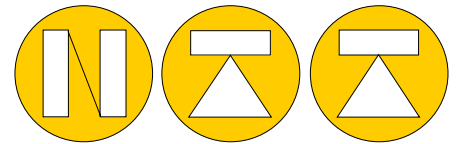


TC4-AMP

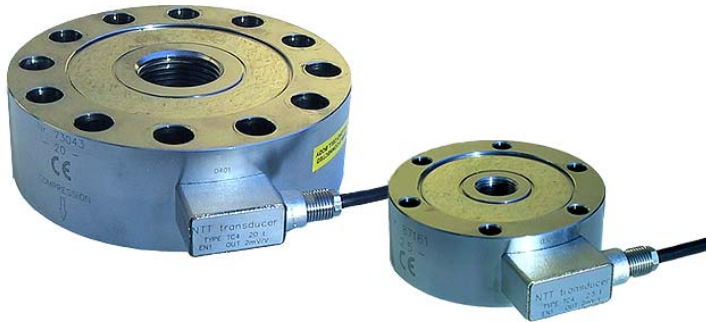


NORDIC TRANSDUCER

Compression load cell up to 500 ton or 5000kN load

Tension up to 250ton or 2500kN

Output: 4-20mA or +/-5V or +/-10V



- ° Typical used in test system with direct connection to PC or PLC
- ° Very fast reaction from the cell material
- ° Other force measuring applications
- Please also notice !**
- ° 100 % safe side load
- ° 75% dynamic load

The TC4-AMP is a low profile hermetically sealed load cell made in stainless steel with IP67 protection . Their compact size makes them ideally suited for applications where space also is limited & where high side forces or dynamic loads are present. They can together with our high accuracy instruments be used as dynamic load cells for many types of jobs as weighing & test systems.

SPECIFICATIONSTC4

NOMINAL LOAD in ton	0.5-1-2.5-5.0-10-20-30-50-75-100-200-300-500		
Linearity F.S.	< +/- 0.05%		
Hysteresis F.S	< +/- 0.05%		
Minimum working range 20%	= 0 to 20% of max. capacity		
Repeatability	< +/- 0.040%		
Zero F.S.	< +/- 0.030%		
Temp. effect on zero per 10°C	< +/- 0.028 %		
Temp. effect on span per 10°C	< +/- 0.024 %		
Effect of transversal load	at: 10% of nominal load < +/-0.030% F.S.		
OUTPUTS 3 wire	4-20mA, +/-5V +/-10V		
Sensitivity Tolerance	+/-0.1%	DISPLACEMENT N.LOAD mm	0.06,0.09,0.17,0.17,0.23,0.21,0.21
ZERO BALANCE	+/-1%	NOMINAL TEMP. RANGE	-10/+40 °C
SUPPLY VOLTAGE N.24V	12- 28 Volt	SERVICE TEMP. RANGE	-20/+70 °C
MECHANICAL LIMIT VALUES RELATED TO NOMINAL LOAD	STORAGE TEMP. RANGE		-20/+80 °C
	PROTECTION CLASS		IP67
a) minimum load	0%	WEIGHT	1.60- 2.45-5.80-6.8-16.5-63kg
b) service load	120%	CELL MATERIAL	Stainless IP67
c) max. permissible load	150%	CABLE LENGTH	5/10 meter or connector
d) breaking load	>300%	FIXING SCREWS CLASS	--12.9--
e) max. side load	100%	Diameter M	M8- M10 - M16 -M24-M27
f) max. dynamic load *3	75%	Tightening torque Nm	40 , 70, 368, 460, 1500Nm

Gravity acceleration $g = 9.804537 \text{ m/s}^2$

* Test and calibration performed in Compression with load cell mounted on a bearing support with correctly tightened clamping bolts

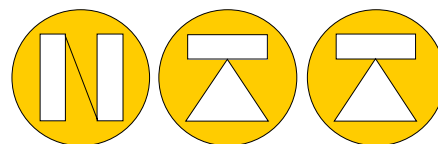
*3 The Dynamic load must be applied to the load cell central thread and not to the external fixing ring.

