

# E680Fi

SDLG Hydraulic Excavator 8 Ton



**Reliability in Action**

Member of the Volvo Group

# E680Fi

## Hydraulic Excavator

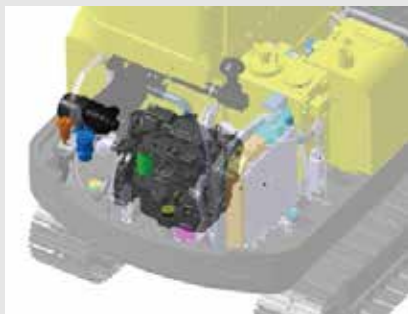
### POWERFUL ENGINE

- Yanmar engine with EGR
- Single rotor distribution pump for higher ignition pressure and better combustion
- ECU controlled



Multiple filters for prolonged engine life

- 3-stage fuel filters
- 2-stage air filters
- Fuel Water Separator

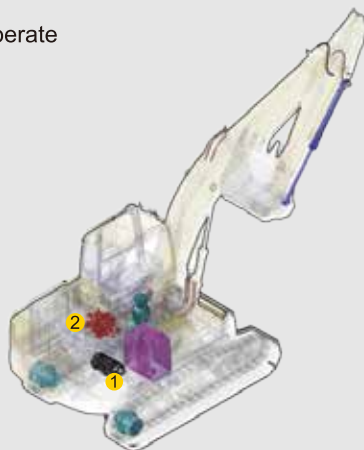
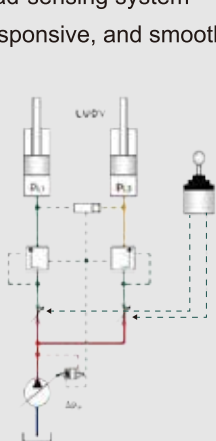


- 9 work modes
- Auto-idle function



### EFFICIENT HYDRAULIC SYSTEM

- Load-sensing system
- Responsive, and smooth to operate



### ROBUST STRUCTURE

- Integrated frame offering balanced load distribution
- Reinforced structures
- Large ground clearance



- Robotic-welded high-strength steel plates
- Stringent NDT procedures
- Reinforced joints



- Wear-resistant GP bucket lasting 20% longer





# E680Fi

## Hydraulic Excavator

### SAFE AND COMFORTABLE CABIN

- Excellent fields of vision
- Large rear-view mirror
- Large wiper area
- Lock lever
- Good anti-slip
- Hydraulic cylinder protective covers
- Silicone oil shock absorbers
- 6-way adjustable mechanical suspension seat
- Strong A/C with multiple air outlets in a well-sealed cabin
- Tinted glass
- Multiple storage compartments



### EASY MAINTENANCE

- Grouped filters, Electricals and lubrication points
- Easy access at standing height



### OPTIONAL ATTACHMENTS

- Top/side mounted breakers
- LM buckets
- Ditching buckets
- Log grapples



\*The abovemention illustrations may not refer to specific models.

# E680Fi

## Hydraulic Excavator

### POWERFUL YET ENERGY-SAVING



The highly efficient four-cylinder Yanmar engine, coupled with an energy-saving hydraulic system, delivers both power and fuel economy. Work modes and an auto-idle function ensure power on-demand, minimising fuel consumption and noise.

### SMOOTH- OPERATIONS



The load-sensing hydraulic system is engineered to deliver class leading performance and efficiency. The variable piston pump offers precise control in a wide variety of work conditions.

### RELIABLE AND DURABLE



All core components in the engine and hydraulic systems are sourced from world-renowned manufacturers to meet our highest reliability standards. A robust structure provides excellent stability and machine durability.

### MULTI- PURPOSE



Access more applications with breaker piping, rubber pads and other optional accessories. This versatile machine is ideal for a wide variety of urban and rural tasks.



## SAFE AND COMFORTABLE



The cabin features excellent fields of vision, and is built on industry-leading vibration and noise reduction technologies. A powerful air-conditioning system provides comfort in cabin, reducing operator fatigue and improving productivity.

