frac{3}{4}$ " dia. x 1 $\frac{1}{2}$ " deep. **Prices below.***

Amph. Model	Finish*		Amph. Model	Finish*	
	Cover	Dials		Cover	Dials
1320	B. Chrome	S. Chrome	1324	G. Black	S. Chrome
1321	B. Chrome	G. Black	1325	G. Black	G. Black
1322	S. Chrome	S. Chrome	1326	D. Black	S. Chrome
1323	S. Chrome	G. Black	1327	D. Black	D. Black

*B.—Bright S.—Satln. G.—Glossy. D.—Dull.

Type 1360: Economical 10-turn concentric type with dial same as Type 1320. Smooth, continuous operation either direction. Fingertip brake. Size, 1 $\frac{3}{4}$ " dia. x 1" deep. **Prices below, right.***

Amphenol Number	Coloring			
	Large Dial	Turns Dial	Cover	Arm
1361	Dark Gray	White*	Dark Gray	Light Gray
1362	Light Gray*	White*	Light Gray	Dark Gray
1363	Black	White*	Red	Black
1364	Dark Gray	White*	Red	Light Gray
1365	Light Gray*	White*	Red	Dark Gray

*Black numerals; other dials have white numerals.

Type 3000: Miniature concentric turns counter is only 1" dia. Companion to Series 2100 and 2440 potentiometers. It is suitable for angular positioning of any precision shaft-controlled device of ten turns or less. **Prices below at right.***

Amphenol Number	1/8" Shaft	3/4" Shaft	Colors	Brake*	
				Suffix	Knob Color
3021	3041	White numbers on black	-1	White	
3022	3042	Black numbers on white	-2	Black	
3023	3043	Fluorescent nos. on black	-3	Red	
			-4	Dk. Gray	
			-5	Lt. Gray	

*Add suffix to standard type, i.e. 3021-1.

TYPE 1003-4SY INSTRUMENT MOTORS

Geared, synchronous 4-pole motors for quality instrument applications. Also available in inductance types, 2-pole construction, and without gear trains (data on request). Reversible; capacitor-start (0.8 μ f). **Power Input:** Rated for 110 v. AC, 60 cycles. May also be operated on 50 cycles at reduced speed. Also operate on 220 v. AC, 50/60 cycles when properly connected. Connection diagrams supplied. **Size:** 2.916" sq. x 2 $\frac{1}{2}$ " l. body; $\frac{1}{2}$ " dia. flattened shaft extends 1"; two 8-32 thread screws on 2.696" (diag.) centers for mounting. Stack lgh., $\frac{1}{4}$ ".

Amphenol Model 1003-4SY Geared 4-Pole Synchronous Motor—Specify gear ratio when ordering: 2-gear type, 6:1 (300 rpm), 8:1 (225 rpm), 10:1 (180 rpm) or 12:1 (150 rpm); 3-gear, 15:1 (120 rpm), 18:1 (100 rpm), 24:1 (75 rpm), 30:1 (60 rpm), 36:1 (50 rpm), 60:1 (30 rpm) or 72:1 (25 rpm); 4-gear, 100:1 (12 rpm), 150:1 (8 rpm), 180:1 (10 rpm) or 200:1 (9 rpm); 5-gear, 300:1 (6 rpm), 360:1 (5 rpm), 600:1 (3 rpm), 900:1 (2 rpm) or 1800:1 (1 rpm). **Prices at right.***

