Sanyo machine works
Multi motion new
Generation
Press system

High Performance Servo Press

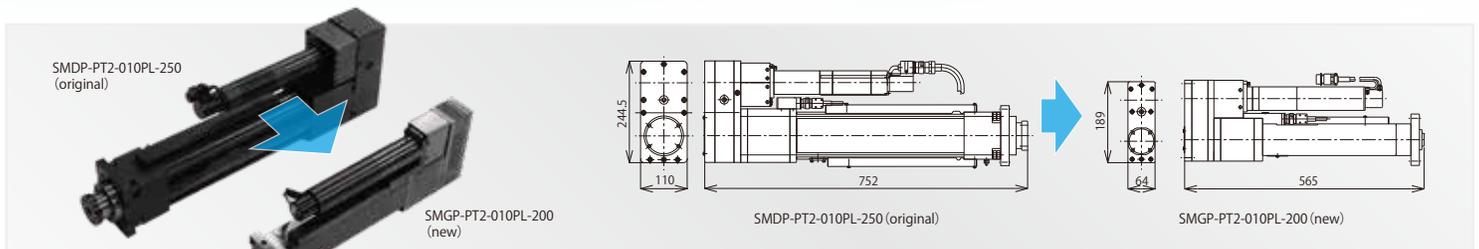# SMGP

SMGP-PT2-010PL-200

SMGP-PT2-030PL-200

SMGP-PT3-050PL-200

SMGP-PT3-120PL-200

Lighter, Smaller, Space Saving

The size of the press tool has been reduced by 60-90% from our original servo-press and the weight reduced by 40-60%. The height of the driver is 30mm shorter than our original. This lighter, smaller design saves valuable cell space and offers great flexibility.

SMDP-PT2-010PL-250 (original)

SMGP-PT2-010PL-200 (new)

244.5   110   752

SMDP-PT2-010PL-250 (original)

189   64   565

SMGP-PT2-010PL-200 (new)

Press Tool

High-power, high speed motor reduces cycle times

Sanyo developed our next generation press with a faster more powerful motor designed specifically for our new generation press tool.
Cycle times can be lowered using approach speeds 150-190% faster than our original products.

High Performance

Pressing force is confirmed and verified by load cell for quality and accuracy. Stopping accuracy rated at +/- 2% provides great performance and repeatability making this tool ideal for press-fit depth management.

High Accuracy of press control

Tried and tested servo control technology combined with High speed CPU enables high accuracy of press control.

High Durability and Excellent Reliability

To ensure outstanding durability, Sanyo servo presses passed a demanding 1 million cycle test, at rated load.
All units are tested for functionality and pressing accuracy before shipment.
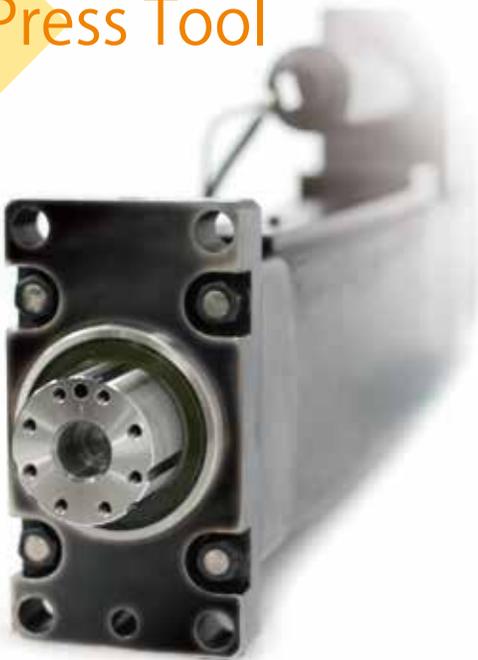
Driver

Power Supply Separation

The drivers power supply is divided into control and drive power supply.
Therefore, origin return operation after driver power off is unnecessary.
This allows for setting up and monitoring when the drive power supply is turned off.

Flexible Pressing Settings

Eight different pressing programs and 32 independent pressing parameters can be pre-programmed for each connected press tool.
This flexibility allows for combined pressing methods such as the load with length method.
Various pressing options, such as load keeping, are also available.

