



HORIZONTAL END SUCTION VOLUTE PROCESS PUMP MODEL GSO

ISO2858/5199

eDYNAMiQ

Eco, Dynamic and Integrated Quality

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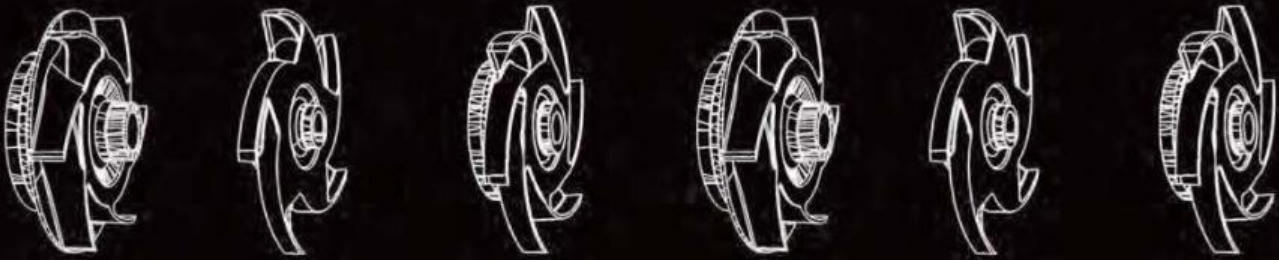
Atau



eDYNAMiQ

Eco, Dynamic and Integrated Quality

Ebara's Stunning Solutions for a Better World
Stunning Solutions to Every Application and Occasion



Technical Data

- ✓ **Capacity** : To 1400m³/h
- ✓ **Head** : To 150m
- ✓ **Temperature** : -30°C to 150°C
- ✓ **Max. Working Pressure** :
 - Up to 16bar (1.6MPa)
- ✓ **Materials** :
 - Casing : 304/316 Stainless Steel
 - Impeller : 304/316 Stainless Steel
- ✓ **Standard** : ISO2858, ISO5199
- ✓ **Rotation** : Clockwise viewed from coupling end

