



HALL SENSOR THROTTLES /

MAIN FEATURES

The appearance of the product is simple, tough, ergonomic, light and comfortable; the main body uses PC+ABS, which has good comprehensive performance and high impact resistance; Teflon high temperature resistant wire, adapt to various harsh environments ; Environmental protection of materials, RoHS certification



268X /

268X-2

U-tube installation+ external wiring method



PC+ABS high-performance flame-retardant materials are used, safe, light and durable; Teflon high temperature resistant wires are used, which can adapt to various harsh environments; U-tube installation+ internal wiring method, beautiful, high torsional strength, safe wiring, and not easy to damage; Hall fully enclosed glue filling process, waterproof to IPX7; Adopts multifunctional structure of throttle and double buttons, compact structure, convenient operation, to provide a strong space foundation for more efficient product portfolio.

/Approval	RoHS	/Voltage	5V
/Size	L67mm W47mm H32mm	/Operating Temperature	-20° ~ 60°
/Weight	51g	/Wire Tension	≥130N
/Waterproof	IPX7	/Rotation Angle	0° ~ 50°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle



288X /



U-tube installation+ internal wiring method, beautiful, high torsional strength, safe wiring, and not easy to damage; Hall fully enclosed glue filling process, waterproof to IPX7; Design a redundant system, dual Hall, dual magnetic steel, dual output, to ensure nothing is lost.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L60mm W30mm H47.6mm	/Operating Temperature	-20°C ~ 60°C
/Weight	37g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0° ~ 40°
/Material	PC+ABS	/Spin Intensity	≥4N.m
/Wiring	3 Pins	/Durability	100000 mating cycle



270X /



Thumb control, stylish and exquisite; Adopting the side wiring method, it can obey the handlebar pipe, which is more beautiful ; Teflon high temperature resistant wire, adapt to various harsh environments; Environmental protection of materials, RoHS certification; Achieve the highest tough waterproof ability of IPX7 level (full immersion).

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L64mm W44mm H27mm	/Operating Temperature	-20°C ~ 60°C
/Weight	38g	/Wire Tension	≥60N
/Waterproof	IPX7	/Rotation Angle	0° ~ 50°
/Material	PC+ABS、TPR	/Spin Intensity	≥6N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



216X / 216X/2 /



Thumb control, stylish and exquisite, U-tube installation; The inner wiring method can be used to line the horizontal pipe, which is more beautiful; Teflon high temperature resistant wire, adapt to various harsh environments; Achieve IPX4 waterproof performance; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L64mm W24mm H43.5mm	/Operating Temperature	-20°C~60°C
/Weight	32g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0° ~ 50°
/Material	PC+ABS, TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



130X/2

130X /



Simple structure, reliable process and stable performance; High-strength plastic shell, lightweight and durable; Teflon high temperature resistant wire, adapt to various harsh environments; Environmental protection of materials, RoHS certification. 130X/2 Thumb control ergonomic operation, large button area, light and comfortable.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L60mm W30mm H47.6mm	/Operating Temperature	-20°C~60°C
/Weight	39g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0° ~ 40°
/Material	PC+ABS	/Spin Intensity	≥4N.m
/Wiring	3 Pins	/Durability	100000 mating cycle



230X/2 /



Thumb control, stylish and exquisite, U-tube installation; The inner wiring method can be used to line the horizontal pipe, which is more beautiful; Teflon high temperature resistant wire, adapt to various harsh environments; Achieve IPX4 waterproof performance; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L65mm W28.5mm H46mm	/Operating Temperature	-20°C~60°C
/Weight	40g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0° ~ 50°
/Material	PC+ABS, TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



188X /



Simple structure, reliable process and stable performance; High-strength plastic shell, lightweight and durable; Ergonomic operation, large button area, light and comfortable; Teflon high temperature resistant wire, adapt to various harsh environments; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L62mm W33mm H63mm	/Operating Temperature	-20°C~60°C
/Weight	46g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0° ~ 40°
/Material	PC+ABS	/Spin Intensity	≥4N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle



