

ESS315 Pressure Sensor for Drilling System & Downhole Environment

Better Drilling with Better Data ESS315				
Application: Mine Drilling Downhole Environment Downhole Fluid & Mud				
Specification		Dimension & Connection		
Pressure Range	0~1500bar			
Power Supply	5Vdc (default)			
Proof-Pressure	2200bar			
Wetted Medium	Downhole Fluid & Mud			
Material of Housing	17-4PH			
Accuracy	Non-linearity			<0.2%/FS
	Hysteresis			<0.15%/FS
	Repeatability			<0.10%/FS
	Stability			<0.15%/FS/Year
Output load Resistance	1.5kΩ ~ 5kΩ			
Output @ Zero	≤ ±2mV@5VDC			
Output @ Full Span	≥ 1.4mV/V			
Insulation Impedance	≥ 500MΩ @250VDC			
Temp.	Working Temp.			≥ 10KΩ
	Temp. Drift @zero			≤ 1000pF
	Sensitivity Temp. drift	16Vdc		
Black	Power Supply Negative	Green	Output Positive	
Red	Power Supply Positive	White	Output Negative	

Connect and power on the device in strict accordance with the prescribed wiring method and power supply voltage as outlined in this specification. The maximum measured pressure must not exceed 150% of the rated value, and the burst pressure must not exceed 300% of the rated value. The measured medium should consist of gas or liquid that is non-corrosive to stainless steel. Exercise caution and refrain from using hands or any sharp objects to apply pressure or clean the pressure hole, as this may result in damage to the chip. Please be advised that this product falls under the category of measurement devices, and as such, it is strictly prohibited to subject it to impacts or drops. Disassembling the product is also not permitted. Please note that any damages resulting from these actions are not covered under the warranty. To ensure reliable sealing in underground situations, the product is accompanied by high-temperature O-rings and PEEK rings.