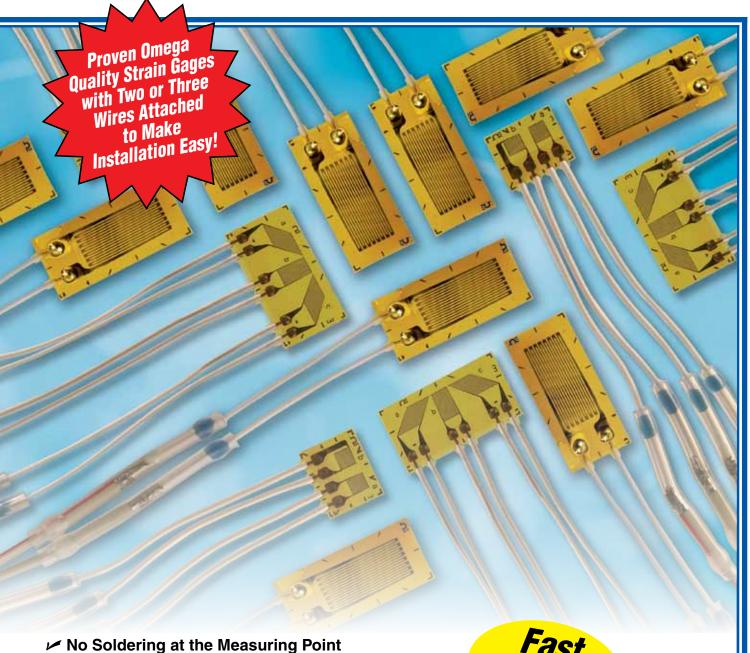
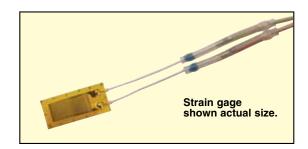
OMEGA® KFH SERIES PRE-WIRED STRAIN GAGES





- Each Gage has 50 mm of PTFE Cable before Transitioning to AWG 28 Leads to Prevent Leads from Adhering During Installation
- ✓ Short, Medium and Long Grid Linear Gages
- ✓ Short and Medium Grid XY Gages (T-Rosettes)
- ✓ Short and Medium Grid 0°/45°/90° Planar Rosettes
- ✓ Rugged Polyimide Carrier
- ✓ Fully Encapsulated Gages for Protection from the Environment





PRE-WIRED STRAIN GAGES PRECISION LINEAR PATTERN

KFH Series

2- or 3-Wire Models 120 or 350 Ω 0.6 to 20 mm Grid Lengths

- ✓ Pre-Wired for Fast Installation
- ✓ No Soldering at Measurement End
- Broad Temperature Range
- ✓ 2- or 3-Wire Models
- Clear Alignment Marks

- ✓ Bonds with Hot or Cold Cure Adhesives
- PTFE Wire at Attachment End Prevents Sticking During Installation

Linear pattern precision gages with minature and medium length grids are for general purpose and stress analysis applications. Available with either two 1-meter leads or three 3-meter leads and 120 or 350 Ω resistance. All models are compensated for steel.