106DX /



Simple structure, reliable process and stable performance; High-strength plastic shell ; Clamping aluminum alloy locking ring for more stable locking; 3 levels of power display, power at a glance; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V/72V
/Size	L69mm W69mm H30mm	/Operating Temperature	-20°C~60°C
/Weight	46g	/Wire Tension	≥60N
/Waterproof	IPX4	/Rotation Angle	0°~53°
/Material	PC+ABS	/Spin Intensity	≥5N.m
/Wiring	6 Pins	/Durability	100,000 mating cycle



108X-L / 108X-R /



Simple structure, reliable process and stable performance; High-strength plastic shell, lightweight and durable; Ergonomic operation, large button area, light and comfortable; Teflon high temperature resistant wire, adapt to various harsh environments; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L44mm W46mm H59mm	/Operating Temperature	-20°C~60°C
/Weight	47g	/Wire Tension	≥60N
/Waterproof	IPX5	/Rotation Angle	0°~65°
/Material	ABS、PA66/GF20	/Spin Intensity	≥5N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



272X+HT478 /



the main body uses PC+ABS, which has good comprehensive performance and high impact resistance;the fixed ring is designed externally, and the locking does not affect the rotating structure; with the matching grip cover, the fixed ring can be perfectly hidden; the internal wiring design, the whole vehicle is simple and beautiful ; Hall fully enclosed glue filling process, waterproof to IP65 level.

/Approval	RoHS	/Voltage	5V
/Size	L67mm W40mm H46mm	/Operating Temperature	-20°~60°
/Weight	62g	/Wire Tension	≥60N
/Waterproof	IP65	/Rotation Angle	0°~50°
/Material	PC+ABS	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



298X+HT246 /



U-tube installation; Teflon high temperature resistant wire, adapt to various harsh environments; Double Hall side by side, automatic retrieval and standby switching, achieving higher safety factor; Using seals to seal the internal active area to achieve IP6 dust tight performance; Electrical components are fully sealed and filled with glue, reaching the highest IPX7 level of strong waterproof capability (full water immersion).

/Approval	RoHS	/Voltage	5V
/Size	L140.5mm W50mm H58mm	/Operating Temperature	-20°~60°
/Weight	95g	/Wire Tension	≥60N
/Waterproof	IP67	/Rotation Angle	0°~70°
/Material	PC+ABS	/Spin Intensity	≥9N.m
/Wiring	6 Pins	/Durability	100,000 mating cycle



112DXS+HT375 /



Electric lock switch, safety control; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L141mm W84mm H62mm	/Operating Temperature	-20°C~60°C
/Weight	220g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle



118DX+HT388 /



Simple structure, reliable process and stable performance ; Clamping aluminum alloy locking ring for more stable locking ; 3 levels of power display, power at a glance ; Ergonomic operation, light and comfortable; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V
/Size	L63.8mm W46mm H65mm	/Operating Temperature	-20°C~60°C
/Weight	62g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	4 Pins	/Durability	100,000 mating cycle



72DX+HT390 /



Reliable process and stable performance; High-strength plastic housing; Clamping aluminum alloy locking ring for more stable locking; Using electroplating process area decoration, showing high-grade and more beautiful; Five-level power display, power at a glance; Environmentally friendly materials, RoHS certification

/Approval	RoHS	/Voltage	36V/48V/60V
/Size	L178mm W87mm H77mm	/Operating Temperature	-20°C~60°C
/Weight	260g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	7 Pins	/Durability	100,000 mating cycle



82X+HT386 /



Reliable process and stable performance; High-strength plastic housing; Clamping aluminum alloy locking ring for more stable locking; Using electroplating process area decoration, showing high-grade and more beautiful; Ergonomic operation, light and comfortable; Environmentally friendly materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L176mm W65mm H55mm	/Operating Temperature	-20°C~60°C
/Weight	218g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	7 Pins	/Durability	100,000 mating cycle



122DX+HT418 /



Electric lock switch, safety control; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; 4 levels of power display, power at a glance, under voltage reminder; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L150mm W66mm H85mm	/Operating Temperature	-20°C~60°C
/Weight	130g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	6 Pins	/Durability	100,000 mating cycle



