Electronic Data Devices Product Catalog

Manufacturing EDD Turbine Flow Meters Since 1980

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The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

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January 2004



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Table of Contents

EDD Contact Information	04
Flow Range Chart	05
Pressure Drop Curves	06
Standard Threaded Meter	07
Installation Drawings	08 - 21
Hex Body Threaded Meter	22
Installation Drawings	23 - 27
Cast Body Threaded Meter	28
Installation Drawing	29
Grooved Meter	30
Installation Drawings	31 - 51
Standard Flanged Meters	52
Installation Drawings	53 - 87
1502 Union Meters	88
Installation Drawings	89 - 92
Square Flanged Meters	93
Installation Drawings	94,95
Standard Meter Repair Kits	96
3/8" - 3" Repair Kit Installation Instructions	97
4" & Up Repair Kit Installation Instructions	98
Between Flange Meters	99
Installation Drawings	100 - 113
4" Long Between Flange Meters	114
Installation Drawings	115 - 119
Between Flange Ring Joint Meters	120
Installation Drawings	121 - 130
Between Flange Repair Kits	131
Between Flange Repair Kit Installation Instructions	132
EDD-600 Totalizer	133
Installation Drawings	134, 135
EDD-340 4 - 20 mA Converter	136
EDD-530 Pulse Output Card	137
Preamplifier Spec Sheet	138
4.0420 FTC Converter Spec Sheet	140
4.303 Magnetic Pickup	142
4.303 Magnetic Pickup Spec Sheet	143
4.304 Magnetic Pickup Spec Sheet	144
4.5015U Magnetic Pickup	145
4.5015U Magnetic Pickup Spec Sheet	146
4.5024 Magnetic Pickup Spec Sheet	147
4.5050 Magnetic Pickup Spec Sheet	148
4.308T800 Magnetic Pickup Spec Sheet	149



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	Turbine Flow Meters Flow Range									
Size										
Inch	MM	GPM	BPM	BPD	LPM	M³/D	Pulses P/Gal	Frequency Pulses P/ Sec		
3/8	10	.3 – 3	.00707	10 - 100	1.14 - 11.36	1.6 - 16	22000	1100		
1/2	13	.75 - 7.5	.0117	25 - 250	2.84 - 28.39	4 - 40	14500	1815		
3/4	19	2 - 15	.0533	68 - 515	7.57 - 56.78	11 - 80	2950	740		
7/8	22	3 – 30	.0771	100 - 1000	11.36 - 113.56	16 - 160	2350	1175		
1	25	5 - 50	.11-1.19	170 - 1700	18.93 - 189.27	27 - 270	900	750		
1 1/2	38	15 - 180	.35 - 4.3	515 - 6000	56.78 - 681.35	80 - 1100	325	975		
2	51	40 - 400	.9 - 9.3	1300 - 13000	151 - 1514	210-2100	55	365		
3	76	60 - 600	1.4 - 14.3	2100 - 21000	227 - 2271	320 - 3200	57	570		
4	102	100 - 1200	2.4 - 28.5	3400 - 41000	380 - 4542	545 - 6541	30	600		
6	152	200 - 2500	4.7 - 60	6800 - 86000	757 - 9464	1090 - 13628	7	290		
8	203	350 - 3500	8.3 - 83	12000 - 120000	1325 - 13250	1907 - 19078	3	175		
10	550	550 - 5500	13 - 130	19000 - 180000	1892 - 18926	2725 -27255	1.6	147		

Ma	aterial Specifications
Flow Meter Body	316 S.S. or A-286 Alloy
Support Vanes	316 S.S.
Rotor	CD4MCu
Sleeve Bearings	Tungsten Carbide
Shaft	Tungsten Carbide
Thrust Ball	Ceramic
Perfc	ormance Specifications
Repeatability	Within ±0.1% of indicated flow throughout the linear flow range
Accuracy	Within $\pm 1\%$ of reading Note $3/8'' \pm 2\%$



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FUD Electronic Data Devices Turbine Flow Meters



Threaded Turbine Flow Meters

Electronic Data Devices manufactures a complete line of turbine flow meters that are available with ranges from 0.3 GPM to 5500 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards and are available with a wide range of end connections compatible with many applications. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Threaded meters are available in the sizes below. All threaded meters have a working pressure of 5000 psi except 3" and 4", which are 3000 psi.

.37" X 1"-MNPT	.75" X 2" MNPT	1" X 1"-MNPT	1.5" X 2" MNPT	3" X 3" FMNPT
.50" X 1" MNPT	.87" X 1" MNPT	1" X 2" MNPT	2" X 2" FMNPT	4" X 4" FMNPT
.75" X 1" MNPT	.87" X 2" MNPT	1.5" X 1.5" MNPT		

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FUD Electronic Data Devices Turbine Flow Meters



Threaded Turbine Flow Meters

Electronic Data Devices offers a complete line of turbine flow meters that are available with ranges from 0.3 GPM to 5500 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards, and are available with a wide range of end connections compatible with many applications. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Threaded meters are available in the sizes below. All threaded meters have a working pressure of 5000psi except 3" and 4", which are 3000 psi.

