

A1 - IGNITION 3
 A2 - IGNITION 6
 A3 - OUT1
 A4 - IDLE1
 A5 - IDLE2
 A6 - VVT1
 A7 - TACHO_OUT
 A8 - VREF
 A9 - WBO_GREEN
 A10 - INJECTOR 6
 A11 - INJECTOR 5
 A12 - GNDA
 A13 - INJECTOR3

B1 - IGNITION 2
 B2 - IGNITION 5
 B3 - LAUNCH_IN
 B4 - FUEL PUMP
 B5 - TABLE SWITCH
 B6 - TPS
 B7 - COOLANT
 B8 - AIR TEMP
 B9 - WBO_BLACK
 B10 - WBO_YELLOW
 B11 - WBO_RED
 B12 - GNDA
 B13 - INJECTOR 2

C1 - IGNITION 1
 C2 - IGNITION 4
 C3 - WBO_WHITE
 C4 - +12 VOLT
 C5 - GND
 C6 - SENSOR GND
 C7 - WBO_GREY
 C8 - VR1+ (VVT2)
 C9 - VR1- / HALL1
 C10 - VR2+ (HALL3)
 C11 - VR2- / HALL2
 C12 - INJECTOR 4
 C13 - INJECTOR 1

RED = With modifications

Bosch LSU 4.9 WBO:

+12 VOLT : kapcsolt tápfeszültség

GND: test

GNDA: Nagyáramú test (mindegyiket be kell kötni, min. 1.5mm² kábel!!!)

VREF: referencia feszültség (+5V) szenzorokhoz

SENSOR GND: szenzor test

INJECTOR x : injector kimenet X

IGNITION x : gyújtás kimenet hagyományos vagy logikai trafóhoz (kiépítés függő)

IDLE1 : 3A-es kapcsolható kimenet

IDLE2 : 3A-es kapcsolható kimenet

VR1+ : Főtengely VR szenzor +

VR1- / HALL1 : Főtengely VR szenzor - / Hall 1

VR2+ : Veztengely VR szenzor +

VR2- /HALL2 : Veztengely VR szenzor - / Hall 2

LAUNCH IN : rajtprogram gomb (testre aktív!)

TABLE SWITCH : programváltó kapcsoló bemenet (testre aktív!)

TACHO OUT : Fordulatszámérő kimenet

FUEL PUMP: benzinpumpa relé kimenet

AIR TEMP : levegőhőmérséglet szenzor

COOLANT : vízhőmérséglet szenzor

TPS : folytószelep-poti bemenet

OUT1: 3A kapcsolható kimenet

WBO xxxxx : Bosch LSU 4.9 lambda szonda

VVT1: 3A kapcsolható kimenet



- 1 - RED
- 2 - YELLOW
- 3 - WHITE
- 4 - GREY
- 5 - GREEN
- 6 - BLACK

The injectors and coils need to connect to the ecu in sequence.

Example:

If your firing order is 1-5-3-6-2-4

Ignition1 and Injector1 out to cylinder 1

Ignition2 and Injector2 out to cylinder 2

Ignition3 and Injector3 out to cylinder 3

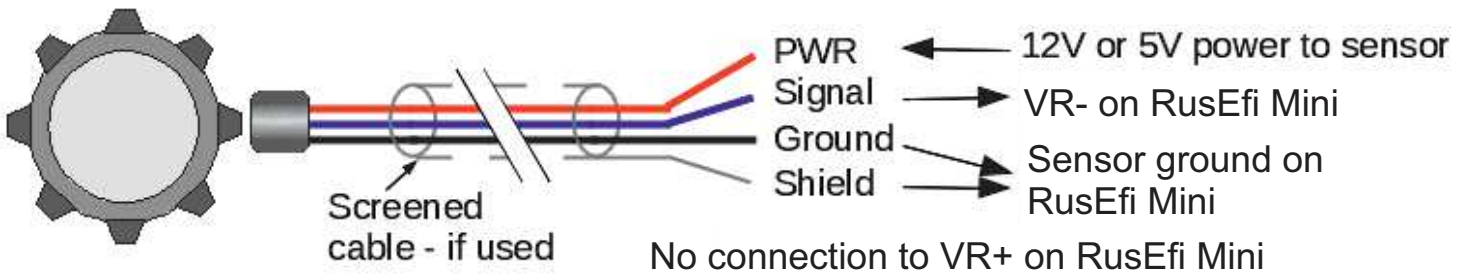
Ignition4 and Injector4 out to cylinder 4

