

OMEGADYNE®



MICRO MACHINED MODULAR TECHNOLOGY PRESSURE SENSOR

Configurable—High Accuracy—High Temperature Performance
For Industrial, Test and Measurement, and Aerospace Applications

**MOST POPULAR MODELS IN STOCK!
FAST DELIVERY FOR THOUSANDS OF CONFIGURATIONS!**

MM Series Pressure Transducers

Low pressure from 10 in-H₂O to 2.5 psi and standard ranges from 5 to 5000 psi
Metric ranges: 25 mbar to 350 bar

STARTS AT \$350 **NEW!**

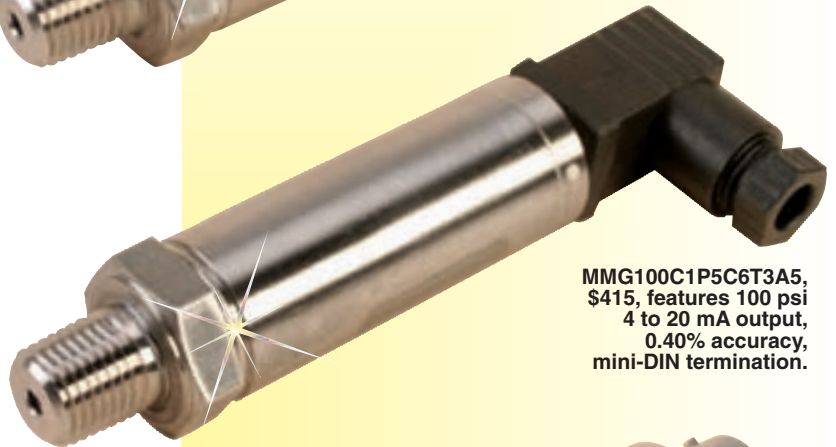


Optional

- ✔ Customer Selectable Features
- ✔ Fast Delivery
- ✔ High Accuracy
- ✔ Up to $\pm 0.03\%$ BSL*
Also Available:
0.05% BSL
0.08% BSL
0.20% BSL
0.40% BSL
- ✔ Premium Temperature Performance
- ✔ Broad Compensated Range
- ✔ Gage, Absolute, Barometric, Vacuum, Compound and Differential
- ✔ 5-Point NIST Traceable Calibration



MMG050VP5C0T3A5,
\$350, features 50 psi, mV
output, 0.4% accuracy,
cable termination.



MMG100C1P5C6T3A5,
\$415, features 100 psi
4 to 20 mA output,
0.40% accuracy,
mini-DIN termination.



MMDWU015VP5C1T3A5,
\$650, features 15 psid,
mV output, 0.4% accuracy,
twist-lock termination.



MMG10WVP3C1T2A2,
\$605, features 0 to 10 in-H₂O,
mV output, 0.08% accuracy,
twist-lock termination.

All models shown actual size.

**10 Day Delivery
on Custom
Configurations!**

* Best Straight Line



ONE SOURCE FOR ALL YOUR PRESSURE MEASUREMENT APPLICATIONS

Gage Pressure
 Low Pressure
 Absolute Pressure
 Differential Pressure
 Vacuum Ranges
 Compound Ranges
 Barometric Pressure

Adjustable zero and span potentiometers

MMG1.0KC1P2J0T3A5P, \$734, 4 to 20 mA output, 1000 psi, 0.05% accuracy, 2 m (6') cable, and optional potentiometers.

MMG100C1P5C6T3A5, \$415, features 100 psi 4 to 20 mA output, 0.40% accuracy, mini-DIN termination.

MMG10WVP3C1T2A2, \$605, features 0 to 10 in-H₂O, 3 mV/V output, 0.08% accuracy, twist-lock termination.

All models shown actual size.



Omegadyne has developed a rapid delivery system for its new Micro Machined Silicon product line.

You can have your pick of pressure ports, electrical connections, pressure range and units, thermal range and accuracy and accessories like trim pots. There are over 1-million possible combinations. Omegadyne can deliver reasonable quantities of almost any combination within 10 working days. We have an easy-to-use configurator online at omegadyne.com where you can select the transducer with the exact specifications for your project.

We also have the most popular configurations stocked for same day shipment!

