

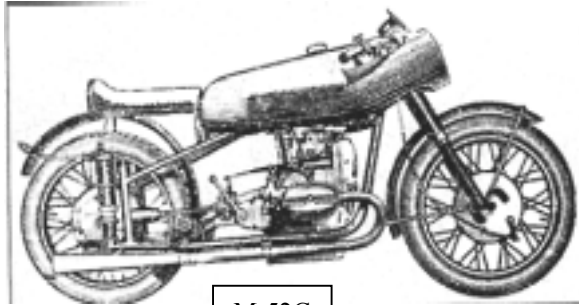
Model Developments Civilian/Military 750cc Side Valve M72 ('Moto' to K-750M)

Model	M-72	M-72M	M-72K	M-72H	K-750	MB750	MB750M MW750 MW750M	K-750M	MT12
Years	1941-1956	1956-1960	1954-1960	1956-1959	1959-1963	1964-1977?	1973-1977	1963-1977	1977-1984
Factory	MMZ,IMZ KMZ,ГМZZ MZ, K-0	IMZ Mainly Military	IMZ - End of IMZ 750 production	KMZ Military Production	KMZ Military Production	KMZ Military Production	KMZ Military Production	KMZ Military Production	KMZ Civilian
Capacity	746	746	746	746	746	746	746	746	746
Compression Ratio	5.5:1	5.5:1	5.5:1	5.5:1	6.0:1	6.0:1	6.0:1	6.0:1	6.0:1
Power BHP	22	22	27	22	26	26	26	26	26
RPM for max power	4600	4600	5000	4600	4900	4900	4900	4900	4900
Torque [Nm]	4.0	4.0	4.2	4.0	4.2	4.2	4.2	4.2	
RPM max torque	3200	3200	3500	3200	3200	3800	3800	3800	
Front fork	Telescopic BMW Type	Telescopic BMW Type	Telescopic BMW Type	Short leading link	Short leading link	Telescopic New design	Telescopic New design	Telescopic New design	Telescopic New design
Rear suspension	Plunger	Plunger	Plunger	Plunger	Swing arm	Swing arm + s/c drive, diff	Swing arm + s/c drive & diff +lock	Swing arm	Swing arm + s/c drive, diff
Air filter	net	Inertia / oil	mesh	Inertia / oil	Inertia / oil	Inertia / oil	Inertia / oil	Inertia / oil	Inertia / oil
Generator	Г11	Г11А	Magneto	Г11А	Г11А	Г414	Г414	Г414	ГГ414
Regulator	PP-1	PP-31А	None	PP-31А	PP-31А	PP-302	PP-302	PP-302	PP-302
Front Brake	SLS	SLS	SLS	SLS	SLS	SLS	SLS	SLS	TLS
Dry Weight [kg] solo	205	211	190	204	204 or 210	209	209	209	-
With sidecar	336	340	227	335	315 or 335	318	318	318	?
Load max [kg] solo	219	225	204						-
With sidecar	359	380	267						260
Top Speed kph solo	105	105	-	-	-	-	-	-	-
With sidecar	85	85	120	90	90	90	90	90	90
Fuel litres/100km at specified kph with sc	5.9 - 50	7.5 - 50	-	6.0 - 45	6.0 - 45	6.0 - 45	6.0 - 45	6.0 - 45	9.0 - 65
Wheel base [mm]	1400	1400	1450	1450	1450	1450	1450	1450	1510

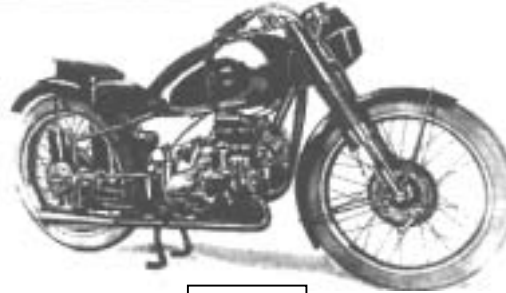
1. M72 first development (probably under licence) from 1938 BMW R71, BMW's last side valve motor! M72 used lots in WWII.
2. IMZ – Irbit in Urals. MMZ-Moscow, ZMZ.-?, K-0 ? ГМЗ-Gorky. KMZ – Kiev (Dnieper). (MZ ~ Motor Zavod - Motor Works).
3. MB-750 & K-750M had sidecar wheel drive through differential (as BMW WWII R75 system) with diff lock. Exclusively used by military.
4. MT12 – s/c wheel drive through diff. but no lock, sold for civilian use, maybe military use with diff lock. 4 speed & reverse gearbox.

