

**ROTAX.****TECHNICAL DATA**

Db. 538 - E

March 1994

ROTAX engine type 100 KART DS C-3, model 1994

DESIGN NO. 32.100.1500.00.351 DS C-3, cylinder with sleeve

HOMOLOGATION:	CIK: 92/152 model DS C-3/94 valid from 01.01.1992																												
DESCRIPTION:	ROTAX single-cylinder-, two-stroke-, rotary valve engine, oil-in-fuel lubrication, free air cooled.																												
BORE:	50,0 mm																												
STROKE:	50,5 mm																												
DISPLACEMENT:	99,157 cm ³																												
THEORETICAL MAX. BORE:	50,21 mm																												
CAPACITY:	no specification																												
TORQUE:	no specification																												
MAX. ALLOWED R.P.M.:	17 000 r.p.m.																												
PISTON:	Aluminium cast piston with coating and one L-piston ring tolerance																												
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CYLINDER:	DS C-3, 3-port-light-alloy-"O"-cylinder gray cast iron sleeve tolerance																												
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CYLINDER/PISTON CLEARANCE:	0,09 - 0,11 mm																												
PISTON CENTER PROTRUDING OVER CYLINDER TOP:	4,30 mm (to adjust with cylinder-base gaskets 0,3 - 0,6 mm)																												



CYLINDERHEAD VOLUME:	cylinder head part no. 223 841 10,07 cm ³ ± 0,05 cm ³ (+2 cm ³ for the spark plug thread)
VOLUME OF THE COMBUSTION CHAMBER:	6,61 cm ³ ± 0,25 cm ³ (+2 cm ³ for the spark plug thread)
SQUITCH GAP:	1,07 mm
COMPRESSION :	theoretical: 16,0 ± 0,5
IGNITION UNIT:	PVL
IGNITION TIMING:	2,5 mm (= 23°) before T.D.C., at 10 000 r.p.m. adjustment to ignition timing mark
SPARK PLUG:	BOSCH W370 S2S (W07CS, part no. 299 160) or NGK BR 10EG (part no. 297 830) thread M14 x 1,25
ELECTRODE GAP:	BOSCH: 0,6 - 0,7 mm NGK: 0,5 - 0,6 mm
INTAKE SYSTEM:	rotary valve
ROTRAY VALVE:	part no. 224 323, rotary valve cut-off section = 165°
ROTARY VALVE TIMING:	opens: 132,3° before T.D.C. closes: 75° after T.D.C.
CARBURETOR:	according to regulation (not extent of delivery of ROTAX)
FUEL PUMP:	membrane pump on carburetor
FUEL:	SUPER-gasoline (unleaded), octane number not below ROZ 98
LUBRICATION:	oil in fuel lubrication, CASTROL TTS, mixing ratio 1 : 20 (5%)
COOLING:	free air by air stream
DIRECTION OF ROTATION:	clockwise, viewed towards p.t.o.-side
STANDARD SPROCKET:	10 teeth also available are sprockets with 9 and 11 teeth
DIMENSION OF CHAIN:	7,75 x 4,6 x 4,5



