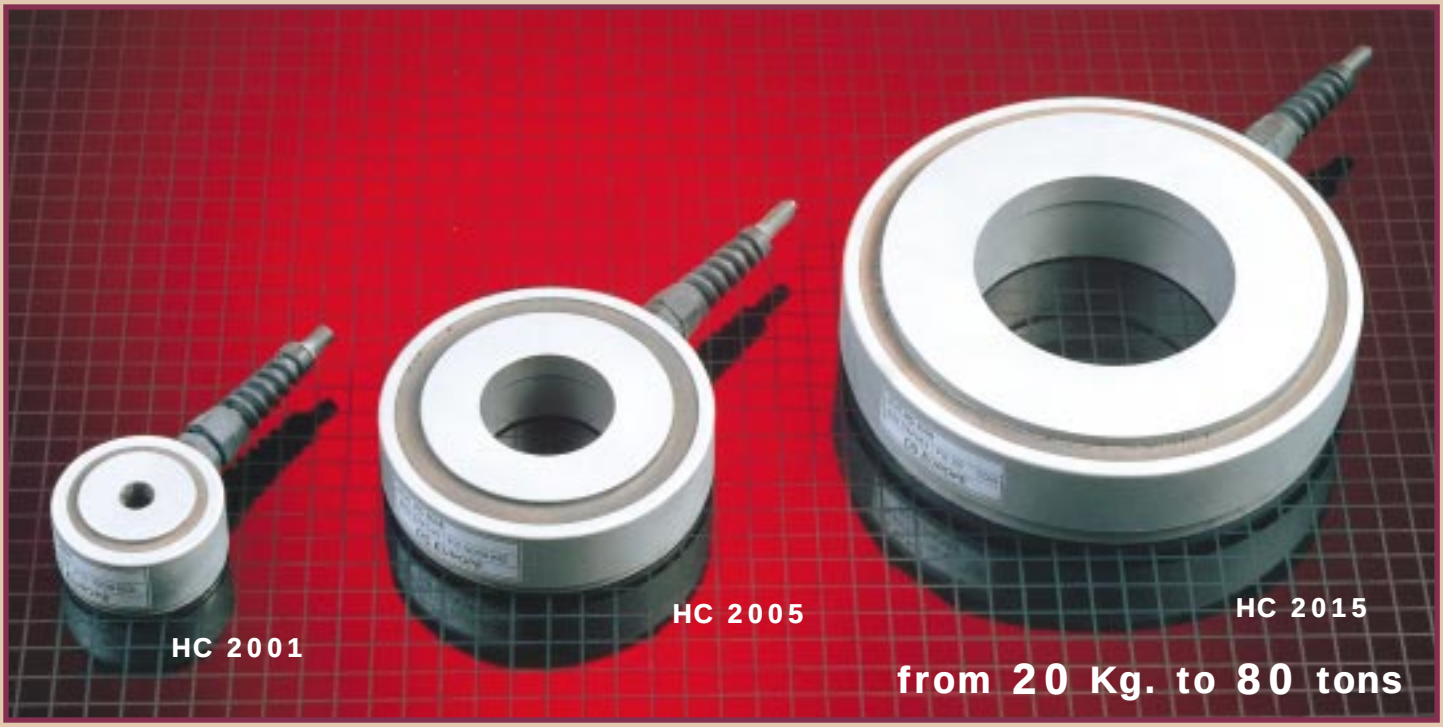
WASHER LOAD CELLS

SERIES HC 2000



APPLICATIONS AND CONSTRUCTIVE FEATURES

HC 2000 Series are washer load cells with a central hole, which supply an electrical signal proportional to the force applied in their axial direction.

These washers find application for the indication and for the automatic control and feedback of axial thrusts static and dynamic on punching machines, on machine tools, on presses, on power hammers installed directly or, better, through a thrust spherical plane bearing.

Main constructive peculiarities:

- Low profile, compactness, high strength, easiness of installation.
- Central hole diameter: large, for standard metric shafts and screws.
- Internal sensors and electrical circuits: entirely stuffed by water-repellent and high insulating silicon filler.
- Internal calibration: to allow a simple calibration of the complete system by the User.

SIGNAL CONDITIONERS AND INDICATORS DS EUROPE

***Note**: all the underlisted units, connected to the washers ES 200, set up complete measuring systems.*

- **Mod. AN 201**: *Conditioner - indicator* with microprocessor and software: 4 full digits (± 9999), LED. By simple instructions regarding the software the User can select: weighing, piece-counter, rejection of out-of-load pieces, peak indications, moreover, inside these functions can be introduced: threshold levels, delay times for the relays, bandwidth of antinoise filter. *Options*: peak measures, digital outputs RS 232 or RS 485. Windows® software.

