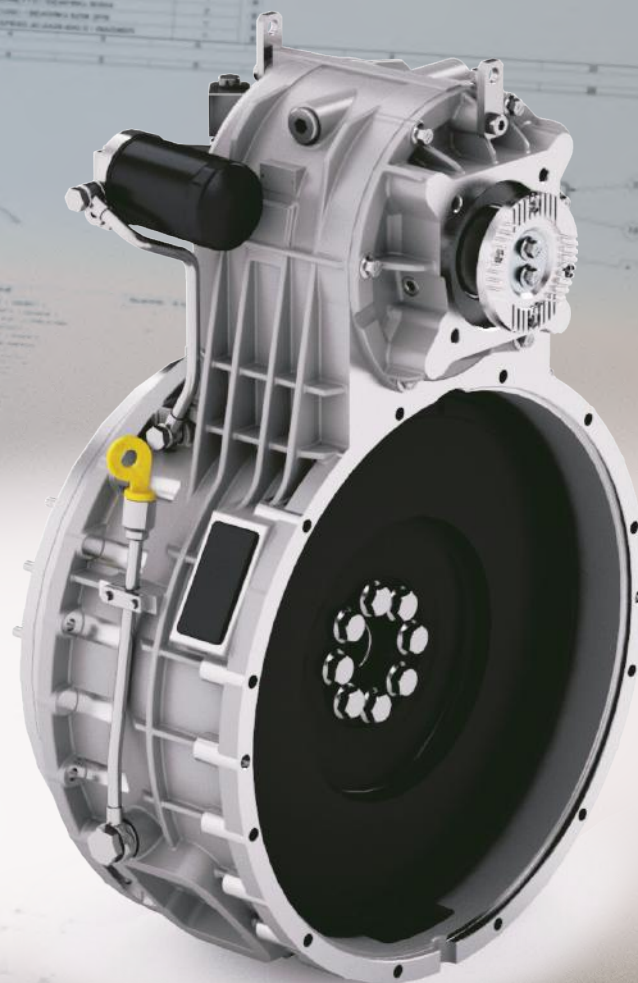


# ENGINE FLYWHEEL

POWER TAKE-OFF  
SAE TYPE 1





## **PTO FOR HEAVY DUTY APPLICATIONS (100% OF ENGINE AVAILABLE TORQUE)**

Main applications are:

- fire-fighting (including pump & roll function),
- refrigerator (cooler) vehicle
- concrete mixer,
- sewer cleaner,
- snowplow,
- drilling devices,
- other.

## **EASY TO FIT**

The PTO EFP-1 is so easy to adapt that is easily suitable to be installed onto the following transmissions (manual, automated and fully automatic) and related engines:

- ZF,
- ALLISON (series 3000/4000),
- EATON,
- DAIMLER,
- VOLVO,
- TATA,
- ISUZU,
- HINO,
- NISSAN,
- FUSO,
- HYUNDAI,
- other.

## **TECHNICAL SPECIFICATIONS**

PTO clutch engagement limit conditions:	1000 RPM / 1,845 lbs.ft. (2,500 Nm) / 350 HP (262 kW)
	1500 RPM / 1,215 lbs.ft. (1,650 Nm) / 350 HP (262 kW)
	2000 RPM / 920 lbs.ft. (1,250 Nm) / 350 HP (262 kW)
PTO output Torque:	2,500 RPM / 1845 lbs.ft. (2,500 Nm) / ratio 1:1,02
	2,000 RPM / 1475 lbs.ft. (2,000 Nm) / ratio 1:1,27
	1,600 RPM / 1180 lbs.ft. (1,600 Nm) / ratio 1:1,56

The max Power is continous use at 525 HP (392 kW) max.

## **FUNCTIONS**

- Engine dependent pto;
- PTO usage both with standing still vehicles as well as in mobile conditions (pump and roll);
- PTO mounting position between engine and gearbox;
- PTO output at 12 O'clock (from 11 up to 1 O'Clock - see pictures);
- Assembling without any "special" or dedicated tool.

