

## General Purpose Strain Gages - Delta Rosettes

### FEATURES

- Gage patterns designed for determining principle stresses and strains
- All patterns have three grids orientated at 0°, 60° and 120° angles
- Both stacked and planar constructions available
- Gage lengths from 0.015 in (0.38mm) to 0.500 in (12.7mm)

GAGE PATTERN	Actual size shown. Enlarged when necessary for definition.	GAGE DESIGNATION	RES. IN OHMS	OPTIONS AVAILABLE
	ES = Each section      CP = Complete pattern S = Section (S1= Sec 1) M = Matrix	Insert desired S-T-C number in spaces marked XX.	Tolerance is increased when Option W, E, SE, LE, or P is specified.	

<b>015YC</b>				Micro-miniature three-element 60° delta rosette with one tab common to all sections. See also 015YD pattern. Note: See Strip Patterns datasheet for discussion of common-tab gages.		
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH			
0.015 ES	0.063 CP	0.020 ES	0.140 CP			
0.38 ES	1.60 CP	0.51 ES	3.56 CP			
MATRIX SIZE	0.15L x 0.18W	3.8L x 4.6W		EA-XX-015YC-120 SA-XX-015YC-120	120 ± 0.6% 120 ± 1.0%	E, SE

<b>015YD</b>				Micro-miniature three-element 60° delta rosette. Similar to 015YC pattern except each section has separate tabs for electrical isolation.		
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH			
0.015 ES	0.063 CP	0.020 ES	0.140 CP			
0.38 ES	1.60 CP	0.51 ES	3.56 CP			
MATRIX SIZE	0.15L x 0.18W	3.8L x 4.6W		EA-XX-015YD-120 SA-XX-015YD-120	120 ± 0.6% 120 ± 1.0%	E, SE

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## Vishay Micro-Measurements



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GAGE PATTERN		Actual size shown. Enlarged when necessary for definition.	GAGE DESIGNATION	RES. IN OHMS	OPTIONS AVAILABLE
ES = Each section S = Section (S1= Sec 1)	CP = Complete pattern M = Matrix	inch millimeter		Tolerance is increased when Option W, E, SE, LE, or P is specified.	

<b>030WY</b>				Miniature three-element 60° delta stacked rosette.		
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH			
0.030 ES	0.17 M	0.030 ES	0.19 M	WA-XX-030WY-120	120 $\pm$ 0.8%	
0.76 ES	4.3 M	0.76 ES	4.8 M	WK-XX-030WY-120	120 $\pm$ 0.8%	
MATRIX SIZE	0.17L x 0.19W	4.3L x 4.8W		SA-XX-030WY-120	120 $\pm$ 0.8%	
				SK-XX-030WY-120	120 $\pm$ 0.8%	

<b>030YB</b>				Miniature three-element 60° delta single-plane rosette.		
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH			
0.030 ES	0.104 CP	0.030 ES	0.200 CP	EA-XX-030YB-120	120 $\pm$ 0.4%	
0.76 ES	2.64 CP	0.76ES	5.08 CP	SA-XX-030YB-120	120 $\pm$ 0.8%	E, SE
MATRIX SIZE	0.21L x 0.27W	5.3L x 6.9W				

<b>060WY</b>				Small three-element 60° delta stacked rosette.		
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH			
0.060 ES	0.24 M	0.060 ES	0.30 M	WA-XX-060WY-120	120 $\pm$ 0.5%	
1.52 ES	6.1 M	1.52 ES	7.6 M	WK-XX-060WY-120	120 $\pm$ 0.5%	
MATRIX SIZE	0.24L x 0.30W	6.1L x 7.6W		WK-XX-060WY-350	350 $\pm$ 0.5%	
				WK-XX-060WY-10C	1000 $\pm$ 0.5%	
				SA-XX-060WY-120	120 $\pm$ 0.5%	
				SK-XX-060WY-120	120 $\pm$ 0.5%	
				SK-XX-060WY-350	350 $\pm$ 0.5%	
				SK-XX-060WY-10C	1000 $\pm$ 0.5%	

