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# TYPE-CERTIFICATE DATA SHEET

No. E.219

**for**  
Solo 2350 series engines

**Type Certificate Holder**  
SOLO Aircraft Engines GmbH

Industriestraße 9  
71069 Sindelfingen  
Germany

For Models: Solo 2350  
Solo 2350 B  
Solo 2350 BS  
Solo 2350 C  
Solo 2350 D



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## **I. General**

### **1. Type/ Model/ Variants**

Solo 2350 / Solo 2350, 2350 B, 2350 C, 2350 D

### **2. Type Certificate Holder**

Solo Aircraft Engines GmbH  
Industriestraße 9  
71069 Sindelfingen  
Germany

EASA ADOAP: AP 136

### **3. Manufacturer**

Solo Aircraft Engines GmbH  
Industriestraße 9  
71069 Sindelfingen  
Germany

from 15 May 2024

SOLO Vertriebs- und Entwicklungs- GmbH  
Stuttgarter Straße 41  
71069 Sindelfingen  
Germany

from 16 July 2013 until 15 May 2024

Solo Kleinmotoren GmbH  
Stuttgarter Straße 41  
71069 Sindelfingen  
Germany

from 02 June 1982 until 15 July 2013

### **4. Date of Application**

02 June 1982

Note: The application was made to LBA Germany before EASA had been established according to German national procedures.

### **5. EASA Type Certification Date**

02 June 1983



## **II. Certification Basis**

### **1. EASA Certification Basis**

#### **1.1. Airworthiness Standards**

JAR-22 Change 2 dated September 13. 1982, Subpart H

#### **1.2. Special Conditions (SC)**

None

#### **1.3. Equivalent Safety Findings**

None

#### **1.4. Deviations**

None

#### **1.5. Environmental Protection**

None (not required for piston engines)

## **III. Technical Characteristics**

### **1. Type Design Definition**

Type Design Definition in accordance with parts list 20 00 350 of 10 August 1987 for Solo 2350 B, also applicable for Solo 2350(\*)

(\*) = or later approved revisions



## 2. Description

Two-stroke, two-cylinder air-cooled inline engine with contactless magneto ignition.

Displacement: 431 cm<sup>3</sup>

Bore / stroke: 70mm / 56mm

Model	Solo 2350*	Solo 2350 B**	Solo 2350 C	Solo 2350 D*
Compression ratio	1:10	1:10	1:12	1:12
Gear ratio	-	1:2,1	1:2,3	1:1,56
Starter	-	SJCE Mod. 102 Or United Tech. 1077-28-Mo 30 sM	SJCE Mod. 101 Or United Tech. SMH-12-A-104	-
Generator	-	Ducati 435.03.0600	-	-
Fuel Pump	Bing 80-203A (no longer available) Replacement: Mikuni DF44-18, standard from S/N 1162	-	Bing 80-203A (no longer available) Replacement: Mikuni DF44-18, standard from S/N 2175	Bing 80-203A (no longer available) Replacement: Mikuni DF44-18, standard from S/N 296

\* no throttle control, no engine starter, no generator;

\*\* no fuel pump; see also VI, No. 5.

## 3. Equipment

As stated in the type definition parts list.

## 4. Dimensions

Model		Solo 2350	Solo 2350 B	Solo 2350 C	Solo 2350 D
Overall Length	mm	480	405	472	620
Overall Height	mm	383	506	575	524
Width	mm	216	290	259	240



## 5. Dry Weight

Model	Solo 2350	Solo 2350 B	Solo 2350 C	Solo 2350 D
Mass kg complete with exhaust system	17	26	25	23,5

## 6. Ratings

Model	Solo 2350 (*with muffler)	Solo 2350 B	Solo 2350 C	Solo 2350 D
Take-off Power	19,6 (*15,3) KW at 5500 rpm	17 KW at 6300 rpm	22 KW at 6500 rpm	22 KW at 6500 rpm
Max. Continuous Power	19,6 (*15,3) KW at 5500 rpm	17 KW at 6300 rpm	20 KW at 6100 rpm	22 KW at 6500 rpm

Note: The performance value specified above correspond to minimum values defined under the conditions of ICAO or ARDC standard atmosphere.

