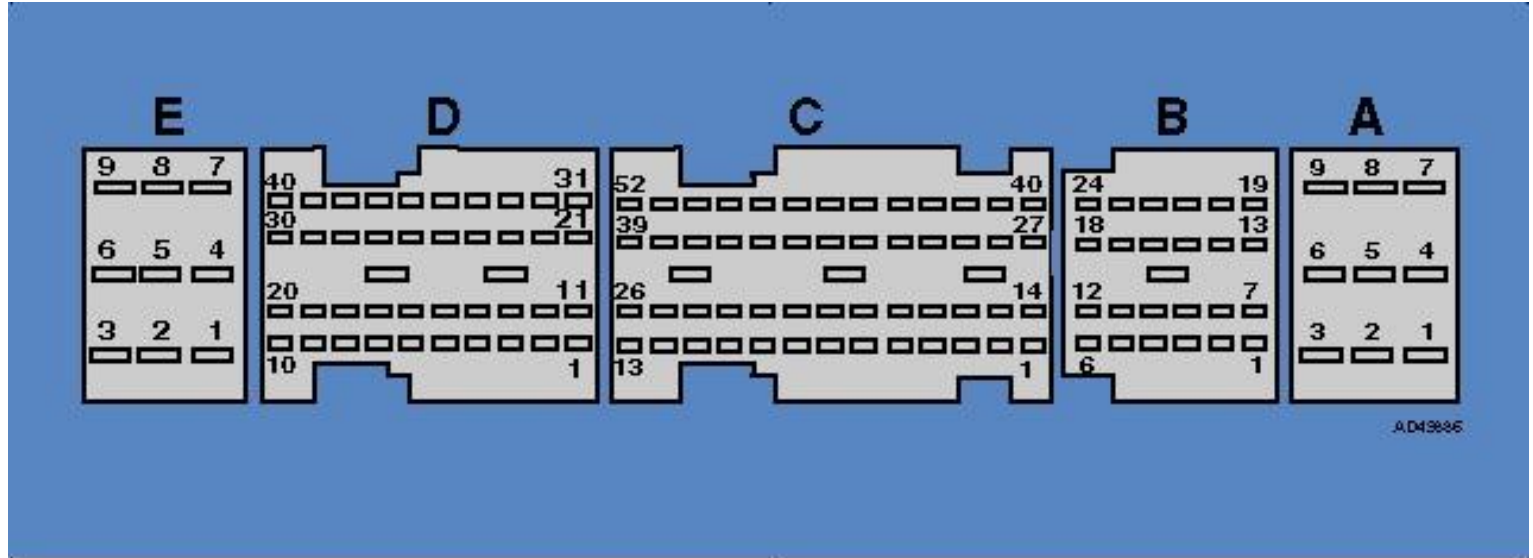
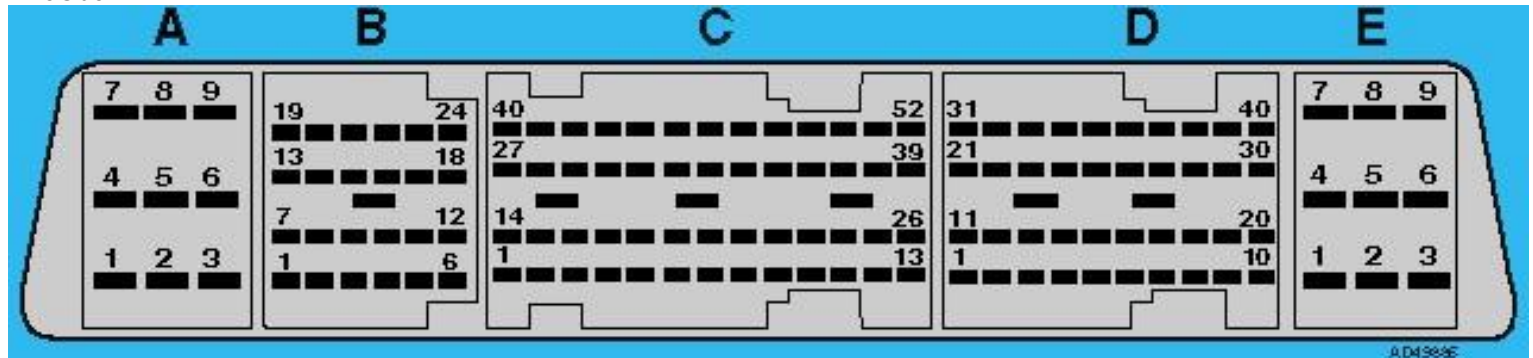


