

SK-01 Strain gauge force transducer

FEATURES

- Nominal force : 300 kN and 400 kN (other nominal force available on request)
- Accuracy class : 3%
- Stainless steel
- Temperature compensated
- Optional amplifier display (SKG-01)
- Protection class : IP 66
- Mechanical adaptation for different diameters



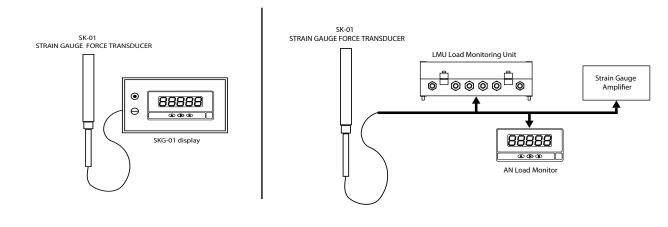
APPLICATIONS

The SK-01 is available in two different ranges. One for ropes of a diameter 28 to 47 mm for forces up to 300 kN and the second of a diameter 48 to 92 mm for forces up to 400 kN.

When connected to a SKG-01 Digital Amplifier, the SK-01 is ideally suited for measuring the clamping force on lifts, ski-lifts and similar applications

The capability of this device was tested by Swiss Federal Laboratories for Materials Testing and Research, see "Prüfbericht Nr. 169166 from 16 July 1997".

SYSTEM CONFIGURATION



1

DESCRIPTION

The Magtrol SK-01 Force Transducer, based on strain gauge technology, is ideal for the control of ropes, brake clamps and similar devices. It measures the clamping force, independent of the clamp, on the longitidunal axis of the transducer.

F Specifications

TECHNICAL RATINGS

	SK-01		
MECHANICAL CHARACTERISTICS			
Nominal load	300 kN	400 kN	
Accuracy class	3%		
Admissible overload	120%		
Overload Limit	150%		
ELECTRICAL CHARACTERISTICS			
Nominal sensitivity	0.7 mV/V		
Nominal input resistance	3500 Ω		
Nominal output resistance	3500 Ω		
Supply voltage (max.).	20V		
ENVIRONMENTAL CHARACTERESTICS			
Nominal temperature	0°C to 40°C		
Operating temperature	-10°C to 60°C		
Temperature coefficient of signal zero per 10 K	<= ± 0.2 %		
Protection	IP66		
CONNECTION CABLE			
Cable length (*)	3 m		

(*) Shielded connection cable 3 m long. The shielding is not attached to the transducer body.

DIMENSIONS

Pin Color Code + supply brown - supply white + signal yellow – signal green FORCE В А ٢ FORCE F Ε DIRECTION Ψ ç 02 Σ Ø Ø <u>-</u> CABLE øG GRIP PINS FOR POSITION OF THE SHELLS

REF. / DIMENSION (mm)	A	B	C	øD1	0D2	E	F	L	ØG
SK-01-300	250	22	28	19.9	from 28 to 47	50±0.3	150±0.1	300	4.1
SK-01-400	250	22	28	39.9	from 48 to 92	50±0.3	150±0.1	300	6.1

PIN CONNECTIONS

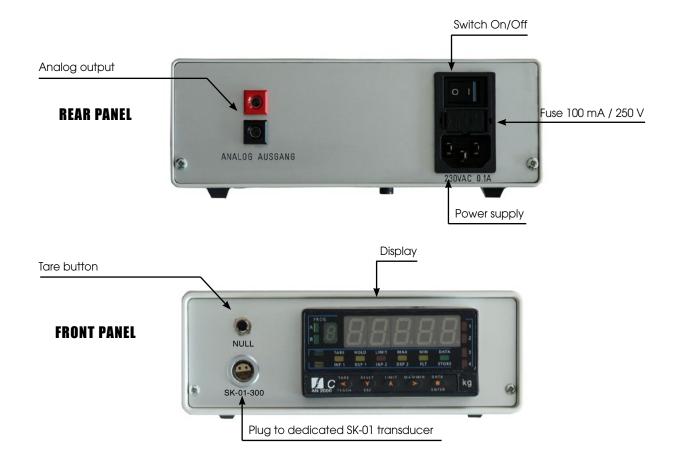


Specifications

ACCESSORIES : SKG-01-

MEASUREMENT CHARACTERISTICS				
Range	300 kN or 400 kN according to type			
Accuracy	±0,1% + 2 count			
Temperature Coefficient	100 ppm/°C			
ELECTRICAL CHARACTER	ISTICS			
Voltage requirements	115/230 VAC 50/60 Hz ±10%			
Transducer voltage	10V DC			
INPUTS AND OUTPUTS				
Maximum value input	± 300 mV			
Analog output	1V for 100 kN			

ENVIRONMENT			
Operating Temperature	- 10°C to +60	°C	
Storage temperature	- 25°C to +80	°C	
Relative Humidity	< 90 %		
Warm up time	5 min		
DIMENSIONS			
Width	251 mm	9.88 in	
Height	71 mm	2.80 in	
Depth	190 mm	7.49 in	
Weight	1.66 kg	3.66 lb	



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



MAGTROL INC

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

MAGTROL SA

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

www.magtrol.com

Subsidiaries in:

Germany • France China • India

Worldwide Network of Sales Agents