Process Quality Monitoring

System performs process management and continuous monitoring during the entire process to ensure high-quality pressing.
Judgement function detection allows for over 60 pressing errors to be monitored.
Over 45 items can be selected for end-of-cycle pressing data such as various load, time and length judgments.

Driver

On-board 7-segment LED display for Easy Status Results

By using a 7 segment display, pressing judgement and results are easily viewed.
The multi-controller displays program and parameter number during the pressing process.

Additional function

Add the output signal of the "Forward Position", "Position 1 output" and the "Position 2 output".
Press data history saves 400 cycles and records the data for 20 load curves in the drive unit.
Memory contents can be viewed on the display panel or by use of the Windows based User Interface Terminal Software.
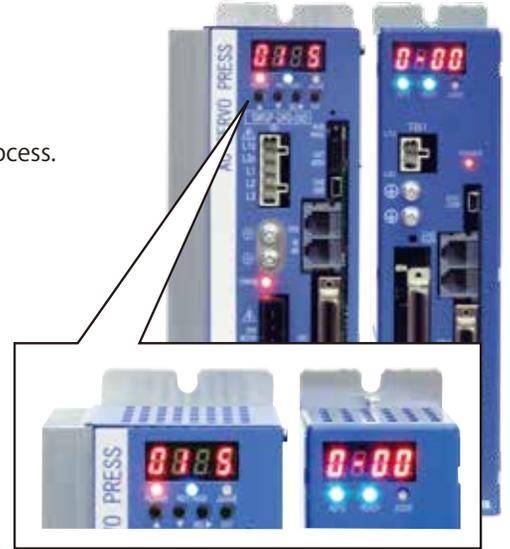
Multi-Controller(Option)

Optional Expansion Unit

Optional Expansion Unit allows for up to 4 additional option boards for increased flexibility.

Interface Options

The Multi-Controller has multiple option board interfaces to correspond to various manufacturing systems and global networks.
RS232C, USB interface and 1 option board slot come standard.

Input / Output board	Sink input (NPN)
	Source input (PNP)
Field bus board	CC-Link
	CC-Link Ver.2
	DeviceNet
	Profibus
	Ethernet/IP
Data-communications board	Ethernet

Optional Expansion unit (shown here) is required when 4 additional option boards are being used.

Display Panel

In addition to displaying Servo Press functions, the user can configure the screen to display for PLC operations.
(Screen configuration software is required)

- There are multiple display languages; Japanese and English.
- PLC is able to accept pressing data from this unit.
- With the use of a high-speed CPU and highly efficient depiction LSI, information is displayed at near real-time.


Servo Press Operation

- Pressing setting (Programs & Parameters)
- Type M/S switching
- Data display
- Load curve monitoring
- NG and pressing reports
- USB port for saving settings and NG reports
- Maintenance mode for diagnostics
- Manual operation mode
- Back-Up settings to memory
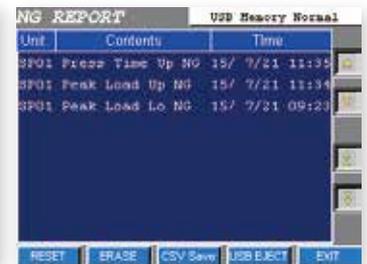- Password protection option
- Key lock protection option
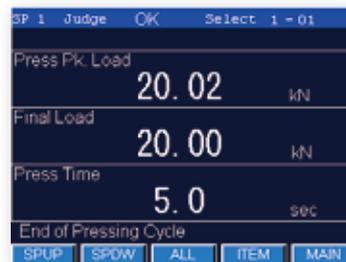
Pressing Data Display
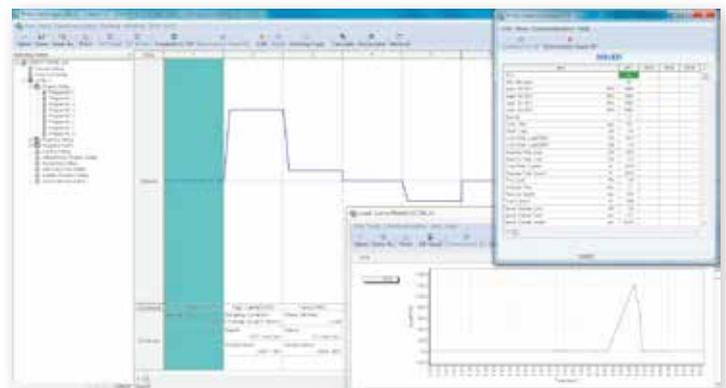

