SQB/SQB-A/-SS/-ASS load cell (Shear beam)
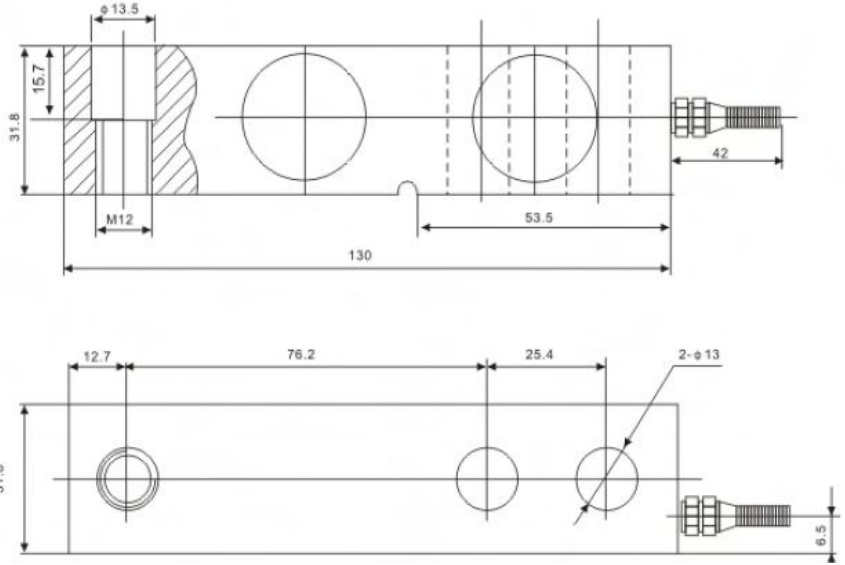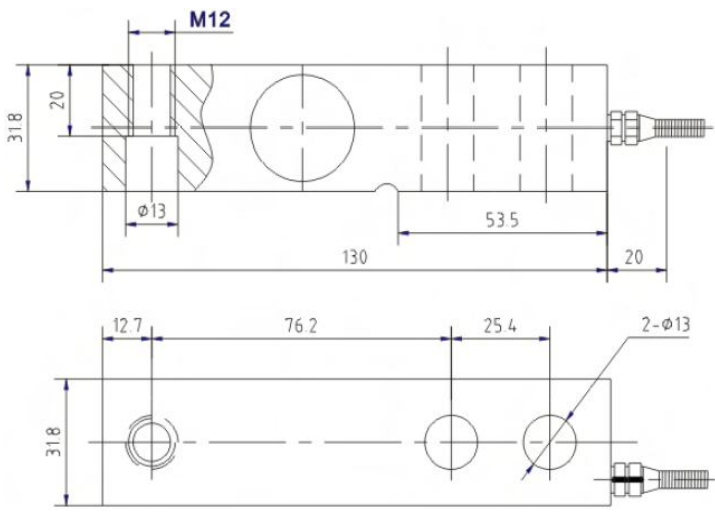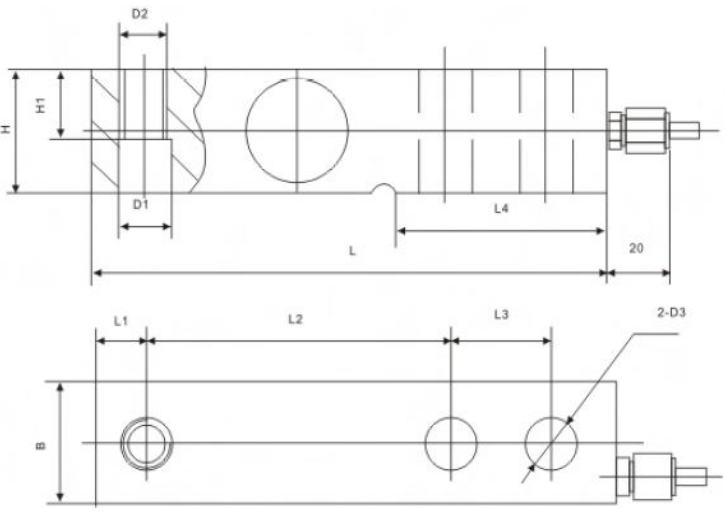
SQB/SQB-A   0.25～2.5t

