



AIRCRAFT HYDRAULIC GROUND SUPPORT EQUIPMENT

AIRCRAFT MODEL

Developed for

DASSAULT AIRCRAFT

RAFALE

HC1600 - series

Mobile hydraulic ground power unit



ABC hydraulic ground power units (HGPU) are suitable for:

- ✈ AMM/ATA29 maintenance and overhaul tests on the aircraft hydraulic system
- ✈ Filtering the aircraft hydraulic system for decontamination
- ✈ Refilling and draining the aircraft hydraulic system

32 Usqpm
120 l/min

Mineral
MIL-H-83282

The HGPU model HC1600-series replaces the aircraft hydraulic power unit and it enables to perform on ground maintenance operations. It is designed for hangar applications with focus on simplicity to operate and maintain.

Three versions are available according to aircraft applications:

Models	Flow	Pressure	Max pressure	Max hyd. power
HC1600 Electric-driven	32 <u>usqpm</u>	5000 psig	6400 psig	160000 <u>usqpm</u> * <u>psig</u>
	120 <u>lpm</u>	350 bar	440 bar	42000 <u>lpm</u> * <u>bar</u>

*Indicated measurements may vary by +/-2%



And all other aircraft with hydraulic characteristics complying with this HGPU

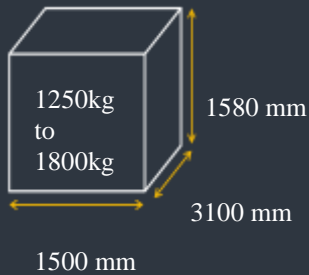


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OVERALL DIMENSIONS



Hydraulic hoses:

- 9 meters (without aircraft quick-disconnect)

- Power supply cable : 12 meters (without plug)

OPERATING CONDITIONS

Operating temperature: from -5°C to +50°C

Indoor use (maintenance hangar)

Easily movable by one operator

Forkliftable

Power supply: 3 x 400V, 50Hz, +Ground (other upon request)

Power 75 kW

Commands circuit upon 24V (Safety voltage)

Main Characteristics



The chassis is made of a welded painted structure movable thanks to four wheels with a tow bar for towing and braking. The cart can be towed up to 25 km/h (15 mph) on surface road. The complete hydraulic system is mounted on a special tray to collect possible leaks and thus help preserve the environment. A rainproof polyester material canopy protects the internal system. A control panel integrates all the commands and lights for the monitoring of the hydraulic cart. Pressure and flow pre-settings are operated thanks to touch screen.

Standard accuracy

(other upon request)

- ✦ Pressure gauge: Class 1
- ✦ Flowmeter: Class 0.5
- ✦ Sound level: less than 75 dbA
- ✦ Hourmeter
- ✦ Temperature: Class 1

Hydraulic parameters

- ✦ Mineral oil MIL-PRF-83282
- ✦ Single power system with one supply line (red) and one return line (yellow)
- ✦ Axial piston pump with variable stroke technology
- ✦ Pressure range: adjustable up to 5000 psi / max 6400psi at reduced flow upon pressure manometer
- ✦ Flow range: up to 32 usgpm upon visual flow indicator
- ✦ Non-stop fluid decontamination level in class 4 (or better) upon NAS 1638 standards using filter with clogging indicator
- ✦ Air/Oil heat exchanger with low noise level
- ✦ 40 usgallon (150 liter) reservoir capacity
- ✦ A selector valve to allows the operator to work on aircraft reservoir mode or on HGPU reservoir mode for fluid transfer

Options available

(other upon request)

- ✦ **BR** : A flushing unit to clean the hydraulic cart (maintenance purpose)
- ✦ **CP** : Connectors to connect an external particle counter
- ✦ **EC**: Electrical cable length 20 meters
- ✦ **ML**: A specific device for slow operations controlled through a remote control and precise check of locking pressure of the aircraft landing system.
- ✦ **MR**: Display of the return pressure
- ✦ **QD** : Aircraft quick-disconnect
- ✦ **RD**: Controls for flow adjustment
- ✦ **TY**: Hydraulic hose length 12 meters
- ✦ **INCLUDE** : A second hydraulic supply line with a return line
- ✦ **INCLUDE**: Manual reel to store hydraulic hoses
- ✦ **INCLUDE** : Sampling port
- ✦ **INCLUDE** : A specific degassing system with fluid regulation system



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