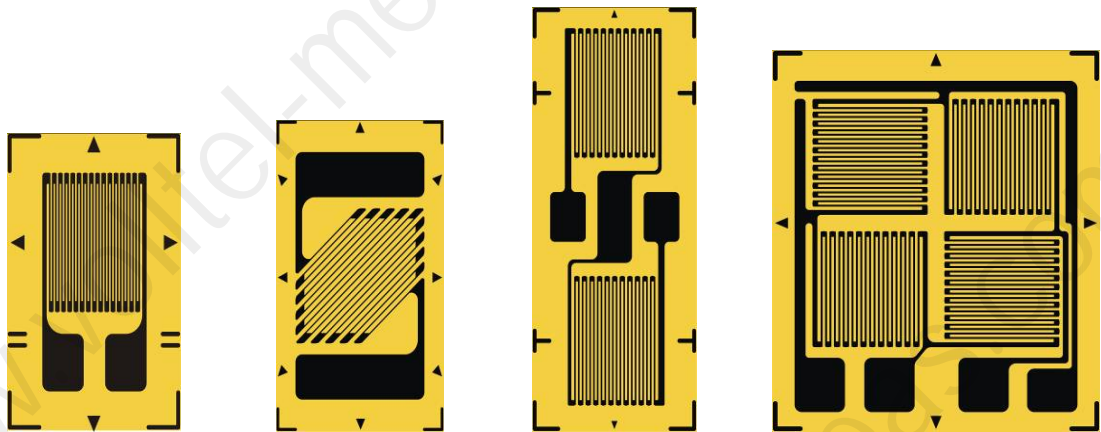
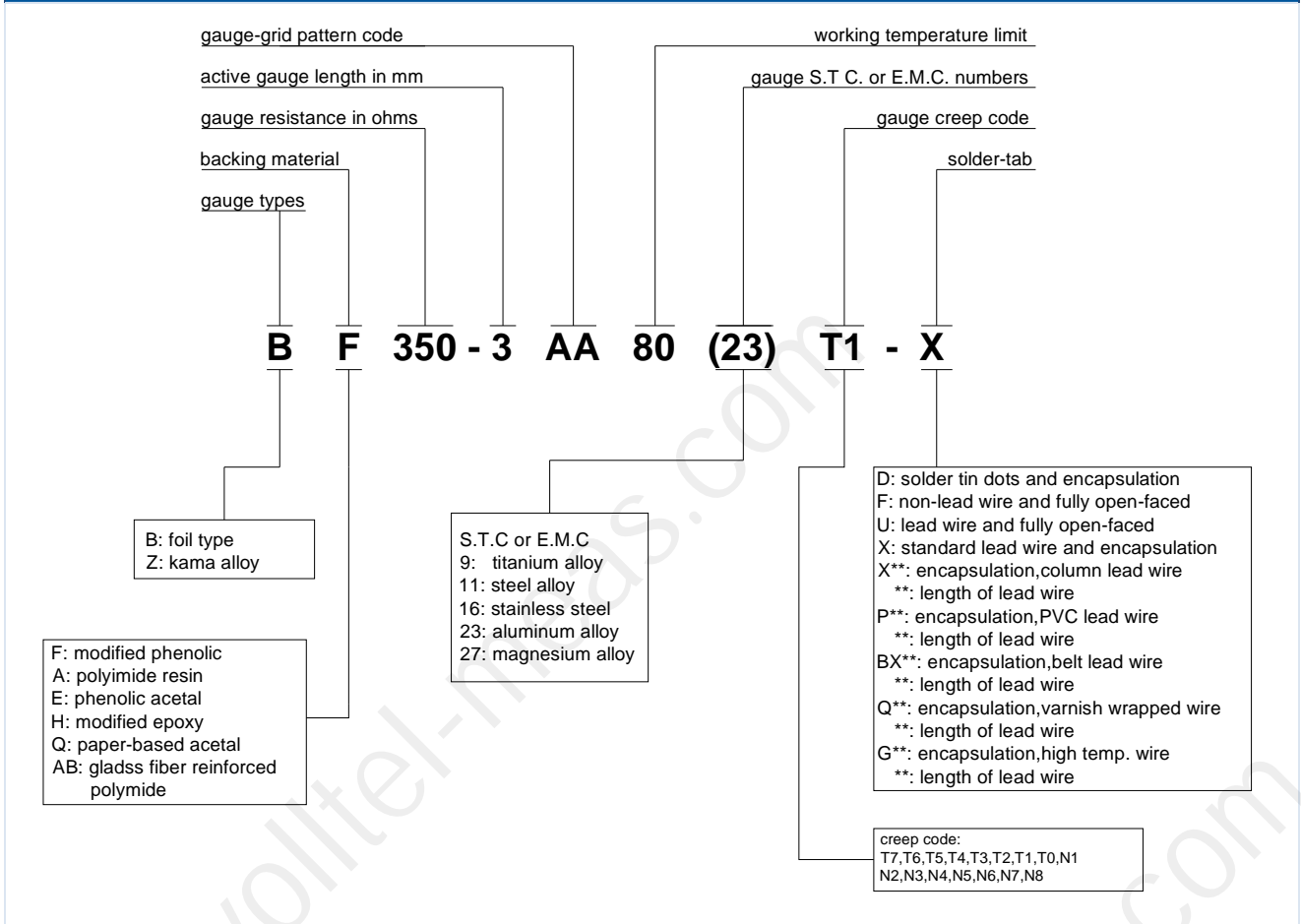


