

Class-A Strain Gauges for Transducer Application

T&S class-A strain gauges are specially developed for manufacturing precision transducers. For the purpose of this specific application, most of the class-A strain gauges are encapsulated gauges and possess both temperature and creep compensation properties.

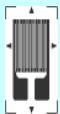
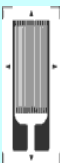
For a certain type of the class-A gauges, the gauge can be manufactured with effective modulus compensation as well, and those strain gauges are sometimes called EMC gauges.

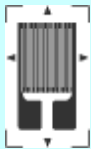
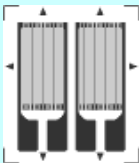
The EMC gauges are manufactured from kamar foil (EKF-series), and the application of EMC gauges is a solution for manufacturing low-cost transducers because with EMC gauges one can eliminate the use of compensation resistors and achieve a moderate accuracy for concerned transducers.





For more information on temperature compensation (S.T.C.), creep compensation, and effective modulus compensation (E.M.C.) of strain gauges, please refer to the corresponding topic of STC, Creep Compensation, and EMC, respectively.


To choose a correct and proper strain gauge, we suggest you first refer to Strain Gauge Coding System, in order for a quick understanding of T&S gauge features according to its part number (P/N).

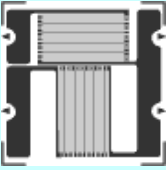
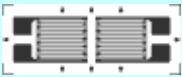
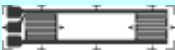



Listed in the following table is the class-A gauges available in stock for quick delivery.

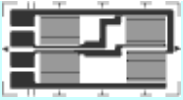
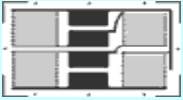


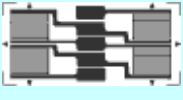
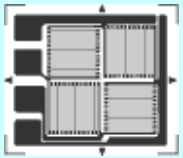
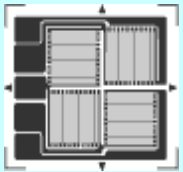
Gauge Pattern (pattern number)	Gauge Part Number (P/N)	Gauge Grid Dimensions (L x W) in mm	Gauge Backing Dimensions (L x W) in mm	Gauge Creep Code *	Grid Center Distance (d) in mm
<p>1</p> 	ECF-200-4AA-(**)-O	4.0 x 2.2	8.0 x 3.6	O	not available
	ECE-200-4AA-(**)-O	4.0 x 2.2	8.0 x 3.6		
	ECF-200-6AA-(**)-O	6.0 x 2.3	10.7 x 4.8		
	ECE-200-6AA-(**)-O	6.0 x 2.3	10.7 x 4.8		
	ECF-300-1AA-(**)-O	1.1 x 1.3	3.6 x 2.2		
	ECE-300-1AA-(**)-O	1.1 x 1.3	3.6 x 2.2		
<p>2</p>  <p>The "AA-A" pattern is a narrow version of the "AA" pattern.</p>	ECF-350-2.4AA-A-(**)-O	2.4 x 2.0	5.5 x 2.5	O	not available
	ECE-350-2.4AA-A-(**)-O	2.4 x 2.0	5.5 x 2.5		
	ECF-350-3AA-A-(**)-O	2.9 x 1.8	5.5 x 2.5		
	ECE-350-3AA-A-(**)-O	2.9 x 1.8	5.5 x 2.5		
	EKF-350-0.8AA-(**)-#	0.8 x 1.4	2.6 x 3.1	O	not available
	ECF-350-1.5AA-(**)-#	1.5 x 2.5	4.5 x 3.5	N7, N6, N5, N4, N3, N2, N1, O, P1, P2, P4	not available
	OCF-350-1.5AA-(**)-#	1.5 x 2.5	4.5 x 3.5		
	ECF-350-2.4AA-(**)-O	2.4 x 3.0	4.9 x 4.0	O	not available
	ECE-350-2.4AA-(**)-O				

