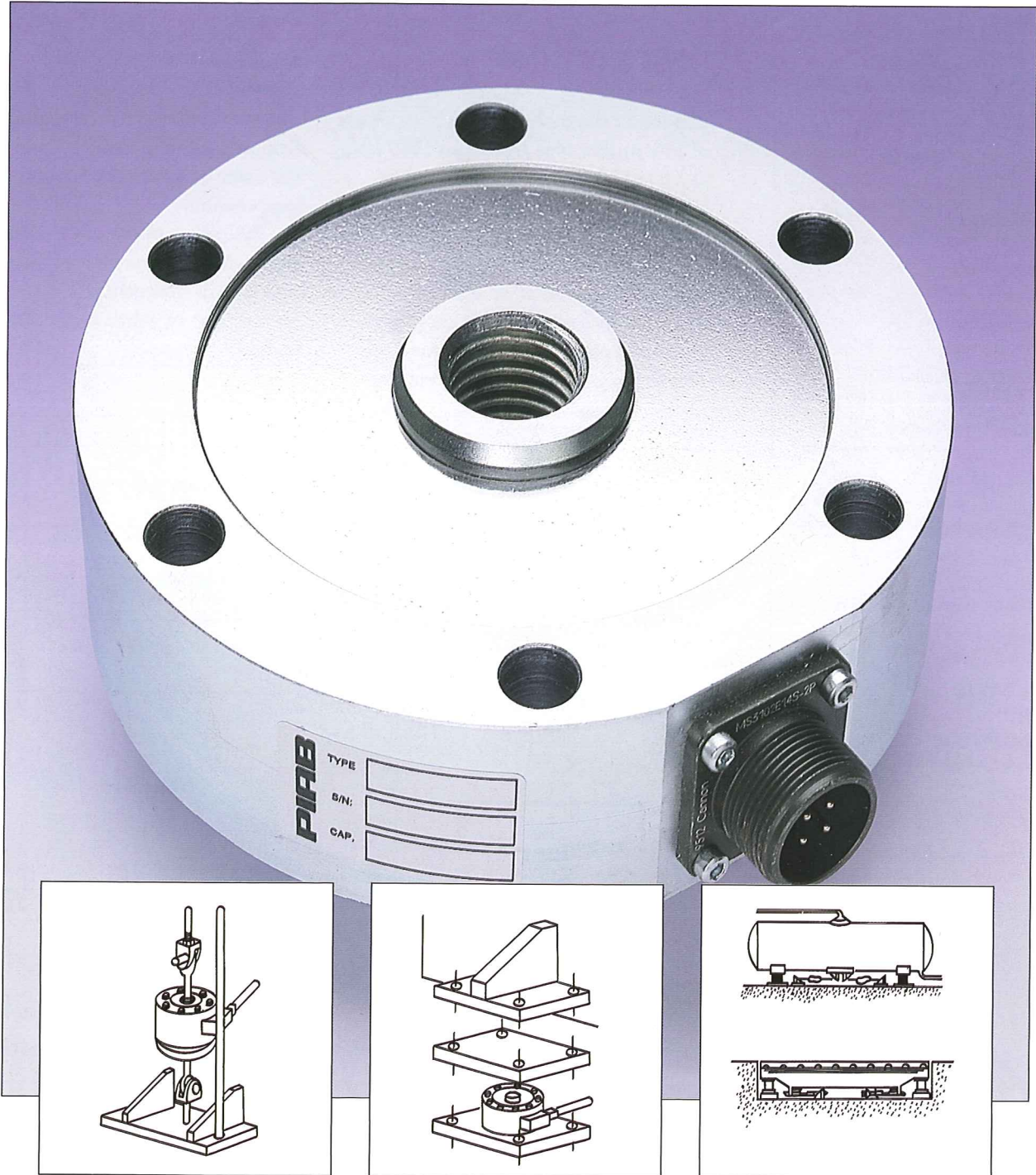


# LOAD CELL TYPE AC-AG



The PIAB AC-AG Load cell is designed for aggressive industrial use for measuring tensile and compressive loads.

