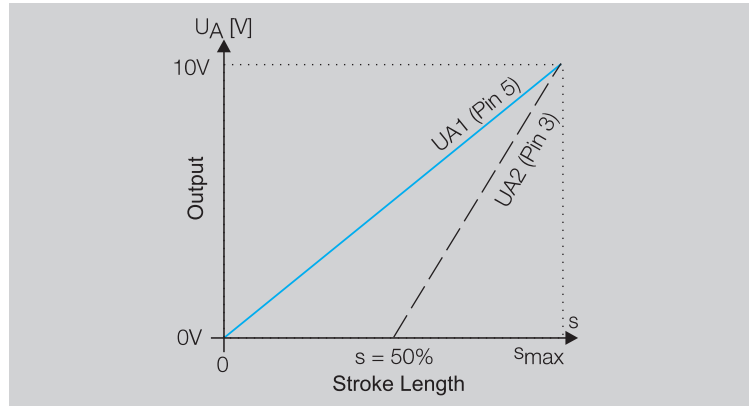


Series
Output Signal
Transducer Interface

BTL6 Profile A1
Analog Voltage, Programmable
A



Ordering Code

BTL6-A301-M____-A1-S115

Output Voltage (U_A)	0...10 V programmable
Load Current	max. 5 mA
Max. Ripple	≤ 5 mV
System Resolution	≤ 10 μ m
Repeatability	≤ 10 μ m
Repeat Accuracy	≤ 20 μ m
Sampling Rate	fSTANDARD = 1 kHz (< 850 mm)
Non-linearity	$\leq \pm 200$ μ m to 500 mm nominal stroke typ. ± 0.02 %, max. ± 0.04 % 500...1500 mm nominal stroke
Supply Voltage	18...30 Vdc
Current Draw	≤ 100 mA
Polarity Reversal Protected	yes
Operating Temperature	0 to +158 °F
Storage Temperature	-40 to +212 °F

Pin Assignments	Pin	Color*	BTL6-A301...
Output Signals	1	YE	Programming input (a)
	2	GY	Analog common
	3	PK	Output 2, 0-10 V programmable
	4	RD	Programming input (b)
	5	GN	Output 1, 0-10 V programmable
Supply Voltage	6	BU	Supply GND
	7	BN	+24 Vdc supply
	8	WH	Not used — Do not connect



Connect shield to housing,
Pin 8 (WH) must remain unconnected.
*Connector BKS-S115/BKS-S116

Please enter code for nominal
stroke in ordering code

Included:
– Transducer
– User's guide

Please order separately:
Magnets pg 100
Mounting clamps/cuff pg 100
Connectors pg 101

Ordering example:

BTL6-A301-M____-A1-S115

Output signal

2 analog outputs
Single or differential-
measurement, rising,
falling, zero and end
point programmable

**Standard
nominal strokes [mm]**

0050, 0100, 0130, 0150, 0175, 0200,
0225, 0250, 0300, 0350, 0360, 0400,
0450, 0500, 0550, 0600, 0650, 0700,
0750, 0800, 0900, 0950, 1000, 1100,
1200, 1250, 1300, 1400, 1500, on
request in 25 mm increments for high
quantities only



Description	Magnet	Magnet
Series	BTL6 Profile A1	BTL6 Profile A1
	<p>Cost Effective</p> <p>Lateral offset: C = ±2 mm Vertical distance of magnet: D = 4...8 mm</p>	<p>Lateral offset: C = ±2 mm Vertical distance of magnet: D = 4...8 mm</p>
Ordering Code	BTL6-A-3801-2	BTL6-A-3800-2
Housing Material	Plastic	Plastic
Weight	ca. 25 g	ca. 30 g
Magnet Traverse Speed	any	any
Operating Temperature/Storage Temperature	-40...+85 °C	-40...+85 °C
Included	Magnet	Magnet

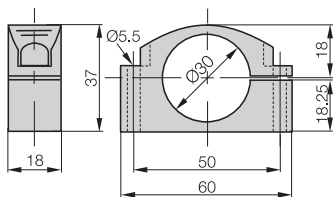
The BTL6-A-3800-2 magnet can be operated at a distance of 4...8 mm from the top surface of the profile housing.

This means that both families of transducers can be interchanged without making any mechanical modifications.

Together with mounting clamps BTL6-A-MF01-A-50 or mounting cuff BTL6-A-MF03-K-50 the mechanical installation is compatible to series BTL5-...-P-S 32 with magnets BTL5-P-3800-2 or BTL5-P-5500-2 on page 71-72.