205 SERIES PRECISION MICROPOTS®

TYPE 205 TEN-TURN

Precision potentiometers; rugged and dependable under exacting electrical and environmental specifications. Resistance wire locked in place; precision positioned and molded integrally with housing for permanent accuracy; rigid terminals also molded integrally with housing. Two bearings support the rotor assembly for precise positioning. Stainless steel, double thread, precision lead screw guides the moving contact assuring accurate settings and smooth action and uniform low torque. Anti-backlash spring in contact guide makes for accurate setting and resetting. Fine resolution due to 43 $\frac{1}{2}$ " Kohirausch winding in the helical element. Resistance output directly proportional to shaft rotation with extra high accuracy; each pot is automatically machine tested for linearity at 100 points. **Linearity Accuracy:** $\pm 0.1\%$; independent of zero based except 1.15-50 ohms, independent of zero. **Mechanical Rotation:** 3600° $\pm 15^\circ - 0^\circ$. **Electrical Rotation:** 3600° $\pm 14.4^\circ - 0^\circ$. **Total Resistance:** 1.15 to 100K ohms, tol. $\pm 10\%$ and $\pm 3\%$. **Torque:** Not over 1.5 in./oz., running; 3.0 in./oz., starting. **Power Dissipation:** 5 watts at 40° C. **Life:** Not less than 50,000 cycles (1 million revolutions). **Size:** 1 $\frac{3}{4}$ " O.D. x 2 $\frac{1}{4}$ " l., body. Shaft $\frac{1}{8}$ " long with $\frac{1}{8}$ -32 threaded base with hex nut. Terminals $\frac{3}{4}$ " h. **Amph. Model 205 Ten-Turn Micropot®** (1% zero-based linearity)—Specify resistance when ordering: 1.15, 2.9 and 25 ohms with $\pm 0.1\%$ linearity, $\pm 10\%$ resistance tolerance; 50, 100, 200 and 500 ohms with $\pm 0.1\%$ linearity, $\pm 3\%$ resistance tolerance; 1000, 2000, 5000, 10K, 20K ohms with $\pm 0.1\%$ linearity, $\pm 3\%$ resistance tolerance; 50K and 100K ohms with $\pm 0.1\%$ linearity, $\pm 3\%$ resistance tolerance. **Prices below.***

TYPE 205-3T THREE-TURN

Rugged and reliable precision potentiometer with much shorter housing length than that of 10-turn Micropot. **Linearity Accuracy:** $\pm 0.5 - 0.1\%$, independent or zero-based. **Mechanical Rotation:** 1080° $\pm 15^\circ - 0^\circ$. **Electrical Rotation:** 1080° $\pm 14.4^\circ - 0^\circ$. **Total Resistance:** 10 ohms $\pm 10\%$; balance, $\pm 3\%$ tol. **Torque:** Not over 1.5 in./oz., running; 3.0 in./oz., starting. **Power Dissipation:** 3 watts at 40° C. **Size:** 1 $\frac{1}{4}$ " O.D. x 1 $\frac{1}{4}$ " l., body. Shaft $\frac{1}{8}$ " long with $\frac{1}{8}$ -32 hex nut. **Amph. Model 205-3T Three-Turn Micropot®** (0.5% Independent Linearity)—Specify resistance when ordering: 10 or 50 ohms with $\pm 0.5\%$ linearity; 100 or 500 ohms with $\pm 0.5 - 0.25\%$ linearity; 1000, $\pm 0.5 - 0.15\%$ linearity; 5K, 10K, 20K, 30K or 50K ohms with $\pm 0.5 - 0.1\%$ linearity. **Prices below.***

TYPE 2101B TEN-TURN MICROPOT®

Machined aluminum end caps and housing. Sealed against dust, sand and moisture. Turret-type, gold-plated, color coded terminals. Miniature size. Lead wires welded to terminals. One-piece stainless steel shaft. **Linearity Accuracy:** $\pm .05$ to $\pm .5\%$ independent or zero-based. **Mechanical Rotation:** 3600° $\pm 5^\circ - 0^\circ$. **Electrical Rotation:** 3600° $\pm 5^\circ - 0^\circ$. **Total Resistance:** 25, 50 ohms, $\pm 10\%$ tol.; 1,000,000 revolutions. **Power Dissipation:** 5 watts at 40° C. **Size:** $\frac{3}{8}$ " dia. x 1.448" l. body. Shaft, $\frac{1}{16}$ " l. with $\frac{1}{8}$ -32 NEF-2A thd. hex nut. Lugs, $\frac{1}{8}$ " h. of body.

