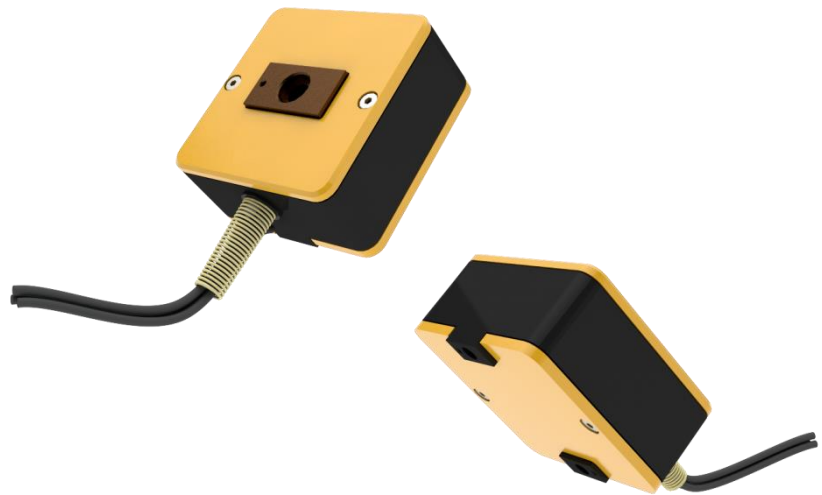


Data sheet

Multicomponent transducer Series DKA-ZE

(0,5 kN - 10 kN)



Benefits/Application

- ▶ Accuracy class 0.2 and 0,3
- ▶ Compact construction
- ▶ Low weight
- ▶ 6-wire connection technology
- ▶ Very easy installation
- ▶ Force ratio FZ:FX,Y = 10:1

Technical data

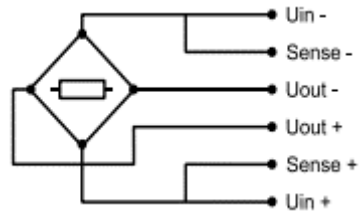
Metrological data	Nominal forces	$\pm F_x$ $\pm F_y$ $\pm F_z$	kN	0.05 0.05 0.5	0.1 0.1 1	0.2 0.2 2	0.5 0.5 5	1 1 10
	Accuracy class			0.2				0.3
	force measurement range	d_{lim}	%	0.2				0.3
	Hysteresis	h	%	0.1				0.2
	Reproducibility		%	0.01				0.025
	Creep		%	0.05				
	Temperature effect on characteristic value per 10 K	TK_C	%/10K	0.1				
	Temperature effect on zero signal per 10 K	TK_0	%/10K	0.1				
	Characteristic value difference, tension/compression force	d_{ZD} x, y z	%	0.1 1		0.2 2		0.3 3
	Electrical Data	Rated characteristic value	C_{F_x}, C_{F_y} C_{F_z}	mV/V	0.7 1	1.4 2	1.8 1.5	1.8 1.5
Input resistance		R_e	Ω	350 - 450				
Output resistance		R_a	Ω	350				
Insulation resistance		R_{is}	Ω	>10 ⁹				
Operating range of excitation voltage		$B_{U, G}$	V	5 - 12				
Protection (DIN EN 60529)				IP 40				
Mechanical Data		Rated Displacement	s_{xnom} s_{ynom} s_{znom}	mm	0.01 0.01 0.02	0.02 0.02 0.03	0.02 0.02 0.02	0.04 0.04 0.05
	Spring rigidity	c_{ax} c_{ay} c_{az}	kN/mm	5 5 25		10 10 100	12.5 12.5 100	25 25 125
	Mass	m	kg	0.06		0.15	0.4	
	Proportionate moving mass	m_{mess}	kg	0.05		0.09	0.25	0.26
	Resonance frequency	f_x f_y f_z	kHz	0.03 0.03 0.1		1.7 1.7 5.3	1.1 1.1 3.2	1.6 1.6 3.5
	Permissible oscillation stress		%	±80				

Technical data

Limits	Nominal forces	$\pm F_x$ $\pm F_y$ $\pm F_z$	kN	0.05 0.05 0.5	0.1 0.1 1	0.2 0.2 2	0.5 0.5 5	1 1 10
	Force limit ¹⁾	F_x F_y F_z	%			150 150 150		150 150 130
	Breaking force ¹⁾	F_x F_y F_z	%	300				
	Rated temperature range	$B_{T, nom}$	°C	10 - 60				
	Operating temperature range	$B_{T, G}$	°C	5 - 80				
		e_{Fx}	mm	150	50	50	150	55
		e_{Fy}		150	50	50	150	55
		e_{Fz}		25	20	5	20	5

