

## TECHNICAL SPECIFICATIONS - ENGINE (only USA)

Engine	250 SX	250 EXC	300 EXC, MXC	360 SX	360 EXC, MXC		
Design	Liquid-cooled single-cylinder two-stroke engine with <b>KTM Twin Valve Control</b> exhaust system						
Piston displacement	249 ccm		297 ccm		353 ccm		
Bore / stroke	67,5 / 69,5 mm (2,66 / 2,74 in)		72 / 73 mm (2,84 / 2,88 in)		78 / 74 mm (3 / 2,9 in)		
Fuel	SUPER fuel, research octane no 95, mixed with two stroke oil						
Oil / gasolin ratio	1:50 - 1.60 when using high grade two stroke oil. When in dought, please contact your importer or use 1:40 mix ratio to be on the safe side						
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing						
Connecting rod bearing	needle bearing						
Piston pin bearing	needle bearing						
Piston	forged piston			cast piston			
Piston ring	two plain compression rings						
Dimension "X" <small>(upper edge piston - upper edge cylinder)</small>	0 ± 0,1 mm (0 ± 0,004 in)						
Ignition timing	1,9 mm (0,07 in) (17 °) BTDC		2,0 mm (0,08 in) (17 °) BTDC				
Spark plug	NGK BR 8 ECM						
Electrode gap	0,6 mm (0,024 in)						
Dimension "Z" <small>(height of the control flap)</small>	46 mm (1,8 in)			48 mm (1,9 in)			
TVC start open	5400/min		5300/min		5200/min		
TVC fully open	7550/min		7750/min		7200/min		
Primary drive	straight cut spur gears, primary ratio 25:72			straight cut spur gears, primary ratio 26:72			
Clutch	multiple disc clutch in oil bath						
Transmission	5 speed, claw actuated						
Gear ratio			EXC	MXC		EXC	MXC
1. Gear	15:29	15:29	15:29	15:29	15:29	15:29	15:29
2. Gear	17:27	18:26	18:26	18:26	18:26	18:26	18:26
3. Gear	19:25	19:22	19:22	19:24	19:24	19:22	19:24
4. Gear	21:23	21:20	21:20	21:23	21:23	21:20	21:23
5. Gear	23:21	23:18	23:18	23:21	23:21	23:18	23:21
Gear lubrication	0,8 l engine oil SAE 30						
Rear wheel ratio	14:50	14:52		14:50	14:52		
Available chain sprockets	13t / 14t / 15t for chain $\frac{5}{8} \times \frac{1}{4}$ "						
Available final sprockets	38t / 40t / 42t / 45t / 48t / 50t / 52t for chain $\frac{5}{8} \times \frac{1}{4}$ "						
Coolant	1,3 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)						
Ignition system	KOKUSAN 2K-1	KOKUSAN 2K-2		KOKUSAN 2K-1	KOKUSAN 2K-2		
Generator output	no generator	12V 35W		no generator	12V 35W		
Carburetor	flat-slide carburetor, carburetor setting see table 3						
Air-filter	wet foam type air filter insert						

<b>TOLERANCES AND FITTING CLEARANCES</b>			
Piston fitting clearance	0,04 mm (250)	0,05 mm (300)	0,09 mm (360)
Piston ring end cap	0,3–0,4 mm		
Connecting rod bearing - radial clearance	0,021–0,032 mm		
Transmission shafts end float	0,1–0,2 mm		
Clutch springs - length	Ø 2,5 new = 43 mm, minimum length = 41 mm		

<b>GASKET THICKNESSES</b>	
Crankcase	0,5 mm
Clutch cover	0,5 mm
Cylinder bottom gasket	as required
Available bottom gasket	0,15/0,2/ 0,5 / 0,7 mm
Cylinder-head gasket	O-rings

<b>BASIC CARBURETOR SETTING</b>		
	250 SX/EXC USA 300 MXC/EXC USA	360 SX/MXC/EXC USA
Carburetor	Keihin PWK 38	Keihin PWK 38
Carburetor setting number	240496	250496
Main jet	175 (170/180)	175 (165/170)
Idling jet	45 (42/48)	45 (42/48)
Starting jet	85	85
Jetneedle	N85C (N85D)	NOZF (NOZG)
Needle position from top	III	III
Throttle valve	6	6
Air adjustment screw open	1,5	1,5