Omegadyne's micro-machined piezoresistive pressure transducers have a proven record in high performance commercial, automotive, test and measurement and aerospace applications. The piezoresistive process uses strain gages molecularly embedded into a highly stable silicon wafer. The silicon wafer is diced into individual die which each contain a full strain gage bridge. The die is mounted in a sealed chamber protected from the environment by glass to metal seals and a pressure sensitive stainless steel diaphragm. A small volume of silicone oil transfers the pressure from the diaphragm to the strain bridge. The construction provides a very rugged transducer with exceptional accuracy, stability and thermal effects.

A unique design ruggedizes the transducers by providing secondary fluid containment in the event of a diaphragm rupture.

- ✔ FIVE ACCURACIES
- ✔ NINETY-TWO PRESSURE RANGES
- ✔ TEN ELECTRICAL OUTPUTS
- ✔ FOUR THERMAL RANGES
- ✔ FOURTEEN PRESSURE PORTS
- ✔ FOUR ELECTRICAL TERMINATIONS

OVER 1,000,000 COMBINATIONS!

MM Series



MMG1.0KC1P4J0T3A5P,
\$534, 4 to 20 mA output, 1000 psi, 0.20%
accuracy with potentiometers.

MMG100C1P5C6T3A5,
\$415, features 100 psi
4 to 20 mA output, 0.40%
accuracy, mini-DIN termination.

MMG1.0KC1P2C2T3A5, \$640,
features 1000 psi, 4 to 20 mA
output, 0.05% accuracy, cable
termination with ½ NPT conduit fitting.

Cable Connection			
Color	mV	5/10V	mA
Black	- EXC	- EXC	- EXC
White	+ OUT	+ OUT	+ CAL
Green	- OUT	SHUNT	- SHUNT
Red	+ EXC	+ EXC	+ EXC

Mini-DIN Connection			
Color	mV	5/10V	mA
Pin 1	+ EXC	+ EXC	+ EXC
Pin 2	- EXC	- EXC	- EXC
Pin 3	+ OUT	+ OUT	+ SHUNT
Pin 4	- OUT	SHUNT	- SHUNT

Twist-Lock Connection			
Color	mV	5/10V	mA
Pin A	+ EXC	+ EXC	+ EXC
Pin B	- EXC	- EXC	- EXC
Pin C	+ OUT	+ OUT	+ SHUNT
Pin D	- OUT	SHUNT	- SHUNT
Pin E	SPARE	SPARE	SPARE
Pin F	SPARE	SPARE	SPARE

COMMON SPECIFICATIONS

Approvals: RoHS and CE
Calibration: 5-point NIST traceable
Bandwidth: DC to 1 kHz typical
Response Time: < 1 ms
Weight: 115 to 200 g (4 to 7 oz) (depending upon configuration)
CE Compliant: IEC61326
Emissions: IEC550022 Class B
Electrostatic Discharge Immunity: IEC1000-4-2
EM Field Immunity: IEC61000-4-3
EFT Immunity: IEC61000-4-4
Surge Immunity: IEC61000-4-5
Conducted RF: IEC61000-4-6
Rate Power Frequency Magnetic Field: IEC61000-4-8
Minimum Resistance Between Body and Any Wire: 100 MΩ @ 50 Vdc
Environmental
Operating Temperature: -51 to 127°C (-60 to 260°F)
Protection:
Cable: 2 m (6') IP67
Mini-Din: IP65
Twist-Lock: IP65
Conduit 2 m (6') Cable with ½ NPT Conduit Fitting: IP67
Mechanical
Wetted Parts: 316 stainless steel
Media: Compatible with 316 SS

Pressure Cycles: 1 million minimum
Shock: 50 g, 11 ms half sine (under test)
Vibration: ±20 g (under test)
Overpressure Safe:
10 in-H₂O: 10 times span
1 psi: 6 times span
2.5 to 3500 psi: 4 times span
5000 psi: 3 times span
Secondary Containment Gage/Diff/Vac/Compound:
10 in-H₂O to 5 psi: To 1000 psi
15 to 150 psi: To 3000 psi
250 to 1000 psi: To 6000 psi
1500 to 5000 psi: To 15,000 psi
Secondary Containment Absolute/Barometric:
Barometric Ranges: To 6000 psi
5 to 1000 psi: To 6000 psia
1500 to 5000 psi: To 15,000 psia
Excitation
3 mV/V: 10 Vdc (ratiometric 5 to 10 Vdc)
10 mV/V: 10 Vdc (ratiometric 5 to 10 Vdc)
0 to 5 Vdc: 10 to 30 Vdc @ 10 mA
0 to 10 Vdc: 15 to 30 Vdc @ 10 mA
4 to 20 mA: 9 to 30 Vdc (9 to 20 Vdc above 229°F)
Bipolar Amplifiers: Same as corresponding outputs from above

