

SENSORS

LOAD CELLS AND FORCE TRANSDUCERS



GEFRAN



Thanks to forty years of experience, Gefran is the world leader in the design and production of solutions for measuring, controlling, and driving industrial production processes.

We have 14 branches in 12 countries and a network of over 80 worldwide distributors.

QUALITY AND TECHNOLOGY

Gefran components are a **concentration of technology**, the result of constant study and **cooperation with major Research Centres**.

This is why Gefran is synonymous with **quality and expertise in the design and production of force transducers**. Force transducers are built for machining of solids with a CNC machine.

For this reason, the primary sensing elements are machined from a single block and have no welds, thus guaranteeing maximum accuracy and reliability of measurement as well as maximum strength.

SERVICES

A team of Gefran experts works with the customer to select the ideal product for its application and to help install and configure devices (customercare@gefran.com).

Gefran offers a wide range of courses at different levels for the technical-commercial study of the Gefran product range as well as specific courses on demand.

In addition to foreseeing the market's application needs, Gefran forms partnerships with its customers to find **the best way to optimise and boost the performance of various applications**.



APPLICATIONS







FLUID POWER



WOOD



METAL



INDUSTRIAL LIFTING



FOOD



TEXTILE



AUTOMOTIVE



INDUSTRIAL PRINTING



PLASTICS



MATERIAL TEST MACHINES



TEST BENCHES AND TEST EQUIPMENT



TECHNOLOGY

Gefran load cells and force transducers, built in various sizes and capacities, are available in stainless or in aluminium, with protection levels from IP65 to IP68 and many precision classes.

The cells measure the deformation generated by compression, traction/compression, cutting, double cutting, and bending, and convert it by means of glued strain-gauge technology.

The strain-gauges are linked to form a Wheatstone bridge that converts the deformation into an easily managed electrical signal.

PRECISION, STRENGTH, ACCURACY

Gefran load cells and force transducers offer precision, strength, and reliability.

They have been developed for all applications demanding **maximum precision** of measurement: automation, industrial control and weighing, robotics.





Load cells and force transducers are used in many industrial applications. They have an electrical output in mV/V and a measurement range from 50 Kg to 50,000 Kg.

The range includes force transducers designed specifically for applications in the plastic film and textile/knitting industry, as well as small cells that are perfect for robotics.

LOAD CELLS AND FORCE TRANSDUCERS

GUIDE TO SELECTION



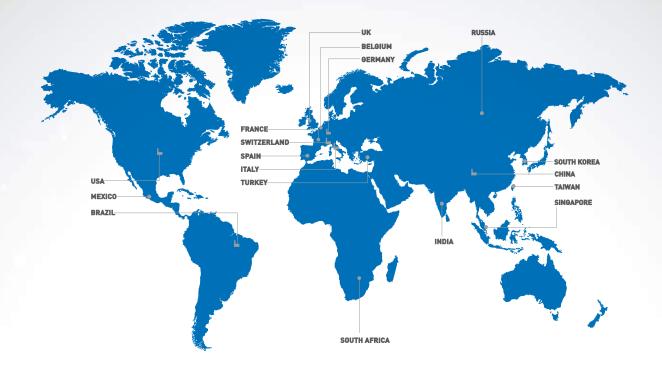
LOAD CELLS

LOAD TYPE	DIMENSIONS	RANGE	OUTPUT SIGNAL	ACCURACY	PROTECTION Level	PROTECTION Level
Compression	compact	up to 1000kg	mV/V	0,2%	IP67	cu
	standard	up to 50000kg				СМ
Traction or Compression	compact	up to 1000kg				TU
	standard	up to 20000k				тс
Cutting	standard	up to 5000kg		D1 (OIMLR60)	IP66	SB
		up to 10000kg				SH
Bending		up to 200kg		C1,C2,C3 (OIMLR60)	IP68	СВ



PROTECTION PROTECTION LOAD TYPE DIMENSIONS RANGE OUTPUT SIGNAL ACCURACY LEVEL LEVEL up to 20kN 1% AM compact up to 1500kN 1% CC Compression standard up to 3000kN 0,5% CT mV/V IP65 Traction or up to 100kN 0,2% ТН Compression standard Bending up to 2kN 0,5% TR

