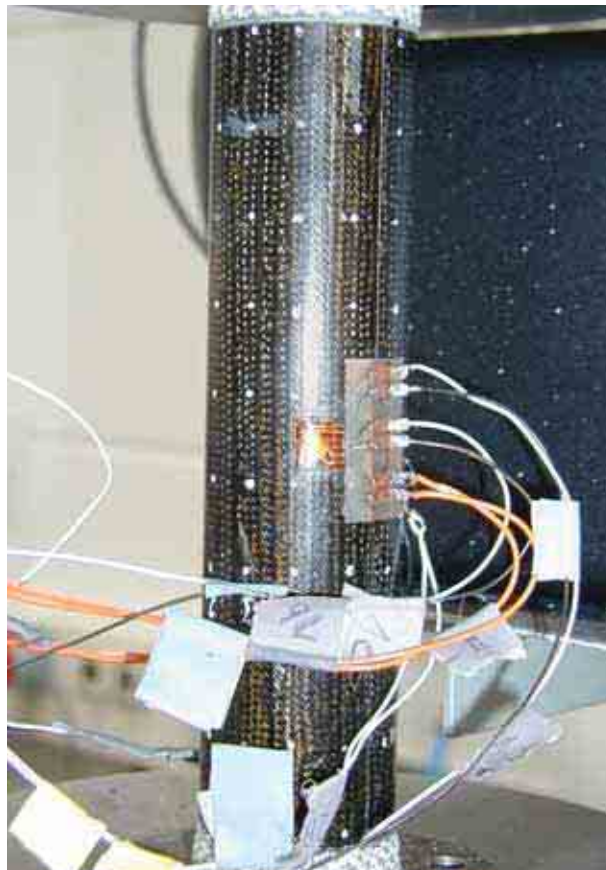


Y series strain gages

Y series strain gages

- Universal strain gage
- Excellent measuring characteristics
- Different connection configurations
- Flexible, therefore easy to handle
- Wide range of geometries available ex stock
- Wide range of geometries available with different nominal resistance values (120, 350, 700, 1000 Ω)



Pipe specimen made of carbon-fiber reinforced plastic in a torsion fracture test

SG / Y series with 1 measuring grid / linear strain gages

Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-LY11-0.6/120	1-LY13-0.6/120	1-LY1x-0.6/120#	120	0.6	1	5	3.2	1.5	LS 7
1-LY11-1.5/120	1-LY13-1.5/120	1-LY1x-1.5/120	120	1.5	1.2	6.5	4.7	2.5	LS 7
1-LY11-3/120	1-LY13-3/120	1-LY1x-3/120	120	3	1.4	8.5	4.5	4	LS 7
1-LY11-3/120A		1-LY1x-3/120A	120	3	1.4	8.5	4.5	4	LS 7
1-LY11-6/120	1-LY13-6/120	1-LY1x-6/120	120	6	2.8	13	6	8	LS 5
1-LY11-6/120A		1-LY1x-6/120A	120	6	2.8	13	6	8	LS 5
1-LY11-10/120	1-LY13-10/120	1-LY1x-10/120	120	10	4.9	18.5	9.5	13	LS 5
1-LY11-10/120A		1-LY1x-10/120A	120	10	4.9	18.5	9.5	13	LS 5
1-LY11-1.5/350	1-LY13-1.5/350	1-LY1x-1.5/350#	350	1.5	1.2	5.7	4.7	4.5	LS 7
1-LY11-3/350	1-LY13-3/350	1-LY1x-3/350	350	3	1.5	8.5	4.5	7	LS 7
		1-LY1x-3/350A	350	3	1.5	8.5	4.5	7	LS 7
1-LY11-6/350	1-LY13-6/350	1-LY1x-6/350	350	6	2.9	13	6	14	LS 5
1-LY11-6/350A		1-LY1x-6/350A	350	6	2.9	13	6	14	LS 5
1-LY11-10/350		1-LY1x-10/350	350	10	5	18.5	9.5	23	LS 5
1-LY11-10/350A		1-LY1x-10/350A	350	10	5	18.5	9.5	23	LS 5

LY11

Linear strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

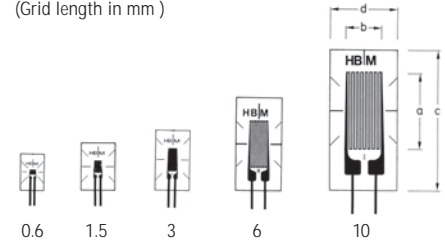
LY13

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

LY1x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 10 pcs.

Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-LY21-0.6/120		1-LY2x-0.6/120#	120	0.6	0.6	3.5	6.4	1	LS 7
1-LY21-1.5/120		1-LY2x-1.5/120	120	1.5	1.4	4.7	8.3	2	LS 5
1-LY21-3/120		1-LY2x-3/120	120	3	2.8	7.5	10	6	LS 5
		1-LY2x-6/120	120	6	5.7	11	16	12	LS 4

Types marked # are only available with matching to aluminum, ferritic or austenitic steel

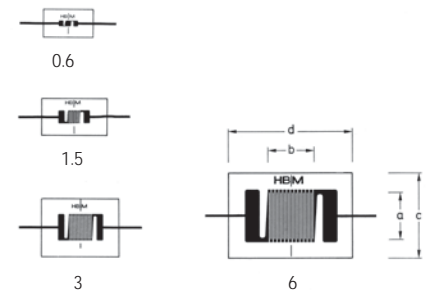
LY21

Linear strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

LY2x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 10 pcs.

SG / Y series with 1 measuring grid / linear strain gages

Stock types		Variants	No-nominal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-LY51-3/120		1-LY5x-3/120	120	3	0.3	9	4.7	2	LS 7
		1-LY5x-6/120	120	6	0.4	13	4.7	3	LS 7

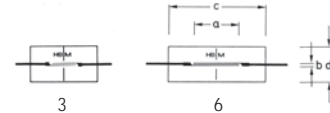
LY51

Linear strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

LY5x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 10 pcs.

Stock types		Variants	No-nominal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-LY61-1.5/120		1-LY6x-1.5/120	120	1.5	1.0	7.8	4.7	2.5	-
1-LY61-3/120		1-LY6x-3/120	120	3	1.4	9.8	4.7	4	-
		1-LY6x-3/120A	120	3	1.4	9.8	4.7	4	-
1-LY61-6/120	1-LY63-6/120	1-LY6x-6/120	120	6	2.5	16	6.3	8	-
		1-LY6x-6/120A	120	6	2.5	16	6.3	8	-
1-LY61-10/120		1-LY6x-10/120	120	10	4.3	23.5	9.3	13	-
1-LY61-3/350		1-LY6x-3/350	350	3	1.7	9.8	4.7	7	-
		1-LY6x-3/350A	350	3	1.7	9.8	4.7	7	-
1-LY61-6/350	1-LY63-6/350	1-LY6x-6/350	350	6	2.6	16	6.3	13	-
1-LY61-6/350A		1-LY6x-6/350A	350	6	2.6	16	6.3	13	-
1-LY61-10/350		1-LY6x-10/350	350	10	4.3	23.5	9.3	22	-

LY61

Linear strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

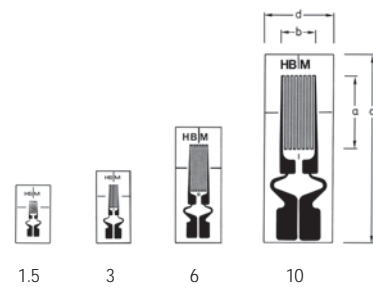
LY63

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

LY6x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 10 pcs.

SG / Y series with 2 measuring grids / double strain gages

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-DY11-3/350	1-DY13-3/350	1-DY1x-3/350	350	3	2.7	9	8	9	LS 7
1-DY11-6/350	1-DY13-6/350	1-DY1x-6/350	350	6	3.2	12.5	9.4	14	LS 7

DY11

Double strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

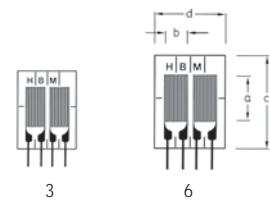
DY13

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

DY1x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-DY41-3/350	1-DY43-3/350	1-DY4x-3/350	350	3	2.5	8.2	8	8.5	LS 7
1-DY41-6/350		1-DY4x-6/350	350	6	2.8	10.7	9	13	LS 7

