

**delivery**

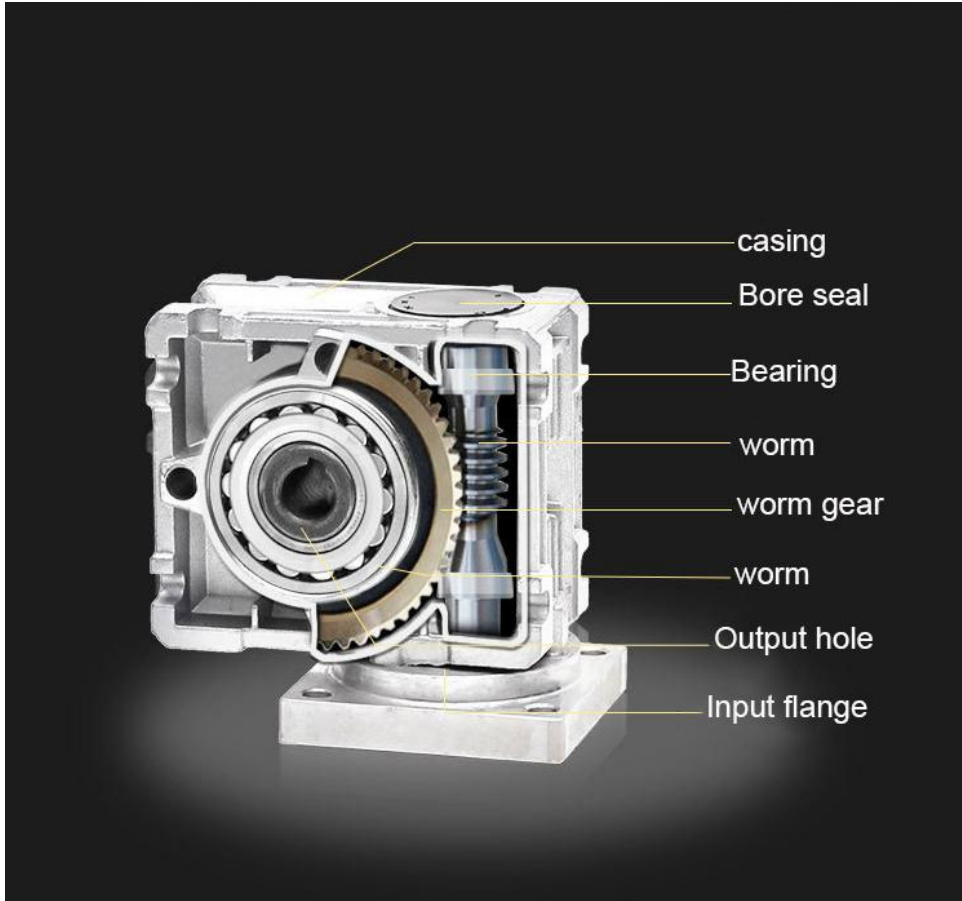
- 1 X MD860 Driver
- 1 X Stepping motor with worm gear

