Housing size	
Type	
Transmission distance	
Installation type	

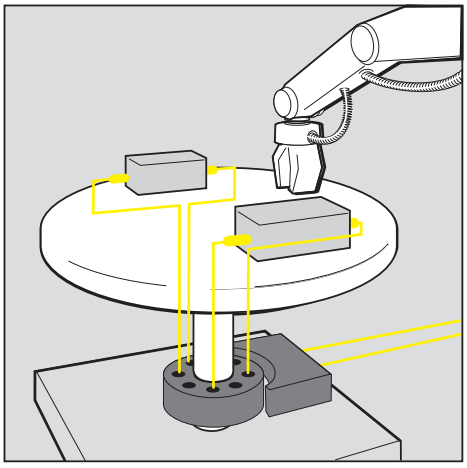
Non-Contact Energy and Data Transmission

The system has a modular design for non-contact transmission of energy for powering up to 8 binary PNP sensors on rotating shafts, axles or tables.

The switching state of each sensor is transmitted over the air gap to the stationary component. The system works independently of the rotation speed, and transmission is reliable even under the harshest ambient conditions.

Since no mechanically contacting parts are used, this technology completely eliminates all service and maintenance procedures.

- No-slip rings necessary
- Intelligent, compact and noise-immune system: inductive, non-contact, wear-free
- Connects up to 8 sensors
- Integrated supply energy for the sensors
- Connect, turn on, process data



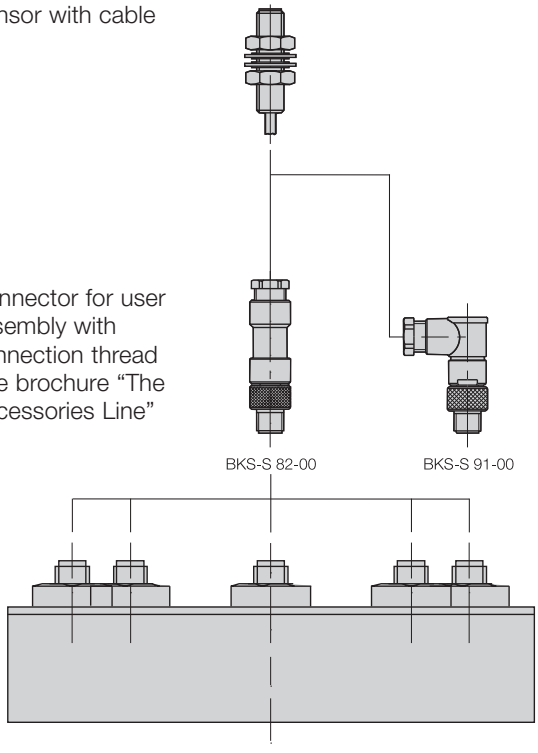
***Order as a set**
Part number: RPEM 4502P-ST05
1× Output sensor RPEM 4502P-ST and
1× Connector BKS-S 96-PU-05 and
1× Connector BKS-S 97-PU-05
(Connector with 5 m PUR cable)

Transmitter	
Output sensor PNP	
Assured transmission distance	
Supply voltage U_B incl. ripple	
Voltage drop U_d at I_e	
Rated operational current I_e	
No-load supply current I_0 max.	
Off-state current I_r	
Short circuit protected	
Axial/radial offset	
Operating current (for sensors)	
Output voltage (for sensors)	
Rated insulation voltage U_i	
Ambient temperature range T_a	
Switching frequency f	
Function/Supply voltage indicator	
Degree of protection per IEC 60529	
Housing material	
Material of sensing face	
Connection type	
Recommended connector	
Weight	

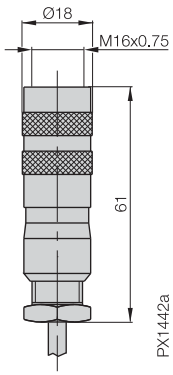
For your electrical planning, please ask for the user's guide!

Sensor with cable

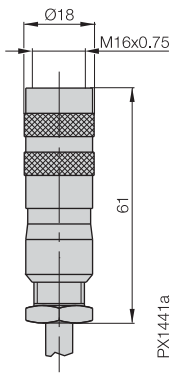
Connector for user assembly with connection thread
See brochure "The Accessories Line"

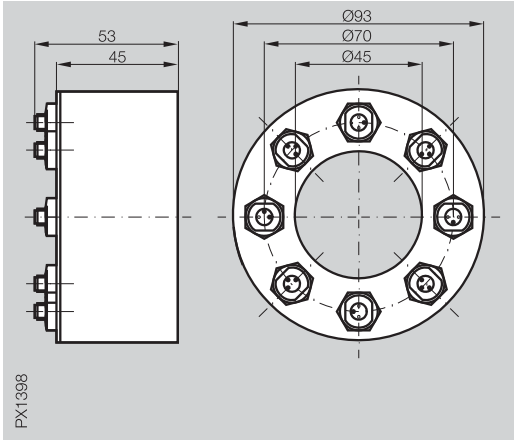
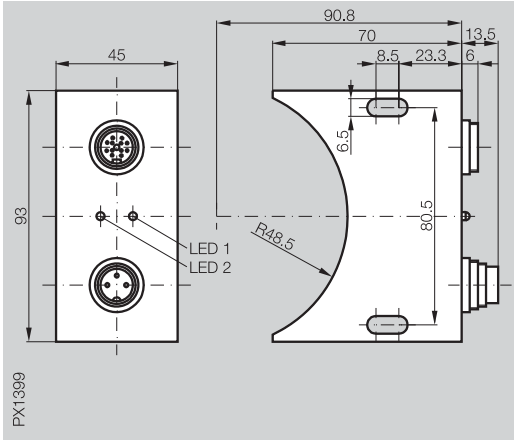


