## Model 2965 Paddle Force Transducers



#### **Features**

- paddle force
- made from aluminum with rubber plates
- range from 500 N to 1500 N
- accuracy up to 0.5 %fs
- environment protection up to IP 67

### **Applications**

- paddle force measuring system
- compression force measurement

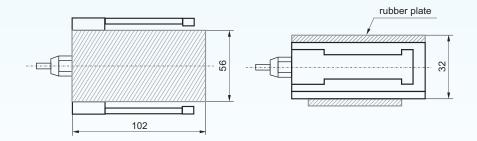


### **Description**

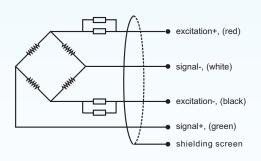
Based on BCM advanced strain gauge technology, model 2965 paddle force transducers are developed for application of compressive paddle force measurement in automotive industry. The transducer is made from aluminum alloy and integrated with two rubber plates. The special design in shape and dimensions allows the 2965 transducer to be easily installed in a paddle force measuring system.

The 2965 paddle force transducers possess 0.1%fs (fs = full scale) measuring accuracy for paddle force ranging from 500 to 1500 N. Thanks to BCM's leading technology in sealing process, the 2965 paddle force transducers can be made to IP 67 protection grade, and are suitable for applications in harsh industrial conditions.

#### **Dimensions**



#### **Electrical Connection**



## **BCM SENSOR TECHNOLOGIES** BVBA

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# **Model 2965 Paddle Force Transducers**



#### **Technical Data**

parameters	units	specifications					
capacity	N	500, 1000, 1500					
safe load limit	%fs	150					
ultimate overload	%fs	200					
output sensitivity at fs	mV/V	1.3 ± 0.1					
zero unbalance	%fso	±1					
non-linearity	%fs	± 0.05 ± 0.1 (standard)					
hysteresis	%fs	± 0.05	± 0.1				
repeatability	%fs	± 0.05	± 0.1				
creep error (30 min.)	%fs	± 0.05	± 0.1				
excitation (supply voltage)	Vdc	10					
max. excitation voltage	Vdc	12					
input resistance	Ω	520 ± 10					
output resistance	Ω	500 ± 10					
insulation resistance	ΜΩ	≥ 5000@50 Vdc					
storage temp. range	°C	-35 ~ +80					
operating temp. range	°C	-30 ~ +70					
compensated temp. range	°C	-10 ~ +60					
temp. coefficient of sensitivity	%fs/°C	± 0.005					
temp. coefficient of zero	%fs/°C	± 0.005					
load cell body material		mild steel					
sealing		potted					
mechanical interface		refer to the dimensions on the datasheets					
electrical interface		Ф5.7mm, 4-conductor shielded cable, PVC jacket, 5 m					
environment protection		IP 66 (standard), IP 67					
unit weight	kg	to be confirmed when order					

The listed specifications are subject to change without prior notice.

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## **Model 2965 Paddle Force Transducers**



## **Ordering Information**

	(pos.) 1: mo											
2965: made	e from alumin											
	pos. 2: ca	apacities										
	500 N 1000 N 1500 N											
		pos. 3: output sensitivity										
		1.3 mV/V										
			pos. 4: no	on-linearity	or accuracy	y class						
			0.05 %fs 0.1 %fs (sta	andard)								
				pos. 5: bi	ridge resista	ance						
				500 Ω (Rin	$= 520 \pm 10 \Omega$	, Rout = 500±	10 Ω)					
		pos. 6: mechanical interface										
					Refer to the	Refer to the dimensions on the datasheets. Pos. 6 can be omitted from the ordering code.						
						pos. 7: electrical interface						
			cable, code = diameter(Φ)/number of conductors/cable ja 5.7/4/PVC/5 = Φ5.7 mm, 4-conductors shielded, PVC, I pos. 8: environment protection									
									protection			
							IP 66 (stan IP 67	andard)				
								pos. 9: accessories for installation				
								N = NA**. In case of "NA", pos.9 can be omitted.				
									pos. 10: customized spec's			
									When any customized spec's are required, the customer needs to add "C" as the last parameter in the ordering code, and specifies the wished spec's on his order clearly.			
									The customized spec's needs to be confirmed in advance by BCM's sales representative.			
									Code "C" can be omitted if no customized spec's are required.			
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9	pos. 10			

<sup>\*:</sup> This value can also be a customized value.

**example**:  $2965-500N-1.3mV/V-0.1\%fs-500\Omega-5.7/4/PVC/5-IP66-C$ 



**BCM SENSOR TECHNOLOGIES** BVBA

ISO9001 Certified Company

<sup>\*\*:</sup> NA = not available or not applicable