Strain Gages For Special Purpose

Features And Technical Specifications

Strain gage for special purpose is a series designed to meet a variety of special purpose measurement, as a high-end products, it shows our professional and advanced level in strain gage research and manufacturing. The main products are: Mid-Temp. Strain gages up to 250℃ , Waterproof Foil Strain Gages, Residual Stress Gages, Crack propagation gauges, etc. which provide a strong support for the high temperature, underwater, residual stress measurement and other special measurement works.

BAB Mid-Temp. Strain Gages Up to 250℃

Karma foil gages, glass-fibre-reinforced polyamide backing, with excellent heat-resistance, good ability on insulation and higher applicable temperature, especially suitable for stress analysis and transducers.

TJ Waterproof Foil Strain Gages

Adopting special adhesive with features of waterproof and mildew resistance, and the gages employ the fully encapsulated form. Waterproof gages are specially designed for stress measurement in the static pressure field under water within 5Mpa. They can successfully be used in the test of hermetic of the air plane cockpit, the stress analysis for internal wall of pressure container and the strength test and crustal stress test of dam and highway.

Residual Stress Gages

Gages for residual stress can measure the uneven plastic deformation, which are caused by the effect of external force or temperature.

TS Crack Propagation Gauges

The crack propagation gauges is designed for measuring the length and rate of crack propagation in structural fatigue tests and fracture mechanics of complex components, while other methods cannot detect. Make the grid parallel to the direction of the main stress when using, when the component crack created by external force, the grid breaks, the total resistance of the crack propagation gauge changes accordingly, so that the length of the crack and the expansion speed can be calculated. Crack opening displacement: ≤ 0.02mm, Fracture lag (lead): ≤ 0.5mm, Working temperature: -30 ℃ ~ +60 ℃ .

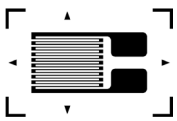
PCA Shielding Block

Constantane foil gages, acetal resin backing, excellent electromagnetic shielding.

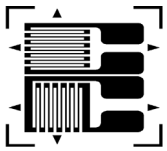
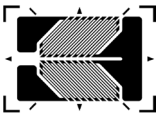
Strain Gages For Special Purpose

Products specification			
Typical specifications	BAB250℃ series	Residual Stress Gages	TJ Series
Backing Material	Glass–fibre–reinforced	Phenolic–Acetal	Polyurethane
Grid Materials	Karma	Const	Const
Typical resistance (Ω)	120, 350	120	120, 350
Resistance	≤±0.15%		
Gage Factor	1.86~1.98	2.00~2.20	2.00~2.20
Dispersion of	≤±1%		
Strain Limit	1.5%	2.0%	2.0%
Fatigue Life	$\geq 10^7$	$\geq 10^7$	$\geq 10^6$
Temp.Range (℃)	-269~+250	-30~+60	-30~+60
STC Code	9、11、16、23、27		9、11、16、23、27

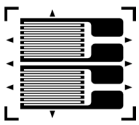
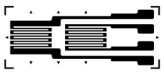
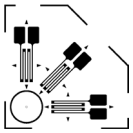
Strain Gages For Special Purpose

Product form		Product Model	Sensitive grid size Long (L) × width (W) (mm)	Backing size Long (L) × width (W) (mm)
BAB Mid-Temp.Strain gages up to 250℃		BAB120-1AA-W250(**)	1.0×1.5	4.0×2.7
		BAB120-2AA250(**)	2.1×2.3	5.8×3.8
		BAB120-3AA250(**)	2.8×2.0	6.4×3.5
		BAB120-4AA250(**)	3.9×2.7	8.0×4.0
		BAB120-10AA250(**)	10.0×3.0	15.0×5.0
		BAB300-1AA-W250(**)	1.1×1.0	2.9×2.0
		BAB300-2AA-W250(**)	2.0×1.0	3.8×2.0
		BAB300-2AA-A-W250(**)	2.0×2.0	3.8×2.8
		BAB300-3AA-A250(**)	2.9×1.9	5.5×2.5
		BAB350-1AA250(**)	1.0×3.1	4.5×4.2
		BAB350-2AA250(**)	1.9×2.8	5.7×4.0
		BAB350-3AA250(**)	3.1×2.6	7.0×3.8
		BAB350-4AA250(**)	4.0×3.7	8.0×4.9
		BAB350-5AA250(**)	5.0×4.1	9.4×5.7
		BAB650-4AA250(**)	4.0×4.4	8.6×6.0
		BAB650-4AA-A250(**)	4.0×2.7	7.2×3.8
		BAB1000-3AA250(**)	3.2×3.2	7.4×4.5
		BAB2000-4AA250(**)	4.0×4.4	8.6×6.0