## **OPTIONS**

- PTO output engagement control, shift, constant drive and hydraulic shifting (engine off);
- External oil cooler (optional);
- Temperature control option;
- Oil level inspection;
- PTO output sensor speed;
- Auxiliary PTO opening located at 4 and 8 O'clock to avoid chassis 300 Nm
- Oil cooler (air/oil);
- No residual clutch drag (active brake function).

## TECHNICAL SPECIFICATIONS

Unit through torque (to rear axle):

- as indication and reference

2,950 lbs.ft. (4,000 Nm) max; 720 HP (530 kW) max

## VEHICLES INSTALLATIONS

Max. engine speed:

2,500 RPM

Max. operating angle of the vehicle:

- forward / rearward: 17° (30%),

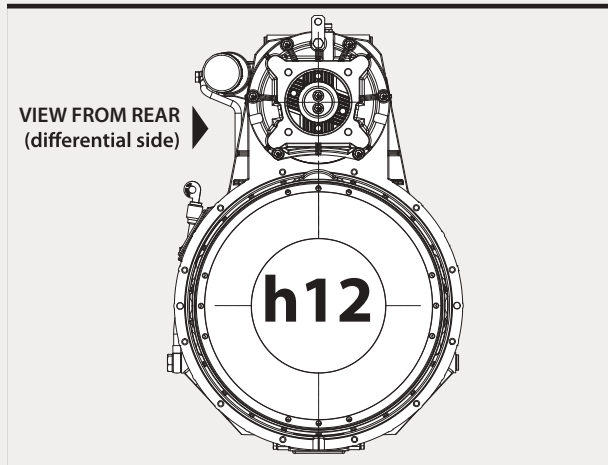
- right / left: 17° (30%).

## FLANGE OUTPUT

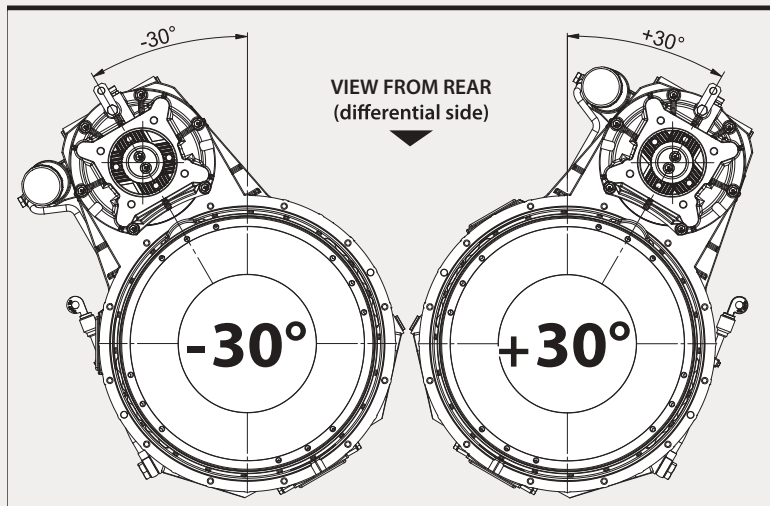
PTO output: - pump SAE C 4 bolts,  
- flange 120 ISO 8667 (XS),  
- flange 150 ISO 8667 (XS),  
- flange 1410

