

## DIGITAL REMOTE MODEL BGI

- FORCE & TORQUE
- INTERCHANGEABLE SENSORS
- ONE DISPLAY - MANY SENSORS
- COMPUTER INTERFACES
- SELECTABLE UNITS

*Model BGI - Remote Display  
and "S" Beam Sensor*



*Model SS  
"S" Beam*



*Model SBC  
Miniature Button*



*Model SSM  
Inline*



*Model SJR  
Miniature "S" Beam*



*Model STJ  
Universal Torque*



*Model STH  
Interchangeable  
Torque*

The unique **BGI Digital Remote Force and Torque Gage** system features extreme versatility with many force and torque sensors available for quick attachment to the BGI display.

The various sensor configurations are offered with a wide range of capacities extending from 1/4 lbf to 10,000 lbf of force and 10 ozf-in to 100 lbf-in of torque.

The BGI system operates in the same manner as the BG Force Gage with its load cell sensor located within its housing, but with the BGI, the sensor is simply located remotely by a cable.

### CONSTRUCTION

- BGI Display - Cast aluminum housing.
- Coiled or un-coiled cable connects gage to sensor.
- Sensors - Refer to individual specifications.

### OPERATION

- Selected sensor attaches to BGI display for immediate use.
- Selectable force units: lbf, kgf, gf or N.
- Selectable torque units: lbf-in, ozf-in, kgf-mm, kgf-m, N-cm or N-m.
- Peak sampling rate: 65/sec.
- Display rate: 2.5/sec.
- Data outputs: RS232, Mitutoyo, Analog  $\pm 1$  VDC.

### POWER REQUIREMENTS

- Rechargeable NiMH 9V battery for 10 hours of use with 8 hour charge.
- "Lo Bat" warning then gage turns off.
- Selectable auto shut-off, after 30 minutes of inactivity, conserves battery.

### ACCESSORIES

- Various output cables are available.
- Hi / Lo limits indicator to set limit conditions for a test.
- Set point cable for use with motorized test stands.

### ACCURACY

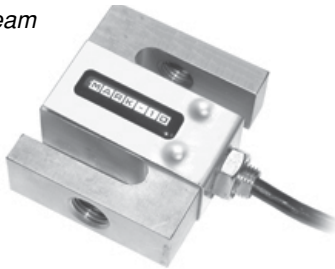
- Total System: BGI Display ( $\pm 0.1\%$ ) + Sensor ( $\pm 0.XX\%$ ). See individual sensors.

### WEIGHT & DIMENSIONS:

- Weight: 0.9 lb.
- Dimensions: 6" H x 2 1/2" W x 1 1/2" D.

### SS – TENSION / COMPRESSION

SS – "S" Beam



MODEL	CAPACITY/GRADUATION					PRICE
BGI	Digital Force Display – 110 / 220 VAC					\$795.00*
SS50	50 lbf x 0.02 lbf	25 kgf x 0.01 kgf	250 N x 0.1 N	0.1 N		545.00
SS100	100 lbf x 0.05 lbf	50 kgf x 0.02 kgf	500 N x 0.2 N	0.2 N		545.00
SS200	200 lbf x 0.1 lbf	100 kgf x 0.05 kgf	1000 N x 0.5 N	0.5 N		545.00
SS500	500 lbf x 0.2 lbf	250 kgf x 0.1 kgf	2500 N x 1 N	1 N		545.00
SS1000	1000 lbf x 0.5 lbf	500 kgf x 0.2 kgf	5000 N x 2 N	2 N		545.00
SS2000	2000 lbf x 1 lbf	1000 kgf x 0.5 kgf	10000 N x 5 N	5 N		545.00
SS5000	5000 lbf x 2 lbf	2500 kgf x 1 kgf	25 kN x 0.01 kN			795.00
SS10000	10000 lbf x 5 lbf	5000 kgf x 2 kgf	50 kN x 0.02 kN			795.00

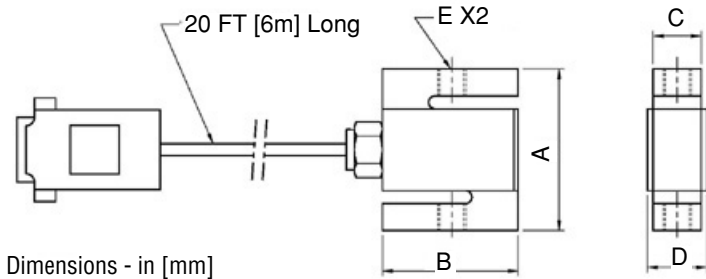
#### SPECIFICATIONS

Accuracy: ± 0.15% of full scale + BGI (± 0.1%).

