# 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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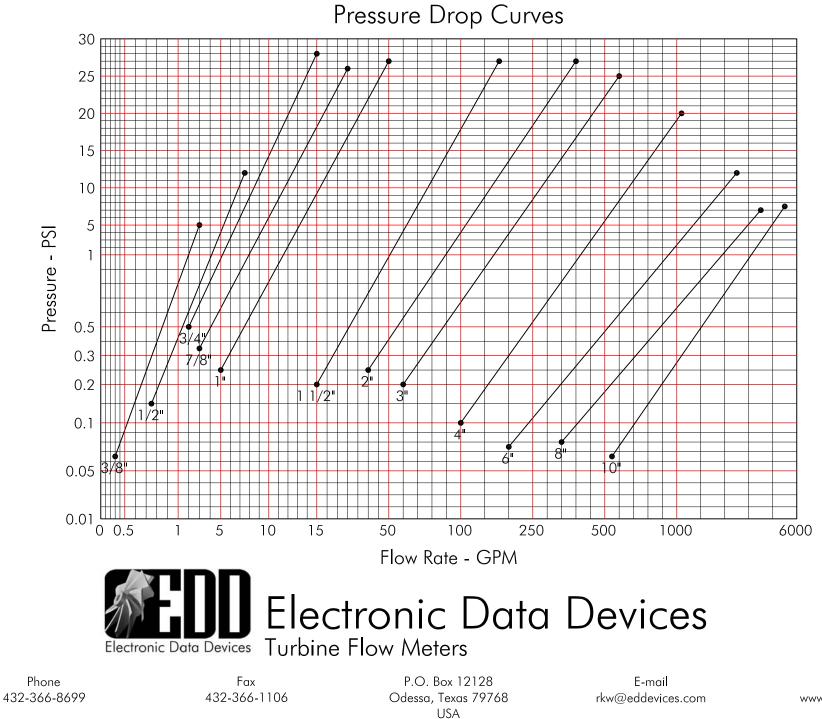
	Turbine Flow Meters Flow Range								
Size								Max Output	
Inch	MM	GPM	BPM	BPD	LPM	M³/D	Pulses P/Gal	Frequency Pulses P/ Sec	
3/8	10	.3 – 3	.00707	10 - 100	1.14 - 11.36	1.6 - 16	22000	1100	
1/2	13	.75 - 7.5	.0117	25 - 250	2.84 - 28.39	4 - 40	14500	1815	
3/4	19	2 - 15	.0533	68 - 515	7.57 - 56.78	11 - 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	iterial 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
Perfo	rmance 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



## 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.

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**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.

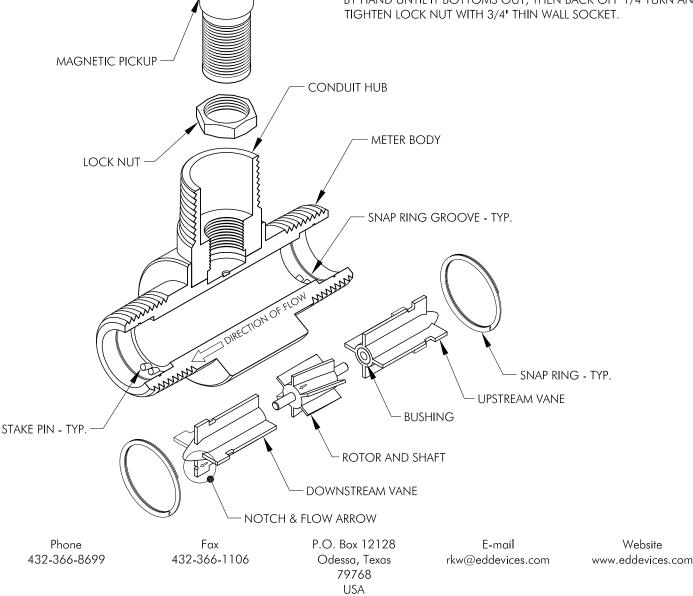
3. INSTALL ROTOR BEING SURE THE ARROW IS PROPERLY ALIGNED, AND THE SHAFT SEATED IN THE VANE BUSHING.

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.





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#### 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.

