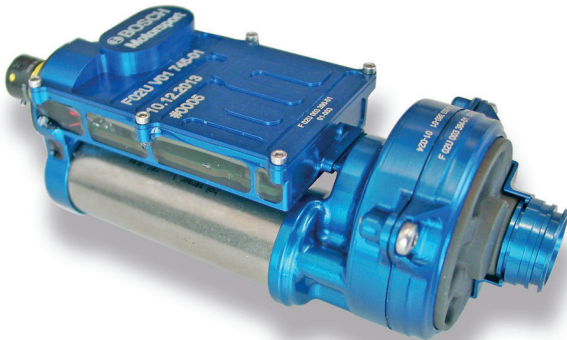


Fuel Pump LPx-F1

www.bosch-motorsport.com



BOSCH
Invented for life



- ▶ > 160 l/h at 7 bar (g)
- ▶ 325 g
- ▶ Max. 8 bar (g)
- ▶ Brushless motor
- ▶ PWM speed controlled

The fuel pump LPx-F1 was developed to feed the high pressure fuel pumps. It is for in tank installation. The speed controller is integrated and needs a PWM signal from the ECU. The supply voltage is 48 V.

Application

Fuel pressure	< 8 bar (g)
Delivery rate at 22°C	> 160 l/h at 7 bar (g) (120 W)
Max. delivery rate	> 260 l/h
Max. temperature fuel	65°C
Max. ambient temperature	80°C
Storage temperature range	-40 to 70°C
Max. vibration	See vibration profile 1
Max. dry run time	< 5 min
Duration for pressure build up	< 200 ms from (0 ... 160 l/h at 8 bar abs at T _{fuel} = 65°C)
Fuel compatibility	Gasoline, more on request

Technical Specifications

Mechanical Data

Pump	50 (25) mm x 125 mm
Electronic	47 x 60 x 20 mm
Weight	325 g
Housing	Aluminum
Sucking/intake side	Open pump element
Pressure side	M12x1

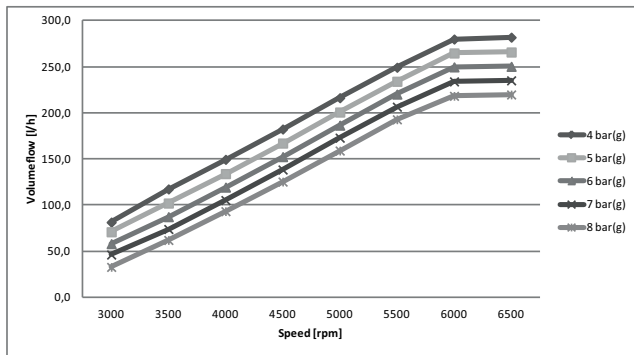
Electrical Data

Supply voltage	48 V ± 2 V
Load current	See diagrams
Speed control	PWM

Characteristic

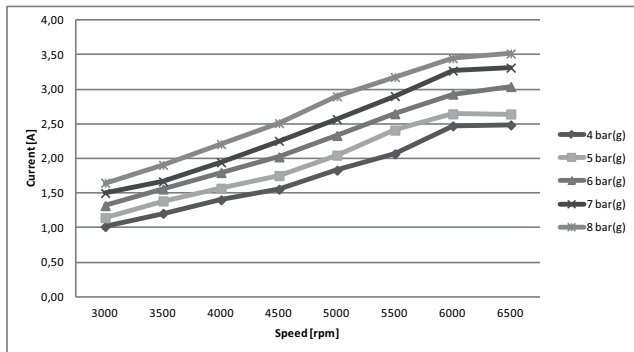
Surface coating	Anodization
Color	Blue
Non-return valve	External
Fuel filtering	Possible both sides

Volume flow



Pump speed [rpm]	Pressure [bar(g)]					
	4 bar(g)	5 bar(g)	6 bar(g)	7 bar(g)	8 bar(g)	
3000	81,3	70,8	58,0	46,1	32,7	l/h
3500	117,3	102,0	87,2	73,8	61,9	l/h
4000	149,4	133,9	119,3	105,2	93,2	l/h
4500	182,2	167,0	152,3	138,3	125,2	l/h
5000	216,2	200,7	186,5	172,8	158,9	l/h
5500	249,2	234,0	220,1	206,4	192,8	l/h
6000	279,8	264,7	249,6	233,9	218,2	l/h
6500	281,8	265,8	250,2	235,0	219,7	l/h

