

Model 6795

Single-Ended Load Pins

Description

The 6795 load pin is developed from the BCM tube-like 6798 load pin, and functions as a single-ended load transducer.

Compared to the single-ended 5795 load pin which works on one-shear beam, the 6795 load pin employs the bending beam principle and results in higher resistance to measuring errors resulted from the eccentric load.

By keeping the most specifications of the 6798 double-ended load pins, the 6795-series are designed to have load capacity ranging from 0~300 kg to 0~50 ton, with 1%fs measuring accuracy, and the rest specifications can be referred to the BCM 6798 load pins.

As a single-ended load pin, one end of the 6795 is fixed to a stationary object while the other end is fixed to another object where the load is applied.

As the 6795-series load pins offer outstanding environmental protection up to IP68 rating, they are the good candidates for harsh environment use.



Features

- single-ended bending beam
- good resistance to eccentric loading
- amplified output on request:
4~20 mA, 1~5Vdc, 1~10Vdc
- capacity: 0.3t, ..., 50t
- protection rating up to IP68

Applications

- draft sensors
- crane scales
- hopper weighing
- onboard vehicle weighing
- process system

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Technical Data

Parameters		Units	Specifications	Notes
capacity		ton	0.3, 1, 2.5, 5, 10, 20, 30, 40, 50	1
safe overload		%fs	300	
ultimate overload		%fs	500	2
output signal	transducer output sensitivity	mV/V	2±0.05 (standard), 1±0.05	3
	transmitter output		4~20mA, 0.5~5Vdc, 0.5~4.5V ratiometric	
zero unbalance (for transducer)		%fso	≤ ±1.5	
combined error		%fs	≤ ±1, ≤ ±2 (standard)	4
creep (30min)		%fs	≤ ±0.2	
excitation for transducers		Vdc	≤ 15, typically 10Vdc	
power supply for transmitters		Vdc	19~21 (standard), 15~36	
input resistance (for transducers)		Ω	390±20	
output resistance (for transducers)		Ω	352±3	
load resistance (for transmitters)		Ω	350~1000	
insulation resistance		MΩ	≥ 5000 @50Vdc	
compensated temperature range		°C	-10 ~ +55	
operating temperature range		°C	-35 ~ +85	
storage temperature range		°C	-35 ~ +85	
temperature coefficient of zero		%fso/10°C	≤ ±0.05	
temperature coefficient of span		%fso/10°C	≤ ±0.1	
load cell body material			17-4PH stainless steel	
material of housing for electronics			304 stainless steel	
electrical interface			Φ6mm, 4-core shielded PVC cable with 14S/5P connector, color of the cable jacket = gray, cable length = 12m.	5
environment protection			IP67 (standard), IP68	6
net weight			confirmed when ordering	

Notes: 1. For customized capacity, consult BCM..

2. "fs" refers to full scale pressure or rated pressure.

3. Other output sensitivity values between (1±0.05)mV/V and (2±0.05)mV/V are available on request.

4. Includes non-linearity, hysteresis and repeatability.

5. The number of cores in the cable depends on the type of output signal.

The cable for the output of 4~20mA has 2 cores or 3 cores;

The cable for the output of either 1~5Vdc or 1~10Vdc has 3 cores.

6. In case IP68 is selected, one must specify the following test conditions for the transducer in the purchasing order:

1) How deep under water will the installed transducer be located?

2) How long will the installed transducer continuously stay under water of that depth?

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Ordering Information

position (pos.) 1: model						
6795						
pos. 2: capacity						
0.3t 20t						
1t 30t						
2.5t 40t						
5t 50t						
10t						
pos. 3: output signal						
2mV/V (standard) 1mV/V 4/20mA 1/5V 1/10V						
pos. 4: combined error						
1%fs 2%fs (standard)						
pos. 5: excitation / power supply						
for transducers: 15V						
for transmitters: 19/21V (standard) 15/36V						
pos. 6: environment protection						
IP67 (standrad) IP68						
pos. 7: customized specifications						
“(*)” is necessary only if any customized parameter 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 load pin:
6795-10t-2mV/V-2%fs-15V-IP67
- customized load pin:
6795-25t-4/20mA-1%fs-15/36V-IP68-(*)
(*): Customized capacity = 25t.

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

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