<b>TIGHTENING TORQUES</b>			
Flange bolts - cylinder-head	M 8	34 Nm	(25 ft.lb)
Nuts-cylinder base	M 10	34 Nm	(25 ft.lb)
Flywheel collar nut	M 12x1	54–59 Nm	(40–43 ft.lb)
Nut for primary sprocket (LH thread)	M 18x1,5	147 Nm	(108 ft.lb)
Nut for inner clutch hub	M 18x1,5	147 Nm	(108 ft.lb)
Crankcase and cover bolts	M 6	8 Nm	(6 ft.lb)
Swingarm pivot	M 14	137 Nm	(101 ft.lb)
Axle for rear hub	M 20x1,5	88 Nm	(65 ft.lb)
Other screws	M 6	5 Nm	(4 ft.lb)
	M 8	29 Nm	(2 ft.lb)
	M 10	49 Nm	(36 ft.lb)

## TECHNICAL SPECIFICATIONS - ENGINE (all models out of USA)

Engine	250 SX	250 EXC, EGS	300 EXC, EGS	360 SX	360 EXC, EGS
Design	Liquid-cooled single-cylinder two-stroke engine with <b>KTM Twin Valve Control</b> exhaust system				
Piston displacement	249 ccm		297 ccm	353 ccm	
Bore / stroke	67,5 / 69,5 mm (2,66 / 2,74 in)		72 / 73 mm (2,84 / 2,88 in)	78 / 74 mm (3 / 2,9 in)	
Fuel	SUPER fuel, research octane no 95, mixed with two stroke oil				
Oil / gasolin ratio	1:50 - 1.60 when using high grade two stroke oil. When in doupt, please contact your importer or use 1:40 mix ratio to be on the safe side				
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing				
Connecting rod bearing	needle bearing				
Piston pin bearing	needle bearing				
Piston	forged piston			cast piston	
Piston ring	two plain compression rings				
Dimension "X" <small>(upper edge piston - upper edge cylinder)</small>	0 ± 0,1 mm (0 ± 0,004 in)				
Ignition timing	1,9 mm (0,07 in) (17 °) BTDC	1,2 mm (0,05 in) (13,5 °) BTDC	1,2 mm (0,05 in) (13,5 °) BTDC	2,0 mm (0,08 in) (17 °) BTDC	1,2 mm (0,05 in) (13 °) BTDC
Spark plug	NGK BR 8 ECM				
Electrode gap	0,6 mm (0,024 in)				
Dimension "Z" <small>(height of the control flap)</small>	46 mm (1,8 in)			48 mm (1,9 in)	
TVC start open	5400/min		5300/min	5200/min	
TVC fully open	7550/min		7750/min	7200/min	
Primary drive	straight cut spur gears, primary ratio 25:72			straight cut spur gears, primary ratio 26:72	
Clutch	multiple disc clutch in oil bath				
Transmission	5 speed, claw actuated				
Gear ratio					
1. Gear	15:29		15:29	15:29	15:29
2. Gear	17:27		18:26	18:26	18:26
3. Gear	19:25		19:22	19:24	19:22
4. Gear	21:23		21:20	21:23	21:20
5. Gear	23:21		23:18	23:21	23:18
Gear lubrication	0,8 l engine oil SAE 30				
Rear wheel ratio	14:50	14:50 / 15:48 / 15:40 / 13:50	14:50 / 15:48 / 15:40	13:50	13:50 / 15:40
Available chain sprockets	13t / 14t / 15t for chain $\frac{5}{8} \times \frac{1}{4}$ "				
Available final sprockets	38t / 40t / 42t / 45t / 48t / 50t / 52t for chain $\frac{5}{8} \times \frac{1}{4}$ "				
Coolant	1,3 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)				
Ignition system	KOKUSAN 2K-1	SEM K11 (counterclock)		KOKUSAN 2K-1	SEM K11 (counterclock)
Generator output	no generator	12V 130W		no generator	12V 130W
Carburetor	flat-slide carburetor, carburetor setting see table 3				
Air-filter	wet foam type air filter insert				

TOLERANCES AND FITTING CLEARANCES			
Piston fitting clearance	0,04 mm (250)	0,05 mm (300)	0,09 mm (360)
Piston ring end cap	0,3–0,4 mm		
Connecting rod bearing - radial clearance	0,021–0,032 mm		
Transmission shafts end float	0,1–0,2 mm		
Clutch springs - length	Ø 2,5 new = 43 mm, minimum length = 41 mm		

GASKET THICKNESSES	
Crankcase	0,5 mm
Clutch cover	0,5 mm
Cylinder bottom gasket	as required
Available bottom gasket	0,15/0,2/0,5/0,7 mm
Cylinder-head gasket	O-rings