Telephone:
Fax:
VAT Registration No.:

Terminal side



Wire side



All models

Component/circuit description	ECM pin	Signal	Condition	Typical value
AC compressor clutch relay	D32		Engine running - AC OFF	11-14 V
AC compressor clutch relay	D32		Engine running - AC ON	0 V
AC refrigerant triple pressure switch	B3		Engine idling - AC OFF	0 V
AC refrigerant triple pressure switch	B3		Engine idling - AC ON	11,4 V

Manufacturer: Alfa Romeo
Engine code: 325.01
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AC refrigerant triple pressure switch	C20	←	Engine idling - AC ON - coolant blower motor OFF	11-14 V
AC refrigerant triple pressure switch	C20	←	Engine idling - AC ON - coolant blower motor ON	0 V
AC refrigerant triple pressure switch	D15	←	Engine idling - AC ON - coolant blower motor OFF	11-14 V
AC refrigerant triple pressure switch	D15	←	Engine idling - AC ON - coolant blower motor ON	0 V
<u>Accelerator pedal position (APP) sensor</u>	C5	⇒	Ignition OFF	0 V
<u>Accelerator pedal position (APP) sensor</u>	C5	⇒	Ignition ON	5 V
<u>Accelerator pedal position (APP) sensor</u>	C8	⌘	Ignition ON	0 V
<u>Accelerator pedal position (APP) sensor</u>	C9	←	Ignition ON - accelerator pedal released	0,38 V
<u>Accelerator pedal position (APP) sensor</u>	C9	←	Ignition ON - accelerator pedal depressed	1,84 V
<u>Accelerator pedal position (APP) sensor</u>	C10	←	Ignition ON - accelerator pedal released	0,77 V
<u>Accelerator pedal position (APP) sensor</u>	C10	←	Ignition ON - accelerator pedal depressed	3,7 V
<u>Accelerator pedal position (APP) sensor</u>	C21	⇒	Ignition OFF	0 V
<u>Accelerator pedal position (APP) sensor</u>	C21	⇒	Ignition ON	5 V
<u>Accelerator pedal position (APP) sensor</u>	C23	⌘	Ignition ON	0 V
<u>Brake pedal position (BPP) switch</u>	B8	←	Ignition ON - brake pedal released	0 V
<u>Brake pedal position (BPP) switch</u>	B8	←	Ignition ON - brake pedal depressed	11-14 V
Camshaft position (CMP) sensor	D2	⌘	Ignition ON	0 or 5 V
Camshaft position (CMP) sensor	D3	←	Engine idling	2 V/50 ms per division 
Camshaft position (CMP) sensor	D3	←	Ignition ON	4,7 V
Camshaft position (CMP) sensor	D12	⇒	Ignition OFF	0 V
Camshaft position (CMP) sensor	D12	⇒	Ignition ON	11-14 V
<u>Clutch pedal position (CPP) switch</u>	B2	←	Ignition ON - clutch pedal released	0 V
<u>Clutch pedal position (CPP) switch</u>	B2	←	Ignition ON - clutch pedal depressed	11-14 V
<u>Crankshaft position (CKP) sensor</u> - screened lead	D17	⌘	Ignition ON	0 V
<u>Crankshaft position (CKP) sensor</u>	D26	←	Engine idling	5,38 V ac
<u>Crankshaft position (CKP) sensor</u>	D26	←	Engine idling	5 V/2 ms per division 
<u>Crankshaft position (CKP) sensor</u>	D37	⌘	Ignition ON	0 V
Data link connector (DLC)	C28	↔	Ignition ON	11,6 V
Earth	A4		Ignition ON	0 V
Earth	A5		Ignition ON	0 V