## EASY TO MAINTAIN



Designed to minimise maintenance efforts, the main components, filter and electrical systems are grouped for easy, ground level access.



# E680Fi

## Hydraulic Excavator

### ENGINE

|                        | Unit   | E680Fi                             |
|------------------------|--------|------------------------------------|
| Model                  | -      | 4TNV98-ZCVLGC                      |
| Type                   | -      | In-line, water-cooled, four-stroke |
| Power                  | kW@rpm | 42.8@2100                          |
| Max. torque            | Nm@rpm | (226.5~246.7)/1575                 |
| Displacement           | ml     | 3319                               |
| No. of cylinders       | -      | 4                                  |
| Cylinder bore x stroke | mm     | 98×110                             |

### ELECTRICAL SYSTEM

|                    | Unit | E680Fi |
|--------------------|------|--------|
| System voltage     | V    | 12     |
| Battery voltage    | V    | 12     |
| Battery capacity   | Ah   | 100    |
| Alternator voltage | V    | 13.5   |
| Starter voltage    | V    | 12     |

### UNDER CARRIAGE

|                       | Unit | E680Fi |
|-----------------------|------|--------|
| No. of track shoes    | -    | 2×39   |
| No. of top rollers    | -    | 2×1    |
| No. of bottom rollers | -    | 2×5    |

### PARAMETER

|                                   | Unit           | E680Fi   |
|-----------------------------------|----------------|----------|
| Total mass                        | kg             | 7700     |
| Bucket capacity                   | m <sup>3</sup> | 0.3      |
| Average ground pressure           | mm             | 34.5     |
| Slewing speed (r/min)             | -              | 10±0.3   |
| Traveling speed (low/high) (km/h) | -              | 2.86/5.0 |
| Maximum digging force             | kN             | 50       |

### HYDRAULIC SYSTEM

|                             | Unit                | E680Fi                                    |
|-----------------------------|---------------------|---|
| Hydraulic system type       | -                   | Load-sensing control system               |
| Working pressure            | kgf/cm <sup>2</sup> | 245                                       |
| Main valve model            | -                   | HVSE18                                    |
| Hydraulic control type      | -                   | Pilot-actuated proportional control valve |
| Maximum flow rate           | L/min               | 160                                       |
| Main pump model             | -                   | HP3V80                                    |
| Motor (rotary/travel) model | -                   | MSG-44P-21/TM10VD-A-26/49-1               |

### HYDRAULIC CYLINDER

|                                      | Unit | E680Fi        |
|--------------------------------------|------|---------------|
| Stick cylinder - bore × stroke       | mm   | 1 - 95 × 865  |
| Dozer blade cylinder - bore × stroke | mm   | 1 - 120 × 180 |
| Boom cylinder - bore × stroke        | mm   | 1 - 110 × 850 |
| Bucket cylinder - bore × stroke      | mm   | 1 - 85 × 710  |

### FUEL CHARGE

|   | Unit | E680Fi |
|---|------|--------|
| Fuel filling capacity                   | L    | 135    |
| Hydraulic oil filling capacity          | L    | 115    |
| Engine oil filling capacity             | L    | 12     |
| Oil filling capacity of walking reducer | L    | 2×1.1  |
| Water radiator antifreeze coolant       | L    | 13.5   |

### ROTARY SYSTEM

|                          | E680Fi   |
|--------------------------|--|
| Slewing type             | Hydraulic internal-tooth single-row ball bearing     |
| Type of slewing brake    | Wet disc (hydraulic oil release, spring compression) |
| Model of slewing bearing | QNA800*25AZ1   |

### WALKING SYSTEM

|                                       | E680Fi   |
|---------------------------------------|--|
| Number of supporting wheel (one side) | 5  |
| Track shoe width (three-teeth) (mm)   | 450  |
| Number of carrier roller (one side)   | 1  |
| Type of travel brake                  | Wet disc (hydraulic oil release, spring compression) |