Connectors
BKS-S 96-PU-_ _

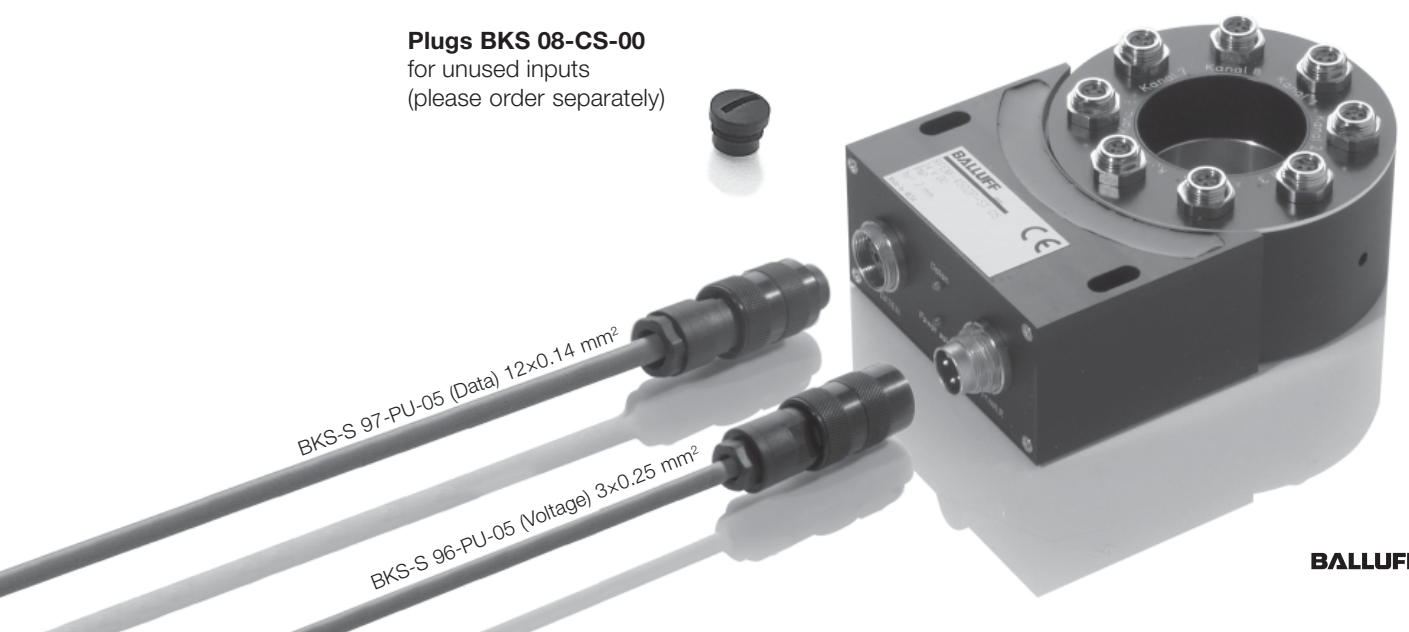


BKS-S 97-PU-_ _



	Ø 93		**93×83×45 mm**
	Transmitter	←·····→	Output sensor
	2 mm		
	on shaft Ø 45 mm		stationary
			
	RPTM 4502P-S49		RPEM 4502P-ST*
	2 mm		
			24 V DC ±5 %
			≤ 1.5 V
			≤ 30 mA per output
			≤ 700 mA
			≤ 50 µA
	yes		yes
	± 1 mm		
	≤ 160 mA		
	24 V DC		
	75 V DC		
	0...+70 °C		0...+70 °C
			1000 Hz
			yes/yes
	IP 67		IP 67
	PETP		PETP
	PETP		PETP
	Connectors		Connectors
	BKS-S 82-00/BKS-S 91-00		1× BKS-S 96 and 1× BKS-S 97
	755 g		340 g
	for max. 8 sensors		

Plugs BKS 08-CS-00
for unused inputs
(please order separately)



Non-contacting inductive energy and analog signal transmission for applications where cables are not permitted

The transmission of sensor signals from rotating machine members or from interchangeable tools often represents a difficult challenge for the designer. The same applies to the power supply for the sensors and actuators in such applications. Conventional approaches are usually based on contact- and wear-prone solutions such as slip rings or mechanical connections.