**PIAB**

## TECHNICAL DATA

NON-LINEARITY	AC	AF-AG
% of R.O.	<+/-0.04	<+/-0.1
HYSTERESIS		
% of R.O.	<0.08	<0.2
REPEATABILITY		
% of R.O.	<+/-0.02	<+/-0.05
CREEP ERROR AT R.C. 30 MIN		
% of load	<+/-0.05	<+/-0.1
CREEP BETWEEN 20 AND 30 MIN		
% of load	<+/-0.01	<+/-0.025
MINIMUM LOAD OUTPUT RETURN		
% of R.O.	<+/-0.05	<+/-0.1
EXITATION		
V	10 (I5)	10 (I5)
INPUT RESISTANCE		
Ohm	410+/-20	750+/-20
OUTPUT RESISTANCE		
Ohm	350+/-3	700+/-5
INSULATION RESISTANCE		
Gohm	>5	>5
TEMP. EFFECT ON MIN. LOAD OUTP.		
% of R.O./°C	<+/-0.004	<+/-0.005
TEMP. EFFECT ON SENSITIVITY		
% /°C	<+/-0.004	<+/-0.005
COMPENS. TEMP. RANGE		
°C	-10 - +40	-10 - +30
OPERATING TEMP. RANGE		
°C	-30 - +70	-30 - +70
SAFE LOAD		
% of R.C.	150	150
BREAKING LOAD		
% of R.C.	>400	>400
PROTECTION CLASS		
IP	65.	

SURFACE PROTECTION  
El. zink coated and chromated.

CABLE LENGTH  
5 m (Or connector).

Continuous product development  
may change specification.



## FEATURES

- Accurate measurement of compressive and tensile loads.
- The load capacity range goes from 10 t to 50 t. (100 kN to 500 kN).
- Low installation height.
- Simple mounting.
- High resistance for sideloads.
- Doublebridges as option.

## DESCRIPTION

The load cells in the AC - AG series are of low profile type from 10 t (100 kN) to 50 t (500 kN). The height varies from 43 to 70 mm and the diameter from 145 to 225 mm.

The load cell is manufactured in one billet of hardened alloy steel.

The load is detected by strain gauges in radial going beams in the load cell.

The strain gauges are connected in a

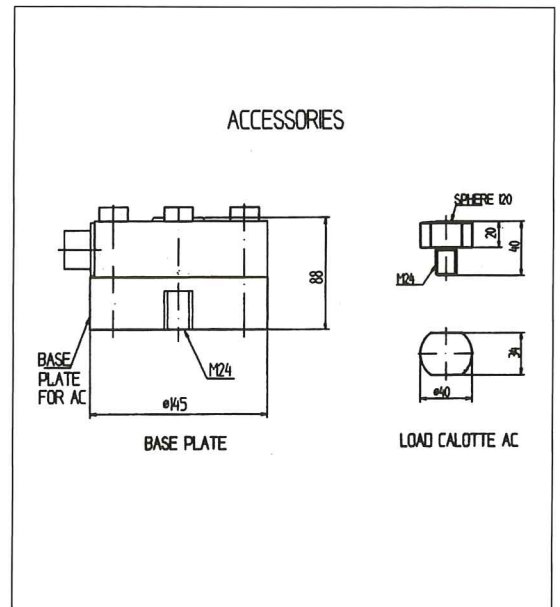
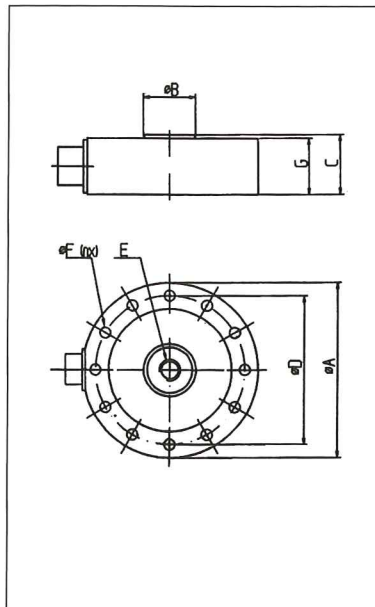
bridge delivering an analogue signal in proportion to the load.

The same accuracy for tension and compression.

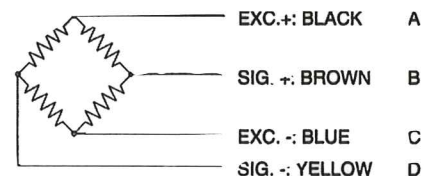
The deflection of the cell is extremely small which means high stiffness and high natural frequency.

The cell can be fabricated with double bridges.

MODELL	RATED CAP. (R.C.) ton / kN	RATED OUTP. (R.O.) mV/V +/- 0.1%	A mm	B	C	G	D	E	F	N	WEIG. kg
AC100	10/100	2.4	145	40	43	40	125	M24x3	12	6	3.6
AC200	20/200	2.3	145	40	43	40	125	M24x3	12	6	3.6
AF350	35/350	≈2.0	225	131	70	67	195	M80x2	14	12	
AG500	50/500	≈2.0	225	118	70	67	189	M52x3	14	12	



## WIRING SCHEMATIC



**GIGASENSE**

Force Measurement

Gigasense AB • P.O. Box 123  
SE-184 22 ÅKERSBERGA • Sweden  
e-mail info@gigasense.se • www.gigasense.se