TIGHTENING TORQUES			
Flange bolts - cylinder-head	M 8	34 Nm	(25 ft.lb)
Nuts-cylinder base	M 10	34 Nm	(25 ft.lb)
Flywheel collar nut	M 12x1	54–59 Nm	(40–43 ft.lb)
Nut for primary sprocket (LH thread)	M 18x1,5	147 Nm	(108 ft.lb)
Nut for inner clutch hub	M 18x1,5	147 Nm	(108 ft.lb)
Crankcase and cover bolts	M 6	8 Nm	(6 ft.lb)
Swingarm pivot	M 14	100 Nm	(74 ft.lb)
Axle for rear hub	M 20x1,5	88 Nm	(65 ft.lb)
Other screws	M 6	10 Nm	(7 ft.lb)
	M 8	25 Nm	(19 ft.lb)
	M 10	45 Nm	(33 ft.lb)

BASIC CARBURETOR SETTING								
TABLE 3		250 EGS AUS, SGP	250 SX EUROPE DIVERSE 250 EXC EUROPE DIVERSE 250 EGS FRANCE	360 SX, EXC EUROPE DIVERSE	250 EGS AUSTRIA, GERMANY	300 EXC EUROPE DIVERSE 300 EGS AUSTRALIA 300 EGS FRANCE	300 EGS AUSTRIA, GERMANY	360 EGS EUROPE DIVERSE
	Carburetor	Keihin PWK 38	Keihin PWK 38	Keihin PWK 38	Keihin PWK 39	Keihin PWK 38	Keihin PWK 39	Keihin PWK 38
	Carburetor setting number	240496	180495	200596	100793	210495	210793	080695
	Main jet	175 (170/180)	175 (170)	175 (165/170)	150 (170/175/180)	175 (170)	150 (170/175/180)	150 (170/175/180)
	Idling jet	45 (42/48)	45 (42)	45 (42/48)	38 (42/45/48)	45 (42/48)	38 (42/45/48)	45 (42/48)
	Starting jet	85	85	85	85	85	85	85
	Jetneedle	N85C (N85D)	N85D (N85E)	NOZH (NOZI)	N85C (N85D)	N85D	N85C (N85D)	NOZH (NOZG)
	Needle position from top	III	III	II	I	III	I	II
	Throttle valve	6	6	6	6	6	6	6
Air adjustment screw open	1,5	1,5	1,5	1,5	1,5	1,5	1,5	

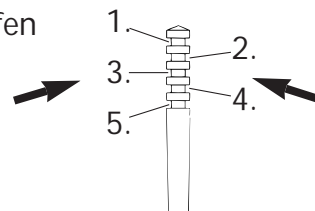
BASIC CARBURETOR SETTING	
	360 EGS AUSTRALIA
TABLE 3	Keihin PWK 38
Carburetor	Keihin PWK 38
Carburetor setting number	300596
Main jet	175 (170/165)
Idling jet	45 (42/40)
Starting jet	85
Jetneedle	NOZG (NOZH/NOZI)
Needle position from top	II
Throttle valve	6
Air adjustment screw open	1,5

VERGASERREGULIERUNG  
CARBURETOR SETTING

# KTM 250 SX / EXC '97 EUROPA KEIHIN PWK 38

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →	-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/2 45 N85C 4 175	1 3/4 42 N85C 3 172	2 40 N85D 2 170	2 1/4 40 N85D 1 168	2 1/2 40 N85E 1 165	2 3/4 38 N85E 1 165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/4 48 N85B 4 178	1 1/2 45 N85C 3 175	1 3/4 42 N85D 2 172	2 42 N85D 2 170	2 1/2 40 N85E 1 165	2 1/2 40 N85E 1 165
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 48 N85B 4 180	1 1/4 45 N85B 4 178	1 1/2 45 N85C 3 175	1 3/4 45 N85D 3 172	2 1/4 42 N85E 2 168	2 1/4 42 N85E 2 168
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	3/4 50 N85B 4 182	1 48 N85B 3 180	1 1/4 45 N85C 3 178	STANDARD 1 1/2 45 N85D 3 175	STANDARD 2 45 N85D 3 170	2 42 N85E 3 170
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1/2 50 N85A 5 185	3/4 48 N85B 4 182	1 45 N85C 4 180	1 1/4 45 N85C 3 178	1 3/4 45 N85D 2 172	1 3/4 42 N85D 2 172

LSCHR = Luftregulierschraube offen  
LD = Leerlaufdüse  
POS = Clip Position von oben  
HD = Hauptdüse



AS = Air screw open from fully-seated  
IJ = Idling jet  
POS = Clip position from top  
MJ = Main jet

**NICHT FÜR STRASSEN BETRIEB**  
Kraftstoff: Euro-Super bleifrei ROZ 95  
**NOT FOR HIGHWAY USE**  
Fuel: Euro-Super unleaded ROZ 95

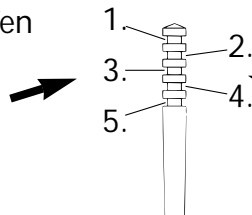
VERGASERREGULIERUNG  
CARBURETOR SETTING

