



FEATURES

- ♦ High accuracy for low ranges
- ♦ Integrated Spherical Load Button
- ♦ High Overload Capacity
- ♦ Small design

APPLICATIONS

- ♦ Robotics and effectors
- ♦ Micro component assembly tools
- ♦ Keyboard and phone buttons control
- ♦ Mechanical switches control

XFC200R

Miniature Compression Load Cell

SPECIFICATIONS

- ♦ Range from 0-2N to 0-10kN [0-0.45 lbf to 0-2.2 klb]
- ♦ High Stiffness
- ♦ Integrated Spherical Load Button
- ♦ Linearity < 0,5% FS

The miniature size and lightweight of the **XFC200R** facilitates testing where these conditions are necessary. Unlike sensors with flat force application surfaces, the **XFC200R** incorporates a spherical load button resulting in more precise measurements.

Its high stiffness, for the size and measurement ranges, allows measurements in dynamic applications. A strain relief spring strengthens the cable output. The sensing element is fitted with a fully temperature compensated Wheatstone bridge equipped with high stability micro-machined silicon strain gages.

To meet your needs, we also offer extensive turnkey systems. The matched components (sensor, power, amplifier and digital display) are formatted, calibrated and ready for immediate use.

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

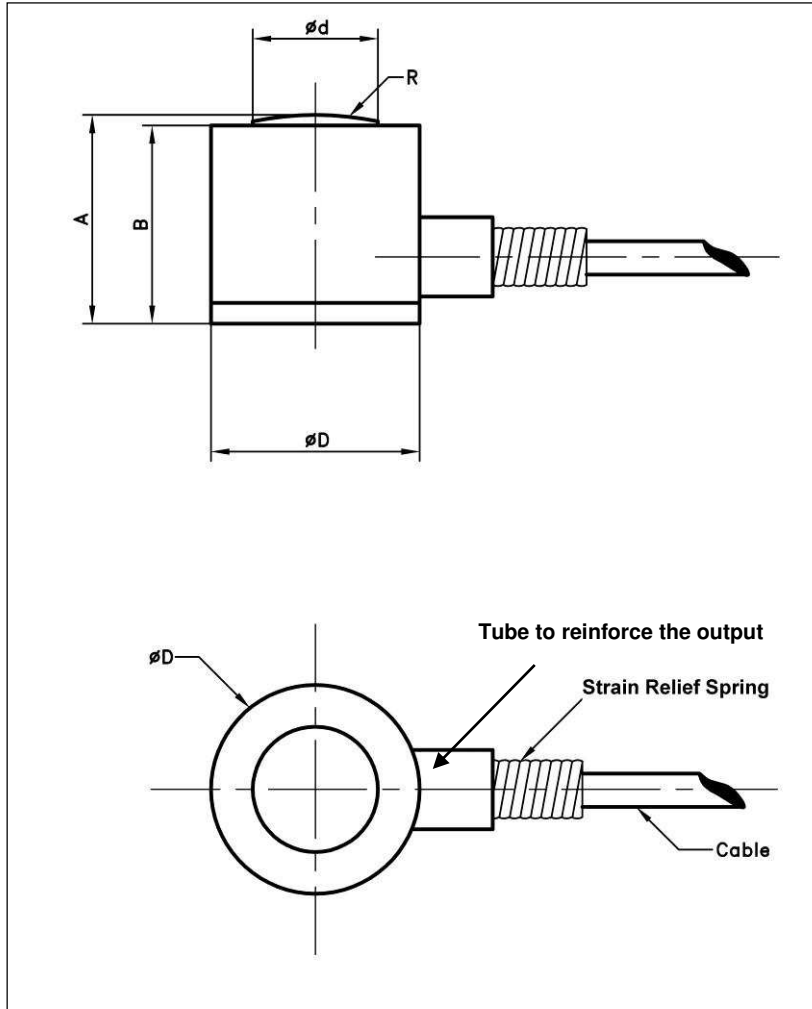
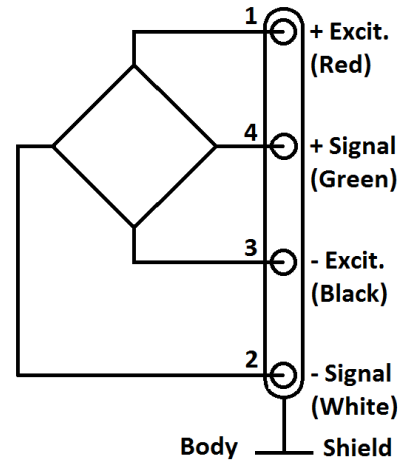
CHARACTERISTICS (typical values at temperature 23°C)