## 7. Control System

The engine models Solo 2350, Solo 2350 D are equipped with dual diaphragm carburettors without throttle control, an additional fuel pump and a contactless magneto ignition.

The engine model Solo 2350 B is equipped with dual diaphragm carburettors and a contactless magneto ignition. For the definition of the Model Solo 2350 BS see VI, No. 5. The engine model Solo 2350 C is equipped with two diaphragm carburettors, an additional fuel pump and a contactless magneto ignition.

## 8. Fluids (Fuel, Oil, Coolant, Additives)

See Operation and Maintenance Manual for approved fluids.

## 9. Aircraft Accessory Drives

None



## IV. Operating Limitations

### 1. Temperature Limits

Model		Solo 2350	Solo 2350 B	Solo 2350 C	Solo 2350 D
Maximum Cyl.Head Temperature*	°C	275	275	275	275

\* see note 4

### 2. Speed Limits

Model	Solo 2350	Solo 2350 B	Solo 2350 C	Solo 2350 D
Minimum Cont. Speed	*	2000 rpm	3000 rpm	*
Max.Take off and Cont. Speed	5500 rpm	6300 rpm	6100 rpm	6500 rpm
Maximum Speed	6500 rpm	6500 rpm	6500 rpm	6600 rpm

\* not possible, no throttle control

### 3. Pressure Limits

#### 3.1 Fuel Pressure

Fuel supply pressure min. 0.2 bar; max. 0.4 bar.

#### 3.2 Oil Pressure

See engine manual

## V. Operating and Service Instructions

Model	Solo 2350	Solo 2350 B	Solo 2350 C	Solo 2350 D
Manual for the engine (Handbuch für den Motor)	Solo Typ 2350 01, Issue 1 dated 24.05.1983 (*)	Solo Typ 2350 B, Issue 1 dated 20.08.1987 (*)	Solo Typ 2350 C, Issue 1 dated 27.04.1989 (*)	Solo Typ 2350 D, Issue 1 dated 30.07.2001 (*)

(\*) = or later approved revisions



## VI. Notes

1. The manufacturer documents recorded in this TCDS are binding in the specified issue or later approved revisions.
2. The suitability and allowable operating ranges of an engine for use in a specific aircraft/propeller combination are to be demonstrated during the aircraft certification.
3. For the permitted engine operating hours refer to the relevant operating instructions.
4. The maximum permissible Cylinder Head Temperature was increased to 275°C for all Models with a Non-significant major change, EASA approved 21. September 2005, Nr. EASA.E.C.01026.
5. Model Solo 2350 B: The deviations of the Model Solo 2350 BS are defined as follows:  
The engine model Solo 2350 BS is equipped with a single float type carburettor and a contactless magneto ignition.

1. Operational limitations

- Take-off Power: 17 KW at 5500 rpm
- Max. Continuous Power: 17 KW at 5500 rpm
- Maximum Speed: 6500 rpm
- Minimum Cont. Speed: 2000 rpm

2. Equipment

Fuel pump: Bing 80-203A (no longer available) Replacement: Mikuni DF44-18  
Carburettor: Bing 84-2

The width is increasing to 405 mm.

All other technical data are identical to the Model solo 2350 B.

Operating instructions: engine manual 2350 BS, Issue 1, dated 12.06.1991 (or later approved revisions).

Both Models are used for pusher-configuration engine installations only.

6. The deviations of the series e with starter on the crank shaft are defined in the Service Bulletin No 4603-16, issue 1, dated 19.05.2015.



## **SECTION: ADMINISTRATIVE**

### **I. Acronyms and Abbreviations**

n/a

### **II. Type Certificate Holder Record**

Before 19 November 2025:  
Solo Kleinmotoren GmbH  
Stuttgarter Straße 41  
71069 Sindelfingen  
Germany

### **III. Change Record**

<b>Issue</b>	<b>Date</b>	<b>Changes</b>	<b>TC issue</b>
Issue 01	09 January 2013	Initial Issue	Initial Issue, 09 January 2013
Issue 02	12 November 2014	Replacement of fuel pump	
Issue 03	02 July 2015	Modification engine 2350 (version with starter)	
Issue 04	18 September 2015	Editorial Changes	
Issue 05	19 November 2025	Updated Manufacturer and TC Holder name and address	19 November 2025

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