Safe Overload: 150% of full scale.

Weight: 1.9 - 3.0 lb (0.4 - 1.4 kg).

\*For total system add BGI price to sensor price.



Dimensions - in [mm]

MODEL	A	B	C	D	E
SS50			0.46 [11.7]	0.65 [16.5]	1/4-28 UNF
SS100					
SS200	2.40 [61.0]	2.00 [50.8]			
SS500			0.71 [18.0]	0.90 [22.9]	1/2-20 UNF
SS1000					
SS2000					
SS5000	3.90 [99.1]	3.00 [76.2]	0.96 [24.4]	1.15 [29.2]	3/4-16 UNF
SS10000					

### SBC – COMPRESSION

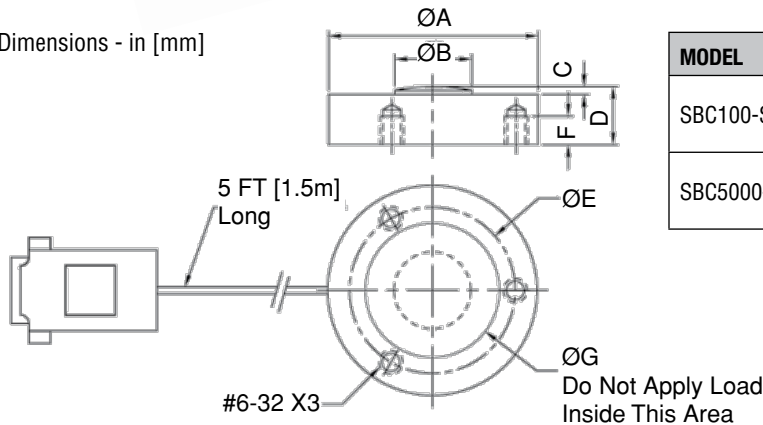
SBC – Miniature Button



MODEL	CAPACITY/GRADUATION					PRICE
BGI	Digital Force Display – 110 / 220 VAC					\$795.00*
SBC100	100 lbf x 0.05 lbf	50 kgf x 0.02 kgf	500 N x 0.2 N	0.2 N		650.00
SBC200	200 lbf x 0.1 lbf	100 kgf x 0.05 kgf	1000 N x 0.5 N	0.5 N		650.00
SBC500	500 lbf x 0.2 lbf	250 kgf x 0.1 kgf	2500 N x 1 N	1 N		650.00
SBC1000	1000 lbf x 0.5 lbf	500 kgf x 0.2 kgf	5000 N x 2 N	2 N		650.00
SBC2000	2000 lbf x 1 lbf	1000 kgf x 0.5 kgf	10000 N x 5 N	5 N		650.00
SBC5000	5000 lbf x 2 lbf	2500 kgf x 1 kgf	25 kN x 0.01 kN			650.00
SBC10000	10000 lbf x 5 lbf	5000 kgf x 2 kgf	50 kN x 0.02 kN			650.00

\*For total system add BGI price to sensor price.

Dimensions - in [mm]



MODEL	ØA	ØB	C	D	ØE	F	ØG
SBC100-SBC2000	1.23 [31.3]	0.32 [8.1]	0.05 [1.3]	0.39 [9.9]	1.0 [25.4]	THRU	0.83 [21.1]
SBC5000-SBC10000	1.48 [37.6]	0.43 [10.9]	0.07 [1.8]	0.62 [15.8]	1.25 [31.8]	0.25 [6.4]	1.08 [27.4]

#### SPECIFICATIONS

Accuracy: ± 0.5% of full scale + BGI (± 0.15%).

Safe Overload: 150% of full scale.

Weight: From 0.4 lb (0.2 kg).



### SJR – COMPRESSION



SJR – Miniature "S" Beam

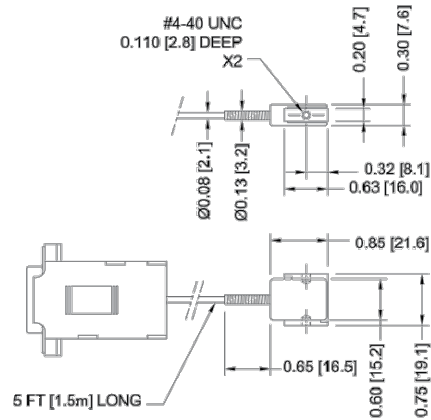
#### SPECIFICATIONS

Accuracy:  $\pm 0.2\%$  of full scale + BGI ( $\pm 0.1\%$ ).  
 Weight: 0.015 lb.  
 Dimensions: 0.30" H x 0.85" W x 0.75" D.

