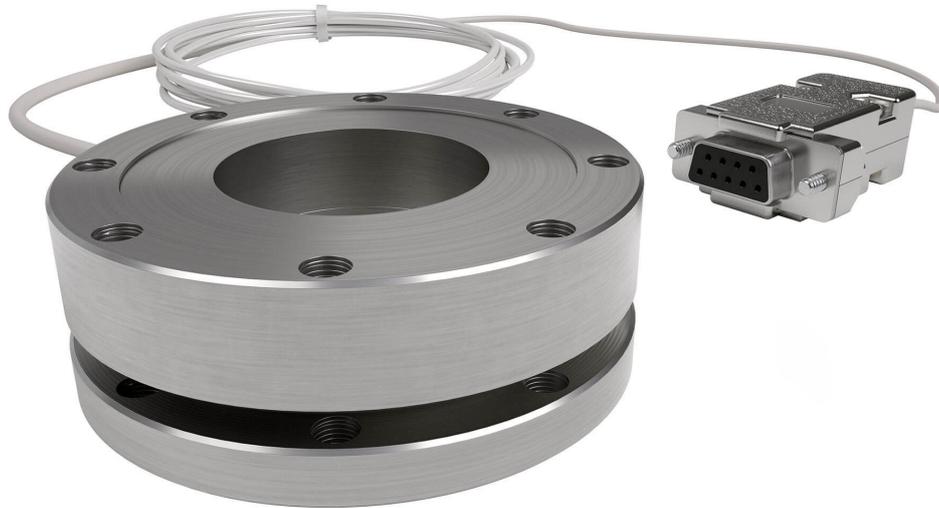


# JF1 press force sensor



## product description

The JF1 is a full-bridge, bonded foil strain gauge force sensor designed for press fit applications.

Constructed of stainless steel, the robust construction offers repeatable, high accuracy monitoring of press fit operations in assembly machinery. The low-profile design enables the JF1 to be easily embedded into assembly machines.

Available in a range of standard capacities, both in kN or klbf. The JF1 is configured for compression force measurement. The mV/V output from the transducer provides excellent long-term stability and ensures high performance even in applications requiring in excess of 1 million load cycles.

The JF1 can be supplied with standard cable configurations or with industry standard connectors.

Comprehensive range of electronic modules available.

## applications

Press-fit, riveting and joining applications in assembly process equipment.

## key features

Capacities of up to 100kN or 20klbf

Stainless steel construction

Environmental protection to IP64

High accuracy  $\pm 0.25\%$

Low profile design

Temperature compensated from  $-15^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$

## options

Range of cable lengths

Flying leads or cable connectors

## accessories

Range of electronic modules



## specifications

Capacity	kN	2, 5, 10, 20, 50, 100
	klbf	0.5, 1, 2, 5, 10, 20
Safe overload	% FS	200
Ultimate load	% FS	>300
Sensitivity	mV/V	1 ± 20% (Voltage, current loop or digital output versions are available on request)
Non-linearity	% FS	± 0.25 (± 0.5% FS Max)
Hysteresis	% FS	± 0.25 (± 0.5% FS Max)
Repeatability	% FS Max	± 0.1
No load offset	% RO	± 2
Zero temp coefficient	% RO / °C	0.02
Sensitivity temp coefficient	% of load / °C	0.02
Compensated temp range	°C	-15 to 70
Operating temp range	°C	-20 to 70
Bridge resistance	Ω	700 +/- 100
Excitation voltage	V	5 (recommended), 10 (max)
IP rating	-	64
Material	-	Stainless steel