All specifications subject to change without notice

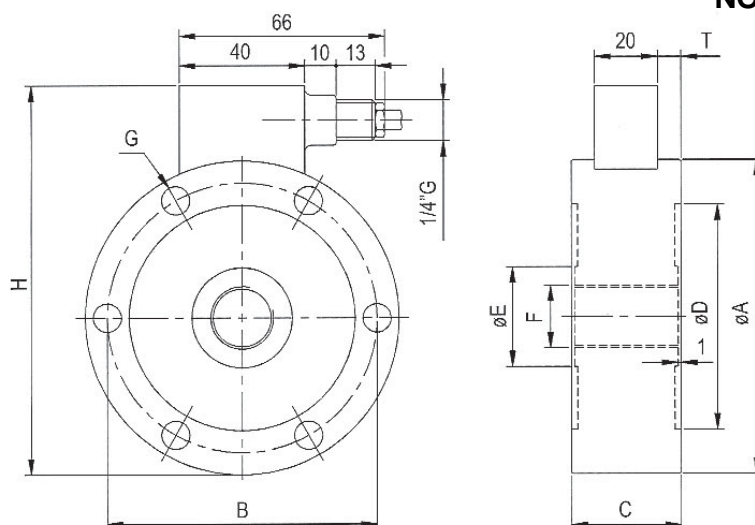
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DIMENSIONS TC4-AMP



NORDIC TRANSDUCER



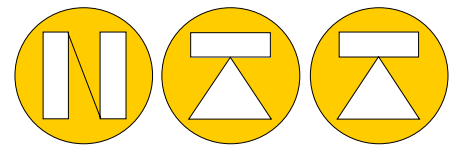
CODE	LOADS	øA	øB	C	øD	øE	øF	øG	Holes	H	T
TC41005KN	5kN	100	86	35	72	32	M20x1.5	9.0	6	121	7.5
TC410010KN	10kN	100	86	35	72	32	M20x1.5	9.0	6	121	7.5
TC410025KN	25kN	100	86	35	72	32	M20x1.5	9.0	6	121	7.5
TC412750KN	50kN	127	110	35	92	47	M30x2	10.5	8	149	7.5
TC4127100KN	100kN	127	110	35	92	47	M30x2	10.5	8	149	7.5
TC4165200KN	200kN	165	138	50	108	62	M42x3	17.0	12	188	15
TC4165300KN	300kN	165	138	50	108	62	M42x3	17.0	12	188	15
TC4165500KN	500kN	165	138	60	108	62	M42x3	17.0	12	190	20
TC4230750KN	750kN	230	185	80	145	98	M60x3	26.0	12	254	30
TC42301MN	1000kN	230	185	80	145	98	M60x3	26.0	12	254	30
TC43002MN	2000kN	300	250	100	198	132	M100x3	26.0	16	274	40
TC43503MN	3000kN ⁽³⁾	350	294	120	241	171	M100x3	29.0	16	274	50
TC43505MN	5000kN ⁽³⁾	350	294	120	241	171	M100x3	29.0	16	274	50