HOW TO ORDER

TO PLACE AN ORDER—SIMPLY CHOOSE YOUR OPTION

	1. Pressure Type	2. Pressure Range	3. Elec Output	4. Pressure Units	5. Accuracy Class
MM	G	030	V5	P	2

Step 1 - Type

Pressure Type	Code
Absolute	A
Gage	G
Compound	CG
Barometric	B
Vacuum	V
Diff wet/wet uni-directional	DWU
Diff wet/wet bi-directional	DWB
Diff wet/dry uni-directional	DDU
Diff wet/dry bi-directional	DDB

Step 2 - Range (psi) (see step 4 for other pressure units)

Range (psi)	Code	Gage	Absolute	Compound	Vacuum
10 in-H ₂ O	10W	✓		✓	✓
1	001	✓		✓	✓
2.5	2.5	✓		✓	✓
5	005	✓	✓	✓	✓
15	015	✓	✓	✓	✓
30	030	✓	✓	✓	✓
50	050	✓	✓		
100	100	✓	✓		
150	150	✓	✓		
250	250	✓	✓		
500	500	✓	✓		
750	750	✓	✓		
1000	1.0K	✓	✓		
1500	1.5K	✓	✓		
2500	2.5K	✓	✓		
3500	3.5K	✓	✓		
5000	5.0K	✓	✓		
16-32 in-Hg	16				
26-32 in-Hg	26				
0-32 in-Hg	32				

Step 3 - Output

Output	Code
3 mv/V	V
10 mv/V	V1
0 to 5 Vdc	V5
0 to 10 Vdc	V10
4 to 20 mA	C1
±3 mv/V	BIV
±10 mv/V	BIV1
±0 to 5 Vdc	BIV5
±0 to 10 Vdc	BIV10
4 to 20 mA, 12 mA set at zero	BIC1

Step 4 - Units

	psi	mBar (hPa)	bar	kPa	Torr (mm-Hg)	in-H ₂ O	ft-H ₂ O	in-Hg
Code	P	H	B	K	T	W	F	M
10W	10 in-H ₂ O	25	0.025	2.5	20	10	1	0.75
001	1	70	0.07	7	50	30	2.5	2
2.5	2.5	170	0.17	17	130	70	5.5	5
005	5	350	0.35	35	260	140	11.5	10
015	15	1000	1	100	800	400	34.5	30.5
030	30	2000	2	200	1500	800	69	61
050	50	3500	3.5	350	2600	1400	114	100
100	100	7000	7	700	5200	2750	230	200
150	150	10,000	10	1000	7800	4150	346	300
250	250	17,500	17.5	1750	13,000	7000	575	500
500	500	35,000	35	3500	25,000	14,000	1150	1000
750	750	50,000	50	5000	38,000	21,000	1730	1500
1.0K	1000	70,000	70	7000	52,000	28,000	2300	2000
1.5K	1500	100,000	100	10,000				
2.5K	2500	175,000	175	17,500				
3.5K	3500	245,000	245	24,500				
5.0K	5000	350,000	350	35,000				

Step 5 - Accuracy

Accuracy (BSL* % FS)	Code
±0.03%	1
±0.05%	2
±0.08%	3
±0.20%	4
±0.40%	5

* BSL (Best Straight Line) defined as terminal base nonlinearity divided by 2.

Step 6 - Fitting

Process Fittings (Male)	Code
1/8-27 NPT Male	A
1/4-18 NPT Male	C
7/16-20 UNF Male	J
9/16 UNF Male	L
G 1/8B Male	MA
G 1/4B Male	MC
M12X1.5 Male	ME

Step 7 - Termination

Electrical Connection	Code
Cable (2 m, IP67)	
Twist Lock (IP65)*	
Conduit (2 m, IP67)	
DIN (IP67)	

* PT06F10-6S, mating twist-lock connector \$26.50, sold separately.