SQB/SQB-A/SQB-SS/SQB-ASS   3～10t

SQB-SS/SQS-ASS   0.25～2.5t

Rated Load(t)	L	L1	L2	L3	L4	H/B	H1	D1	D2	D3
3,5	171.5	19	95.3	38.1	72.5	38.1	26	Φ20	M18×1.5	Φ20
7.5～10	225.5	25.3	124	50.8	102	50.8	25.4	Φ27	M24×2	Φ27

Applications:

platform scale,blendingcontrol system

Technical Parameter   4Wires:Exc+(Red);Exc-(Black);Sig+(Green);Sig-(White)

Rated capacities(Emax)	0.1～10t	**Temperature compensation**	-10℃～+40℃
Sensitivity	3.0±0.003mV/V(0.5～10t); 2.0±0.002mV/V(0.1～0.3t)	**Operating temperature**	-30℃～+70℃
Accuracy class	C2～C3	**Maximum safe overload**	150 %F.S
Zero balance	±1%F.S	**Ultimate overload**	180%F.S
TCO	±0.02%F.S/10℃	**Recommended excitation**	10～12V DC
TC SPAN	±0.02%F.S/10℃	**Maximum excitation**	15V DC
Input impedance	400±20Ω	**Protection class**	IP66(0.25～0.75t);IP67(1～10t
Output impedance	352±3Ω	**Construction textures**	Alloy Steel,Stainless Steel
Insulation impedance	≥5000MΩ		
Cable	Length=3m(0.25～2.5t),4.2m(3～5t),5m(7.5～10t) Diameter:Φ5mm(Alloy Steel 0.25～5t; Stainless Steel 0.25～0.3t); Φ6mm(Alloy Steel 7.5～10t;Stainless Steel 0.5～10t)		

Weighing sensor technology described
summarize
Analog sensor working principled: all kinds of series load cell strain gauge affixed to the elastic body as Sensitive original copy,after outer connect to the excitation power supply,the output and applied load (force) is proportional to the signal.It with the corresponding equipment matching,it can be widely used truck scale,batching scale, packing and other electronic weighing scales and automatic weighing systems. Additionally,you can choose different forms of ancillary equipment to meet the measurement, detection,regulation and control and other demands.

Our company produces high precision weighing sensor,good reliability,ease of installation,the performance is stable,has a good dust-proof and other measures in a variety of natural environments work.

Introduction of analog sensors
Sensor elastomer using high quality special metal material,attached R1,R2,R3 and R4 four pieces(group) strain gauge to the surface strain sensitive areas,consisting HuiSiTing bridge,when the external force F is applied,the elastic deformation,causing the strain gauges R1,R3 under tension tensiled,the resistance value becomes large;R2,R4 is compressed,power resistance decreases, so that the bridge out of balance and outputs a voltage signal proportional to the external force F.

Measuring bridge because of high sensitivity,wide measuring range,the circuit structure is simple,high precision,easy to implement temperature compensation,etc.,so can well meet the requirements of strain measurement.

Structural characteristics
Sensor elastomer special structure,has good anti-bending and torsional resistance, thereby increasing the natural frequency of sensor,lodging resistance,anti-bias,anti-jamming and other characteristics,the sensor can be connected to a dedicated connection component,easy to install and reliable.

Precautions
1)Sensor in use should far away from higher heat source.

2)When checking the insulation resistance of the sensor, the voltage of megger can not exceed 100V, prohibited the use of shake table tests.

3)Should be placed at -10 ℃ ~ 50 ℃ and relative humidity ≤ 85% of the environment, the air should not containing corrosive gases etc substances.

4)When design and installation of the load device, should ensure that the use load   force of the line of action be doublication to the stress axis of the sensor ,let inclined load and eccentric load impact to the minimize.

5)To prevent chemical corrosion, the installation should use Vaseline coated outer surface of the sensor.

6)Sensor shell, protective cover, lead connector are all seal deals, the user can not arbitrarily open the package or strongly pull wire, if there is failure, should be sent to the manufacturer for overhaul.

7)The Company can provide matched sensor Load coupling device.

Cable wire colour code wiring method:

激励 +Excitation+

反馈 +Sense+

信号 +Signal+

激励 – Excitation –

反馈 – Sense –

信号 – Signal –

屏蔽线 Shield