

SERIES TDE-H

Hydraulic Compressors

Idro Meccanica is an Italian key player in infrastructure compression technology. Since 1966 it develops and produces hydraulic compressors for hydrogen, biomethane and natural gas compression.



Compressor Physical Description

Idro Meccanica units adopt a hydraulic transmission. The main components of the compressor are one hydraulic cylinder and two gas cylinders. A steel rod connects the oil piston with two gas pistons. The pressure of the oil moves the connecting rod and gas is compressed in the cylinders by the gas pistons.

TDE-H series are suitable for:

- Discharge stations and direct filling, where high suction and discharge pressure are required

Datasheet

DATA	UNIT OF MEASURE	VALUES
Models	-	13, 20, 30, 35, 40, 85, 90
Cylinder	No.	1
Stages	No.	3
Max Power	kW (HP)	75 (100)
Max Speed	rpm	80
Suction pressure	bar (psi)	14 ÷ 450 (203 ÷ 6,525)
Discharge pressure	bar (psi)	450 (6,525)
Max flow-rate	Ncm/h	1,500 (885)
Gas handled	-	Hydrogen, biomethane, natural gas
Maintenance interval	Hours of operation	5,000
Certifications	-	EC/EAC - US
Configuration	-	Single or Twin

Benefits



Green

The gas and hydraulic sections are divided by a long distance piece (LDP), longer than compressor stroke at atmospheric pressure and two sets of seals, one on the gas and one on the oil side preventing any oil contamination during gas compression.



Efficiency and Flexibility

Hydraulic compressors are simple with only one moving part: the piston rod to which the oil and gas pistons are fixed. The low speed and wide range of pressures covered make Idro Meccanica compressors highly competitive, with a low Total Cost of Ownership (TCO).



Availability and Reliability

Low speed results in a high service life (up to 20 years). Wear parts are self-lubricating PTFE-based and have an average life up to 5,000 operating hours.

safe
GAS DESIGNED FOR YOU