Strain Gauges

For Transducer Manufacturers



Coding System of Strain Gauges



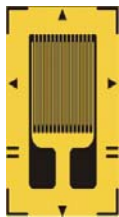
Performance Specifications

BF Series	Fully encapsulated Constant foil gauges with modified phenolic backing. Offering both self-temperature and creep compensations. With high accuracy, good stability and simple application, suitable for Class 0.02%FS transducers.
ZF Series	Fully encapsulated Karma foil gauges with modified phenolic backing. Offering both self-temperature(or elastic modulus) and creep compensations. With high accuracy and excellent stability over a wide temperature range, suitable for Class 0.02%FS transducers, especially suitable for DC/AC electronic weighing instruments.
BA Series	Fully encapsulated Constantan foil gauges with polyamide backing and or thin polyamide film backing self-temperature and creep compensations. With high elongation, excellent heat resistance and wide temperature range. Primarily intended for both precision stressanalysis and normal accuracy transducers with temperature up to 150 °C


Specifications	BF Series	BA Series	ZF Series
Resistance(ohms)	350,650,1000	350,650,1000	350,650,1000
Resistance Tolerance	≤±0.1%	≤±0.1%	≤±0.1%
Gage Factor	2.00~2.20	1.86~2.20	1.86~2.40
Dispersion of Gage Factor	≤±1%	≤±1%	≤±1%
Strain Limit	2.0%	2.0%	2.0%
Fatigue Life	1,000,000	1,000,000	1,000,000
STC Code	titanium(9), mild steel(11), stainless steel(16), aluminium(23), magnesium(27)		
EMC Number	/	/	M23
Temp.Range(°C)	-30...+80	-30...+80 -30...+150	-30...+80