1) For individually occurring components

Cable connection



Permanent connection
end not connected

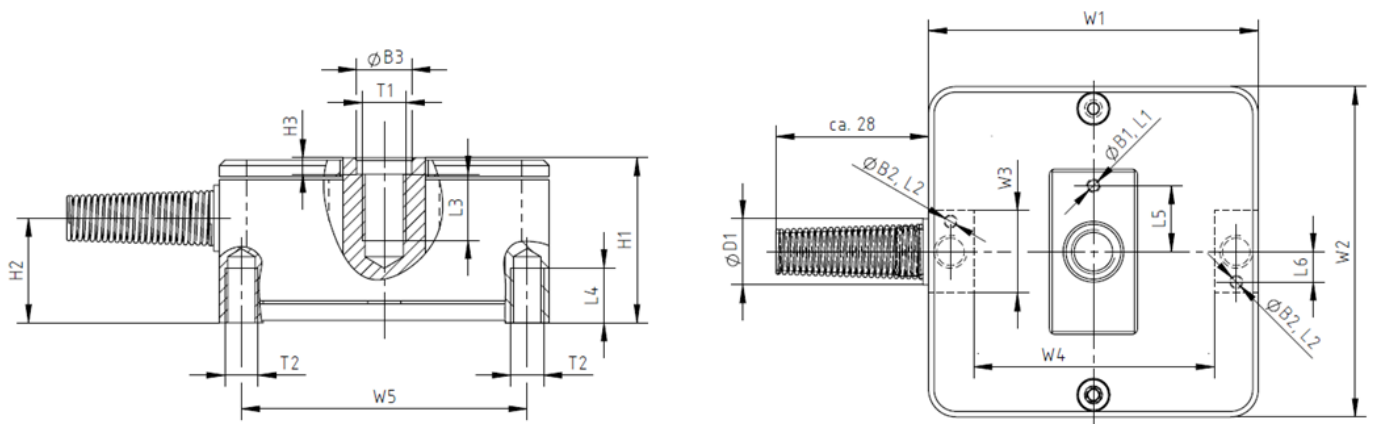
Black cable 6-wire
Ø 2,9 mm
6 x 0.04 mm²
Temperature range: -50 °C bis +105 °C

Connection		Color
Supply voltage (+)	U _{in+}	blue
Supply voltage (-)	U _{in-}	black
Measurement signal (+)	U _{out+}	white
Measurement signal (-)	U _{out-}	red
Sense (+)	Sense+	green
Sense (-)	Sense-	yellow
Shielding		grey



End not connected, lenght 3 m

Mating dimensions



Nominal force compression/tension	$\pm F_{nom}$ F_x F_y F_z	kN	0.05	0.1	0.2	0.5	1
			0.05	0.1	0.2	0.5	1
			0.5	1	2	5	10
Bore	$\varnothing B_1$	mm	2				
Bore	$\varnothing B_2$	mm	2				
Bore	$\varnothing B_3$	mm	10				
Diameter	$\varnothing D_1$	mm	12				
Thread	T_1	mm	M8				
Thread	T_2		M5		M6		
Height	H_1	mm	23		32		
Height	H_2	mm	11		19		
Height	H_3	mm	3				
Length	L_1	mm	5				
Length	L_2	mm	5				
Length	L_3	mm	8		12		
Length	L_4	mm	6		10		
Length	L_5	mm	12				
Length	L_6	mm	5.5				
Width	W_1	mm	60				
Width	W_2	mm	60				
Width	W_3	mm	15				
Width	W_4	mm	44				
Width	W_5	mm	52				

Typical normalised sensitivities

Load \ Signal	Signal		
	F_x	F_y	F_z
F_x	1	0.01	0.01
F_y	0.01	1	0.03
F_z	0.02	0.03	1

Änderungen vorbehalten. Alle Angaben beschreiben unsere Produkte in allgemeiner Form. Sie stellen keine vereinbarte Beschaffenheit im Sinne des § 434 Abs. 1 BGB dar.



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