.37" X 1"-MNPT	.75" X 2" MNPT	1" X 1"-MNPT	1.5" X 2" MNPT	3" X 3" FMNPT
.50" X 1" MNPT	.87" X 1" MNPT	1" X 2" MNPT	2" X 2" FMNPT	4" X 4" FMNPT
.75" X 1" MNPT	.87" X 2" MNPT	1.5" X 1.5" MNPT		

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FUD Electronic Data Devices Turbine Flow Meters



Threaded Turbine Flow Meters

Electronic Data Devices offers a line of threaded turbine flow meters with cast bodies that are available with ranges from 0.3 GPM to 50 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Threaded meters with a cast meter body are available in 1" x 1" MNPT. All threaded meters have a working pressure of 5000 psi.

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• 432-3

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FUD Electronic Data Devices Turbine Flow Meters



Grooved Turbine Flow Meters

Electronic Data Devices offers a complete line of turbine flow meters that are available with ranges from 0.3 GPM to 5500 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards, and are available with a wide range of end connections compatible with many applications. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Grooved end turbine flow meters are available in the sizes below. The maximum operating psi is determined by the victaulic clamp rating.

.37" X 1"	.75" X 2"	1" X 1"	2" X 2.5"	6" X 6"
.50" X 1"	.87" X 1"	1" X 2"	3" X 3"	8" X 8"
.75" X 1"	.87" X 2"	1.5" X 2"	4" X 4"	10" X 10"

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FUD Electronic Data Devices



Standard Flanged Turbine Flow Meters

Electronic Data Devices offers a complete line of turbine flow meters that are available with ranges from 0.3 GPM to 5500 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards, and are available with a wide range of end connections compatible with many applications. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Standard flanged turbine flow meters are available with raised face or ring joint ANSI B16.5 rated flanges, carbon steel, 304SS or 316SS. Operating pressure will be determined by the ANSI flange series and ratings. Flanged meters are available with the following ratings 150#,300#,600#, 900# and 1500# in the following sizes 1",1.5",2",3", 4",6",8" and 10".

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SPECIFICATIONS: FLOW RATE: 5-50 GPM	FLOW METER INSTALLATION DRAWING 1" TURBINE FLOW METER WITH 150 LBS. RAISED FACE FLANGES, PART NO. 3.1000-150	
PRESSURE RATING: 275 PSI	P.O. Box 12128	
NOTE: 1" TURBINE REPAIR KIT PART NUMBER: 5100	Odessa, TX 79768 Phone: 432-366-8699 Fax: 432-366-1106 E-mail: rkw@eddevices.com Website: www.eddevices.com	





SPECIFICATIONS: FLOW RATE: 5-50 GPM PRESSURE RATING: 720 PSI	FLOW METER INSTALLATION DRAWING 1" TURBINE FLOW METER WITH 300 LBS. RAISED FACE FLANGES, PART NO. 3.1000-300	
	P.O. Box 12128	
NOTE: 1" TURBINE REPAIR KIT PART NUMBER: 5.100	Odessa, TX 79768 Phone: 432-366-8699 Fax: 432-366-1106 E-mail: rkw@eddevices.com Website: www.eddevices.com	





 SPECIFICATIONS:
 FLOW METER INSTALLATION DRAWING

 FLOW RATE: 5-50 GPM
 1" TURBINE FLOW METER WITH 600 LBS. RAISED FACED FLANGES, PART NO. 3.1000-600

 PRESSURE RATING: 1400 PSI
 P.O. Box 12128

 Odessa, TX 79768
 Odessa, TX 79768

 1" TURBINE REPAIR KIT PART NUMBER: 5.100
 E-mail: rkw@eddevices.com

SPECIFICATIONS:

FLOW RATE: 5-50 GPM PRESSURE RATING: 2160 PSI

NOTE: 1" TURBINE REPAIR KIT PART NUMBER: 5.100 FLOW METER INSTALLATION DRAWING I" TURBINE FLOW METER WITH 900 LBS. RAISED FACE FLANGES, PART NO. 3.1000-900

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5.85" DIA.



NOTE: DRAWING NOT TO SCALE

 SPECIFICATIONS:

 FLOW RATE: 5-50 GPM

 PRESSURE RATING: 3600 PSI

 NOTE:

 1" TURBINE REPAIR KIT PART NUMBER: 5.100

FLOW METER INSTALLATION DRAWING

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 Phone: 432-366-8699

 Pax: 432-366-1106

 E-mail: rkw@eddevices.com



NOTE:

1.5" TURBINE REPAIR KIT PART NUMBER: 5.150



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1502 Union Turbine Flow Meters

Electronic Data Devices manufactures a line of 1502 union turbine flow meters that are available with ranges from 5 GPM to 600 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

1502 union turbine flow meters are available in the following sizes: 1", 1 1/2", 2" and 3". All union meters have a working pressure of 15000 psi.

