

Product Information

Pneumatic control units



Pneumatic control unit



CTA: 281729 281730

The pneumatic control unit can be combined with all versions of pneumatic grips and load frames included in the ZwickRoell series portfolio. It is suitable for specimens that are not dimensionally stable, are sensitive to clamping and slip easily—even with shrinking specimen thickness. It is also ideal for high specimen throughput and frequently changing specimen materials.

Optimum gripping and convenience

Specimens are always properly gripped and held, regardless of the properties of the specimen material. This ensures reliable test results. When compared with the use of mechanical grips, cycle times are significantly reduced.

- Constant, reproducible gripping force, even with specimen thickness reduction or pressure fluctuations in the compressed-air system.
- With the optional foot pedal unit, your hands remain free to grip specimens that are not dimensionally stable, for example.
- The closing pressure is indicated via a pressure gauge on the control unit, with stepless adjustment from 1.5 bar to 10 bar. This allows you to use high gripping forces to hold specimens that slip easily and low gripping forces for specimens that are sensitive to clamping.
- Maximum operating convenience is achieved through low operating forces and short operating times.
- With the use of spring-closing specimen grips, the level of efficiency and specimen throughput are increased even further.



Pedal unit for opening and closing the pneumatic grips via foot operation

Additional benefits achieved through direct connection

With the space-saving connection of the pneumatic control unit on the machine electronics and integration in the system configuration builder, you obtain additional benefits:

- Integration of the specimen grips in the system configuration builder ensures traceable and repeatable test
 conditions and the highest level of safety for the
 testing system and user. The system configuration
 builder allows you to predefine and save all relevant
 settings, thereby providing precisely repeatable test
 conditions.
- High specimen throughput is guaranteed through the option of automatic opening of the specimen grip and approach of the start position after the end of the test.
- Significantly reduced travel distances are achieved through flexible positioning of the optional foot pedal unit and machine remote control, with which you can conveniently operate the specimen grips.
- Highest level of safety through monitoring of the force limits to open the specimen grips.
- The optional clamping pressure preselection function allows the applied pressure to be set in testXpert III in a traceable manner.



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Highest level of safety

The pneumatic control unit from ZwickRoell meets all legal requirements (e.g. Machinery Directive 2006/42/EC, BIA Fact Sheet/Worksheet 330 216). Use of the following functions ensures the highest level of safety for the operator:

- When using pneumatically closing specimen grips:
 Closing movement of the jaws only as long as the
 closing button is being activated. In the event of a
 hazardous situation, removing your hand from the
 closing button will cause the grip to go into safe mode
 immediately.
- The maximum closing speed of 10 mm/s allows time to react and is independent of the supply pressure.

- Reduced pressure during the closing process provides additional safety.
- When using spring-closing specimen grips: A brief tap on the closing button is sufficient and the specimen grip closes quickly and safely with a force of < 150 N.
- Electrical interlocking with the machine emergency stop feature ensures system-wide safety.
- If the air or electricity supply is interrupted, the grips will not make any uncontrolled movement and will remain in safe mode.

Pneumatic control unit (1x required)

The pneumatic control units can be used with testXpert III from V1.7 and testControl from V8.62.

Description	ArticleNumber
Pneumatic control unit	1108557
or	
Pneumatic control unit with clamping pressure preselection via testXpert III testing software	1108559

Optional accessories

Foot pedal unit

Description	ArticleNumber
Pedal unit for opening and closing the pneumatic grips via foot operation	1108558

Display-equipped remote control

Description	ArticleNumber
testControl II display remote control for efficient and ergonomic operation of the testing system	057984