Linear(AA) series strain gauges





Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BAM,BHB,BA)100-4AA(**)N*	4.0x1.9	8.0x3.6	T0	/
	BF(BAM,BHB,BA)120-2AA(**)N*	1.8x1.8	5.2x3.2	T0	/
	BF(BAM,BHB,BA)120-3AA(**)N*	2.8x2.0	6.4x3.5	T0,N0,N1,N3,N4,N6,N8	/
	BF(BAM,BHB,BA)120-4AA(**)N*	4.0x3.3	7.9x4.6	N6	/
	BF(BAM,BHB,BA)120-5AA(**)N*	5.0x2.0	10.1x4.0	N0	/
	BF(BAM,BHB,BA)120-6AA(**)N*	5.9x2.7	9.8x4.3	N5	/
	BF(BAM,BHB,BA)175-1AA(**)N*	1.5x2.6	4.6x3.6	N0,N6,N8	/
	BF(BAM,BHB,BA)175-2AA(**)N*	2.1x1.9	6.0x3.5	N6	/
	BF(BAM,BHB,BA)175-3AA(**)N*	3.0x2.4	6.8x3.5	N8,N0	/
	BF(BAM,BHB,BA)200-4AA(**)N*	4.0x2.2	8.0x3.6	T0	/
	BF(BAM,BHB,BA)200-6AA(**)N*	6.0x2.2	10.4x4.5	N0,T0	/
	BF(BAM,BHB,BA)240-3AA(**)N*	3.2x3.1	7.4x4.4	N8	/
	BF(BAM,BHB,BA)300-2AA-W(**)N*	2.0x2.0	3.8x2.8	T8	/
	BF(BAM,BHB,BA)300-3AA-A(**)N*	3.0x1.9	5.5x2.5	T4	/
	BF(BAM,BHB,BA)350-10AA(**)N*	9.4x4.1	15.4x6.1	N9	/
	BF(BAM,BHB,BA)350-1AA(**)N*	1.5x2.6	4.6x3.6	N0,N1,N2,N3,N4,N6,N7, N8,T0,T1,T2,T3,T4,T5,T6,T8	/
	BF(BAM,BHB,BA)350-1.5AA(**)N*	1.5x4.0	4.9x4.8	N3,N6,T1,T2,T3 T4,T5,T6,T8	/
	BF(BAM,BHB,BA)350-2AA-A(**)N*	2.4x3.0	4.9x4.0	N1,N4,N6,T4,T0	/
	BF(BAM,BHB,BA)350-2AA(**)N*	2.5x3.3	6.4x4.5	N0,N1,N2,N3,N4,N5,N6,N7,N8, N9,T0,T1,T2,T3,T4,T5,T6,T8	/
	BF(BAM,BHB,BA)350-2AA-P(**)N*	2.0x2.4	5.0x3.5	N0,N2,N4,T0,T1, T2,T3,T4,T5,T6,T8	/
	BF(BAM,BHB,BA)350-3AA-A(**)N*	3.2x1.6	6.9x3.1	N0,N6,N8	/
	BF(BAM,BHB,BA)350-3AA(**)N*	3.2x3.1	7.4x4.4	N0,N1,N2,N3,N4,N5,N6,N7,N8, N9,T0,T1,T2,T3,T4,T5,T6,T8	/
	BF(BAM,BHB,BA)350-3AA-B(**)N*	3.0x3.1	14.3x4.5	N0,N1,N2,N3,N5,N6,N7, T2,T3,T4,T8	/
	BF(BAM,BHB,BA)350-4AA(**)N*	3.8x2.2	8.2x4.2	N0,N2,N6,N9,T6	/
	BF(BAM,BHB,BA)350-5AA(**)N*	5.0x2.9	9.3x4.5	N0,N1,N2,N3,N4, N6,N8,T0,T2	/
	BF(BAM,BHB,BA)350-6AA(**)N*	6.1x3.1	10.4x5.4	N0,N6,T0	/
	BF(BAM,BHB,BA)500-4AA(**)N*	4.0x3.3	7.9x4.6	T0,N4,N6	/
	BF(BAM,BHB,BA)650-4AA-AA(**)N*	4.0x3.2	7.8x4.2	N6	/
	BF(BAM,BHB,BA)650-4AA(**)N*	4.0x4.4	8.6x6.0	N6	/
	BF(BAM,BHB,BA)650-5AA(**)N*	5.0x3.9	9.0x5.6	N6	/
	BF(BAM,BHB,BA)650-6AA(**)N*	6.0x4.2	10.0x5.2	N6	/
	BF(BAM,BHB,BA)700-3AA(**)N*	3.2x3.1	7.4x4.4	N2,N4,N6,T0,N6	/
	BF(BAM,BHB,BA)840-4AA(**)N*	4.0x3.6	7.9x4.6	N6	/
	BF(BAM,BHB,BA)1000-2AA(**)N*	2.2x4.6	5.8x5.8	N0,N2,N6,T0,T1, T2,T4,T5,T6,T8	/
	BF(BAM,BHB,BA)1000-3AA(**)N*	3.0x5.3	6.7x6.5	N0,N1,N2,N3,N4,N5,N6,N7,N8, N9,T0,T1,T2,T3,T4,T6,T8	/
	BF(BAM,BHB,BA)1000-4AA(**)N*	4.0x4.2	7.7x5.4	N8	/
	BF(BAM,BHB,BA)1000-6AA(**)N*	6.0x4.0	9.9x5.4	N6	/
	BF(BAM,BHB,BA)1000-10AA(**)N*	10.0x4.2	14.8x6.0	N0	/



