

**ROTAX****TECHNICAL DATA**

Db. 434 - E

March 1989

ROTAX engine type 100 KART, rotary valve, model 1989

DESIGN NO. 39.100.1500.00.125 DS A
39.100.1500.00.126 DS B
39.100.15 SUPER CENT

HOMOLOGATION:	INTERCONTINENTAL A, model DS A model DS B valid from 01.01.1989
DESCRIPTION:	ROTAX single-cylinder-, two-stroke-, rotary valve engine, oil-in-fuel lubrication, free air cooled.
BORE:	50,0 mm (1,969 inch)
STROKE:	50,5 mm (1,988 inch)
DISPLACEMENT:	99,157 cm ³ (6,051 inch ³)
THEORETICAL MAX. BORE:	50,21 mm (1,977 inch)
COMPRESSION:	theoretical: 15,0 ± 0,5 effektiv: 9,2
COMBUSTION CHAMBER VOLUME v _c :	7,08 cm ³ ± 0,25 cm ³ (0,432 inch ³ ± 0,015 inch ³)
PISTON CENTER PROTRUDING OVER CYLINDER TOP:	4,35 mm (0,171 inch)
POWER OUTPUT:	no specification
TORQUE:	no specification
MAX. ALLOWED R.P.M.:	17 000 r.p.m.
CYLINDER:	Light alloy cylinder with cast iron sleeve 2 transfer-ports, 2 boost-ports, 2 mainexhaust-ports, 2 sideexhaust-ports
PISTON:	Aluminium cast piston with or without coating and one L-piston ring
CYLINDER/PISTON CLEAR- ANCE:	0,09 - 0,11 mm (0,0035 - 0,0043 inch)
COOLING:	free air by air stream

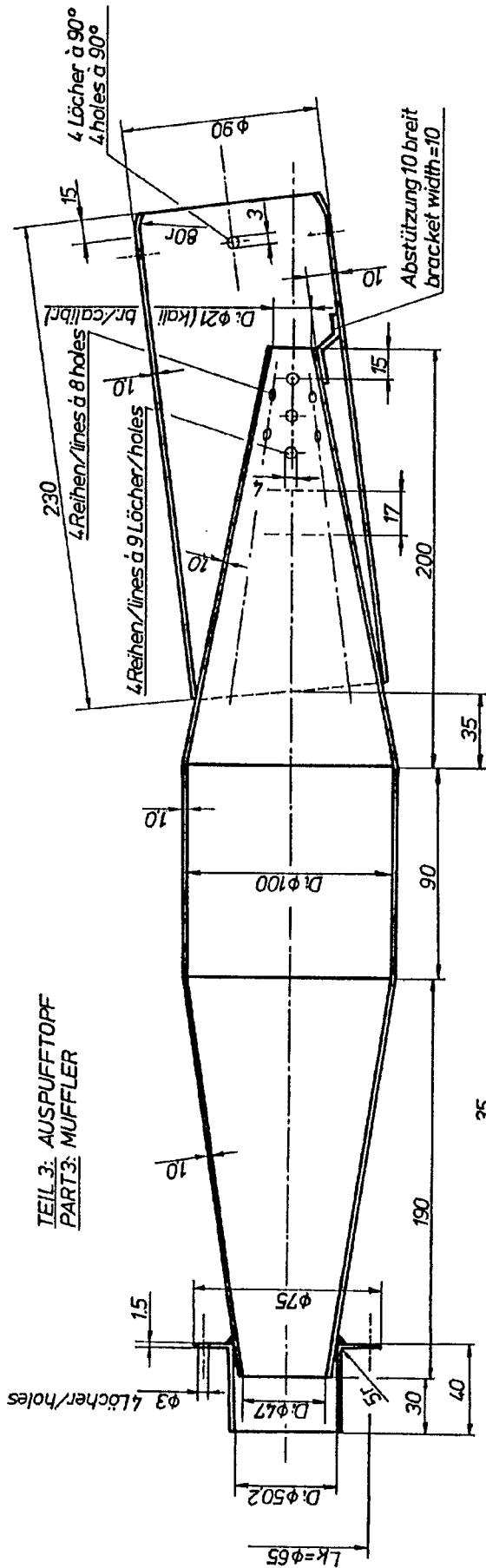
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COOLING:	free air by air stream
IGNITION UNIT:	MOTOPLAT
IGNITION TIMING:	2,5 mm (0,098 inch) = 23° before T.D.C., at 10 000 r.p.m. adjustment to T.D.C.-mark
SPARK PLUG:	BOSCH W370 S2S (W07CS), or NGK R 5184-105 thread M14 x 1,25
ELECTRODE GAP:	BOSCH: 0,6 - 0,7 mm (0,024 - 0,028 inch) NGK: 0,5 - 0,6 mm (0,020 - 0,024 inch)
INTAKE SYSTEM:	rotary valve
ROTRAY VALVE:	224 325, rotary valve cut-off section = 142°
ROTARY VALVE TIMING:	opens: 130° before T.D.C. closes: 62° after T.D.C.
CARBURETOR:	HEZEMANS 19,7 mm, for configuration DS A and DS B HEZEMANS 28 - 34 mm, for configuration SUPER CENT
FUEL PUMP:	Membrane pump on carburetor
FUEL:	SUPER-gasoline, octane number not below ROZ 98
LUBRICATION:	CASTROL TTS, mixing ratio 1 : 20 (5%)
DIRECTION OF ROTATION:	clockwise, viewed towards p.t.o.
STANDARD SPROK- KET:	10 teeth also available are sprockets with 9 and 11 teeth
DIMENSION OF CHAIN:	7,75 x 4,6 x 4,5
EXHAUST SYSTEM:	ROTAX exhaust system VSK 158
WEIGHT:	11,5 kg (25,353 lb.) without carburetor and exhaust system
RECOMMENDED EXCHANGE OF CRANKSHAFT REPAIR SET AND PISTON ASSY.:	every 15 operating hours

