

Product News

NO.23
09E

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A3HM Series High Pressure Variable Displacement Piston Pumps

Notice of Model Change

We are pleased to announce a model change to the 20-design A3HM series high-pressure variable displacement piston pumps, which have been well received by our customers.

■Major Changes

- (1)The external shape and port positions of the on-board control valve have been changed.
- (2)Shaft extension shape has been added to some models (A3HM45, A3HM85, A3HM100).

■Specifications

Specifications are unchanged.

■Mounting Interchangeability

There is no change in the pump installation dimensions, but due to a change in the position of the control valve pilot port, some of the following models are not compatible for installation [see No. 3].

| Control Type | Mounting Interchangeability |
|--|-----------------------------|
| 01: Pressure Compensator Type | Interchangeable |
| 07: Pilot Pressure Control Type Pressure Compensator | Not Interchangeable |
| 14: Load Sensing Type | |

■External Shape and Dimensions

Please refer to the following external drawing or the general catalog for the external shape and dimensions of the new 20 design.

●Details

| Series Number | Drawing Number | | |
|---------------|-----------------|------------------|------------------|
| | 01 Control | 07 Control | 14 Control |
| A3HM18 | 2250-PA316128-8 | 2250H-PA316220-0 | 2250Q-PA316137-9 |
| A3HM28 | 2251-PA316133-8 | 2251H-PA316221-0 | 2251Q-PA316136-1 |
| A3HM45 | 2252-PA316111-4 | 2252H-PA316222-0 | 2252Q-PA316114-8 |
| A3HM63 | 2253-PA316129-6 | 2253H-PA316223-0 | 2253Q-PA316132-0 |
| A3HM85 | 2254-PA316123-9 | 2254H-PA316224-0 | 2254Q-PA316125-4 |
| A3HM100 | 2255-PA316118-9 | 2255H-PA316225-0 | 2255Q-PA316120-5 |

●Hydraulic Equipment Engineering Information Catalog

Cat.A-Edit3E Piston Pumps

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■Timing of Release

All Models, Upon depletion of current stock.

■Model Number Designation

Design numbers will be updated to 20 designs.

Furthermore, shaft extension shape has been added for A3HM45, A3HM85 and A3HM100.

| A3HM18 | -R | 01 | A | S | R | -20 |
|--|---|---|----------------------|---------------|--|---------------|
| Series Number | Direction of Rotation | Control Type | Mounting (ISO3019-1) | Port Position | Shaft Extension | Design Number |
| A3HM18: (18.6 cm ³ /rev) | [Viewed from Shaft End] R: Clockwise L: Counter-Clockwise | 01: Pressure Compensator Type 07: Pilot Pressure Control Type Pressure Compensator 14: Load Sensing Type | A: 82-2 | S: Side Port | Splined Shaft See Table Below For Details | 20 |
| A3HM28: (28.7 cm ³ /rev) | | | B: 101-2 | | | 20 |
| A3HM45: (45.7 cm ³ /rev) | | | B: 101-2 | | | 20 |
| A3HM63: (63.5 cm ³ /rev) | | | C: 127-4 | | | 20 |
| A3HM85: (85.6 cm ³ /rev) | | | C: 127-2/4 | | | 20 |
| A3HM100: (100.7 cm ³ /rev) | | | | | | 20 |

Shaft Extension Details

| Series Number | Shaft Extension Before Change | Shaft Extension After Change |
|---------------|---|--|
| A3HM18 | None: ISO 3019-1 Standard R: High Torque Transmission Type | None: ISO 3019-1 Standard (11T-16/32DP) R: High Torque Transmission Type (11T-16/32DP) |
| A3HM28 | | None: ISO 3019-1 Standard (13T-16/32DP) R: High Torque Transmission Type (13T-16/32DP) |
| A3HM45 | | None: ISO 3019-1 Standard (15T-16/32DP) R: High Torque Transmission Type (15T-16/32DP) T: ISO 3019-1 Standard (13T-16/32DP)* U: High Torque Transmission Type (13T-16/32DP) |
| A3HM63 | | None: ISO 3019-1 Standard (15T-16/32DP, 14T-12/24DP) R: High Torque Transmission Type (15T-16/32DP, 14T-12/24DP) |
| A3HM85 | None: ISO 3019-1 Standard | None: ISO 3019-1 Standard (17T-12/24DP) T: ISO 3019-1 Standard (14T-12/24DP) U: High Torque Transmission Type (14T-12/24DP) |
| A3HM100 | | None: ISO 3019-1 Standard (17T-16/32DP) T: ISO 3019-1 Standard (14T-12/24DP) U: High Torque Transmission Type (14T-12/24DP) |

★There are limitations on specifications. Please contact us for details.

