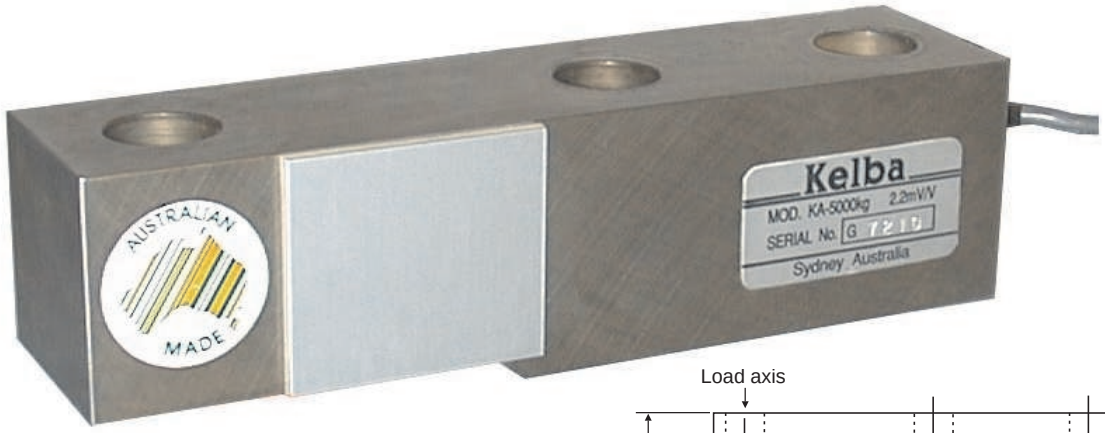
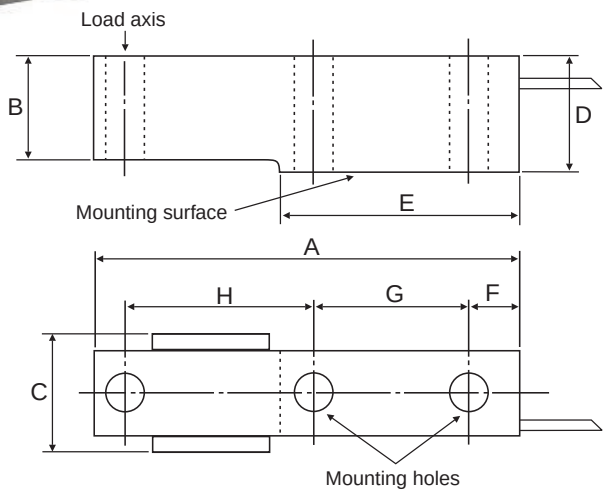
Kelba ‘K’ Series Load Cells
Shearbeam Models



Shear beam type dimensions (mm)								
Model	A	B	C	D	E	F	G	H
SG-KA- * -125KG	110	21	28max	25	54	10	33	57
SG-KA- * -250KG	110	21	28max	25	54	10	33	57
SG-KA- * -500KG	125	28	33max	32	63	12.5	38	61.5
SG-KA- * -1000KG	125	28	33max	32	63	12.5	38	61.5
SG-KL-Z-1000KG	125	28	31	28	66.5	12.5	38	61.5
SG-KA- * -2500KG	190	45	51	50	108	20	59	89
SG-KA- * -5000KG	190	45	51	50	108	20	59	89
SG-KA-N-10000KG	227	56	50	66	117	25	60	117

* Add letter S in this position for stainless steel or the letter N for nickel plated



Note: KA-125 & KA-250 mounting holes are offset 2.5mm from centre line towards non-cable side

Description

Kelba ‘K’ series load cells exhibit proven dependable performance over a wide range of weighing applications. They have inherent low deflection, high rejection of side loads and exhibit excellent cyclic performance. Applications for these cells range from precision scales to heavy industrial weighing. The load cells are machined from specially selected steels and then heat treated to a precise toughness. Heavy electroless nickel plating is then applied. Alternatively stainless steel cells are available in most models. Particular attention is paid to the environmental sealing in order to provide a product with good field performance and reliability. All ‘K’ series cells are IP67 rated. The output from each model is standardised. This simplifies multiple cell installations since there will be an equal change in output from each cell for the same load change.