**Product Information:**

Type: worm gear stepper motor

**86 Worm Gear Stepper Motor Feature:**

- High torque
- Low noise
- Efficient and precise
- Safe and durable



**für 57 Schrittmotor**

RV025 RV030

Ausgang-Loch 11MM

Ausgang-Loch 14MM

**für 86 Schrittmotor**

RV040 RV050

Ausgang-Loch 18MM

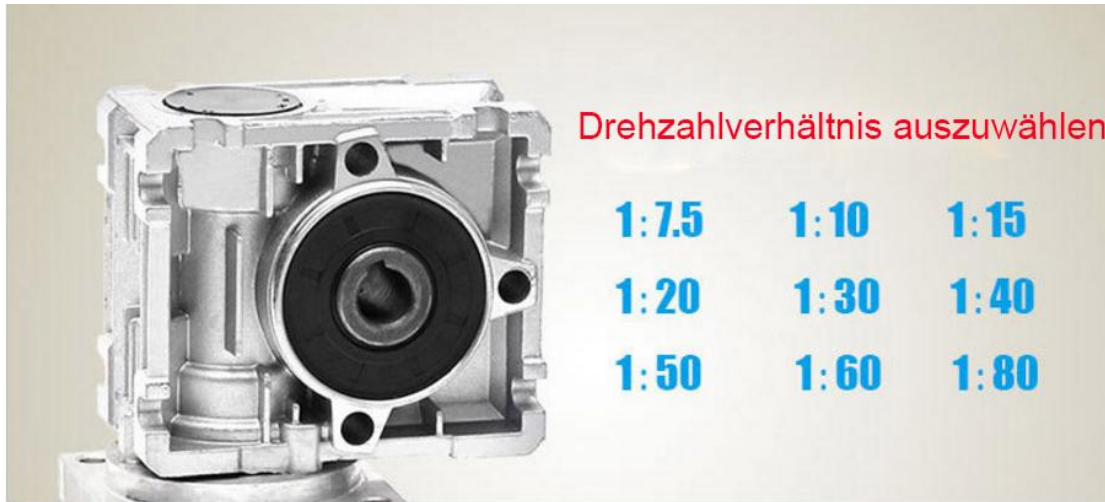
Ausgang-Loch 25MM



**How to choose the right turbine gear?**

- 1: Load Conditions
- 2: Speed range and ratio
- 3: Installation space
- 4: Working conditions and operating environment (temperature, humidity, corrosion, etc.)

more ratio



**NMRV Worm Gear Characteristic:**

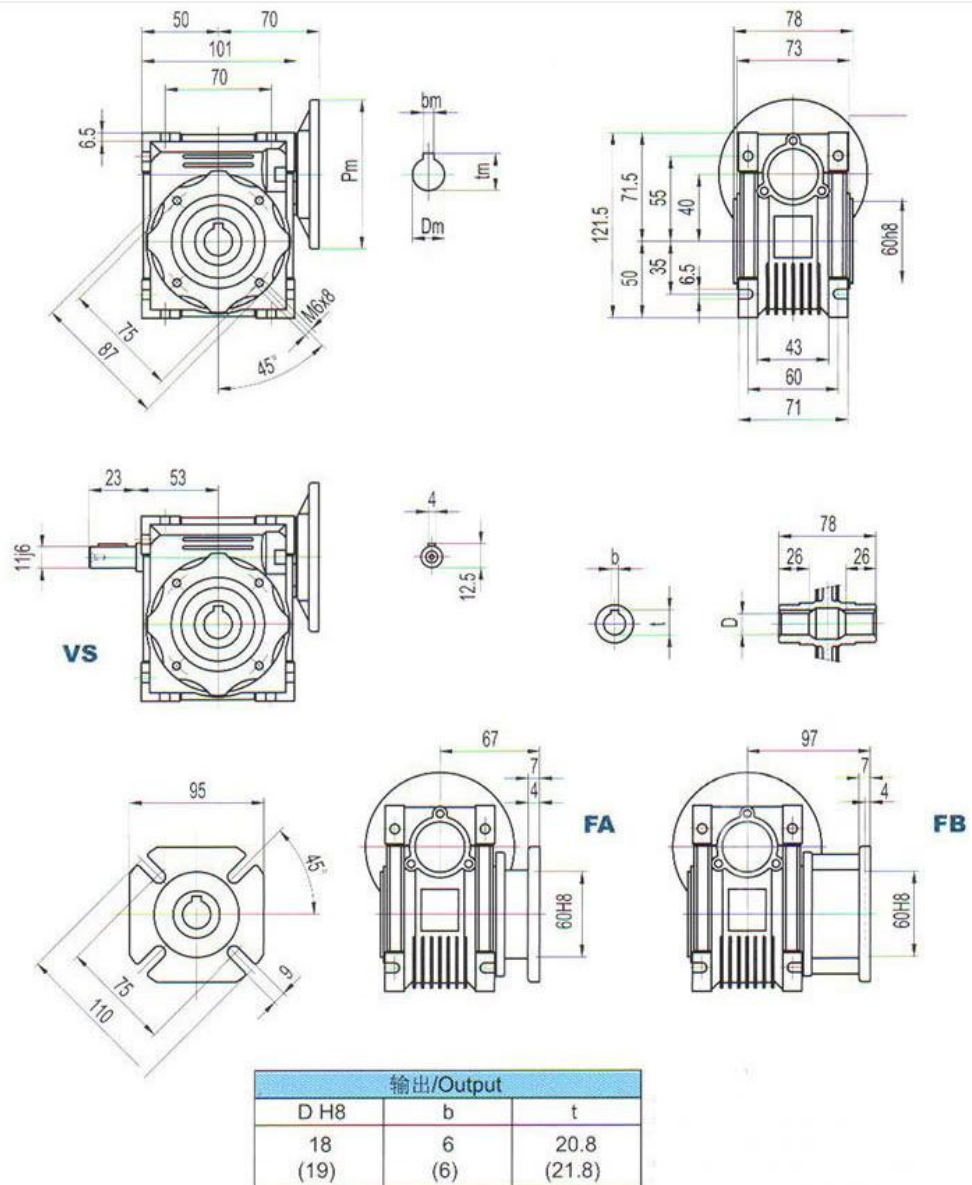
Products has aluminum alloy housing, and beautiful shape, compact design, small size, light weight and not easy to rust  
 The internal unique design, good heat dissipation, safety and reliability, high efficiency  
 The continuous improvement process has high load bearing capacity, smooth transmission, small vibration, low noise)