Design Number

| Series Number | Old Design Number | New Design Number |
|---------------|-------------------|-------------------|
| A3HM18 | 11 | 20 |
| A3HM28 | 12 | |
| A3HM45 | 12 | |
| A3HM63 | 12 | |
| A3HM85 | 11 | |
| A3HM100 | 11 | |

■External View / Mounting Dimensions

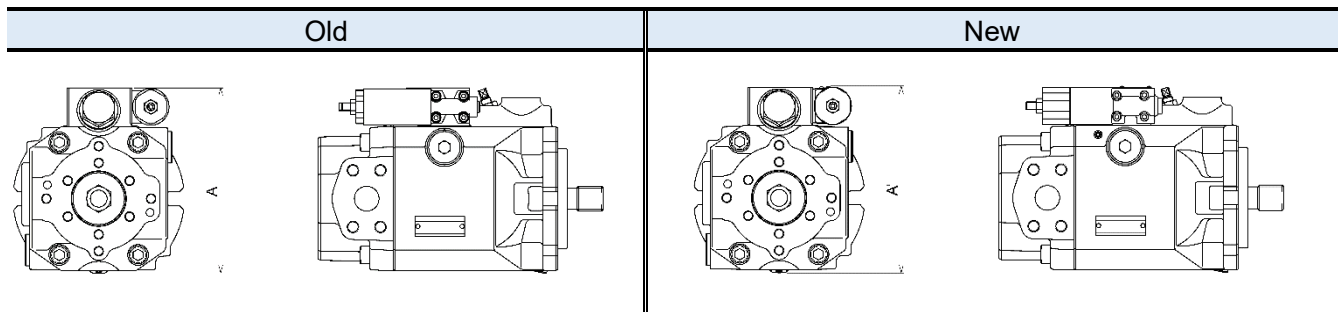
Due to the change of the control valve, the external shape and each dimension will be changed.

There are no changes in dimensions other than those listed below.

(1) Pressure Compensator Type

Maximum height increased by 1mm [A3HM45].

| Old | | New | |
|------------------|-------|-------------------|----------------|
| Model Number | A | Model Number | A' |
| A3HM18-※01AS※-11 | 168 | A3HM18-※01AS※-20 | 168(No Change) |
| A3HM28-※01BS※-12 | 169 | A3HM28-※01BS※-20 | 169(No Change) |
| A3HM45-※01BS※-12 | 183.5 | A3HM45-※01BS※-20 | 184.5 |
| A3HM63-※01※S※-12 | 188 | A3HM63-※01※S※-20 | 188(No Change) |
| A3HM85-※01CS-11 | 217 | A3HM85-※01CS※-20 | 217(No Change) |
| A3HM100-※01CS-11 | 219 | A3HM100-※01CS※-20 | 219(No Change) |



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(2) Pilot Pressure Control Type Pressure Compensator / Load Sensing Type

Maximum height increased by 7 mm, external pilot port and load sensing port locations changed.

| Old | | | | New | | | |
|------------------|-------|-------|-------|-------------------|-------|-------|-------|
| Model Number | B | C | D | Model Number | B' | C' | D' |
| A3HM18-※07AS※-11 | 188 | 94.8 | 98.5 | A3HM18-※07AS※-20 | 195 | 96 | 102 |
| A3HM18-※14AS※-11 | | | | A3HM18-※14AS※-20 | | | |
| A3HM28-※07BS※-12 | 182 | 105.8 | 98.5 | A3HM28-※07BS※-20 | 189 | 107 | 102 |
| A3HM28-※14BS※-12 | | | | A3HM28-※14BS※-20 | | | |
| A3HM45-※07BS※-12 | 203.5 | 126.3 | 110.5 | A3HM45-※07BS※-20 | 210.5 | 127.5 | 114 |
| A3HM45-※14BS※-12 | | | | A3HM45-※14BS※-20 | | | |
| A3HM63-※07※S※-12 | 208 | 142.8 | 112.5 | A3HM63-※07※S※-20 | 215 | 144 | 116 |
| A3HM63-※14※S※-12 | | | | A3HM63-※14※S※-20 | | | |
| A3HM85-※07CS-11 | 233.5 | 159.3 | 129 | A3HM85-※07CS※-20 | 240.5 | 160.5 | 132.5 |
| A3HM85-※14CS-11 | | | | A3HM85-※14CS※-20 | | | |
| A3HM100-※07CS-11 | 233.5 | 159.3 | 129 | A3HM100-※07CS※-20 | 240.5 | 160.5 | 132.5 |
| A3HM100-※14CS-11 | | | | A3HM100-※14CS※-20 | | | |

