

Accuracy

0.03% High-precision (PGRS)

0.015% Ultra High-precision (PGRH)

Features

Sealed construction

* Excluding TU-PGRS 100N-G

Compression / Tension Load Cell



TU-PGRS-G

Ultra Precision

Achieved 0.015% of Linearity by unique construction. (TU-PGRH-G)

High Stability

The high-impedance circuit minimizes temperature drift due to self-heating.

Mounting Method

Bolt-mount type. (Bolt size varies on models.)

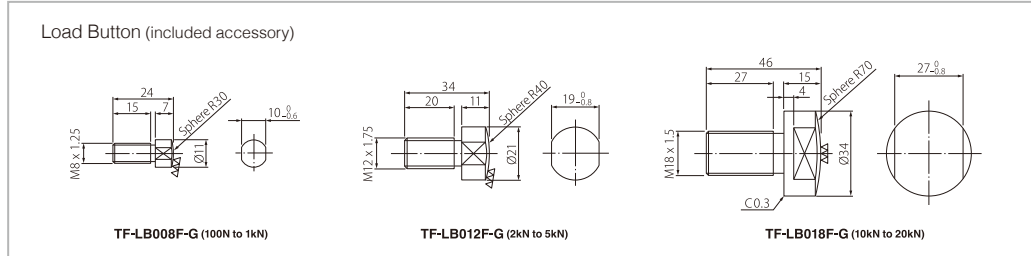
Tension/Compression Compatible

An included Load Button TF-LB allows the TU-PGRS/TU-PGRH to work as a Compression Load Cell.

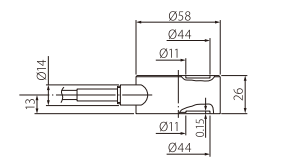
Specifications

Type	Tension / Compression Load Cell														
Model	TU-PGRS(T)□□N/KN-G									TU-PGRH(T)□□N/KN-G					
	RoHS (10 substances)									RoHS (10 substances)					
Rated Capacity (R.C.)	100N	200N	500N	1kN	2kN	3kN	5kN	10kN	20kN	200N	500N	1kN	2kN	3kN	5kN
Natural Frequency	1.1kHz	1.5kHz	4.3kHz	5.4kHz	3.4kHz	4.4kHz	6.5kHz	3.9kHz	5.4kHz	1kHz	1.6kHz	2.2kHz	2.1kHz	(TBC)	3.4kHz
Weight	0.15kg	0.15kg	0.15kg	0.15kg	0.41kg	0.41kg	0.41kg	2.2kg	2.2kg	0.4kg	0.4kg	0.4kg	1.3kg	1.3kg	1.3kg
Safe overload rating	150 % R.C.									150 % R.C.					
Rated Output (R.O.)	2mV/V ±0.3%									2mV/V ±0.3%					
Linearity	0.03% R.O.									0.015% R.O.					
Hysteresis	0.03% R.O.									0.02% R.O.					
Repeatability	0.02% R.O.									0.015% R.O.					
Safe Excitation Voltage	15V			20V						10V					
Input Terminal Resistance	1050 ±10Ω									1050 ±10Ω					
Output Terminal Resistance	1050±10Ω									1050±10Ω					
Insulation Resistance	1000MΩ or more (DC 50V)									1000MΩ or mote (DC 50V)					
Compensated Temperature Range	-10°C to 60°C									-10°C to 60°C					
Permissible Temperature Range	-30 to 80°C									-30 to 80°C					
Temperature Effect on Zero Balance	0.025% R.O. / 10°C									0.02% R.O. / 10°C					
Temperature Effect on Output	0.03% R.C. / 10°C									0.025% R.C. / 10°C					
Cable	Φ6, 4-core shielded, 5m direct connection cable with bare lead wires							Φ8, 4-core shielded, 5m direct connection cable with bare lead wires		Φ6, 4-core shielded, 5m direct connection cable with bare lead wires					
Mounting Method	Bolt hole									Bolt hole					
Body Material	Aluminum (Coated surface)							Steel (Coated surface)		Stainless Steel / Steel (Coated surface)					
Included Accessories	Load Button									Load Button					

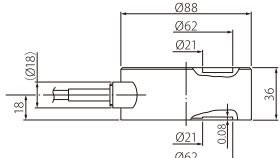
Dimensional drawings
(Units: mm)



