

## Single point load cell Up to 30 kg Model F4881

WIKA data sheet FO 53.16

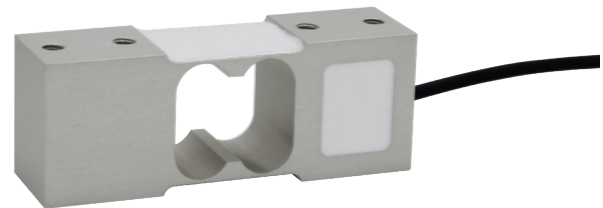
**EAC**

### Applications

- Multihead combination weighers
- Belt weighers, floor and bench scales
- Filling applications
- Dosing systems

### Special features

- Measuring ranges 0 ... 2 kg to 0 ... 30 kg  
[0 ... 4 lbs to 0 ... 66 lbs]
- Load cell made from aluminium
- High accuracy, react quickly, low settling time
- Insensitive to lateral and corner load
- Simple design, easy installation



Load cell, model F4881

### Description

The model F4881 single point load cells are a range of aluminium single point load cells suitable for a wide range of applications. Thanks to their standardised geometry and simple design, they can be easily installed in all types of scales.

The model F4881 load cells are adapted to the special requirements of multihead combination weighers and feature a particularly short settling time, so that the weight of the goods being combined can be determined as quickly as possible.

The load cells are also suitable for use in sectors such as industry, commerce, medicine and research.

The model F4881 single point load cells also feature high accuracy and react quickly. They are also insensitive to lateral and corner loading.



The load cells are easy to handle due to their simple force introduction. This is made perpendicular to the geometry.

## Specifications per VDI/VDE/DKD 2638

Model F4881						
Rated load $F_{nom}$ kg	2	3	5	8	15	30
Rated load $F_{nom}$ lbs	4	7	11	18	33	66
Relative linearity error $d_{lin}^{1)}$	$\pm 0.02 \% F_{nom}$					
Relative creep, 30 min.	$\pm 0.02 \% F_{nom}$					
Relative reversibility error $v$	$\pm 0.02 \% F_{nom}$					
Relative deviation of zero signal $d_{S,0}$	$\pm 5 \% F_{nom}$					
Temperature effect on zero signal $TK_0$	$\leq \pm 0.014 \% / 10 K$					
Temperature effect on characteristic value $TK_C$	$\leq \pm 0.02 \% / 10 K$					
Force limit $F_L$	150 % $F_{nom}$					
Breaking force $F_B$	200 % $F_{nom}$					
Material of the measuring body	Aluminium					
Rated temperature range $B_{T,nom}$	-10 ... +40 °C [14 ... 104 °F]					
Operating temperature range $B_{T,G}$	-20 ... +65 °C [-4 ... 149 °F]					
Input resistance $R_e$	410 $\pm$ 10 $\Omega$					
Output resistance $R_a$	350 $\pm$ 5 $\Omega$					
Insulation resistance $R_{is}$	$\geq 5,000 M\Omega/DC 100 V$					
Output signal (rated characteristic value) $C_{nom}$	2.0 $\pm$ 0.2 mV/V					
<b>Electrical connection</b>						
Design A: 2 kg; 3 kg; 5 kg; 8 kg [4.4 lbs; 6.6 lbs; 11 lbs; 17.6 lbs]	Measuring cable $\varnothing 3 \times 250$ mm [ $\varnothing 0.13 \times 9.84$ in]					
Design B: 5 kg; 8 kg [11 lbs; 17.6 lbs]	Measuring cable $\varnothing 3 \times 360$ mm [ $\varnothing 0.13 \times 14.17$ in]					
Design B: 30 kg [66 lbs]	Measuring cable $\varnothing 3 \times 2,000$ mm [ $\varnothing 0.13 \times 78.74$ in]					
Design C: 15 kg [33 lbs]	Measuring cable $\varnothing 3 \times 250$ mm [ $\varnothing 0.13 \times 9.84$ in]					
Design C: 30 kg [66 lbs]	Measuring cable $\varnothing 3 \times 250$ mm [ $\varnothing 0.13 \times 9.84$ in]					
Supply voltage $U_B, nom$	DC 5 ... 10 V (max. 15 V)					
Ingress protection (per IEC/EN 60529)	IP67					
Platform size	Design A: 300 x 300 mm [11.81 x 11.81 in] Design B: 350 x 350 mm [13.78 x 13.78 in] Design C: 300 x 300 mm [11.81 x 11.81 in]					
Weight	0.2 kg [0.44 lbs]					

1) Relative linearity error is specified in accordance with guideline VDI/VDE/DKD 2638 chap. 3.2.6.