Step 9 - Thermals

Thermal Accuracy	Pressure Range
10 in-H ₂ O to 1 psi	
10 in-H ₂ O to 1 psi	
2.5 to 5 psi Standard	
2.5 to 5 psi Enhanced	
15 to 5000 psi Standard	
15 to 5000 psi Enhanced	
26 to 32 in-Hg Standard	
26 to 32 in-Hg Enhanced	

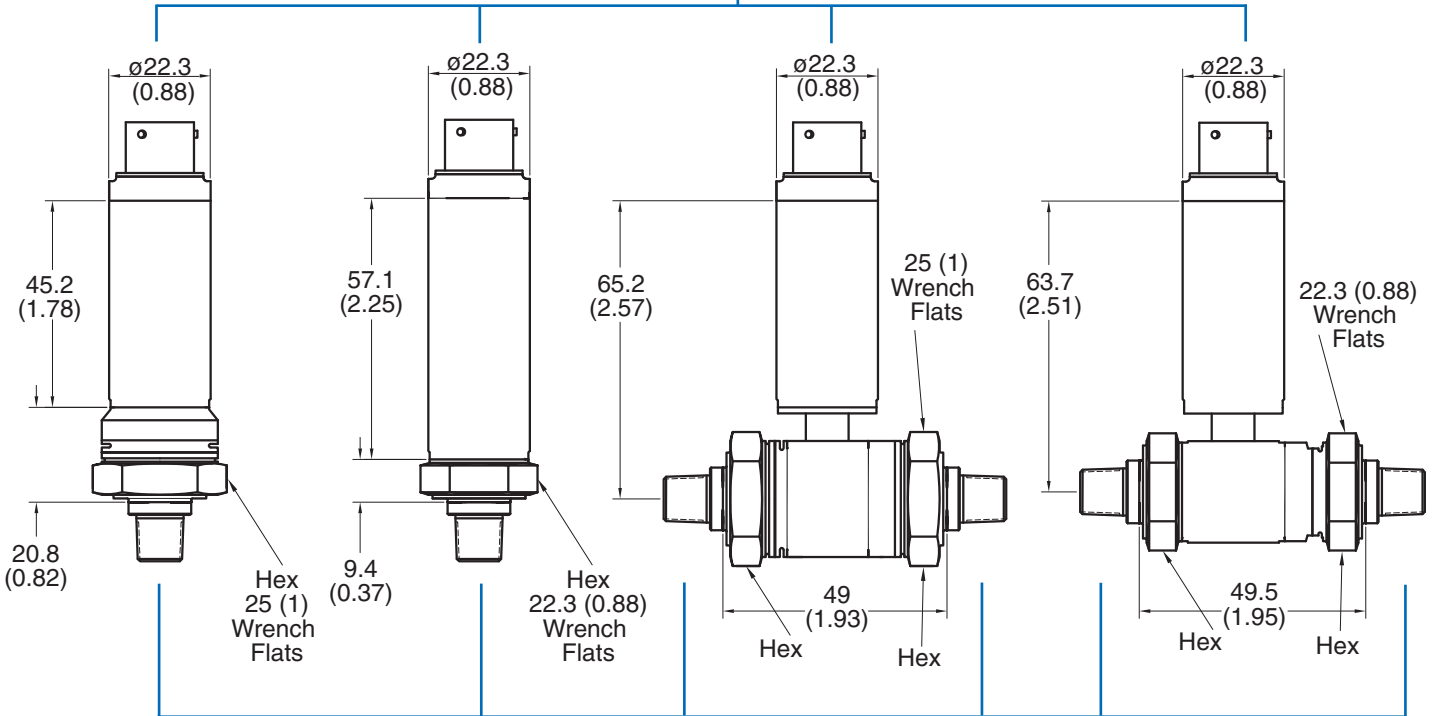
We make running changes when technical advances allow. Check at time of ordering for additional features.