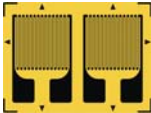
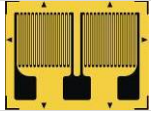
Single shear(AB) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BAM,BHB,BA)60-3AB(**)N*	3.0x3.0	8.2x5.1	T0	/
	BF(BAM,BHB,BA)120-6AB(**)N*	5.8x5.8	9.7x7.4	N8	/
	BF(BAM,BHB,BA)175-2AB(**)N*	2.0x2.0	6.7x3.7	N8,T0	/
	BF(BAM,BHB,BA)175-3AB(**)N*	3.0x3.0	8.2x5.1	N8	/
	BF(BAM,BHB,BA)280-3AB(**)N*	3.0x3.0	8.2x5.1	N0	/
	BF(BAM,BHB,BA)350-2AB(**)N*	2.0x2.0	6.7x3.7	N0,N4,N8,T3	/
	BF(BAM,BHB,BA)350-3AB(**)N*	3.0x3.0	8.2x5.1	N0,N1,N2,N4,N5,N6,N8,T0,T6	/
	BF(BAM,BHB,BA)350-4AB(**)N*	4.0x4.0	9.1x5.8	N8	/
	BF(BAM,BHB,BA)350-6AB(**)N*	5.9x5.9	12.0x8.3	N5	/
	BF(BAM,BHB,BA)350-8AB(**)N*	7.9x7.9	13.3x10.0	N8	/
	BF(BAM,BHB,BA)60-3AB(**)N*	3.0x3.0	8.2x5.1	T0	/