FORCE Transducers



GEFRAN DEUTSCHLAND GmbH

Philipp-Reis-Straße 9a D-63500 Seligenstadt Ph. +49 (0) 61828090 Fax +49 (0) 6182809222 vertrieb@gefran.de

SIEI AREG - GERMANY

Gottlieb-Daimler Strasse 17/3 D-74385 Pleidelsheim Ph. +49 [0] 7144 897360 Fax +49 [0] 7144 8973697 info@sieiareg.de

SENSORMATE AG

Steigweg 8, CH-8355 Aadorf, Switzerland Ph. +41(0)52-2421818 Fax +41(0)52-3661884 http://www.sensormate.ch

GEFRAN FRANCE SA

4, rue Jean Desparmet BP 8237 69355 LYON Cedex 08 Ph. +33 (0) 478770300 Fax +33 (0) 478770320 commercial@gefran.fr

GEFRAN BENELUX NV

ENA 23 Zone 3, nr. 3910 Lammerdries-Zuid 14A B-2250 OLEN Ph. +32 (0) 14248181 Fax +32 (0) 14248180 info@gefran.be

GEFRAN UK Ltd

Unit 7 Brook Business Centre 54a Cowley Mill Road Uxbridge UB8 2FX Ph. +44 (0) 8452 604555 Fax +444 (0) 8452 604556 sales@gefran.co.uk

GEFRAN ESPAÑA

Calle Vic, números 109-111 08160 - MONTMELÓ (BARCELONA) Ph. +34 934982643 Fax +34 935721571 comercial.espana@gefran.es

GEFRAN MIDDLE EAST ELEKTRIK VE ELEKTRONIK San. ve Tic. Ltd. Sti

Yesilkoy Mah. Ataturk Cad. No: 12/1 B1 Blok K:12 D: 389 Bakirkoy /Istanbul TURKIYE Ph. +90212 465 91 21 Fax +90212 465 91 22

GEFRAN RUSSIA

4 Lesnoy pereulok, 4 Business center "White Stone" 125047, Moscow, Russia Ph. +7 (495) 225-86-20 Fax +7 (495) 225-85-00

GEFRAN SOUTH AFRICA Pty Ltd.

Unit 10 North Precinet, West Building Topaz Boulevard Montague Park, 7411, Cape Town Ph. +27 21 5525985 Fax +27 21 5525912

GEFRAN SIEI Drives Technology Co., Ltd

No. 1285, Beihe Road, Jiading District, Shanghai, China 201807 Ph. +86 21 69169898 Fax +86 21 69169333 info@defran.com.cn

GEFRAN SIEI - ASIA

31 Ubi Road 1 #02-07, Aztech Building, Singapore 408694 Ph. +65 6 8418300 Fax +65 6 7428300 info@gefran.com.sg

GEFRAN INDIA

Survey No. 191/A/1, Chinchwad Station Road, Chinchwad, Pune-411033, Maharashtra Ph. +91 20 6614 6500 Fax +91 20 6614 6501 gefran.indial@gefran.in

GEFRAN TAIWAN

No.141, Wenzhi Rd., Zhongli City, Taoyuan County 32054, Taiwan (R.O.C.) Ph. +886-3-4273697 eddie.liao@gefran.com.sg

GEFRAN SOUTH KOREA

Room #1207, Hogue-Dong Anyang IT Valley 16-39, LS-ro 91Beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 431-848, South Korea Ph. +82 70 7578 8680

GEFRAN Inc.

8 Lowell Avenue WINCHESTER - MA 01890 Toll Free 1-888-888-4474 Fax +1 (781) 7291468 info.us@gefran.com

GEFRAN BRASIL ELETROELETRÔNICA

Avenida Dr. Altino Arantes, 377 Vila Clementino 04042-032 SÃO PAULO - SP Ph. +55 (0) 1155851133 Fax +55 (0) 1132974012 comercial@gefran.com.br

GEFRAN HEADQUARTER

Via Sebina, 74 25050 PROVAGLIO D'ISEO (BS) ITALY Ph. +39 03098881 Fax +39 0309839063

Drive & Motion Control Unit

Via Carducci, 24 21040 GERENZANO (VA) ITALY Ph. +39 02967601 Fax +39 029682653 info.motion@gefran.com Technical Assistance:

technohelp@gefran.com Customer Service

motioncustomer@gefran.com Ph. +39 02 96760500 Fax +39 02 96760278







www.gefran.com



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