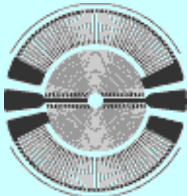

<p>3</p> 	ECF-350-2.5AA-(**)-#	2.5 x 3.3	6.5 x 4.5	N7, N6, N5, N4, N3, N2, N1, O, P1, P2, P3, P4, P5, P6, P7	not available
	ECE-350-2.5AA-(**)-#				
	EKF-1000-2.5AA-(**)-#				
	ECF-350-3AA-(**)-#	3.2 x 3.1	7.4 x 4.4	N7, N6, N5, N4, N3, N2, N1, O, P1, P2, P3, P4, P5, P6, P7	not available
	ECE-350-3AA-(**)-#	3.2 x 3.1			
	ECF-350-4AA-(**)-#	3.8 x 2.7			
	ECE-350-4AA-(**)-#	3.8 x 2.7			
	EKF-1000-3AA-(**)-#	3.2 x 3.1			
	EKF-1000-4AA-(**)-#	3.8 x 2.7			
	ECF-350-5AA-(**)-#	5.0 x 2.9	9.3 x 4.5	N1, O, P1, P2	not available
	ECE-350-5AA-(**)-#	5.0 x 2.9	9.3 x 4.5		
	ECF-350-6AA-(**)-O	6.1 x 3.1	10.4 x 5.4	O	not available
	ECE-350-6AA-(**)-O	6.1 x 3.1	10.4 x 5.4		
	ECF-500-4AA-(**)-O	4.0 x 3.3	7.9 x 4.6		
	ECE-500-4AA-(**)-O	4.0 x 3.3	7.9 x 4.6		
ECF-600-4AA-(**)-O	4.2 x 4.0	8.6 x 5.8			
ECE-600-4AA-(**)-O	4.2 x 4.0	8.6 x 5.8			
ECF-650-4AA-(**)-O	4.0 x 4.4	8.6 x 6.0			
ECE-650-4AA-(**)-O	4.0 x 4.4	8.6 x 6.0			
ECF-650-5AA-(**)-O	5.0 x 3.9	9.0 x 5.6			
ECE-650-5AA-(**)-O	5.0 x 3.9	9.0 x 5.6			
ECF-650-6AA-(**)-O	5.8 x 4.4	10.4 x 6.4			
ECE-650-6AA-(**)-O	5.8 x 4.4	10.4 x 6.4			
ECF-1000-3AA-(**)-#	3.0 x 5.3	6.7 x 6.5	N6, N4, N3, N1, P1, P3	not available	
ECE-1000-3AA-(**)-#	3.0 x 5.3	6.7 x 6.5			
ECF-1000-4AA -(**)-#	4.0 x 4.3	7.7 x 5.5			
ECE-1000-4AA -(**)-#	4.0 x 4.3	7.7 x 5.5			
<p>4</p> 	ECF-350-2FB-(**)-O	2.0 x 2.8	6.4 x 7.6	O	not available
	ECE-350-2FB-(**)-O	2.0 x 2.8	6.4 x 7.6		
	ECF-350-3FB-(**)-O	2.9 x 2.6	7.4 x 7.2		
	ECE-350-3FB-(**)-O	2.9 x 2.6	7.4 x 7.2		
	ECF-350-4FB-(**)-O	4.0 x 2.4	8.2 x 6.8		
	ECE-350-4FB-(**)-O	4.0 x 2.4	8.2 x 6.8		
	ECF-350-6FB-(**)-O	5.9 x 2.8	9.8 x 7.3		