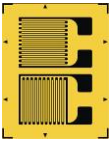
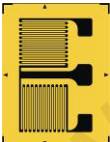
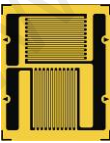
Double shear(HA) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BAM,BHB,BA)350-2HA(**)N*	2.0x4.4	9.0x5.6	N2,N4,N5,N6,T0,T4	/
	BF(BAM,BHB,BA)350-3HA(**)N*	3.0x4.5	9.4x6.5	N0,N1,N2,N3,N4,N5,N6,N7,N8,N9,T0,T2,T3,T4,T8	/
	BF(BAM,BHB,BA)350-4HA(**)N*	3.8x4.2	9.0x7.8	N4,N6,T0,T4	/
	BF(BAM,BHB,BA)350-6HA(**)N*	5.7x6.1	10.9x10.5	N4	/
	BF(BAM,BHB,BA)1000-3HA(**)N*	3.0x5.5	9.9x6.2	N4,N8,T2,T6,T8	/
	BF(BAM,BHB,BA)1000-4HA(**)N*	4.0x5.6	9.9x7.5	T0	/
	BF(BAM,BHB,BA)350-2HA-A(**)N*	2.0x4.4	9.0x5.6	N2,N4,N6,T0,T4,T8	/
	BF(BAM,BHB,BA)350-3HA-A(**)N*	3.0x4.5	9.4x6.5	N0,N1,N2,N3,N4,N5,N6,N7,N8,N9,T0,T2,T4,T6,T8	/
	BF(BAM,BHB,BA)350-4HA-A(**)N*	3.8x4.2	9.0x7.8	N4	/
	BF(BAM,BHB,BA)350-6HA-A(**)N*	5.7x6.1	10.9x10.5	N8	/
	BF(BAM,BHB,BA)1000-3HA-A(**)N*	3.0x5.5	9.9x6.2	N2,N4,T2	/
	BF(BAM,BHB,BA)350-2HA-B(**)N*	2.0x2.5	7.2x6.3	N6,N8	/
	BF(BAM,BHB,BA)350-3HA-B(**)N*	3.1x4.0	9.5x7.8	N4,N6,N8,T0,T4	/
	BF(BAM,BHB,BA)350-5HA-B(**)N*	4.8x4.1	10.7x9.3	N4	/
	BF(BAM,BHB,BA)1000-5HA-B(**)N*	4.8x6.5	15.7x9.6	N4	/
	BF(BAM,BHB,BA)350-2HA-C(**)N*	2.0x2.5	7.2x6.3	N0,N2,N4,N6,N8,T2,T4,T8	/
	BF(BAM,BHB,BA)350-3HA-C(**)N*	3.1x4.0	9.5x7.8	N2,N4,N6,N8,N9,T0,T4,T6,T8,T9	/
	BF(BAM,BHB,BA)1000-3HA-C(**)N*	3.1x5.4	10.7x7.8	N4,N8,T0,T4	/
	BF(BAM,BHB,BA)350-2HA-E(**)N*	2.0x4.3	8.9x5.7	N8	/
	BF(BAM,BHB,BA)350-3HA-E(**)N*	3.0x3.9	8.8x6.8	N4,N8	/
	BF(BAM,BHB,BA)350-4HA-E(**)N*	4.2x2.8	8.3x8.3	N4,N8	/
	BF(BAM,BHB,BA)350-6HA-E(**)N*	5.9x3.7	10.5x11.4	N8	/

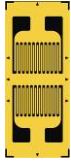


Double linear(FB) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BA)350-2FB-(**)-N*	2.1 x 2.8	6.4 x 7.6	N6,T0	/
	BF(BA)350-3FB-(**)-N*	3.2 x 2.8	7.4 x 7.4	N0,N1,N2,N3,N4,N5,N6,	/
	BF(BA)350-4FB-(**)-N*	4.0 x 2.4	7.8 x 6.2	N6,T0	/
	BF(BA)350-6FB-(**)-N*	5.9 x 2.8	9.8 x 7.3	N6	/
	BF(BA)1000-3FB-(**)-N*	3.0 x 5.3	12.1 x 6.7	T0	/
	BF(BA)350-3FB-A-(**)-N*	3.2 x 2.5	6.8 x 6.4	N2	/

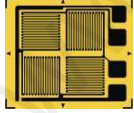
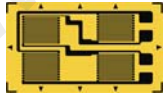
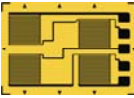
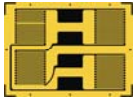
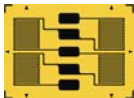