MODEL	CAPACITY/GRADUATION						PRICE
BGI	Digital Force Display – 110 / 220 VAC						\$795.00*
SJR025	0.25 lbf x 0.0001 lbf	100 gf x	0.05 gf	1 N x	0.0005 N	795.00	
SJR05	0.5 lbf x 0.0002 lbf	250 gf x	0.1 gf	2.5 N x	0.001 N	795.00	
SJR2	2 lbf x 0.001 lbf	1 kgf x	0.0005 kgf	10 N x	0.005 N	795.00	
SJR5	5 lbf x 0.002 lbf	2.5 kgf x	0.001 kgf	25 N x	0.01 N	795.00	
SJR10	10 lbf x .005 lbf	5 kgf x	0.002 kgf	50 N x	0.02 N	795.00	
SJR20	20 lbf x 0.01 lbf	10 kgf x	0.005 kgf	100 N x	0.05 N	795.00	
SJR50	50 lbf x 0.02 lbf	25 kgf x	0.01 kgf	250 N x	0.1 N	795.00	
SJR100	100 lbf x 0.05 lbf	50 kgf x	0.02 kgf	500 N x	0.2 N	795.00	

\*For total system add BGI price to sensor price.

Dimensions - in [mm]



### SSM – TENSION/COMPRESSION



SSM – Inline

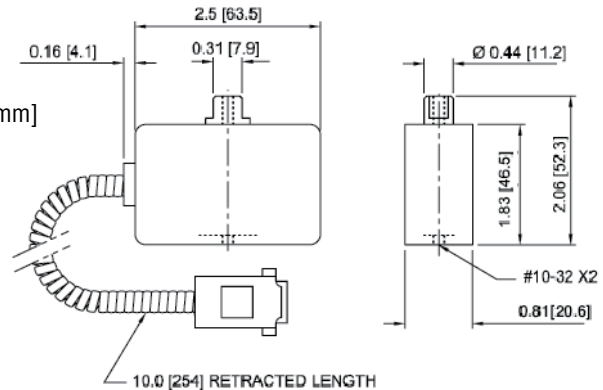
#### SPECIFICATIONS

Accuracy:  $\pm 0.15\%$  of full scale + BGI ( $\pm 0.1\%$ ).  
 Weight: 0.4 lb.  
 Dimensions: 0.396" H x 2.5" W x 2" D.

MODEL	CAPACITY/GRADUATION						PRICE
BGI	Digital Force Display – 110 / 220 VAC						\$795.00*
SSM025	0.25 lbf x 0.0001 lbf	100 gf x	0.05 gf	1 N x	0.0005 N	775.00	
SSM05	0.5 lbf x 0.0002 lbf	250 gf x	0.1 gf	2.5 N x	0.001 N	775.00	
SSM2	2 lbf x 0.001 lbf	1 kgf x	0.0005 kgf	10 N x	0.005 N	650.00	
SSM5	5 lbf x 0.002 lbf	2.5 kgf x	0.001 kgf	25 N x	0.01 N	650.00	
SSM10	10 lbf x .005 lbf	5 kgf x	0.002 kgf	50 N x	0.02 N	650.00	
SSM20	20 lbf x 0.01 lbf	10 kgf x	0.005 kgf	100 N x	0.05 N	650.00	
SSM50	50 lbf x 0.02 lbf	25 kgf x	0.01 kgf	250 N x	0.1 N	650.00	
SSM100	100 lbf x 0.05 lbf	50 kgf x	0.02 kgf	500 N x	0.2 N	650.00	

\*For total system add BGI price to sensor price.