Pressing Setting Display
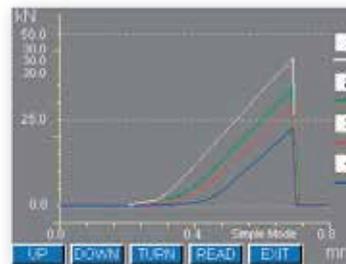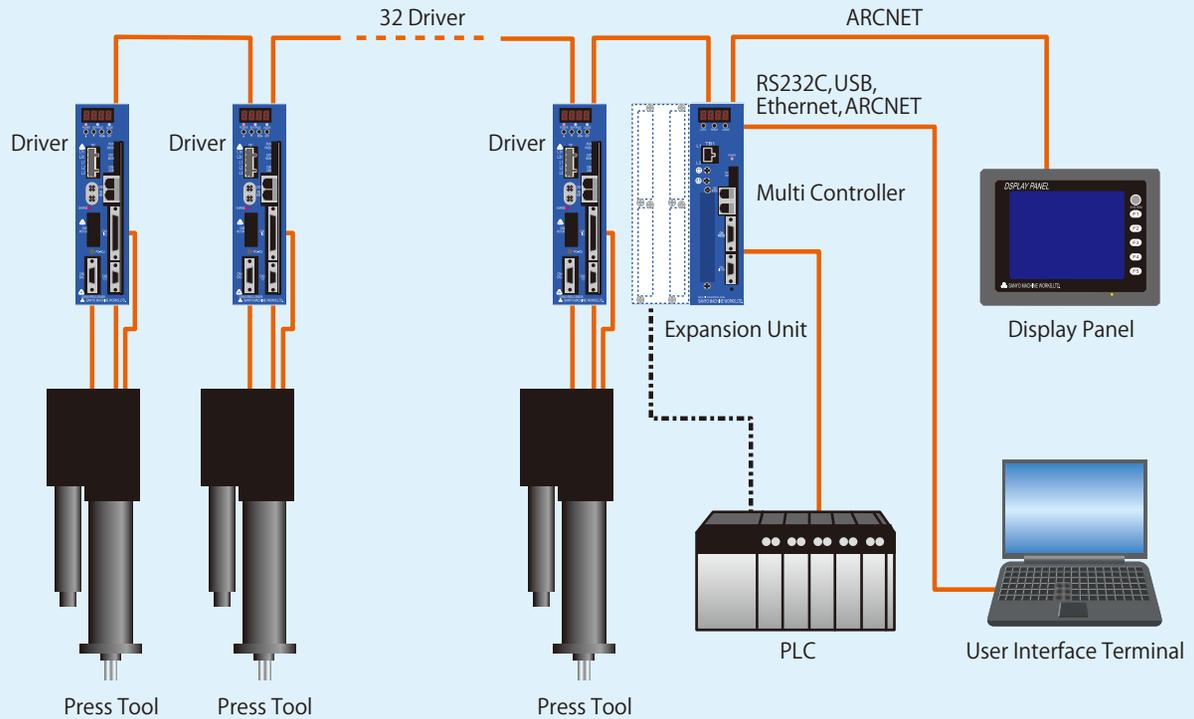

Load Curve Display

NG Report Display

User Interface Terminal Software (Option)