	ECE-350-6FB-(**)-O	5.9 x 2.8	9.8 x 7.3		
<p>5</p> 	ECF-350-3AB-(**)-O	3.0 x 4.0	8.2 x 5.4	O	not available
	ECE-350-3AB-(**)-O	3.0 x 4.0	8.2 x 5.4		
	ECF-350-4AB-(**)-O	4.0 x 4.4	9.4 x 6.2		
	ECE-350-4AB-(**)-O	4.0 x 4.4	9.4 x 6.2		
	ECF-350-6AB-(**)-O	6.0 x 6.0	12.0 x 8.3		
	ECE-350-6AB-(**)-O	6.0 x 6.0	12.0 x 8.3		
	ECE-350-9AB-(**)-O	9.0 x 4.0	11.0 x 8.5		
	EKF-1000-3AB-(**)-O	4.2 x 4.0	8.2 x 5.1		
	EKF-1000-4AB-(**)-O	5.6 x 4.4	9.1 x 5.8		
<p>6</p> 	ECF-350-3AC-(**)-O	3.0 x 4.0	8.2 x 5.4	O	not available
	ECE-350-3AC-(**)-O	3.0 x 4.0	8.2 x 5.4		
	ECF-350-4AC-(**)-O	4.0 x 4.4	9.4 x 6.2		
	ECE-350-4AC-(**)-O	4.0 x 4.4	9.4 x 6.2		
	ECF-350-6AC-(**)-O	6.0 x 6.0	12.0 x 8.3		
	ECE-350-6AC-(**)-O	6.0 x 6.0	12.0 x 8.3		
	ECE-350-9AC-(**)-O	9.0 x 4.0	11.0 x 8.5		
	EKF-1000-3AC-(**)-O	4.2 x 4.0	8.2 x 5.1		
	EKF-1000-4AC-(**)-O	5.6 x 4.4	9.1 x 5.8		
<p>7</p> 	ECF-350-2HA-(**)-O	2.0 x 3.7	9.0 x 5.6	O	not available
	ECE-350-2HA-(**)-O				
	ECF-350-3HA-(**)-#	3.1 x 5.5	9.4 x 6.7	N7, N5, N3, N1, P1	not available
	ECE-350-3HA-(**)-#	3.1 x 5.5	9.4 x 6.7		
	ECF-350-4HA-(**)-#	3.8 x 6.0	9.0 x 7.8		
	ECE-350-4HA-(**)-#	3.8 x 6.0	9.0 x 7.8		
	EKF-1000-3HA-(**)-#	3.1 x 5.5	9.4 x 6.7		
	EKF-1000-4HA-(**)-#	3.8 x 6.0	9.0 x 7.8		
	ECF-350-6HA-(**)-O	5.8 x 9.2	10.5 x 10.8	O	not available
ECE-350-6HA-(**)-O					
<p>8</p> 	ECF-350-2HA-A-(**)-O	2.0 x 3.7	9.0 x 5.6	O	not available
	ECE-350-2HA-A-(**)-O				
	ECF-350-3HA-A-(**)-#	3.0 x 5.5	9.4 x 6.7	N7, N5, N3, N1, P1	not available
	ECF-350-4HA-A-(**)-#	3.8 x 6.0	9.0 x 7.8		
	EKF-1000-3HA-A-(**)-#	3.0 x 5.5	9.4 x 6.7		
	EKF-1000-4HA-A-(**)-#	3.8 x 6.0	9.0 x 7.8		

	ECF-350-6HA-A(**)-O ECE-350-6HA-A(**)-O	5.8 x 9.1	10.5 x 10.8	O	not available
9 	ECF-350-2HA-B(**)-O	2.0 x 3.7	9.0 x 5.6	O	not available
	ECF-350-3HA-B(**)-#	3.1 x 6.5	9.5 x 7.8	N5, N3, N1, P1	not available
	ECF-1000-5HA-B(**)-N1	4.9 x 9.8	15.7 x 9.6	N1	not available
10 	ECF-350-3HA-C(**)-#	3.1 x 6.5	9.5 x 7.8	N7, N1	not available
	ECF-1000-3HA-C(**)-N3	3.1 x 8.0	10.8 x 7.8	N3	
11 	ECF-350-2BB(**)-O	2.2 x 2.8	8.0 x 6.0	O	not available
	ECE-350-2BB(**)-O	2.2 x 2.8	8.0 x 6.0		
	ECF-350-3BB(**)-O	3.0 x 3.4	8.6 x 6.0		
	ECE-350-3BB(**)-O	3.0 x 3.4	8.6 x 6.0		
	ECF-350-4BB(**)-O	4.0 x 4.1	9.7 x 7.7		
	ECE-350-4BB(**)-O	4.0 x 4.1	9.7 x 7.7		
	ECF-350-6BB(**)-O	5.8 x 6.5	14.4 x 10.0		
	ECE-350-6BB(**)-O	5.8 x 6.5	14.4 x 10.0		
	ECF-600-4BB(**)-O	3.9 x 4.1	9.7 x 9.7		
	ECE-600-4BB(**)-O	3.9 x 4.1	9.7 x 9.7		
	ECF-650-4BB(**)-O	4.0 x 4.5	7.9 x 10.3		
	ECE-650-4BB(**)-O	4.0 x 4.5	7.9 x 10.3		
EKF1000-3BB(**)-O	3.0 x 3.4	8.6 x 6.6			
12 	ECF-350-2BB-A(**)-O	2.1 x 2.6	6.9 x 5.9	O	not available
	ECE-350-2BB-A(**)-O	2.1 x 2.6	6.9 x 5.9		
	EKF-350-2BB-A(**)-O	1.8 x 2.2	5.4 x 6.4		
	ECF-350-3BB-A(**)-O	3.0 x 3.4	9.8 x 6.8		
	ECE-350-3BB-A(**)-O	3.0 x 3.4	9.8 x 6.8		
	ECF-350-4BB-A(**)-O	4.0 x 4.2	10.0 x 7.8		
	ECE-350-4BB-A(**)-O	4.0 x 4.2	10.0 x 7.8		
	ECF-350-6BB-A(**)-O	6.0 x 6.1	14.4 x 10.0		