**86 Schneckengetriebe-Schrittmotor verschiedene Modelle**

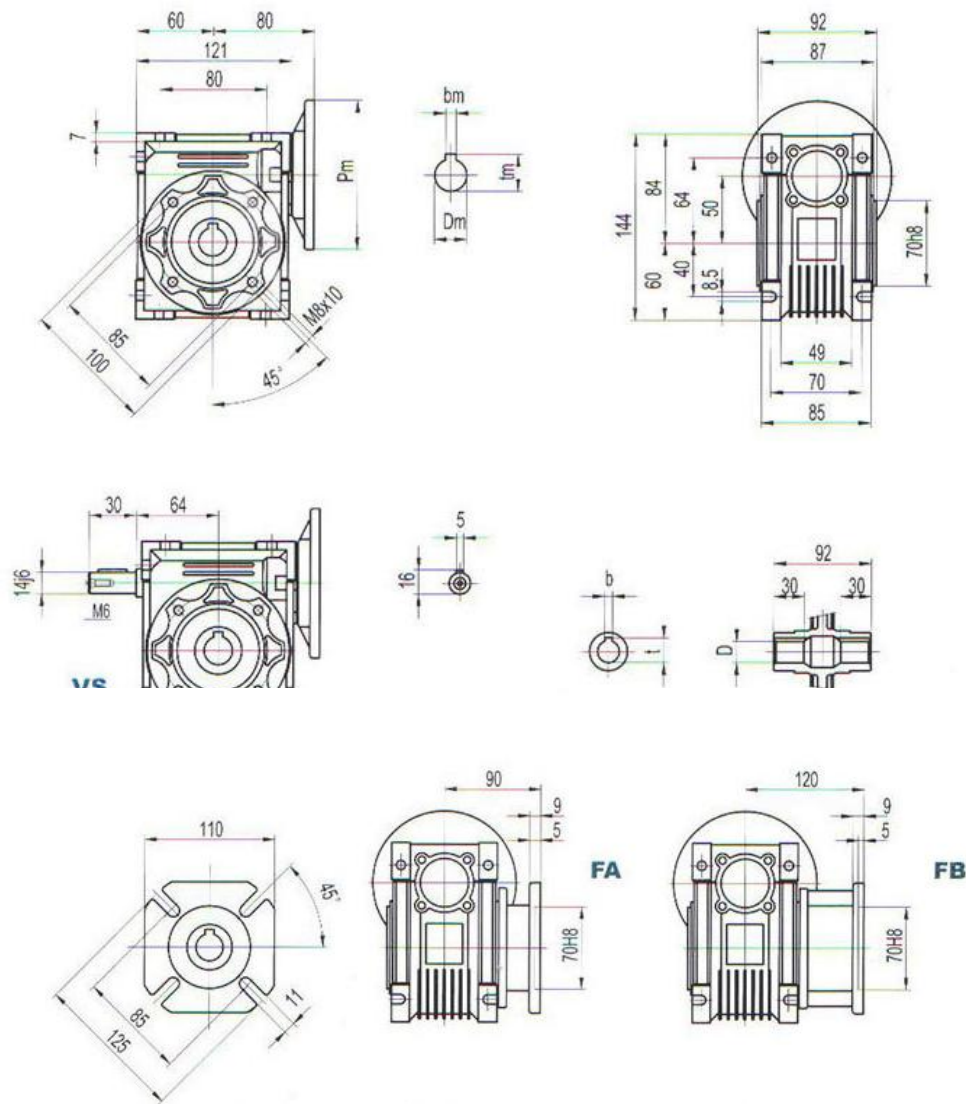


Motor Length  
Schrittmotor  
länge: F-86BYG1835 67mm F-86BYG1845 80mm F-86BYG1865 98mm F-86BYG1885 118mm F-86BYG1890 125mm F-86BYG18120 160mm