Model Developments of Sports Machines ('Moto' October 2001)

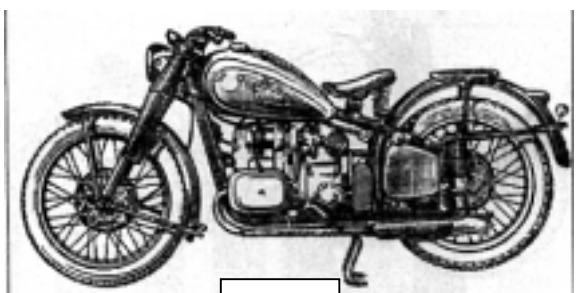
Model	M-75	M-75M	M-72K	M-77	M-52C	M-80	M-35	M-35K	M-76	M-51
Year	1947-1951	1952-1954	1954	1954-1955	1957-1960	1946	1947-1948	1949	1948-1949	1961-1962
Factory	IMZ Ural	IMZ	IMZ	IMZ	IMZ	ГМЗ	ГМЗ	ЦКЗБ	ЦКЗБ	ЦКЗБ
Capacity	746	746	746	746	494	746	347	347	746	496
Compression Ratio	8.0	8.5	5.5	8.5	9.0	9.5	8.0	4.7	9.5	9.5
Power BHP	35	38	27	50	35	40	20	45	38	60
RPM for max power	5100	5500	5000	5900	6200	6000	6000	6600	5300	8500
Dry Weight [kg] solo	183	183	186	180	142	192	166	165	185	190
With sidecar	247	258	240	275	-	-	231	189	270	285
Top Speed km/hr solo	165	170	120	180	140	170	140	170	160	180
With sidecar	135	145	85	155	-	-	110	150	145	150



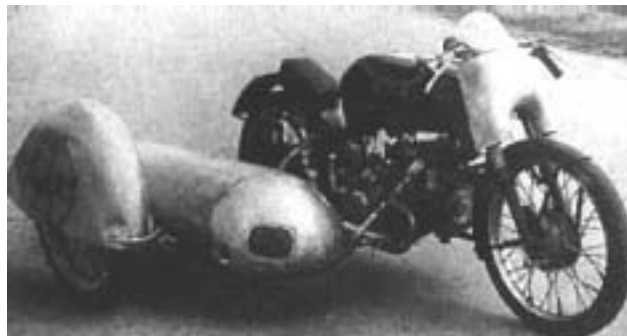
M-52C



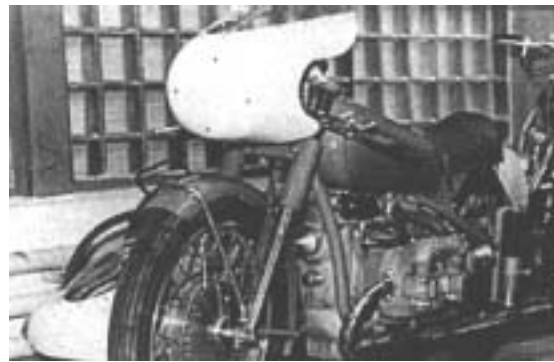
M-80



M-35



M-35k



M-52C



M-35k

Model Specification Sheets

The following specification tables should be treated as 'live' documents, they will be completed as data is made available; although efforts have been made to ensure accuracy in the data it is difficult to guarantee it. They are intended to concentrate on model & number, place of manufacture, years of manufacture & brief details.