- System configuration (programming)
- Pressing data acquisition
- Load curve acquisition and display
- System maintenance
- Data acquisition and exportation
- Communicate with a PC via RS232C Serial Communications, USB, Ethernet and/or optional high speed ARCNET unit.
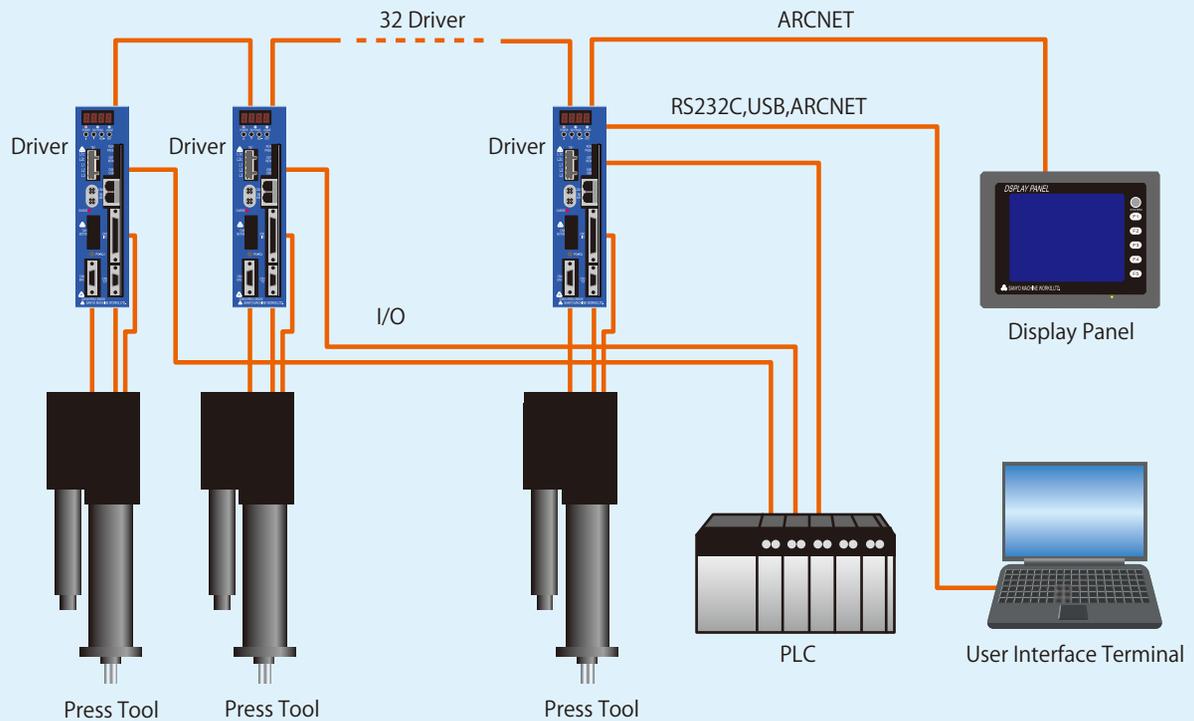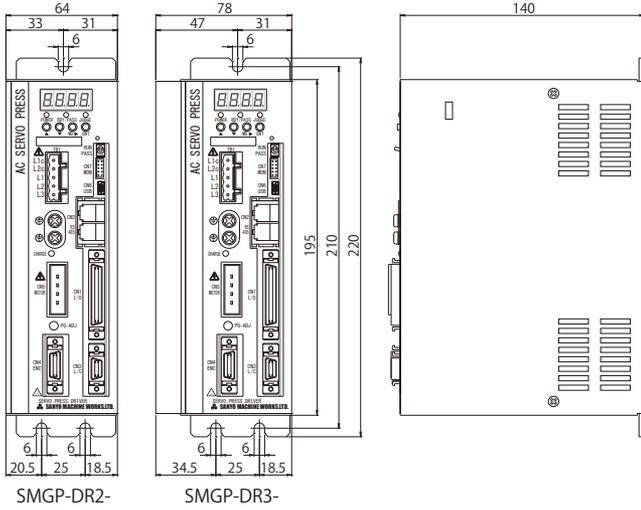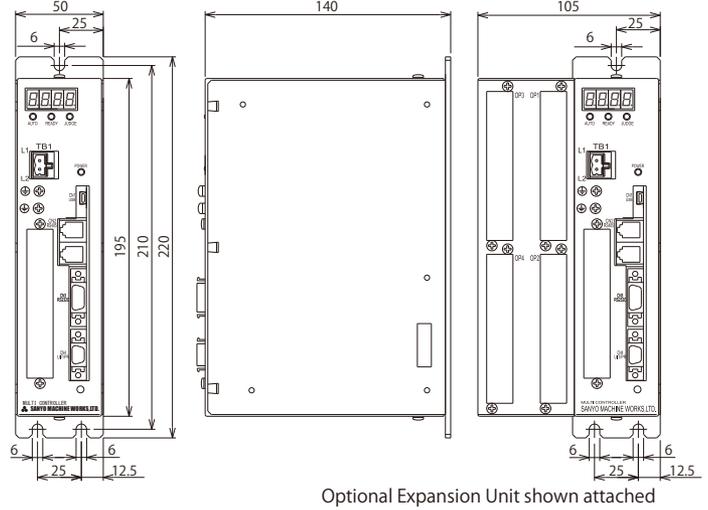
System Configuration