⁽²⁾ Natural frequency

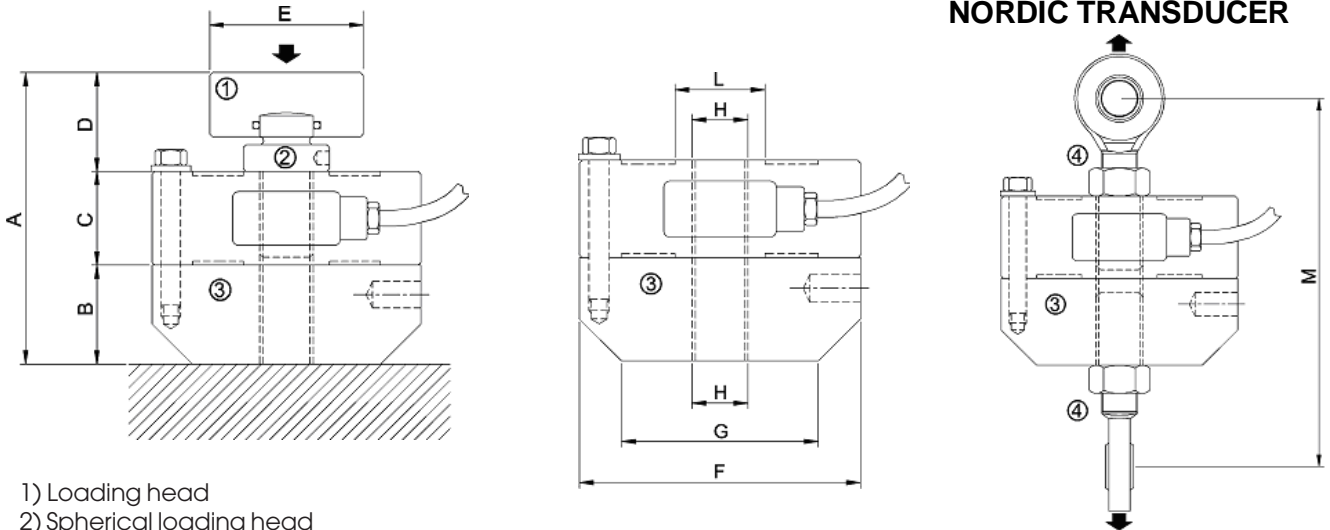
⁽³⁾ Up to 2500kN in tension

TC4-AMP can be supplied calibrated in ton or N,
or with M12 or MILL connector instead of cable

TC4-AMP accessories



NORDIC TRANSDUCER



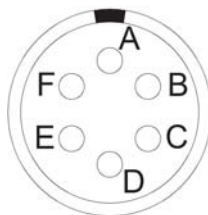
- 1) Loading head
- 2) Spherical loading head
- 3) Mounting base for compression and tension
- 4) Rod end bearings

TC4:	A	B	C	D	E	F	G	H	L	M
5, 10, 25 kN	109	37	35	37	∅ 57	∅ 100	∅ 70	M 20 X 1.5	∅ 32	~ 170
50, 100 kN	110	37	35	38	∅ 76	∅ 127	∅ 100	M 30 X 2	∅ 47	~ 200
200, 300kN	158	60	50	59	∅ 76	∅ 165	∅ 100	M 42 X 3	∅ 62	~ 224
500 kN	169	60	60	59	∅ 76	∅ 165	∅ 100	M 42 X 3	∅ 62	/
750, 1000 kN	253	85	80	88	∅ 126	∅ 230	∅ 180	M 60 X 3	∅ 98	/
2000 kN	324	100	100	124	∅ 126	∅ 300	∅ 250	M 100 X 3	∅ 132	/
3000, 5000kN	384	120	120	144	∅ 168	∅ 350	∅ 280	M 100 X 3	∅ 171	/

Other options:



Mill connector 6 pole



Picture seen from soldering side

AMP

If supplied with Connector & mounted with cable, the cable length is 5m as standard.

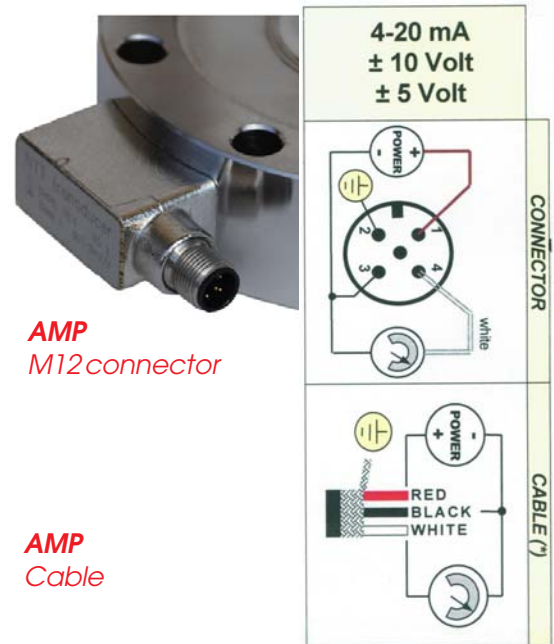
AMP Mill connector for 4-20mA or Voltage output:

- Power supply 12-24VDC = A (RED)
- 0V/ -Signal = B (BLACK)
- Signal Output + = D (WHITE)
- Earth / shield = F connected to Body

INDUSTRIAL STANDARD OUTPUT

4-20mA - +/-5Volt or +/-10Volt 3wire system

Calibration tolerance is +/-0.1%
 Nominal power supply is 12-24Vdc max. 28 Volt
 Max. absorption is 30mA (without load applied)
 A 5 point test report can also be supplied as a option at order time.



AMP M12 connector

AMP Cable

Cable: PVC 105°C ∅5.2mm with 4 tinned conductors ∅ 0.3and tinned shield All specifications subject to change without notice

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