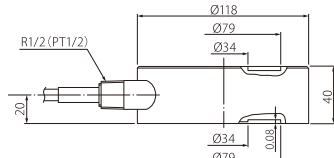
TU-PGRS□□N/KN-G (500N, 1kN)



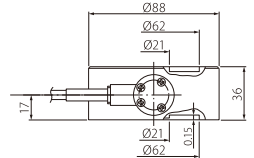
TU-PGRS□□N/KN-G (100N, 200N)
TU-PGRH□□N/KN-G (200N, 500N, 1kN)



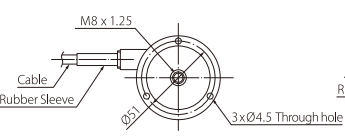
TU-PGRS□□KN-G (2kN, 5kN)



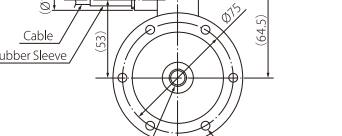
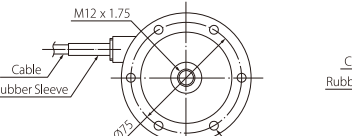
TU-PGRS□□KN-G (10kN, 20kN)



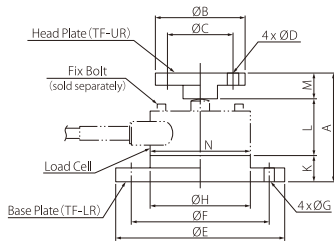
TU-PGRH□□KN-G (2kN to 5kN)



TU-PGRS□□N/KN-G (100N to 1kN)
TU-PGRH□□N/KN-G (200N to 1kN)

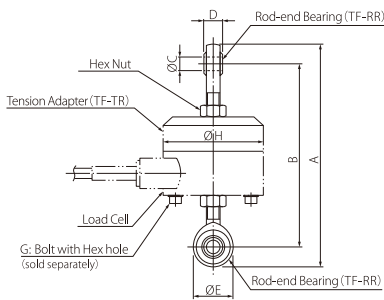


Head Plate, Base Plate (Sold separately)



Model	Rated Capacity	Head Plate (approx. weight)	Base Plate (approx. weight)	Bolt with Hex hole	A	ØB	ØC	ØD	ØE	ØF	ØG	ØH	K	L	M	ØN
TU-PGRS-G	100N, 200N, 500N, 1kN	TF-UR102F (0.13kg)	TF-LR058F (0.62kg)	3 x M4	63	53	38	6.6	98	80	6.6	58	15	33	15	58
TU-PGRH-G	200N, 500N, 1kN															
TU-PGRS-G	2kN, 3kN, 5kN		TF-LR090F (2.45kg)	6 x M6	96	98	80	11	136	112	11	88	25	47	24	88
TU-PGRH-G	2kN, 3kN, 5kN	TF-UR002F (0.86kg)														
TU-PGRS-G	10kN, 20kN		TF-LR118F (4.7kg)	6 x M8	109	98	80	11	178	148	14	118	30	55	24	118

Rod-end Bearing, Tension Adapter (Sold separately)



Model	Rated Capacity	Rod-end Bearing (approx. weight)	Tension Adapter (approx. weight)	A	B	ØC	D	ØE	F	G	ØH
TU-PGRS-G	100N, 200N, 500N	TF-RR008F (0.15kg)	TF-TR058F (0.36kg)	130	107	8H7	11	13	M8 length=1.25	3 x M4 length=35	58
TU-PGRH-G	200N, 500N										
TU-PGRS-G	2kN, 3kN, 5kN	TF-RR012F (0.15kg)	TF-TR088F (1.9kg)	203	169	12H7	16	34	M12 length=1.75	6 x M6 length=50	88
TU-PGRH-G	2kN, 3kN, 5kN										

TEAC CORPORATION

1-47 Ochiai, Tama-shi, Tokyo
206-8530, Japan

E-mail: cs_ipd@teac.jp
Web: https://loadcell.jp/en/

TEAC America, Inc.,

E-mail: datarecorder@teac.com

TEAC EUROPE GmbH.

E-mail: info@teac.eu

TEAC SALES & TRADING (ShenZhen) CO., LTD.

E-mail: teacservice3@teac.com.cn

https://loadcell.jp/en/products/loadcell/tu-pgrs.html

