



Product Description

Flintec Force Transducers are designed to meet the most stringent accuracy requirements. The CT3 *Precision* shear web metric series force transducers offer the following items.

Key Features

- Capacities: 1.5 kN to 500 kN
- High accuracy (0.02-0.04 %)
- 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
- Output up to 4 mV/V
- 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			CT3-10M-	CT3-10M-	CT3-20M-	CT3-30M-
Maximum capacity	(E _{max})	kN	1.5 / 2.5 / 5 / 10	25 / 50	100 / 250	500
ACCURACY						
Static error band		%*RO	≤ ± 0.02	≤ ± 0.03	≤ ± 0.04	≤ ± 0.05
Non-linearity		%*RO	≤ ± 0.03	≤ ± 0.04		≤ ± 0.05
Hysteresis		%*RO	≤ ± 0.02	≤ ± 0.04		≤ ± 0.05
Non-repeatability		%*RO	≤ ± 0.01			
Creep error (20 minutes)		%*RO	≤ ± 0.03			
Off-centre load sensitivity		%*RO/cm	≤ ± 0.04	≤ ± 0.25		
Side load sensitivity		%*RO	≤ ± 0.1	≤ ± 0.25		
Zero balance		%*RO	≤ ± 1.0			
TEMPERATURE						
Compensated temperature range		°C	-10...+45			
Operating temperature range		°C	-55...+90			
Temperature effect on sensitivity	(TC _{LC})	%*of reading/°C	≤ ± 0.0015	≤ ± 1.0		
Temperature effect on zero	(TC ₀)	%*RO/°C	≤ ± 0.0027			
ELECTRICAL						
Rated Output	(RO)	mV/V	2 ± 10%	4 ± 10%		
Excitation voltage		V	recommended 10, max. 20			
Input resistance	(R _{LC})	Ω	350 +40/-3.5			
Output resistance	(R _{out})	Ω	350 ± 3.5			
Insulation resistance (50 V DC)		MΩ	≥ 5000			
MECHANICAL						
Safe load limit	(E _{lim})	%*E _{max}	150			
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
CT3-10M-1.5/2.5/5/10 kN	3.1	31.8	28.7	0.8	5.1	104.8	32.8	31.8	M12x1.25	M12x1.25
CT3-10M-25/50 kN	3.1	31.8	28.7	0.8	5.1	104.8	32.8	31.8	M16x2	M16x2
CT3-20M-100/250 kN	3.1	41.4	44.5	0.8	7.6	154.0	100 kN-59.4 250 kN-65.5	57.2	M33x2	M33x2
CT3-30M-500 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"> The force transducer is provided with a bayonet connector (type MS3112E10-6P, pin assignment see table) The suitable cable connector (type MS3116F10-6S) and assembled connection cables are available on request 	
Connector pin	Function
A	+ Excitation / + Sense
B	+ Signal
C	- Signal / ShuntCal
D	- Excitation / - Sense