



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 klbf]
- ♦ 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.

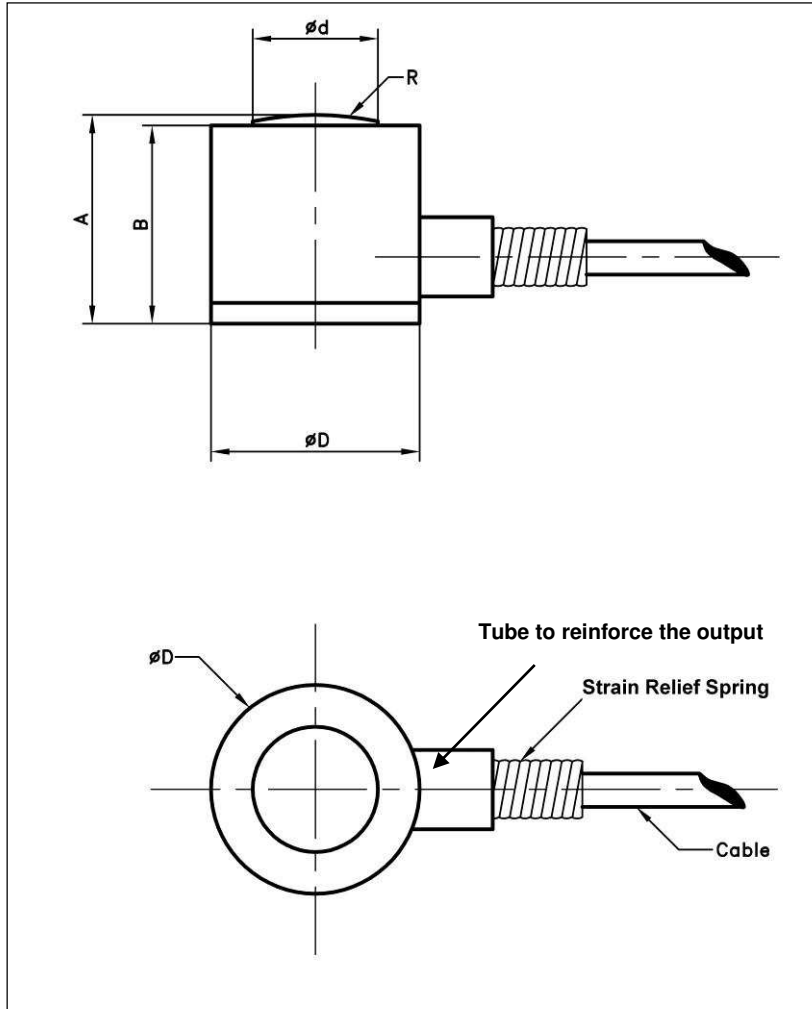
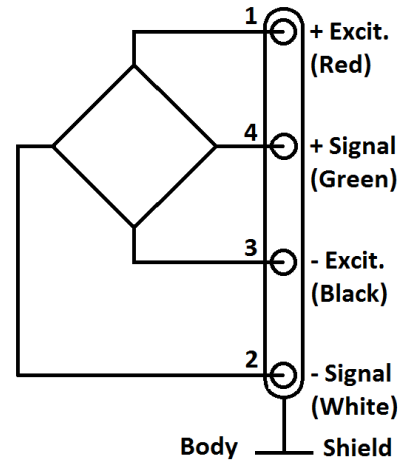
CHARACTERISTICS (typical values at temperature 23°C)

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

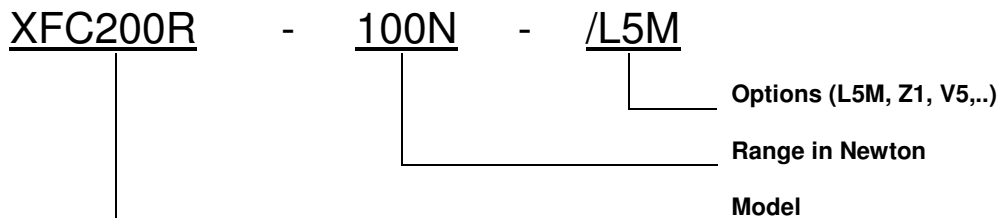
DIMENSIONS & WIRING SCHEMATIC (IN METRIC AND IMPERIAL)**Wiring Schematic****Dimensions in mm [inch]**

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		

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

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.

中国大陆
西安鑫源宇通电子科技有限公司
陕西省西安市高新区科技六路西段
西安国家数字出版基地A栋12402
Tel: 400-780-9688
sales@senstechxyz.com

中国香港
深大实业有限公司
香港新界沙田安平街6号新贸易
中心B座13楼06室
Tel: +86 17792099916
info@caltropinstruments.com

新加坡
深大实业有限公司
香港新界沙田安平街6号新贸易
中心B座13楼06室
Tel: +86 17792099919
info@senstechxyz.com