DY41

Double strain gage
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

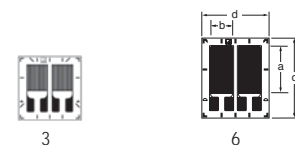
DY43

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

DY4x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs

(1) Solder terminals are not compulsory

SG / Y series with 2 measuring grids / T rosette

Stock types		Variants	No- minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-XY11-0.6/120		1-XY1x-0.6/120#	120	0.6	1	6	4	1.5	LS 7
1-XY11-1.5/120	1-XY13-1.5/120	1-XY1x-1.5/120	120	1.5	1.5	9	5	3	LS 5
1-XY11-3/120	1-XY13-3/120	1-XY1x-3/120	120	3	3	14.5	7.5	6	LS 4
1-XY11-6/120		1-XY1x-6/120	120	6	6	23.5	11	12	LS 5
1-XY11-1.5/350	1-XY13-1.5/350	1-XY1x-1.5/350#	350	1.5	1.5	9	5	5	LS 5
1-XY11-3/350	1-XY13-3/350	1-XY1x-3/350	350	3	3	14.4	7.3	10	LS 4
1-XY11-6/350	1-XY13-6/350	1-XY1x-6/350	350	6	6	23.3	10.5	20	LS 4

XY11

0°/90° T rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

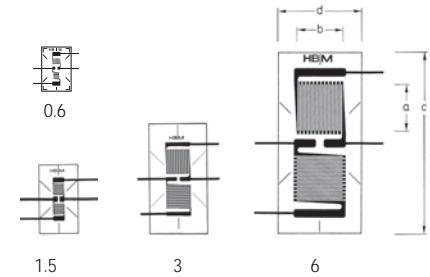
XY13

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY1x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

Stock types		Variants	No- minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-XY31-0.6/120		1-XY3x-0.6/120#	120	0.6	1	7	6	1.5	LS7
1-XY31-1.5/120	1-XY33-1.5/120	1-XY3x-1.5/120	120	1.5	1.5	8	6.3	3	LS7
1-XY31-3/120		1-XY3x-3/120	120	3	2.8	10.5	8	5.5	LS7
1-XY31-6/120		1-XY3x-6/120	120	6	5.8	17.5	12	11	LS4
1-XY31-1.5/350	1-XY33-1.5/350	1-XY3x-1.5/350#	350	1.5	1.2	7.7	6.3	5	LS7
1-XY31-3/350	1-XY33-3/350	1-XY3x-3/350	350	3	2.9	10.9	7.6	10	LS5
1-XY31-6/350	1-XY33-6/350	1-XY3x-6/350	350	6	5.7	18	12	20	LS4

XY31

0°/90° T rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

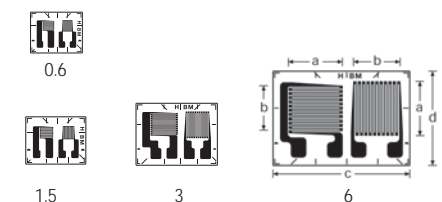
XY33

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY3x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 2 measuring grids / T rosette

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Ω	Measuring grid				
						a	b1	b2	c	d
1-XY91-1.5/120	1-XY93-1.5/120	1-XY9x-1.5/120	120	1.5	1.2	1.2	4.7	5.2	2	LS 5
1-XY91-3/120	1-XY93-3/120	1-XY9x-3/120	120	3	1.4	1.3	6.2	7.9	3.5	LS 5
1-XY91-6/120	1-XY93-6/120	1-XY9x-6/120	120	6	1.9	2.2	10	9.6	5.5	LS 4
1-XY91-10/120		1-XY9x-10/120	120	10	3.2	3.8	15.2	14.0	9	LS 212

XY91

0°/90° stacked T rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

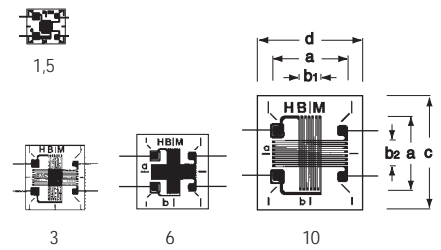
XY93

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY9x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 2 measuring grids / torsion / shear strain gages