To Order Visit omega.com/kfh for Pricing and Details

		NOM.	DIMENSIONS mm (inch)						
		RESIS-	GF	RID	CAR	RIER			TERMINATION
GAGE PATTERN Leads not shown	MODEL NO. Pkg of 10	TANCE (Ω)	A	В	С	D	MAX V* (Vrms)	TEMP COMP	AND LEAD LENGTH
Shown	0.3 mm GRID								
larger than actual size,	KFH-03-120-C1-11L1M2R	120	0.3	1.96	4.5	3.9	1.5	ST	Two 1 m leads
0.3 mm	KFH-03-120-C1-11L3M2R	120	(0.012)	(0.077)	(0.18)	(0.15)	1.5	ST	Three 3 m leads
Shown	0.6 mm GRID								
larger than actual size,	KFH-06-120-C1-11L1M2R	120	0.6	1.1	4.8	3.9	1.5	ST	Two 1 m leads
" ▶ 7 . 1 № 1 0.6 mm	KFH-06-120-C1-11L3M3R	120	(0.024)	(0.043)	(0.19)	(0.15)	1.5	ST	Three 3 m leads
Shown	1.5 mm GRID		I.						
larger than actual size,	KFH-1.5-120-C1-11L1M2R	120	1.5	1.5	5.8	3.9	2.5	ST	Two 1 m leads
1.5 mm	KFH-1.5-120-C1-11L3M3R	120	(0.059)	(0.059)	(0.23)	(0.15)	2.5	ST	Three 3 m leads
Shown actual size, 3 mm	3 mm GRID		1						
,	KFH-3-120-C1-11L1M2R	120					4	ST	Two 1 m leads
⇒	KFH-3-120-C1-11L3M3R	120	3.0 (0.118)	2.0	7.4	3.9 (0.15)	4	ST	Three 3 m leads
	KFH-3-350-C1-11L1M2R	350		(0.079)	(0.29)		9	ST	Two 1 m leads
	KFH-3-350-C1-11L3M3R	350					9	ST	Three 3 m leads
Shown actual size, 6 mm	6 mm GRID		ı						
	KFH-6-120-C1-11L1M2R	120					8	ST	Two 1 m leads
	KFH-6-120-C1-11L3M3S	120	6.0	2.0 (0.079)	10.5 (0.41)	3.9 (0.15)	8	ST	Three 3 m leads
	KFH-6-350-C1-11L1M2R	350	(0.24)				15	ST	Two 1 m leads
	KFH-6-350-C1-11L3M3R	350					15	ST	Three 3 m leads
Shown actual size, 10 mm	10 mm GRID	100							
	KFH-10-120-C1-11L1M2R	120	10	3.0	14.8	4.8	14	ST	Two 1 m leads
	KFH-10-120-C1-11L3M3R	120	(0.39)	(0.12)	(0.58)	(0.19)	14	ST	Three 3 m leads
Shown actual size, 20 mm	20 mm GRID		l						
	KFH-20-120-C1-11L1M2R	120	20	3.0	25.2	4.8	7	ST	Two 1 m leads
100000000	KFH-20-120-C1-11L3M3R	120	(0.79)	(0.12)	(0.99)	(0.19)	7	ST	Three 3 m leads

ACCESSORIES

/.00E000111E0						
MODEL NO.	DESCRIPTION					
TT300	Complete heat cure adhesive kit					
SG496	1 oz methyl-based cyanoacrylate (approximately 750 gages)					
SG401	0.1 oz ethyl-based cyanoacrylate (approximately 50 gages)					

^{*} Maximum permitted bridge energizing voltage (Vrms)

Ordering Examples: KFH-1.5-120-C1-11L1M2S, a linear 1.5 mm grid, 120 Ω , with two 1 m (3.3') leads. KFH-3-350-C1-11L3M3S, a linear 3 mm grid, 350 Ω , with three 3 m (9.8) leads.

PRE-WIRED STRAIN GAGES PRECISION PLANAR X-Y PATTERN

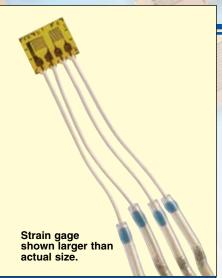
KFH Series

2- or 3-Wire Models 120 or 350 Ω 0.6 to 6 mm Grid Lengths

- ✓ Pre-Wired for Fast Installation
- No Soldering at Measurement End
- Broad Temperature Range
- ✓ 2- or 3-Wire Models
- Clear Alignment Marks

- ✓ Bonds with Hot or Cold Cure Adhesives
- PTFE Wire at Attachment End Prevents Sticking During Installation

The planar XY pattern allows precision strain measurement by eliminating the errors often associated with a stacked XY pattern. These gages are available with either two 1-meter leads or three 3-meter leads per grid and are compensated for steel.



To Order Visit omega.com/kfh for Pricing and Details

10 Oluci Visit omega.com/kin for i ficing and Details									
			DIME	NSIONS	S mm (inch)			
			GF	RID	CAR	RIER			
GAGE PATTERN Leads not shown	MODEL NO. Pkg of 10	NOM. RESIS- TANCE (Ω)	A	В	С	D	MAX V* (VRMS)		TERMINATION AND LEAD LENGTH PER GRID
Shown	0.6 mm GRID								
larger than actual size,	KFH-06-120-D16-11L1M2S	120	0.6	1.0	5.1	6.9	1.5	ST	Two 1 m leads
0.6 mm	KFH-06-120-D16-11L3M3S	120	(0.024)	(0.039)	(0.20)	(0.27)	1.5	ST	Three 3 m leads
Shown	1.5 mm GRID								
larger than actual size,	KFH-1.5-120-D16-11L1M2S	120	1.5	1.6	5.8	6.9	3	ST	Two 1 m leads
	KFH-1.5-120-D16-11L3M3S	120	(0.059)	(0.063)	(0.23)	(0.27)	3	ST	Three 3 m leads
Shown actual size, 3 mm	3 mm GRID								
	KFH-3-120-D16-11L1M2S	120					5.5	ST	Two 1 m leads
====	KFH-3-120-D16-11L3M3S	120	3.0	3.2 (0.13)	7.5 (0.30)	9.4 (0.37)	5.5	ST	Three 3 m leads
	KFH-3-350-D16-11L1M2S	350	(0.12)				10	ST	Two 1 m leads
	KFH-3-350-D16-11L3M3S	350					10	ST	Three 3 m leads
Shown actual size, 6 mm 6 mm GRID									
	KFH-6-120-D16-11L1M2S	120					11	ST	Two 1 m leads
	KFH-6-120-D16-11L3M3S	120	6.0 (0.24)	6.3	11	.	11	ST	Three 3 m leads
	KFH-6-350-D16-11L1M2S	350		(0.25)	(0.43)		20	ST	Two 1 m leads
	KFH-6-350-D16-11L3M3S	350					20	ST	Three 3 m leads