Modell	Halte drehmoment		Nenn strom A/PHASE	Phasen widerstand Ω/PHASE	Phase Induktivität mH/PHASE	Leistung (PINS)	Trägheitsmoment		Gewicht kg (lb)	Dicke mm (inch)
	N · m	oz-in					g · cm <sup>2</sup>	oz-in <sup>2</sup>		
F-86BYG1835	3.5	91	2.4	1.2	2.4	4	1300	7.1	1.86 (4.10)	67.5 (2.66)
F-86BYG1845	4.5	135	4.0	1.0	2.4		1800	9.8	2.83	80.23
F-86BYG1865	6.5	184	4.2	0.8	2.4		2500	13.7	3.00 (6.61)	96 (3.78)
F-86BYG1885	8.5	326	5.0	0.76	2.5		3700	20.2	3.95 (8.71)	119.5 (4.70)
F-86BYG1890	9.0	354	6.0	0.81	3		3900	21.3	4.18 (9.22)	126 (4.96)
F-86BYG18120	12.0	439	6.0	0.95	3.7		5600	30.6	5.50 (12.12)	156 (6.14)



Size of RV050



输出/Output		
D H8	b	t
25 (24)	8 (8)	28.3 (27.3)

**Product Size:**

Drive Size: 98 \* 150mm

Stepper motor size: 86 \* 98

**Product specifications of DM860**

High performance, high torque, almost zero noise

Speed is twice than the analog amount chip (analog quantity chip)

Input voltage / input voltage: 24 - 80 VDC

Output Current / Output Current: 2.8A - 7.2A

Pulse Response Frequency: 200KHZ

Optimization of engine noise function

The DM860 is one of the two-phase hybrid stepping motor Drivern

**Electrical Properties:**

Input power: 24-80V DC power supply

Capacity: not less than 200 VA

Typical values: DC36V

Output current: 2.4A to 7.2A, 8-channel adjustable

Resolution: 0.5A

Drive: Dual constant current -PWM output drive

Insulation resistance: Normal voltage > 500MΩ

Weight: 485g

**Environmental conditions :**

Cooling: natural cooling

Working temperature -10 ~ 45 °C;

Storage temperature -40 °C ~ 70 °C

Humidity: <80% RH, Humidity / Humidity: no condensation, no water droplets / No condensation, no water droplets

Vibration: maximum not above 5.7 m / s<sup>2</sup>

**Drive input signal Interface function / (port function):****Signal interface**

PUL +, PUL-

Pulse signal

PUL+ is the positive end of pulses input pin

PUL- is the negative end of pulse input pin

DIR+, DIR-

DIR signal:

DIR+ is the positive end of direction input pin

DIR- is the negative end of direction input pin

ENA + and ENA- (ENABLE signal)

ENA + is the positive end of the ENABLE signal

ENA - is the negative end of the ENABLE signal

note: when VCC=24V, R=2K

**Engine interface:**

A + and A- connect positive and negative terminals from the A-phase windings of the stepping motor

B + and B- connect positive and negative terminals from the B-phase windings of the stepping motor

When A, B two-phase windings are changed, the motor direction is reversed.

**Power Supply Interface:**

Use DC power supply. The operating range of recommendations is 20V-50VDC, mains power is more than 100 W. According to the actual use, input is not more than DC40V as the right choice.