122DX/2+HT416+DG521 /



Electric lock switch, safety control; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; 4 levels of power display, power at a glance, under voltage reminder; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L150mm W66mm H85mm	/Operating Temperature	-20°C~60°C
/Weight	110g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	6 Pins	/Durability	100,000 mating cycle



122DX/4+HT450 /



Electric lock switch, safety control; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; Simulation of LCD display effect, looks upscale; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L149mm W66mm H85mm	/Operating Temperature	-20°C~60°C
/Weight	209g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	9 Pins	/Durability	100,000 mating cycle



198X+HT416+DG521 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Clamping aluminum alloy locking ring for more stable locking; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L130mm W62.5mm H50mm	/Operating Temperature	-20°C~60°C
/Weight	130g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle



112DX+HT386 /



Reliable process and stable performance; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; Four levels display at a glance; Achieve IPX4 waterproof performance; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	36V/48V/60V
/Size	L150mm W31mm H67mm	/Operating Temperature	-20°C~60°C
/Weight	145g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	6 Pins	/Durability	100,000 mating cycle



112X/2+HT386 /



Reliable process and stable performance; High-strength plastic shell, lightweight and durable; Clamping aluminum alloy locking ring for more stable locking; Using electroplating technology to decorate the area, showing high-grade and more beautiful; Achieve IPX4 waterproof performance; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L150mm W31mm H67mm	/Operating Temperature	-20°C~60°C
/Weight	130g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle



218X+HT468+DG556 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L126mm W50mm H51mm	/Operating Temperature	-20°C~60°C
/Weight	105g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 65°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle



218X/2 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L135mm W51mm H52mm	/Operating Temperature	-20°C~60°C
/Weight	102g	/Wire Tension	≥130N
/Waterproof	IPX7	/Rotation Angle	0° ~ 65°
/Material	PC+ABS、PVC	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle

158X+HT406 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Clamping aluminum alloy locking ring for more stable locking; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L136.5mm W36mm H43mm	/Operating Temperature	-20°C~60°C
/Weight	100g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle

160X+HT406 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Clamping aluminum alloy locking ring for more stable locking; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L138.5mm W41.5mm H55mm	/Operating Temperature	-20°C~60°C
/Weight	105g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle

162DX+HT406 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; 3 levels of power display, power at a glance, under voltage reminder; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L139mm W47mm H56mm	/Operating Temperature	-20°C~60°C
/Weight	110g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	7 Pins	/Durability	100,000 mating cycle

158X/2+HT430 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L136.5mm W50mm H50mm	/Operating Temperature	-20°C~60°C
/Weight	105g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle

160X/2+HT428 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L137.5mm W62mm H50mm	/Operating Temperature	-20°C~60°C
/Weight	110g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle

FT160X+HT420 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L139mm W41.5mm H55mm	/Operating Temperature	-20°C~60°C
/Weight	105g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	5 Pins	/Durability	100,000 mating cycle

FT158X+HT420 /



Reliable process and stable performance; High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	Working voltage 5v Output voltage 0.8-4.2V
/Size	L138.5mm W43.1mm H37mm	/Operating Temperature	-20°C~60°C
/Weight	100g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle

FT162DX+HT420 /



High-strength plastic housing; Open side cover for easy maintenance; Teflon high temperature resistant wire, adapt to various harsh environments; 3 levels of power display, power at a glance, under voltage reminder; EMC electromagnetic compatibility design, reliable operation in electromagnetic environment; Environmental protection of materials, RoHS certification.

/Approval	RoHS	/Voltage	24V/36V/48V/60V
/Size	L136.5mm W50mm H50mm	/Operating Temperature	-20°C~60°C
/Weight	105g	/Wire Tension	≥130N
/Waterproof	IPX4	/Rotation Angle	0° ~ 70°
/Material	PC+ABS、TPR	/Spin Intensity	≥9N.m
/Wiring	3 Pins	/Durability	100,000 mating cycle