

HPI 5-M 8C

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BOSCH
Invented for life



- ▶ Max. 8 cylinders
- ▶ Max. 8,000 rpm (8 cyl. operation)
- ▶ 440 g

The injector power stage HPI 5-M 8C is a device for driving injectors and high pressure pumps for gasoline direct injection. Combined with a suitable ECU up to 8 injectors can be driven. The injectors are gathered in 4 groups of 2 injectors each. Within a group only one injector can be switched on at the same time. The 4 groups are totally independent, so that overlapping injection of injectors of different groups is possible. The HPI 5-M is mainly designed to drive the Bosch high pressure pump HDP 5. Communication between main ECU and the HPI 5-M is realized via CAN interface.

Application

Max. number of cylinders	8
Max. rpm (8 cyl. operation)	8,000
Max. rpm (6 cyl. operation)	9,500

Optimized for Bosch high pressure injection valve HDEV 5 and Bosch high pressure pump HDP 5

Technical Specifications

Mechanical Data

Aluminum housing
Each connector pin individually filtered

Housing temperature	-25 to 100°C
Size (incl. connectors)	167 x 97 x 39 mm
Protection Classification	IP67 to DIN 40050, Section 9, Issue 2008
Weight	440 g

Electrical Data

Voltage supply	14 V
Operating voltage	12 to 16 V
Operation voltage (engine start)	6.5 to 16 V
Nominal voltage	14 V

Connectors and Wires

Mating connector	AS 616-26SN AS 614-19SN
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Pin Configuration

16-26 (size 16) 26#20 7,5 A

Pin	Name	Comment
A	O_P_FSCVL1	Flow control valve #1 output low side

16-26 (size 16) 26#20 7,5 A		
B	V_V_BAT_R	Battery plus
C	V_V_BAT_R	Battery plus
D	G_G_BAT	Battery minus
E	G_G_BAT	Battery minus
F	O_P_BANK2_LS4_LS 6	Injector control output, Low side of HDEV Injector #4 (6-cyl. engine: #6)
G	O_P_BANK2_HS4_HS 6	Injector control output, High side of HDEV Injector #4 (6-cyl. engine: #6)
H	O_P_BANK1_HS2_HS 2	Injector control output, High side of HDEV Injector #2 (6-cyl. engine: #2)
I	O_P_BANK1_LS2_LS 2	Injector control output, Low side of HDEV Injector #2 (6-cyl. engine: #2)
K	O_P_BANK2_LS3_LS 3	Injector control output, Low side of HDEV Injector #3 (6-cyl. engine: #3)
L	O_P_BANK2_HS3_HS 3	Injector control output, High side of HDEV Injector #3 (6-cyl. engine: #3)
M	O_P_BANK1_HS1_HS 1	Injector control output, High side of HDEV Injector #1 (6-cyl. engine: #1)
N	O_P_BANK1_LS1_LS 1	Injector control output, Low side of HDEV Injector #1 (6-cyl. engine: #1)
P	I_P_HPIND1_D1	Injector control, input signal for injector #1 (6-cyl. engine: #1)
R	O_P_FSCVH1	Flow control valve #1 output high side
S	I_P_HPIND2_D2	Injector control, input signal for injector #2 (6-cyl. engine: #2)
T	V_V_BAT_R	Battery plus
U	G_G_BAT	Battery minus
V	I_P_1SEL1	Flow control valve #1, input signal "SEL1"
W	I_P_HPIND4_D6	Injector control, input signal for injector #4 (6-cyl. engine: #6)
X	I_S_T15	Input "Terminal 15" (Ignition switch)
Y	B_D_CANL	CAN Interface, Signal "CAN Low"
Z	B_D_CANH	CAN Interface, Signal "CAN High"
a	I_P_HPIND3_D3	Injector control, input signal for injector #3 (6-cyl. engine: #3)
b	I_P_1SELO	Flow control valve #1, input signal "SELO"
c	I_P_1ON	Flow control valve #1, input signal "ON"

14-19 (size 14) 19#20 7,5 A		
Pin	Name	Comment
A	I_P_HPIND6_D5	Injector control, input signal for injector #6 (6-cyl. engine: #5)
B	O_P_BANK1_LS5_LS 4	Injector control output, Low side of HDEV Injector #5 (6-cyl. engine: #4)
C	O_P_BANK1_HS5_HS 4	Injector control output, High side of HDEV Injector #5 (6-cyl. engine: #4)
D	O_P_BANK2_HS7	Injector control output, High side of HDEV Injector #7 (6-cyl. engine: not used)
E	O_P_BANK2_LS7	Injector control output, Low side of HDEV Injector #7 (6-cyl. engine: not used)
F	O_P_BANK1_LS6_LS 5	Injector control output, Low side of HDEV Injector #6 (6-cyl. engine: #5)
G	O_P_BANK1_HS6_HS 5	Injector control output, High side of HDEV Injector #6 (6-cyl. engine: #5)
H	O_P_BANK2_HS8	Injector control output, High side of HDEV Injector #8 (6-cyl. engine: not used)
I	O_P_BANK2_LS8	Injector control output, Low side of HDEV Injector #8 (6-cyl. engine: not used)
K	I_P_HPIND8	Injector control output, Low side of HDEV Injector #8 (6-cyl. engine: not used)
L	G_G_BAT	Battery minus
M	O_P_FSCVH2	Flow control valve #2 output high side
N	I_P_2SELO	Flow control valve #2, input signal "SELO"
P	I_P_HPIND7	Injector control, input signal for injector #7 (6-cyl. engine: not used)
R	I_P_2SEL1	Flow control valve #2, input signal "SEL1"
S	O_P_FSCVL2	Flow control valve #2 output low side
T	G_G_BAT	Battery minus
U	I_P_2ON	Flow control valve #2, input signal "ON"
V	I_P_HPIND5_D4	Injector control, input signal for injector #5 (6-cyl. engine: #4)

