

Universal load cell for all static and dynamic applications in the areas of industrial testing, experimental mechanics and assembly testing.

## FEATURES:

- Strain gage principle
- Extremely low weight
- Small, robust universal transducer
- Simple mounting, high reliability
- Convincing price-performance ratio
- Numerous adaptations possible

## SPECIFICATIONS:

Nominal sensitivity (tension/compression)	C nom	mV/V	2
Class			0.1
Interpolation deviate	f <sub>c</sub>	%	<0.1
Realtime output tolerance (compression)	D <sub>c</sub>	%	<0.1
Relative zero balance	d <sub>s.o</sub>	mV/V	±0.02
Relative Hysteresis	u	%	0.1
Relative creep (tB=30min)	d <sub>crF,E</sub>	%	<±0.05
Temperature effect per 10 K on: zero, in % ORL	T <sub>K0</sub>	%	0.05
span	T <sub>KC</sub>	%	0.1
Eccentricity effect per mm	d <sub>E</sub>	%	0.05
Effect of lateral forces (10% F <sub>nom</sub> )	d <sub>Q</sub>	%	0.1
Input impedance	R <sub>e</sub>	Ohm	ca. 380
Output impedance	R <sub>a</sub>	Ohm	ca. 350
Insulation impedance	R <sub>is</sub>	Ohm	>2*10 <sup>9</sup>
Reference excitation	U <sub>ref</sub>	V	10
Maximum excitation	U <sub>e,max</sub>	V	12
Nominal temperature	B <sub>t,nom</sub>	° C	-10 to +70
Reference temperature	t <sub>ref</sub>	° C	22 ±1
Service temperature range	B <sub>t,G</sub>	° C	-20 to +85
Static Overload in % ORL	F <sub>L</sub>	%	150
Static safe lateral force in % of capacity <sup>1)</sup>	F <sub>Q</sub>	%	80
Ultimate static overload in % ORL <sup>1)</sup>	F <sub>B</sub>	%	>300
Protection rating acc. to DIN VDE 0470-1			IP67
Permissible dynamic load range <sup>1)</sup>			2xF <sub>nom</sub>

1) see also Lebow load diagrams

## Model 3161-300 Force Transducer



## ACCESSORIES AVAILABLE:

- Swivel Joints
- Threaded Bolts
- Load Buttons

Consult factory.

**Lebow® Products Inc.**

1728 Maplelawn Road • P.O. Box 1089  
Troy, Michigan 48084-1089 USA

**800 803-1164**

Phone: +1 248 643-0220

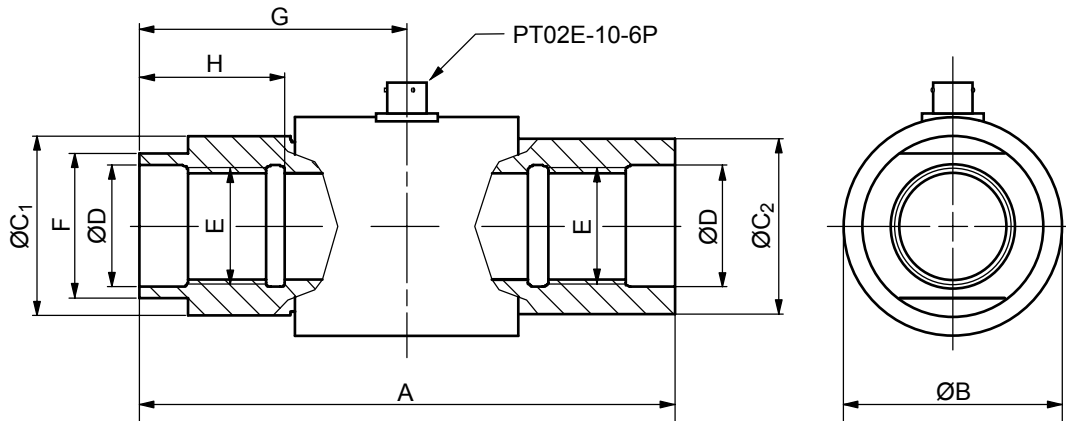
Fax: +1 248 643-0259

Email: lebowsales@lebow.com

Visit our web site!! [www.lebow.com](http://www.lebow.com)

# Lebow® Products Inc.

## DIMENSIONS:



Model 3161-300 Series							
Nominal capacity (tens./compr.)	±F nom	kN	20	50	100	200	500
Height	A	mm	94	110	155	185	270
Overall diameter	ØB	mm	38	45	70	85	125
Connection thread	E		M20x1.5	M24x2	M39x2	M48x2	M72x4
Diameter A/F-side	ØC1	mm	30	37	60	75	115
Diameter other side	ØC2	mm	29	36	59	74	113
Internal diameter	ØD	mm	21	25	40	50	74
Width across flats	F	mm	24	30	55	69	100
Cable entry position	G	mm	47	55	77.5	92.5	135
max. engagement length	H	mm	25	30	46	54	83
Tightening torque (oiled, =0.12)		Nm	75	250	750	1800	6800
Weight		kg	0.4	0.7	2.3	4.3	15
Nominal deflection		mm	0.04	0.07	0.09	0.12	0.21

Subject to change