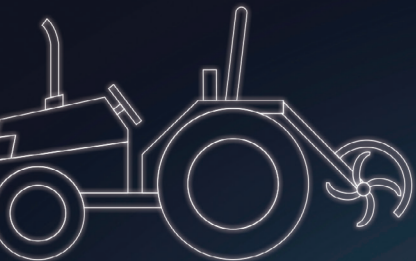
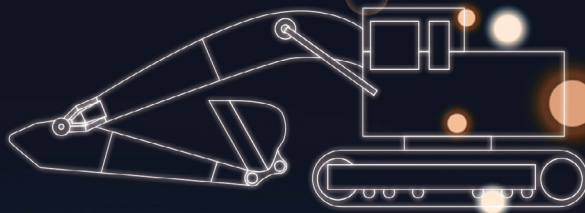
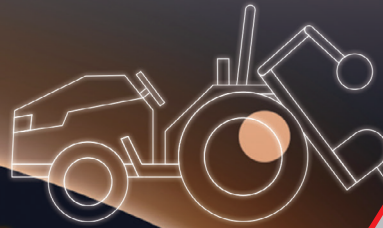
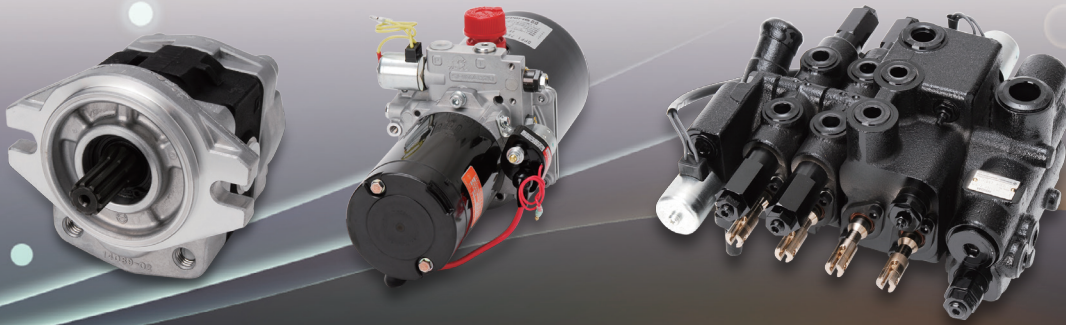


Shimadzu Hydraulic Equipment





Contributing to Society through Science and Technology

Environmentally Friendly Hydraulic Technology

Our factory is located near Lake Biwa, the largest fresh water lake in Japan.

It provides the daily life water for 15 million people living near by.

The Shimadzu production system is strictly controlled not to pollute the beautiful water source.



Shimadzu Corporate Profile

Since Shimadzu's Foundation, our business activities have always been conducted with the aim of "Contributing to Society through Science and Technology".

1875

Genzo Shimadzu started his business in Kyoto

1961

Hydraulic equipment section was established in Aircraft division

2002

Koichi Tanaka received the Nobel Prize in Chemistry for developing a novel method for mass spectrometric analyses of biological macromolecules

2011

50th anniversary of hydraulic business



Genzo Shimadzu Sr. (the founder)

Born in 1839 in Kyoto, the second son of Seibei Shimadzu, a maker of Buddhist altars. In 1875, inspired with the idea of raising the profile of science in Japan, he left the family business and started to manufacture physical and chemical instruments for educational purposes in Kiyamachi-Nijo.



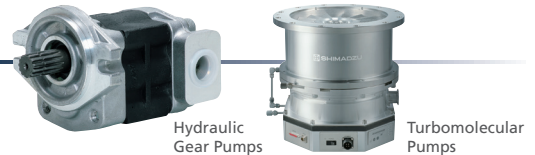
Genzo Shimadzu Jr.

Born in 1869 in Kyoto, the first son of Genzo Sr. His childhood name was Umejiro but with the sudden death of his father in 1894, he became head of the family and assumed the name of his father. During his lifetime he was credited with 178 inventions and was chosen as one of the ten greatest inventors of Japan.

Business Field

Industrial Machinery and Equipment

Our development of advanced-level manufacturing and testing equipment is meeting the needs of next-generation production in cutting-edge industrial fields.



Analytical Instruments

Our cutting-edge analysis technologies are contributing to research, technology development, and quality control in a wide variety of fields.



Testing and Measuring Instruments

Our measuring, testing, and inspection technologies are helping to ensure greater urban safety and day-to-day peace of mind.