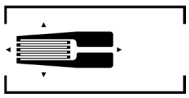
Strain Gages For Special Purpose

Product form		Product Model	Sensitive grid size Long (L) × width (W) (mm)	Backing size Long (L) × Width (W) (mm)
BAB Mid-Temp.Strain gages up to 250℃		BAB120-3BB250(**)	2.8×3.3	8.5×6.5
		BAB120-4BB250(**)	4.0×4.4	10.3×7.5
		BAB350-1.5BB250(**)	1.5×2.0	5.1×4.6
		BAB350-2BB250(**)	1.9×2.5	6.4×5.5
		BAB350-3BB250(**)	3.0×3.4	8.8×6.8
		BAB350-4BB250(**)	4.0×4.3	10.0×7.8
		BAB350-5BB250(**)	4.7×5.2	11.6×8.3
		BAB350-3HA-C250(**)	3.0×3.8	9.5×7.8
		BAB350-2HA250(**)	1.9×2.2	6.0×4.9
		BAB350-3HA250(**)	3.0×4.4	9.4×6.5
		BAB350-3HA-A250(**)	3.0×4.4	9.4×6.5
		BAB350-4HA-A250(**)	4.0×3.6	8.8×7.8
		BAB1000-3HA-A250(**)	3.0×4.5	9.4×6.5
		BAB1000-4HA-A250(**)	3.8×4.2	9.0×7.8
		BAB250-1HA-W250(**)	1.0×1.3	3.8×2.8
		BAB300-2HA-W250(**)	2.0×1.2	4.0×4.0
		BAB350-1HA-W250(**)	1.0×1.3	3.8×2.8
		BAB350-2HA-W250(**)	2.0×1.2	4.0×4.0
		BAB350-4HA-D250(**)	3.9×2.3	8.3×8.3
		BAB350-4HA-E250(**)	3.9×2.3	8.3×8.3

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Product form		Product Model	Sensitive grid size Long (L) × width (W) (mm)	Backing size Long (L) × Width (W) (mm)
BAB Mid-Temp.Strain gages up to 250℃		BAB120-(6)KA-B250(**)	Φ5.2	Φ6.0
		BAB350-(6)KA-B250(**)	Φ5.6	Φ6.0
		BAB350-(6-B10)KA250(**)	Φ6.4	Φ10.0
		BAB350-(10)KA250(**)	Φ8.8	Φ10.0
		BAB350-(13)KA250(**)	Φ12.4	Φ13.0
		BAB350-(15)KA250(**)	Φ14.0	Φ15.0
		BAB350-(20)KA250(**)	Φ18.6	Φ20.0
		BAB1000-(10)KA250(**)	Φ9.0	Φ10.0
		BAB1000-(10-B13)KA250(**)	Φ9.0	Φ13.0
		BAB1000-(14)KA250(**)	Φ12.8	Φ14.0
		BAB1000-(20)KA250(**)	Φ18.6	Φ20.0
		BAB1500-(11)KA250(**)	Φ10.0	Φ10.8
		BAB1650-(10-B13)KA250(**)	Φ9.4	Φ13.0
		BAB350-(10)KA-A250(**)	Φ9.2	Φ10.0
		BAB1000-(10)KA-A250(**)	Φ9.4	Φ10.0
		BAB350-(20)KA-A250(**)	Φ19.0	Φ20.0
		BAB350-2FB250(**)	2.0×2.0	5.6×5.2
		BAB1000-6FB250(**)	6.0×2.4	9.5×6.8
		BAB650-4GB-CL6250(**)	4.0×3.2	20.0×6.0
		BAB650-5GB-CL7250(**)	5.0×2.4	27.0×4.0
BE Residual Stress Gages		BE120-2CA-K	2.0×1.2	9.0×9.0
		BE120-2CD-K	2.1×2.1	8.9×8.9
		BE120-3CD-K	3.1×1.8	11.6×11.6
		BE350-3CD-K	3.2×2.7	11.6×11.6

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Product form		Product Model	Sensitive grid size Long (L) × width (W) (mm)	Backing size Long (L) × Width (W) (mm)
TJ Waterproof Foil Strain Gages		TJ120-4AA(**)	4.0×2.3	29.0×10.5
		TJ350-4AA(**)	4.0×2.9	30.0×12.0
TS Crack propagation gauges		TS3-(10)MA	35.0×9.7	37.0×12.0
		TS8-(10)MA	33.5×9.0	35.0×11.4
		TS5-(25)MA	34.0×19.9	36.0×23.9
		TS5-(10)MB	23.0×9.0	30.0×11.4
		TS8-(10)MB	32.2×9.0	34.2×11.4
		2TS8-(10)MB	32.2×9.0	34.2×11.4
		TS3-(6)MC	8.0×8.0	10.0×10.0
		TS4-(12)MC	14.0×15.0	16.0×18.0
		TS5-(18)MC	29.5×31.2	33.5×35.2
PCA series		PCA-1	15.0×15.0	15.6×17.0
		PCA-2	26.0×15.0	30.0×16.2
		PCA-3	15.0×7.5	17.0×8.1

Note :
The length of the lead wire of TJ series waterproof foil strain gage is generally 1m, and also can be changed according to customer's requirements.