Ignition5 and Injector5 out to cylinder 5

Ignition6 and Injector6 out to cylinder 6

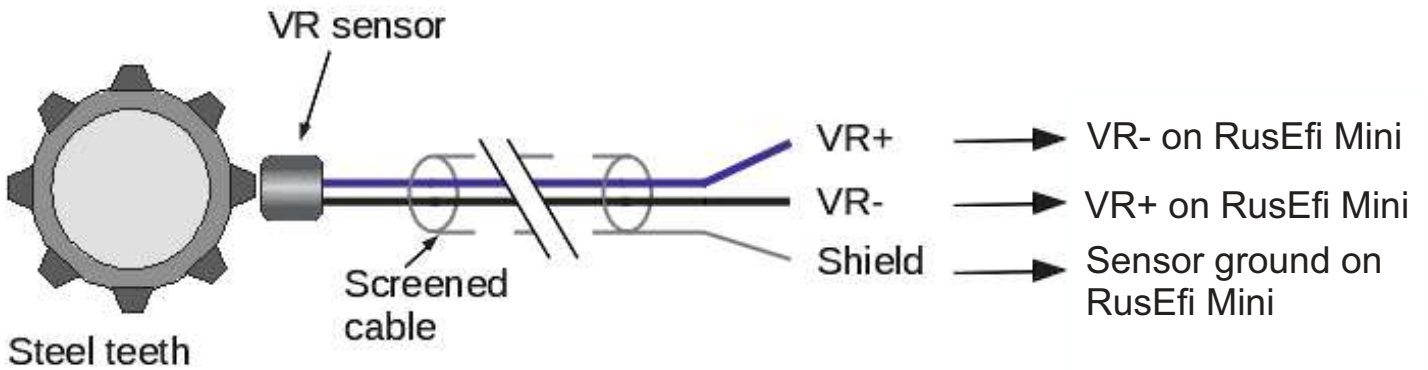
You can choose the correct firing order in TunerStudio

HALL szenzor:



HALL pull-up resistors inside the box

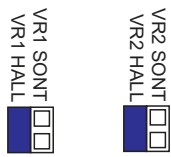
VR szenzor:



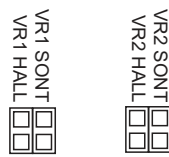
Some installs may find it necessary to install a "shunt" resistor between VR+ and VR- to reduce the signal voltage at higher RPMs. A 1/4W resistor is sufficient and values in the range of 1k to 10k. 10k is recommended for 60-2 wheels.

Jumpers inside the FFG_RusEfi:

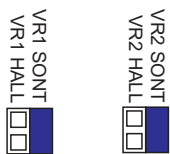
For hall sensor:



For VR sensor:

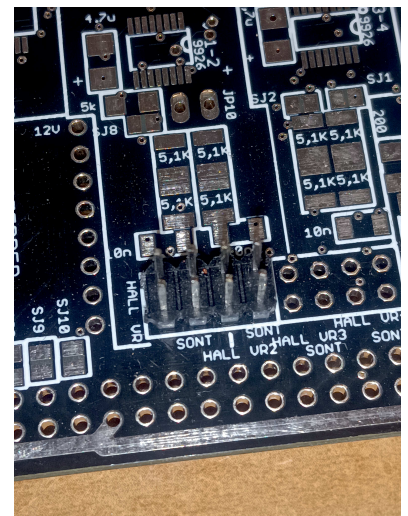


For VR sensor with sонт resistor:



The internal sонт resistor is 2,2kohm

VR2 SONT } VR2 Circuit
 VR2 HALL }
 VR1 SONT } VR1 Circuit
 VR1 HALL }



Csatlakozó megnevezés	Processzor láb			Csatlakozó megnevezés	Processzor láb	
Injector 1	PB15			IDLE1	PD9	
Injector 2	PB14			IDLE2	PD12	
Injector 3	PB12			OUT1	PD10	
Injector 4	PB13			OUT2	PD11	
Injector 5	PA8			OUT3	PC9	
Injector 6	PE7			VVT1	PE9	
Injector 7	PE13			VVT2	PD8	
Injector 8	PE10			BOOST	PC7	
Ignition 1	PE2			FUEL PUMP	PE11	
Ignition 2	PE3			CAN RX	PD0	
Ignition 3	PC13			CAN TX	PD1	
Ignition 4	PE6			SPI1 MOSI	PB5	
Ignition 5	PE4			SPI1 MISO	PB4	
Ignition 6	PE5			SPI1 SCK	PB3	
Ignition 7	PE0			SPI3 MOSI	PC12	SD CARD
Ignition 8	PB9			SPI3 MISO	PC13	
MAP	PA3			SPI3 SCK	PC10	
TPS	PA2			TACHO_OUT	PD13 vagy PD15	
TPS1	PC1			HB_Sense	PC5	
TPS2	PC4					
PPS1	PC3					
PPS2	PA7					
BATTERY	PA4					
COOLANT	PA1					
AIR TEMP	PA0					
O2	PB0					
BARO	PA5					
ANALOG_IN10	PC0					
EGT	PB1					
TABLE SWITCH	PB8					
LAUNCH_IN	PD14					
DIGITAL_IN3	PE14					
DIGITAL_IN4	PC6					
VR1	PD3					
VR2	PD4					
VR3	PE8					
VR4	PE12					