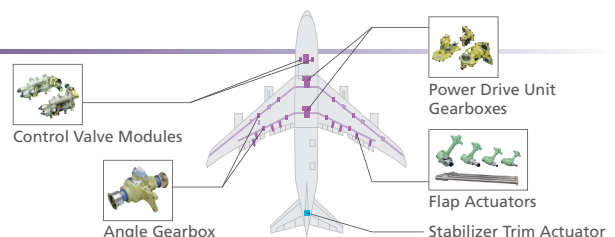
Medical Systems

Our advanced diagnostic imaging system is contributing to the early detection and early treatment of disease, opening up a new world of possibilities for medical facilities.



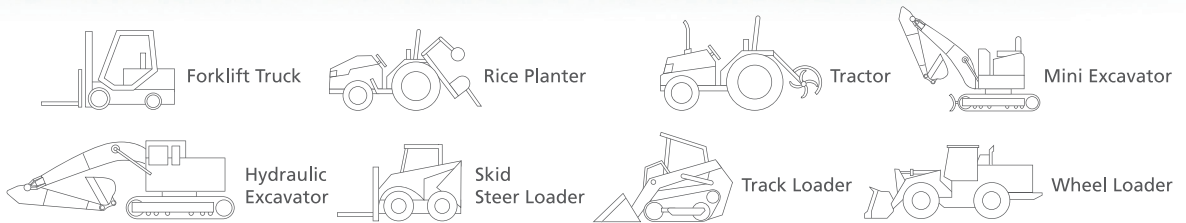
Aircraft Equipment

Our wide range of aircraft equipment is increasing both the safety and comfort of passengers to reduce the effects of stress during flight.



Hydraulic Gear Pumps

For the past 50 years, Shimadzu gear pumps have achieved total customer satisfaction through high efficiency, stable performance, and superior durability. Our gear pumps are used in wide range of applications, including material handling equipment, specially-equipped vehicles, construction, and agricultural machinery.



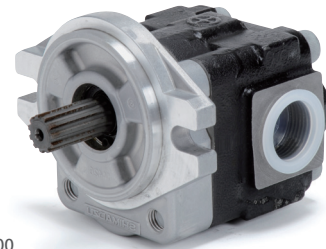
Single Pumps

High Pressure Cast Iron Body Gear Pumps

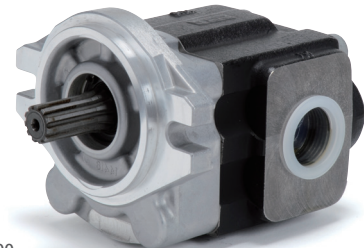
SGP300, 400, 600 Series

Rated pressure	250 bar / 3,625 psi
Displacement	8.0 ~ 60.0 cm ³ / 0.49 ~ 3.66 in ³
Max speed	3,000 ~ 3,500 min ⁻¹

- High volumetric efficiency at high temperature
- Compact design and high durability



SGP300 / SMG300



SGP400 / SMG400

High Pressure Cast Iron Body Low-noise Gear Pumps

SMG300, 400, 600 Series

Rated pressure	250 bar / 3,625 psi
Displacement	8.3 ~ 62.1 cm ³ / 0.51 ~ 3.79 in ³
Max speed	3,000 ~ 3,500 min ⁻¹

- Low noise
- High volumetric efficiency at high temperature
- Compact design and high durability



SGP600 / SMG600

Hydraulic Gear Pumps

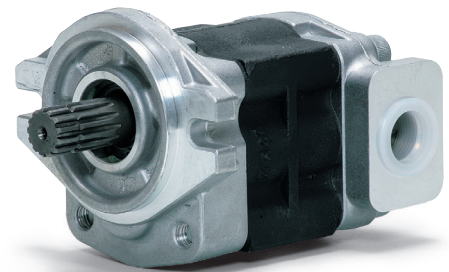
Single Pumps

Cast Iron Body Gear Pumps

SGP1 series

Rated pressure	206 bar / 2,987 psi
Displacement	16.2 ~ 36.6 cm ³ / 0.99 ~ 2.23 in ³
Max speed	4,000 min ⁻¹

