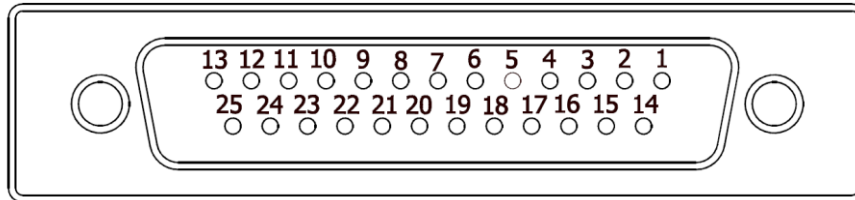


## 1 General digital I/O

### 1.1 Digital input ( NPN internal power )

PIN Definition:

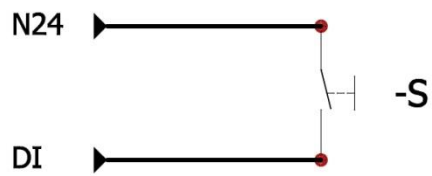


PIN	Specification	PIN	Specification
DB25-1	X0	DB25-16	0V
DB25-2	X1	DB25-17	
DB25-3	X2	DB25-18	
DB25-4	X3	DB25-19	
DB25-5	X4	DB25-20	
DB25-6	X5	DB25-21	
DB25-7	X6	DB25-22	
DB25-8	X7	DB25-23	
DB25-9	X8	DB25-24	
DB25-10	X9	DB25-25	
DB25-11	X10		
DB25-12	X11		

Electrical Specification:

Action driving	ON: >3.5mA , <8V OFF: <1.5mA, 18<x<35V
Input Impedance	≈4.3KΩ
Maximum Input Current	10mA/35V
Reaction Time	6.4ms DEFAULT, can be configured to 0.8~51.2ms
Insulation Type	Optoelectronic isolation for each channel

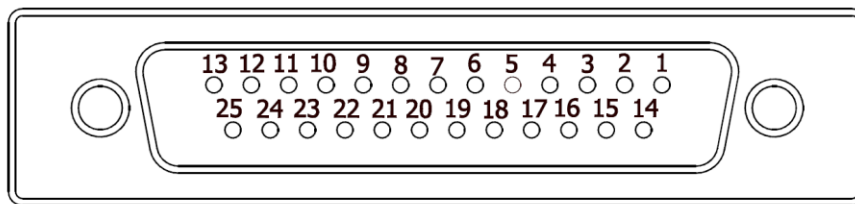
Example: **Digital input from a button.**



In above picture, N24 can be external GND.(Make sure all device are in ground connection)

### 1.2 Digital output ( NPN Transister output)

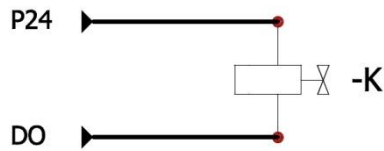
PIN Definition:



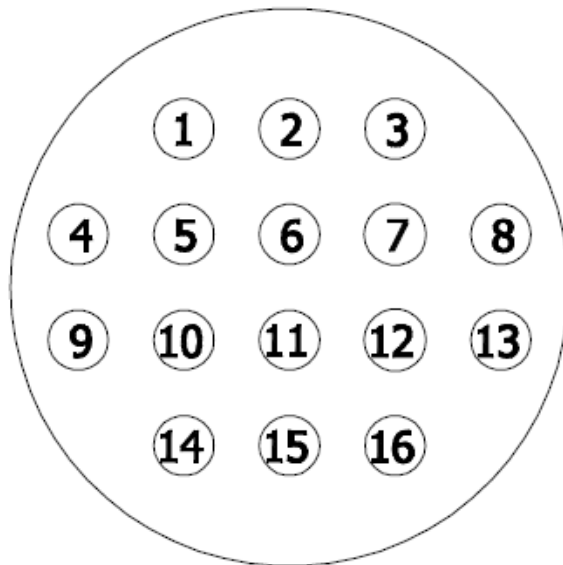
PIN	Specification	PIN	Specification
DB25-1	Y0	DB25-16	24V
DB25-2	Y1	DB25-17	
DB25-3	Y2	DB25-18	
DB25-4	Y3	DB25-19	
DB25-5	Y4	DB25-20	
DB25-6	Y5	DB25-21	
DB25-7	Y6	DB25-22	
DB25-8	Y7	DB25-23	
DB25-9	Y8	DB25-24	
DB25-10	Y9	DB25-25	
DB25-11	Y10		
DB25-12	Y11		

Maximum load	Resistive Load	0.5A/1 point, 2A/4 points COM
	Inductive Load	5W/DC24V
	Lamp load	12W/DC24V
Action driving		ON:0V OFF: Z
Minimum Load		2mA
Voltage Specification		30VDC
Drive Capability		MAX 1A 10 S
Reaction Time		Off→On 10us, On→Off 120us
Insulation Type		Optoelectronic isolation for each channel

Example: **Load controlled by a digital output.**



## 2. Robot terminal IO



Pin number	Color	Pin definition	Signal
1	Orange	DI1	Digital input 1
2	Orange black	DI2	Digital input 2
3	Yellow	DI3	Digital input 3

4	Yellow black	DI4	Digital input 4
5	Brown		
6	Brown black		
7	Red	GND	Ground (0V)
8	Red white	24V	Power supply (24V)
9	White	DO1	Digital output 1
10	White black	DO2	Digital output 2
11	Green	DO3	Digital output 3
12	Green black	DO4	Digital output 4
13	Black		
14	Black white		
15	Blue	GND	Ground (0V)
16	Blue black	24V	Power supply (24V)