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<b>GAGE PATTERN</b>	Actual size shown. Enlarged when necessary for definition.	<b>GAGE DESIGNATION</b> Insert desired S-T-C number in spaces marked XX.	<b>RES. IN OHMS</b> Tolerance is increased when Option W, E, SE, LE, or P is specified.	<b>OPTIONS AVAILABLE</b>
ES = Each section S = Section (S1= Sec 1) M = Matrix	CP = Complete pattern	inch millimeter		

<b>062YE</b>				Small 60° delta single-plane rosette. Normally used in the EA Series with Option W.		
<b>GAGE LENGTH</b> <b>OVERALL LENGTH</b> <b>GRID WIDTH</b> <b>OVERALL WIDTH</b>						
0.062 ES	0.150 CP	0.062 ES	0.400 CP			
1.57 ES	3.81 CP	1.57 ES	10.16 CP			
<b>MATRIX SIZE</b>	0.26L x 0.47W	6.6L x 11.9W			EA-XX-062YE-350 SA-XX-062YE-350	350 ± 0.2% 350 ± 0.4%
				W, E		

<b>120WY</b>				Three-element 60° delta stacked rosette.		
<b>GAGE LENGTH</b> <b>OVERALL LENGTH</b> <b>GRID WIDTH</b> <b>OVERALL WIDTH</b>						
0.120 ES	0.34 M	0.080 ES	0.40 M	WA-XX-120WY-120 WA-XX-120WY-350 WD-DY-120WY-350 WK-XX-120WY-120 WK-XX-120WY-350 SA-XX-120WY-120 SA-XX-120WY-350 SK-XX-120WY-120 SK-XX-120WY-350 SD-DY-120WY-350	120 ± 0.5% 350 ± 0.5% 350 ± 0.5% 120 ± 0.5% 350 ± 0.5% 120 ± 0.5% 350 ± 0.5% 120 ± 0.5% 350 ± 0.5% 350 ± 0.5%	
3.05 ES	8.6 M	2.03 ES	10.2 M			
<b>MATRIX SIZE</b>	0.34L x 0.40W	8.6L x 10.2W				

<b>125UY</b>				'C' FEATURE		
<b>GAGE LENGTH</b> <b>OVERALL LENGTH</b> <b>GRID WIDTH</b> <b>OVERALL WIDTH</b>						
0.125 ES	0.375 CP	0.062 ES	0.375 CP			
3.18 ES	9.53 CP	1.57 ES	9.53 CP			
<b>MATRIX SIZE</b>	0.50L x 0.44W	12.7L x 11.2W			CEA-XX-125UY-120 CEA-XX-125UY-350	120 ± 0.4% 350 ± 0.4%
				CEA-Series Strain Gages feature large copper solder tabs and a completely encapsulated grid.		

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## Vishay Micro-Measurements



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GAGE PATTERN	Actual size shown. Enlarged when necessary for definition.	GAGE DESIGNATION	RES. IN OHMS	OPTIONS AVAILABLE
ES = Each section S = Section (S1= Sec 1) M = Matrix	CP = Complete pattern	inch millimeter	Tolerance is increased when Option W, E, SE, LE, or P is specified.	

<b>125YA</b>				Compact three-element 60° delta rosette with large solder tabs.
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	
0.125 ES	0.375 CP	0.062 ES	0.375 CP	
3.18 ES	9.53 CP	1.57 ES	9.53 CP	
MATRIX SIZE	0.55L x 0.45W	14.0L x 11.4W	EA-XX-125YA-120 EP-08-125YA-120 SA-XX-125YA-120 SK-XX-125YA-350	120 ± 0.2% 120 ± 0.2% 120 ± 0.4% 350 ± 0.4%
			L, LE	