## MOUNTING POSITIONS

STANDARD: h12

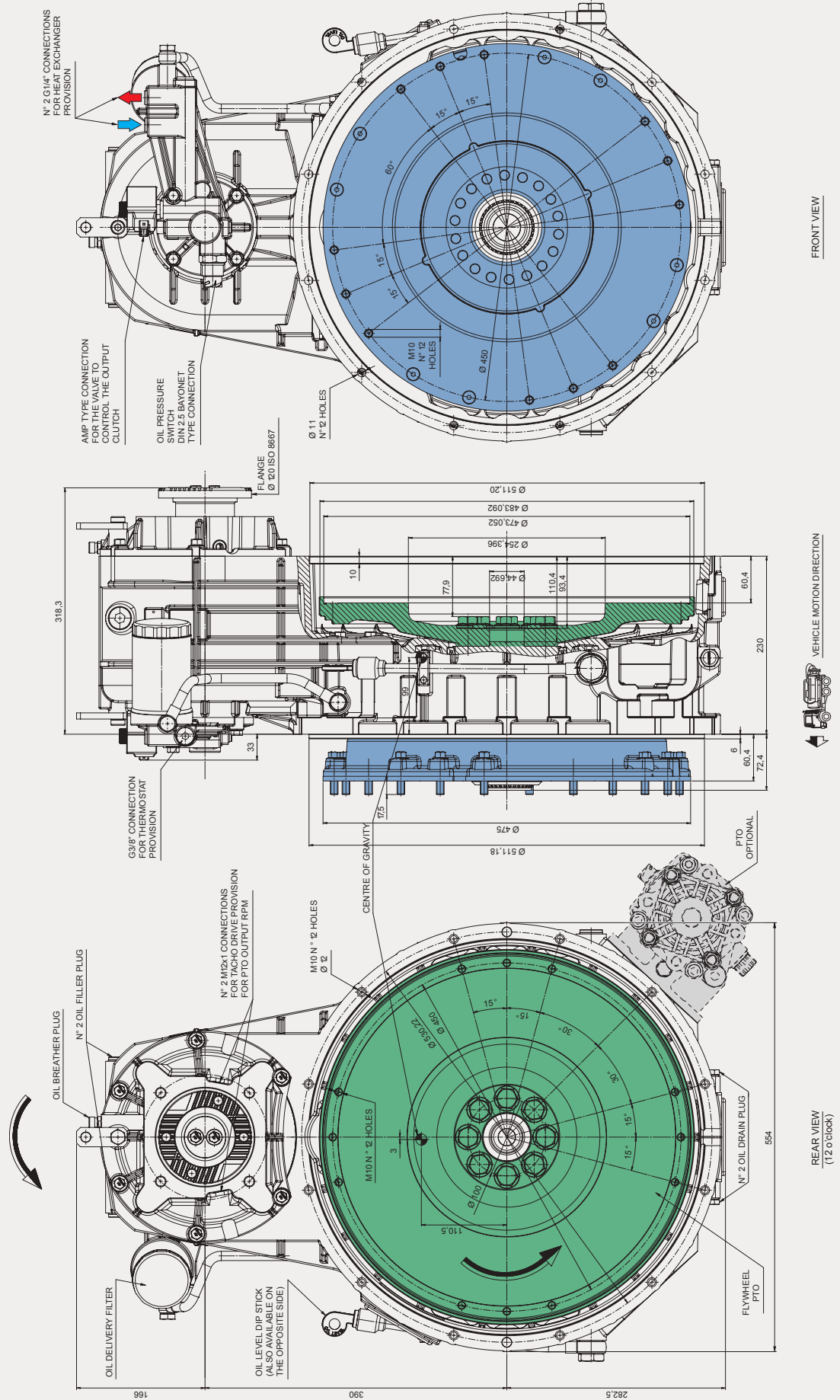


OPTIONAL: +30° or -30°



# DIMENSIONS

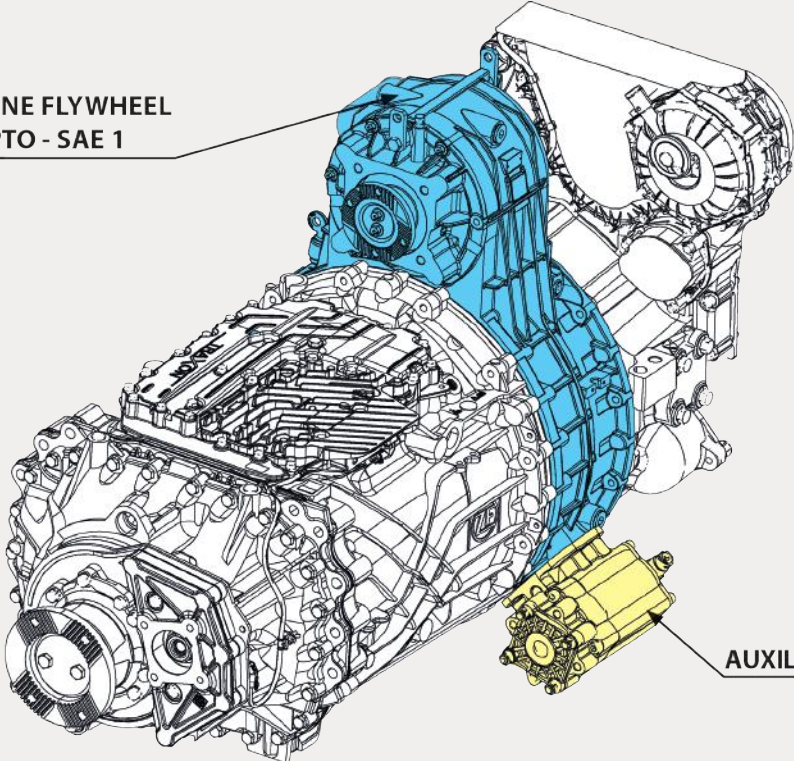
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# GEARBOXES

