

Type CT4 Metrology Grade Force Transducer



Product Description

Flintec Force Transducers are designed to meet the most stringent accuracy requirements. The CT4 *Metrology Grade* shear web metric series force transducers offer the following items.

Key Features

- Capacities: 1.5 kN to 450 kN
- High accuracy:
 - ASTM E74 Class AA to 10% of range
 - ASTM E74 Class A to 2% of range
 - ISO 376 Class 0.5
- Low height
- 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

Includes

- Male/Male thread adaptor in flexure
- ASTM E74 Calibration with NIST / NVLAP accreditation
- Two-year conditional warranty

Options

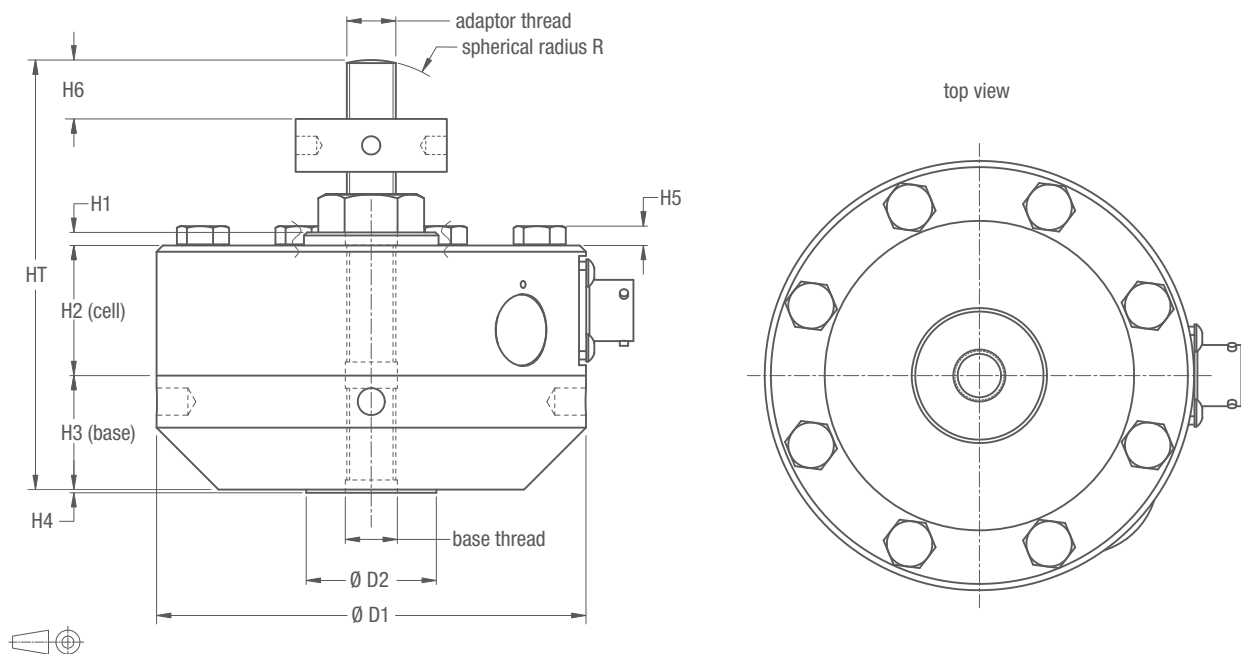
- Male/Male thread adaptor in flexure
- ASTM E74 Calibration with NIST / NVLAP accreditation
- Two-year conditional warranty

Available Accessories

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

Specifications						
MODEL			CT4-10M-	CT4-10M-	CT4-20M-	CT4-30M-
Maximum capacity	(E _{max})	kN	1.5 / 2.5 / 5 / 10	25 / 50	100 / 250	450
ACCURACY						
Static error band		%*RO	≤ ± 0.02	≤ ± 0.03	≤ ± 0.04	≤ ± 0.05
Non-linearity		%*RO	≤ ± 0.02	≤ ± 0.04		≤ ± 0.05
Hysteresis		%*RO	≤ ± 0.02	≤ ± 0.04		≤ ± 0.05
Non-repeatability		%*RO	≤ ± 0.005	≤ ± 0.01		
Creep error (20 minutes)		%*RO	≤ ± 0.015	≤ ± 0.03		
Off-centre load sensitivity		%*RO/cm	≤ ± 0.02	≤ ± 0.25		
Side load sensitivity		%*RO	≤ ± 0.05	≤ ± 0.25		
Zero balance		%*RO	≤ ± 1.0	≤ ± 1.0		
TEMPERATURE						
Compensated temperature range		°C	-10...+45			
Operating temperature range		°C	-55...+90			
Temperature effect on sensitivity	(T _{LC})	%*of reading/°C	≤ ± 0.0015	≤ ± 1.0		
Temperature effect on zero	(T _{C0})	%*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		kg	1.3	3.1	10.8	26.2
Flexure material			aluminium	steel		
Protection according DIN 40.050			IP 67			

Dimensions (in mm).



Type	H1	H2	H3	H4	H5	H6	HT	D1	D2	R	adapt. thread	base thread
CT4-10M-1.5/2.5/5/10 kN	3.1	31.8	28.7	0.8	5.1	19.1	106.4	104.8	31.8	152.4	M12x1.25	M12x1.25
CT4-10M-25/50 kN	3.1	31.8	28.7	0.8	5.1	38.1	163.6	104.8	31.8	152.4	M16x2	M16x2
CT4-20M-100/250 kN	3.1	41.4	44.5	0.8	7.6	38.1	163.6	154.0	57.2	152.4	M33x2	M33x2
CT4-30M-450 kN	6.3	57.2	50.8	0.8	10.2	44.5	200.2	203.2	76.2	304.8	M42x2	M42x2

Wiring

- The force transducer is provided with a bayonet connector.