



## Product Description

Flintec Force Transducers are designed to meet the most stringent accuracy requirements. The CT2 *Fatigue Rated* shear web metric series force transducers offer:

## Key Features

- Capacities: 1.25 kN to 250 kN
- Fatigue rated to 100 Million reverse cycles
- High accuracy (0.03-0.05%)
- Low height
- First choice for structural and materials testing
- Guaranteed maximum off-centre load and moment error
- Low creep
- Low susceptibility to magnetic fields
- Barometric pressure compensated
- Temperature compensated
- Bayonet connector
- Protection IP 67

## Options

- Additional bridges
- Output adjustment to standard
- Compression overload protection
- Integral cable
- Custom connectors
- Imperial versions available

## Available Accessories

- Mating connector
- Loading fixtures
- Interconnection cable
- Shunt calibration connector
- Instrumentation

Specifications						
MODEL			CT2-10M-	CT2-10M-	CT2-20M-	CT2-30M-
Maximum capacity	(E <sub>max</sub> )	kN	1.25 / 2.5 / 5	12,5 / 25	50 / 125	250
<b>ACCURACY</b>						
Static error band		%*RO	≤ ± 0.03	≤ ± 0.04		≤ ± 0.05
Non-linearity		%*RO	≤ ± 0.04	≤ ± 0.04		≤ ± 0.05
Hysteresis		%*RO	≤ ± 0.03	≤ ± 0.04		≤ ± 0.05
Non-repeatability		%*RO			≤ ± 0.01	
Creep error (20 minutes)		%*RO			≤ ± 0.03	
Off-centre load sensitivity		%*RO/cm			≤ ± 0.4	
Side load sensitivity		%*RO			≤ ± 0.1	
Zero balance		%*RO			≤ ± 1.0	
<b>TEMPERATURE</b>						
Compensated temperature range		°C			-10...+45	
Operating temperature range		°C			-55...+90	
Temperature effect on sensitivity	(TC <sub>LC</sub> )	%*of reading/°C			≤ ± 0.0015	
Temperature effect on zero	(TC <sub>0</sub> )	%*RO/°C			≤ ± 0.0027	
<b>ELECTRICAL</b>						
Rated Output	(RO)	mV/V	1 ± 10%		2 ± 10%	
Excitation voltage		V			recommended 10, max. 20	
Input resistance	(R <sub>LC</sub> )	Ω			350 +40/-3.5	
Output resistance	(R <sub>out</sub> )	Ω			350 ± 3.5	
Insulation resistance (50 V DC)		MΩ			≥ 5000	
<b>MECHANICAL</b>						
Safe load limit	(E <sub>im</sub> )	%*E <sub>max</sub>			300	
Weight (without base)		kg	0.45	1.30	4.13	10.66
Weight (with base)		kg	1.13	2.95	9.75	23.81
Flexure material			aluminium		steel	
Protection according EN 60 529					IP 67	

Dimensions (in mm)										
Type	H1	H2	H3	H4	H5	D1	D2	D3	cell thread	base thread
CT2-10M-1.25/2.5/5 kN	3.1	31.8	28.7	0.8	5.1	104.8	32.8	31.8	M12x1.25	M12x1.25
CT2-10M-12.5/25 kN	3.1	31.8	28.7	0.8	5.1	104.8	32.8	31.8	M16x2	M16x2
CT2-20M-50/125 kN	3.1	41.4	44.5	0.8	7.6	154.0	50 kN-59.4 125 kN-65.5	57.2	M33x2	M33x2
CT2-30M-250 kN	6.3	57.2	50.8	0.8	10.2	203.2	95.5	76.2	M42x2	M42x2

Wiring	
<ul style="list-style-type: none"> <li>The force transducer is provided with a bayonet connector (type MS3112E10-6P, pin assignment see table)</li> <li>The suitable cable connector (type MS3116F10-6S) and assembled connection cables are available on request</li> </ul>	
Connector pin	Function
A	+ Excitation / + Sense
B	+ Signal
C	- Signal / ShuntCal
D	- Excitation / - Sense