ACCESSORIES

MODEL NO.	DESCRIPTION
TT300	Complete heat cure adhesive kit
SG496	1 oz methyl-based cyanoacrylate (approximately 750 gages)
SG401	0.1 oz ethyl-based cyanoacrylate (approximately 50 gages)

^{*} Maximum permitted bridge energizing voltage (Vrms)

Ordering Examples: KFH-1.5-120-D16-11L1M2S, a linear 1.5 mm grid, 120Ω , with two 1 m (3.3') leads per grid. KFH-3-350-D16-11L3M3S, a linear 3 mm grid, 350Ω , with three 3 m (9.8') leads per grid.

PRE-WIRED STRAIN GAGES PLANAR 0°/45°/90° ROSETTE PATTERN

KFH Series

2- or 3-Wire Models 120 or 350 Ω 0.6 to 6 mm Grid Lengths

- Pre-Wired for Fast Installation
- No Soldering at Measurement End
- Broad Temperature Range
- 2- or 3-Wire Models
- Clear Alignment Marks

- ✓ Bonds with Hot or Cold Cure Adhesives
- PTFE Wire at Attachment End Prevents Sticking During Installation

The planar rosette pattern allows precision strain measurement by eliminating the errors often associated with a stacked pattern. These gages are available with either two 1-meter leads or three 3-meter leads per grid and are compensated for steel.



To Order Visit omega.com/kfh for Pricing and Details

			DIME	NSIONS	S mm (i	inch)			
			GF	RID	CAR	RIER			
GAGE PATTERN Leads not shown	MODEL NO. Pkg of 10	NOM. RESIS-TANCE (Ω)	A	В	С	D	MAX V* (VRMS)		TERMINATION AND LEAD LENGTH PER GRID
Shown	0.6 mm GRID								
larger than actual size,	KFH-06-120-D17-11L1M2S	120	0.6	1.1	4.8 (0.19)	9.9 (0.39)	1.6	ST	Two 1 m leads
0.6 mm	KFH-06-120-D17-11L3M3S	120	(0.024)	(0.043)			1.6	ST	Three 3 m leads
Shown	1.5 mm GRID								
larger than actual size,	KFH-1.5-120-D17-11L1M2S	120	1.5	1.5	5.8	10.2	2.5	ST	Two 1 m leads
1.5 mm	KFH-1.5-120-D17-11L3M3S	120	(0.059)	(0.059)	(0.23)	(0.40)	2.5	ST	Three 3 m leads
Shown actual size, 3 mm	3 mm GRID								
	KFH-3-120-D17-11L1M2S	120		2.0 (0.079)	7.4 (0.29)	13.9 (0.55)	3	ST	Two 1 m leads
	KFH-3-120-D17-11L3M3S	120	3.0				3	ST	Three 3 m leads
⇒ 2.	KFH-3-350-D17-11L1M2S	350	(0.12)				5.5	ST	Two 1 m leads
	KFH-3-350-D17-11L3M3S	350					5.5	ST	Three 3 m leads
Shown actual size, 6 mm	6 mm GRID								
======	KFH-6-120-D17-11L1M2S	120			10.5 (0.41)	1	7.5	ST	Two 1 m leads
#	KFH-6-120-D17-11L3M3S	120	6.0	2.0			7.5	ST	Three 3 m leads
== .	KFH-6-350-D17-11L1M2S	350	(0.24)	(0.079)			13	ST	Two 1 m leads
	KFH-6-350-D17-11L3M3S	350					13	ST	Three 3 m leads

ACCESSORIES

MODEL NO.	DESCRIPTION
TT300	Complete heat cure adhesive kit
SG496	1 oz methyl-based cyanoacrylate (approximately 750 gages)
SG401	0.1 oz ethyl-based cyanoacrylate (approximately 50 gages)

^{*} Maximum permitted bridge energizing voltage (Vrms)

Ordering Examples: KFH-1.5-120-D17-11L1M2S, a linear 1.5 mm grid, 120Ω , with two 1 m (3.3') leads per grid. **KFH-3-350-D17-11L3M3S**, a linear 3 mm grid, 350Ω , with three 3 m (9,8') leads per grid.