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Square Flanged Turbine Flow Meters

Electronic Data Devices offers a line of turbine flow meters that are available with ranges from 5 GPM to 400 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Square flanged turbine flow meters are available with raised face 316SS schedule 160 flanges. Operating pressure is 3600 psi. Square flanged meters are available in the following sizes: 1", 1 1/2" and 2".

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FUD Electronic Data Devices Turbine Flow Meters



Standard Meter Repair Kits

Electronic Data Devices offers a broad line of turbine flow meter repair kits designed for our meters and other popular brands. The kits are available for flow ranges of 0.3 to 5000 GPM and fit meter sizes of 3/8'' to 10''.

Electronic Data Devices' repair kits are manufactured to the highest quality standards. The repair kits are manufactured of 316SS and CD4MCu for the rotors. Bearings are tungsten carbide and ceramic. The kits are calibrated in pulses per gallon for each kit, and may be used in a wide range of applications including: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry and most other liquid applications.

Repeatability: Within \pm 0.1% of indicated flow throughout the linear flow range.

Accuracy: Within \pm 1% of the reading Note: $3/8'' \pm 2\%$ of the reading.

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3/8" thru 3" Meter Repair Kit Installation Instructions

KIT REMOVAL

1. REMOVE MAGNETIC PICKUP BY LOOSENING LOCK NUT USING 3/4" THIN WALL SOCKET, THEN UNSCREW FROM METER BODY. THIS PROCEDURE WILL HELP TO PREVENT PICKUP DAMAGE DURING THE REPAIR PROCEDURE.

2. REMOVE SNAP RING FROM EACH END OF METER BODY, USING PICK OR SCREWDRIVER.

3. REMOVE UPSTREAM AND DOWNSTREAM VANES, TAPPING WITH SOFT ROD IF NECESSARY TO DRIVE OUT VANES.

4. REMOVE ROTOR FROM BODY.

5. CLEAN THE METER BODY BORE AS REQUIRED BRINGING IT BACK TO A LIKE NEW CONDITION.

6. CLEAN SNAP RING GROOVES TO ALLOW THE RING TO PROPERLY SEAT.

UM

KIT INSTALLATION

1. INSTALL DOWNSTREAM VANE SO ARROW ON VANE CORRESPONDS WITH DIRECTIONAL ARROW ON THE METER BODY. THE VANE BLADE WITH THE NOTCH GOES BETWEEN THE WELD STAKE PINS.

2. INSTALL OUTER DOWNSTREAM SNAP RING.

3. INSTALL ROTOR BEING SURE THE ARROW IS PROPERLY ALIGNED, AND THE SHAFT SEATED IN THE VANE BUSHING.

4. INSTALL UPSTREAM VANE, WITH NOTCHED VANE BLADE BETWEEN WELD STAKE PINS. SPIN THE ROTOR TO ALLOW SHAFT TO EASILY ENTER THE VANE BUSHING. DO NOT USE FORCE TO PUSH THE VANE BEARING OVER THE ROTOR SHAFT.

5. INSTALL UPSTREAM OUTER SNAP RING.

6. MAKE SURE THE ROTOR SPINS FREELY BEFORE INSTALLING THE METER.

7. ATTACH PLASTIC CALIBRATION TAG AROUND THE CONDUIT HUB AND CUT OFF EXCESS STRAP LENGTH FLUSH WITH TAG.
8. INSTALL MAGNETIC PICKUP AS FOLLOWS: CLEAN PICKUP HUB THREADS AND PICKUP THREADS AS NEEDED. SCREW IN THE PICKUP BY HAND UNTIL IT BOTTOMS OUT, THEN BACK OFF 1/4 TURN AND TIGHTEN LOCK NUT WITH 3/4" THIN WALL SOCKET.





Electronic Data Devices

4" & Up Meter Repair Kit Installation Instructions

KIT REMOVAL

1. REMOVE MAGNETIC PICKUP BY LOOSENING LOCK NUT USING 3/4" THIN WALL SOCKET, THEN UNSCREW FROM METER BODY. THIS PROCEDURE WILL HELP TO PREVENT PICKUP DAMAGE DURING THE REPAIR PROCEDURE.

2. REMOVE SNAP RING FROM EACH END OF METER BODY, USING PICK OR SCREWDRIVER.

3. REMOVE UPSTREAM AND DOWNSTREAM VANES, TAPPING WITH SOFT ROD IF NECESSARY TO DRIVE OUT VANES.

4. REMOVE INNER SNAP RINGS AND ROTOR FROM BODY.

5. CLEAN THE METER BODY BORE AS REQUIRED BRINGING IT BACK TO A LIKE NEW CONDITION.

6. CLEAN SNAP RING GROOVES TO ALLOW THE RING TO PROPERLY SEAT.

MAGNETIC PICKUP

KIT INSTALLATION

1. INSTALL DOWNSTREAM INNER SNAP RING.

2. INSTALL DOWNSTREAM VANE SO ARROW ON VANE CORRESPONDS WITH DIRECTIONAL ARROW ON THE METER BODY. THE VANE BLADE WITH THE NOTCH GOES BETWEEN THE WELD STAKE SPOTS.