Ranges (FS)	2 N	5 N	10 N	20 N	50 N	100 N	200 N	500 N	1 kN	2 kN	5 kN	10 kN
Ranges (lbf)	0.450	1.12	2.25	4.50	11.2	22.5	45.0	112	225	450	1124	2248
Material	Aluminium					Stainless Steel		Aluminium		Stainless Steel		
Stiffness (N/m)	3.0E+05	7.8E+05	2.3E+06	4.1E+06	9.2E+06	2.0E+07	3.5E+07	1.9E+08	1.9E+08	4.3E+08	4.6E+08	1.4E+09
Stiffness (lbf/ft)	2.1E+04	5.3E+04	1.6E+05	2.8E+05	6.3E+05	1.4E+06	2.4E+06	1.3E+07	1.3E+07	2.9E+07	3.2E+07	9.6E+07
Sensitivity (FSO)	150 mV				120 mV			60 mV	120 mV			

Specifications	
Power supply	10Vdc
Overrange Without Damage	2 x FS
Overrange Without Destruction	3 x FS
Offset	<±10 mV
Input Impedance	1500 ohms
Output Impedance	500 ohms
Linearity	< ±0.5% de l'EM
Hysteresis	< ±0.5% de l'EM
Operating Temperature Range (OTR)	-40°C to +120°C (-40 to 250°F)
Compensated Temperature Range (CTR)	0°C to +60°C (32 to 140°F)
Th. Zero Shift in CTR	< 2% de l'EM/50°C
Th. Sensitivity Shift in CTR	< 2%/50°C
Insulation	> 100 Mohms
Protection Index	IP50

Notes

1. Signal goes negative in compression with standard wiring configuration
2. Electrical Termination: Shielded cable with 4 wires (AWG36/28), standard length 2 m [6.6 ft] with strain relief spring
3. Material: Body in stainless steel or aluminum alloy
4. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1

DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)**Wiring Schematic****Dimensions in mm [inch]**

F.S. Ranges in N	2 - 5	10 - 20 - 50	100 - 200	500 - 1000	2000	5000 - 10000
A	10 [0.39]					16 [0.63]
B	9,5 [0.37]					15 [0.59]
Diameter D	10 [0.39]					16 [0.63]
Diameter d	3 [0.12]	5 [0.2]		6 [0.24]		12 [0.47]
R	15 [0.59]					30 [1.18]
Tube presence	no			yes		

XFC200R

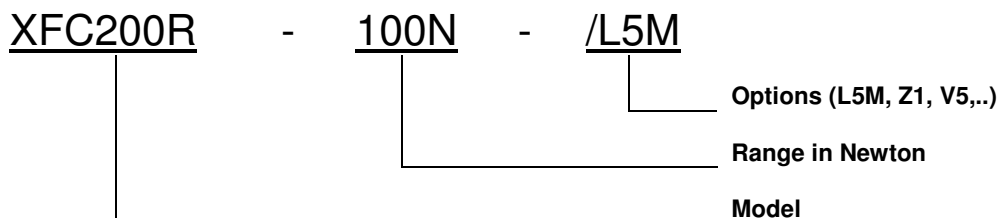
Miniature Load Cell

OPTIONS

Z0	CTR -40°C to +20°C (-40°F to 68°F)
Z04	CTR -40°C to +90°C (-40°F to 194°F)
Z1	CTR -20°C to +40°C (-4°F to 104°F)
Z3	CTR +20°C to +80°C (68°F to 176°F)
Z35	CTR +20°C to +120°C (68°F to 248°F)
HA	Accuracy (CNL&H) $\leq \pm 0.5\%$ F.S.
V00	Non-standard power supply calibration, replace "00" with value in Volt
L00M	Special cable length, replace "00" with total length in meters

* Order Flat Force application surface with reference **XFC200**.

ORDERING INFO



神州融安科技（北京）有限公司

电话：010-62127688、82057633

地址：北京市海淀区花园路2号牡丹科技楼B座三层B308室

网址：www.ronganchina.cn

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Phone: +1 800 522 6752
Email: customercare.frm@te.com

EUROPE

Measurement Specialties (Europe), Ltd.
a TE Connectivity Company
Phone: +31 73 624 6999
Email: customercare.lcsb@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Phone +86 400 820 6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.