- High volumetric efficiency at high temperature with specialized cast iron body

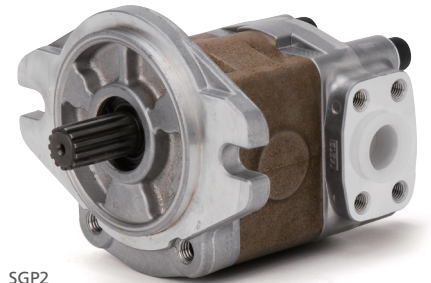


SGP1

SGP2 series

Rated pressure	245 bar / 3,553 psi
Displacement	20.3 ~ 52.8 cm ³ / 1.24 ~ 3.22 in ³
Max speed	3,000 min ⁻¹

- Maintain high performance at high pressure with ceramic coated cast iron body



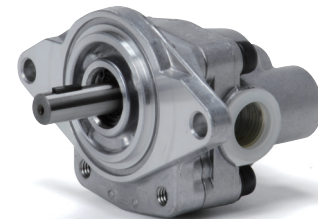
SGP2

Aluminum Body Gear Pumps

YP10 series

Rated pressure	206 bar / 2,987 psi
Displacement	0.8 ~ 7.0 cm ³ / 0.05 ~ 0.43 in ³
Max speed	4,000 min ⁻¹

- Lightweight achieved by aluminum body
- Compact design due to 2 piece body structure

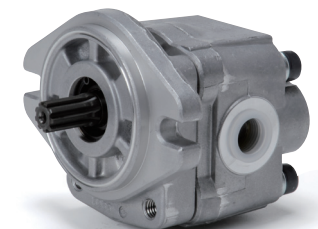


YP10

YP15 series

Rated pressure	206 bar / 2,987 psi
Displacement	5.1 ~ 15.9 cm ³ / 0.31 ~ 0.97 in ³
Max speed	4,000 min ⁻¹

- Lightweight achieved by aluminum body
- Compact design due to 2 piece body structure



YP15

Multi-Section Pumps

SD1, SD Series

- SD1 : Tandem pump (combination of SGP1 + SGP1)
- SD : Tandem pump (combination of SGP2 + SGP2)

ST Series

- Triple pump (combination of SGP2 + SGP2 + SGP2)

DDG440 Series

Rated pressure	250 bar / 3,625 psi
Displacement	No.1 Pump : 16.0 ~ 32.8 cm ³ / 0.98 ~ 2.00 in ³ No.2 Pump : 8.2 ~ 18.1 cm ³ / 0.50 ~ 1.10 in ³
Max speed	3,000 min ⁻¹

- Compact tandem pump featuring mono-body block design to provide both 1st and 2nd pump section
- Common inlet port for 1st section and 2nd section

DNP21S Series

Rated pressure	No.1 Pump : 206 bar / 2,987 psi No.2 Pump : 39 bar / 566 psi
Displacement	No.1 Pump : 4.5 ~ 14.1 cm ³ / 0.27 ~ 0.86 in ³ No.2 Pump : 2.7 ~ 4.5 cm ³ / 0.16 ~ 0.27 in ³
Max speed	3,000 min ⁻¹

- Special slim body designed for use as charge pump
- Inlet piping free due to direct inlet port located in the front side

MRD2 Series

Rated pressure	No.1 Pump : 172 bar / 2,538 psi No.2 Pump : 172 bar / 2,538 psi
Displacement	No.1 Pump : 12.1 ~ 15.1 cm ³ / 0.74 ~ 0.92 in ³ No.2 Pump : 7.54 ~ 9.56 cm ³ / 0.46 ~ 0.58 in ³
Max speed	3,000 min ⁻¹

- Simple structure due to reasonable design
- Lightweight achieved by aluminum body



SD1



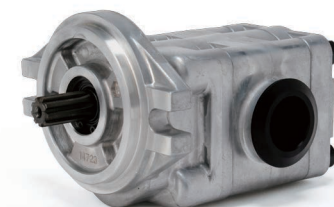
ST



DDG440



DNP21S



MRD2

Multi Control Valves

Shimadzu has achieved great customer satisfaction with high quality hydraulic control valves for industrial vehicles. Shimadzu hydraulic control valves are specially designed for forklift trucks application, and have excellent performance and durability.