Current



Pump speed [rpm]	Pressure [bar(g)]					
	4 bar(g)	5 bar(g)	6 bar(g)	7 bar(g)	8 bar(g)	
3000	1,01	1,14	1,32	1,50	1,65	A
3500	1,21	1,39	1,56	1,67	1,91	A
4000	1,40	1,57	1,80	1,94	2,21	A
4500	1,55	1,75	2,02	2,25	2,51	A
5000	1,83	2,05	2,33	2,57	2,90	A
5500	2,07	2,41	2,65	2,90	3,18	A

6000	2,47	2,64	2,93	3,27	3,45	A
6500	2,48	2,64	3,04	3,31	3,52	A

Connectors and Wires

Electrical connector	ASL 0-06-05PA-HE-952K
Electrical matting connector	on request
Pin 1	U _{batt} (48 V, 3 A)
Pin 2	PGND
Pin 3	Nc
Pin 4	PWM_IN (10 Hz to 5 kHz, 10–90 % = 0 ... 7,000 rpm pump speed)
Pin 5	SIG_OUT (optional)
Mechanical connector intake side	open
Mechanical connector pressure side	M12x1

Installation Notes

Fuel compatibility with F1 gasoline fuel.

For technical reasons the values may vary.

Please use within the specified limit values only.

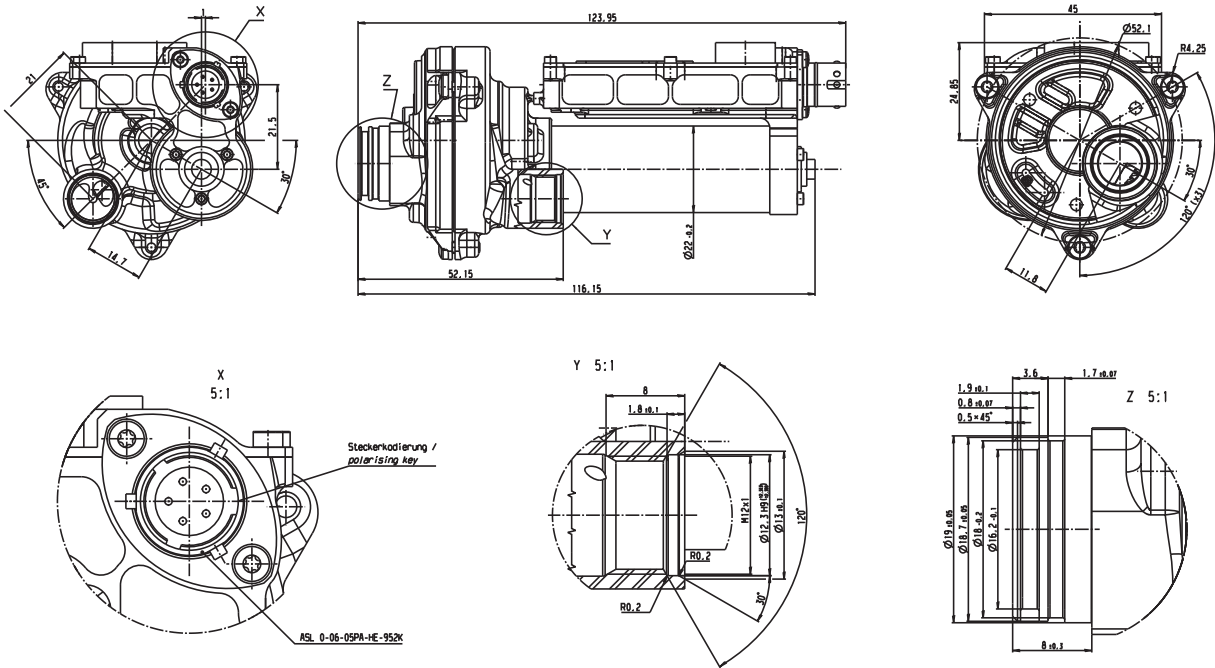
Please find further application hints in the offer drawing at our homepage.

Ordering Information

Fuel Pump LPx-F1

Order number **F 02U V01 745-02**

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