Accessories for Precision Switchgear Couplings

Coupling BSW 502-00-34

for switchgear with long shaft end (40 mm).

Coupling BSW 502-00-24

for switchgear with short shaft end (20 mm).

Suitable for the direct coupling of switchgear units.

Complete with plastic coupling guard.







Shaft Coupling with Smooth Adjustment BSW 502-00-48

for switchgear with long shaft end (40 mm). This adjustment coupling corresponds with the latest safety regulations applicable to power operated presses. The rotation of the switchgear shaft resulting from the displacement of the eccentric (stroke) can be smoothly corrected by means of this coupling. The adjustment range of the coupling is 65°. A maximum of two 12-fold switchgear units can be coupled together at a maximum drive speed of 200/min.

Accessories for Precision Switchgear Chain Wheel Couplings

Chain Wheel Coupling with Smooth Adjustment BSW 502-00-47

for switchgear with long shaft end (40 mm).

This adjustable coupling complies with the latest safety regulations applicable to power operated presses and is supplied as a complete unit consisting of coupling and chain wheel.

The rotation of the switchgear shaft resulting from a movement of the eccentric shaft (for example on tool changing) can be smoothly corrected with this coupling.

The coupling adjustment range is max. 65°. The adjustable coupling is at the same time also the carrier of the chain wheel (with a single sided hub). The chain wheel with 25 teeth has a pitch diameter of 76 mm and is suitable for roller chains $\frac{3}{16} \times \frac{7}{32}$ ", 6.35 mm diameter.

Chain Wheel Couplings with Smooth Adjustment BSW 502-00-67

for switchgear with long shaft end (40 mm).

This adjustable coupling satisfies the latest safety regulations applicable to power-operated presses and is supplied as a complete unit consisting of the coupling section and the chain wheel.

In contrast to the above coupling this version is also fitted with a rotating metal disc (of 140 mm diameter) which serves to protect the chain.

The coupling adjustment range is also max. 65°. The chain wheel with a hub on one side and with 21 teeth has a pitch diameter of 85.21 mm and is suitable for roller chains of $1/2 \times 5/16''$, 8.51 mm diameter.





Accessories for Precision Switchgear Gears



Reduction Gear BG 502-00-40/43/53

for switchgear with long shaft end (40 mm) The gear can be flange-mounted directly to the switchgear unit. It is possible to offset the gear by 45° in each case. Eight holes of M 4 are provided for this purpose.

The gear can also be mounted between two switchgear units. The shaft end of the gear is then connected to the shaft end of the second switchgear unit by means of a coupling.

Axle centres	36	44	47
Reduction	2:1 3:1 4:1 5:1	3,4 :1 4,8 :1	3,7 :1

Ordering instructions	BG	502	00	_	40	/	3:1
BALLUFF gear Axle centres 40 = for axle centres a = 36 43 = for axle centres a = 44 53 = for axle centres a = 47			 				
Reduction ratio							

Spur Gear 8:1 10:1	Mitre Gear 1 : 1 1 :1.5	Plug-on gear GV (play \pm 1°) (installation by menas of adaptor disc 707 505).
16:1	1:2	Gear ratio increases up to max. 1:10.
20:1		Reductions up to max. 8000 : 1

Special gears available for our programme on application:

Speed Monitors (Evaluator Units) Series BES 516-604

Please ask for separate catalogues.



Application

Construction

Function

In connection with an inductive proximity switch (type series BALLUFF BES 516–3...) the speed monitor unit monitors digitally to ensure that the actual value coincides with the preset reference number of pulses.

The monitor unit can be used universally to detect a given number of pulses, within a range from 6 to 30.000 pulses per minute depending upon the unit. This covers amongst other things

The casing of the speed monitor is made of Thermoplast. It is installed by clip- or screw-mounting. The power supply (24 V DC \pm 20%) for the inductive proximity switch is included in the unit.

The pulse sequence generated by the inductive proximity switch is compared to the given reference number of pulses and is evaluated. If this reference number of pulses is exceeded the relay d1 is energized and the LED lights up.

stand-still monitoring, monitoring of stroke speeds, monitoring conveyor belts and shafts for failure, for example with respect to the use of BALLUFF switchgear with internal pulse pickups (see page 22) and with an external plug-in unit respectively (see page 26). If the monitor unit is used to monitor safety functions which affect the machine then it may only be used in connection with a safety control (in the sense of the UVV for press operation).

The speed monitor units are available with a fixed or variable number of pulses as well as with or without a starting bridge. The standstill monitor is equipped with a reversed relay function for reasons of safety.

When the reference number of pulses falls below the preset hysteresis the relay d1 is de-energized again and the LED goes out.

Programmable Limit Switch Series BPC/BMC

Purpose

Balluff programmable position controllers Series BPC and BMC are electronically programmable limit switches. They are distinguished by their ease of use, rugged construction, and high safety and reliability. Used together with linear or rotary transducers, they ensure cost effective operation, optimal flexibility and high productivity.

Function

BPC and BMC position controllers receive coded data from an absolute position feedback device.



Eccentric Press

Dynamic setpoints in the BPC eliminate switching delays in connected control devices regardless of rotational speed. Safety of operator and machine is assured by using program lockout against unauthorized access. Machine positions are read and control functions executed fast and precisely. Based on the encoder feedback, the position controller turns on normal, time delayed, dynamic time delayed, or analog outputs.

With our available linear or rotary transducers, Balluff offers complete systems from a single source.

Features

- resolution 0.1°
- 48/24 outputs
- 32 programs
- 15 setpoints per output
- resolution up to 3600 counts
- dynamic setpoints
- serial interface
- timer outputs
- analog outputs
- high count frequency
- CIM compatible
- manual functions

Construction

The BPC and BMC position controllers has a shallow installation depth, making installation in an easily accessible location possible. All necessary operating and status features are accessible on the front panel. Programming is done using an environmentally sealed membrane keypad (IP 67).



Depending on the applica-

tion, up to three trans-

ducers and/or encoders

can be connected to the

BPC.

Applications

The high precision, safety and reliability, as well as the user-friendly operation and features of the position controllers BPC and BMC assure optimum performance in a wide range of applications including presses, rotary index tables, packaging machinery, and automatic lathes.

If you would like to know more, please request the following information:

- Position Controller BPC
- Mini-Controller BMC
- Incremental encoders
- BDG - Absolute encoders BRG
- Absolute encoders Bha
 Linear displacement
 - transducers BTL