But electronic solutions are non-contacting, wear-free and are for the most part immune to contamination. Availability of a reliable and at the same time quick-disconnect link for power and data is indispensable in such circumstances. The Remote System from Balluff offers a wear-free, non-contacting alternative.

This flexible solution approach with the option of radial or axial coupling gives the user a new range of freedom.

New to the system is transmission of up to 4 independent analog signals with a single Radial system. The greater level of power provided for the sensors makes it possible to connect different analog systems.

Non-contacting signal transmission from BAW inductive distance sensors or BIL magneto-inductive displacement sensors is no longer a problem. BTL linear displacement transducers with analog output can also be connected with no restrictions.

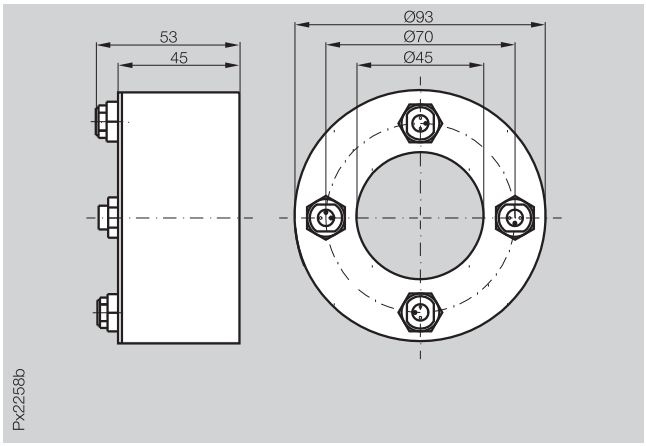
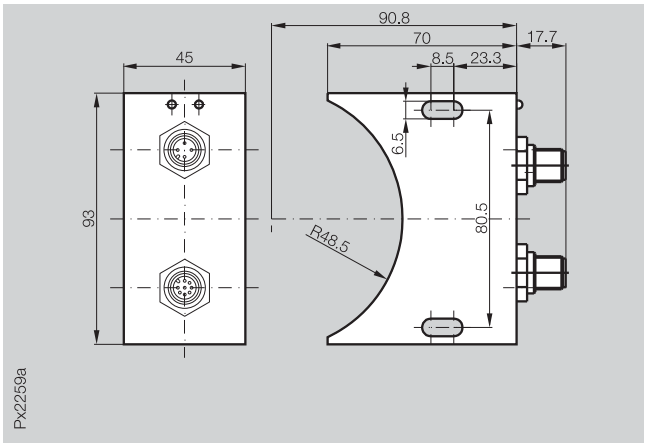
Plugs BKS 08-CS-00
for unused inputs
(please order separately)

Housing size	
Type	
Transmission distance	
Installation type	

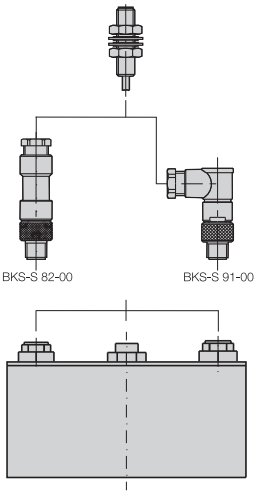
CE

Transmitter	
Output sensor	
Assured transmission distance	
Supply voltage U_B incl. ripple	
Voltage drop U_d at I_e	
No-load current I_0 max.	
Off-state current I_r	
Short circuit protected	
Load resistance R_L (per output)	
Resolution	
Measuring range	Voltage input
	Voltage output
Radial offset	
Operating current (for sensors)	
Output voltage (for sensors)	
Rated insulation voltage U_i	
Ready delay	
Ambient temperature range T_a	
Switching frequency f	
Function/Supply voltage indicator	
Degree of protection per IEC 60529	
Housing material	
Material of sensing face	
Connection type	
Recommended connector	
Weight	

For your electrical planning,
please ask for the user's guide!

	∅ 93	**93×70×45 mm**
	Transmitter ←·····→	Output sensor
	2 mm	
	on shaft ∅ 45 mm	stationary
		
	RNTM 4502-4V10-S49	RNEM 4502-4V10-S4
	2 mm ±1 mm	2 mm ±1 mm
		24 V DC ±5 %
		≤ 1.5 V
		≤ 800 mA
		≤ 50 µA
	yes	yes
		≥ 1 kΩ
	12 bits	12 bits
	4×0...10.65 V DC	
		4×0...10.65 V DC
	± 1 mm	±1 mm
	180 mA	
	24 V DC	
	75 V DC	
		≤ 10 ms
	0...+70 °C	0...+70 °C
		250 Hz/channel
		yes/yes
	IP 67	IP 67
	PETP	PETP
	PETP	PETP
	Connectors	Connectors
	BKS-S 82-00 or BKS-S 91-00	1× BKS-B 19-1-PU-_ _ and 1× BKS-S115-PU-_ _
	650 g	250 g
	for connecting max. 4 analog sensors	

Connectors BKS-S 82-00 or BKS-S 91-00



Connectors BKS-_ 19 and BKS-S115