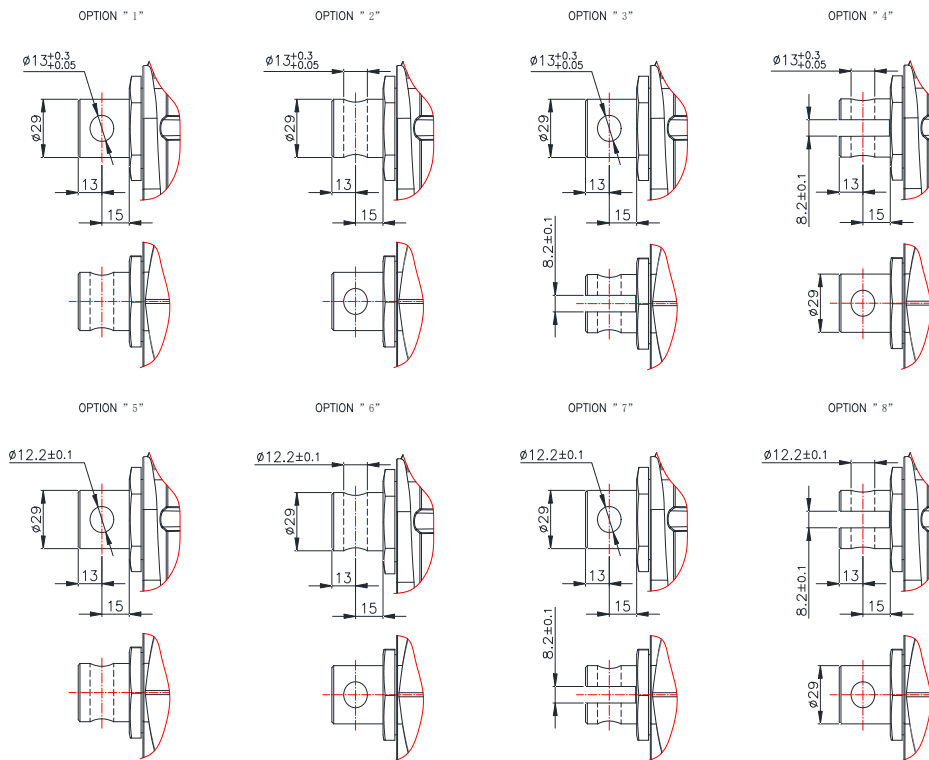
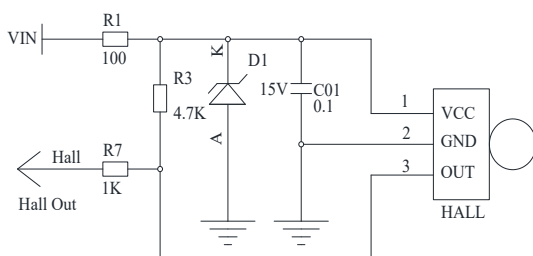
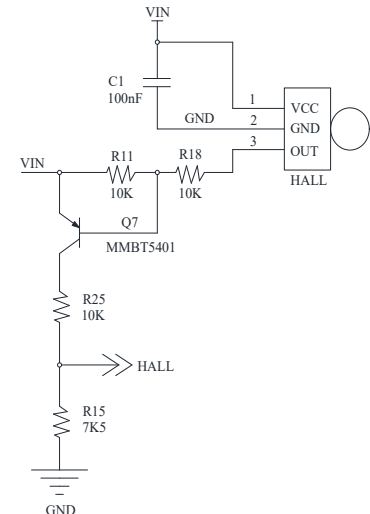


Table 4.0 Rear attachment



Displacement sensor (Hall)

	item	min	max	typical	test condition
plan 1	voltage	7V	30V	12V/24V	$I_o=0$
	output voltage	$V_{in} \cdot 0.425$			$I_o=0, V_{in} > 10V$
	Output current of signal		500mA		
	current	2mA	6mA	4mA	$I_o=0$
plan2	voltage	3.3V	15V		$I_o=0$
	output voltage	20mV	0.7V	0.1	$I_o=0, V_{in} > 5V$
	Output current of signal		20mA		$V_{in}=12V$
	current	2mA	6mA	4mA	$I_o=0$
PS: If $V_{in} > 15V$, need to change D1					



Schematic diagram of plan 2 (hall is installed in the motor)

Schematic diagram of plan 1 (hall is installed on the control board)

Note:

- Two kinds of hall installation plans are provided. The default is plan 1
- In plan 1, the phase difference between two hall is $55^\circ \sim 90^\circ$, plan 2: phase difference between two hall is $90^\circ \pm 10^\circ$
- Refer to table 5.0 for Hall pulse equivalent

Table 5.0 Hall sensor parameter comparison table

hall is installed on the control board				
Reduction ratio		lead range	Magnet pole number	Single Hall pulse equivalent
linear actuator	hall			
20.843:1	27:47	4	Pair of poles	0.435pulse/mm
			Four pairs of poles	1.741pulse/mm
31.131	20:54		Pair of poles	0.675pulse/mm
			Four pairs of poles	2.700pulse/mm
43.404	16:58		Pair of poles	0.906pulse/mm
			Four pairs of poles	3.625pulse/mm
20.843:1	27:47	8	Pair of poles	0.218pulse/mm
			Four pairs of poles	0.870pulse/mm
31.131	20:54		Pair of poles	0.338pulse/mm
			Four pairs of poles	1.350pulse/mm
43.404	16:58		Pair of poles	0.453pulse/mm
			Four pairs of poles	1.813pulse/mm
20.843:1	27:47	12	Pair of poles	0.145pulse/mm
			Four pairs of poles	0.580pulse/mm
31.131	20:54		Pair of poles	0.225pulse/mm
			Four pairs of poles	0.900pulse/mm
43.404	16:58		Pair of poles	0.302pulse/mm
			Four pairs of poles	1.209pulse/mm
hall is installed in the motor				
Reduction ratio		lead range	Magnet pole number	Pulse equivalent
20.843:1	4	4	Pair of poles	5.211pulse/mm
			Four pairs of poles	20.843pulse/mm
31.131:1			Pair of poles	7.783pulse/mm
			Four pairs of poles	31.131pulse/mm
43.404:1			Pair of poles	10.851pulse/mm
			Four pairs of poles	43.404pulse/mm
20.843:1	8	8	Pair of poles	2.605pulse/mm
			Four pairs of poles	10.422pulse/mm
31.131:1			Pair of poles	3.891pulse/mm
			Four pairs of poles	15.566pulse/mm
43.404:1			Pair of poles	5.426pulse/mm
			Four pairs of poles	21.702pulse/mm
20.843:1	12	12	Pair of poles	1.737pulse/mm
			Four pairs of poles	6.948pulse/mm
31.131:1			Pair of poles	2.594pulse/mm
			Four pairs of poles	10.377pulse/mm
43.404:1			Pair of poles	3.617pulse/mm
			Four pairs of poles	14.468pulse/mm