Manual Stack Valves (MSV Series)

MSV04 Series

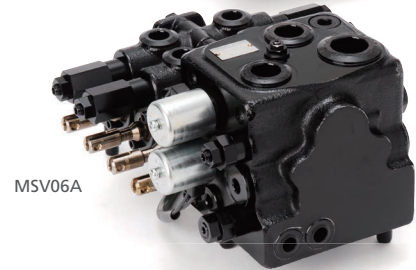
Rated flow	85 L/min / 22.5 GPM
Rated pressure	206 bar / 2,987 psi
Truck capacity	1.0 - 3.5 ton / 2,200 ~ 7,700 lbs



MSV04A

MSV06 Series

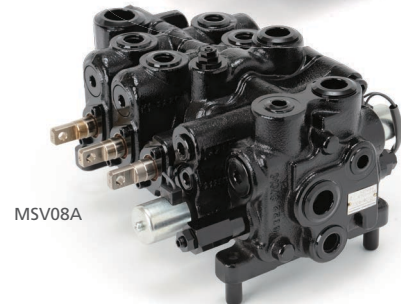
Rated flow	120 L/min / 31.7 GPM
Rated pressure	206 bar / 2,987 psi
Truck capacity	3.5 - 5.5 ton / 7,700 ~ 12,000 lbs



MSV06A

MSV08 Series

Rated flow	177 L/min / 46.8 GPM
Rated pressure	206 bar / 2,987 psi
Truck capacity	6 - 10 ton / 13,000 ~ 22,000 lbs



MSV08A

- Operability of all valves can be fully customized to manufacturers' preference.
- Options below are available for all series.
- a) Lift lock b) Flow divider c) Flow regulator d) Unloading function

Proportional Control Valves (SSV Series)

SSV04 Series

Rated flow	85 L/min / 22.5 GPM
Rated pressure	206 bar / 2,987 psi
Truck capacity	1.0 - 3.5 ton / 2,200 ~ 7,700 lbs



SSV04A

SSV06 Series

Rated flow	120 L/min / 31.7 GPM
Rated pressure	206 bar / 2,987 psi
Truck capacity	3.5 - 5.5 ton / 7,700 ~ 12,000 lbs

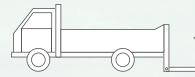


SSV06A

- Operability of all valves can be fully customized to manufacturers' preference.
- Options below are available for all series.
- a) Lift lock b) Flow divider c) Flow regulator d) Unloading function

Power Packs

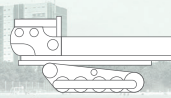
Shimadzu Power Pack is an integration of small gear pumps (YP10), electric motors, oil tank, valves and other accessories in a compact package. Shimadzu Power Packs are widely used as great hydraulic power source for specially-equipped vehicles, agricultural machinery and lift devices.



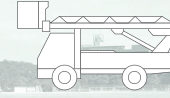
Tailgate Truck



Crane Truck



Dump Body Hoist



Truck Mount Aerial Work Platforms

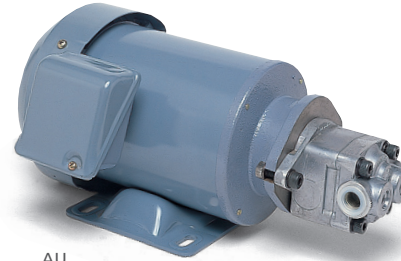


Electric Lift Truck

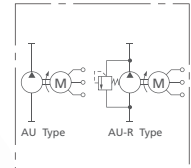
AU/EU Series

Rated pressure	206 bar / 2,987 psi
Pump size	0.8 ~ 7 cm ³ / 0.05 ~ 0.43 in ³
Motor power	0.4 ~ 2.2 kW (3 phase 200 V)

- Relief valve and check valve are available



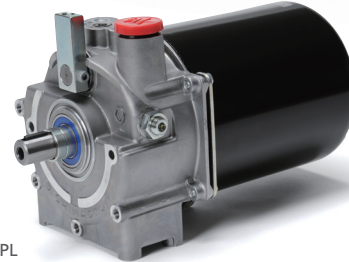
AU



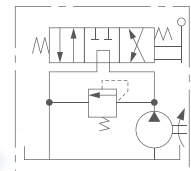
PPL Series

Rated pressure	172 bar / 2,494 psi
Pump size	0.8 ~ 7 cm ³ / 0.05 ~ 0.43 in ³
Tank size	1 ~ 4 L / 0.26 ~ 1.06 gal

