

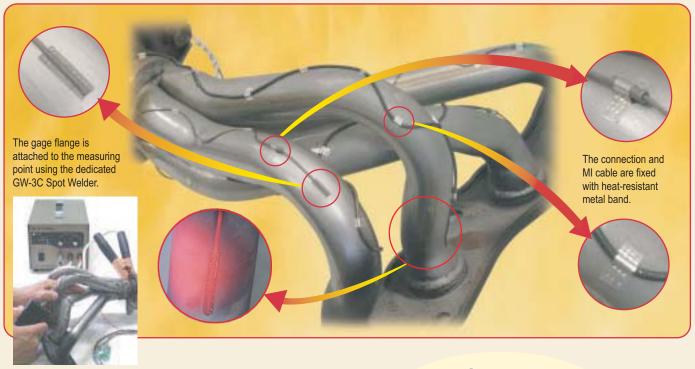
Weldable strain gages are applicable to static/dynamic strain measurement at temperature up to 950°C.

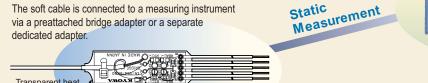
The game elements are encapsulated in a heat-resistant metal tube that can be spot-welded to a measuring point. The heat-resistant MI cable which contains leadwires is laid in the heat-affected zone. Thus, these gages enable strength tests of devices operating at high temperatures. The gages are connected to a data logger or dynamic strain amplifier using the soft cable equipped with a bridge adapter.

Models and Typical Applications

Model	KCW			КНС		кнсм		7]	KHCS		KHCD		Please ask Kyowa.	
Max. operating temperature (°C/°F)	100/212		2	500/932		650/1202		2	750/1382		800/1472		950/1742	
Static strain measurement	Yes			Yes		Yes			Yes		—		Yes	
Dynamic strain measurement	Yes		+	Yes		Yes			Yes		Yes		Yes	
	103			Yes		Yes		-	Yes		103		Yes	
Structure 2-gage half bridge			_	162		162		_	162				162	
1-gage quarter bridge	Yes										Yes			
Temperature compensation	Yes			Yes		Yes			Yes				Yes	
Typical applications	Operating temperature (°C)													
Energy	10	0 2	200	30	00	400	500)	600	700) 8	900	900	1000
High-temperature gas turbine blades														
High-temperature gas furnace														
Nuclear reactor cooling water pipes (natrium)														
Nuclear reactor peripherals														
High-speed breeder reactors														
Thermal electric power plant heat exchangers														
Boiler steam turbines														
Nuclear fuel rods														
Nuclear plant cooling pipes (pure water)														
Gas turbine combustors														
Thermal electric power plant boiler pumps														
Plants & Large-Scale Structures														
Petrochemical reactors														
Heat treat furnaces														
Incinerators														
Steelmaking furnace peripherals														
Fire resistant tests of reinforced concrete structures														
Large-scale plant piping														
Underwater marine structures														
Underwater tests of reincorced structures														
Transports														
Marine engines														
Aircraft jet engine turbines														
Automotive exhaust manifolds														
Automotive exhaust turbines														
Automotive exhaust mufflers														
Automotive exhaust valves														
Automotive cylinder heads														
Automotive pistons														
Automotive suction blowers														
Car bodies (cold districts)														
Operating temperature (°F)	212	2 3	392	57	'2	752	932		1112	129	2 1	472 1	652	1832

Application Example







Data Logger UCAM-60A

Transparent heat shrink tube **Bridge Adapter**

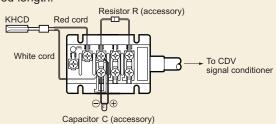
Dynamic Measurement



Memory Recorder/Analyzer **EDX-2000A**

Notes:

- 1. All KYOWA weldable strain gages are equipped standard with an MI cable 2m long and a soft cable 0.5m long. These cables can also optionally be extended to a desired length.
- 2. For the 1-gage quarter-bridge KHCD, dedicated DB-120A/L bridge boxes are available for connection to the CDV-700A signal conditioner



Bridge Box DB-120A/L for KHCD





Specifications are subject to change without notice for improvement.

Safety precautions Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

Reliability through integration



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