	ECE-350-6BB-A(**)-O EKF1000-3BB-A(**)-O	6.0 x 6.1 3.0 x 3.4	14.4 x 10.0 9.8 x 6.8		
13 	ECF-700-5BB-B(**)-#	4.9 x 3.2	9.6 x 9.8	N1, O	not available
14 	ECF-350-2GB-(**)-O ECE-350-2GB-(**)-O ECF-350-3GB-(**)-O ECE-350-3GB-(**)-O ECF-350-4GB-(**)-O ECE-350-4GB-(**)-O	2.1 x 3.0 2.1 x 3.0 3.1 x 2.8 3.1 x 2.8 4.0 x 3.7 4.0 x 3.7	10.8 x 4.4 10.8 x 4.4 12.4 x 4.4 12.4 x 4.4 16.0 x 5.8 16.0 x 5.8	O	not available
15 	ECF-350-3GB-L(**)-d-# EKF-1000-3GB-L(M**)-d-#	3.1 x 3.8 3.1 x 3.8	(d+6.7) x 4.8 (d+6.7) x 4.8	N7, N6 N5, N4, N3, N2, N1, O, P2	7.0, 8.0, 10.5, 12.0
16 	ECF-350-1.5GB-AL(**)-d-# ECE-350-1.5GB-AL(**)-d-# EKF-350-1.5GB-AL(M**)-d-# ECF-350-2GB-AL(**)-d-# ECE-350-2GB-AL(**)-d-# ECF-750-3GB-AL(**)-d-# ECE-750-3GB-AL(**)-d-# EKF-1000-1.6GB-AL(M**)-d-#	1.5 x 2.5 1.5 x 2.5 1.5 x 3.0 2.0 x 3.0 2.0 x 3.0 3.0 x 3.5 3.0 x 3.5 1.6 x 3.9	13.8 x 3.8 13.8 x 3.8 (d+3.0) x 4.2 10.8 x 4.4 10.8 x 4.4 (d+4.8) x 4.3 (d+4.8) x 4.3 14.0 x 5.2	N3, N2, N1, O, P1, P2 N3, N2, O, P2 N5, N3, N2, O, P2 N3, P2 N5, N3, N2, O, P2	10.5 6.8, 8.0 7.0 10.5, 12.0, 14.0 10.5
17 	EKF-350-2GB-AL(M**)-d-# ECF-350-3GB-AL(**)-d-# ECE-350-3GB-AL(**)-d-# EKF-1000-3GB-AL(M**)-d-# EKF-750-2GB-AL(M**)-d-# EKF-1000-2GB-AL(M**)-d-#	2.0 x 2.6 3.0 x 2.9 3.0 x 2.9 2.0 x 3.3 1.6 x 3.9	(d+3.8) x 3.6 (d+4.8) x 4.3 (d+4.8) x 4.3 15.8 x 4.5 14.0 x 5.2	N7, N6 N5, N4, N3, N2, N1, O, P1, P2	7.0, 10.5, 12.0 10.5, 12.0 12.0 10.5
18 	ECF-500-3GB-BL(**)-d-O ECF-500-3.4GB-BL(**)-d-O EKF-1000-2GB-BL(M**)-d-O ECF-1000-3GB-BL(**)-d-O EKF-2000-3GB-BL(**)-d-O	3.0 x 4.1 3.4 x 4.1 2.1 x 4.1 3.0 x 5.5 3.0 x 5.5	12.0 x 5.4 13.0 x 5.4 9.5 x 4.6 11.6 x 6.5 11.6 x 6.5	O	7.0 6.0 7.0 7.0
19	EKF-350-1.5FG-L(M**)-d-#	1.5 x 2.4	14.4 x 6.4		10.5