Communication

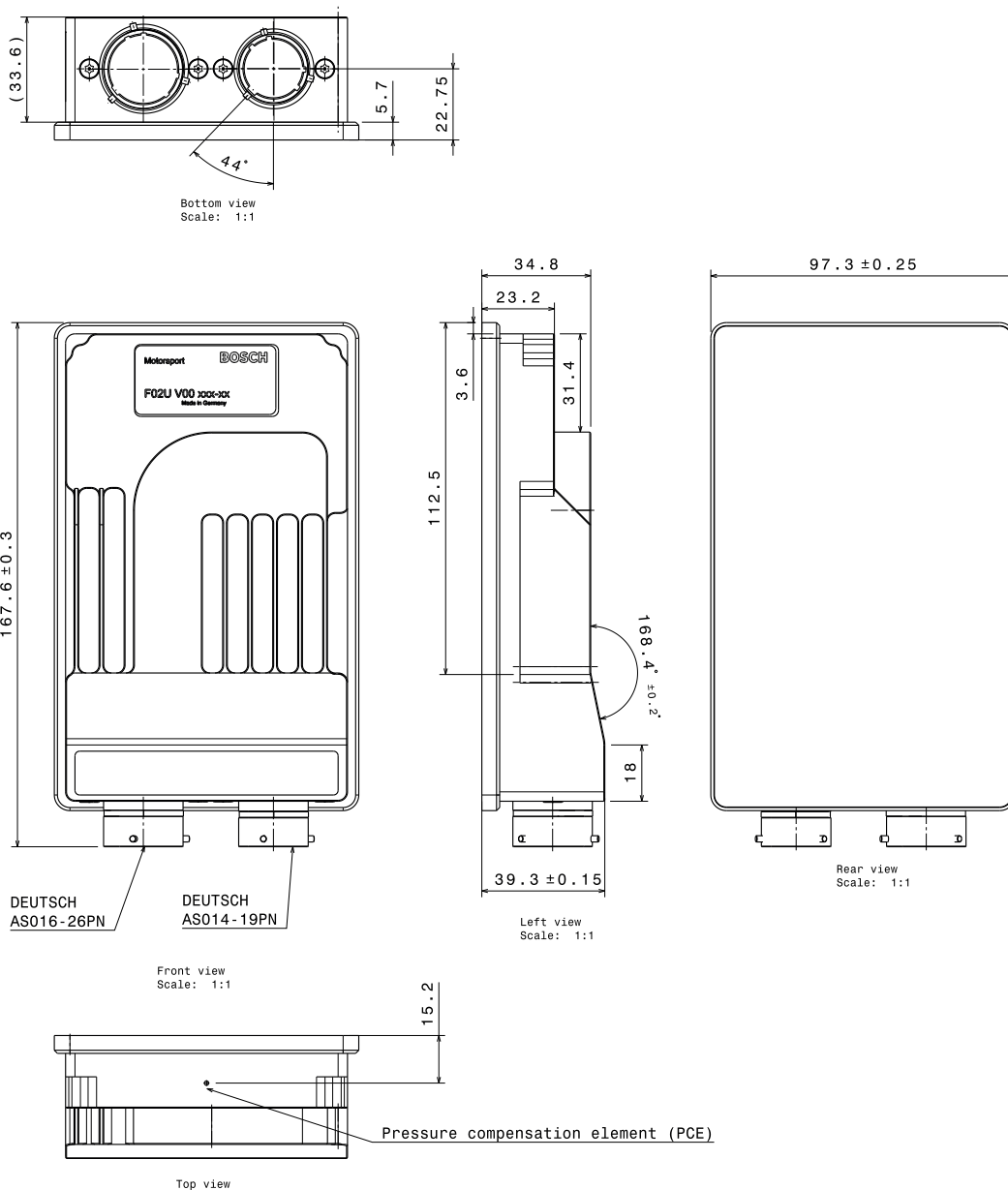
1 CAN (1 Mbaud)

Ordering Information

HPI 5-M 8C

Order number F 02U V01 630-01

Dimensions



Represented by:

Europe:
 Bosch Engineering GmbH
 Motorsport
 Robert-Bosch-Allee 1
 74232 Abstatt
 Germany
 Tel.: +49 7062 911 9101
 Fax: +49 7062 911 79104
 motorsport@bosch.com
 www.bosch-motorsport.de

North America:
 Bosch Engineering North America
 Motorsport
 38000 Hills Tech Drive
 Farmington Hills, MI 48331-3417
 United States of America
 Tel.: +1 248 876 2977
 Fax: +1 248 876 7373
 motorsport@bosch.com
 www.bosch-motorsport.com

Latin America:
 Robert Bosch Ltda
 Motorsport
 Av Juscelino Kubitschek de
 Oliveira 11800
 Zip code 81460-900
 Curitiba - Parana
 Brasilia
 Tel.: +55 41 3341 2057
 Fax: +55 41 3341 2779

Asia-Pacific:
 Bosch Engineering Japan K.K.
 Motorsport
 18F Queen's Tower C, 2-3-5 Minato Mirai
 Nishi-ku, Yokohama-shi
 Kanagawa 220-6218
 Japan
 Tel.: +81 45 650 5610
 Fax: +81 45 650 5611
 www.bosch-motorsport.jp

Australia, New Zealand and South Africa:
 Robert Bosch Pty. Ltd
 Motorsport
 1555 Centre Road
 Clayton, Victoria, 3168
 Australia
 Tel.: +61 (3) 9541 3901
 motor.sport@au.bosch.com