3. INSTALL OUTER DOWNSTREAM SNAP RING.

4. INSTALL ROTOR BEING SURE THE ARROW IS PROPERLY ALIGNED, AND THE SHAFT SEATED IN THE VANE BUSHING.

5. INSTALL UPSTREAM INNER SNAP RING.

6. INSTALL UPSTREAM VANE, WITH NOTCHED VANE BLADE BETWEEN WELD STAKE SPOTS. SPIN THE ROTOR TO ALLOW SHAFT TO EASILY ENTER THE VANE BUSHING. DO NOT USE FORCE TO PUSH THE VANE BEARING OVER THE ROTOR SHAFT.

7. INSTALL UPSTREAM SNAP RING.

8. MAKE SURE THE ROTOR SPINS FREELY BEFORE INSTALLING THE METER.

9. ATTACH PLASTIC CALIBRATION TAG AROUND THE CONDUIT HUB AND CUT OFF EXCESS STRAP LENGTH FLUSH WITH TAG.

10. INSTALL MAGNETIC PICKUP AS FOLLOWS: CLEAN PICKUP HUB THREADS AND PICKUP THREADS AS NEEDED. SCREW IN THE PICKUP BY HAND UNTIL IT BOTTOMS OUT, THEN BACK OFF 1/4 TURN AND TIGHTEN LOCK NUT WITH 3/4" THIN WALL SOCKET.



FUND Electronic Data Devices Turbine Flow Meters



BF Series Turbine Flow Meters

Electronic Data Devices offers a complete line of turbine flow meters that are available with ranges from 0.3 GPM to 5500 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards, and are available with a wide range of end connections compatible with many applications. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

BF series meters are available in the following sizes

All between flange series meters are available for use with 150# - 1500# RF ANSI flanges with pressure ratings of 275 - 3600 psi.

.75″ X 2″	1.5″ X 2″	3″X 3″	6″ X 6″
1″ X 2″	2″ X 2″	4" X 4"	8″ X 8″

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NOTE: DRAWING NOT TO SCALE	FLOW METER ASSEMBLY DRAWING	
<u>Specifications:</u> FLOW RATE: PER METER PRESSURE RATING: AS PER FLANGE RATING	1" - 8" BETWEEN FLANGE METER WITH RAISED FACE ENSD FOR 150- 1500 LBS. FLANGES P.O. Box 12128	
NOTE: METER AND FLANGE ASSEMBLY SHOWN	Odessa, TX 79768 Phone: 432-366-8699 Fax: 432-366-1106 E-mail: rkw@eddevices.com Website: www.eddevices.com	Electronic Data Devices

EDD Electronic Data Devices Turbine Flow Meters



4" Long BF Turbine Flow Meters

Electronic Data Devices offers a complete line of between flange turbine flow meters that are available with ranges from 0.3 GPM to 50 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

4" long BF meters are available in the sizes below. The working pressure for the meter is determined by the flanges used. All sizes are compatible with 150 pound to 1500 pound flanges.

3/8″ x 1″ x 4″ 1/2″ x 1″ x 4″ 3/4″ x 1″ x 4″ 7/8″ x 1″ x 4″ 1″ x 1″ x 4″

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FUD Electronic Data Devices



Ring Joint Turbine Flow Meters

Electronic Data Devices offers a line of turbine flow meters that are available with ranges from 2 GPM to 400 GPM covering a wide range of measurement applications. Our turbine flow meters are manufactured to the highest quality standards. Some of the typical applications include: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry, and most other liquid applications.

Ring joint turbine flow meters are available in the following sizes: 3/4'', 1'', 1 1/2'' and 2''. Operating pressure is determined by the rating of the gasket and are available in either 1500 series or 2500 series ring joints.

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FUD Electronic Data Devices Turbine Flow Meters



BF Series Meter Repair Kits

Electronic Data Devices offers a broad line of turbine flow meter repair kits designed for EDD meters and other popular brands. The kits are available for flow ranges of 0.3 to 5000 GPM. Electronic Data Devices kits fit meter sizes of 3/8" to 10".

Our repair kits are manufactured to the highest quality standards. The repair kits are manufactured of 316SS and CD4MCu for the rotors. Bearings are tungsten carbide and ceramic. The kits are calibrated in pulses per gallon for each kit. The kits may be used in a wide range of applications including: oilfield waterflood, production, well servicing, pipelines, mining, chemicals, food and beverage industry and most other liquid applications.