ROTAX

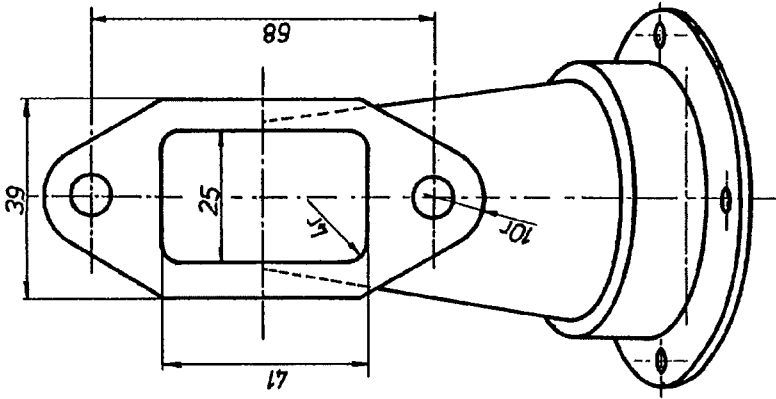
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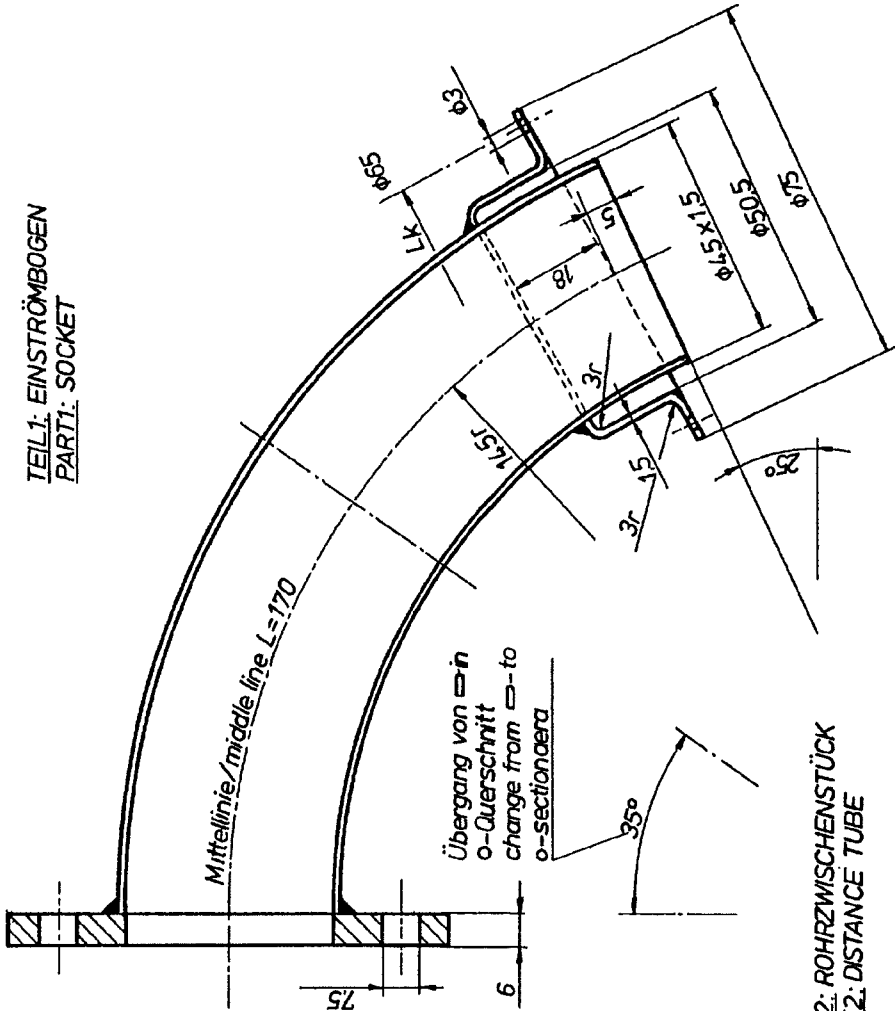
March 1994

- 3 -

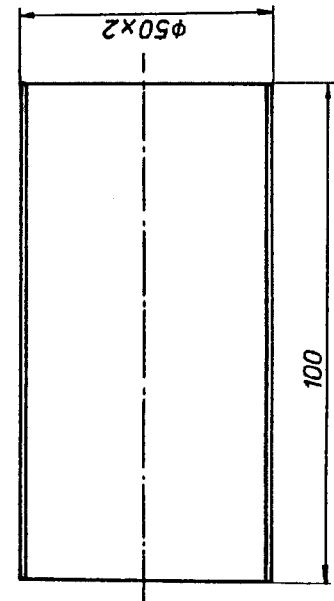
INTAKE SILENCER:	not extent of delivery of ROTAX
EXHAUST SYSTEM:	according to ROTAX-drawing VSK 158, exhaust manifold type "HEZEMANS"
STARTER:	no starting device, push start
WEIGHT:	11,5 kg without carburetor and exhaust system



TEIL 1: EINSTRÖMBOGEN
PART 1: SOCKET



TEIL 2: ROHRZWISCHENSTÜCK
PART 2: DISTANCE TUBE



VSK 158 1/2
100 KART DS C-3 94

