

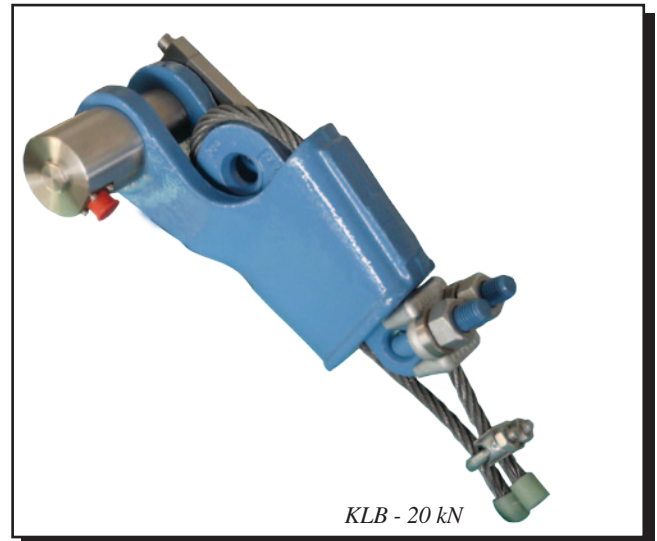
KLB/KLE/KLU Series Wedge Socket

FEATURES

- Mechanical system suitable for measuring forces between 20 and 160 kN
- Specially designed for lifting fixed point applications
- High reliability for strict safety requirements
- Available with or without integrated electronic 4-20 mA (KLE) or 0-10V (KLU)
- IP 66 Protection class
- Available in 6 standard ranges for cable diameters of 11 to 28 mm

DESCRIPTION

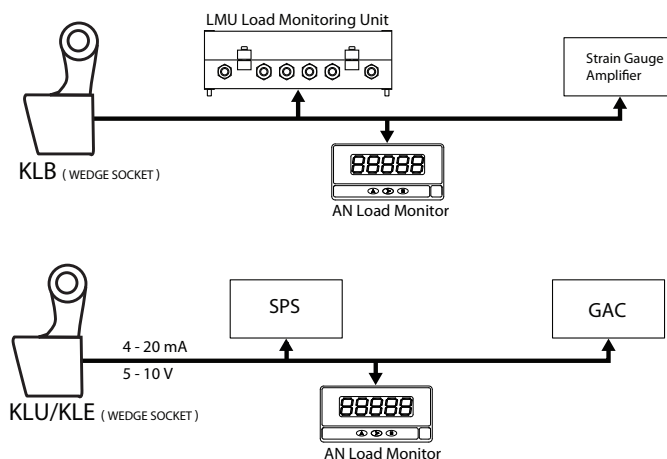
Magtrol Wedge Sockets are used on a fixed point to measure load and force and provide overload protection. This electrical signal is proportional to the applied force. The transducer is constructed with resistance stainless steel and is insensitive to external mechanical and chemical effects making them ideal for use in harsh environmental conditions.



APPLICATIONS

The KLB/KLE/KLU Series Wedge Sockets are perfectly suited for hoisting and crane security in combination with a Magtrol LMU Load Monitoring Unit or AN Series Load Monitor/Signal Conditioner/Display.