Stock types		Variants	No-nominal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Others	Measuring grid		Measuring grid carrier		
			Ω	a	b	c	d	V	
1-XY101-1.5/120		1-XY10x-1.5/120	120	1.5	1.4	8	8.3	1.5	LS7
1-XY101-3/120	1-XY103-3/120	1-XY10x-3/120	120	3	2.8	10.6	9.8	3	LS5
		1-XY10x-6/120	120	6	5.5	18	16.5	5.5	LS4
1-XY101-3/350	1-XY103-3/350	1-XY10x-3/350	350	3	2.9	10.6	8	11	LS5
		1-XY10x-6/350	350	6	5.9	18	16.5	10	LS4

XY101

0°/90° T rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

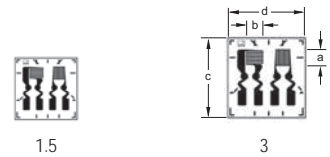
XY103

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY10x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

Stock types		Variants	No-nominal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals	
Steel	Aluminum			Others	Measuring grid					Measuring grid carrier
			Ω	a	b1	b2	c	d	V	
1-XY21-0.6/120		1-XY2x-0.6/120#	120	0.6	2	1.1	7.5	4	2.5	LS 7
1-XY21-1.5/120		1-XY2x-1.5/120	120	1.5	1.7	2.5	6.8	4.5	4.5	LS 7
1-XY21-3/120		1-XY2x-3/120	120	3	4.3	5.3	11.2	9.5	6	LS 5
1-XY21-6/120		1-XY2x-6/120	120	6	8.0	10	17.5	12.7	11	LS 4
1-XY21-1.5/350		1-XY2x-1.5/350#	350	1.5	2.1	2.5	7.4	4.5	5	LS 7
1-XY21-3/350	1-XY23-3/350	1-XY2x-3/350	350	3	4.0	5.3	11.2	9.5	10	LS 4
1-XY21-6/350	1-XY23-6/350	1-XY2x-6/350	350	6	7.8	10	17.5	12.7	19	LS 4
		1-XY2x-3/700#	700	3	4.0	5.3	11.2	9.5	14	LS 5
		1-XY2x-6/700	700	6	7.8	10	17.5	12.7	27	LS 4

XY21

Shear/torsion half bridge
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

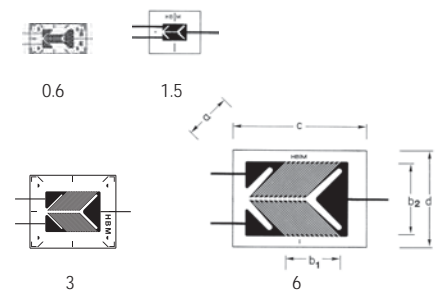
XY23

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY2x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 2 measuring grids / torsion / shear strain gages

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid			Measuring grid carrier			
		Others	Ω	a	b1	b2	c	d		
1-XY41-0.6/120		1-XY4x-0.6/120#	120	0.6	2.1	1.6	6.5	4.6	1.5	LS 7
1-XY41-1.5/120	1-XY43-1.5/120	1-XY4x-1.5/120	120	1.5	1.7	3.1	7.5	4.6	2.5	LS 7
1-XY41-3/120		1-XY4x-3/120	120	3	3	5.4	11	8	5	LS 7
1-XY41-6/120		1-XY4x-6/120	120	6	6	10.2	16	12.2	9.5	LS 4
		1-XY4x-1.5/350	350	1.5	1.5	1.95	3	7.5	4	LS 7
1-XY41-3/350	1-XY43-3/350	1-XY4x-3/350	350	3	4.1	5.6	11	8	9.5	LS 7
1-XY41-6/350		1-XY4x-6/350	350	6	6	10	16	12.2	16	LS 4
1-XY41-3/700		1-XY4x-3/700#	700	3	4.1	5.6	11	8	13.5	LS 7
		1-XY4x-6/700	700	6	6	10	16	12.2	23	LS 4

XY41

Shear/torsion half bridge
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

XY43

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

XY4x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



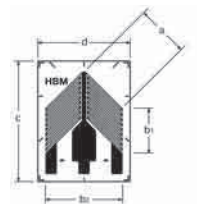
0.6



1.5



3



6

Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 3 measuring grids / rosettes