- 3rd bearing equipped for radial road



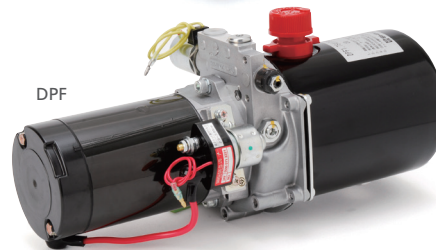
PPL



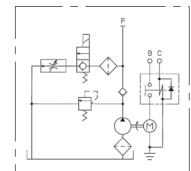
DPF Series

Rated pressure	172 bar / 2,494 psi
Pump size	0.8 ~ 7 cm ³ / 0.05 ~ 0.43 in ³
Tank size	1 ~ 11 L / 0.26 ~ 2.91 gal
Motor power	0.7 ~ 2.4 kW (12/24 V)

- Silent relief valve is available



DPF



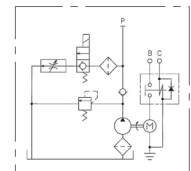
PWPM Series

Rated pressure	206 bar / 2,987 psi
Pump size	0.8 ~ 2.5 cm ³ / 0.05 ~ 0.15 in ³
Tank size	2 ~ 3 L / 0.53 ~ 0.79 gal
Motor power	1.2 ~ 2.0 kW (12/24 V)

- Steel cover to shut off the noise and water



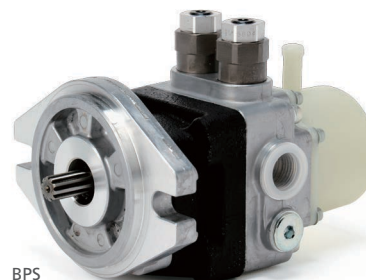
PWPM



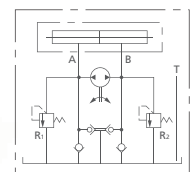
BPS Series

Rated pressure	88 bar / 1,276 psi
Pump size	3 ~ 7 cm ³ / 0.19 ~ 0.43 in ³
Tank size	0.2 L / 0.05 gal

- Compact electro-hydraulic steering system



BPS



* The operability of all power packs can be fully customized to manufacturer's preference.

Efforts to Environment

One of our top management initiatives is balancing business operations with global environmental conservation. Shimadzu actively contributes to building a sustainable society by developing environmental measurement instruments along with various other products, participating in environmental conservation activities, and engaging in events that contribute to society.

Shimadzu Environmental Activities

Environmental Preservation through R&D

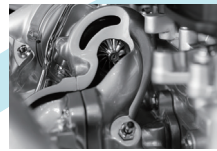
Environmentally friendly products throughout its life cycle.



Contributing to the function and usage of environmental friendly products.



Environmental analysis (Water, air, etc)