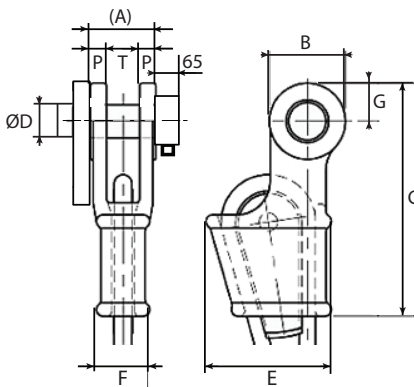
SYSTEM CONFIGURATION



TECHNICAL RATINGS - KLB SERIES

Type	KLB 281	KLB 282	KLB 283	KLB 284	KLB 285	KLB 286
Size (inches)	1/2	5/8	3/4	1/8	1	1 1/8
MECHANICAL CHARACTERISTICS						
Nominal Load	20 kN	40 kN	50 kN	80 kN	120 kN	160 kN
Admissible Overload	150% of rated load					
Cable Diameter Ø (mm)	11-13	14-16	17-19	20-22	23-26	27-28
Protection Class	IP 66 according to DIN 40050					
Weight (kg)	2	5	8	14	19	28
Material	stainless steel 1.4057					
ELECTRICAL CHARACTERISTICS						
Transducer Sensitivities	0.5 %		1%			
Bridge Impedance	350 Ω					
Power Supply	5 - 10 V					
Combined Error (Non-linearity + Hysteresis)	1 à 2%					
ENVIRONMENTAL CHARACTERISTICS						
Operating Temperature	-25°C à +80°C					
Storage Temperature	-55°C à +125°C					
Temperature Influence: On Zero	± 0.02 %/K					
Temperature Influence: On Sensitivity	± 0.02 %/K					
CONNECTION						
Cable type	K-414					
Output Connector	Radial, MS 3112 E 10-6P					
Connection cable Assembly	3 m, 6 m, 12 m ou 20 m long cable with straight connector (MS 3116 J10 6S) or angled 90° (Souriau 851 08 EC 10 6S50)					
Influence on Measurement Signal (Shift of Force Angle with Respect to Measurement Axis)	According to the cosine function					

DIMENSIONS



		Dimensions (mm)								
Size (inch)		A	B	C	ØD	E	F	G	P	T
1/2"	20 kN	50.8	49.3	175	25.4	88.1	41.1	26.9	12.7	25.4
5/8"	40 kN	60.2	57.2	210	30.2	109	53.8	31	14.2	31.8
3/4"	50 kN	71.7	66.8	251	35.1	130	62	35.6	16.8	38.1
7/8"	80 kN	82.7	79.5	286	41.4	149	68.5	42.4	19.1	44.5
1"	120 kN	95.8	95.5	325	51	161	74.7	51	22.4	51
1 1/8"	160 kN	107.8	108	365	57	176	84	57	25.4	57

TECHNICAL RATINGS - KLE SERIES

Type	KLE 281	KLE 282	KLE 283	KLE 284	KLE 285	KLE 286
Size (inches)	1/2	5/8	3/4	1/8	1	1 1/8
MECHANICAL CHARACTERISTICS						
Nominal Load	20 kN	40 kN	50 kN	80 kN	120 kN	160 kN
Admissible Overload	150% of rated load					
Cable Diameter Ø (mm)	11-13	14-16	17-19	20-22	23-26	27-28
CEM	According to EN 6100-6-2 & EN 6100-6-4 category B					
Protection Class	IP 66 according to DIN 40050					
Weight (kg)	2	5	8	14	19	28
Material	stainless steel 1.4057					
ELECTRICAL CHARACTERISTICS						
Transducer Sensitivities	0.5 %		1%			
Bridge Impedance	350 Ω					
Output Signal	Rated 4 to 20 mA; max. 3.5 to 25 mA					
Power Supply	5 - 10 V					
Combined Error (Non-linearity + Hysteresis)	1 à 2%					
ENVIRONMENTAL CHARACTERISTICS						
Operating Temperature	-25°C à +80°C					
Storage Temperature	-55°C à +125°C					
Temperature Influence: On Zero	± 0.02 %/K					
Temperature Influence: On Sensitivity	± 0.02 %/K					
CONNECTION						
Cable type	K-414					
Configuration	2 wires					
Output Connector	Radial, MS 3112 E 10-6P					
Connection cable Assembly	3 m, 6 m, 12 m ou 20 m long cable with straight connector (MS 3116 J10 6S) or angled 90° (Souriau 851 08 EC 10 6S50)					
Influence on Measurement Signal (Shift of Force Angle with Respect to Measurement Axis)	According to the cosine function					
Load Resistance	Admissible resistance of the 2-wire circuit at the connection of the Wedge socket 28x					

