



Technical Data

Output signal	PROFIBUS-DP		
Transducer interface	T		
Input interface	PROFIBUS-DP		
Profibus-Version	EN 50170, Encoder Profil		
Profibus-Interface	potential-free		
System resolution position	5 µm increments configurable		
System resolution velocity	0.1 mm/s increments configurable		
Hysteresis	<=1 Digit		
Repeatability	±1 Digit		
Sampling rate	1kHz		
max.non-linearity	±30µm at 5 µm resolution		
Temperature coefficient of overall system	(6µm +5ppm x L) /°C		
Magnet traverse speed	any		
Supply voltage	24 V DC ±20%		
Current draw	<120mA		
Operating temperature	-40...85°C		
Storage temperature	-40...100°C		
Address assignment	mechanical switches and Master Class 2		
Shock load	100g / 6ms per IEC60068-2-27		
Vibration	12g, 10...2000 Hz per IEC 60068-2-6		
Polarity reversal protected	yes		
Oversupply protection	Transzorb protection diodes		
Dielectric constant	500 V (GND to housing)		
Enclosure rating per IEC 60529	IP 67 (when BKS-S...IP 67 connector is in place)		
Housing material	Anodized aluminum		
flange- and tube material	1.4571 stainless tube, 1.3952 stainless investment cast flange		
Mounting	thread 3/4" x 16 UNF		
Pressure rating	250 bar		
Connection type	Connector		
recommended connector	BKS-S103-00 + BKS-S48		
RF emission	EN 55011 Group 1,Class A		
Static electricity (ESD)	IEC 61000-4-2 Severity Level 3		
Electromagnetic fields (RFI)	IEC 61000-4-3 Severity Level 3		
Fast transients (BURST)			
Line-carried noise, induced by high-frequency fields			
Cable length [m] at Baud rate (kBit/s)			
Accessories			
Pin assignments			
Control and data signals	Data GND	S103 5-pin	S103 3-pin
	RxD/TxD-N (A)	3	
	RxD/TxD-P (B)	2	
	VP +5 V	4	
Supply voltage and shield	+24 V	1	
	0 V (GND)	3	
	Ground PROFIBUS-DP	5	
	Shield Supply	4	