Manufacturer: Alfa Romeo
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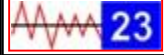
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Earth	AO		Ignition ON	U V
Engine control relay	A1	←	Ignition OFF	0 V
Engine control relay	A1	←	Ignition ON	11-14 V
Engine control relay	A7	←	Ignition OFF	0 V
Engine control relay	A7	←	Ignition ON	11-14 V
Engine control relay	A8	←	Ignition OFF	0 V
Engine control relay	A8	←	Ignition ON	11-14 V
Engine control relay	C46	↔	Ignition OFF	11-14 V
Engine control relay	C46	↔	Ignition ON	0,9 V
Engine coolant blower motor relay I	B23	←	Ignition OFF	0 V
Engine coolant blower motor relay I	B23	←	Ignition ON	11-14 V
Engine coolant blower motor relay II/III	C45	⇒	Engine idling - coolant blower motor OFF	11-14 V
Engine coolant blower motor relay II/III	C45	⇒	Engine idling - coolant blower motor ON	0 V
Engine coolant 'hot' warning lamp	C49	↔	Ignition ON - lamp ON	0,1 V
Engine coolant 'hot' warning lamp	C49	↔	Ignition ON - lamp OFF	11-14 V
Engine coolant temperature (ECT) sensor	D27	↔	Ignition ON	0 V
Engine coolant temperature (ECT) sensor	D36	←	Ignition ON - engine cold	3,5 V
Engine coolant temperature (ECT) sensor	D36	←	Engine idling - engine hot	1,2 V
Engine malfunction indicator lamp (MIL)	C48	↔	Ignition ON - lamp ON	0 V
Engine malfunction indicator lamp (MIL)	C48	↔	Ignition ON - lamp OFF	11-14 V
Exhaust gas recirculation (EGR) solenoid	C37	⇒	Ignition OFF	0 V
Exhaust gas recirculation (EGR) solenoid	C37	⇒	Ignition ON	11-14 V
Exhaust gas recirculation (EGR) solenoid	C37	⇒	Engine idling	11-14 V
Exhaust gas recirculation (EGR) solenoid	C50	↔	Ignition OFF	0 V
Exhaust gas recirculation (EGR) solenoid	C50	↔	Ignition ON	11-14 V
Exhaust gas recirculation (EGR) solenoid	C50	↔	Engine idling	5 V/5 ms per division 
Fuel pressure control solenoid	D21	↔	Ignition ON	0 V
Fuel pressure control solenoid	D31	←	Engine idling	73%
Fuel pressure control solenoid	D31	←	Engine idling	2 V/1 ms per division 
Fuel pressure sensor	D13	⇒	Ignition OFF	0 V

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Fuel pressure sensor	D13	⇒	Ignition ON	5 V
Fuel pressure sensor	D24	←	Engine idling	1,3 V
Fuel pressure sensor	D24	←	Engine running - 3000 rpm	2,1 V
Fuel pressure sensor	D24	←	Ignition ON	0,5 V
Fuel pressure sensor	D34	↗	Ignition ON	0 V
Fuel pump relay	C30	⇒	Ignition ON	11-14 V
Fuel pump relay	C52	↗	Engine idling	0 V
Fuel pump relay	C52	↗	Ignition ON	0 V for 7 seconds then 11-14 V
<u>Fuel temperature sensor</u>	C1	↗	Ignition ON	0 V
<u>Fuel temperature sensor</u>	C24	←	Ignition ON - fuel temp. 20°C	2,6 V
<u>Glow plug control module</u>	B1	↗	Ignition OFF	0 V
<u>Glow plug control module</u>	B1	↗	Ignition ON	0,6 V
<u>Glow plug control module</u>	C38	⇒	Ignition OFF	0 V
<u>Glow plug control module</u>	C38	⇒	Ignition ON	11-14 V
<u>Glow plug control module</u>	C51	⇒	Engine idling	12,5 V
<u>Glow plug control module</u>	C51	⇒	Ignition ON	10,7 V
Glow plug warning lamp	C43	⇒	Ignition ON - lamp ON	0 V
Glow plug warning lamp	C43	⇒	Ignition ON - lamp OFF	11-14 V
Ignition switch	B13	←	Ignition OFF	0 V
Ignition switch	B13	←	Ignition ON	11-14 V
Immobilizer control module	C13	←	Ignition OFF	0 V
Immobilizer control module	C13	←	Ignition ON	11-14 V
<u>Injector 1</u>	E5	↗	Engine idling	1 ms pilot + 1,5 ms main
<u>Injector 1</u>	E5	↗	Engine idling	10 V/0,5 ms per division 
Injectors 1, 3 & 4	E4	⇒	Ignition ON	1,1 V
<u>Injector 2</u>	E9	↗	Engine idling	10 V/0,5 ms per division 
<u>Injector 3</u>	E8	↗	Engine idling	10 V/0,5 ms per division 
<u>Injector 4</u>	E7	↗	Engine idling	10 V/0,5 ms per division 

