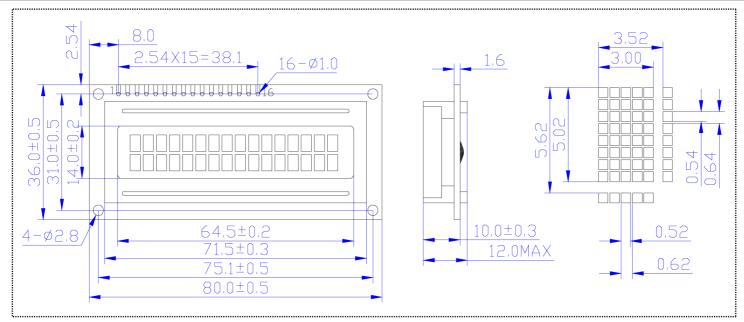# Datasheet HD44780 16x2 LCD Display
Source : http://www.mijnprintplaat.nl/

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

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min	Type	Max	Unit
Operating Voltage	V_{DD}	4.5	5.0	5.5	V
Operating Current	I_{DD}	1.0	1.3	1.5	mA
LED Voltage	V_{LED}	1.5	5.0	5.5	V
LED Current	I_{LED}	75	140	200	mA
Operating Temp.	T_{opr}	−20	—	+70	℃
Storage Temp.	T_{sto}	−30	—	+80	℃

ELECTRICAL CHARACTERISTICS

Item	Symbol	Min	Type	Max	Unit
Input Hight Voltage	V_{IH}	2.2	—	VDD	V
Input Low Voltage	V_{IL}	0	—	0.6	V
Output Hight Voltage	V_{OH}	2.4	—	VDD	V
Output Low Voltage	V_{OL}	0	—	0.4	V

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)

BLOCK DIAGRAM

POWER SUPPLY