T-pattern(BB) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BA)100-4BB-(**)-N*	4.0 x 4.4	10.3 x 7.5	T0	/
	BF(BA)120-2BB-(**)-N*	1.8 x 2.4	6.3 x 5.5	N2	/
	BF(BA)120-3BB-(**)-N*	2.8 x 3.3	8.5 x 6.5	N6	/
	BF(BA)120-4BB-(**)-N*	4.0 x 4.4	10.3 x 7.5	T0	/
	BF(BA)350-2BB-(**)-N*	2.0 x 2.6	7.2 x 6.0	T0	/
	BF(BA)350-3BB-(**)-N*	3.0 x 3.3	8.6 x 6.6	N2,N8,T4	/
	BF(BA)350-4BB-(**)-N*	4.0 x 4.1	9.7 x 7.7	T0	/
	BF(BA)350-6BB-(**)-N*	6.0 x 6.0	13.8 x 9.7	T0	/
	BF(BA)600-4BB-(**)-N*	3.9 x 4.1	9.7x 7.7	N6,N0	/
	BF(BA)120-2BB-A-(**)-N*	1.8 x 2.4	6.3 x 5.4	T0	/
	BF(BA)120-3BB-A-(**)-N*	2.8 x 3.3	8.5 x 6.5	N6	/
	BF(BA)120-4BB-A-(**)-N*	4.0 x 4.4	10.3 x 7.5	T0	/
	BF(BA)350-2BB-A-(**)-N*	2.0 x 2.7	6.9 x 6.0	T1,N0	/
	BF(BA)350-3BB-A-(**)-N*	3.0 x 3.4	9.8 x 6.8	N2	/
	BF(BA)350-4BB-A-(**)-N*	4.0 x 4.1	9.7 x 7.7	T0,N6	/
	BF(BA)350-6BB-A-(**)-N*	5.9 x 6.3	14.3 x 9.6	T0,N6	/
	BF(BA)1000-4BB-A-(**)-N*	3.6 x 4.0	9.4x 7.0	T0	/
		BF(BA)600-5BB-A-(**)-N*	4.9 x 3.2	9.6 x 9.8	N0,N1,N4,N6,N8,T0
BF(BA)700-5BB-A-(**)-N*		4.9 x 3.2	9.6 x 9.8	N0,N4,N6,N8,T0,T2	/
BF(BA)1000-5BB-A-(**)-N*		4.9 x 3.2	9.6 x 9.8	N6	/

Half bridge(GB) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BA)350-2GB-(**)-N*	2.1 x 3.0	10.8 x 4.4	T0,N6	2.7
	BF(BA)350-3GB-(**)-N*	3.1 x 2.8	12.4 x 4.4	N4,N6	3.8
	BF(BA)350-4GB-(**)-N*	4.0 x 3.8	15.3 x 5.8	T0	5.0
	BF(BA)350-1.5GB-DL6.8(**)-N*	1.5 x 3.1	9.8 x 4.3	T0	10.5
	BF(BA)350-2GB-DL10.5(**)-N*	2.0 x 3.1	14.4 x 4.4	N1,N3,N4,N6	10.5
	BF(BA)350-2GB-DL5.5(**)-N*	2.0 x 2.8	8.9 x 3.8	N8,T0,T2,T6,T8	5.5
	BF(BA)350-2GB-DL6(**)-N*	2.0 x 2.8	9.4 x 3.8	N6	6.0
	BF(BA)350-2GB-DL7(**)-N*	2.0 x 3.1	10.8 x 4.4	N0,N2,N6,T0,T4,T6	7.0
	BF(BA)350-3GB-DL10.5(**)-N*	3.0 x 2.9	15.4 x 2.2	N0,N2,N6,T0,T5	10.5
	BF(BA)350-3GB-DL12(**)-N*	3.0 x 2.9	16.9 x 4.2	N2,N6,T0	12.0
	BF(BA)350-3GB-DL13(**)-N*	3.2 x 4.2	19.0 x 5.6	T0	13.2
	BF(BA)350-3GB-DL15(**)-N*	3.0 x 2.7	20.0 x 4.1	N2,N4,N8,T0,T2,T4	15.0
	BF(BA)750-3GB-DL10.5(**)-N*	3.0 x 3.5	15.2 x 4.3	N8	10.5
	BF(BA)750-3GB-DL12(**)-N*	3.0 x 3.5	16.7 x 4.3	T0	12.0
	BF(BA)350-3GB-DL14(**)-N*	3.0 x 3.5	18.7 x 4.2	N0	14.0
		BF(BA)500-2GB-EL8(**)-N*	2.1 x 5.3	11.3 x 6.3	N0
BF(BA)500-3GB-EL7(**)-N*		3.0 x 4.1	12.0 x 5.5	T0	7.1
BF(BA)500-4GB-EL7(**)-N*		3.4 x 4.1	13.0 x 5.5	N6	7.2
BF(BA)750-2GB-EL12.8(**)-N*		2.5 x 5.2	16.9 x 6.0	N0	12.8
BF(BA)1000-2GB-EL12.8(**)-N*		2.5 x 5.0	10.1 x 6.0	N6	6.0
BF(BA)1000-3GB-EL7(**)-N*		3.0 x 5.5	11.7 x 6.5	N8,T4	7.0