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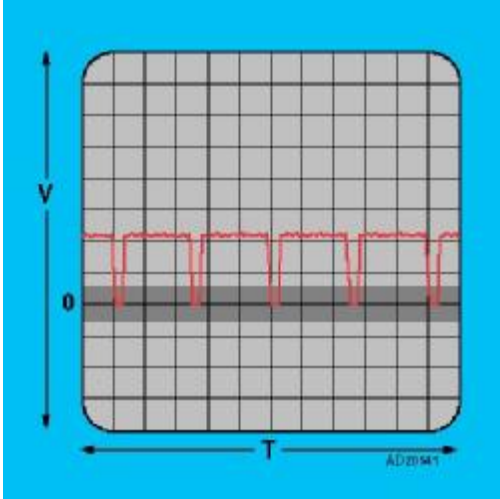
Injector 5	E3		Engine idling	1 ms pilot + 1,5 ms main
Injector 5	E3		Engine idling	10 V/0,5 ms per division 
Injector 5	E7		Engine idling	1 ms pilot + 1,5 ms main
Injector 5	E8		Engine idling	1 ms pilot + 1,5 ms main
Injector 5	E9		Engine idling	1 ms pilot + 1,5 ms main
Injectors 2 & 5	E1		Ignition ON	1,1 V
Intake air temperature (IAT) sensor	D23		Ignition ON - air temp. 20°C	2,5-3,8 V
Intake air temperature (IAT) sensor	D4		Ignition ON	0 V
Manifold absolute pressure (MAP) sensor	D6		Ignition ON	1,86 V
Manifold absolute pressure (MAP) sensor	D6		Engine idling	1,85 V
Manifold absolute pressure (MAP) sensor	D6		Engine idling - accelerate briefly	2,9 V
Manifold absolute pressure (MAP) sensor	D7		Ignition ON	0 V
Manifold absolute pressure (MAP) sensor	D8		Ignition OFF	0 V
Manifold absolute pressure (MAP) sensor	D8		Ignition ON	5 V
Mass air flow (MAF) sensor	D1		Ignition OFF	0 V
Mass air flow (MAF) sensor	D1		Ignition ON	5 V
Mass air flow (MAF) sensor	D11		Ignition OFF	0 V
Mass air flow (MAF) sensor	D11		Ignition ON	11-14 V
Mass air flow (MAF) sensor	D14		Engine idling	1,7-2,2 V
Mass air flow (MAF) sensor	D14		Engine running - accelerate briefly	4,7 V
Mass air flow (MAF) sensor	D14		Ignition ON	1 V
Tachometer	C40		Engine idling	2 V/20 ms per division 
Tachometer	C40		Ignition ON	11,6 V
Vehicle speedometer	C26			Connected pin - no test data available

Manufacturer: Alfa Romeo
Engine code: 325.01
Tuned for:

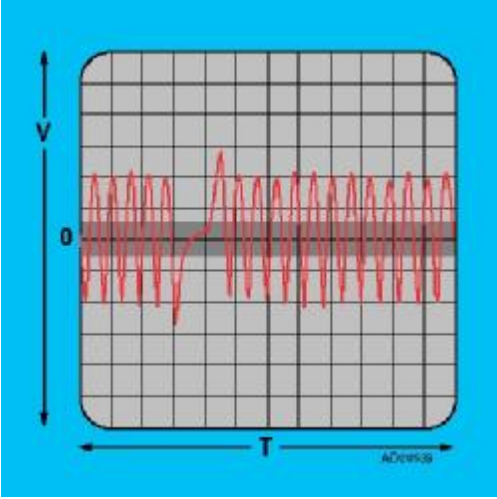
Model: 156 2,4D JTD
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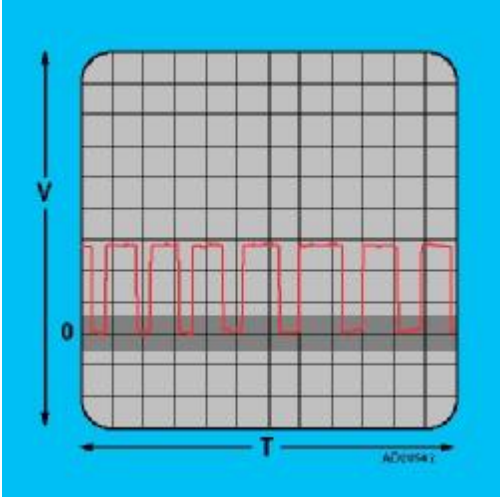
3. Digital, DC



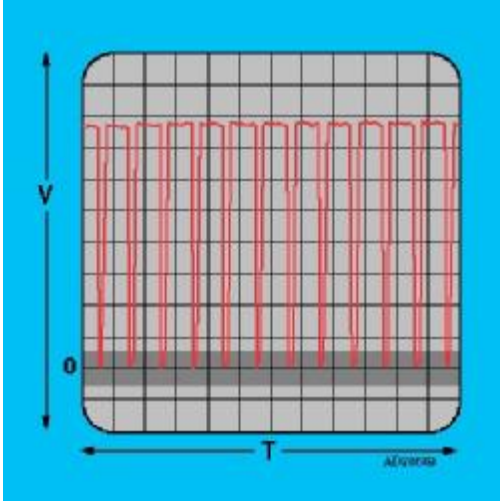
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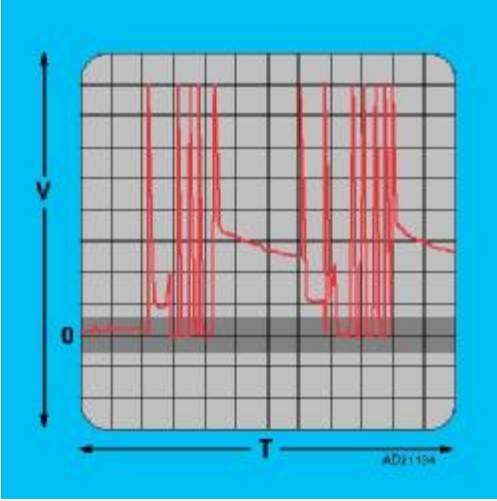
4. Digital, DC



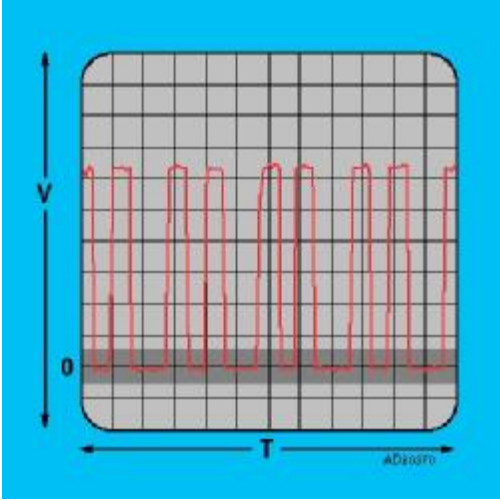
37. Digital, DC



23. Digital, DC



21. Digital, DC



	input/output signal
	input signal
	output signal
	ECM switched earth
	ECM earth circuit

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