1,000,00		7				
SPECIFICATI	ONS					
Strain Gage Co	nstruction		Foil strain gage with embe	edded measuring grid		
Measuring Grid	I					
Material			Constantan			
Thickness		μm (microinch)	3.8 or 5 (150 or 197), depending upon strain gage type			
Carrier						
-	Material		Polyimide			
Thickness		μm (microinch)	45 ± 10 (1.772 ± 394)			
Connections			PTFE wire, Ø - 0.051 mm², approximately 50			
			long, connected to AWG	•		
			insulated) through solder sleeves in 2- or 3			
Name to a laborate	4		configurations			
Nominal Resist		Ω %	120 or 350 depending up	on gage		
	nd 1.5 mm grid length	%	±0.35 ±1			
Gage Factor	na 1.5 mm gna lengui	/0	approximately 2 (stated on package)			
Gage Factor To	lerance	%	±1	ii paokago)		
_	nd 1.5 mm grid length	%	±1.5			
	efficient of gage factor	1/K [1/°F]	(115 ± 10) x 10 ⁻⁶ [(64 ± 5	5.5) x 10 ⁻⁶ l		
	f gage factor temperature coefficient		Specified on each package	-		
Reference Tem		°C (°F)	23	, ~		
Operating Tem	•	(1)	PTFE cable			
	=	00 (05)				
	surement (zero point related)	°C (°F)	-10 to 155 (-14 to 320)			
	easurement (not zero point related)	°C (°F)	-10 to 155 (-14 to 320)			
Transverse Sensitivity for linear 3 mm 120Ω gage		%	±0.2			
Temperature Response		/6				
-	-		Specified on each package			
	esponse as required, adapted to hermal expansion		10.8 x 10-6 (6.0 x 10-6)			
	nemai expansion	4/1/ [4/0]	,			
α for aluminum		1/K [1/°F]	23 x 10-6 (12.8 x 10-6)			
α for plastic mat		1/K [1/°F]	65 x 10-6 (36.1 x 10-6)			
α for austenitic s	steel	1/K [1/°F]	16 x 10-6 (8.9 x 10-6)			
α for titanium		1/K [1/°F]	9 x 10-6 (5.0 x 10-6)			
α for molybden	ım	1/K [1/°F]	5.4 x 10-6 (3.0 x 10-6)			
α for quartz		1/K [1/°F]	0.05 x 10-6 (0.3 x 10-6)			
Tolerance of tem	nperature response	°C (°F)	-10 to 120 (-14 to 248)			
Mechanical Hys	steresis					
1) at reference	temperature and strain [= 1000 μm/m n linear 3 mm 120Ω gage			← D - > > B ←		
, ,	and adhesive SG496	μm/m (microstrain)	1			
	and adhesive SG496	μm/m (microstrain)	0.5			
Maximum Elon				□		
	emperature on linear 3 mm 120Ω gage					
	value for positive direction	μm/m (microstrain)	20,000 ± 29/			
	value for negative direction	μm/m (microstrain)	20,000 ± 2% 25,000 ± 2.5%	Dimensions Key: GRID		
		(-,	A: Active gage length B: Active gage width		
Fatigue Life	amporature on linear 2 mm 1000			CARRIER		
	emperature on linear 3 mm 120Ω gage			C: Matrix length D: Matrix width		
	mber of Load Cycles L _w at					
	ain L w = ±1000 μ m/m and	um/m (miorestrain)	>1 v 107 (toot was atoms	d)		
zero point variation ≤ 300 zero point variation ≤ 30		μm/m (microstrain) μm/m (microstrain)	>1 x 10 ⁷ (test was stopped) 5 x 10 ⁶			
Minimum Radiu	us of Curvature, Longitudinal and					
Transverse, at	Reference Temperature					
within measuring grid area		mm (inch)	0.3 (0.012)			
within solder to	ab area	mm (inch)	10 (0.394)			
Applicable Bon	ding Materials					
Applicable Bon Cold Cure Adhe Heat Cure Adhe	esives		SG496, SG401 TT300			