



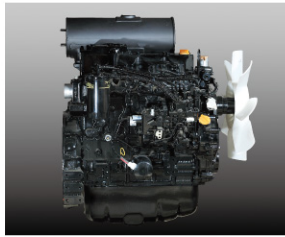
**FR45**  
**FR60**  
**FR80H**

## Product Features of FR45/FR60/FR80H:

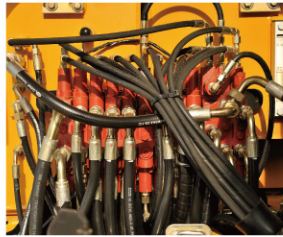
- Japan Yanmar engine;
- Hydraulic control valves from KYB/REXROTH system, main pump from KYB/REXROTH/CASAPPA, high efficiency and reliability;
- Design and manufacture of structural components can achieve world-class level;
- Fashionable and safe driving cab.



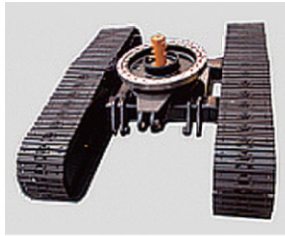
# Products Information



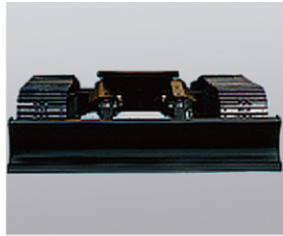
Original YANMAR engine



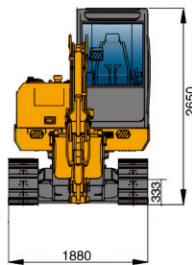
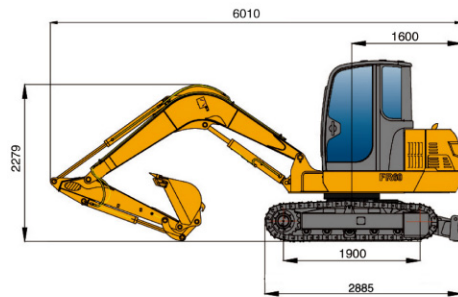
Japan KYB/REXROTH hydraulic parts



Conformity optimize stepped system



Integrated and improved driving system



| Main parameters              |                | FR45           | FR60           | FR80H          |
|------------------------------|----------------|----------------|----------------|----------------|
| Operating weight             | kg             | 4200           | 5730           | 8300           |
| Standard bucket capacity     | m <sup>3</sup> | 0.14           | 0.18           | 0.32           |
| Transport dimensions (L×W×H) | mm             | 5450×1850×2475 | 6010×1880×2650 | 6100×2275×2485 |
| Bucket digging force         | KN             | 26             | 42             | 61             |
| Stick digging force          | KN             | 23             | 31             | 44             |
| Maximum traction force       | KN             | 41.7           | 52.8           | 83             |

| Walking device     |      | FR45    | FR60    | FR80H   |
|--------------------|------|---------|---------|---------|
| High and low speed | Km/h | 2.6/5.0 | 4.5/3.0 | 5.2/2.6 |
| Gradeability       | °    | 30      | 30      | 30      |
| Ground pressure    | Kpa  | 24.5    | 32      | 37      |

| Rotating device |     | FR45 | FR60 | FR80H |
|-----------------|-----|------|------|-------|
| Rotating speed  | Rpm | 10.4 | 10.2 | 11.5  |

| Engine              |        | FR45   | FR60               | FR80H            |
|---------------------|--------|--|--------------------|------------------|
| Model               | /      | YANMAR 4TNV88-SYY  | YANMAR 4TNV94L-SFN | ISUZU AA-4JG1TPC |
| Type                | /      | Four—cylinder, direct injection, naturally aspirated, water—cooled |                    |                  |
| Rated power / speed | KW/rpm | 25.2/2200  | 39/2200            | 54.3/2150        |
| Bore × stroke       | mm     | 88×90  | 94×110             | 95.4×107         |
| Displacement        | L      | 2.19   | 3.054              | 3.059            |
| Fuel consumption    | g/KW·h | 245  | 235                | 257              |
| Fuel tank capacity  | L      | 73   | 120                | 110              |

| Hydraulic system   |       | FR45 | FR60 | FR80H |
|--------------------|-------|------|------|-------|
| Main pump pressure | Mpa   | 24.5 | 24.5 | 24.5  |
| Main pump flow     | L/min | 98   | 135  | 160   |

| Operation range             |    | FR45 | FR60     | FR80H    |
|-----------------------------|----|------|----------|----------|
| Maximum digging height      | mm | 5050 | 5330     | 7150     |
| Maximum unloading height    | mm | 3440 | 3640     | 5030     |
| Maximum digging depth       | mm | 3600 | 3935     | 4050     |
| Maximum digging radius      | mm | 5680 | 5330     | 6190     |
| Bulldozing blade size (L×W) | mm | /    | 1880×360 | 2256×406 |