We reserve the right to modify designs in favour of further development.

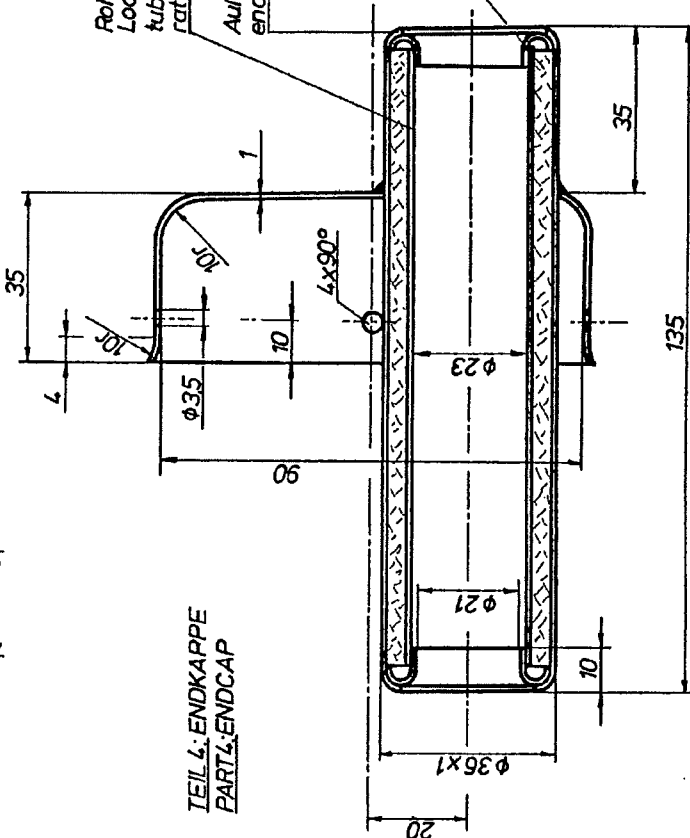


TEIL 3: AUSPUFFTOPF
PART 3: MUFFLER

Rohr $\phi 25 \times 1$ perforiert mit Löcher $\phi 3$
Lochflächenanteil 35%
tube $\phi 25 \times 1$ perforated with holes $\phi 3$
rate of hole area 35%