	ECF-350-2FG-L(**)-d-#	2.0 x 2.7	14.6 x 6.9	N7, N6, N5, N4, N3, N2, N1, O, P1, P2	10.5
	EKF-350-2FG-L(M**)-d-#	2.0 x 2.5	(d+4.5) x 6.4		7.0, 8.8, 10.5
	EKF-1000-3FG-L(M**)-d-#	3.0 x 2.5	(d+7.1) x 6.6		10.5, 12.0
<p>20</p> 	ECF-350-1.5FG-BL(**)-d-#	1.5 x 2.8	13.5 x 6.9	N7, N6, N5, N4, N3, N2, N1, O, P1, P2	10.5
	EKF-350-1.5FG-BL(M**)-d-#	1.5 x 2.3	(d+3.8) x 6.2		6.0, 8.0, 10.5
	EKF-1000-1.5FG-BL(M**)-d-#	1.5 x 2.8	14.1 x 6.9		10.5
	EKF-1000-2FG-BL(M**)-d-#	2.1 x 2.8	(d+4.3) x 6.9		6.0, 10.5
	ECF-350-3FG-BL(M**)-d-#	3.1 x 2.8	15.3 x 6.8		10.5
	EKF-1000-3FG-BL(M**)-d-#	3.1 x 2.8	15.3 x 6.8		
	EKF-2000-3FG-BL(M**)-d-#	3.0 x 3.3	14.6 x 7.8		
<p>21</p> 	ECF-350-3FF-L(**)-d-#	3.1 x 3.2	(d+6.1) x 8.5	N7, N6, N5, N2, O	10.5, 12.0, 14.0
	EKF-1000-3FF-L(M**)-d-#	3.1 x 3.2	(d+6.1) x 8.5		
<p>22</p> 	ECF-350-1.5FF-AL(**)-d-#	1.5 x 2.5	13.9 x 6.5	N5, N4, N2	10.5
<p>23</p> 	EKF-350-1.5FF-BL(M**)-d-#	1.5 x 2.3	(d+3.1) x 6.2	N7, N6 N4, N2, O	6.0, 7.0, 10.5
	ECF-350-2FF-BL(**)-d-#	2.2 x 2.8	(d+3.7) x 6.5		
	ECF-350-3FF-BL(**)-d-#	3.1 x 2.8	(d+4.6) x 7.0		
	EKF-1000-3FF-BL(M**)-d-#	3.1 x 2.7	(d+4.6) x 6.8		
<p>24</p> 	EKF-300-2EB(**)-O	1.8 x 2.2	8.5 x 7.3	O	2.5
	ECF-350-2EB(**)-O	2.3 x 2.7	8.6 x 7.1		
	EKF-1000-2EB(M**)-O	2.3 x 2.7	8.6 x 7.1		
<p>25</p> 	ECF-350-2EC(**)-O	2.3 x 2.7	8.6 x 7.1	O	2.5
	EKF-350-2EC(**)-O	1.8 x 2.2	8.4 x 7.3		
	EKF-350-2EC(M**)-O	1.8 x 2.2	8.4 x 7.3		

<p style="text-align: center;">26</p> 	ECF-350-(7)KA-(**)-O	ø 6.0	ø 7	O	not available
	ECE-350-(8)KA-(**)-O	ø 7.0	ø 8		
	ECF-350-(10)KA-(**)-O	ø 9.0	ø 10		
	ECE-350-(10)KA-(**)-O	ø 9.0	ø 10		
	ECF-350-(13)KA-(**)-O	ø 12.0	ø 13		
	ECF-350-(15)KA-(**)-O	ø 14.0	ø 15		
	ECE-350-(15)KA-(**)-O	ø 14.0	ø 15		
	ECF-350-(20)KA-(**)-O	ø 19.0	ø 20		
	ECE-350-(20)KA-(**)-O	ø 19.0	ø 20		
	ECF-700-(20)KA-(**)-O	ø 19.0	ø 20		
	ECE-700-(22)KA-(**)-O	ø 20.0	ø 22		
	ECF-1000-(15)KA-(**)-O	ø 12.0	ø 15		
	EKF-350-(20)KA-(**)-O	ø 19.0	ø 20		
	EKF-420-(7)KA-(**)-O	ø 6.0	ø 7		
	EKF-1000-(10)KA-(**)-O	ø 9.0	ø 10		
	EKF-1000-(13)KA-(**)-O	ø 12.0	ø 13		
EKF-1000-(15)KA-(**)-O	ø 14.0	ø 15			
EKF-1000-(20)KA-(**)-O	ø 19.0	ø 20			
<p style="text-align: center;">27</p> 	ECF-350-(20)KC-(**)-O			O	not available
	EKF-350-(20)KC-(**)-O	ø 19.0	ø 20		
	EKF-1000-(20)KC-(**)-O				

* The gauge creep code is listed as the last letter in the gauge part number: #- stands for one of the creep codes available for the concerned gauge, O stands for the creep code O, and N1 for the creep code N1, ect.

The dimensions of gauge grid and gauge backing are subject to change without notice.