1-800-872-3963®
1-800-USA-DYNE

ELECTRICAL TERMINATION

<p>6-pin, vented or non-vented bendix</p> <p>PT06F-10-6S mating connector, \$26.50, sold separately.</p> <p>4.3 (0.17)</p>	<p>4-pin, vented or non-vented mini-DIN</p> <p>included</p> <p>4.8 (0.19)</p>	<p>4-conductor integral cable, 2 meter</p> <p>4.8 (0.19)</p>	<p>4-conductor conduit cable, 2 meter</p> <p>½ NPT conduit fitting</p> <p>9.4 (0.37)</p>
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<p>Low Range Pressure Transducer</p>	<p>Mid Range Pressure Transducer</p>	<p>Low Range Differential Pressure Transducer</p>	<p>Mid Range Differential Pressure Transducer</p>
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PRESSURE PORTS *

Ø = diameter
Dimensions: mm (in)

<p>Male</p>	<p>16.2 (0.64)</p> <p>M12 x 1.5-6g</p>	<p>17 (0.67)</p> <p>9/16-18 UNF-2A</p>	<p>14 (0.55)</p> <p>G 1/4B-19TPI</p>	<p>10.6 (0.42)</p> <p>G 1/8-28TPI</p>	<p>16.5 (0.65)</p> <p>7/16-20 UNJF-2A</p>	<p>14.2 (0.56)</p> <p>1/4-18 NPT</p>	<p>13 (0.51)</p> <p>1/8-27 NPT</p>
<p>Female</p>	<p>12.7 (0.50)</p> <p>M12 x 1.5-6H</p>	<p>18.3 (0.72)</p> <p>9/16-18 UNF-2B</p>	<p>14.2 (0.56)</p> <p>G 1/4B-19TPI</p>	<p>10.6 (0.42)</p> <p>G 1/8-28TPI</p>	<p>17 (0.67)</p> <p>7/16-20 UNJF-2B</p>	<p>14.2 (0.56)</p> <p>1/4-18 NPT</p>	<p>14.2 (0.56)</p> <p>1/8-27 NPT</p>

* Dimensions may vary slightly for ranges >1000 psi. See omegadyne.com for exact dimensions.

STOCKED FOR FAST DELIVERY!

MOST POPULAR MODELS HIGHLIGHTED!

GAGE PRESSURE RANGES (psig), HIGH ACCURACY: ±0.08% ACCURACY, 1/8-18 NPT MALE, 2 m (6') CABLE						
	10 mV/V OUTPUT	PRICE	0 to 5 Vdc OUTPUT	PRICE	4 to 20 mA OUTPUT	PRICE
0 to 10 in-H ₂ O	MMG10WV1P3C0T1A1	\$525	MMG10WV5P3C0T1A1	\$590	MMG10WC1P3C0T1A1	\$590
1	MMG001V1P3C0T1A1	525	MMG001V5P3C0T1A1	590	MMG001C1P3C0T1A1	590
2.5	MMG2.5V1P3C0T1A3	525	MMG2.5V5P3C0T1A3	590	MMG2.5C1P3C0T1A3	590
5	MMG005V1P3C0T1A3	475	MMG005V5P3C0T1A3	540	MMG005C1P3C0T1A3	540
15	MMG015V1P3C0T3A5	475	MMG015V5P3C0T3A5	540	MMG015C1P3C0T3A5	540
30	MMG030V1P3C0T3A5	475	MMG030V5P3C0T3A5	540	MMG030C1P3C0T3A5	540
50	MMG050V1P3C0T3A5	475	MMG050V5P3C0T3A5	540	MMG050C1P3C0T3A5	540
100	MMG100V1P3C0T3A5	475	MMG100V5P3C0T3A5	540	MMG100C1P3C0T3A5	540
500	MMG500V1P3C0T3A5	475	MMG500V5P3C0T3A5	540	MMG500C1P3C0T3A5	540
1000	MMG1.0KV1P3C0T3A5	475	MMG1.0KV5P3C0T3A5	540	MMG1.0KC1P3C0T3A5	540
ABSOLUTE PRESSURE RANGES (psia), HIGH ACCURACY: ±0.08% ACCURACY, 1/8-18 NPT MALE, 2 m (6') CABLE						
5	MMA005V1P3C0T1A3	\$520	MMA005V5P3C0T1A3	\$585	MMA005C1P3C0T1A3	\$585
15	MMA015V1P3C0T3A5	520	MMA015V5P3C0T3A5	585	MMA015C1P3C0T3A5	585
30	MMA030V1P3C0T3A5	520	MMA030V5P3C0T3A5	585	MMA030C1P3C0T3A5	585
50	MMA050V1P3C0T3A5	520	MMA050V5P3C0T3A5	585	MMA050C1P3C0T3A5	585
100	MMA100V1P3C0T3A5	520	MMA100V5P3C0T3A5	585	MMA100C1P3C0T3A5	585
DIFFERENTIAL PRESSURE RANGE (psid), HIGH ACCURACY: ±0.08%, WET/WET, UNI-DIRECTIONAL, 1/8 NPT-MALE, 2 m (6') CABLE						
0 to 10 in-H ₂ O	MMDWU10WV1P3C0T1A1	\$825	MMDWU10WV5P3C0T1A1	\$890	MMDWU10WC1P3C0T1A1	\$890
1	MMDWU001V1P3C0T1A1	825	MMDWU001V5P3C0T1A1	890	MMDWU001C1P3C0T1A1	890
5	MMDWU005V1P3C0T1A3	775	MMDWU005V5P3C0T1A3	840	MMDWU005C1P3C0T1A3	840
15	MMDWU015V1P3C0T1A3	775	MMDWU015V5P3C0T1A3	840	MMDWU015C1P3C0T1A3	840
50	MMDWU050V1P3C0T1A5	775	MMDWU050V5P3C0T1A5	840	MMDWU050C1P3C0T1A5	840
100	MMDWU100V1P3C0T3A5	775	MMDWU100V5P3C0T3A5	840	MMDWU100C1P3C0T3A5	840
BAROMETRIC PRESSURE RANGE (inHg), HIGH ACCURACY: ±0.08%, 1/8 NPT-MALE, 2 m (6') CABLE						
16 to 32	MMB16V1M3C0T3A5	\$625	MMB16V5M3C0T3A5	\$690	MMB16C1M3C0T3A5	\$690
26 to 32	MMB26V1M3C0T3A7	625	MMB26V5M3C0T3A7	690	MMB26C1M3C0T3A7	690
VACUUM PRESSURE RANGE (psiv), HIGH ACCURACY: ±0.08%, 1/8 NPT-MALE, 2 m (6') CABLE						
10 in-H ₂ O	MMV10WV1P3C0T1A1	\$600	MMV10WV5P3C0T1A1	\$665	MMV10WC1P3C0T1A1	\$665
1	MMV001V1P3C0T1A1	600	MMV001V5P3C0T1A1	665	MMV001C1P3C0T1A1	665
15	MMV015V1P3C0T3A5	550	MMV015V5P3C0T3A5	615	MMV015C1P3C0T3A5	615