SMGP typeM

32 Driver

ARCNET

Driver

Driver

Driver

RS232C, USB,
Ethernet, ARCNET

Multi Controller

DISPLAY PANEL

Display Panel

Expansion Unit

Press Tool

Press Tool

Press Tool

PLC

User Interface Terminal

SMGP type S

32 Driver

ARCNET

Driver

Driver

Driver

RS232C, USB, ARCNET

DISPLAY PANEL

Display Panel

I/O

Press Tool

Press Tool

Press Tool

PLC

User Interface Terminal

Driver

SMGP-DR2-   SMGP-DR3-

Multi-Controller

Optional Expansion Unit shown attached

Driver Specifications

Model	Power Supply(V)		Control Average Consumption Power(W)	Drive Average Consumption Power(W)	Drive Peak Consumption Power(W)
	Control Power	Drive Power			
SMGP-DR2-005	Single-phase AC180～242	Three-phase AC180～242	15	240	1900
SMGP-DR2-010					
SMGP-DR2-030					
SMGP-DR3-050				380	2500
SMGP-DR3-120					

Multi-Controller Specifications

Model	Power Supply(V)	Peak Consumption Power(W)
SMGP-MC	Single-phase AC180～242	7

Press Tool
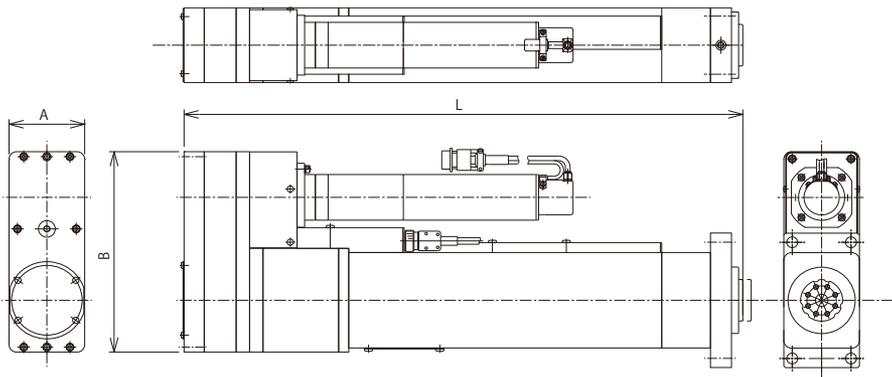
Display Panel
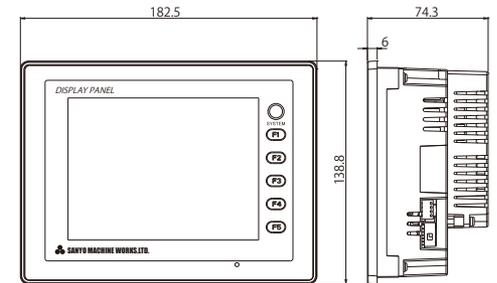
Panel Cut Out W174.0 H131.0

Display Panel Specifications

Model	Power Supply(V)	Peak Consumption Power(W)
SMGP-DP	DC24±10%	17

Press Tool Specifications

Model	Maximum Press Load (kN)	Maximum Speed in High Speed (mm/sec)	Maximum Speed in Press (mm/sec)	Stroke (mm)	Dimensions(mm) Width A × Depth B × Length L
SMGP-PT2-005PL-200	5	225	30	200	64 × 189 × 565
SMGP-PT2-010PL-200	10	225	30	200	64 × 189 × 565
SMGP-PT2-030PL-200	30	208	27	200	90 × 241.5 × 675
SMGP-PT3-050PL-200	50	124	16	200	110 × 283 × 777
SMGP-PT3-120PL-200	120	64	8	200	140 × 360 × 974

Specifications subject to change without notice.

SANYO MACHINE WORKS, LTD.

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