Stock types		Variants	No-nominal resistance Ω	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage V	Solder terminals
Steel	Aluminum	Others		Measuring grid			Measuring grid carrier			
				a1	a2	b	c	d		
1-RY11-3/120	1-RY13-3/120	1-RY1x-3/120#	120	0.8	3	0.8	7	7	1.5	LS 7
1-RY11-6/120	1-RY13-6/120	1-RY1x-6/120	120	2	6	1.3	11	11	3	LS 5
1-RY11-10/120		1-RY1x-10/120	120	2.9	10	2.6	15.4	15.4	5	LS 4

R Y11

0°/45°/90° rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

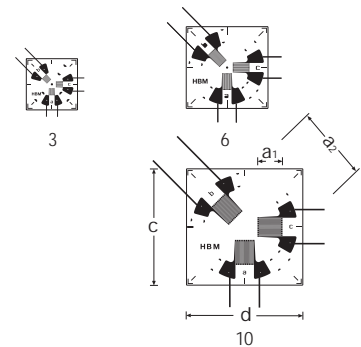
R Y13

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

R Y1x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Dimension a2 in mm)



Contents per package: 5 pcs.

Stock types		Variants	No-nominal resistance Ω	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage V	Solder terminals (1)
Steel	Aluminum	Others		Measuring grid			Measuring grid carrier			
				a1	a2	b	d			
1-RY31-3/120		1-RY3x-3/120#	120	0.8	3	0.8	7	1.5	LS 7	
1-RY31-6/120	1-RY33-6/120	1-RY3x-6/120	120	2	6	1.3	11	3	LS 5	
1-RY31-10/120		1-RY3x-10/120	120	2.9	10	2.6	15.4	5	LS 4	

R Y31

0°/45°/90° rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

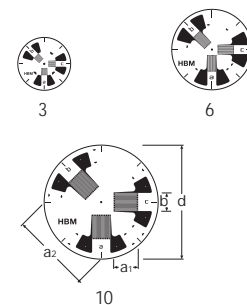
R Y33

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

R Y3x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Dimension a2 in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 3 measuring grids / rosettes

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid			Measuring grid carrier			
		Others	Ω	a1	a2	b	c	d	V	
		1-RY4x-3/120#	120	0.8	3	0.8	7	7	1.5	LS 7
1-RY41-6/120		1-RY4x-6/120	120	2	6	1.3	11	11	3	LS 5
1-RY41-10/120		1-RY4x-10/120	120	2.9	10	2.6	15.4	15.4	5	LS 4

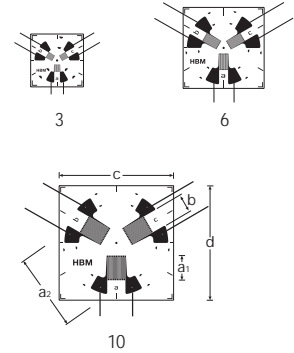
RY41

0°/60°/120° rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

RY4x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Dimension a2 in mm)



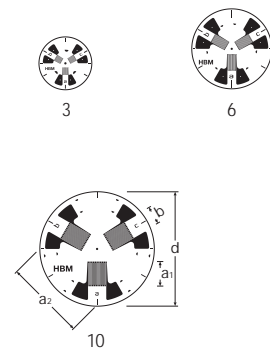
Contents per package: 5 pcs

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid			Measuring grid carrier		
		Others	Ω	a1	a2	b	d	V	
		1-RY7x-3/120#	120	0.8	3	0.8	7	1.5	LS 7
		1-RY7x-6/120	120	2	6	1.3	11	3	LS 5
		1-RY7x-10/120	120	2.9	10	2.6	15.4	5	LS 4

RY7x

0°/60°/120° rosette
Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Dimension a2 in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 3 measuring grids / rosettes

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
		1-RY8x-0.6/120#	120	0.6	1.2	4.8	8.7	1.6	LS 7
1-RY81-1.5/120		1-RY8x-1.5/120	120	1.5	1.2	8.2	14.6	2.5	LS 7
1-RY81-3/120	1-RY83-3/120	1-RY8x-3/120	120	3	0.9	9.7	14.6	3	LS 7
1-RY81-6/120		1-RY8x-6/120	120	6	2.6	13.2	22.9	7.5	LS 7
		1-RY8x-1.5/350#	350	1.5	1.6	8.2	14.6	5	LS 7
		1-RY8x-3/350	350	3	0.9	9.7	14.6	5.5	LS 7
1-RY81-6/350		1-RY8x-6/350	350	6	2.6	13.1	22.9	13	LS 5