Repeatability: Within \pm 0.1% of indicated flow throughout the linear flow range.

Accuracy: Within \pm 1% of the reading Note: $3/8'' \pm 2\%$ of the reading.



Electronic Data Devices

Between Flange & Ring Joint Repair Kit Installation Instructions

KIT INSTALLATION

1. INSTALL DOWNSTREAM VANE SO ARROW ON VANE

BODY. THE DIRECTIONAL ARROW AND NOTCH ON THE

WHERE THE CONDUIT HUB IS LOCATED.

CORRESPONDS WITH DIRECTIONAL ARROW ON THE METER

VANE SHOULD ALIGN WITH THE TOP OF THE METER BODY,

2. INSTALL THE DOWNSTREAM SOCKET HEAD CAP SCREWS.

3. INSTALL ROTOR BEING SURE THE ARROW IS PROPERLY

ALIGNED, AND THE SHAFT SEATED IN THE VANE BUSHING. 4. INSTALL UPSTREAM VANE, ALIGNING THE VANE THE SAME

AS THE DOWNSTREAM VANE. SPIN THE ROTOR TO ALLOW

SHAFT TO FASILY ENTER THE VANE BUSHING. DO NOT USE

FORCE TO PUSH THE VANE BEARING OVER THE ROTOR

KIT REMOVAL

1. REMOVE MAGNETIC PICKUP BY LOOSENING LOCK NUT USING 3/4" THIN WALL SOCKET, THEN UNSCREW FROM METER BODY. THIS PROCEDURE WILL HELP TO PREVENT PICKUP DAMAGE DURING THE REPAIR PROCEDURE. 2. REMOVE SOCKET CAP SCREWS FROM BOTH ENDS OF

2. REMOVE SOCKET CAP SCREWS FROM BOTH ENDS OF METER USING HEX KEY.

3. REMOVE UPSTREAM AND DOWNSTREAM VANES, TAPPING WITH SOFT ROD IF NECESSARY TO DRIVE OUT VANES.

4. REMOVE ROTOR FROM BODY.

5. CLEAN THE METER BODY BORE AS REQUIRED BRINGING IT BACK TO A LIKE NEW CONDITION.

6. CLEAN SCREW HOLES AND COUNTER BORE FOR VANE TO ALLOW THE VANE TO PROPERLY SEAT.

SHAFT. 5. INSTALL UPSTREAM SOCKET HEAD CAP SCREWS. 6. MAKE SURE THE ROTOR SPINS FREELY BEFORE INSTALLING THE METER. 7. ATTACH PLASTIC CALIBRATION TAG AROUND THE CONDUIT HUB AND CUT OFF EXCESS STRAP LENGTH FLUSH WITH TAG. 8. INSTALL MAGNETIC PICKUP AS FOLLOWS: CLEAN PICKUP HUB THREADS AND PICKUP THREADS AS NEEDED. SCREW IN MAGNETIC PICK-UP THE PICKUP BY HAND UNTIL IT BOTTOMS OUT, THEN BACK OFF 1/4 TURN AND TIGHTEN LOCK NUT WITH 3/4" THIN CONDUIT HUB WALL SOCKET. METER BODY LOCK NUT SOCKET HEAD CAP SCREW - TYP. D) D) D) UPSTREAM VANE 6P BUSHING ROTOR AND SHAFT NOTCH & FLOW ARROW DOWNSTREAM VANE P.O. Box 12128 Website Phone Fax E-mail 432-366-1106 432-366-8699 Odessa, Texas rkw@eddevices.com www.eddevices.com 79768

USA

FUD Electronic Data Devices Turbine Flow Meters



EDD-600 Totalizer

Electronic Data Devices' EDD-600 is a self-contained totalizer and flow rate indicator designed to mount directly on the turbine flow meter or remotely mounted with optional hardware. By using state of the art low power CMOS intergrated circuits and liquid crystal displays, long battery life is attained.

SPECIFICATIONS

Power	4 C Batteries	Battery Life	2 - 4 Years
Flow Rate	Digital 6 Digit	Flow Rate Units	Specified by customer
Totalizer	Digital 6 Digit	Totalizer Units	Specified by customer
Totalizer Reset	With optional switch	Divisor Capability	From 1 - 131071
Accuracy	± 1 Count	Mounting	Directly on meter
Temperature Range	-20° to 155° F	Housing	Polyester Weatherproof
Input Frequency	0 - 2500 Hz	Input Amplitude	20 - 5000 mVpp





EDD Electronic Data Devices Turbine Flow Meters



EDD-340 4-20 mA Converter

The EDD-340 circuit card will accept signal inputs from turbine flow meters or any pulsing device with acceptable wave forms and signal levels. The card has a 4 - 20 mA output. The card is 4" x 4" and mounts via 4 standoffs and screws to a backplate. Hookup is via 7 wire compression terminals. The card may be calibrated to any customer specified full scale output.

