

## Service and Calibration Kit

### FEATURES

- Start-up calibrate and troubleshoot process weighing systems
- Simultaneous individual load cell measurement
- Pre-calibrated for mV/V, percent of load, and force units
- Includes instrument calibrator
- Remote connection cable assemblies
- Rugged portable suitcase design with shock mounting
- Troubleshooting procedures manual

### APPLICATIONS

- Field service
- Calibration
- Test and measurement

### DESCRIPTION

Start-up, commissioning, routine servicing, and calibration of process weighing systems can be simplified significantly using the FSK-40 Service and Calibration Kit. This complete kit is equipped with a four-channel load cell instrument, an instrument calibrator, a serial communication module, operation and servicing manuals, and a set of 10-foot remote connection cables. The entire assembly is housed in a rugged, portable suitcase with shock mounting.

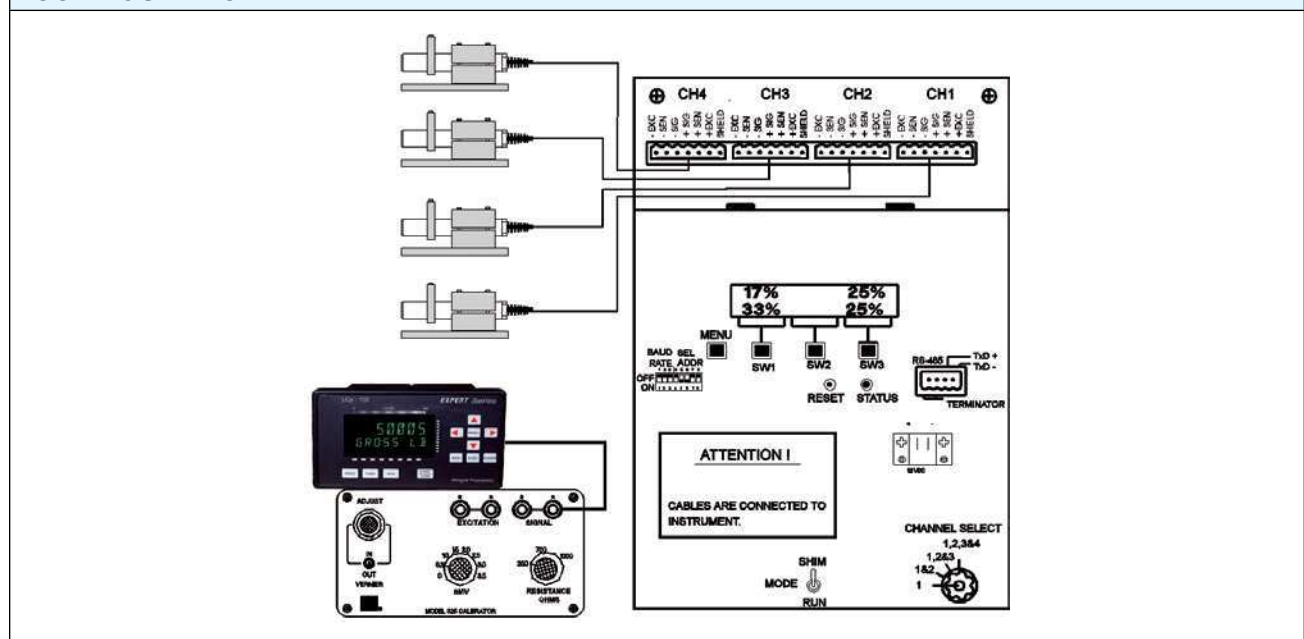
The core of the kit is the four-channel instrument that makes it possible to measure the output of each of up to four load cells simultaneously and independently. This powerful tool greatly reduces the time needed to identify mechanical restrictions, mechanically balance the system,



and isolate load cells for troubleshooting. The instrument is factory pre-calibrated to provide individual readout in mV/V, and percent of load or conventional units of force. In addition, the instrument is equipped with a serial port and adapter for logging of data on a PC or serial printer.

