



CWS3 I

CanWeigh System



The Jiskoot CWS3 I CanWeigh is a hazardous area approved system that can be used as part of an automatic sampling system to provide continuous monitoring of the sampling collection process, as recommended by the international sampling standards.

The system provides accurate weight measurement of two sample receivers generating industry standard 4 to 20mA signals that have a direct linear relationship to the weight of the sample being collected. These signals, in conjunction with a suitable controller enable the sampling system to be automated, enhancing system integrity and compliance with standards.

A certified enclosure houses all components required to interface to the field equipment. A typical arrangement will include two load-cells together with amplifiers, a number of solid state relays, an optional power supply unit for DC

circuits and the required fusing and terminations. All field connections from the safe area can usually be made to this single enclosure. This enclosure together with its contents is known as the control station, as it provides local control to the field equipment.

The load-cells are connected to the control station via dedicated cables and provide measurement of the mass of accumulated sample in a receiver. The system is simple to calibrate and the constants are retained in non-volatile memory within the amplifier.

The load cells and associated connections are certified intrinsically safe.

The Jiskoot CanWeigh system can be configured to suit the sample receivers in use. For example, receivers can be placed vertically on platforms, as shown above, or suspended from an anchor point.

Data Sheet SI I 7-0505-3 • CWS3 I Can Weigh System



Features

- Tare limit testing of each receiver position in the system indicating that empty receivers are in place ready for duty for a forthcoming transfer.
- Easy to install, system suitable for use with Jiskoot and other ISO 3171, IP 6.2, API 8.2 and ASTM D4177 sampler controllers.
- Automatic switching to a second or standby receiver when the first is sensed as being full, or alternating receivers for a continuous flow pipeline application (when used with a suitable controller).
- Performance factor calculations in line with API8.2 / ISO3171 / IP6.2 sampling standard recommendations provide reportable evidence of the integrity of the whole sample collection process (when used with a suitable controller).
- Load cells include mechanical overload protection.
- Monitoring of the performance factor can provide "early warning" indicators of reduced system performance enabling predictive maintenance to reduce downtime.

Specification

CWS31	Supply voltage:	115 & 230 VAC (85 to 250 VAC) @ 50-60Hz	24 VDC (20 to 28 VDC)
		Internal power consumption:	
		21 Watts max	
Solid state relay	Pull-in voltage:	5-24 VDC	
	Control voltage:	110/220 VAC or 24 DC	
	Contact rating:	0.5 Amp (1A max)	
Load cell amplifier	Current output:	4 - 20mA	
	Max load:	600 Ohms	
	Bridge supply:	8 volts DC	
	Supply voltage:	24 - 230 VAC ± 10%	
		24 - 250 VAC ± 20%	
	Frequency:	50 - 60Hz	
	Power consumption:	6 Watts	
Environmental data	Operating & storage temperature:	-20oC to 50oC	
	Humidity range:	<95% RH non-condensing	
	IP rating:	IP67	
Hazardous area approval	Certified to:	ATEX 94/9/EC	
	Equipment category/group:	II 2G	
	Classification:	EEx d IIB T6	

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