ZF

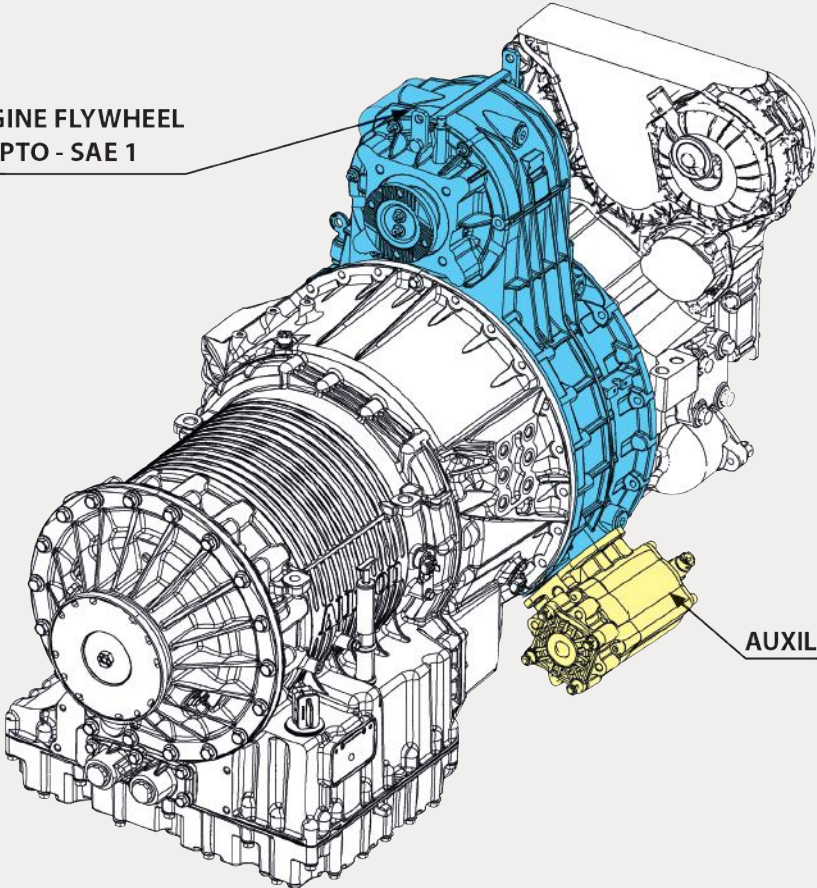
ENGINE FLYWHEEL  
PTO - SAE 1



AUXILIARY PTO AVAILABLE

Allison 4000

ENGINE FLYWHEEL  
PTO - SAE 1



AUXILIARY PTO AVAILABLE

