

# AST-221

## "S" TYPE LOAD CELL



### DESCRIPTION :

AST-221 is a ultra high accuracy S-beam load cell suitable for both tension and compression modes.

### APPLICATIONS :

- Industrial Automation
- Universal Testing Applications
- Conversion of mechanical scale
- Tank, Bag weighing

### KEY FEATURES :

- Universal load capability
- Alloy Tool Steel construction
- Wide capacity range
- Highly precise

### SPECIFICATIONS :

|                               |   |                                      |
|-------------------------------|---|--------------------------------------|
| Rated capacity (Kgf.)         | : | 20, 50, 100, 200, 250, 300, 500, 750 |
| (Tonf)                        | : | 1, 1.5, 2, 2.5, 3, 5, 7.5, 10        |
| Excitation Voltage            | : | 10VDC-Maximum 15 VDC                 |
| Rated Output                  | : | 3.0 mV/V                             |
| Non – Linearity               | : | < ± 0.025 % FSO (Full scale Output)  |
| Hysteresis                    | : | < ± 0.02 % FSO                       |
| Non-Repeatability             | : | < ± 0.01 % FSO                       |
| Creep error (30 minutes)      | : | < ± 0.03 % FSO                       |
| Zero Load Output              | : | ± 1.0 % FSO                          |
| Input Resistance              | : | 390 ± 15 Ohms                        |
| Output Resistance             | : | 350 ± 5 Ohms                         |
| Insulation Resistance         | : | > 1000 Mega Ohms                     |
| Side Load Allowed             | : | 50 % of Rated Capacity               |
| Safe Overload                 | : | 150 % of Rated Capacity              |
| Ultimate Overload             | : | 250 % of Rated Capacity              |
| Temperature Compensated Range | : | 0 to 60° C                           |
| Temperature Effect on Output  | : | < 0.0015 % FSO/° C                   |
| Temperature Effect on Zero    | : | < 0.002 % FSO/° C                    |
| Deflection                    | : | < 0.5 mm at FSO                      |
| Tightening Torque             | : | Refer Table                          |
| Finish & Construction         | : | Electroless Nickel Plated Tool Steel |



## ADI CONTROLS

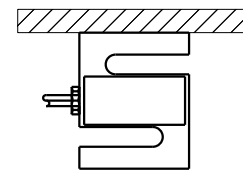
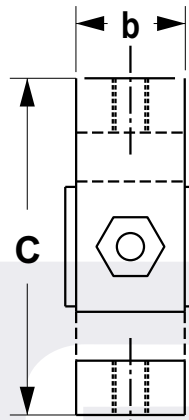
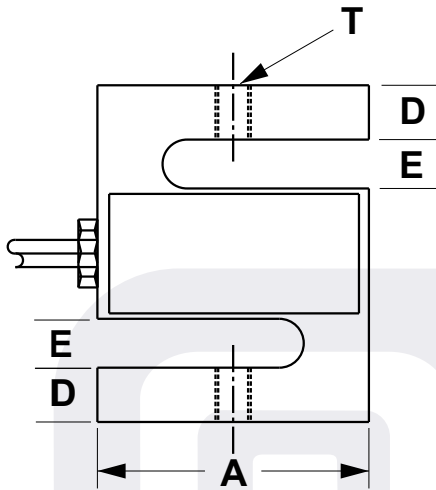
1B,1C POR INDUSTRIAL PARK  
BEHIND SAHYOG HOTEL  
POR 391243 DIST VADODARA (INDIA)

[www.adicontrols.com](http://www.adicontrols.com)

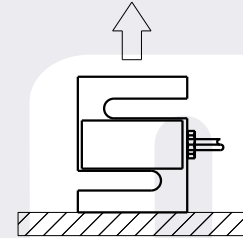
Email : [sales@adicontrols.com](mailto:sales@adicontrols.com)

Customer Care : +91 9328579990

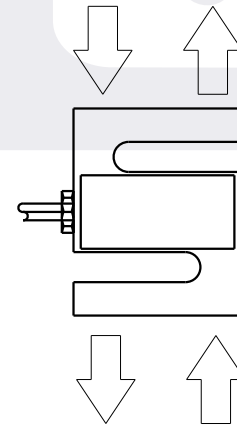
## Loading Direction



**Hanging**

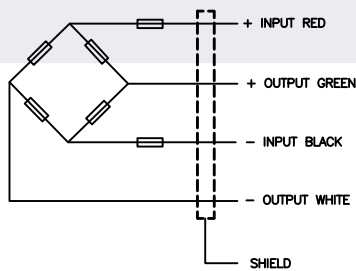


**Floor Mounting**



**Tension or  
Compression Load**

### Electrical Termination



| CAPACITY     | A   | b    | C   | D  | E  | THREAD<br>T | TORQUE<br>Kg-m | CABLE<br>Mtrs |
|--------------|-----|------|-----|----|----|-------------|----------------|---------------|
| 20 to 100    | 50  | 12.5 | 62  | 10 | 9  | M06 x 1.00  | 0.25           | 5             |
| 150 to 1000  | 50  | 19   | 62  | 10 | 9  | M12 x 1.25  | 0.50           | 5             |
| 1500 to 3000 | 75  | 27   | 100 | 17 | 9  | M20 x 1.50  | 2.00           | 5             |
| 5000 to 7500 | 90  | 32   | 140 | 25 | 9  | M24 x 2.00  | 9.00           | 10            |
| 10000        | 115 | 45   | 175 | 40 | 13 | M30 x 2.00  | 10.00          | 20            |



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