

Product Information

GripControl hydraulic power pack

CTA: 97920 204142



GripControl hydraulic power pack



GripControl SA hydraulic power pack

Applications

The GripControl hydraulic power packs are tailor-made for ZwickRoell hydraulic grips and tools/fixtures up to 250 kN.

GripControl

EtherCAT



The power pack is linked to testControl II via the future-proof EtherCAT® interface.

testXpert®III



All power-pack functions are easily controlled via the testXpert®III testing software.

Remote control



Opening and closing of the grips can be conveniently controlled via the machine remote-control.

Advantages and features

EtherCAT Interface



The hydraulic power pack is directly connected to the testControl machine electronics. This offers several advantages during the specimen insertion process and the test. The power pack is linked to testControl II via the EtherCAT interface, which is compatible with future generations, leaving the interface modules of the machine electronics available.



Ergonomic Control

All power pack functions can be controlled conveniently and ergonomically via the ZwickRoell testXpert III testing software or the machine remote control. This offers numerous advantages during the gripping process and the test.



Safety

Operator safety is guaranteed at all times, for example by integration into the Emergency STOP circuit and inching mode.



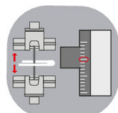
Perfect, gentle clamping

Specimens are always gripped and held perfectly, regardless of the properties of the specimen material.

- Various operating modes can be selected such as optional continuous gripping, re-tightening in the event of a pressure drop, or wedge gripping with a pressure proportional to the current test load.
- Operation is possible even at very low pressure.
- Specimen grip closing speed optionally adjustable via testXpert III.
- Automatic force zero control reliably protects the specimen from unwanted tensile or compression forces due to material flow or grip deformation during the closing and gripping process.

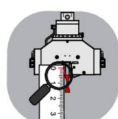
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Intelligent Changeover

Changing between different tests is easy with testXpert III's intelligent test environment concept. This includes automatic test-specific storage of test parameters and the test environment.



GripControl for short gripping length specimen grips

The perfect synergy between short-clamping-length grips and GripControl allows optimum gripping of even the smallest, most sensitive specimens.

GripControl SA (Stand Alone)

The stand-alone power pack is controlled directly by its own remote control with no connection to the testControl electronics. The remote control features the following functions:

- Grips can be opened or closed individually.
- Pressure can be set very simply via a dial control.
- Re-tightening function can also be activated via the remote control.
- Short cycle times, easy to operate. Two different pumps ensure rapid closing and high pressures. Smooth, fully automatic switching.

Function overview

	GripControl ¹⁾	GripControl for short gripping length specimen grips ¹⁾	Gripcontrol stand-alone option
Simple gripping	Yes	Yes	Yes
Regulate gripping	Yes	Yes	Yes
Wedge gripping ²⁾³⁾	Optional	Optional	-
Continuous gripping ³⁾	Optional	Optional	-
Force constant hold	Automatic	Automatic	Manual
Control of grip closing-speed	Optional	Optional	-
Flow-rate limitation (factory-set regulator)	Yes	Yes	Yes
Control	testXpert/ machine remote control	testXpert/ machine remote control	Power pack remote control
Integration with emergency stop circuit	Yes	Yes	Yes
CE conformity	Yes	Yes	Yes
EtherCAT connection	Yes	Yes	-

1) Only in conjunction with the AllroundLine materials testing machine

2) Wedge gripping = gripping force proportional to tensile force

3) Power-on time = 400 bar / approx. 20 % power-on time S3 and 100 bar / approx. 40 % power-on time S3. Permissible power-on time in percent, at a operation period of 10 minutes (e.g. 400 bar / approx. 20 % power-on time S3: 2 min. continuous gripping, 8 min. pause). Within the operation/pause ratio, the power pack can be operated infinitely, without switching off due to overtemperature.

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Technical data

Type Item No.	GripControl ¹⁾ 087280	GripControl for short gripping length specimen grips ¹⁾ 087283	GripControl Stand Alone (SA) 087281	
Dimensions				
Height	587	584	587	mm
Width	502	502	502	mm
Depth	817	817	817	mm
Weight with oil, approx.	90	90	90	kg
Operating pressure	30 ... 460 ²⁾	40 ... 460 ²⁾	30 ... 460 ²⁾	bar
Flow rate	3.6	3.6	3.6	l/min
Ambient temperature	+10 ... +35	+10 ... +35	+10 ... +35	°C
Power input specifications				
Permissible voltage fluctuation	±10	±10	±10	%
Power consumption (full load), approx.	1.6	1.6	1.6	kVA
Power supply frequency	50	50	50	Hz
Also required				
Hydraulic hoses	Yes	Yes	Yes	
Remote control	Yes	Yes	-	

1) Only in connection with the AllroundLine materials testing machine

2) Refers to the power pack only. It is possible that a lower maximum pressure (see maximum specimen grip pressure) results in conjunction with a specimen grip

Hydraulic hose (1x required)

Description	Item number
Set hydraulic hoses for connecting of one pair hydraulic grip to GripControl power pack.	1085542

Optional accessories

Description	Item number
Time-limited continuous and wedge gripping ¹⁾	087288
Control of grip closing-speed via testXpert III (flow-rate limitation)	087289

1) 400 bar / approx. 20 % power-on time S3 and 100 bar / approx. 40 % power-on time S3. Permissible power-on time in percent, at a usage period of 10 minutes (e.g. 400 bar / approx. 20 % power-on time S3: 2 min. continuous gripping, 8 min. pause). Within the operation/pause ratio, the power pack can be operated infinitely, without switching off due to overtemperature.