Außenrohren eingerollt
ends of outer tube are rolled in

Stein- oder Glaswolle
stone- or glasswool



TEIL 4: ENDKARPE
PART 4: ENDCAP

WEITERS NOTWENDIG: 2 x AUSPUFFFEDER
4 x BLECHSCHRAUBE $\phi 3.5$
FURTHER NECESSARY: 2 x SPRING
4 x SCREW $\phi 3.5$

VSK 158 2/2
100 KART DS 89



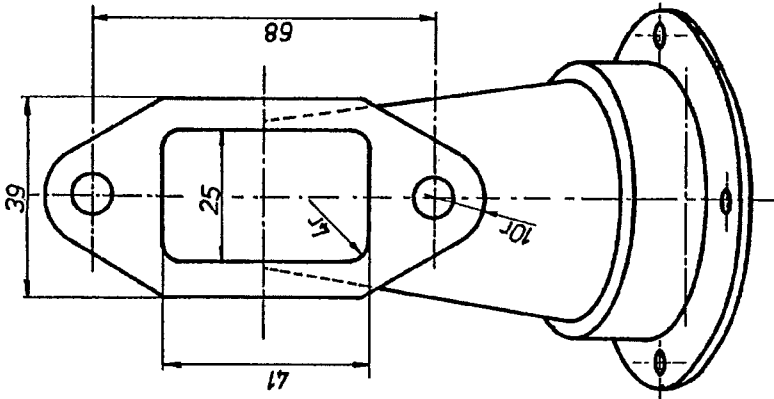
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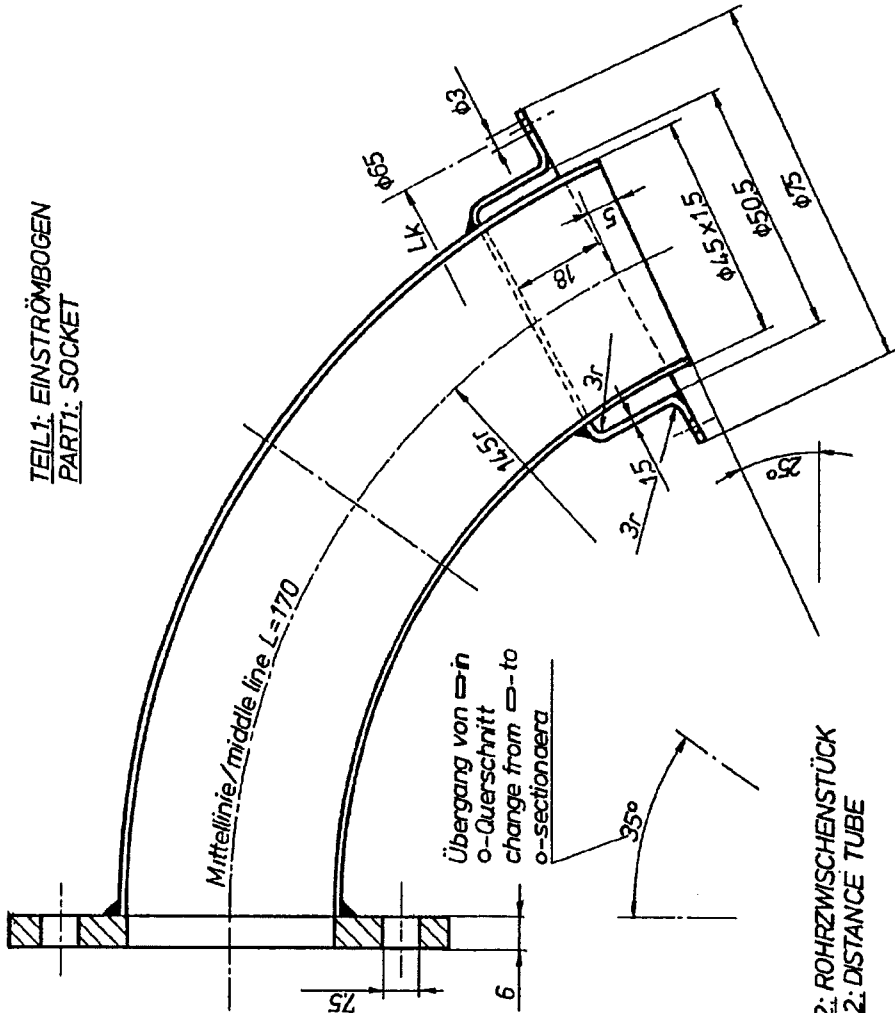
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VSK 158 2/2
100 KART DS 89

TEIL 1: EINSTRÖMBOGEN
PART 1: SOCKET



TEIL 2: ROHRZWISCHENSTÜCK
PART 2: DISTANCE TUBE

