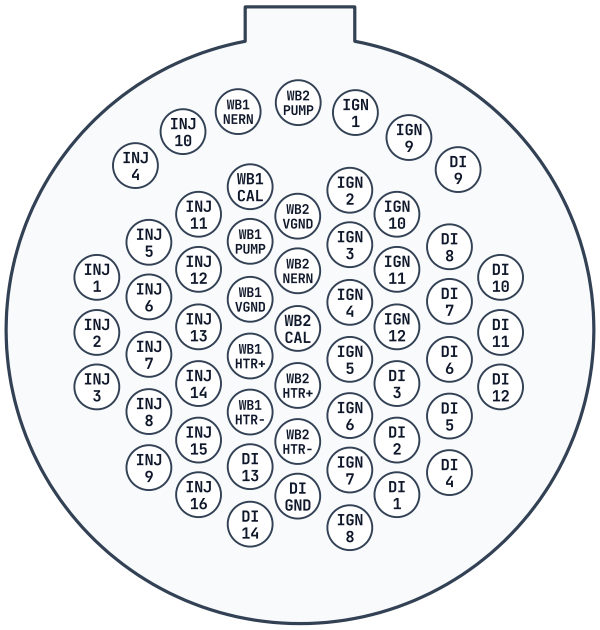
Emtron KV16M pinout

ecurecovery.com/pinouts/emtron/kv16m · Every pin checked against 2 Emtron documents · data checked 2026-11-04

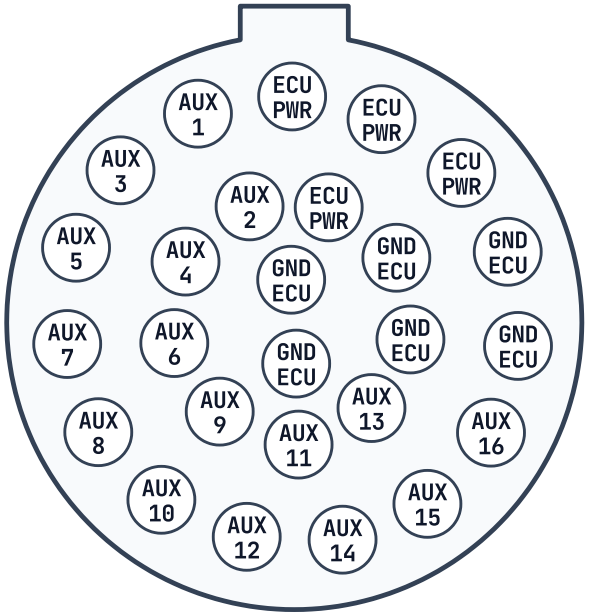
Connector A · 55-pin

CONTACT LAYOUT AS TE CONNECTIVITY (DEUTSCH) DRAWS THIS INSERT; TE DOES NOT SAY FROM WHICH SIDE



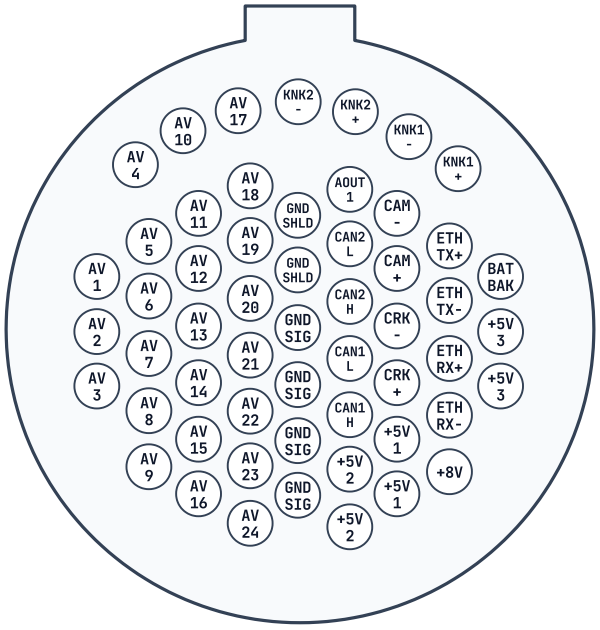
Connector B · 26-pin

CONTACT LAYOUT AS TE CONNECTIVITY (DEUTSCH) DRAWS THIS INSERT; TE DOES NOT SAY FROM WHICH SIDE



Connector C · 55-pin

CONTACT LAYOUT AS TE CONNECTIVITY (DEUTSCH) DRAWS THIS INSERT; TE DOES NOT SAY FROM WHICH SIDE



Emtron KV16M connector A pinout (55-pin)

