

Fuel Senders

These Fuel Senders are designed to be used in conjunction with our EG Series Switchgauge Instruments as well as CAN I/O modules. See the bulletin 95090 EG Series – Electric Gage and Switchgauge Instrument for more information.

Specifications

Tank Cutout Hole: \varnothing 1.750 in. (44 mm)

Materials:

- Float:** Foamed Buna N
- Float Arm:** Stainless Steel
- Resistor Housing:** Glass Filled Polyacetal
- Flange & Shaft:** Steel, Zinc-Plated
- Gaskets:** Buna N, 70 Durometer (48% Acrylonitrile)
- Hardware:** Brass & Phosphor Bronze
- Mounting Hardware:** Zinc-Plated Steel

Resistance Range:

- ESF and ES2F Model:** 240 Ohms to 33 Ohms
- ESDF Model:** 120 ohms to 17 ohms
- Operating Temperature:** -40° to 185°F (-40° to 85°C)
- Storage Temperature:** -76° to 185°F (-60° to 85°C)

Resistance Values

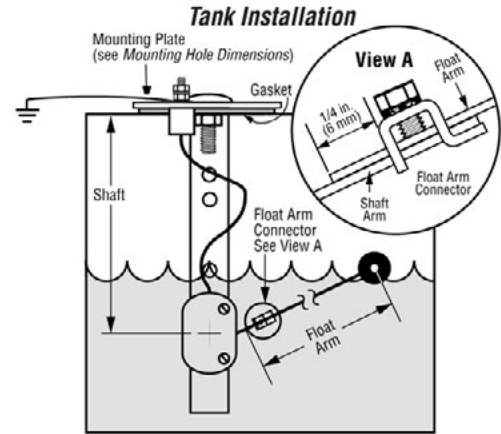
ESF, ES2F Senders:

- E = 240 ohms (falling level) (primary calibration point)
- 1/4 = 153 ohms (falling level)
- 1/2 = around 100 ohms (falling level)
- 3/4 = 67 ohms (falling level)
- F = 33 ohms (rising level) (secondary calibration point)

Resistance Table for ES2F Fuel Sender

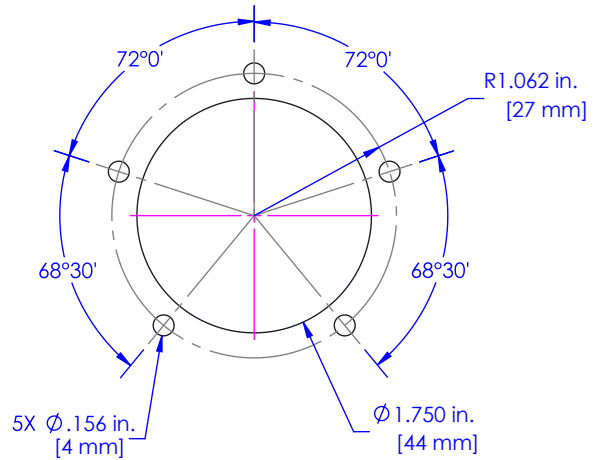
Resistance tables for ES2F Fuel Sender (resistance verses % of scale) Murphy Fuel Sender (0% - 100%)

% of Scale	0	10	20	30	40	50	60	70	80	90	100
R(Ohm)	244	205	171	143	123	103	88	74	60	47	33