Dimensions - in [mm]



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### STJ – TORQUE



STJ – Universal Torque

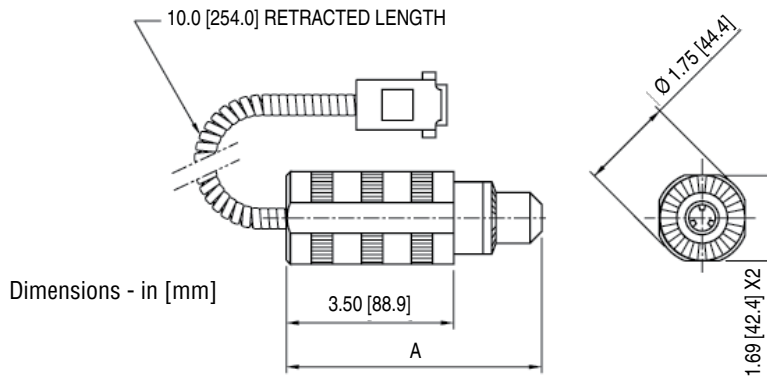
MODEL	CAPACITY/GRADUATION			PRICE
BGI	Digital Force Display – 110 / 220 VAC			\$795.00*
STJ10Z	10 x 0.01 ozf-in	7 x 0.005 kgf-mm	7 x 0.005 N-cm	795.00
STJ20Z	20 x 0.02 ozf-in	14 x 0.01 kgf-mm	14 x 0.01 N-cm	795.00
STJ50Z	50 x 0.05 ozf-in	36 x 0.05 kgf-mm	35 x 0.05 N-cm	795.00
STJ12	12 x 0.01 lbf-in	140 x 0.1 kgf-mm	135 x 0.1 N-cm	745.00
STJ50	50 x 0.05 lbf-in	580 x 0.5 kgf-mm	570 x 0.5 N-cm	745.00
STJ100	100 x 0.1 lbf-in	1150 x 1 kgf-mm	1150 x 1 N-cm	745.00

\*For total system add BGI price to sensor price.

### SPECIFICATIONS

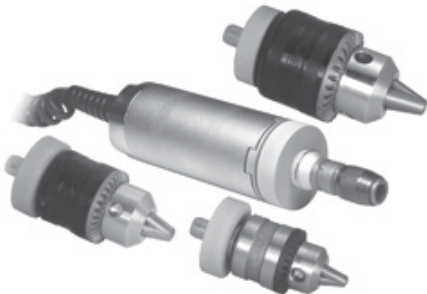
Accuracy:  $\pm 0.35\%$  of full scale + BGI ( $\pm 0.1\%$ ).  
 Safe Overload: STJ10Z - STJ50Z: 300% of full scale  
 STJ12 - STJ50: 150% of full scale  
 Weight: 1.4 lb. [0.6 kg]

MODEL	A
STJ10Z - STJ50Z	4.82 [122.4]
STJ12 - STJ100	5.19 [131.8]



### STH – TORQUE

STH – Universal Interchangeable Torque



MODEL	CAPACITY/GRADUATION		PRICE
BGI	Digital Force Display – 110 / 220 VAC		\$795.00*
STH10Z	10 x 0.01 ozf-in	7 x 0.005 kgf-mm	695.00
STH20Z	20 x 0.02 ozf-in	14 x 0.01 kgf-mm	695.00
STH50Z	50 x 0.05 ozf-in	36 x 0.05 kgf-mm	695.00
STH12	12 x 0.01 lbf-in	140 x 0.1 kgf-mm	665.00
STH50	50 x 0.05 lbf-in	580 x 0.5 kgf-mm	665.00
STH100	100 x 0.1 lbf-in	1150 x 1 kgf-mm	665.00
G1016-1	Jacobs chuck for STH,	0.028" - 0.25"	125.00
G1016-2	Jacobs chuck for STH,	0.062" - 0.375"	130.00
G1016-3	Jacobs chuck for STH,	0.078" - 0.5"	135.00
G1017	Bit holder for STH	1/4" hex	135.00

\*For total system add BGI price to sensor price.

### SPECIFICATIONS

Accuracy:  $\pm 0.2\%$  of full scale + BGI ( $\pm 0.1\%$ ).  
 Safe Overload:  
 STH10Z - STH50Z: 300% of full scale  
 STH12 - STH50: 150% of full scale  
 STH100 - 150% of full scale  
 Weight: 1.4 lb.  
 Chuck and bit capacities:  
 G1016 - 1: 0.028 - 0.25 in [0.7 - 6.3 mm]  
 G1016 - 2: 0.062 - 0.375 in [1.6 - 9.5 mm]  
 G1016 - 3: 0.078 - 0.5 in [2.0 - 12.7 mm]  
 G1017 - 0.25 in [6.3 mm] hex