**Indicator:**

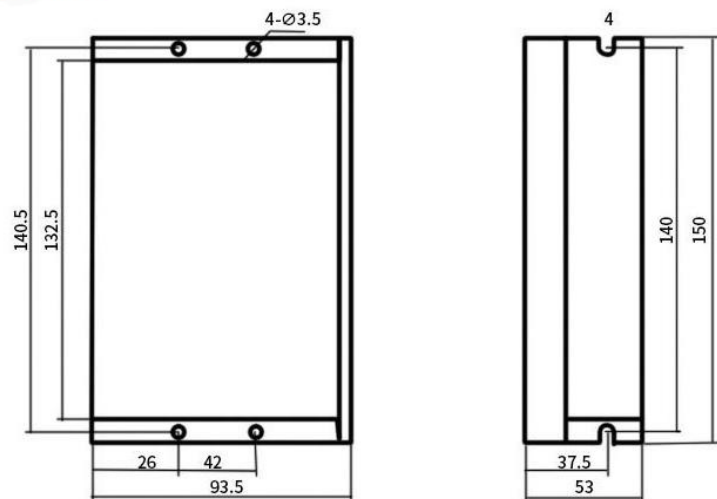
This driver has red and green two lights. The green light is used as the operating indicator. After switching on, the green light is always on.

The red light is the failure indicator. Which is switched on during overvoltage and overcurrent errors. If the error is cleared, failure indicator is off.

If driver has the problem, you need to re-power or re-enable / ENABLE to clear the problem.

Stromausgang Einstellung-Tabelle				Subdivision Einstelltabelle					
Ausgang Spitzenstrom	SW1	SW2	SW3	Subdivision- Vielfaches	Schritte/Kreis (1.8 Winkel/Voll Driver)	SW5	SW6	SW7	SW8
2. 40A	on	on	on	2	400	on	on	on	on
3. 08A	off	on	on	4	800	off	on	on	on
3. 771A	on	off	on	8	1600	on	off	on	on
4. 45A	off	off	on	16	3200	off	off	on	on
5. 14A	on	on	off	32	6400	on	on	off	on
5. 83A	off	on	off	64	12800	off	on	off	on
6. 52A	on	off	off	128	25600	on	off	off	on
7. 20A	off	off	off	256	51200	off	off	off	on
				5	1000	on	on	on	off
				10	2000	off	on	on	off
				20	4000	on	off	on	off
				25	5000	off	off	on	off
				40	8000	on	on	off	off
				50	10000	off	on	off	off
				100	20000	on	off	off	off
				200	40000	off	off	off	off

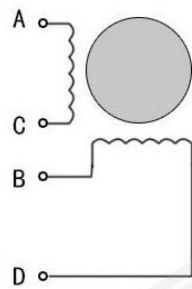
## Einbaumaße



Wir empfehlen Seitlich-Montage, Gute Wärmeableitung

### 4 Leitung (bipolar)

### Einschalten Sequenz



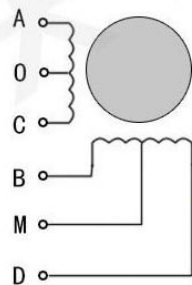
im  
Uhrzeigersinn

STEP	A	B	C	D
1	+	+	-	-
2	-	+	+	-
3	-	-	+	+
4	+	-	-	+

gegen Uhrzeigersinn

### 6 Leitung (unipolar)

### Einschalten Sequenz



im  
Uhrzeigersinn

STEP	A	B	C	D	O	M
1	-	-			+	+
2		-	-		+	+
3			-	-	+	+
4	-			-	+	+

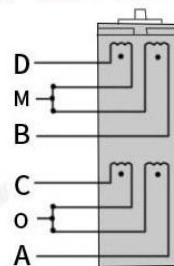
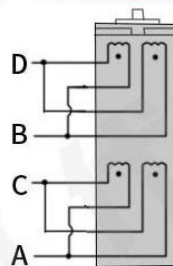
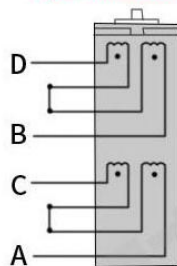
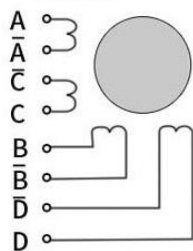
gegen Uhrzeigersinn

### 8 Leitung

Modus 1:  
bipolar Reihenschaltung

Modus 2:  
bipolar Parallelschaltung

Modus 3: unipolar



### bipolar-Voll Drive

### unipolar Full Drive

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STEP	A	B	C	D
1	+	+	-	-
2	-	+	+	-
3	-	-	+	+
4	+	-	-	+

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STEP	A	B	C	D	O	M
1	-	-			+	+
2		-	-		+	+
3			-	-	+	+
4	-			-	+	+

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# Drehmomentkurve