Ordering Examples: **MMG100V5P3C0T3A5**, 100 psi gage range, 1/8 NPT male pressure port, 0.08% accuracy, 0 to 5 Vdc output, 2 m (6') cable, \$540.
MMA015V1P3C0T3A5, 15 psi absolute range, 1/8 NPT male pressure port, 0.08% accuracy, 0 to 100 mV output, 2 m (6') cable, \$520.
MMDWU005C1P3C0T1A3, wet/wet uni-directional 0 to 5 psi differential range, 1/8 NPT male pressure port, 0.08% accuracy, 4 to 20 mA output, 2 m (6') cable, \$840.

COMPATIBLE METERS

DP25B/DP41-B STARTS AT \$245

OMEGA MONOGRAM SERIES

DP25B-E, \$245, shown smaller than actual size.

DP41-B, \$595, shown smaller than actual size.



change color
At Any Setpoint
TOTALLY PROGRAMMABLE COLOR DISPLAYS



- ✓ mV, V, mA, Strain Gage Thermocouple, RTD Inputs
- ✓ Full Process Unit Scaling
- ✓ Built-In Transducer Power

PROCESS AND STRAIN MODELS

Because they accept a wide range of DC voltage and current inputs, the DP25B Series strain meters can handle most process and strain applications. Features include easy front-panel scaling to virtually any engineering units, a remote tare function for weighing applications, and a hardware lockout to prevent unauthorized changes in set-up. OMEGA® set the world standard for accuracy, performance, and quality in digital panel meters. The DP41-B raises the bar even higher with accuracy of up to ±0.005% of reading, and up to 166 readings per second.