For troubleshooting and calibration of associated instrumentation, a precision calibrator is included. To facilitate easy remote connection to individual load cell cables inside a summing box, special 10-foot wiring harnesses with spring loaded connectors are included. Finally, a comprehensive manual describing the techniques professions use to properly configure, calibrate and troubleshoot weigh systems is also included.

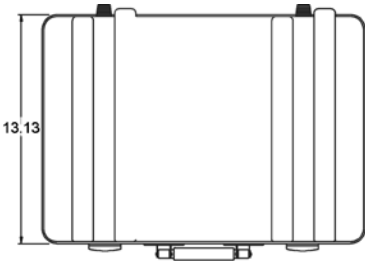
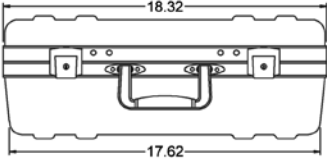
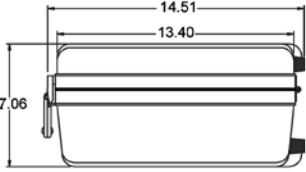
### CONFIGURATION



Service and Calibration Kit

SPECIFICATIONS		
PARAMETER	VALUE	
<b>PERFORMANCE</b>		
Internal Resolution	4,194,304 total counts	
Max. Display Resolution	3,000,000 total counts	
Max. Resolution/Channel	750,000 counts	
Conversion Speed	50 ms (20 updates/s)	
Sensitivity (Noise)	0.0011% full scale (max ±16 counts w/o filter)	
Full Scale Range	35 mV/channel	
Dead Load Range	100%	
Input Impedance	10 MΩ, min. per channel	
Load Cell Excitation	10 V 2 × 350 Ω load cells, 65 mA/channel max.	
Remote Sense	user configurable – each channel	
Linearity	±0.0015% of full scale	
Calibration Repeatability	0.3 μV per count	
Software Filter (Std.)	50 to 6400 ms	
Dynamic Digital Filter	multi-variable to 64 seconds (opt.)	
<b>TEMPERATURE COEFFICIENT</b>		
Span/Zero	±2 ppm/°C	
Step Response	one conversion	
Common Mode Rej.	100 db @ 60 Hz	
Normal Mode Rej.	100 db above 35 Hz	
<b>ENVIRONMENT</b>		
Operating Temperature	-10°C to 55°C (12°F to 131°F)	
Storage Temperature	-20°C to 85°C (-4°F to 185°F)	
Humidity	5 to 90% RH, non-condensing	
Voltage	117/230 V ±15% 50/60 Hz	
Power	12 W max.	
Parameter Storage	EEPROM	
EMI/RFI	Shielded from typical industrial interference	
PARAMETER	VALUE	
<b>ENCLOSURE</b>		
Dimensions	see outline dimensions below	
<b>INTERNAL DISPLAY / OPERATOR INTERFACE</b>		
High-Contrast Vacuum Fluorescent	2 columns of 20 characters each	
Interface	4 “soft buttons”	
<b>DIGI-SYSTEM NETWORK</b>		
Type	RS 485 Half Duplex (Multi-Drop)	
Baud	9.6k, 28.8k, and 56.7k	
Data Format	proprietary	
<b>STANDARD SIMPLEX DATA OUTPUT (TRANSMIT ONLY)</b>		
Type	RS 485 (Simplex)	
Baud	1200 or 9600	
Data Format (Selectable)	ASCII 7 data bits even parity stop bit	
<b>TERMINAL / COMPUTER INTERFACE</b>		
Interface Type	RS 485 Half Duplex (Standard)	
Baud	1200 or 9600	
Protocol	Duplex Command/Response	
Data Format	ASCII 7 data bits even parity stop bit	
<b>WEIGHT</b>		
Complete Case	approx. 19 lb	
<b>CALIBRATION</b>		
	<b>Indicator</b>	<b>Calibrator</b>
Recalibration Interval	1 Year	1 Year
Stability	0.005% FS/year	<<0.02% range/year

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.

DIMENSIONS in inches		
		



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