R Y81

0°/45°/90° rectangular rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

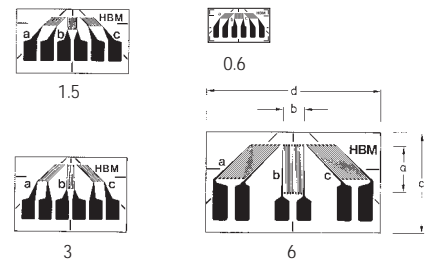
R Y83

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

R Y8x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-RY91-1.5/120		1-RY9x-1.5/120	120	1.5	1.25	9	8	1.5	LS 7
1-RY91-3/120	1-RY93-3/120	1-RY9x-3/120	120	3	1.25	9	9	2	LS 7
1-RY91-6/120	1-RY93-6/120	1-RY9x-6/120	120	6	2.5	12.5	11	4.5	LS 7
1-RY91-10/120		1-RY9x-10/120	120	10	4	18.5	16	7	LS 7

R Y91

0°/45°/90° rosette, stacked measuring grids
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

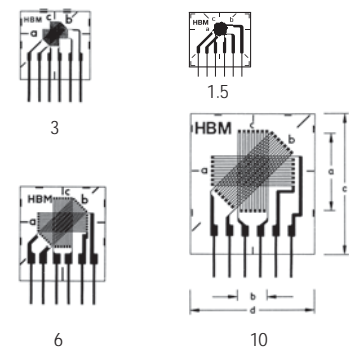
R Y93

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

R Y9x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory
Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series with 3 measuring grids / rosettes

Stock types		Variants	Nominal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-RY101-1.5/120		1-RY10x-1.5/120	120	1.5	1.2	8.2	13.5	2.5	LS 7
1-RY101-3/120	1-RY103-3/120	1-RY10x-3/120	120	3	0.9	9.7	13.5	3	LS 7
		1-RY10x-6/120	120	6	2.8	16.4	22.9	7.5	LS 4
1-RY101-3/350	1-RY103-3/350	1-RY10x-3/350	350	3	1	9.7	13.5	5.5	LS 7
		1-RY10x-6/350	350	6	2.4	16.4	22.9	12	LS4

RY101

0°/45°/90° rectangular rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

RY103

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

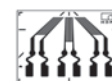
RY10x

Temperature response matching at customer's choice,
see page 20

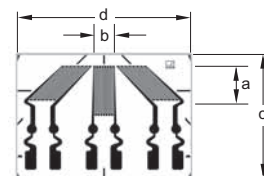
Illustrations show actual size
(Grid length in mm)



1.5



3



6

Contents per package: 5 pcs.

(1) Solder terminals are not compulsory

SG / Y series with 4 measuring grids / full bridges

Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-VY11-3/120		1-VY1x-3/120	120	3	7	13.5	13.5	6	LS 5/7
1-VY11-6/120		1-VY1x-6/120	120	6	14	23	23	12	LS 5/7

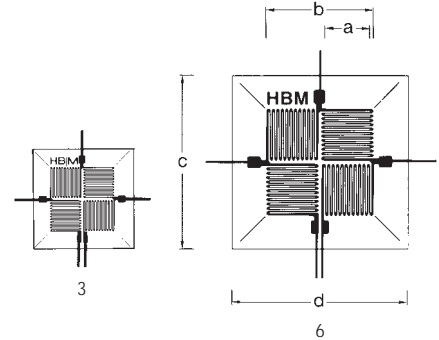
VY11

0°/90° T full bridge
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

VY1x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs

Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals (1)
Steel	Aluminum			Measuring grid		Measuring grid carrier			
		Others	Ω	a	b	c	d	V	
1-VY41-3/120		1-VY41x-3/120	120	3	1.3	9.8	10	3.5	LS7
		1-VY41x-6/120	120	6	2.7	18	17	7.5	LS4
1-VY41-3/350	1-VY43-3/350	1-VY41x-3/350	350	3	1.2	9.8	10	6	LS7
		1-VY41x-6/350	350	6	2.7	18	17	13	LS4

VY41

Shear/torsion full bridge
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

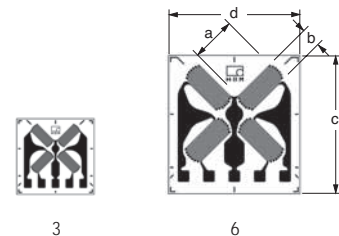
VY43

Temperature response matched to aluminum
with $\alpha = 23 \cdot 10^{-6}/K$

VY4x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Grid length in mm)



Contents per package: 5 pcs.

