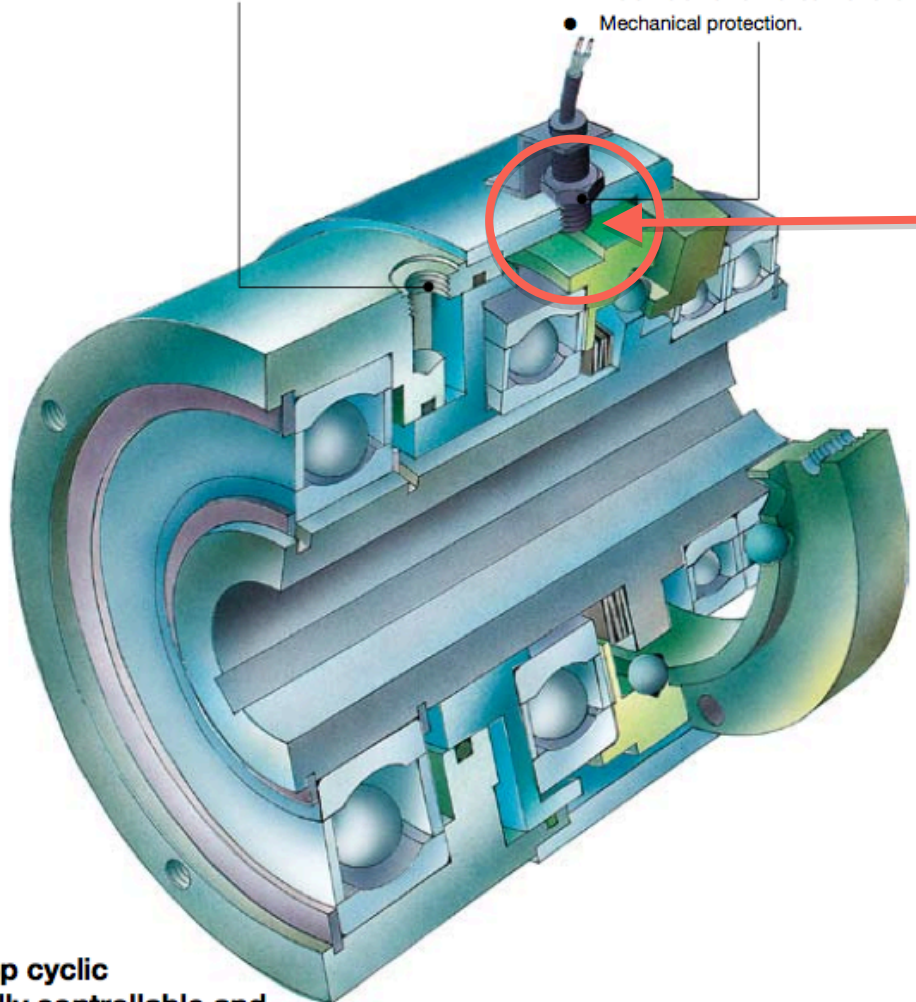


Connection for control unit

- Motionless air pressure supply.
- ON/OFF switching function, multi start function.
- Releases in case of an overload.
- Controllable operating pressure.
- Indication possibility of the functional condition.

Integrated limit switch

- Extreme short switch-off time.
- In case of an overload the limit switch detects the axial disengaging movement of the control element quickly and precisely.
- The limit switch gives a signal to release the clutch and to disconnect the drive or for further control functions.
- Mechanical protection.



The EAS[®]-Sp cyclic pneumatically controllable and adjustable overload clutch

EAS[®]-Sp means:

- Simple attachment of the drive elements
- Lower mass moment of inertia
- Long service life and maintenance free
- High disengaging torque accuracy
- Integrated mechanical protected limit switch

Application:

- In all kinds of automated machines
- With constantly changing operating conditions
- With constantly changing cycles and cycle speeds

EAS[®]-Sp application:

- In packaging machinery
- In filling machinery
- In printing machinery
- In washing/cleaning machines and systems
- In materials handling equipment
- In general machine construction

Backlash-free principle

The backlash-free torque transmission:

- Balls in radially and axially arranged recesses on the hub and on the pressure flange.
- The balls are pressed simultaneously into recesses of the hub and pressure flange, and therefore transmit the torques backlash-free in both directions of rotation, similarly for reversing drives.

Operating principle

1. Overload function:

During operation the clutch transmits the torque determined by the pneumatic pressure. When the torque is exceeded (due to overload) the clutch disengages, input and output are disconnected.

Simultaneously the integrated limit switch (PNP-opener) is damped and gives an impulse to the EAS[®]-Sp control unit. The air is ventilated and the drive is disconnected.

2. Switching function:

The clutch is pneumatically controllable.

The torque is transmitted from input to output when the clutch is pressurized with air.

The clutch and drive can be switched on or switched off via the pneumatic system.

3. Control function:

The limiting torque for overload on the clutch can be adjusted continuously via the air pressure feed and pressure can be varied during operation.

Torque transmission and limitation

- The limit torque is determined by the existing pressure.
- Controllable torques are transmitted from the hub to the pressure flange and further to the input element via the patented backlash-free principle.
- When the limit torque is exceeded, the controlled pressure is exceeded. The limit switch is damped due to the axial movement of the control element. Input and output are disconnected.

Output flange

- The corresponding output element (toothed wheel, pulley etc.) can be attached easily and precisely onto the pressure flange.
- The double bearing also allows the installation of wide input elements.
- Precise running accuracy.

Please Observe:

Please select the screw quality and the tightening torque for the fixing screws on the drive element so that the set limit torque is transmitted using frictional locking with sufficient certainty.

