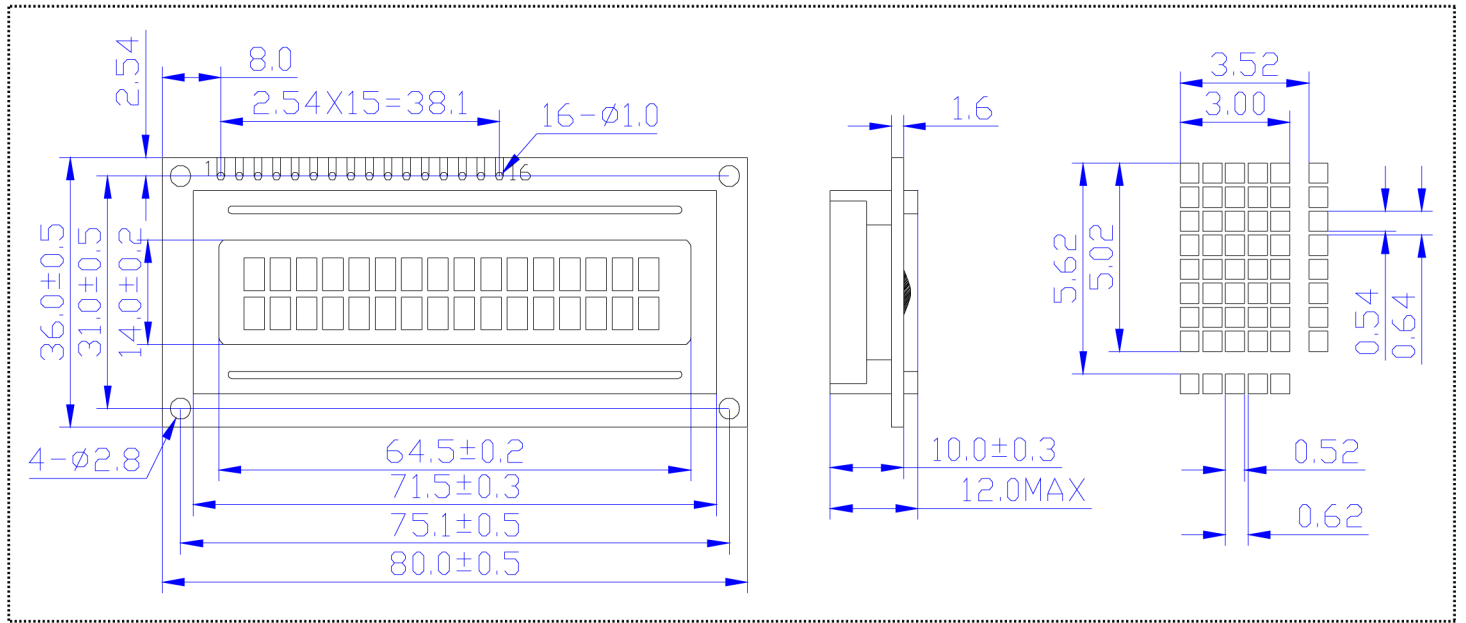


# Datasheet HD44780 16x2 LCD Display

Source : <http://www.mijnprintplaat.nl/>



MECHANICAL DATA		
Item	Nominal Dimensions	Unit
Module Size(W×H×T)	80.0×36.0×12.0	mm
Viewing Area(W×H)	64.5×14.0	mm
Character Size(W×H)	3.00×5.02	mm
Dot Size(W×H)	0.52×0.54	mm

PIN CONNECTIONS			
PIN	Symbol	Level	Function
1	VSS	—	GND(0V)
2	VDD	—	Supply Voltage for Logic(+5V)
3	V0	—	Power supply for LCD
4	RS	H/L	H: Data; L: Instruction Code
5	R/W	H/L	H: Read; L: Write
6	E	H/L	Enable Signal
7	DB0	H/L	Data Bus Line
8	DB1	H/L	
9	DB2	H/L	
10	DB3	H/L	
11	DB4	H/L	
12	DB5	H/L	
13	DB6	H/L	
14	DB7	H/L	
15	BL1	—	Backlight Power(+5V)
16	BL2	—	Backlight Power(0V)

ABSOLUTE MAXIMUM RATINGS					
Item	Symbol	Min	Type	Max	Unit
Operating Voltage	VDD	4.5	5.0	5.5	V
Operating Current	IDD	1.0	1.3	1.5	mA
LED Voltage	V <sub>LED</sub>	1.5	5.0	5.5	V
LED Current	I <sub>LED</sub>	75	140	200	mA
Operating Temp.	T <sub>opr</sub>	-20	—	+70	°C
Storage Temp.	T <sub>sto</sub>	-30	—	+80	°C

ELECTRICAL CHARACTERISTICS					
Item	Symbol	Min	Type	Max	Unit
Input High Voltage	V <sub>IH</sub>	2.2	—	VDD	V
Input Low Voltage	V <sub>IL</sub>	0	—	0.6	V
Output High Voltage	V <sub>OH</sub>	2.4	—	VDD	V
Output Low Voltage	V <sub>OL</sub>	0	—	0.4	V

