

Model 1192 Compression Force Transmitters

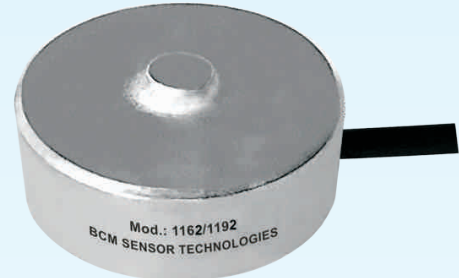
Description

Model 1192 is a low-profile disc-type transmitter which is developed from model 1190 and 1191 to measure compression force.

Comparing to the 1190 and 1191, the 1192 has integrated with the advanced sensor signal conditioner to provide various conditioned output signal, e.g., current loop of 4~20mA, voltage output of 10%~90%Vs ratiometric, 0~5 or 1~5, or digital output of I²C or SPI.

The transmitter has a robust design. Its body is made from 17-4PH stainless steel, and it can have the IP rating of IP65.

Thanks to the robust design and the advanced sensor signal conditioner, the 1192 can be easily integrated into the existing automation system or testing system.



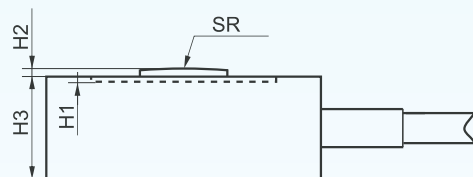
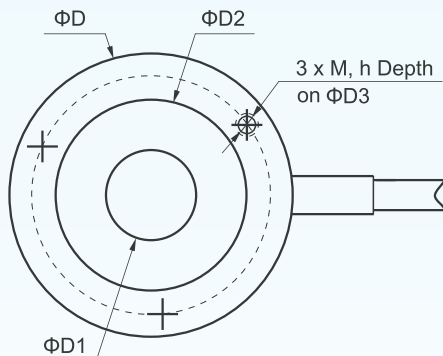
Features

- compact and robust design
- various conditioned output signals available
- accuracy of 0.5%fs
- IP65 rating

Applications

- automatic filling lines
- testing lines of electronics
- retro-fitment of existing machines or systems
- industrial process control

Dimensions



force range (kN)	D1	D2	D3	D	M	h	H1	H2	H3	SR
0.1, 0.2, 0.3, 0.5, 0.7	2.8	22	25	32	M2	thru	0.5	1.3	12.7	SR40
1, 2, 3, 5, 7	8	25.5	30.7	38	M2.5	6	0.5	1.3	13.5	SR50
10, 20	12	32.4	39.2	44.9	M3	8	0.7	1.7	19	SR60

Note: All dimensions are in mm.

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Technical Data

Parameters		Units	Specifications
capacity		kN	0.1, 0.2, 0.3, 0.5, 0.7, 1, 2, 3, 5, 7, 10, 20
safe load limit		%fs	150
ultimate overload		%fs	200
output signal		mA	4~20 (standard)
		Vdc	10%~90%Vs ratiometric, 0~5, 1~5
		digital	I ² C, SPI
accuracy		%fs	±0.5, ±1 (standard)
creep error (30min)		%fs	≤±0.5
long-term stability		%fs/year	±0.2
power supply (Vs)	current loop	Vdc	8, ..., 30
	ratiometric & digital	Vdc	3, ..., 5
load resistance (R _L)	current loop	Ω	≤(Vs - 10) / 0.02 - R ₀ , R ₀ refers to cable resistance, R _L can be 0Ω.
	ratiometric	Ω	≥ Vout / 0.005, R _L the larger the better.
max. excitation voltage		Vdc	5
input resistance		Ω	350±10
output resistance		Ω	350±5
insulation resistance		MΩ	≥500 @100Vdc
storage temp. range		°C	-35 ~ +80
operating temp. range		°C	-20 ~ +80
compensated temp. range		°C	10 ~ 70
temp. coefficient of sensitivity		%fso/°C	≤±0.01
temp. coefficient of zero		%fso/°C	≤±0.01
body material			17-4PH stainless steel
sealing			welded
mechanical interface			refer to its dimensions
electrical interface			Φ5mm, shielded PVC cable, 0.5m cable length
environment protection			IP65
unit weight (without cable)		g	~40, ..., 80 according to capacity

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Ordering Information

position (pos.) 1: model						
1192						
pos. 2: capacities						
0/0.1kN		0/0.5kN		0/2kN		0/7kN
0/0.2kN		0/0.7kN		0/3kN		0/10kN
0/0.3kN		0/1kN		0/5kN		0/20kN
pos. 3: output signal						
4/20mA (standard)						
10%/90%Vs = 10%~90%Vs ratiometric				0/5V		1/5V
I2C		SPI				
pos. 4: accuracy						
0.5%fs			1%fs (standard)			
pos. 5: electrical interface						
5/2(^)/PVC/0.5 = Φ 5mm, 2(^)-core shielded, PVC, cable length = 0.5m(#)						
(^): 2-core for 4~20mA;						
3-core for 10%~90%Vs ratiometric, 0~5V, 1~5V;						
4-core for I ² C, SPI.						
#): Cable length can be customized on request.						
pos. 6: environment protection						
IP65						
pos. 7: customized specifications						
"(*)" is necessary only if any customized specification is required, otherwise it is neglectable.						
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7

Examples of Ordering Code

- standard transmitter:

1192-0/0.1kN-4/20mA-1%fs-5/2/PVC/0.5-IP65

- customized transmitter:

1192-0/0.1kN-10%/90%Vs-1%fs-5/3/PVC/1-IP65-(*)

(*) The customized specifications are:

- output signal = 10%~90%Vs ratiometric;
- cable length = 1m.

The listed dimensions, specifications and ordering information are subject to change without prior notice.

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