	Power	24 Vdc or Optior	nal 12 Vdc	
	Current Pull	50 mA Maximum		
	Input Frequency	0 - 2500 Hz		
	Input Amplitude	30 mV - 30 V peo	ak to peak	
	Accuracy	\pm 1 Percent		
	Output	4 - 20 mA into a	250 Ohm Load	
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EDD-530 Pulse Output Card

The EDD-530 card will accept signal inputs from turbine flow meters or any pulsing device with acceptable wave forms and signal levels. The output is a dry contact closure or an optional voltage output. The card is 4" x 4" and mounts via 4 standoffs and screws to a backplate. Hookup is via 6 wire compression terminals. The card may be calibrated in any customer specified engineering units up to a maximum divisor of 16383.

	Power	12 or 24 Vdc (must spec.)			
	Divisor Capability	1—16383			
	Pulse Output Units	Specified by customer			
	Accuracy	± 1 Count			
	Temperature Range	-20° F - 140° F			
	Input Frequency	0 - 2500 Hz			
	Input Amplitude	30 mV - 30 V peak to peak			
	Pulse Output Duration	150 ms or customer specified		Note: Circuit Current	Pull
	Voltage Output Option	Discuss with Factory		24 Vdc - 35 mA	
3	Phone	Fax	Email		Website

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sinusoidal signals into stable square wave pulses. They can be used with all magnetic VR type pickups, allowing for greater pickup to target gaps and longer signal transmission distance. The pucks are built to fit compact "ELBY" and "Y" type explosion-proof enclosures, refer to bulletin 4001. For Intrinsically Safe certified see brochure: IS4022, 29 * MICROPOWER versions are available in the and models for ultra low current draw, ideal for battery applications. **SPECIFICATIONS** Vs, Supply Voltage: 7.5 (12)to 30 Vdc regulated 3.6 Vdc min., unregulated * MICROPOWER: 2 to 6 Vdc Is, Supply Current: $\leq 2 \text{ mA} @ 5 \text{ Vdc}$ \leq 4 mA @ 12 Vdc ≤10 mA @ 24 Vdc ≤20 mA @ 30 Vdc (OC) *MICROPOWER: ≤ 0.06 mA ≤ 5 mA (Current Loop, 4029) Vo, Signal Out: 0 - 10 V NPN 0 - 5 V NPN @ £ 20mA sink 0 – Vs NPN 0 - Vs, NPN, OC, (Open Collector) 0 - Vs, PNP, OC, 50 mA Sourcing 4 to 20 mA current sink: only: ± 2 mA, 4 to 40 V supply, see page 2 for wiring diagram & R Load spec. **Input Sensitivity:** 30, 12 or 5 mVpp * MICROPOWER: 12 to 40 mV **Frequency Range:** 3 Hz to 10 kHz at specified sensitivity \leq 40 kHz at increased signal level, varies with target size, distance and pickup sensitivity. (Option: \leq 100 kHz) *MICROPOWER: ≤ 1 Hz to 30 kHz Rise/Fall Time (N.L.): 04 / .18 µs (Nom.) **Distance:** 500 ft. max. pickup to preamp Temperature Range: -40° to 221 °F (-40° to 105 °C) CE: EN55011, EN50022-2 **Compliance: TERMINAL/PIN CONNECTIONS** 1. Input Vdc 4. Mag Pickup & : 2. Common 5. Mag Pickup 3. Pulse out (+) 6. Pulse out (-) on MS3106A-10SL-3S A: Input Vdc B: Common C: Pulse out

OPTIONS: Please contact sales. For junction boxes & adapters see spec. 4001 For connector cable assemblies, please see spec. 3000



PAGE 1 OF 2

LABEL -





ID LABEL

PRODUCT DESCRIPTION

The FTC converter receives frequency input and converts it to a proportional 4-20mA output. It has been configured to fit a compact 1/2 & 3/4" NPT "ELBY" explosion proof enclosure. The frequency range is field selectable to fit most applications. ZERO and SPAN adjustments make it easy to calibrate to almost any measurement range, with little interaction between the adjustments.

The power supply input is designed to cover the entire range of commonly available DC power, with no selecting or adjusting.

SPECIFICATIONS

Vs Supply Voltage:	9 - 30 VDC @ \leq 4mA
Input Protection:	100 VAC, reversed leads
Output Protection:	Short to +VDC, Common or Signal out Continuous
Frequency Input Range:	 F Hi: Adjustable full scale: 1100 Hz to 10 KHz* (18 kHz with signal >50 mV, 1% linearity) F Lo: Adjustable full scale: 75 Hz to ≥1100 Hz
Input Sensitivity:	Standard 50 mVpp High 12 mVpp
Linearity:*	0.5% max., 0.15% typ.
Output Setting Time:*	Full scale change to 95% of final value 100mS to 3 sec.
Output Ripple and Noise: *(Parameter Varies with Calibra	* .2 mA max p -p, 1% of Full Scale .02 mA typ., .01% of Full Scale ation Setting)
Temperature Coefficient:	25° to 40°C, 0.13%/°C,
Operating Temp. Range:	-40° to +85 °C (-40 to +185 °F
ZERO/SPAN Adjustment I	nteraction: < 1%
3 WIRE OUTPUT VERSION	1: 20 mA Range
Minimum Output Curren	t: 0.07 mA
Maximum Output Curren (Full Scale Min. Cal., Zero Ca	it: 24.1 mA il.Set to 4 mA)
Terminal Connections:	1. Input VDC4. Mag Pick-up2. Common5. Mag Pick-up3. Signal Out
Wiring Options & R Load	specification: See page 2
Compliance:	CE: EN55011, EN50022-2