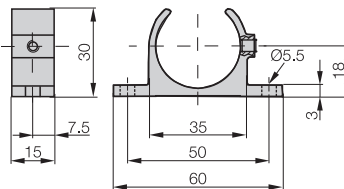


Mounting clamps/cuff

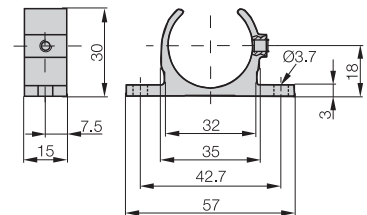


Cost Effective

Mounting cuff
Ordering code: **BTL6-A-MF03-K-50**
Includes: 1 cuff



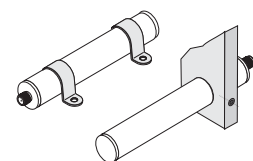
Mounting clamp
Ordering code: **BTL6-A-MF01-A-50**
Includes: 1 clamp



Mounting clamp
Ordering code: **BTL6-A-MF01-A-43**
Includes: 1 clamp

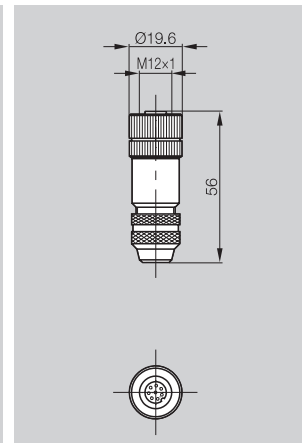
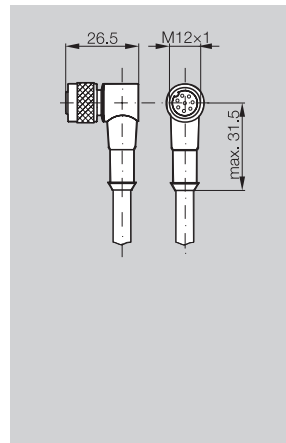
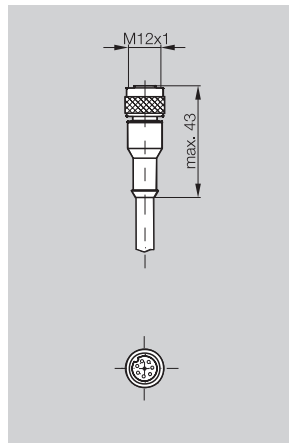
When extreme shock and vibration are present, we recommend spacing mounting clamps every 250 mm.

Length (stroke length)	No. of mounting clamps/cuffs
up to 250 mm	2
251 to 500 mm	3
501 to 750 mm	4
751 to 1000 mm	5
1001 to 1250 mm	6
1251 to 1500 mm	7



Custom mounting options

Connectors for Series	BKS-S115-PU-_-_- BTL6-_-_-S115	BKS-S116-PU-_-_- BTL6-_-_-S115	BKS-S115-00 BTL6-_-_-S115
Type	8-pin, Straight, female	8-pin, Right angle, female	8-pin, female



Ordering Code	BKS-S115-PU-_-_-	BKS-S116-PU-_-_-	BKS-S115-00
Screw Terminal			max. 0.75 mm ²
Housing Material	PUR	PUR	CuZn nickel plated
Contacts	CuZn	CuZn	CuZn
Contact Finish	0.8 µm Au	0.8 µm Au	
Cable Strain Relief			PG 9
Accepts Cable Diameter			6...8 mm
Enclosure Rating per IEC 60529	IP 67	IP 67	IP 67 (when attached)
Knurled Coupling Ring	CuZn	CuZn	
Finish	2.5 µm Ni	2.5 µm Ni	
O-ring	Viton	Viton	Viton
Cable	Molded-on PUR		
No. of Wires × Conductor Cross Section	8 × 0.25 mm ² + braided shield		
Type	LIYY-CF11Y		
Conductor Configuration	14 × 0,15 mm		
Outer Diameter	6,6 ±0,2 mm		
Min. Bending Radius	dynamic 4 × D, static 3 × D		

Please indicate cable length
in ordering code

02 = Length 2 m; 05 = Length 5 m;
10 = Length 10 m; 15 = Length 15 m;
20 = Length 20 m; 25 = Length 25 m

Pin assignments	Pin	Color
	1	YE
	2	GY
	3	PK
	4	RD
	5	GN
	6	BU
	7	BN
	8	WH

View of
female

