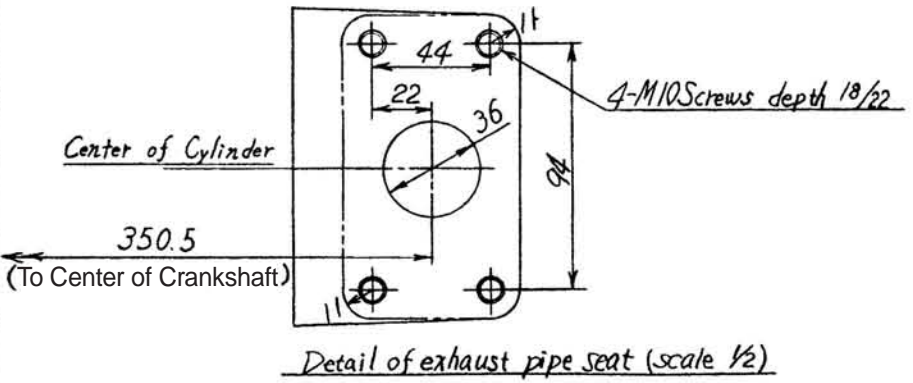


Engine Data	
Model	TS 190 R
Output (continuous rating)	KW 16 PS HP 16
Speed	Speed of Crankshaft rpm 2200 Speed of Driving Shaft rpm 2200
Max Output	KW 19 PS HP 19
Speed of Crankshaft at Max output	rpm 2200
No of Cylinder	1
Rotation (View from flywheel side)	anti-clockwise
Rotation Direction (view from power take-off side)	?
Dry Weight (about)	Kg 182



Thickness Dimensions (mm)	General Dimension Tolerance (Casting)			General Dimension Tolerance (Cutting)			Surface Roughness Classification (JIS)
	Classification of Nominal Dimensions	Sand Mold	Shell	Classification of Nominal Dimensions	Dimension Tolerance	Symbol	
Below 5	±1.0	±0.8	±0.1	Below 100	±1.5 ±1.0	Above 1 Below 4	S(u)
Above 5 Below 10	±1.5	±1.0	±0.2	Above 100 Below 200	±2.0 ±1.5	Above 4 Below 16	▽▽▽
Above 10 Below 20	±2.0	±1.5	±0.3	Above 200 Below 400	±3.0 ±2.0	Above 16 Below 63	▽▽▽
Above 20 Below 30	±3.0	±2.0	±0.5	Above 400 Below 800	±4.0 ±3.0	Above 63 Below 250	▽▽
Above 30 Below 40	±4.0	±3.0	±0.8	Above 800 Below 1600	±5.0 ±4.0	Above 250 Below 1000	▽
Below 10	±1'		±0.1	Above 1600 Below 3150	±7.0 ±6.0	Above 1000 Below 2000	▽
Above 10 Below 50	±30'		±0.2			Above 2000 Below 4000	▽
Above 50 Below 100	±20'		±0.3				▽
Above 100	±10'		±0.5				▽

Model: TS190 R Diesel Engine
Out Line

WEIGHT (RAW)	(± %)	HYDRAULIC TEST	kg / c/d
WEIGHT (Precision %)	(± %)	PNEUMATIC TEST	kg / c/d
CHIEF	DATE	MODEL	SCALE
P.J. DESIGNER	SPECIALIST	QTY	MATERIAL
CHECKED	DRAWN	TRACED	NAME

YANMAR DIESEL ENGINE CO. LTD.
ENGINE DEVELOPMENT DEPT. 1

1st Revision
CODE B2-05890-0260

Important Check Points	Precision Type & Symbol
Type	Symbol
Straightness	
Circularity	⊘
Line Profile	—
Flatness	□
Cylindricity	⊘
Surface Profile	—
Parallelism	
Perpendicularity	⊥
Angularity	∠
Concentricity	⊙
Symmetry	⊕
Position	⊖
Runout	—