

HYDRAULICS

Universal Hydraulic Power Units SERIES >HPM-5/M-PU<



Sound proof enclosure

This power unit is developed to supply modular designed test stands (3000 and 5000psi systems).

It can also be used as autonomous power unit and is designed for test stands like: <HPM-S/M-NR>, <HPM-S/M-MP>, etc.

It is possible to adapt this power unit for other test stands.

- The power unit can be supplied for Skydrol or mineral oil.
- > As an option, a remote control (touch panel operated) can be provided.
- > Flow and pressure can be controlled at the high pressure outlet.
- > As an option, a static high pressure outlet with a max. of 650bar can be provided.
- > As an option, a pressure controlled low pressure outlet is available.
- > Five different types of power units are available, further dimensions can be provided upon request.

safety in test > safety in flight



RANGE OF APPLICATION

> The Skydrol version (letter "S") can be used for the following aircraft types:

AIRBUS A300 A319 A320	BOEING B737 B747 B757	BOMBARDIER CRJ Series	ANTONOV AN-148
A330/340 A380 A400M	B757 B767 B777 B787	EMBRAER ERJ135/145 E-Jets	SUKHOI SSJ-100

> The mineral oil version (letter "M") can be used for the following aircraft types:

Eurolighter formado 1-10 1-15 1-4 AN-124		Eurofighter	Tornado	F-18	F-16	F-15	F-4	AN-124
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3000PSI HYDRAULIC POWER UNIT

> suitable for aircraft types equipped with a 3000psi system

Туре	Flow HP circuit [US gpm]	Flow HP circuit [lpm]	Flow LP circuit [US gpm]	Flow LP circuit [Ipm]	Motor [kW]
HPM-S/M-PU-20-30	20	76	40	151	45
HPM-S/M-PU-40-30	40	151	62	235	75

5000PSI HYDRAULIC POWER UNIT

> suitable for aircraft types equipped with a 3000psi and 5000psi system, e.g.: A380

Туре	Flow HP circuit [US gpm]	Flow HP circuit [Ipm]	Flow LP circuit [US gpm]	Flow LP circuit [Ipm]	Motor [kW]
HPM-S/M-PU-20-50	20	76	40	151	75
HPM-S/M-PU-40-50	40	151	62	235	132
HPM-S/M-PU-60-50	60	227	62	235	160

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GENERAL INFORMATION

- > The equipment can be easily serviced and transported due to its modular design.
- > The framework of this power unit is fitted with a drain pan to collect leaking medium during maintenance and to prevent environmentally hazardous conditions.
- > One return pump is fitted to return test medium into the main tank.
- > The use of stainless steel where required and suitably protected aluminium control panels, covers and housings ensure corrosion resistance.
- > Cleanliness of test medium is ensured by the fitted filters.
- > Samples of medium can be extracted.
- > Heating elements in the hydraulic tank are used to heat up the test medium (option).
- > The sound-insulated design ensures max. noise emission (option).

OPTIONS

> The wide range of different options and the modular design ensure an assembly of the power unit in accordance with individual requirements.

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TECHNICAL DATA

> Electrical parameters:

Mains connection: 3/N/PE AC 50Hz 400V

Nominal current: 327A / 400AgL

Power: 226kVA

> Cooling water supply (requirements):

Pressure - intake: min. 3bar (43.5psi)
Temperature - intake: max. +15°C (+59°F)

> Heating:

HPM-S/M-PU-60-50

Power: 48kW

Temperature: max. +100°C

<u>HPM-S/M-PU-40-30</u> <u>HPM-S/M-PU-40-50</u>

Power: 36kW

Temperature: max. +100°C

<u>HPM-S/M-PU-20-30</u> <u>HPM-S/M-PU-20-50</u>

Power: 18kW

Temperature: max. +100°C

> Medium:

Letter "S":

Skydrol IV, Skydrol V HyJet IV, HyJet V

Letter "M":

Hydraulic oil i.a.w.: MIL-H-5606

MIL-H-83282 MIL-H-87257

> Operating conditions:

Ambient temperature: +5 to +45°C

(+41 to +113°F)

Storage temperature: $0 \text{ to } +60^{\circ}\text{C}$

(+32 to +140°F)

Height: max. 3,000m above SL

(max. 9840ft)

Humidity: 10 to 95%

> Measurement range:

Temperature sensor: 0 to +100°C ±1°C

(1-off) (+32 to +212°F) $(\pm 33.8°F)$

Pressure sensor: 0 to 16bar ±0.5% o.f.s.

(1-off) (0 to 232psi)

Pressure sensor: 0 to 400bar ±0.5% o.f.s.

(3-off) (0 to 5,801psi)

> Dimensions and weight:

HPM-S/M-PU-40-30

HPM-S/M-PU-40-50

HPM-S/M-PU-60-50

Length: 3,300mm (10.8ft)

Width: 1,200mm (4.0ft) Height: 1,900mm (6.2ft)

Height: 2,200mm (7.2ft) (incl. sound insulation)

Weight: ~ 3,000kg (6,613lb)

HPM-S/M-PU-20-30

HPM-S/M-PU-20-50

Length: 2,800mm (9.2ft)

Width: 1,200mm (4.0ft)

Height: 1,900mm (6.2ft)

Height: 2,200mm (7.2ft) (incl. sound insulation)

Weight: ~ 3,000kg (6,613lb)