## Approvals

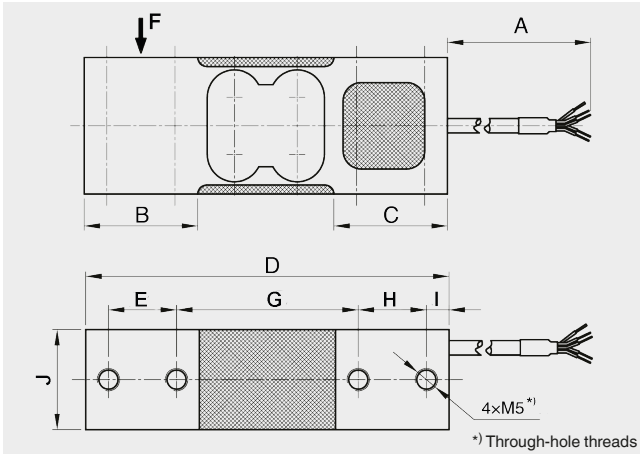
Logo	Description	Region
	EU declaration of conformity RoHS directive	European Union
	UKCA RoHS directive	United Kingdom

## Optional approvals

Logo	Description	Region
	EAC	Eurasian Economic Community

# Dimensions in mm [in]

## Model F4881 of variant A



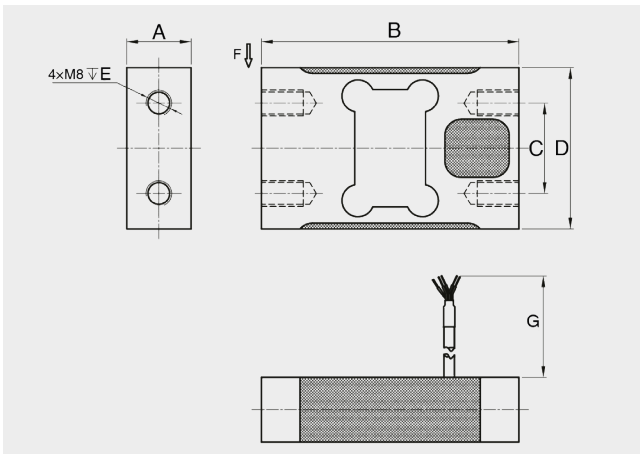
### Dimensions in mm

A	B	C	D	E	G	H	I	J
250	25	25	80	15	40	15	5	22

### Dimensions in inch

A	B	C	D	E	G	H	I	J
9.84	0.98	0.98	3.15	0.59	1.58	0.59	0.20	0.87

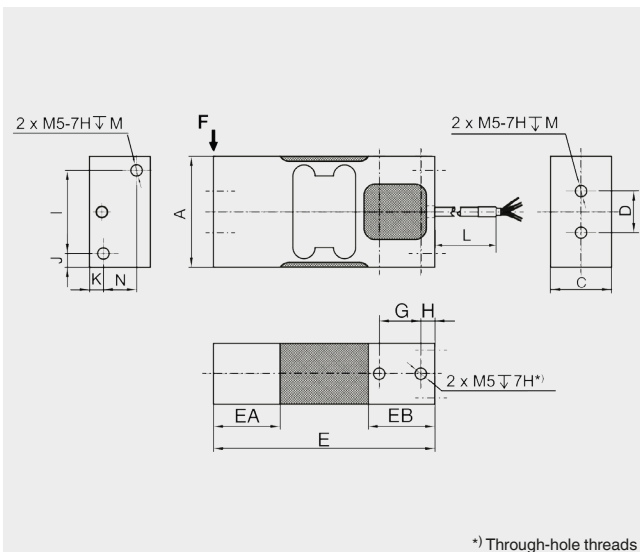
## Model F4881 of variant B



Rated load in kg	Dimensions in mm					
	A	B	C	D	E	G
5	20	80	28	50	13	13
8	20	80	28	50	13	360
30	20	80	28	50	13	2,000

Rated load in lbs	Dimensions in inch					
	A	B	C	D	E	G
11.02	0.79	3.15	1.10	1.97	0.51	0.51
17.64	0.79	3.15	1.10	1.97	0.51	14.17
66	0.79	3.15	1.10	1.97	0.51	78.74

## Model F4881 of variant C



### Dimensions in mm

A	C	D	E	EA	EB	G
40	22	15	80	24	24	15

### Dimensions in mm

H	I	J	K	L	M	N
5	30	5	5	250	15	12

### Dimensions in inch

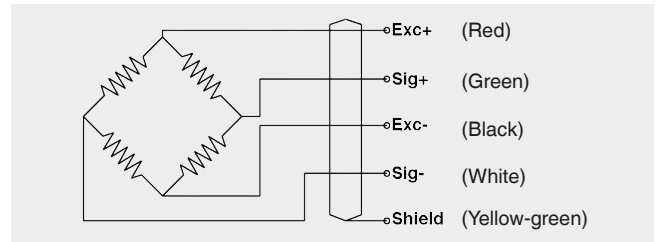
A	C	D	E	EA	EB	G
1.57	0.87	0.59	3.15	0.95	0.95	0.59

### Dimensions in inch

H	I	J	K	L	M	N
0.20	1.18	0.20	0.20	9.84	0.59	0.47

## Pin assignment

Electrical connection		
Supply voltage+	Exc+	Red
Supply voltage-	Exc-	Green
Signal+	Sig+	Black
Signal-	Sig-	White
Shield ⊕	Shield	Yellow-green



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