Mod. AN 401: *Extended and more complete version of AN 201*: 5 full digits (±99999), LED. The options of AN 201, here, are standard.

Mod. 694 A: *Analog conditioner*: 2 (option: 4) alarm levels. Analog output. Supply voltages: DC: 12 to 50 V (with polarity interchangeability) or AC: 8 to 24 V.

Mod. 698 *Digital conditioner*: digital outputs: RS 422, RS 485, CAN bus. Remote controls by computer of (RS422 RS485): zero, gain, tare, mechanical unit conversion (Kg, tons, etc.); control and calibration of the measuring chain, 4 alarm levels, activation of 8 linearisation points. Supply: 6 to 28 Vdc.

TECHNICAL SPECIFICATIONS

Measuring ranges: from 20 Kg. to 80 tons (see table below). (FS = Full scale)

Total error: (non-linearity + hysteresis + sensitivity change with temperature): ≤ ± 0,2% FS.

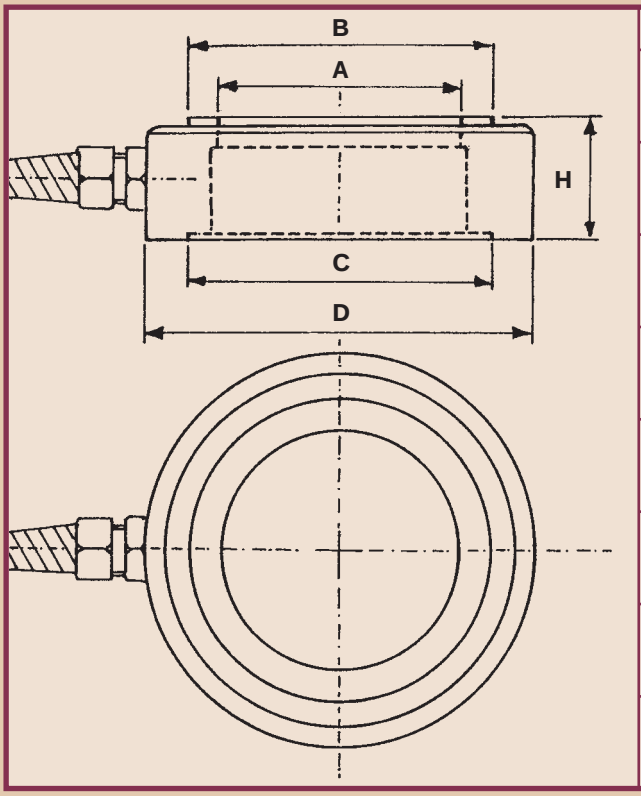
Sensitivity: 2 mV/V, typical.

Temperature effect on zero: ≤ ± 0,1 % FS, within 5° K. ***Creep:*** ≤ ± 0,1% FS, at 4 hours test FS.

Return to zero from FS: ≤ ± 0,1 % FS, after 4 hours FS.

Safe load limit: 50% over FS (see notes). ***Ultimate load limit:*** 2 times FS (see notes).

Notes: • *The load must be applied on the weighing axis, uniformly distributed on the weighing and base surfaces. Thrust spherical plane bearings are advisable.* • *For dynamic loads; with shocks and vibrations, difficult to estimate, the max load allowed has to be reduced to avoid yieldings and ruptures.*



MODEL	MEASURING RANGES	D	A	H	B	C
HC 2001 (Al)	0 to (20)-50-100-200-300 Kg.	49	10,1	26	34	44
HC 2001 (Fe)	0 to 500 - 1000 Kg.					
HC 2002 (Fe)	0 to 2 tons	78	30,1	27,5	57	67
HC 2005 (Fe)	0 to 5 tons	98	40,1	29	75	79
HC 2015 (Fe)	0 to 10 - 15 tons	116	50,1	31	93	92
HC 2030 (Fe)	0 to 30 tons	156	80,1	38	137	128
HC 2080 (Fe)	0 to 50 - 80 tons	196	100,1	39	157	152

Al=Aluminium Fe=Steel	Sizes mm	Uniform and axial distribution of the load is imperative. Thrust spherical plain bearing is advisable.

Technical specifications and prices may change without notice.

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