Model Developments of Civilian 500cc & 650cc Ural Motorcycles up to IMZ 8-XXX series

Model	M52	Ural – M61	Ural 2 - M62	Ural 3 - M63	M66	M67	M67 - 36	IMZ 8 series
Year	1958	1950s	1960s	1965 - 1968	1968-1970	1973-1976	1976-1995?	1995-now
Factory	IMZ	IMZ	IMZ	IMZ	IMZ	IMZ	IMZ	
Capacity	496	649	649	649	649	649	649	649 to 750
Compression Ratio				6.5:1	7:1	7:1	7:1	8:1 & others
Power BHP	25	28	28	28	32 (35DIN)	36	36	
RPM for max power	4900	4800-5200	4800-5200	4800-5200	5300	5400-5800		
Torque [Nm]				4.5kg.m	4.5kg.m	4.5kg.m		
RPM for max torque				3000-3500	4200	4200		
Front fork	Telescopic	Telescopic	Telescopic New design	Telescopic	Telescopic	Telescopic	Telescopic	
Rear suspension	Swinging arm	Plunger	Plunger	Swing arm	Swing arm	Swing arm	Swing arm	
Air filter	Oil bath	Oil bath	Oil bath	Oil bath	Oil bath	Oil bath	New oil bath	
Generator				65watt 6V	65 watt 6V	150watt 12V	150watt 12V	
Regulator				PP-302	PP-302	PP-330	PP-330	
Front Brake	SLS	SLS	SLS	SLS	SLS	TLS	TLS	
Dry Weight [kg] solo With sidecar				320	320	330		
Load max [kg] solo With sidecar								
Top Speed km/hr solo With sidecar				95	125 105	105	130 105	
Fuel consumption per 100km at specified km/hr with sidecar					5.8			
Wheel base [mm]				1440	1440	1440	1440	

Notes.

1. M53, motor taken without licence from BMW R51/2 (1950), R51/3 (1951-54) or R50 (1955-69).
2. Later model specifications needed for completeness for 1990s new Ural Moto models.

Model Developments of Civilian Kiev built KMZ 650cc Dnieper Motorcycles.

Model	M53	K650	MT9	MT10	MT10-36	MT11&16	MT19 & 157 series
Year	1958	1968 – 1970	1971-1974	1973-1976	1976-1980s	1980s to end	
Capacity	496	649	649	649	649	649	649
Compression Ratio		7:1	7:1	7.5:1	7.5:1	7.5:1 or more	
Power BHP	28	32	32 (35DIN)	36	36	36	
RPM for max power	5600	5000-5200	5000-5200	5600-5900	5600-5900	5600-5900	
Torque [Nm]				4.8kg.m	4.8kg.m	4.8kg.m	
RPM for max torque				4900-5200	4900-5200	4900-5200	
Front fork	Leading link 1 st application	Telescopic	Telescopic	Telescopic	Telescopic	Telescopic Leding link option	
Rear suspension	Swinging arm	Swing arm	Swing arm	Swing arm	Swing arm	Swing arm	
Air filter		Oil bath	Oil bath	Oil bath	Oil bath	Oil bath	Oil bath
Generator		65watt 6V	65watt 6V	150watt 12V	150watt 12V	150watt 12V	
Regulator		PP-302	PP-302	PP-330	PP-330	PP-330	
Gearbox	4 speed	4speed	4 speed & rev	4 speed & rev	4 speed & rev	4 speed & rev	4 speed & rev
Front Brake	SLS	SLS	SLS	TLS	TLS	TLS	TLS & disc front
Dry Weight [kg] solo		210			220		
With sidecar	185	315			335		
Load max [kg] + sidecar					260		
Top Speed km/hr solo			125				
With sidecar	125	95	100	105	105		
	-						
Fuel litres/100km at specified km/hr with sidecar	Solo 3.5		5.8		8		
Wheel base [mm]		1500	1500	1500	1500	1500	

Notes.

1. M53 first model with the short leading link forks, chassis very much as for K750. Engine maybe similar to Ural M52.
2. MT12 listed with the earlier 750cc SV machines, though the cycle parts were common to the 650cc models.
3. Prototype MT14 shown at 1977 London motorcycle show, based on MT10, mainly styling changes - blue, gold +lots of chrome
4. MT16 used MT10 motor in MT12 outfit.
5. Kiev Plant runs into trouble with component supply and sales support after collapse of USSR, factory closes end of 1990s. Last models shown elsewhere in this book.