

# UNBF/UNBF2

COMPRESSION TYPE  
LOAD CELL



UNBF series is so compact and thin design that it allows easy mounting on existing equipment. Even more compact without a box part, allowing easy wiring.

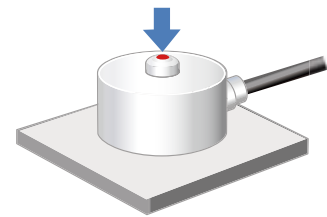


Flexible cable

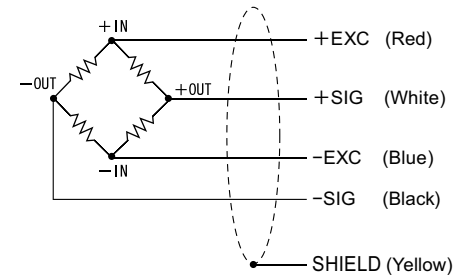
## Specifications

Model	UNBF-300N, UNBF-500N	UNBF2-30KN, UNBF2-50KN
	UNBF-1KN, UNBF-2KN, UNBF-3KN UNBF-5KN, UNBF-10KN, UNBF-20KN	UNBF2-100KN, UNBF2-200KN UNBF2-300KN, UNBF2-500KN
Rated capacity	300 N, 500 N, 1 kN, 2 kN, 3 kN, 5 kN, 10 kN, 20 kN	30 kN, 50 kN, 100 kN, 200 kN, 300 kN, 500 kN
Rated output	2 mV/V±0.5%	
Safe overload	150% R.C.	
Zero balance	±10% R.O.	
Non-linearity	0.2% or less R.O.	0.35% or less R.O.
Hysteresis	0.2% or less R.O.	0.35% or less R.O.
Repeatability	0.1% or less R.O.	0.20% or less R.O.
Compensated temperature range	-10 to +60°C	
Safe temperature range	-20 to +70°C	
Temperature effect on zero	0.1% R.O./10°C or below	
Temperature effect on span	0.1% R.O./10°C or below	
Input resistance	Approx. 400 Ω	
Output resistance	Approx. 350 Ω	
Recommended excitation voltage	10 V	
Maximum excitation voltage	20 V	
Insulation resistance (DC 50 V)	1000 MΩ or more	
Cable	φ 6 4-conductor flexible cable 3 m Cable end: 5 wires	φ 8 4-conductor flexible cable 3 m Cable end: 5 wires
Load cell material	Stainless steel	
RoHS directives	2011/65/EU (EU)2015/863	

## Application example

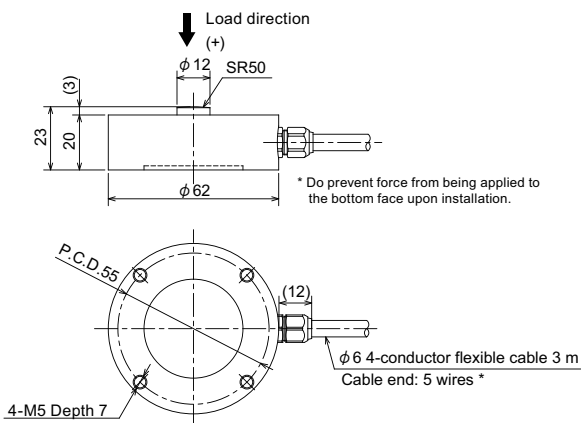


## Wiring diagram

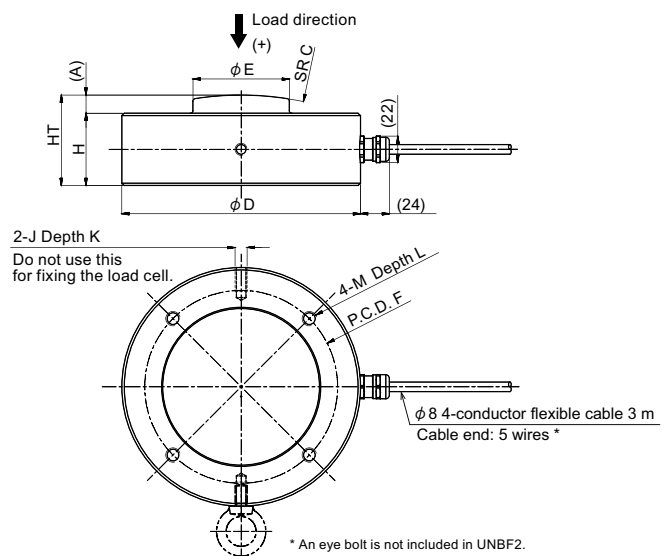


## External dimension

### UNBF-300N to 20KN



### UNBF2-30KN to 500KN



Model	Deflection at rated	Natural frequency	Weight	A	φD	φE	H	HT	P.C.D.F	M	L	SRC	J	K
UNBF-300N	0.060 mm	2.8 kHz	400 g											
UNBF-500N	0.040 mm	3.6 kHz	400 g											
UNBF-1KN	0.040 mm	5.4 kHz	400 g											
UNBF-2KN	0.035 mm	7.8 kHz	400 g											
UNBF-3KN	0.035 mm	9.3 kHz	400 g											
UNBF-5KN	0.035 mm	13 kHz	400 g											
UNBF-10KN	0.055 mm	16 kHz	400 g											
UNBF-20KN	0.050 mm	23 kHz	400 g											
UNBF2-30KN	0.130 mm	9 kHz	1.6 kg	5	98	30	33	38	84	M6	7	100		
UNBF2-50KN	0.140 mm	12 kHz	1.6 kg	5	98	30	33	38	84	M6	7	100		
UNBF2-100KN	0.160 mm	17 kHz	1.6 kg	8	98	30	35	43	84	M6	7	150		
UNBF2-200KN	0.200 mm	9.4 kHz	3.9 kg	10	138	50	43	53	110	M8	8	200		
UNBF2-300KN	0.250 mm	8.9 kHz	6.3 kg	12	158	60	53	65	130	M10	10	250	M8	16
UNBF2-500KN	0.350 mm	6.2 kHz	11 kg	15	198	80	60	75	160	M12	12	250	M8	16

\* An eye bolt is not included in UNBF2.  
\* Hole depth is not exactly fixed.  
\* Do prevent force from being applied to the bottom face upon installation.

Unit: mm

\* Connector can be attached to the cable according to your requests. Refer to 84 pages for details.