

Application

# Pressing & Injection

Features

# Conventional or Low-profile Design

Compression Load Cell



**Center Hole Flat type**

**Low profile Design**

**Durable Robot Cable standardized**

**Plug & Play with built-in TEDS**

Suitable for pressure measurement when injection and swaging.

Space saving, and easy installation to the existing press machine.

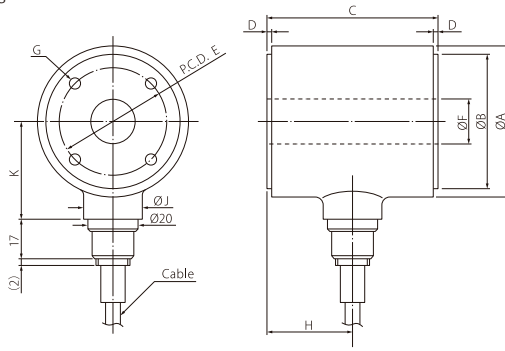
Enhanced durability against bending that occurs in moving parts with frequent repetitive motion, such as industrial robots and machine tools. High stability and reliability are realized.

With the TD series indicators, equivalent input calibration, likely to forget in manual setting, can be performed automatically and help prevention.

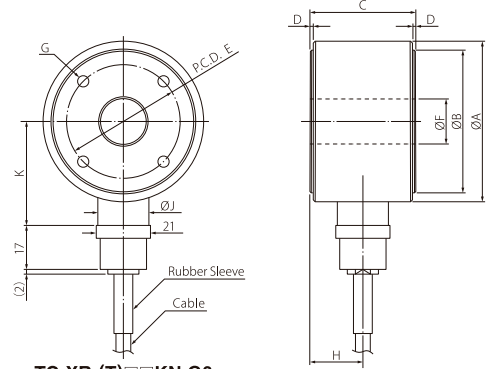
### Specifications

Type	Compression Load Cell												
Model	TC-KR(T)□□KN-G6								TC-XR(T)□□KN-G6				
	<span style="background-color: #ff0000; color: white; padding: 2px;">TEDS</span> (Embedded in the body) <span style="background-color: #008000; color: white; padding: 2px;">RoHS</span> (10 substances)								<span style="background-color: #ff0000; color: white; padding: 2px;">TEDS</span> (Embedded in the body) <span style="background-color: #008000; color: white; padding: 2px;">RoHS</span> (10 substances)				
Rated Capacity (R.C.)	5kN	10kN	20kN	30kN	50kN	100kN	200kN	300kN	20kN	50kN	100kN	200kN	300kN
Natural Frequency	13.2kHz	8.2kHz	10.9kHz	8kHz	13.5kHz	19kHz	10kHz	4.6kHz	7.0kHz	11kHz	13kHz	11kHz	9kHz
Weight	0.3kg	0.95kg	1.0kg	1.0kg	1.0kg	1.3kg	2.9kg	15kg	0.8kg	0.8kg	0.9kg	2.0kg	4.0kg
Safe overload rating	120 % R.C.								120 % R.C.				
Rated Output (R.O.)	1mV/V ±1%								1mV/V ±1%				
Linearity	0.5% R.O.								0.5% R.O.				
Hysteresis	0.5% R.O.								0.5% R.O.				
Repeatability	0.1% R.O.								0.1% R.O.				
Safe Excitation Voltage	18V								15V				
Input Terminal Resistance	350 ±3.5Ω	700 ±7Ω						700 ±7Ω					
Output Terminal Resistance	350 ±3.5Ω	700 ±7Ω						700 ±7Ω					
Insulation Resistance	2000MΩ or more (DC 50V)								2000MΩ or more (DC 50V)				
Compensated Temperature Range	-10°C to 70°C								0°C to 60°C				
Permissible Temperature Range	-20°C to 100°C								-10°C to 80°C				
Temperature Effect on Zero Balance	0.1% R.O. / 10°C								0.5% R.O. / 10°C				
Temperature Effect on Output	0.1% R.C. / 10°C								0.5% R.C. / 10°C				
Cable	Φ6, 6-core shielded, 3m direct connection robot cable with bare lead wires								Φ6, 6-core shielded, 3m direct connection robot cable with bare lead wires				
Mounting Method	Screw Hole								Screw Hole				
Body Material	Nickel-chrome-molybdenum Steel								Nickel-chrome-molybdenum Steel				

Dimensional drawings  
(Units: mm)