TECHNICAL RATINGS - KLU SERIES

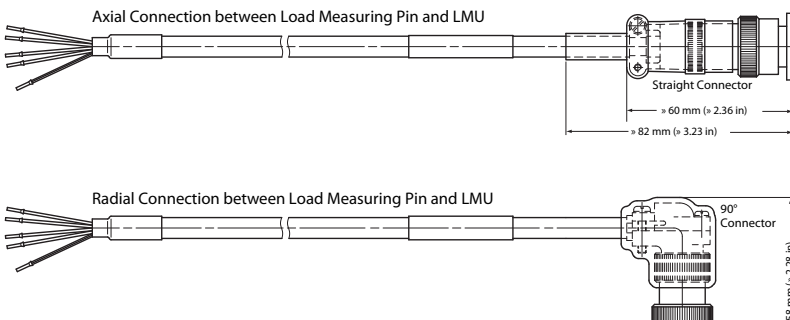
Type	KLU 281	KLU 282	KLU 283	KLU 284	KLU 285	KLU 286
Size (inches)	1/2	5/8	3/4	1/8	1	1 1/8
MECHANICAL CHARACTERISTICS						
Nominal Load	20 kN	40 kN	50 kN	80 kN	120 kN	160 kN
Admissible Overload	150% of rated load					
Cable Diameter Ø (mm)	11-13	14-16	17-19	20-22	23-26	27-28
CEM	According to EN 6100-6-2 & EN 6100-6-4 category B					
Protection Class	IP 66 according to DIN 40050					
Weight (kg)	2	5	8	14	19	28
Material	stainless steel 1.4057					
ELECTRICAL CHARACTERISTICS						
Transducer Sensitivities	0.5 %		1%			
Bridge Impedance	350 Ω					
Output Signal	Rated 4 to 20 mA; max. 3.5 to 25 mA					
Power Supply	5 - 10 V					
Combined Error (Non-linearity + Hysteresis)	1 à 2%					
ENVIRONMENTAL CHARACTERISTICS						
Operating Temperature	-25°C à +80°C					
Storage Temperature	-55°C à +125°C					
Temperature Influence: On Zero	± 0.02 %/K					
Temperature Influence: On Sensitivity	± 0.02 %/K					
CONNECTION						
Cable type	K-414					
Configuration	4 wires					
Output Connector	Radial, MS 3112 E 10-6P					
Connection cable Assembly	3 m, 6 m, 12 m ou 20 m long cable with straight connector (MS 3116 J10 6S) or angled 90° (Souriau 851 08 EC 10 6S50)					
Influence on Measurement Signal (Shift of Force Angle with Respect to Measurement Axis)	According to the cosine function					

OPTIONS AND ORDERING INFORMATION

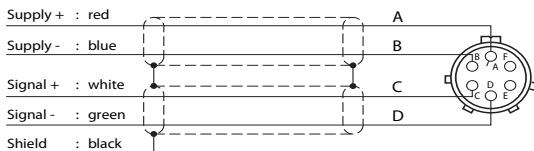
MODELES STANDARD			KL		/ 01X
• Model KLB	standard				
• Model KLE	(4-20 mA, 2 wires)				
• Model KLU	(0-10 V, 4 wires)				
Size 1/2"	20 kN	281			
Size 5/8"	40 kN	282			
Size 3/4"	50 kN	283			
Size 1/8"	80 kN	284			
Size 1"	120 kN	285			
Size 1 1/8"	160 kN	286			

ACCESSORIES

Cable Assemblies



Pin Configuration



Accessory Ordering Information

COUNTER-CONNECTOR

Straight Connector P/N 957.11.08.0030
 90° Connector P/N 957.11.08.0029

CONNECTION CABLE ASSEMBLY

Part Number EH 13 / 0 1

- Straight Connector _____ 8
- 90° Connector _____ 9

CONNECTION CABLE ASSEMBLY

Cable Length: 3 m _____ 1
 6 m _____ 2
 12 m _____ 3
 20 m _____ 4

Due to the continual development of our products, we reserve the right to modify specifications without forewarning.



MAGTROL SA

Route de Montena 77
 1728 Rossens/Fribourg, Switzerland
 Tel: +41 (0)26 407 3000
 Fax: +41 (0)26 407 3001
 E-mail: magtrol@magtrol.ch

MAGTROL INC

70 Gardenville Parkway
 Buffalo, New York 14224 USA
 Tel: +1 716 668 5555
 Fax: +1 716 668 8705
 E-mail: magtrol@magtrol.com

www.magtrol.com

Subsidiaries in:

Germany • France
 China • India

Worldwide Network
 of Sales Agents

