

# FSG35 PRESSURE



## THE FINESCALE GAUGE SET IS PART OF EFC'S FAMILY OF WELL CONTROL INSTRUMENTATION, WHICH ADDS VALUE TO THE CHOKE CONTROL SYSTEM OF ANY RIG.

FSG's are sets of high resolution, 8" gauges, displaying steady, accurate pressure changes in the drilling manifolds, providing vital information during critical drilling & kick-management operations. Two or three 'cascaded' gauges simultaneously indicate pressure.

### FINESCALE GAUGES MONITOR:

- Choke Manifold Pressure
- Kill Manifold Pressure
- Standpipe Manifold Pressure

Enclosure shape and size can vary and may be tailored to suit available space. Unlike hydraulic systems, no manual isolation is required as gauge limits are reached. EFC's electronic solution ensures no damage to gauges or sensors. Scales can be customized to client requirements and can be complemented with digital readouts.

The gauges are normally mounted close to the rig's Choke Control. Repeat displays - without the need for additional sensors - can be mounted at the drilling manifold itself, providing useful backup

# FINESCALE GAUGE SET (FSG)

## System Description

EFC High Resolution Finescale Gauges (FSG) are designed to give instant and accurate indication of pressures on the choke and standpipe manifold. With a resolution far in excess of the traditional hydraulic or digital Casing and Standpipe gauges found in every Choke Control Panel. The cascading gauges also allow easy to view trends.

As pressure rises, gauge pointers move simultaneously. On the illustrations shown, three gauges indicate Choke & Kill, two gauges indicate Standpipe pressure. Only 3 sensors are required, one each for Choke, Kill and Standpipe. Additional 'slave' FSG sets can be added to display pressure on the manifolds. Displays are EFC M25 analogue gauges, intrinsically safe suitable for Zone 1 with no purging requirement.

FSG35	TECHNICAL SPECIFICATION
<b>Overall Size</b>	5 Gauge Display - Typical Enclosure Size 700mm x 500mm x 250mm
<b>Overall Weight</b>	Typical FSG36 25kg
<b>Zone Rating</b>	Zone 1 Display and Zone 1, 2 & Safe area Processing Enclosure
<b>Maximum Working Pressure</b>	10,000 PSI, 15,000 PSI & 20,000PSI options
<b>Working Temperature</b>	-20°C to +50°C
<b>IP Rating</b>	IP66
<b>Documentation Included</b>	Manufactures Data Book (MDB), User Manual (UM) Technical & Certification Manual (T&CM)
<b>Certification</b>	M25 Certificate No ITS 13ATEX 27835X ATEX, IECEx, API, DNV, ABS CDS

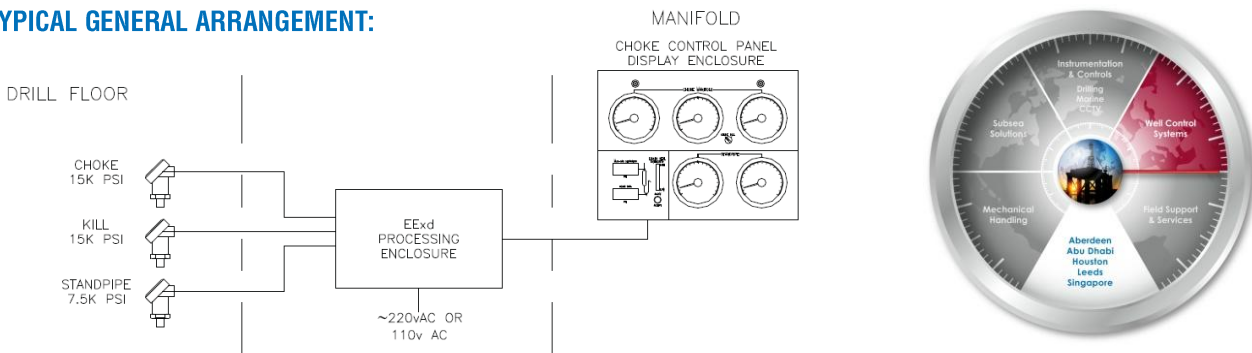
*NB: Technical data may be subject to change*

FEATURES	BENEFITS
<b>Low Pressure Scales</b>	Displays 10PSI Increments
<b>Analogue Gauges</b>	Easier for user to identify an increase or decrease in pressure than a digit only display
<b>Cascaded Gauges 1 Sensor Per 3 Gauges</b>	Simultaneous display on 0-10,000PSI, 0-5,000PSI and 0-15,000PSI
<b>Overscale Protected</b>	No manual isolation (unlike hydraulic gauges)
<b>4-20mA Signal</b>	Robust signal with a high level immunity to interference over long cable runs
<b>4:1 Deboosted</b>	Use in conjunction with 4:1 Piston Isolator & MIM

## EXPANDABILITY:

- Integration with Choke Control System
- LSM22BG
- Choke and Kill Temperature Monitoring
- Glycol Injection Unit
- Use in conjunction with 4:1 deboosted & MIM Manifold Interface

## TYPICAL GENERAL ARRANGEMENT:



HPHT/0114/002/A