(FM, CSA & **CENELEC** Pending) EN55011, EN50022-2

INTRINSICALLY SAFE CLASS I, II, III DIV 1 **GROUP ABCDEFG, ZONE 0**




FUD Electronic Data Devices Turbine Flow Meters



4.303 MAGNETIC PICKUP

Electronic Data Devices' magnetic pickups are manufactured to cover a wide range of metering applications, including our meters and most others popular brands of meters.

SPECIFICATIONS

DC Coil Resistance	1450 ohms	Output Volts	2.5Vpp (turbine meters)
Inductance	800 mh	Pole Piece	Extended
Magnetization	900 Gauss	Construction	303/304 S>S> solid epoxy
Temperature Range	-150° to $+250^{\circ}F$	Connection	2 pins gold plated
Overall length	2.25″	Mating Connector	MS 3106A-10SL-4S
Thread Size	5/8 X 18	Thread Length	1.13″

P.O. Box 12128 Odessa, Texas 79768 USA

Phone 432-366-8699 Fax 432-366-1106

x 5-1106 •

Electronic Data Devia	Electronic Data De Odessa, Texas USA 432-366-8966 rkw@eddevices.com	vices 4.303 Digital Magnetic Pick-Up 5/8 - 18 UNF
Product Description		
Electronic Data Devices' high output voltage and wide range of applicatic	Digital 2 PIN magnetic pick-ups featu great configuration diversity to meet a ns.	re 0.02 — ► < 2.25" — ►
A sanitary version to NEMA 6, IP65 & IP67 is also offered.		
All Models are also avai probe.	lable with an optional temperature	
Specifications		
DC-Coil:	Resistance/Inductance/Output Voltag 1500 Ohms/ 800 mH/ 240 Vpp	
Magnetization:	950 GAUSS 0.106	
Temperature Range:	-100° to 250° F (-73° to 120° C)	
Pole Piece:	Extended Pole, 0.106 dia. x 0.020 L	5/8-18 UNF
Construction:	303/304 Stainless Steel Solid Epoxy Encapsulation All standard connectors have gold plated pins.	
Application:	For gear pitch range of 24 DP or coarser depending on pole piece.	
CE-Compliance:	EN55011, EN50022-2	
Options:	For different lenght, material of con struction, configuration, special pole piece type, thread size, hermetically sealed, precision custom magnetiza tion, intergal temperature sensor, cor nector and/or cable termination, please contact factory.	B A PIN Out A +Voltage B -Ground
		Connector Type Pick-up Part Number: 4.303 WIre Lead Pick-up Part Number: 4.303L Connector Part Number: MS3106-10SL-4S Page 1 of 1

Electronic Data Devid	Electronic Data De Odessa, Texas USA 432-366-8966 rkw@eddevices.com	evices 4.304 Digital Magnetic Pick-Up 5/8 - 18 UNF
Product Description		
Electronic Data Devices' high output voltage and wide range of applicatio	Digital 2 PIN magnetic pick-ups featu great configuration diversity to meet on ns.	ure C
A sanitary version to NE	MA 6, IP65 & IP67 is also offered.	3.00"
All Models are also avai probe.	lable with an optional temperature 0	.02 — 1.75" — 0.65" DIA.
Specifications		
DC-Coil:	Resistance/Inductance/Output Voltag 1500 Ohms/ 800 mH/ 240 Vpp	
Magnetization:	950 GAUSS 0.106 E	
Temperature Range:	-100° to 250° F (-73° to 120° C)	
Pole Piece:	Extended Pole, 0.106 dia. x 0.020 L	5/8-18 UNF
Construction:	303/304 Stainless Steel Solid Epoxy Encapsulation All standard connectors have gold plated pins.	→ X → →
Application:	For gear pitch range of 24 DP or coarser depending on pole piece.	
CE-Compliance:	EN55011, EN50022-2	В
Options:	For different lenght, material of con struction, configuration, special pole piece type, thread size, hermetically sealed, precision custom magnetiza tion, intergal temperature sensor, co nector and/or cable termination, please contact factory.	n A B
		PIN Out
		A +Voltage B -Ground
		Connector Type Pick-up Part Number: 4.304 WIre Lead Pick-up Part Number: 4.304L Connector Part Number: MS3106-10SL-4S Page 1 of 1

FUD Electronic Data Devices



4.5015U MAGNETIC PICKUP

Electronic Data Devices' magnetic pickups are manufactured to cover a wide range of metering applications, including our meters and most others popular brands of meters.