TC-KR(T)□□KN-G6

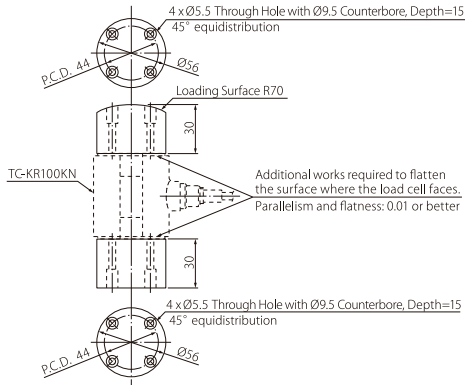


TC-XR(T)□□KN-G6

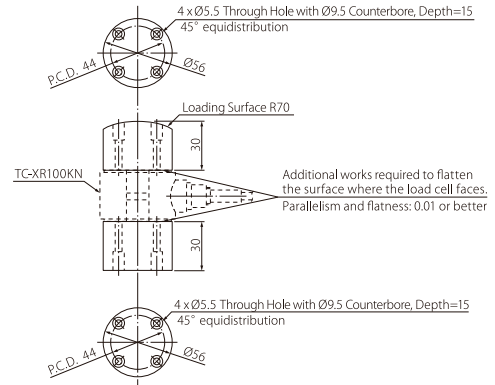
Rated Capacity	ØA	ØB	C	D	ØE	ØF	G	H	ØJ	K	
5kN	510kgf	40	35	50	1	24	10	2x4 xM4 Depth=8	25	26	29
10kN	1.02tf	62	55	70	2	44	18	2x4 xM5 Depth=8	35	26	40
20kN	2.04tf	62	55	70	2	44	18	2x4 xM5 Depth=8	35	26	40
30kN	3.06tf	62	55	70	2	44	18	2x4 xM5 Depth=8	35	26	40
50kN	5.1tf	62	55	70	2	44	18	2x4 xM5 Depth=8	35	26	40
100kN	10.2tf	62	55	80	2	44	18	2x4 xM5 Depth=8	40	26	40
200kN	20.4tf	88	80	100	2	60	20	2x4 xM8 Depth=12	50	26	53
300kN	30.6tf	100	90	120	2	70	20	2x4 xM8 Depth=15	60	26	59

Rated Capacity	ØA	ØB	C	D	ØE	ØF	G	H	ØJ	K	
20kN	2.04tf	62	56	35	1	44	18	2x4 xM5 Depth=7	17.5	20	40
50kN	5.1tf	62	56	35	1	44	18	2x4 xM5 Depth=7	17.5	20	40
100kN	10.2tf	62	56	40	1	44	18	2x4 xM5 Depth=7	20	20	40
200kN	20.4tf	86	78	50	2	60	20	2x4 xM8 Depth=10	25	26	52
300kN	30.6tf	100	90	70	2	70	20	2x4 xM8 Depth=12	35	26	59

The drawings for the JIG attachment dimensions and the geometric tolerance are available in the dimensional drawing section of the web site.



Reference drawing for the TC-KR(T)-G6 series JIG attachment



Reference drawing for the TC-XR(T)-G6 series JIG attachment

Related Products (Indicators and Signal Conditioners)



**New**  
EtherNet/IP™ model  
CC-Link model

92 x 92mm  
Panel opening size

Color Graphics Digital Indicator  
**TD-9000T**

RS-485 model  
EtherNet/IP™ model  
CC-Link model

**High performance model with large LCD**

Supporting two inputs, force sensor and displacement sensor, various comparison judgments function, and direct saving of waveform data onto large capacity internal memory.



EtherNet/IP™

EtherNet/IP is a trademark of ODVA, Inc. Other company names, product names and logos in this document are the trademarks or registered trademarks of their respective holders.



92 x 45mm  
Panel opening size

Digital Indicator  
**TD-700T**

Standard model  
CC-Link model  
RS-485 model

**Excellent model with compact and high functionality**

Supporting five key functions in one unit, numeric display, graph display, TEDS function, static strain display, and signal conditioner. This small and cost-effective TD-700T achieves equal or even higher performance to upper-class models, with high-visibility color LCD and various hold functions.



**New**

Attaches to  
common DIN rails

Signal Conditioner  
**TD-SC1**

D/A model  
RS-485 model

**Slim and light-weight signal conditioner**

Supporting high-speed sampling of 20,000 times/second, PC-based configuration via USB connection, selectable network, and TEDS calibration function.



CC-Link™ EtherNet/IP™

\* Under planning



Weights only 320g  
(incl. batteries)

Portable Digital Indicator  
**TD-01 Portable**

**On-site checking tool with versatility**

Supporting various functions that equal to embedded systems, in hand-held size, allowing you to take measurements anytime anywhere, according to your purpose.



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