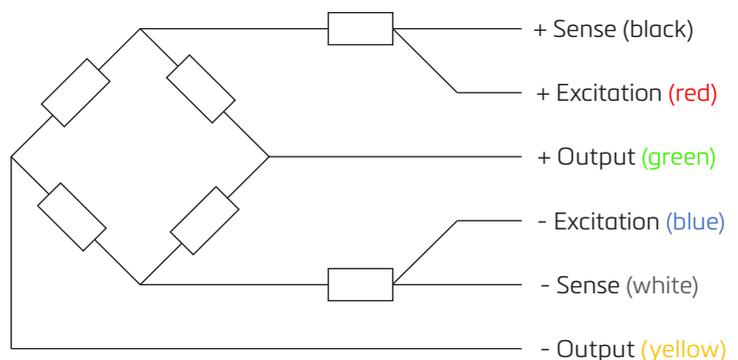
## wiring

The sensor is provided with a 30 AWG 6-conductor braid shielded cable.

Cable jacket: PVC

Cable length: 3m

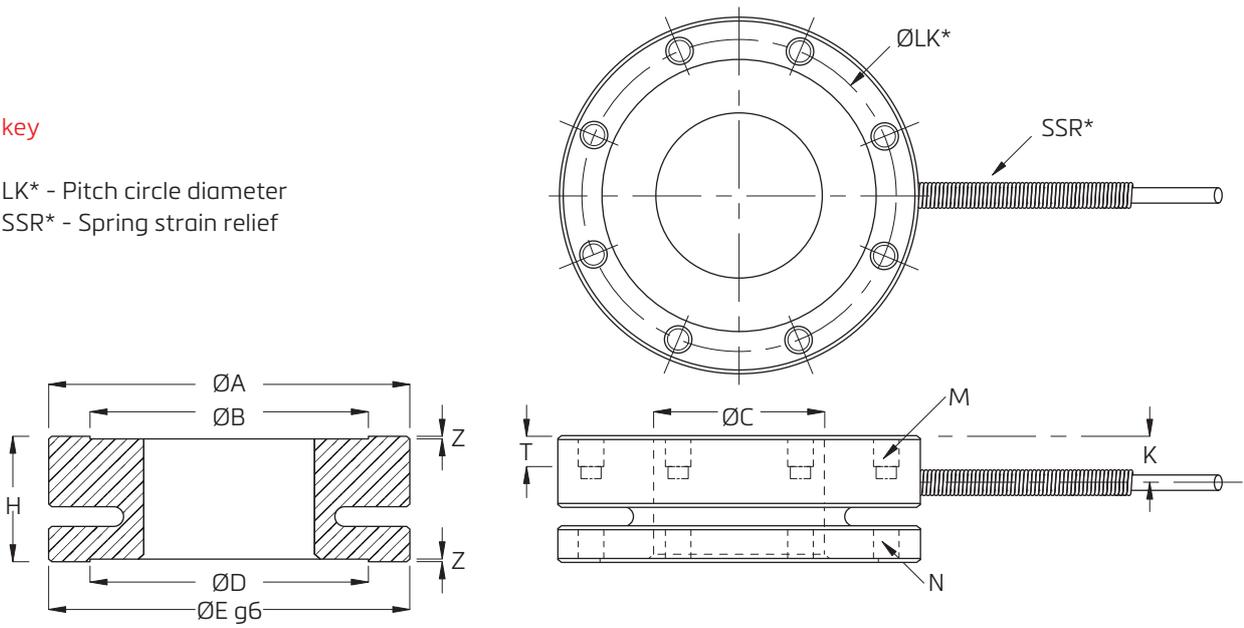
For additional protection, part of the cable is contained within a stainless-steel spring for strain relief purposes.



## product dimensions (mm)

### key

LK\* - Pitch circle diameter  
SSR\* - Spring strain relief



Capacity (kN)	A	B	C	D	E	H	K	Z	M	T	LK	N
2 / 5 / 10 / 20	69.7	54	33	54	70	25	9	0.5	M5, 8 x 45°	6	62	M5, 8 x 45°
50 / 100	111.5	97	70	97	112	35	13	1.1	M6, 8 x 45°	10	104	M6, 8 x 45°

Specifications and dimensions are subject to change without notice.