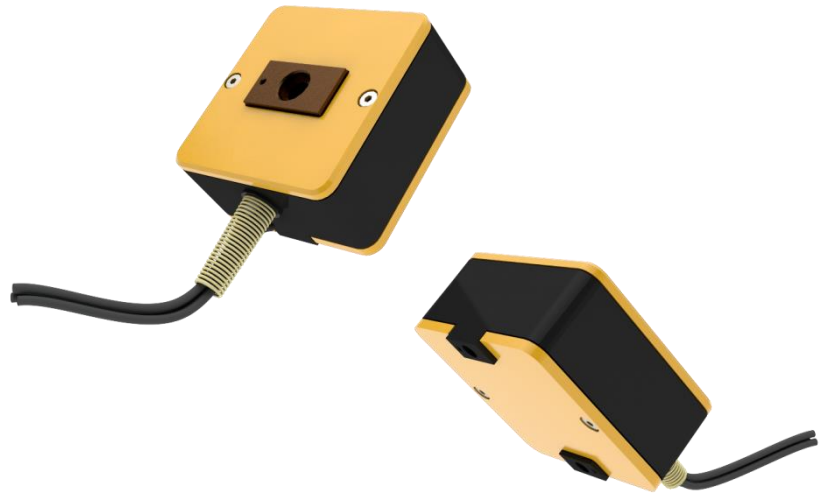


Data sheet

Multicomponent transducer Series DKA-ZE

(0,5 kN - 10 kN)



Benefits/Application

- Accuracy class 0.2 and 0,3
- Compact construction
- Little 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_{lin}	%	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_{Fx}, C_{Fy} C_{Fz}	mV/V	0,7 1,0	1,4 2	1,8 1,5	1,8 1,5	1,5 2
	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	0,04 0,04 0,08
	Spring rigidity	c_{ax} c_{ay} c_{az}	kN/mm	0,2 0,2 0,03		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				

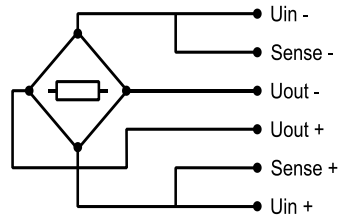
Technical data

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



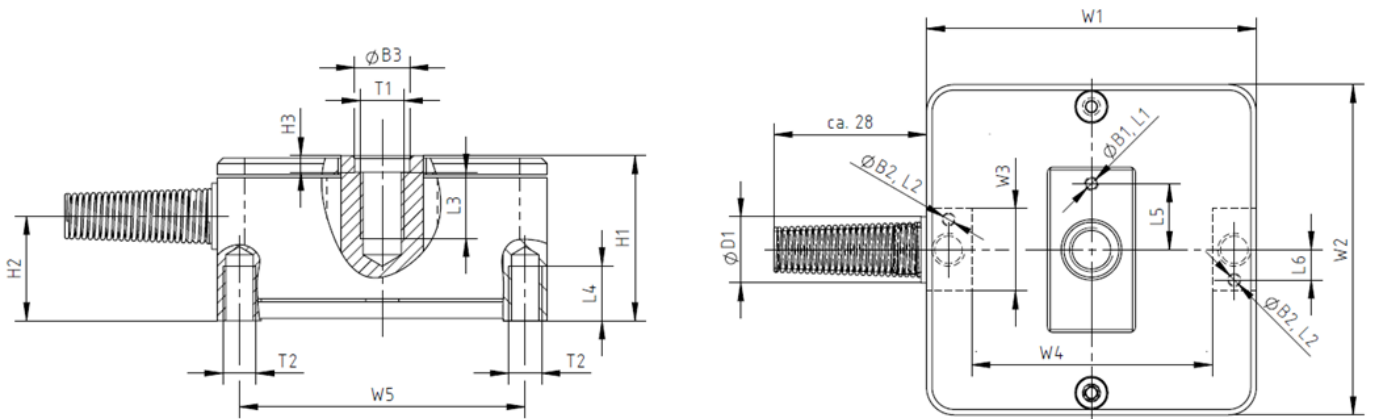
Black cable 6-wire
 \varnothing 2,9 mm
 6 x 0,04 mm²
 Temperature range: -50 °C bis +105 °C

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, length 3 m

Mating dimensions



Nominal force compression/tension	$\pm F_{nom}$	kN						
			0,05	0,1	0,2	0,5	1	1
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			
Lenght	L_1	mm			5			
Lenght	L_2	mm			5			
Lenght	L_3	mm	8		12			
Lenght	L_4	mm	6		10			
Lenght	L_5	mm			12			
Lenght	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	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.



GTM Testing and Metrology GmbH
Philipp-Reis-Straße 4-6, 64404 Bickenbach, Germany
www.gtm-gmbh.com
Phone +49(0)6257-9720-0, Fax +49(0)6257-9720-77
contact@gtm-gmbh.com