



Hegewald & Peschke

Meß- und Prüftechnik GmbH

Product information

Control units for pneumatic clamping devices



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For the control of pneumatic grips, Hegewald & Peschke offers 3 different control options. The optimum control unit is selected on the basis of the clamping fixture used, its risk and the intended application. The main focus is placed on an operation adapted to the specific test sequence with a high level of safety and an attractive price.

Operator safety is realized in all variants by a fixed reduced closing speed of the grips and can be combined with a reduced closing pressure as well as an emergency stop.

All control units are equipped with a maintenance unit with lockable closing and pressure control valve as well as restart protection.

Overview of the different control options:

	14-005-300/-310	14-005-320	14-005-330
			
Applica- tion	<ul style="list-style-type: none"> • simple, cost-sensitive testing with low clamping forces 	<ul style="list-style-type: none"> • tests with increased safety requirements at high clamping forces • tests in the production environment 	<ul style="list-style-type: none"> • tests with high demands on reproducibility, comfort and documentation • automated tests
Ad- vantages	<ul style="list-style-type: none"> • proven, robust system • small space requirement • no power supply necessary • low investment costs 	<ul style="list-style-type: none"> • additional safety due to reduced clamping pressure and emergency stop integration • status display of the clamping tools • variable operating concept via hand or foot switch in inching mode 	<ul style="list-style-type: none"> • control via LabMaster or manual operation of the testing machine • stepless adjustment of the main pressure according to the selected test template • automatic start-up of the main pressure at the beginning of the test • documentation of the test conditions in LabMaster • permanent clamping
Safety	<ul style="list-style-type: none"> • inherently safe closing speed of max. 10 mm/s • pneumatic restart protection with indication of operation status • maintenance unit with lockable switch-on and pressure control valve 		
		<ul style="list-style-type: none"> • closing of the clamping devices in inching operation • fused, reduced pressure during the closing process • integration into the emergency stop circuit of the testing machine 	
Field of ap- plication	single-sided pneumatic grips with low risk	all pneumatic grips in the product range of Hegewald & Peschke	



Technical data of the control units:

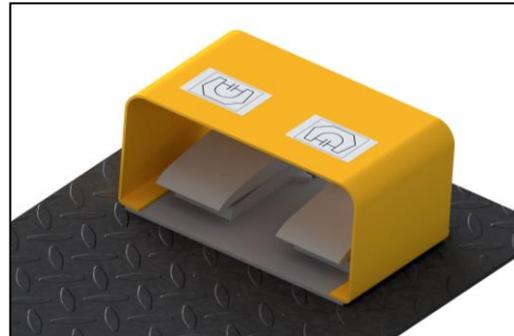
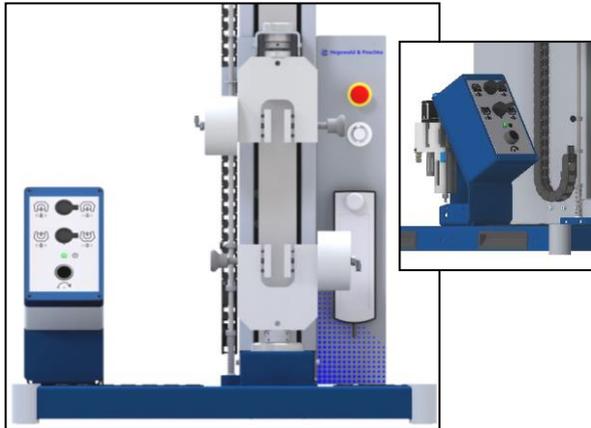
	14-005-300/-310	14-005-320	14-005-330
Dimensions (WxDxH)	400x200x600 mm (-300)	290x320x470 mm	330x475x380
Weight	7 kg (-300)	17 kg	30 kg
Closing speed	max. 10 mm/s	max. 10 mm/s	max. 10 mm/s for manual testing
Clamping pressure during set-up	-	max. 1 bar	max. 1 bar
Main clamping pressure	up to 7 bar manually adjustable	up to 10 bar manually adjustable	up to 10 bar manually adjustable
Switch-on valve	Yes (lockable)	Yes (lockable)	Yes (lockable)
Scope of delivery	<ul style="list-style-type: none"> • maintenance unit • hand or foot control • instruction manual 	<ul style="list-style-type: none"> • pneumatic control unit with operating and maintenance unit • emergency stop linkage and power supply to the testing machine • operating instructions 	<ul style="list-style-type: none"> • pneumatic control unit with maintenance unit • emergency stop linkage and power supply to the testing machine • operating instructions
Electr. connection conditions	-	24 VDC from testing machine	230 VAC/50 Hz external
Filter control valve	Yes (lockable), control range up to 7 bar, pressure gauge	Yes (lockable), control range up to 10 bar Pressure gauge with red-green scale	
Emergency stop	-	2-channel (PLd acc. to EN ISO 13849-1)	
Required	<ul style="list-style-type: none"> • pneumatic grip 	<ul style="list-style-type: none"> • pneumatic grip 	<ul style="list-style-type: none"> • hand control RMCi • pneumatic grip
Accessories		<ul style="list-style-type: none"> • operation via foot pedal (14-005-329) 	<ul style="list-style-type: none"> • speed switching (for automation) • operation via foot pedal (14-005-339)
Optional accessories	customer side: one-hand coupling plug size 3, NW 7.2, 3 to 10 bar		
Compressed air connection	10-35°C, 20- 80% humidity		



Pneumatic control for clamping systems with low risk potential

Hand switch (item no. 14-005-310)

Foot switch (item no. 14-005-300)



Operation of the clamping devices via separate manual control with convenient inching operation (item no. 14-005-320)



Operation of the grips via manual operation of the testing machine - Stepless adjustment of the main pressure possible in the testing software (item no. 14-005-330)



The screenshot shows the LabMaster software interface for a tensile test. The main window displays the 'Einrichten Zugversuch H&P' (Setup Tensile Test H&P) configuration screen. The 'Spannzeug' (Clamping Device) section is active, showing 'Klemmen' (Clamps) selected as the clamping device and 'Standard' as the mode. The 'Hauptdruck' (Main Pressure) is set to 6,00 bar. The 'Randbedingungen' (Boundary Conditions) section shows 'Standardversuch' (Standard Test) selected. The 'Geräte' (Devices) section is also visible. The software interface includes a menu bar, a toolbar, and a data table at the bottom. A control panel is overlaid on the right side of the software window, featuring a digital display showing '2.501' and several function buttons (F1, F2, F3, play, stop, etc.).

