

HYDRAULICS / PNEUMATICS

Test Stand for Hydraulic Pilot Valve





The system serves to check pilot valves using the media MIL H-5606H and MIL-83282.

- Creation and measurement of different current and voltage signals
- > Four channels with a max. of +/-28 V and +/- 1A each. Including parallel measurement of several linear variable differential transformer (LVDT) systems.
- > Creation and measurement of different hydraulic inlets and outlets (max. of 310 bar (4,500 psi) in two parallel systems
- > Signal generation different sine waves within a range of 0.1 Hz to 80 Hz
- > Measurement of several simultaneously available data channels both as individual values and in an x-y-diagram and an y-t-diagram

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MISCELLANEOUS

- > Operation takes place by means of a separate mobile control console in a TF intelligent software
- > Safety doors of test chambers made of laminated safety glass
- > Secured states of operation in case of by-passed safety doors (for UUT mounting and dismounting)
- > Safety equipment: safety monitoring, filter with electric clogging indicator, pressure switch, temperature and pressure sensors to monitor the external medium filled in
- > Leakage detectors in the collection pans
- > Hydraulic supply and return circuit work with an external supply which is not part of the PHPV1, but can be offered in addition

TECHNICAL DATA

> Hydraulic supply (requirements):

Supply: max. of 345bar (5,000psi)

(via an external supply)

Test medium: MIL H-5606H or MIL-83282

> Electricity supply (requirements):

Mains connection: 1/N/PE AC 60Hz 120V

Rated current: 16A
Power: 1.92kVA
Back-up fuse: 20A

> Dimensions and weight:

PHPV1:

Length: 1,700mm (67in)
Width: 1,300mm (51.2in)
Height: 2,130mm (83.6in)
Weight: ca. 1,050kg (2,314.85lb)

HMI:

 Length:
 800mm (31.5in)

 Width:
 750mm (29.5in)

 Height:
 1,750mm (68.9in)

 Weight:
 ca. 172kg (379.2lb)

> Conditions of use:

Operating temperature: 5 to 45°C (41 to 113°F)
Storage temperature: 0 to 60°C (32 to 140°F)
Height: up to 1,460m (4,800ft) MSL
Rel. air humidity: 20 to 95% (non-dewing)

Setup: in a non-ex zone

>PHPV1<

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> Measurements:			
Flow:		Force motor:	
(2 pieces)	0.04 to 4.0I/min (±1% MV) (0.01 to 1USgpm)	(4 pieces)	-1 to 1ADC (±1% MV)
_		Frequency LVDT:	
<u>Pressure:</u>		(2 pieces)	400 to 5,000Hz (±1% MV)
(9 pieces)	0 to 350bar (±0.25% FS) (0 to 5,076psi)	<u>Voltage LVDT:</u>	
(2 pieces)	0 to 250bar (±0.25% FS) (0 to 3,626psi)	(2 pieces)	0.5 to 7Vrms (±2% MV)
(2 pieces)	0 to 35bar (±0.25% FS) (0 to 508psi)		
<u>Temperature:</u>	0 to 100°C (±1°C) (32 to 212°F ±33.8°F)	MVof measurement value MRof measurement range FSof full scale	

OPTIONS

A variety of features are available to customize the equipment, e.g.: adaption for a number of UUTs, requirements for the test program, dimensioning, ... >PHPVI<

Technical changes reserved