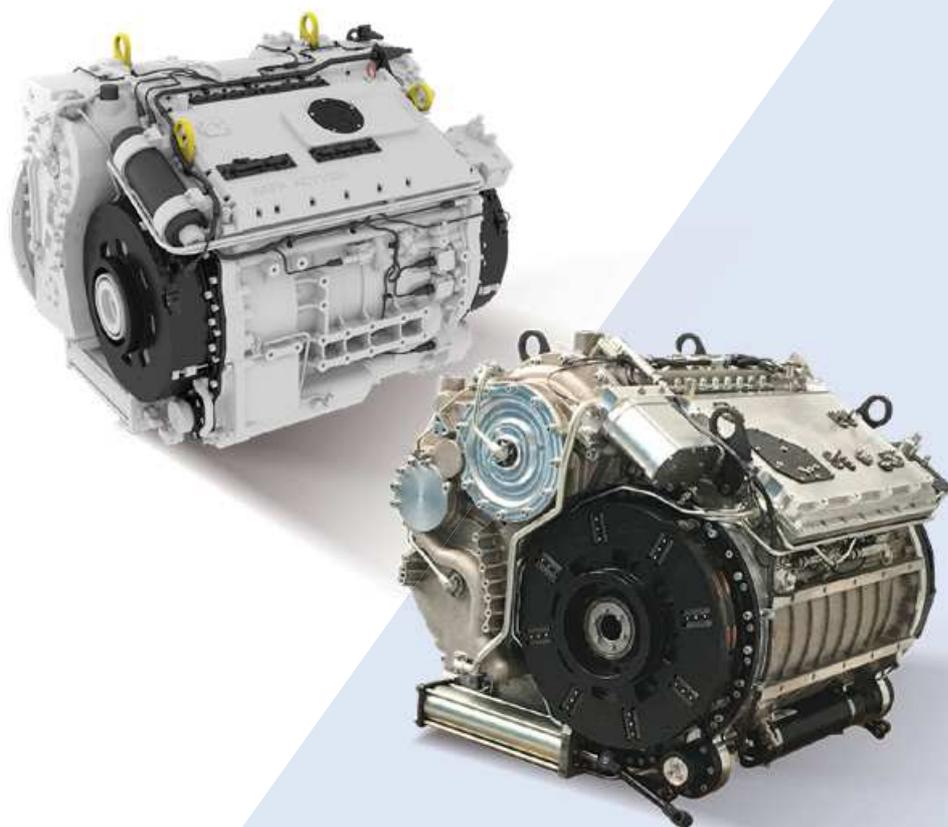


SAPA PLACENCIA

Tracked Vehicle Transmissions



Mobility through efficiency

By eliminating hydraulic power transmission systems from the power path in both the propulsion and steering systems, our transmissions deliver the highest power to the tracks allowing the vehicle excellent maneuverability and control.

The propulsion system of our transmissions is a 32 speed electro-hydraulically controlled power-shift. The ratio spread is 20 and the different ratios are divided into 4 ranges; each of them is suitable for different terrain and maneuver conditions.

The transmission steering is controlled by a “steer by wire” system allowing optimum control of the vehicle at high speed as well as during sharp turns. The steering system performs differential steering, pivot and neutral pivot. With “steer by wire”, no effort is demanded to driver by the steering system so handling of the vehicle and driver fatigue are largely enhanced.

With our transmissions 20:1 ratio, spread of 20 and 90% efficiency, operations in extreme torque demanding conditions can be performed smoothly and precisely. The inherent high efficiency of the technology, derived from the elimination of hydraulic power systems, requires significant lower power level from engines. This perfects vehicle mobility, reduces noise and optimizes fuel consumption.

The transmission's high efficiency is maintained in all operating conditions. An additional benefit derived from this characteristic is that the power-pack cooling system does not need to be oversized and the vehicle will not suffer from overheating conditions caused by the transmission.

Advantages

Q-CVT Transmission

High acceleration

Increased mission range

High performance

Easy maintenance

High reliability

Less fuel consumption

Low preventive maintenance

The transmission brake system provides service, parking and emergency functions. The technology permits the use of engine brake in all conditions.

Rating & specification

Technical characteristics

Model	SG 450	SG 850	SG 850B	ACT 850	ACT 1000
Max. engine power (hp (kW))	450 (331)	850 (625)	850 (625)	850 (625)	1000 (735)
Max. vehicle weight (Tm (US ton))	20 (22)	35 (40)	50 (55)	45 (50)	50 (55)
Number of gears	32	32	32	32	32
Ratio spread, Fwd	15:29 to 0.77	20:1 to 1:1	20:1 to 1:1	17:1 to 0.83:1	33:1 to 1:1
Ratio spread, Rev	15:33 to 1.54	35:1 to 1.75:1	35:1 to 1.75:1	30:1 to 1.45:1	35:1 to 1.75:1

Physical description

Model	SG 450	SG 850	SG 850B	ACT 850	ACT 1000
Width (mm)	1100	1170	1540	938	1029
Length (mm)	610	1200	975	873	810
Height (mm)	746	903	920	850	874
Dry weight (kg)	1350	1800	1750	1400	1600
Powerpack configuration	T	L	T	T,U	T,U

Power take off provision

Model	SG 450	SG 850	SG 850B	ACT 850	ACT 1000
Drive	Engine	Engine	Engine	Engine	Engine
Mounting Position	Double side	Right side	Right side	Right side	Right side
Power Rating (hp)	100 Right 100 Left	134	134	400	400

Oil system

Model	SG 450	SG 850	SG 850B	ACT 850	ACT 1000
Capacity (l)	45	90	90	70	75
Filters	Integral	Integral	Integral	Integral	Integral
Oil Level Sensor	Standard	Standard	Standard	Standard	Standard

Recommended oil types for all models are SAE 5W 30/SAE 15W 40 /SAE 10W /SHELL SPIRAX S6 ATF 2M /A295 /S4 ATF HDX

Key benefits

Torque converter eliminated

Efficiency higher than 90% in any condition

“Drive by wire” steering system

Pure mechanical steering transmission

Brake system with emergency, parking and service brakes

Manual emergency system

Diagnosis and autodiagnosis

Tracked vehicle transmissions

Applications

