

Data sheet

Multicomponent
transducer

Series XY

(1000 / 500 lbf
– 2000 / 500 lbf)



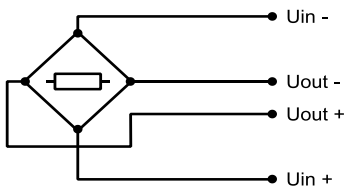
Benefits/Application

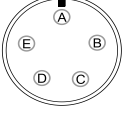
- For tire uniformity machines
 - For static and dynamic loads
 - Insensitive against parasitic forces and moments
 - 6-wire connection technology
 - Popular connection dimensions
 - Stainless special steel
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Technical data

Metrological Data	Nominal force	F_x F_y	lbf lbf	1000 500	1500 500	2000 500
	Rated Force	F_x F_y	N N	4448 2224	6672 2224	8896 2224
	force measurement range	d_{lin}	%	0,1		
	Hysteresis	h	%	0,05		
	Reproducibility		%	0,02		
	Zero error	f_0	%	1		
	Creep		%	0,05		
	Temperature effect on characteristic value per 10 K	TK_C	%/10K	0,004		
	Temperature effect on zero signal per 10 K	TK_0	%/10K	0,004		
	Electrical Data	Rated characteristic value	C_{nom}	mV/V	2	
Characteristic value tolerance		d_c	%	0,25		
Zero signal deviation		$d_{S,0}$	%	1		
Input resistance		R_e	Ω	1000		
Output resistance		R_a	Ω	1000		
Insulation resistance		R_{is}	Ω	$> 5 \cdot 10^9$		
Operating range of excitation voltage		$B_{U,G}$	V	12		
Protection (DIN EN 60529)				IP 40		
Limits	Force limit		%	150		
	Breaking force		%	200		
	Rated temperature range	$B_{T,nom}$	$^{\circ}\text{C}$	+10 ... +60		
	Operating temperature range	$B_{T,G}$	$^{\circ}\text{C}$	-15 ... +85		

Cable connection

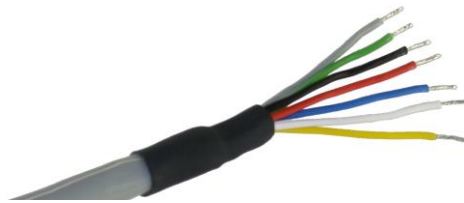


Connection		Connection pluggable ¹⁾ 5-pin Amphenol Male:	End not connected ³⁾
			Grey cable Ø 6,5 mm twisted pairs 3 x 2 x 0,25 mm ² Temperature range: -35 °C bis +90 °C
Connection		Pin	Colour
Supply voltage (+)	U_{in+}	B	Blue
Supply voltage (-)	U_{in-}	C	Black
Measurement signal (+)	U_{out+}	D	White
Measurement signal (-)	U_{out-}	A	Red
Shielding		Housing	Yellow

1) View too connection side

2) Male Amphenol MS3102E-14S-5P

3) Standard; Pluggable connection Amphenol 5 pin, cable end not connected

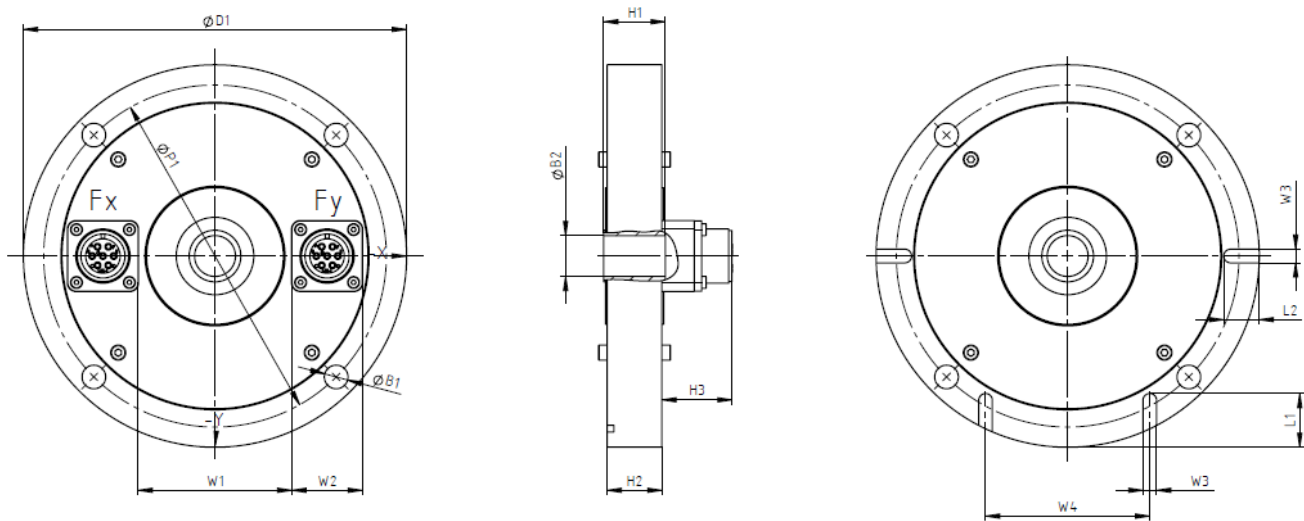


3) End not connected

- Cable length 5 m. More cable types and lengths on request
- Configuration with customer defined connection is possible

Mating dimensions

1000 / 500 lbf – 2000 / 500 lbf



Nominal force	F_x F_y	lbf lbf	1000 - 2000 500
Nominal force	F_x F_y	N N	4448 - 8896 2224
Bore	$\varnothing B_1$	mm	11
Bore	$\varnothing B_2$	mm	19 E9
Diameter	$\varnothing D_1$	mm	177,8
Pitch circle diameter	$\varnothing P_1$	mm	159 $\pm 0,1$
Height	H_1	mm	28,6 -0,05
Height	H_2	mm	25,4
Height	H_3	mm	33
Length	L_1	mm	25
Length	L_2	mm	16,5
Width	w_1	mm	71
Width	w_2	mm	33
Width	w_3	mm	6,35 +0,02
Width	w_4	mm	76,2 $\pm 0,01$

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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