Amph. Model 2101B Ten-Turn Micropot®—Single unit, solder lug type. Standard bushing mounting. Specify resistance when ordering: 25, 50, 100 or 200 ohms with $\pm .5 - \pm .25\%$ linearity; 500, 1000, 2000 or 5000 ohms with $\pm .5 - \pm .1\%$ linearity; 10K, 20K, 30K, 40K, or 50K with $\pm .5 - \pm .05\%$ linearity; 100K or 120K with $\pm .5 - \pm .1\%$ linearity. **Prices below.***

TYPE 2201B TEN-TURN MICROPOT®

High resolution and long life at a modest cost. Dust-proof and gangable up to 3 units. Copper 7/27 lead wire welded to lug terminals and soldered to resistance element terminals. Independent linearity. **Total Resistance:** 25 and 50 ohms, $\pm 5\%$ tol.; 100-100K ohms, $\pm 3\%$ tol.; 200K ohms, $\pm 5\%$ tol. **Mechanical Rotation:** 3600° $\pm 4^\circ - 0^\circ$. **Electrical Rotation:** 3600° $\pm 4^\circ - 0^\circ$. **Power Dissipation:** 5 watts at 40° C. **Life:** 5 million cycles (2 million rev.). **Size:** 1 $\frac{1}{4}$ " dia. x 2 $\frac{1}{2}$ " l., body. Shaft, $\frac{1}{8}$ " l. with $\frac{1}{8}$ -32 NEF-2 thd. hex nut. Lugs, $\frac{1}{8}$ " h. of body.

Amph. Model 2201B Ten-Turn Micropot®—Single unit, solder lug type. Std. bushing mount. Specify resistance when ordering: 25 and 50 ohms, $\pm .5 - \pm .1\%$ linearity; 100, 500 and 1K ohms, $\pm .25 - \pm .1\%$ linearity; 2K, 5K, 10K, 20K, 30K, 50K and 100K, $\pm .25 - \pm .05\%$ linearity; 200K ohms, $\pm .5 - \pm .05\%$ linearity. **Prices below.***

★PRICES

Amphenol Model	Net Each. Lots of				
	1-9	10-24	25-49	50-99	100-199*
205	\$16.86	\$15.81	\$14.75	\$14.75	\$14.05
205-3T	13.38	12.55	11.72	11.72	11.16
2101B	23.10	21.66	20.21	20.21	19.25
2201B	8.70	8.15	7.55	6.95	6.55
1003-4SY, 2-Gear	31.96	28.78	26.95	26.95	25.47
1003-4SY, 3-Gear	33.26	29.94	28.04	28.04	26.50
1003-4SY, 4-Gear	35.87	32.29	30.25	30.25	28.58
1003-4SY, 5-Gear	37.44	33.41	31.29	31.29	29.57
1304	18.00	17.10	16.20	14.85	13.95
1305	23.00	21.90	20.70	19.60	18.40
1309	14.00	13.30	12.60	11.55	10.80
1310	13.00	12.35	11.70	10.75	10.10
1314	19.50	18.53	17.55	16.10	15.10
1315	24.50	23.30	22.10	20.80	19.60
1320-1327	5.82	5.46	5.09	5.09	4.85
1331-1335	16.90	16.10	15.50	14.85	14.20
1331LR-1335LR	20.25	19.25	18.60	17.80	17.00
1331LW-1335LW	20.25	19.25	18.60	17.80	17.00
1361-1365	5.82	5.46	5.09	5.09	4.85
3021, 3022	8.55	8.06	7.67	7.67	7.23
3023	9.05	8.54	8.12	8.12	7.66
3041, 3042	7.55	7.11	6.77	6.77	6.38
3043	8.05	7.59	7.22	7.22	6.81
3021-1-3022-5	8.75	8.25	7.85	7.85	7.40
3023-1-3023-5	9.25	8.73	8.30	8.30	7.83
3041-1-3042-5	7.75	7.30	6.95	6.95	6.55
3043-1-3043-5	8.25	7.78	7.40	7.40	6.98

*Additional quantity discounts on up to 499 pieces, available on Type 1300, 1330 and 2101B.