Support for mobility development



Support for new energy



Support for new materials

Reduce Environmental Impact through Daily Activities



Prevent global warming



Chemical material management



Recycling resources



Water management

Support for Social Environmental Activities



Lecture about environment at school



Support for project by United Nations University



Preserve local ecosystem



Clean local areas

Environmentally Friendly Systems at Seta Works

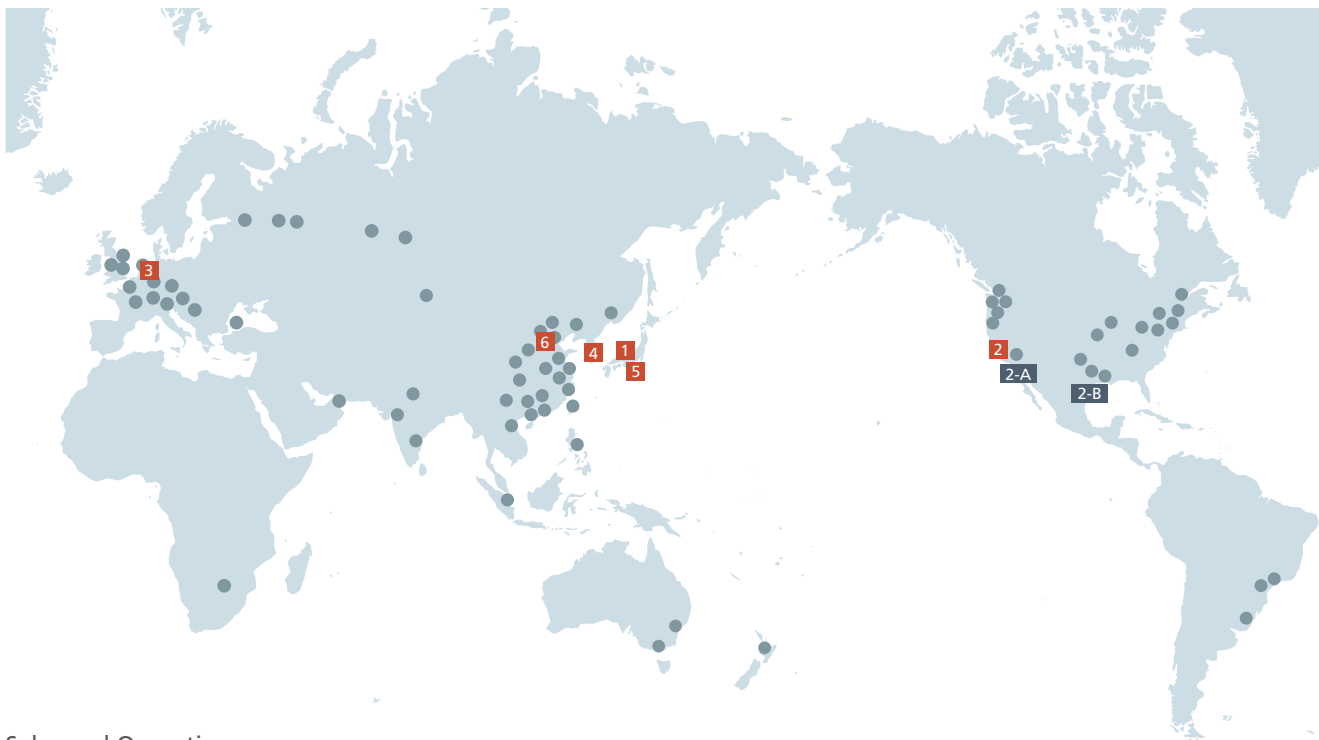
We have been developing environment-friendly systems at our Seta Works. One of them is the wastewater treatment system. The air discharged from special "Aquablaster" nozzles enhances oxygen dissolving efficiency to create a high-oxygen environment that promotes the action of aerobic bacteria, which purify the wastewater. Another environment-friendly system is the recycling system at Seta Works by adopting aqueous cutting liquid instead of oil which was widely used in the past. The dirty cutting liquid from each machine is pumped and collected in the "dirty tank", purified by a special filter and returned to the "clean tank", and then re-supplied back to every machine. This system makes it possible to reduce the use of water because we do not have to drain the wastewater.



Wastewater treatment system



Cutting liquid recycling system



Sales and Operations

1 Shimadzu Corporation
Fluidics Systems Division
<https://www.shimadzu.com/hydraulic/index.html>
 1-8-1, Tsukinowa, Otsu-city, Shiga 520-2152, Japan
 Phone: +81-77-543-6358 Fax: +81-77-543-6359



3 Infracerv Vakuumservice GmbH
<https://vakuumservice.de/en/>
 Albert-Hahn-Strasse 6-10, 47269 Duisburg, F.R. Germany
 Phone: 49 (203) 7687-0 Fax: 49 (203) 7666-25



2 Shimadzu Precision Instruments, Inc.
Shimadzu Industrial Equipment USA
<https://www.sieusa.net/>

2-A Santa Clara Office
 1880 Hartog Drive, San Jose, California 95131, U.S.A.
 Phone: 1 (408) 566-0960 Fax: 1 (408) 566-0961



2-B Austin Office / Warehouse
 9210 Cameron Rd., Suite 600 Austin, TX 78754, U.S.A.

4 Shimadzu Korea Vacuum Equipment Co., Ltd.
www.shimadzu.kr
 9, Deokseongsandan 1-ro, Idong-eup, Cheoin-gu,
 Yongin-si, Gyeonggi-do, 17130 Korea
 Phone: 82 (31) 283-0242 Fax: 82 (31) 333-8857



Manufacturing base

5 Shimadzu Precision Technology, Ltd
 1-8-1, Tsukinowa, Otsu-city, Shiga 520-2152, Japan



6 Tianjin Shimadzu Hydraulic Equipment Co., Ltd.
<https://www.tjshimadzu.com/>
 No. 19, 4th branch of Shengda Road, Xiqing Economic-Technological
 Development Area, Tianjin, 300383 P.R. China



Headquarter



Factory



R&D Facility



Shimadzu Corporation
Fluidics Systems Division
www.shimadzu.com

The appearances and specifications are subject to change for reasons of improvement without notice.

9101-09301-ODPIT