

YOUNGSHIN PRECISION

CHASSIS / TRANSMISSION / POWERTRAIN / BRAKE





"We have a dream to become a Global Leader thru our Passion and Challenge"

As one of the global leading manufacturers & exporters for automotive OE products, we YOUNGSHIN will continuously devote to fulfill the highest customer satisfaction thru "customer value creation". Also, we will do our utmost to develop & supply the world best products for our customers based on our own expert knowledge & advanced technology which we have created. In order to strengthen our core competency and to prepare our prosperous future, we YOUNGSHIN will be aggressively expanding our investment to the R&D and the quality management area. Also, we will be focusing on recruiting a qualified global human resources and training them to become a specialist in their job works as one team.

CEO Sang-Woo Lee

HISTORY

The Take-Off Stage 2000s

2020. 01 - Awarded with Supplier Quality Excellence from GM (5 times from 2009)

2019. 10 - Established regional office For North America, U.S.A

2015. 07 - Contracted with MITEC Automotive AG for Technical Assistance Agreement (Pendulum type Engine oil pump)

2015.06 - Established new R&D Center Building

2009. 12 - Established overseas factory "Youngshin Automotive India PVT., Ltd." in Chennai, India

2007.08 - Established overseas factory "Suzhou Youngshin Precision Co., Ltd." in Suzhou, China

2005. 10 - Established overseas factory "Beijing Youngshin Faco Precision Co., Ltd." in Beijing, China

2005.05 - Established "Hwasan" factory in Gyeongju, Korea

Period Of Growth 1990s

1995. 08 - Selected as "Best Quality Management Top 100 Enterprises" by Korean Government in 1994 & 1995

1991.01 - Foundation of R&D Center

Establishment 1980s

1987. 06 - Contracted with Hitachi Unisia Automotive., Ltd. for Technical Assistance Agreement

1987. 02 - Foundation of Youngshin Precision Co., Ltd.

PRODUCT OVERVIEW









Variable Displacement P/S Pump











Power Steering Oil Pump











C-EPS / MDPS Parts









Mechanical Vacuum Pump









CVT Oil Pump









Engine Oil Pump





Electric Vacuum Pump





Electric Oil Pump







Electro Hydraulic Actuator





Electric Water Pump



ICE



Steering system



Mechanical



Brake system



EV, HEV, FCEV HC3 Power Train





Electrical



HVAC

ELECTRONICS

IMAGE











HIGH VOLTAGE

MOTOR

CONTROLLER

SPECIFICATION

| MOTOR | SPEC | | |
|----------|-------------------------|-------------|--|
| CAPACITY | HIGH VOLTAGE | LOW VOLTAGE | |
| WATT | 1.25KW 100W~400 | | |
| VOLTAGE | 250V 9~16V | | |
| SLOT | AS CUSTOMER REQUIREMENT | | |
| POLE | | | |
| TYPE | BLDC/PMSM | BLDC/PMSM | |

| CONTROLLER | SPEC | | |
|---------------|----------------|----------------|--|
| WATT | 1.25KW | 100~400W | |
| VOLTAGE | 250V | 9~16V | |
| TEMPORATURE | -30~125℃ | -30~125℃ | |
| MOTOR CONTROL | BLDC/PMSM | BLDC/PMSM | |
| COMMUNICATION | LIN/CAN | LIN/CAN | |
| TYPE | Sensor or less | Sensor or less | |

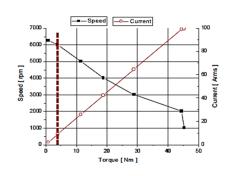
CERTIFICATION



ISO26262 - ASIL A



ASPICE CL2(IN PROGRESS)

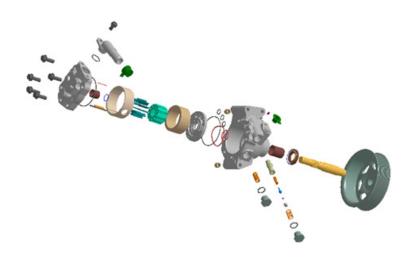


MOTOR TNI GRAPH

VARIABLE DISPLACEMENT PUMP

IMAGE





SPECIFICATION

| Temp. | Displacement | Controlled Flow | Pulley Diameter | Relief Pressure |
|------------------------|--------------|-------------------|-----------------|-----------------|
| -35~120°C (Peak 125°C) | 15 CC/rev | 3.3 GPM(12.5 lpm) | 138.1 mm | 125 +/- 4 Bar |

TEST REPORT

ALL VALIDATION TEST: PASSED

| No | Test Name | Condition | Result |
|----|-----------------------|---------------------------------------|--------|
| 1 | Basic performance | N-Q, P-Q, Relief, Torque | Pass |
| 2 | NVH Test | Noise, Pulsation, Pressure - Ripple | Pass |
| 3 | Vibration Test | 23 ℃ x200Hz x 440G x10^6 cycle | Pass |
| 4 | Salt , Water Spray | Salt, Mud, Water High pressure spray | Pass |
| 5 | Durability Test | 80~135℃ 1~130bar x 369,000cycle | Pass |
| 6 | Relief Abuse Test | 80 °C relief 3s x 5000rpm x2,500ycyle | Pass |
| 7 | Cold start Durability | -15~-40 ℃ x2hrs x cold chamber | Pass |





NVH NOISE LEVEL TEST

RESEARCH AND DEVELOPMENT PRODUCTS

Electric compressor (Scroll Type)









Description:

Electric compressor applied in air conditioning systems for pleasant cabin same as internal combustion vehicles. it is independently driven by an electric motor with scroll type but also enabling the cabin to be cooled even during engine off mode.

Main features

- 01. Stability of noise and vibrations
- 02. High durability
- 03. Operating independently without the engine

Application:

Electric and Hybrid vehicles



Electro Hydraulic Power Steering (E-HPS)









Description:

E-HPS is a key item among the power steering system parts for EV, HEV and operates independently by an electric motor that is operating only during steering mode.

Main features

- 01. Stability of noise and vibrations
- 02. High durability
- 03. Efficient energy consumption
- 04. Operating independently without the engine

Application:

EV, HEV, FCEV (Commercial Vehicles)

Strain Wave Gearing



Description:

SWG is one of the type of reducer and a technology that applies the elastic dynamics of metal and has not only sophisticated controls but also a light weight and simple structure.

Main features

- 01. No Backlash
- 02. High gear ratios
- 03. High torque capability

Application:

Robotics, Smart Factory, aerospace, Automotive parts etc.

COMPANY LOCATION



CUSTOMERS





















Overseas































