TAKE OFF

two-cylinder four-stroke engine with spur gear and centrifugal clutch

Description. 2/2006

Order-No.	Description	Weight
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TBM 10	BOXER-flat engine R 1,1 S 72 kW at 7200 1/min, including motronic-characteristic controlled ignition, lambda probe (also suitable for leaded fuel), starter, three-phase current alternator, twin ignition, oil cooler	61 kg
TBM 11	BOXER-flat engine R 1,15 RS/RT 70 kW at 7200 1/min, including extras (see above)	61 kg
TBM 12	BOXER-flat engine R 1,2 GS 75 kW+ at 7200 1/min, including directly programmable electronic fuel injection, starter, three-phase current alternator, twin ignition, oil cooler	58 kg
TIS 01	second autonomous injection and ignition system matching for engine R 1,2	3 kg
GT2- 2,8	spur gear unit 2,8:1 matching for all four-stroke BOXER-flat engines, helical toothed, drive upturned or down, notably rugged construction, 340 mm long	7,8 kg
GT2- 3,2	spur gear unit 3,2:1 drive upturned or down	7,8 kg
GT2- 3,5	spur gear unit 3,5:1 drive upturned or down	7,8 kg
TMGo 3,5	spur gear unit 3,5:1 drive upturned	7 kg
TMGu 3,5	spur gear unit 3,5:1 drive down	7,5 kg
TMGo 3,0	spur gear unit 3,0:1 drive upturned	7 kg
TMGu 3,0	spur gear unit 3,0:1 drive down	7,5 kg
TMGo 2,75	spur gear unit 2,75:1 drive upturned	7 kg
TMGu 2,75	spur gear unit 2,75:1 drive down	7,5kg
TMGo 2,5	spur gear unit 2,5:1 drive upturned	7 kg
TMGu 2,5	spur gear unit 2,5:1 drive down	7,5kg
TFD 02	centrifugal clutch, rotary vibration absorber, matching for spur gear TMG and GT2 series	4 kg
TEK 11	wiring loom matching for engine 1,1 and 1,15 including all relays and connectors	1kg
TEK 12	wiring loom matching for engine 1,2 including all relays and connectors	1kg
TNG 02	air-filter housing made of GFK, matching for engine R 1,1 and 1,15	1 kg
TNG 03	air-filter housing made of GFK, matching for engine R 1,2	1,2 kg
TRA 11	exhaust system with 2 intakes and 1 outlet, stainless steel	3 kg
TRA 12	exhaust system with 1 three-way catalytic converter intake and 1 outlet, stainless steel	3 kg
TRA 13	exhaust system, enabled with pressure sensor, two-in-one, stainless steel	4 kg
TKT 12	component parts for manifold system, matching for engine R 1,1 and 1,15	1,5 kg
TKT 13	component parts for manifold system, matching for engine R 1,2	1,5 kg
TMK 72	three-way catalytic converter, optinal, integratable into the exhaust system	0,5 kg
TKM 03	four point engine mount with vibrating elements	1,5 kg
TPM01	electrical fuel pump, 3 bar pressure system	0,5 kg
TNL 03	adjustable 3-blade air propeller in pull- and push-version, 1730 or 1650 mm diameter	5,6 kg
TNL 02	adjustable 2-blade air propeller in pull- and push-version, 1730 or 1650 mm diameter	4,5 kg
TEP 02	adjust gauge matching for propeller	
TMA 010	oil temperature indicator with sensor, 52 mm diameter	0,15 kg
TMA 020	oil pressure indicator with sensor, 52 mm diameter	0,2 kg
TMA 030	rev meter, 52 mm diameter	0,15 kg
TMA 040	operating hours counter, 52 mm diameter	0,15 kg

The BOXER-engine with the TAKE OFF gear variant has been developed for land vehicles. This drive does not conform to the standard of aircraft industry. The drive is not tested or certified for the operation in aircrafts. After tests the manufacturer or experimental manufacturer of the air sports equipment has to decide on his own reponsibility, how far this drive concept can be used in air sports equipment (UL) with safe gliding flight characteristics, that can safely land in case of engine failure. The BOXER-manufacturer and TAKE OFF do not assume any liability for consequential damages that are caused by a drive breakdown of an aircraft or air sports equipment.