





The hydraulic bench is designed as a work table, on wich you could install a big variety of didactic equipment in need of a input flow, guaranteeing a simple and practical use.

The upper or working tank it has two volumetric tanks of different sizes. With the purpuse of obtain measutements as accurately as possible, the upper tank has a two-volume volume meter, one calibrated 0-8 liters dor more accurate readings and another 0-40 liters for higher flow rates. This last one also has a drain plug, which can be used to retain the fluid or failing to evacuate quickly.

The lower tank can retain a maximum of 120 liters of water and it has a drain valve, and a minimum and maximum level meter.

The flow control valve is arranged in an ergonomic way, so that the user does not need to bend down for handling.

The connection of the different equipment is done by means of quick union nuts, in an agile and simple way, and does not require tools (for example, screwdrivers or keys).





The user manual clearly shows and with a large number of images, the entire process to be followed to use the equipment.

FL 01.4 BANCO HIDRÁULICO	FL 01.4 BANCO HIDRÁULICO FL 01.4 BANCO HIDRÁULICO					FL 01.4	BANCO HIDRÁULI
5. PRÁCTICAS REALIZABLES	5.n.2.LECTURAS Y RESULTADOS DEPÓSITO GRANDE						
5.1. CALIBRACIÓN DE UN DEPÓSITO VOLUMÉTRICO	DEPÓSITO PEQUEÑO				VOLUMEN VERTIDO	ALTURA	CONSTANTE
II. FUNDAMENTO TEÓRICO	VOLUMEN VERTIDO	ALTURA	CONSTANTE		V (litros)	h (mm)	к
El volumen de un depósito es igual a V = S. h, de manera que conocida su sección, demos obtener el volumen de agua contenido en él a partir de la altura. Por razones	V (litros)	h (mm)	к				
semos obtener el volumen de agua contenido en el a partir de la altura. Por razones Istructivas, los depósitos del banco no son perfectamente rectangulares, por lo que su							
ción varía en función de la altura.							
Es por esto, por lo que es conveniente obtener la ley de variación del volumen de a contenido en los mismos en función de la altura.							
Para ello utilizamos un matraz aforado con el que iremos llenando poco a poco los							
ósitos, anotando cada vez que vertemos el contenido del matraz en el depósito, la							
ra de agua alcanzada. A partir de los resultados obtenidos, podemos establecer la relación altura de agua							-
umen contenido para cada uno de ellos.							
V = Kh							
		Valor medio					
	Con lo que	V =	_* h				
	El banco se suministra con i	una escala va calibrada en	litros.				
		,					
							-
						Valor medio	
						-	
					Con lo que	V =	= h
13	14						
12	14						





The equipment has pressure ports prepared to be able to perform the analysis and calculation of the characteristic curve of the pump.



The lower tank has a coupling for easy filling and emptying of the equipment.





The upper tanks have calibrated rules to facilitate the work of the student in the flow measurements.







Optional Accessory: FLZ.T500 - ACCESSORY ADAPTER FOR HYDRAULIC BENCH Additional accessory for Dikoin hydraulic bench, adapting the hydraulic circuit to connect additional equipment.

The 500mm section, supplied with the equipment, can be easily replaced due to the connections with threaded links. No tools are required for installation.





Optional Accessory: FLQ-500-200Im - ELECTRONIC FLOW METER FOR HYDRAULIC BENCH Additional accessory for hydraulic bench consisting of a DN25 pipe section and an electronic flow meter. The set has a total measurement of 500mm.

The flowmeter has a digital display where the flow that circulates through the hydraulic circuit is visualized. Its installation in a hydraulic bench allows to obtain measurements in a much faster and more precise way.

The installation of this accessory on the bench is done by means of threaded links, which allows it ti be done in a simple, fast and safe way.





Optional Accessory: FLQ-500-30Im - ELECTRONIC FLOW METER 30I/min FOR HYDRAULIC BENCH Additional accessory for hydraulic bench consisting of a DN08 pipe section and an electronic flow meter. The set has a total measurement of 500mm.

The flowmeter has a digital display where the flow that circulates through the hydraulic circuit is visualized. Its installation in a hydraulic bench allows to obtain measurements in a much faster and more precise way.

The installation of this accessory on the bench is done by means of threaded links, which allows it ti be done in a simple, fast and safe way.





Optional Accessory: FL 01.AC.01 - DIFFERENTIAL ELECTRONIC MANOMETER ±7000mBar WITH QUICK CONNECTIONS Digital differential pressure manometer, used to measure the pressure difference in the suction and impulsion taps of hydraulic pumps, to obtain the characteristic curve of the pump.



Optional Accessory: FLZ.HB.P01 - Set of experiments for hydraulic bench The objective of this accessory is to carry out the laboratory **experiments** that are listed below:

- Calibration of a volumetric tank.
- Flow measurement with volumetric tank.
- Study of the trajectory of jets in plates with orifices.
- Archimedes Law.

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About the conection method of the didactic equipment, the bank has connections by quick union nuts (supplied with 2 meters of flexible hose), so the installation of the different equipment is easy and agile, Pump Characteristics: and thanks to the extension of the hose, the arrangement of the multiple elements that make up the didactic equipment is facilitated.

A pump capable of providing a maximum flow of 160 I / min is included in the bank itself. That flow can be regulated thanks to the provision of the valve through which the flow rate can be adjusted to obtain the quantity of flow necessary for the optimum performance of the experiment.

LEARNING OBJECTIVES

With this equipment you can perform the following experiments:

- Calibration of a volumetric tank.
- Flow measurement with volumetric tank.

TECHNICAL DATA

• Maximum manometric height 24 m wc.

- Flow: 20 / 120 l/min.
- Manometric height: 23 / 12 m wc.
- Consumed power 0,55 kW (0,75 HP).
- Turning speed 2900 r.p.m. (50 Hz).

Tanks:

 Storage capacity in lower tank: 120 litres. (available version with 250 I) .

• Measurement of levels by vertical manometers, and calibrated rules in liters.

- Upper calibration tanks.
 - 0 to 8 litres.
 - 0 to 40 litres.

Dimensions:

• 1300 x 845 x 975 mm.

Included ancillary:

Stop-watch.

REQUIREMENTS

• Power supply: 230V/50Hz

NOTE: The equipment does not include the adapter for the 500 mm section.