Transducers

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HSE-HA Isometric Force

Transducers "Diamond-Cell"

- High resolution
- Low vertical displacement

Specifications

- Suitable for small tissue samples like papillary muscle, Purkinje fibers and vessel rings
- 3 Force range of 0-50 cN, 0-150 cN, 0-250 cN

The HSE-HA "Diamond-Cell" is a sensitive, reliable and rugged isometric force transducer suitable for use with very small muscle/tissue specimens. The low vertical displacement of the transducer means that true isometric measurements can be made. The low seismic sensitivity of the "Diamond-Cell" mini-

mizes the influence of environmental vibrations on the force recordings which result in very stable baselines. The design of the unit (no internal wires suspending the transducer head) means that this transducer will stand up to years of

use. This is a full resistance bridge transducer which can be connected to the HSE-HA TAM-A and TAM-D strain gauge amplifiers, see page 133. Connectors are also available for HA-Ltd, Grass and Gould strain gauge amplifiers.





Force Range	0-50 cN, 0-150 cN, 0-250 cN
Linearity	<0.2 %FS
Maximum	1000 cN
Displacement Range	60 μm at 10 cN.
Excitation	DC 5 V
Full-Scale Output	10 mV/V, nominal \pm 30%
Natural Frequency	300 Hz
Bridge Resistance	> 500 kOhm, full resistance bridge
Zero Drift	< ± 0.04 % FS/K
Weight	200 g (7 oz)
Dimensions	20 x 26 x 75 mm (0.8 x 1.0 x 3.0 in)
Mounting Rod, OD x L	6 x 120 mm (0.25 x 4.7 in)

HSE-HA Isometric Force Transducers "Diamond-Cell" For use Transducer Range			
with	0-50 cN	0-150 cN	0-250 cN
HSE	BS4 73-3538	BS4 73-3539	BS4 73-3540
Harvard Apparat.	BS4 73-3541	BS4 73-3542	BS4 73-3543
Grass	BS4 73-3544	BS4 73-3545	BS4 73-3546
Gould 6600	BS4 73-3547	BS4 73-3548	BS4 73-3549
Gould 4400	BS4 73-3550	BS4 73-3551	BS4 73-3552

Connect With Us



These NEWTON style calibration weights are precision weights use to calibrate force transducers. The weights are made from polished brass and have an integral hook. They are supplied in a wooden storage case. They are calibrated in Newtons at the standard acceleration of gravity gn = 9.80665 m/s2. Nine weights are supplied. Class of accuracy M1.

Newtons	Gram-Force	Newtons	Gram-Force
0.01 N	1	0.2 N	20
0.02 N (2 supplied)	2	0.5 N	50
0.05 N	5	1.0 N	100
0.1 N (2 supplied)	10		

Catalog No.	\$ P
BS4 73-2634	F

Product

orce Calibration Weights

Gram Calibration Weights



These gram calibration weights are precision weights use to calibrate preload on force transducers. The weights are made from polished brass. They are supplied in a wooden storage case with a pair of handling forceps and a cleaning brush. Nine weights are supplied. The 0.1, 0.2 and 0.5 gram size weights are flat metal pieces. The larger size weights have an integral hook. Class of accuracy M1 after OIML*.

Specifications				
Weight	Tolerance ± mg	Weight	Tolerance ± mg	
0.1 g	0.5 mg	2 g (2 supplied)	1.2 mg	
0.2 g (2 supplied)	0.6 mg	5 g	1.5 mg	
0.5 g	0.8 mg	10 g	2.0 mg	
1 g	1.0 mg			

Catalog No. Product S BS4 73-2635

Gram Calibration Weights *Note: Organisation Internationale Metrologie Légale





Force Calibration Weights