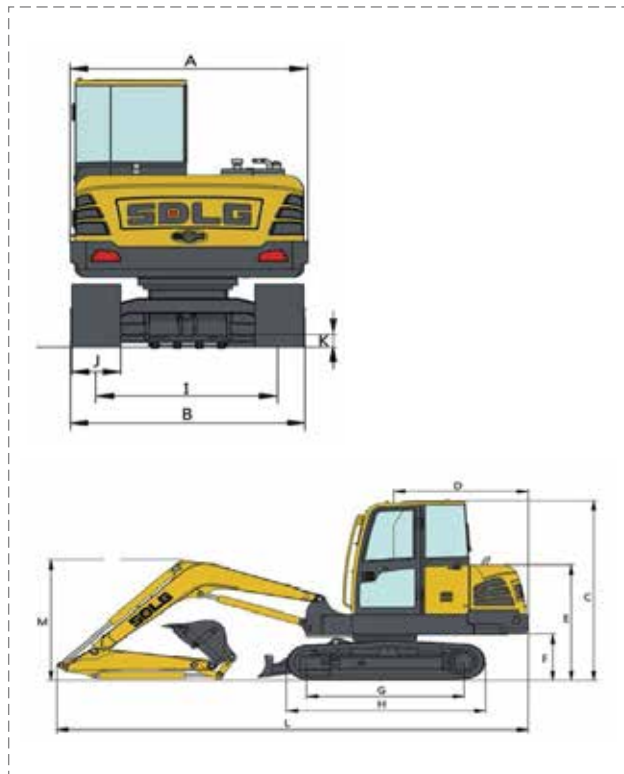
# E680Fi

## Hydraulic Excavator



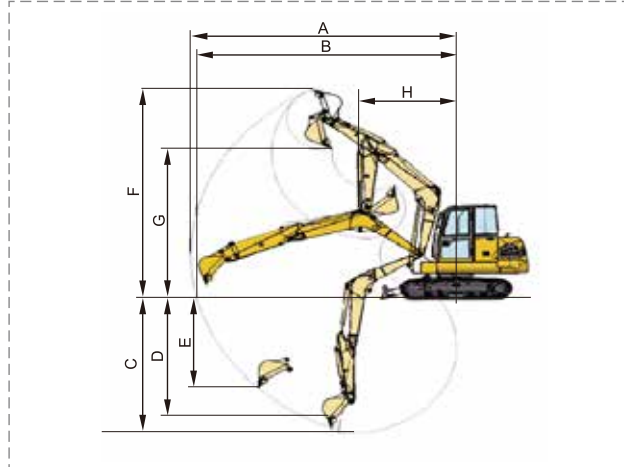
### DIMENSIONS

|                                       | Unit | E680Fi         |
|---------------------------------------|------|----------------|
| Overall length                        | mm   | 6235           |
| Overall width                         | mm   | 2240           |
| Overall height                        | mm   | 2585           |
| Boom length                           | mm   | 3710           |
| Wheel track                           | -    | 1780           |
| Arm length                            | mm   | 1650           |
| wheelbase                             | mm   | 2200           |
| Contour dimension of complete machine | mm   | 6235×2240×2585 |
| Overall width of upper assembly       | mm   | 2330           |
| Overall width of chassis              | mm   | 2240           |
| Overall height to cab top             | mm   | 2580           |
| Rear slewing radius                   | mm   | 1895           |
| Overall height to hood top            | mm   | 1765           |
| Ground clearance of upper assembly    | mm   | 777            |
| Overall length of crawler             | mm   | 2825           |
| Wheel track of crawler                | mm   | 1780           |
| Track shoe width                      | mm   | 450            |
| Minimum ground clearance              | mm   | 375            |
| Minimum front turning radius          | mm   | 1760           |



### EXCAVATING RANGE

|  | Unit | E680Fi |
|--|------|--------|
| Maximum digging radius                                       | mm   | 6340   |
| Maximum digging depth  | mm   | 4160   |
| Maximum discharge height                                     | mm   | 5065   |
| Shovel width (with band edge)                                | mm   | 910    |
| Maximum digging depth under length of bottom surface of 2.5m | mm   | 3800   |
| Maximum digging height                                       | mm   | 7200   |
| Maximum digging radius of reference ground                   | mm   | 6190   |
| Maximum vertical digging depth                               | mm   | 3760   |