(1) Solder terminals are not compulsory

SG / Y series full bridge / diaphragm rosettes

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]				Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Measuring grid		Measuring grid carrier		
			Ω	a	b	c	d	V	
		1-MY2x-6/120	120	6	-	7.3	-	3.5	LS 7
		1-MY21-15/350	350	15	-	17	-	13	LS 5

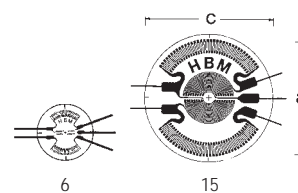
MY21

Diaphragm rosette
Temperature response matched to steel
with $\alpha = 10.8 \cdot 10^{-6}/K$

MY2x

Temperature response matching at customer's choice,
see page 20

Illustrations show actual size
(Dimension a in mm)



Contents per package: 5 pcs.

SG / Y series strain gage chains

Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Measuring grid		Measuring grid carrier			
			Ω	a	b	c	d	t	V	
1-KY11-1/120	1-KY13-1/120	1-KY1x-1/120#	120	0.6	1	7.2	14.5	1	2	LS 7
1-KY11-2/120	1-KY13-2/120	1-KY1x-2/120	120	1.5	1.3	6.7	24.5	2	2.5	LS 7
1-KY11-4/120		1-KY1x-4/120	120	3	2.1	9.7	44.5	4	5	LS 7

KY11

Strain gage chain
Comprising 10 measuring grids in parallel to the chain axis and 1 compensating strain gage.
Temperature response matched to steel with $\alpha = 10.8 \cdot 10^{-6}/K$

KY13

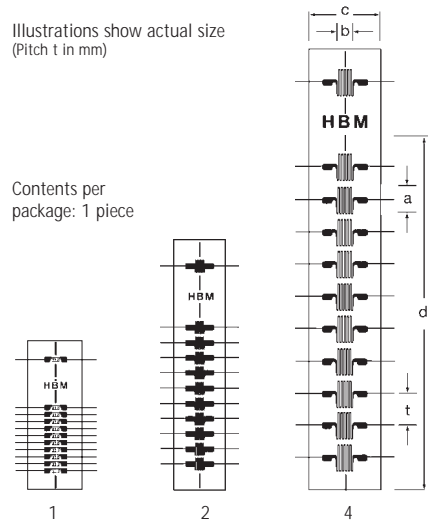
Temperature response matched to aluminum with $\alpha = 23 \cdot 10^{-6}/K$

KY1x

Temperature response matching at customer's choice, see page 20

Illustrations show actual size (Pitch t in mm)

Contents per package: 1 piece



Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Measuring grid		Measuring grid carrier			
			Ω	a	b	c	d	t	V	
1-KY21-1/120	1-KY23-1/120	1-KY2x-1/120#	120	0.8	0.8	6.9	15	1	1.5	LS 7
1-KY21-2/120		1-KY2x-2/120	120	1.7	1.7	9.5	27	2	3.5	LS 7

KY21

Strain gage chain
Comprising 10 measuring grids vertical to the chain axis and 1 compensating strain gage.
Temperature response matched to steel with $\alpha = 10.8 \cdot 10^{-6}/K$

KY23

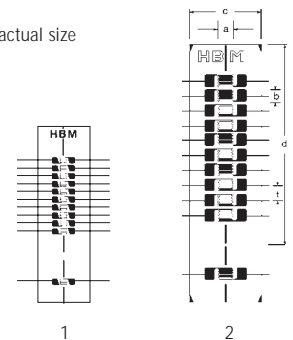
Temperature response matched to aluminum with $\alpha = 23 \cdot 10^{-6}/K$

KY2x

Temperature response matching at customer's choice, see page 20

Illustrations show actual size (Pitch t in mm)

Contents per package: 1 piece



Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series strain gage chains

Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Ω	Measuring grid		Measuring grid carrier			
		Others			a	b	c	d	t	V
		1-KY4x-2/120	120	1.2	1.3	9.2	24.5	2	2.5	LS 7
1-KY41-4/120		1-KY4x-4/120	120	3	3	11.5	44.5	4	6	LS 5