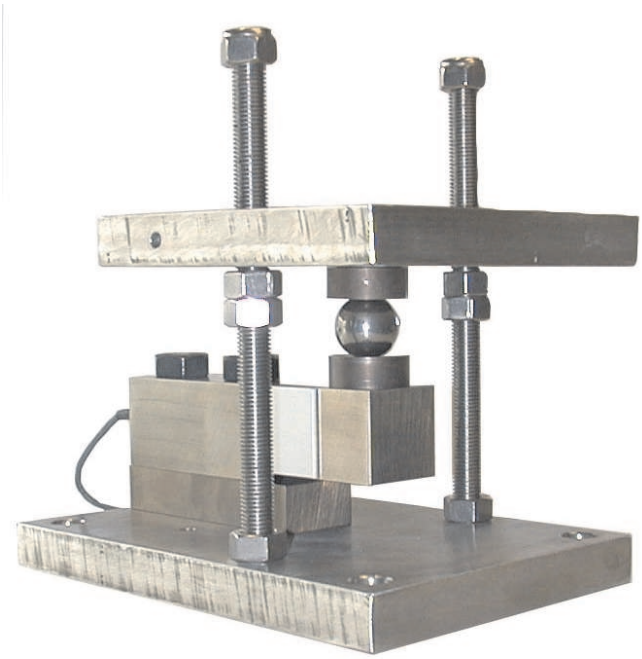
Installation

Electrical connections:

Excitation:	Red wire +V	Black wire -VE
Signal:	Green wire +VE	White wire -VE
Shield:	Bare wire	

Mounting

Mounting kits, hardened load buttons and elastomeric load / load cell interface mounts to suit ‘K’ series load cells are available.



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Specifications	Model SG-KA- * -125KG	Model SG-KA- * -250KG	Model SG-KA- * -500KG	Model SG-KA- * -1000KG
Load cell type	Shear beam	Shear beam	Shear beam	Shear beam
Material of construction	Tool steel *N in part code	Tool steel *N in part code	Tool steel *N in part code	Tool steel *N in part code
Optional material	Stainless steel *S in part code	Stainless steel *S in part code	Stainless steel *S in part code	Stainless steel *S in part code
Mounting bolt size	M 8	M 8	M 10	M 10
Recommended torque	22 Nm	22 Nm	44 Nm	44 Nm
Load hole	Tapped M10 x 1.5	Tapped M10 x 1.5	Tapped M12 x 1.75	Tapped M12 x 1.75
Load fitting contact area	18mm dia.	18mm dia.	24mm dia.	24mm dia.
Rated capacity (R.C.)	125 kg	250 kg	500 kg	1000 kg
Safe load limit	150% of R.C.	150% of R.C.	150% of R.C.	150% of R.C.
Max. excitation voltage	15 VDC	15 VDC	15 VDC	15 VDC
Rec. excitation voltage	10 VDC	10 VDC	10 VDC	10 VDC
Output at rated capacity	2.2mV/V ±0.5%	2.2mV/V ±0.5%	2.2mV/V ±0.5%	2.2mV/V ±0.5%
Standard cable length	2 metres	2 metres	3 metres	3 metres
Temperature range	-10 to + 50°C	-10 to + 50°C	-10 to + 50°C	-10 to + 50°C
Input resistance	385Ω (nominal)	385Ω (nominal)	385Ω (nominal)	385Ω (nominal)
Output resistance	350Ω ±0.2%	350Ω ±0.2%	350Ω ±0.2%	350Ω ±0.2%
Non - linearity	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.
Hysteresis	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.
Non- repeatability	<0.01% of rated cap.	<0.01% of rated cap.	<0.01% of rated cap.	<0.01% of rated cap.
Creep (after 30 min)	<0.04% of reading	<0.03% of reading	<0.03% of reading	<0.02% of reading
Span/temperature effect	0.0015% of reading per degree C	0.0015% of reading per degree C	0.0015% of reading per degree C	0.0015% of reading per degree C
Environmental protection	IP67	IP67	IP67	IP67
Weight	0.4 kg	0.4 kg	0.7 kg	0.7 kg