### SWING SYSTEM

|             | Unit  | E680Fi             |
|-------------|-------|--------------------|
| Swing motor | -     | Axial piston motor |
| Swing brake | -     | Wet disc           |
| Swing speed | r/min | 0-10               |



### DRIVE AND BRAKES

|                             | Unit | E680Fi                                      |
|-----------------------------|------|---|
| Drive motor                 | -    | 2 axial piston motors                       |
| Max drawbar pull            | kN   | 65  |
| Max travel speed (low/high) | km/h | 2.86/5.0                                    |
| Service/parking brakes      | -    | Wet disc, spring applied, hydraulic release |
| Gradeability                | °    | 35  |

# Equipment and Features

## STANDARD EQUIPMENT

| E680Fi   |   |
|--|---|
| Engine   |   |
| Yanmar engine  | S |
| Turbocharger   | - |
| Two-stage air filters  | S |
| Three-stage fuel filters                                     | S |
| Oil-water separator  | S |
| Pre-heater   | S |
| Electrical/Electronic control system                         |   |
| Engine safe start with restart prevention                    | S |
| Idling switch  | S |
| Auto-idle function   | S |
| 9 work modes   | S |
| Central fuse box   | S |
| Halogen work lights<br>(Frame-mounted 2 & Boom-mounted 1 LH) | S |
| Battery, 12V   | S |
| Master electrical disconnect switch                          | S |
| Start motor, 12V   | S |
| Colour monitor   | S |
| Lock lever   | S |
| Hydraulic system   |   |
| Load-sensing hydraulic system                                | S |
| Boom/arm/swing priority                                      | S |
| Boom/arm regeneration  | S |
| Boom/arm holding   | S |
| Two speed travel motors                                      | S |
| Cylinder/motor cushioning                                    | S |
| Dust sealing   | S |
| Hydraulic oil (ISO VG46)                                     | S |
| Muilti-stage filtration                                      | S |
| Frame  |   |
| Reinforced revolving frame                                   | S |
| Dozer blade  | S |
| Rear-view mirror   | S |
| Tool storage area  | S |

## Undercarriage

|                                  |   |
|----------------------------------|---|
| Durable "X" under-carriage       | S |
| Greased and sealed track links   | S |
| Reinforced carrier/top rollers   | S |
| Steel track with triple grousers | S |

## Cab and interior

|                                      |   |
|--------------------------------------|---|
| Fabric operator seat with suspension | S |
| Seat belt                            | S |
| Joysticks                            | S |
| Radio with MP3/AUX                   | S |
| Master key                           | S |
| Hour meter                           | S |
| Sun visor                            | S |
| Dual arm rests                       | S |
| Air conditioner                      | S |
| Sliding wind screen                  | S |

## OPTIONAL EQUIPMENT

### E680Fi

## Electrical/Electronic control system

|  |   |
|--|---|
| Fuel filler pump   | O |
| Extra halogen work lights<br>(Cab-mounted 1/ Boom-mounted 1RH) | O |
| Rotating warning beacon  | O |
| Rear-view camera   | O |

## Hydraulic system

|   |   |
|---|---|
| High-temperature/Low-temperature hydraulic oil module | O |
|---|---|

## Undercarriage

|                     |   |
|---------------------|---|
| 600mm steel track   | O |
| Rubber Pads         | O |
| Without dozer blade | O |

## Attachment

|   |   |
|---|---|
| Ditching buckets  | O |
| X1 pipes  | O |
| X3 pipes  | O |
| Side or top mounted breakers                              | O |
| Log grapples  | O |
| Front upper/front lower/top FOG<br>(falling object guard) | O |



## Member of the VOLVO Group

SDLG is member of the Volvo Group and one of the largest manufacturers of construction machinery, with a wide network of dealerships and service workshops throughout the world.

**Toll free – 1800 108 6586**

[www.sdlgindia.com](http://www.sdlgindia.com)

Connect with us on:  