Full bridge(EB&FG) series strain gauges

Gauge Pattern	Part Number	Grid Dimension L x W (mm)	Backing Dimension L x W (mm)	Creep Code	Grid distance (mm)
	BF(BA)350-2EB-(**)-N*	2.3 x 2.7	8.6 x 7.2	N2	/
	BF(BA)350-2FG-L8.8(**)-N*	2.0 x 2.7	14.5 x 6.5	N6	8.8
	BF(BA)350-2FG-L10.5(**)-N*	2.0 x 2.7	16.2 x 6.5	N2,T2	10.5
	BF(BA)350-2FG-AL6(**)-N*	2.0 x 2.2	12.0 x 7.1	N2,T0,T4,T8	6.0
	BF(BA)350-3FG-AL6(**)-N*	3.0 x 2.1	13.0 x 6.8	T4	6.0
	BF(BA)350-3FG-AL10.5(**)-N*	3.1 x 3.0	17.9 x 8.4	N2,T2,T6	10.5
	BF(BA)350-3FG-AL14(**)-N*	3.0 x 2.1	20.5 x 6.8	N6,T1,T6,T0	14
	BF(BA)350-1FG-BL10.5(**)-N*	1.5 x 2.7	13.7 x 6.9	T4,T6	10.5
	BF(BA)350-2FG-BL10(**)-N*	2.6 x 2.7	4.8 x 8.0	N8	10
	BF(BA)350-3FG-BL10.5(**)-N*	3.1 x 2.8	15.5 x 6.8	T2	10.5
	BF(BA)350-2FG-CL6(**)-N*	2.1 x 2.9	9.8 x 6.9	T0,T2,T4	6.0
	BF(BA)350-3FG-CL10.5(**)-N*	3.1 x 2.8	15.3 x 7.0	N2,N6,T0,T4	10.5
	BF(BA)350-1FG-DL10.5(**)-N*	1.5 x 2.5	13.9 x 6.6	T0,T8	10.5
	BF(BA)350-3FG-DL15(**)-N*	2.8 x 2.3	19.0 x 6.0	T0	15.0

Note:

1.N* or T* stands for creep code. Different creep codes have different creep value.

2.L* stands for grid interval codes.For example, L0 refers to 10.5mm grid interval; L6 refers to 6.0mm grid interval.

3.In the above list,BF350-3AA(**) represents two series of strain gauges ,which are BF350-3AA(**) and BA350-3AA(**) respectively. Please specify the appropriate models on your purchase order.

4.For the encapsulated gauges with grid pattern HA-D and HA-E, we only offer the gauges with lead wires.

5. For strain gauges with KA patterns:

When standard value=350Ω, resistance range: Standard value -1.0...+7.0Ω, resistance difference of the grids≤0.8Ω

When standard value=1000Ω, resistance range: Standard value -50.0...+100.0Ω, resistance difference of the grids≤1.0Ω

When standard value≥1500Ω, resistance range±10%, resistance difference of the grids≤1‰

6.FG,EB patterned strain gauges:

When standard value=350Ω, resistance range: 350±50Ω, zero balance≤0.5mV/V

When standard value≥1000Ω, resistance range: 1000±10%, zero balance≤1.0mV/V

7.Except for the models listed in above table, we also can produce high precision transducers that use strain gauges with any shape and size according to samples or drawings supplied by customers.

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