Product Data Sheet

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Rosemount[™] 400 and 400VP

Contacting Conductivity Sensors



Reliable conductivity measurements for your process

With Rosemount 400 and 400VP contacting conductivity sensors, you can accurately measure electrolytic conductivity in a broad range of applications from high purity water to clean cooling water. These sensors are ideal for use in clean, non-corrosive liquid having conductivity less than 20,000 μ S/cm.



ROSEMOUNT

Figure 1: Recommended Range - Contacting Conductivity

Performance Specifications

Cell 0 Constant).01µS/cm	0.1µS/cm	1.0µS/cm	10µS/cm	100µS/cm	1000µS/cm	10mS/cm	100mS/cm	1000mS	S/cm
0.01		0.01µS/cm to 200µS/cm 200µS/cm								
0.1	• • • •	0.1µS/cm to 2000µS/cm 2000µS/cm to 60mS/cm								
1.0		1 μS/cm to 20mS/cm 20mS/cm 20mS/cm to 600mS/cm					00mS/cm			
4-electrode		2 µS/cm to 300mS/cm								

Recommended Range – Contacting Conductivity

Cell Constant Linearity				
	±0.6% of reading in recommended range			
	+2 to -10% of reading outside high recommended range			
*********	±5% of reading outside low recommended range			
	±4% of reading in recommended range			

Table 1: Weights and Shipping Weights

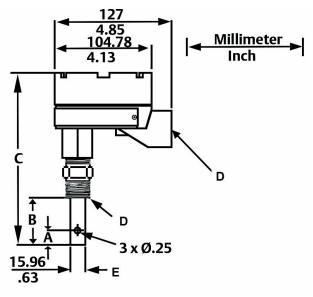
Rounded up to the nearest 1 lb. or 0.5 kg.

Sensor	Weight	Shipping weight
Rosemount 400 with 10-ft. integral cable	1 lb. (0.5 kg)	2 lb. (1.0 kg)
Rosemount 400 with 50-ft. integral cable	4 lb. (2.0 kg)	5 lb. (2.5 kg)
Rosemount 400VP with Variopol cable connection	1 lb. (0.5 kg)	2 lb. (1.0 kg)
Rosemount 400 with integral junction box	3 lb. (1.5 kg)	4 lb. (2.0 kg)

Figure 2: Flow Cell



Figure 4: Rosemount 400 with Integral Junction Box Dimensional Drawing



- A. Dimension (see Table 4)
- B. Dimension (see Table 4)
- C. Dimension (see Table 4)
- D. ¾-in.-14 NPT
- E. Equally spaced

Table 4: Rosemount 400 with Integral Junction Box Dimensions

Sensor	Α		В		С		
configuration	in.	mm	in.	mm	in.	mm	
0.01/cm	1.59	40.39	1.98	50.34	7.41	188.2	
0.1/cm	0.687	17.45	1.11	28.15	6.49	164.9	
1.0/cm	0.667	16.94	1.13	28.70	6.51	165.4	
0.01/cm (with extended insertion length)	1.59	40.39	5.49	139.4	10.90	276.9	
0.1/cm (with extended insertion length)	0.687	17.45	5.49	139.4	10.90	276.9	
1.0/cm (with extended insertion length	0.667	16.94	5.49	139.4	10.90	276.9	