<b>125YF</b>				Three-element 60° delta rosette with high-resistance grid. Designed particularly for use with Option W in the EA Series.
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	
0.125 ES	0.283 CP	0.060 ES	0.620 CP	
3.18 ES	7.19 CP	1.52 ES	15.75 CP	
MATRIX SIZE	0.36L x 0.70W	9.1L x 17.8W	EA-XX-125YF-350 WA-XX-125YF-350	350 ± 0.2% 350 ± 0.4%
			W	W*

<b>250UY</b>				'C' FEATURE	Three-element 60° delta single-plane rosette.
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH		
0.250 ES	0.750 CP	0.125 ES	0.750 CP		
6.35 ES	19.05 CP	3.18 ES	19.05 CP		
MATRIX SIZE	0.99L x 0.85W	25.1L x 21.6W	CEA-XX-250UY-120 CEA-XX-250UY-350	120 ± 0.4% 350 ± 0.4%	CEA-Series Strain Gages feature large copper solder tabs and a completely encapsulated grid.

\*Options available but not normally recommended. See Gage Series and Optional Features datasheet for details.

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<b>GAGE PATTERN</b>	Actual size shown. Enlarged when necessary for definition.	<b>GAGE DESIGNATION</b>	<b>RES. IN OHMS</b>	<b>OPTIONS AVAILABLE</b>
ES = Each section S = Section (S1= Sec 1)	CP = Complete pattern M = Matrix	inch millimeter	Insert desired S-T-C number in spaces marked XX.	Tolerance is increased when Option W, E, SE, LE, or P is specified.

<b>250WY</b>				Three-element 60° delta stacked rosette.
<b>GAGE LENGTH</b>	<b>OVERALL LENGTH</b>	<b>GRID WIDTH</b>	<b>OVERALL WIDTH</b>	
0.250 ES	0.51 M	0.125 ES	0.60 M	WA-XX-250WY-120 350 ± 0.5% WD-DY-250WY-350 350 ± 0.5% WK-XX-250WY-120 120 ± 0.5% WK-XX-250WY-350 350 ± 0.5% SA-XX-250WY-120 120 ± 0.5% SA-XX-250WY-350 350 ± 0.5% SK-XX-250WY-120 120 ± 0.5% SK-XX-250WY-350 350 ± 0.5% SD-DY-250WY-350 350 ± 0.5%
6.35 ES	13.0 M	3.18 ES	15.2 M	
<b>MATRIX SIZE</b>	0.51L x 0.60W	13.0L x 15.2W		

<b>250YA</b>				Three-element 60° delta single-plane rosette.
<b>GAGE LENGTH</b>	<b>OVERALL LENGTH</b>	<b>GRID WIDTH</b>	<b>OVERALL WIDTH</b>	
0.250 ES	0.750 CP	0.125 ES	0.750 CP	EA-XX-250YA-120 120 ± 0.2% EP-08-250YA-120 120 ± 0.2% SA-XX-250YA-120 120 ± 0.4% SK-XX-250YA-350 350 ± 0.4%
6.35 ES	19.05 CP	3.18 ES	19.05 CP	L, LE
<b>MATRIX SIZE</b>	0.99L x 0.85W	25.1L x 21.6W		

<b>500WY</b>				Three-element 60° delta stacked rosette.
<b>GAGE LENGTH</b>	<b>OVERALL LENGTH</b>	<b>GRID WIDTH</b>	<b>OVERALL WIDTH</b>	
0.500 ES	0.76 M	0.120 ES	0.84 M	WA-XX-500WY-120 350 ± 0.5% WD-DY-500WY-350 350 ± 0.5% WK-XX-500WY-350 350 ± 0.5% SA-XX-500WY-120 120 ± 0.5% SA-XX-500WY-350 350 ± 0.5% SK-XX-500WY-350 350 ± 0.5% SD-DY-500WY-350 350 ± 0.5%
12.70 ES	19.3 M	3.05 ES	21.3 M	
<b>MATRIX SIZE</b>	0.76L x 0.84W	19.3L x 21.3W		