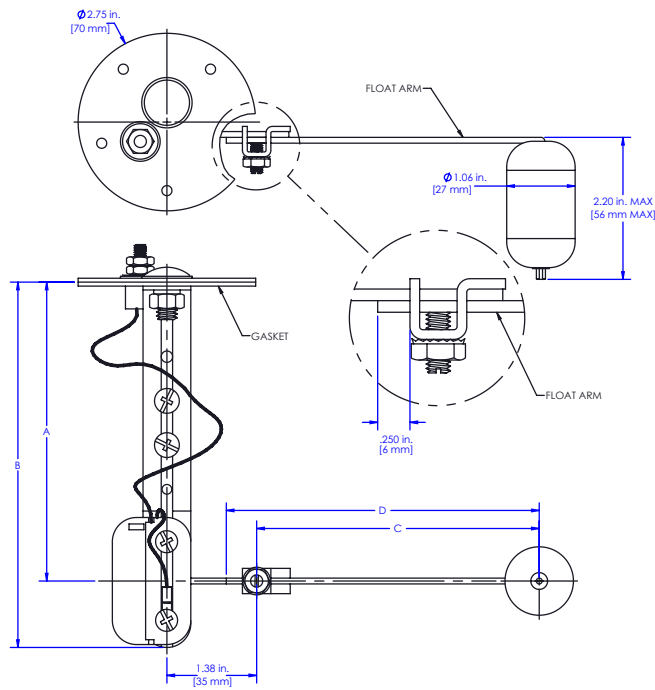


Dimensions

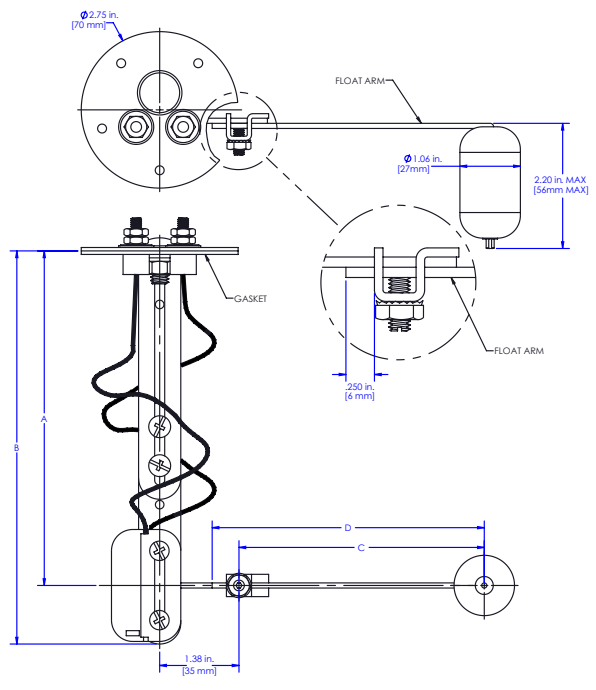
Mounting and Cutout Layout



Model ESF Series



Model ES2F and ESDF Series



Fuel Sender Table

Tank Depth		D Cut Float Arm Length		A Shaft Length Adjustment	
inch	mm	inch	mm	inch	mm
6.00	152	2.31	59	3.06	78
6.50	165	2.69	68	3.31	84
7.00	178	3.00	76	3.56	90
7.50	191	3.38	86	3.81	97
8.00	203	3.75	95	4.06	103
8.50	216	4.06	103	4.31	110
9.00	229	4.38	113	4.56	116
9.50	241	4.75	121	4.81	122
10.00	254	5.12	130	5.06	129
10.50	267	5.44	138	5.31	135
11.00	279	5.81	148	5.56	141
11.50	292	6.19	157	5.81	148
12.00	305	6.50	165	6.06	154
12.50	318	6.88	175	6.31	160
13.00	330	7.19	183	6.56	167
13.50	343	7.56	192	6.81	173
14.00	356	7.88	200	7.06	179
14.50	368	8.25	210	7.31	186

Tank Depth		D Cut Float Arm Length		A Shaft Length Adjustment	
inch	mm	inch	mm	inch	mm
15.00	381	8.56	217	7.56	192
15.50	394	8.949	227	7.81	198
16.00	406	9.31	237	8.06	205
16.50	419	9.62	244	8.31	211
17.00	432	10.00	254	8.56	217
17.50	445	10.31	262	8.81	224
18.00	457	10.69	271	9.06	230
18.50	470	11.00	279	9.31	237
19.00	483	11.38	289	9.56	243
19.50	495	11.75	298	9.81	249
20.00	508	12.06	306	10.06	256
20.50	521	12.44	316	10.31	262
21.00	533	12.75	324	10.56	268
21.50	546	13.12	333	10.81	275
22.00	559	13.44	341	11.06	281
22.50	572	13.81	351	11.30	287
23.00	584	14.12	359	11.56	294
23.50	597	14.50	368	11.81	300
24.00	610	14.88	378	12.06	307

B = A + 1.03125
C = D - .46875

How to Order

Part Number	Model and Description	Notes
05705668	ESF: 1-wire-to-ground Fuel sender	
05705669	ES2F: 2-wire ungrounded Fuel sender	
05705670	ESDF: 2-wire ungrounded Fuel sender, drives 2 gages	