IN STOCK FOR FAST DELIVERY

To Order (Specify Model Number)

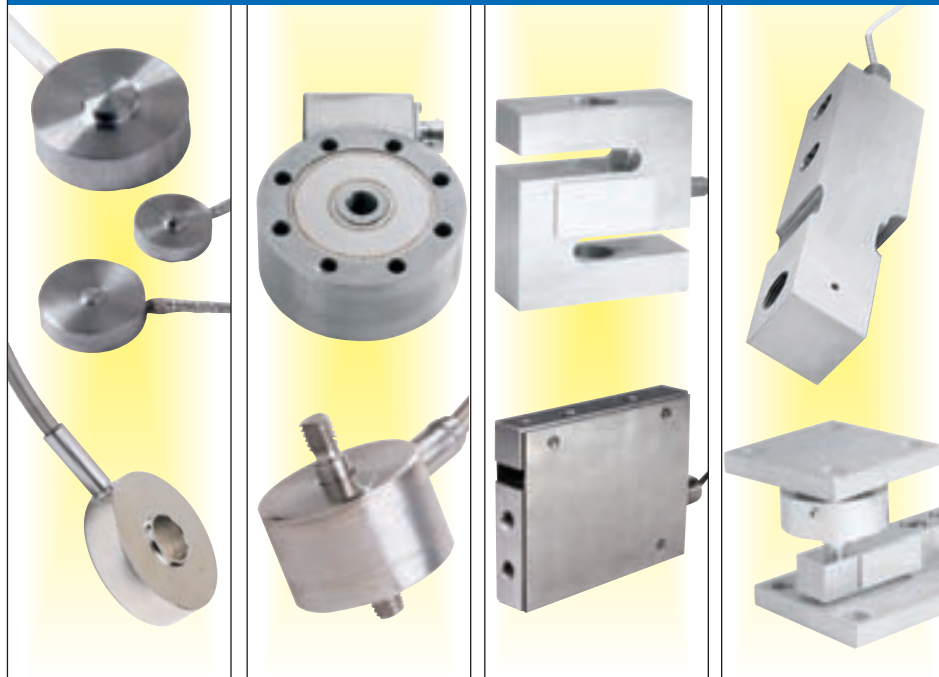
Model No.	Price	Description
DP25B-E	\$245	4-digit voltage/current input meter with excitation
DP25B-S	245	4-digit mV input meter with excitation
DP41-B	595	6-digit 1/8 DIN universal input meter with excitation

Comes with complete operator's manual.
Ordering Examples: **DP25B-E**, voltage/current input meter for use with 0 to 5 V, 0 to 10 V, 4 to 20 mA output MM Series transducers, \$245.
DP25B-S, mV input meter for use with mV/V output MM Series transducers, \$245.
DP41-B, universal input meter for use with all outputs of MM Series transducers, \$595.

MOST POPULAR SENSORS STOCKED AND READY FOR FAST DELIVERY!

LOAD

Omegadyne also has a full line of load cells. Visit omegadyne.com for more information.



Ranges from 10 g to 2,000,000 lb. Accuracies as high as 0.02%. Miniature. Subminiature. Fatigue or Submersible. Mil-Spec. Millivolt, 4 to 20 mA, 0 to 5 and 0 to 10 V outputs.

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How to Order

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 24 hour FAX: (740) 965.9438

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1-800-USA-DYNE

E-MAIL info@omegadyne.com

www.omegadyne.com

TERMS

We are pleased to extend terms of net 30 days to all customers who have established an open account with OMEGADYNE. All shipments will be F.O.B. Sunbury, Ohio. OMEGADYNE welcomes new accounts and will process orders on a C.O.D. or a prepaid basis when an open account is being established. Prepayment checks should be mailed to the address to the right.

PRICES

The prices of goods sold are those in effect at the time of sale. The prices listed are those in effect at the time of publication and are subject to change without notice. Please contact OMEGADYNE's Sales Department for current prices. OMEGADYNE will be pleased to furnish quotations either by mail, e-mail, telephone, FAX, or Telefax upon request.

QUANTITY DISCOUNTS

Many items have quantity discount schedules. For large quantities and for products which do not have discount schedules listed, please consult the Sales Department.

CREDIT CARDS

OMEGADYNE is pleased to honor major credit cards for your ordering convenience. VISA, MasterCard and American Express are accepted.

PAYMENTS BY CHECK

OMEGADYNE, Inc.
 P.O. Box 18361
 Newark, New Jersey 07191
 USA

PAYMENTS BY TRANSFER

Contact Receivables Dept.
 Phone: (740) 965-9340
 Fax: (740) 965-9438

ADDITIONAL PAYMENT INFO

U.S. Federal Tax I.D. #042826774

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