Mating connector: Deutsch Autosport AS616-35SN (Red), 55 pin

Pin	Function
A1	Injection Channel 1
A2	Injection Channel 2
A3	Injection Channel 3
A4	Injection Channel 4
A5	Injection Channel 5
A6	Injection Channel 6
A7	Injection Channel 7
A8	Injection Channel 8
A9	Injection Channel 9
A10	Injection Channel 10
A11	Injection Channel 11
A12	Injection Channel 12
A13	Injection Channel 13
A14	Injection Channel 14
A15	Injection Channel 15
A16	Injection Channel 16
A17	Lambda 1 Nernst Cell (Vs)
A18	Lambda 1 Cal Resistor (CalR)
A19	Lambda 1 Pump Cell (Ip)
A20	Lambda 1 Virtual Ground (VGnd)
A21	Lambda 1 Heater +
A22	Lambda 1 Heater -
A23	Digital Input 13
A24	Digital Input 14
A25	Lambda 2 Pump Cell (Ip)
A26	Lambda 2 Virtual Ground (VGnd)
A27	Lambda 2 Nernst Cell (Vs)
A28	Lambda 2 Cal Resistor (CalR)
A29	Lambda 2 Heater +
A30	Lambda 2 Heater -
A31	Digital Input Ground Out
A32	Ignition Channel 1
A33	Ignition Channel 2
A34	Ignition Channel 3
A35	Ignition Channel 4
A36	Ignition Channel 5
A37	Ignition Channel 6
A38	Ignition Channel 7
A39	Ignition Channel 8
A40	Ignition Channel 9
A41	Ignition Channel 10
A42	Ignition Channel 11
A43	Ignition Channel 12
A44	Digital Input 3
A45	Digital Input 2
A46	Digital Input 1
A47	Digital Input 9
A48	Digital Input 8
A49	Digital Input 7
A50	Digital Input 6
A51	Digital Input 5
A52	Digital Input 4

Pin	Function
A53	Digital Input 10
A54	Digital Input 11
A55	Digital Input 12

Emtron KV16M connector B pinout (26-pin)

Mating connector: Deutsch Autosport AS616-26SN (Red), 26 pin

Pin	Function
B_A	ECU 14V Supply
B_B	ECU 14V Supply
B_C	ECU 14V Supply
B_D	ECU Ground
B_E	ECU Ground
B_F	Auxiliary Output 16
B_G	Auxiliary Output 15
B_H	Auxiliary Output 14
B_J	Auxiliary Output 12
B_K	Auxiliary Output 10
B_L	Auxiliary Output 8
B_M	Auxiliary Output 7
B_N	Auxiliary Output 5
B_P	Auxiliary Output 3
B_R	Auxiliary Output 1
B_S	Auxiliary Output 2
B_T	ECU 14V Supply
B_U	ECU Ground
B_V	ECU Ground
B_W	Auxiliary Output 13
B_X	Auxiliary Output 11
B_Y	Auxiliary Output 9
B_Z	Auxiliary Output 6
B_a	Auxiliary Output 4
B_b	ECU Ground
B_c	ECU Ground

Emtron KV16M connector C pinout (55-pin)

Mating connector: Deutsch Autosport AS616-35SA (Yellow), 55 pin

Pin	Function
C1	Analog Input Channel 1
C2	Analog Input Channel 2
C3	Analog Input Channel 3
C4	Analog Input Channel 4
C5	Analog Input Channel 5
C6	Analog Input Channel 6
C7	Analog Input Channel 7
C8	Analog Input Channel 8
C9	Analog Input Channel 9
C10	Analog Input Channel 10
C11	Analog Input Channel 11
C12	Analog Input Channel 12

Pin	Function
C13	Analog Input Channel 13
C14	Analog Input Channel 14
C15	Analog Input Channel 15
C16	Analog Input Channel 16
C17	Analog Input Channel 17
C18	Analog Input Channel 18
C19	Analog Input Channel 19
C20	Analog Input Channel 20
C21	Analog Input Channel 21
C22	Analog Input Channel 22
C23	Analog Input Channel 23
C24	Analog Input Channel 24
C25	Knock 2 -
C26	SHIELD (Crank/Cam/ Knock)
C27	SHIELD (Crank/Cam/ Knock)
C28	Analog Sensor 0V Reference
C29	Analog Sensor 0V Reference
C30	Analog Sensor 0V Reference
C31	Analog Sensor 0V Reference
C32	Knock 2 +
C33	Analog Out
C34	CAN 2L
C35	CAN 2H
C36	CAN 1L
C37	CAN 1H
C38	Sensor Supply Vref2: 5.0V
C39	Sensor Supply Vref2: 5.0V
C40	Knock 1 -
C41	Sync Sensor -
C42	Sync Sensor +
C43	Crank Index Sensor -
C44	Crank Index Sensor +
C45	Sensor Supply Vref1: 5.0V
C46	Sensor Supply Vref1: 5.0V
C47	Knock 1 +
C48	Ethernet Tx +
C49	Ethernet Tx -
C50	Ethernet Rx +
C51	Ethernet Rx -
C52	Sensor Supply 8V
C53	Constant 14V Supply(Backup)
C54	Sensor Supply Vref3: 5.0V
C55	Sensor Supply Vref3: 5.0V

Where this comes from

Emtron pinout for this ECU

Emtron KV16M Pinout (Emtron Resource Centre)

Pinouts.doc_kv16mpdf

Emtron KV16M Pinout, Rev 1.0 (PDF, 2018)

Plug drawing: TE Connectivity Deutsch Autosport catalogue, insert arrangements (used for the drawing only)

Third party

TE Connectivity, Deutsch Autosport Interconnection Solutions (2022), page 25: AS contact / insert arrangements