KY41

Strain gage chain

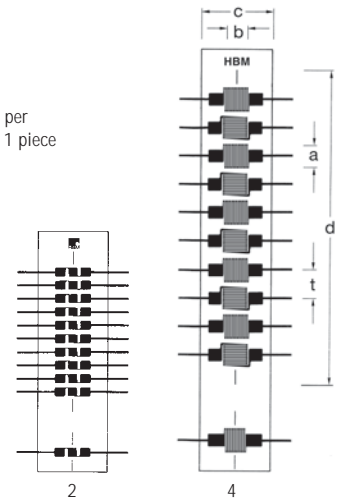
Comprising 10 measuring grids (5 in parallel, 5 vertical to the chain axis, alternatingly) and 1 compensating strain gage. Temperature response matched to steel with $\alpha = 10.8 \cdot 10^{-6}/K$.

KY4x

Temperature response matching at customer's choice, see page 20

Illustrations show actual size
(Pitch t in mm)

Contents per
package: 1 piece



Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Ω	Measuring grid		Measuring grid carrier			
		Others			a	b	c	d	t	V
		1-KY3x-4/120	120	1.3	4.1	8.3	25	4	2.5	LS 7

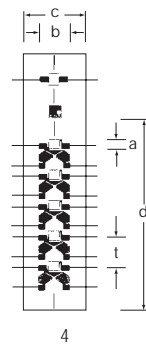
KY3x

Strain gage rosette chain

comprising 5 rosettes each with 3 0°/60°/120° measuring grids and 1 compensating strain gage

Temperature response matching at customer's choice, see page 20

Illustrations show actual size
(Pitch t in mm)



Contents per package: 1 piece

SG / Y series strain gage chains

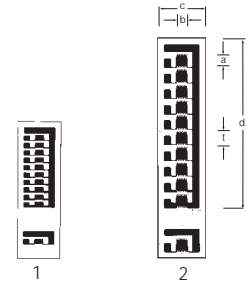
Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Ω	Measuring grid		Measuring grid carrier		
						a	b	c	d	t
		1-KY5x-1/120#	120	0.6	1.1	5.6	12.8	1	1.5	-
		1-KY5x-2/120	120	1.5	1.3	6	22.8	2	2.5	-

KY5x

Strain gage chain comprising 10 measuring grids with common connection in parallel to the measuring chain axis and 1 compensating strain gage

Temperature response matching at customer's choice, see page 20

Illustrations show actual size (Pitch t in mm)



Contents per package: 5 pcs

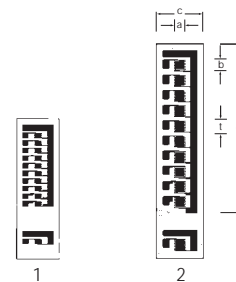
Stock types		Variants	No-minal resistance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective excitation bridge voltage	Solder terminals
Steel	Aluminum			Others	Ω	Measuring grid		Measuring grid carrier		
						a	b	c	d	t
		1-KY6x-1/120#	120	0.8	0.6	5.6	12.8	1	1.2	-
		1-KY6x-2/120	120	1.3	1.5	6	22.8	2	2.5	-

KY6x

Strain gage chain comprising 10 measuring grids with common connection vertical to the measuring chain axis and 1 compensating strain gage

Temperature response matching at customer's choice, see page 20

Illustrations show actual size (Pitch t in mm)



Contents per package: 5 pcs

Types marked # are only available with matching to aluminum, ferritic or austenitic steel

SG / Y series strain gage chains

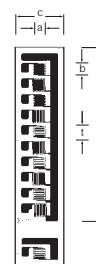
Stock types		Variants	No- minal resis- tance	Dimensions (mm) [1 inch = 25.4 mm]					Max. perm. effective bridge excitation voltage	Solder terminals
Steel	Aluminum			Others	Measuring grid		Measuring grid carrier	Pitch		
			Ω	a	b	c	d	t	V	
		1-KY7x-2/120	120	1.3	1.5	6	22.8	2	2.5	-

KY7x

Strain gage chain comprising 10 measuring grids with common connection (5 in parallel, 5 vertical to the measuring chain axis, alternatingly) and 1 compensating strain gage

Temperature response matching at customer's choice, see page 20

Illustrations show actual size (Pitch t in mm)



Contents per package: 5 pcs