Specifications	Model SG-KL-N-1000KG	Model SG-KA- * -2500KG	Model SG-KA- * -5000KG	Model SG-KA-Z-10000KG
Load cell type	Shear beam	Shear beam	Shear beam	Shear beam
Material of construction	Tool steel	Tool steel *N in part code	Tool steel *N in part code	Tool steel *N in part code
Optional material	No option	Stainless steel *S in part code	Stainless steel *S in part code	No option
Mounting bolt size	M10	M20	M20	25mm
Recommended torque	44 Nm	380 Nm	380 Nm	660 Nm
Load hole	3/8" UNF	M 20 clearance	M 20 clearance	25mm clearance
Load fitting contact area	24mm dia.	46mm dia.	46mm dia.	50mm dia.
Rated capacity (R.C.)	1000 kg	2500 kg	5000 kg	10,000 kg
Safe load limit	150% of R.C.	150% of R.C.	150% of R.C.	150% of R.C.
Max. excitation voltage	15 VDC	15 VDC	15 VDC	15 VDC
Rec. excitation voltage	10 VDC	10 VDC	10 VDC	10 VDC
Output at rated capacity	1.5mV/V ±0.5%	2.2mV/V ±0.5%	2.2mV/V ±0.5%	2.2mV/V ±0.5%
Standard cable length	3 metres	5 metres	5 metres	5 metres
Temperature range	-10 to + 50°C	-10 to + 50°C	-10 to + 50°C	-10 to + 50°C
Input resistance	385Ω (nominal)	385Ω (nominal)	385Ω (nominal)	385Ω (nominal)
Output resistance	350Ω ±0.2%	350Ω ±0.2%	350Ω ±0.2%	350Ω ±0.2%
Non - linearity	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.	<0.05% of rated cap.
Hysteresis	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.	<0.03% of rated cap.
Non- repeatability	<0.01% of rated cap.	<0.01% of rated cap.	<0.01% of rated cap.	<0.01% of rated cap.
Creep (after 30 min)	<0.02% of reading	<0.03% of reading	<0.04% of reading	<0.04% of reading
Span/temperature effect	0.0015% of reading per degree C	0.0015% of reading per degree C	0.0015% of reading per degree C	0.0015% of reading per degree C
Environmental protection	IP67	IP67	IP67	IP67
Weight	0.7 kg	2.8 kg	2.8 kg	4.4 kg

Accessories - Load Cell Mounting Kits and Interface Mounts

Model	Description	Suits load cells		Additional Details
SG-KMA-250	Mounting kit	125 kg	250 kg	-N (nickel) or -S (stainless steel) versions
SG-KLBM10	Hardened load button	125 kg	250 kg	
SG-KMA-1000	Mounting kit	500 kg	1000 kg	-N (nickel) or -S (stainless steel) versions
SG-KLBM12	Hardened load button	500 kg	1000 kg	
SG-KMA-5000	Mounting kit	2500 kg	5000 kg	-N (nickel) or -S (stainless steel) versions
SG-KLBM20	Hardened load button	2500 kg	5000 kg	
SG-KMA-10000	Mounting kit	10,000 kg	-	-N (nickel) or -S (stainless steel) versions
SG-KLBM25	Hardened load button	10,000 kg	-	
SG-KO43	Rubber mount	125 kg	250 kg	3/8 UNF load side - M10 load cell side
SG-KO46	Rubber mount	500 kg	1000 kg	M12 load side - M12 load cell side
SG-KO42	Rubber foot	500 kg	1000 kg	Nil load side - M12 load cell side
SG-KO41	Rubber mount - use with SG-KO41/B1	2500 kg	5000 kg	8 x 14mm holes (4 each side)
SG-KO41/B1	Mounting bracket/kit - use with SG-KO41	2500 kg	5000 kg	Installation hardware use with SG-KO41