SPECIFICATIONS

Supply Voltage	7.5 to 30 Vdc	Signal Output	0 - 10 V
Frequency Range	3 - 10 kHz	Pole Piece	Extended
Magnetization	900 Gauss	Input Sensitivity	30 mVpp
Temperature Range	-40° to $+250^\circ\text{F}$	Connection	3 pins gold plated
Overall length	3.0″	Mating Connector	MS 3106A-10SL-3S
Thread Size	5/8 X 18 UNF	Thread Length	1.75″

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4.5015U Digital Magnetic Pick-Up 5/8 x 18 UNF

Product Description

Electronic Data Devices' Digital 3 PIN magnetic pick-up produces a digital frequency output directly proportional to speed. The internal amplifier provides for constant pulse shaping, signal amplitude, logic-level output, improved signal-to-noise ratio, usable at lower RPM's and greater air gap between the sensor and the actuator.

MICROPOWER wersions are available for ultra low current draw, ideal for battery appliactions.

A sanitary version to NEMA 6, IP65 & IP67 is also offered.

All Models are also available with an optional temperature probe.

Specifications

V _s , Supply Voltage:	7.5 (12) to 30 Vdc regulated 3.6 Vdc min., unregulated MICROPOWER: 2 to 6 Vdc	
I _s , Supply Current:	$\leq 2 \text{ mA} @ 5 \text{ Vdc}$ $\leq 4 \text{ mA} @ 12 \text{ Vdc}$ $\leq 10 \text{ mA} @ 24 \text{ Vdc}$ $\leq 20 \text{ mA} @ 30 \text{ Vdc} (OC)$ <i>MICROPOWER</i> : $\leq 0.06 \text{ mA}$	
V _o , Signal Out: @ ≤ 20 mA sink	0 - 10 V, NPN 0 - 5 V, NPN 0 - V _s , NPN 0 - V _s , NPN, OC (Open Collector)	ų
Input Sensitivity:	30, 12 or 5 mVpp MICROPOWER: 12 - 40 mV	
Frequency Range:	 ≤ 3 Hz to 10 kHz ≤ 40 kHz at increased signal level, varies with target size, distance and pick-up sensitivity. (Option: ≤100 kHz) MICROPOWER: ≤1 Hz to 30 kHz 	
Rise/Fall Time:	0.04 / 0.16 µs	
Temperature Range:	-40 [°] to 248 [°] F (-40 [°] to 120 [°] C) (Option: -45 [°] to 140 [°] C)	
Magetization:	Standard: \geq 900 GAUSS Low Mag: 250 GAUSS, typ.	
Sensor Body:	303 Stainless Steel	
		Connecto Wire Log



Connector Part Number: MS3106A-10SL-3S

Page 1 of 1



Page 1 of 1

Electronic Data Device	Electronic Data De Odessa, Texas USA 432-366-8966 rkw@eddevices.com	evices 4.5050 Digital Magnetic Pick-Up 5/8 - 18 UNF
Product Description		
Electronic Data Devices' high output voltage and wide range of applicatio	Digital 2 PIN magnetic pick-ups featu great configuration diversity to meet c ns.	ore □ 0.02
A sanitary version to NE	MA 6, IP65 & IP67 is also offered.	
All Models are also avai probe.	lable with an optional temperature	→ 1.13" → 0.65" DIA.
Specifications		
DC-Coil:	Resistance/Inductance/Output Voltag 3000 Ohms/ 1500 mH/ 290 Vpp	
Magnetization:	600 GAUSS 0.106	5 DIA. —┘
Temperature Range:	-150 $^{\circ}$ to 330 $^{\circ}$ F (-101 $^{\circ}$ to 165 $^{\circ}$ C)	
Pole Piece:	Extended Pole, 0.106 dia. x 0.020 L	5/8-18 UNF
Construction:	303/304 Stainless Steel Solid Epoxy Encapsulation All standard connectors have gold plated pins.	X X
Application:	For gear pitch range of 24 DP or coarser depending on pole piece.	
CE-Compliance:	EN55011, EN50022-2	
Options:	For different lenght, material of con struction, configuration, special pole piece type, thread size, hermetically sealed, precision custom magnetiza tion, intergal temperature sensor, con nector and/or cable termination, please contact factory.	n A B
		PIN Out
		A +Voltage B -Ground
		Connector Type Pick-up Part Number: 4.5050 WIre Lead Pick-up Part Number: 4.5050L Connector Part Number: MS3106-10SL-4S Page 1 of



Coil Resistance 160 Ohms (Inductance) Pole Diameter

Pole Length

(140 mH)

0.106"

0.020"