# KTM 300 SX / EXC '97 EUROPA

# KEIHIN PWK 38

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →		-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR	AS	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4
	LD	IJ	45	42	40	40	40	38
	NADEL	NEEDLE	N85D	N85D	N85D	N85E	N85E	N85E
	POS	POS	4	3	2	1	1	1
	HD	MJ	175	172	170	168	165	165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR	AS	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2
	LD	IJ	48	45	42	42	42	40
	NADEL	NEEDLE	N85C	N85D	N85D	N85D	N85E	N85E
	POS	POS	4	3	2	2	2	1
	HD	MJ	178	175	172	170	168	165
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR	AS	1	1 1/4	1 1/2	1 3/4	2	2 1/4
	LD	IJ	48	45	45	45	45	42
	NADEL	NEEDLE	N85C	N85C	N85D	N85D	N85D	N85E
	POS	POS	4	4	3	3	3	2
	HD	MJ	180	178	175	172	170	168
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR	AS	3/4	1	1 1/4	STANDARD	1 1/2	STANDARD
	LD	IJ	50	48	45	STANDARD	45	STANDARD
	NADEL	NEEDLE	N85C	N85C	N85D	STANDARD	N85D	STANDARD
	POS	POS	4	3	3	STANDARD	3	STANDARD
	HD	MJ	182	180	178	STANDARD	172	STANDARD
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR	AS	1/2	3/4	1	1 1/4	1 1/2	1 3/4
	LD	IJ	50	48	45	45	42	42
	NADEL	NEEDLE	N85B	N85C	N85C	N85D	N85D	N85E
	POS	POS	5	4	4	3	2	2
	HD	MJ	185	182	180	178	175	172

LSCHR = Luftregulierschraube offen  
LD = Leerlaufdüse  
POS = Clip Position von oben  
HD = Hauptdüse



AS = Air screw open from fully-seated  
IJ = Idling jet  
POS = Clip position from top  
MJ = Main jet

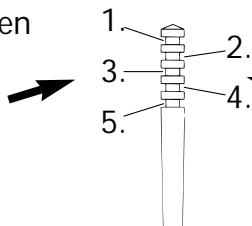
**NICHT FÜR STRASSEN BETRIEB**  
Kraftstoff: Euro-Super bleifrei ROZ 95  
**NOT FOR HIGHWAY USE**  
Fuel: Euro-Super unleaded ROZ 95

VERGASERREGULIERUNG  
CARBURETOR SETTING

# KTM 360 SX / EXC '97 EUROPA KEIHIN PWK 38

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →	-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
3000 m <i>10000 ft</i> ↑ 2301 m <i>7501 ft</i>	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/2 45 NOZH 3 175	1 3/4 42 NOZH 2 172	2 40 NOZH 1 170	2 1/4 40 NOZI 1 168	2 1/2 40 NOZI 1 165	2 3/4 38 NOZI 1 165
2300 m <i>7500 ft</i> ↑ 1501 m <i>5001 ft</i>	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/4 48 NOZG 3 178	1 1/2 45 NOZH 2 175	1 3/4 42 NOZH 1 172	2 42 NOZI 1 170	2 1/4 42 NOZI 1 168	2 1/2 40 NOZI 1 165
1500 m <i>5000 ft</i> ↑ 751 m <i>2501 ft</i>	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 48 NOZG 3 180	1 1/4 45 NOZG 3 178	1 1/2 45 NOZH 2 175	1 3/4 45 NOZH 2 172	2 45 NOZH 2 170	2 1/4 42 NOZI 2 168
750 m <i>2500 ft</i> ↑ 301 m <i>1001 ft</i>	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	3/4 50 NOZG 3 182	1 48 NOZG 2 180	1 1/4 45 NOZH 2 178	STANDARD 1 1/2 45 NOZH 2 175	STANDARD 1 3/4 45 NOZI 2 172	2 42 NOZI 2 170
300 m <i>1000 ft</i> ↑ Meeresniveau <i>Sea level</i>	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1/2 50 NOZF 4 185	3/4 48 NOZG 3 182	1 45 NOZG 3 180	1 1/4 45 NOZH 2 178	1 1/2 42 NOZH 1 175	1 3/4 42 NOZI 1 172

LSCHR = Luftregulierschraube offen  
LD = Leerlaufdüse  
POS = Clip Position von oben  
HD = Hauptdüse



AS = Air screw open from fully-seated  
IJ = Idling jet  
POS = Clip position from top  
MJ = Main jet

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Kraftstoff: Euro-Super bleifrei ROZ 95  
**NOT FOR HIGHWAY USE**  
Fuel: Euro-Super unleaded ROZ 95