Applications

Industry



- Petrochemical
- Inorganic chemical



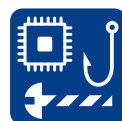
- Motor vehicle



- Steel



- Paper and pulp



- Semiconductor
- Metal goods
- Fisheries

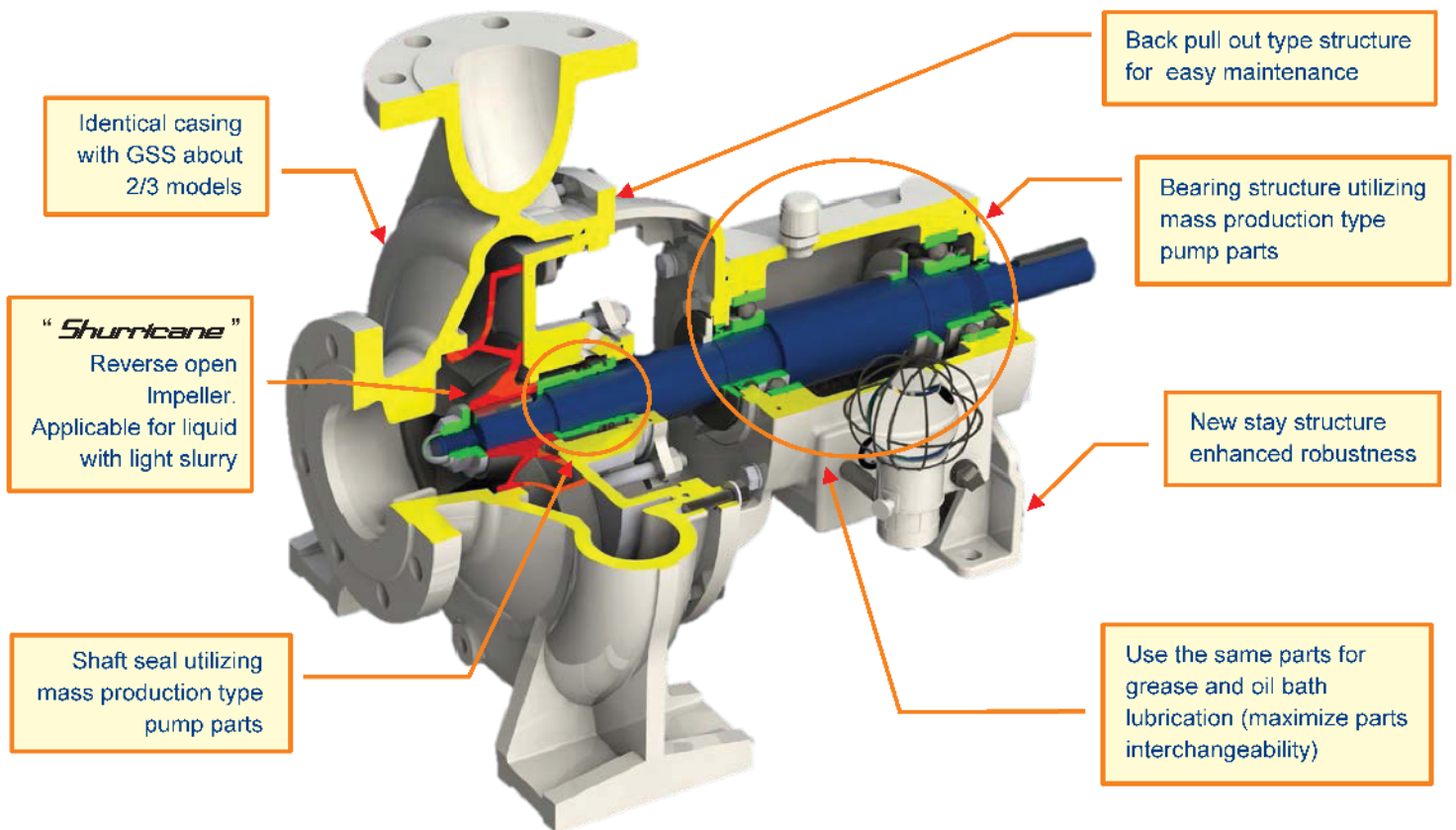


- Food

- **ISO 2858, 5199 compliant.**
(Dimensions and structure. Equivalent to API for Vibration value, shaft deflection, bearing life)
- **Wide coverage, capable for handling light slurry liquid.**
- **Semi-open impeller, comparative efficiency to close impeller.**
- **Increased parts interchangeability, for reducing inventory parts and wooden patterns.**
- **Minimize cost by proactive adoption of mass production pump parts.**

PRODUCT FEATURES

- **Comply with international standards**
 - Outline dimension : ISO2858 and EN22858
 - Pump design : ISO5199
 - Seal chamber dimensions : ISO3069
- **Available in wide application**
 - Impeller with unique reverse open shape for both clean liquid and light slurry liquid.
 - Gland cover compatible with various shaft seal types.
- **Extending bearing and seal life**
 - Less axial thrust load and low seal box pressure by unique shape impeller “*Shurricane*”
 - Heavy duty design to reduce vibration and shaft deflection.
- **Energy saving**
 - World top class pump efficiency achieved.
- **Maintenance friendly design**
 - Back pull-out construction for easy maintenance without disassembling suction and discharge piping.
 - Minimized maintenance cost and stock parts by high interchangeability of parts.



“*Shurricane*” is Ebara’s unique hydraulic technology. It can reduce the pump axial thrust load with high pump efficiency.

PRODUCT SPECIFICATION & STAGE

| | Items | 1st Launch (Standard Specification) | | | 2nd Launch(*1) Special Specification | Upon request (*1) Special Specification |
|---|---|--|---------|-------------------------------|---|--|
| Operating condition | Service liquid | Industrial water, Chemical | | | incl. light slurry | |
| | Liquid temperature | -30~120°C | | | 121~150°C | -31~-50°C、151°C~ |
| | Liquid density | 0.7~1.2 | | | 1.2 ~2.0 | |
| | Pump speed | 4 pole-50Hz/60Hz、 2 pole-50Hz | | | 2 pole-60Hz | |
| Pressure casing | Material | SCS13/SUS304 | | | | Cast iron, Carbon steel |
| | | SCS14A/SUS316 (*1) | | | | |
| | Design pressure | 16bar | | | | 25 barg |
| | Flange standard | DIN(GB) | | | JIS | ASME |
| O ring material | FKM | | | FFKM or NBR (PTFE coating) | | |
| | EPDM (*1) | | | | | |
| Shaft seal | Mech. Seal (unbalanced & w/o sleeve) | Single, E-Bellows (FKM and EPDM) | Sic/C | - | Single, cartridge with sleeve | Special seal |
| | | | Sic/Sic | | | |
| | | Single, E-Bellows (FKM and EPDM) (*1) | Sic/C | Quench | Double, cartridge with sleeve | |
| | | | Sic/Sic | | | |
| | Double, E-Bellows (FKM and EPDM) (*1) | Sic/C | - | | | |
| | | Sic/Sic | | | | |
| Single, Pusher, O ring (FKM and EPDM) (*1) | Sic/C | - | | | | |
| | Sic/Sic | | | | | |
| Gland packing (with sleeve) | P#6501L eq. (4 rings/1 lantern, w/o Quench) | | | | | |
| | P#436 eq. (4 rings/1 lantern, w/o Quench) (*1) | | | | | |
| Bearing | Bearing/Lub. | #63ZZ/#63ZZ grease shield | | | #63/#73BDB oil lub. | |
| | | #63/#63 oil lubrication | | | | |
| | Cooling | N/A | | | | Fan or water cooling |
| | Bearing seal | Oil seal | | | | new deflector |

(*1) : Early in the sale, estimate it for each request.

Yellow background : It shows a standard structure.

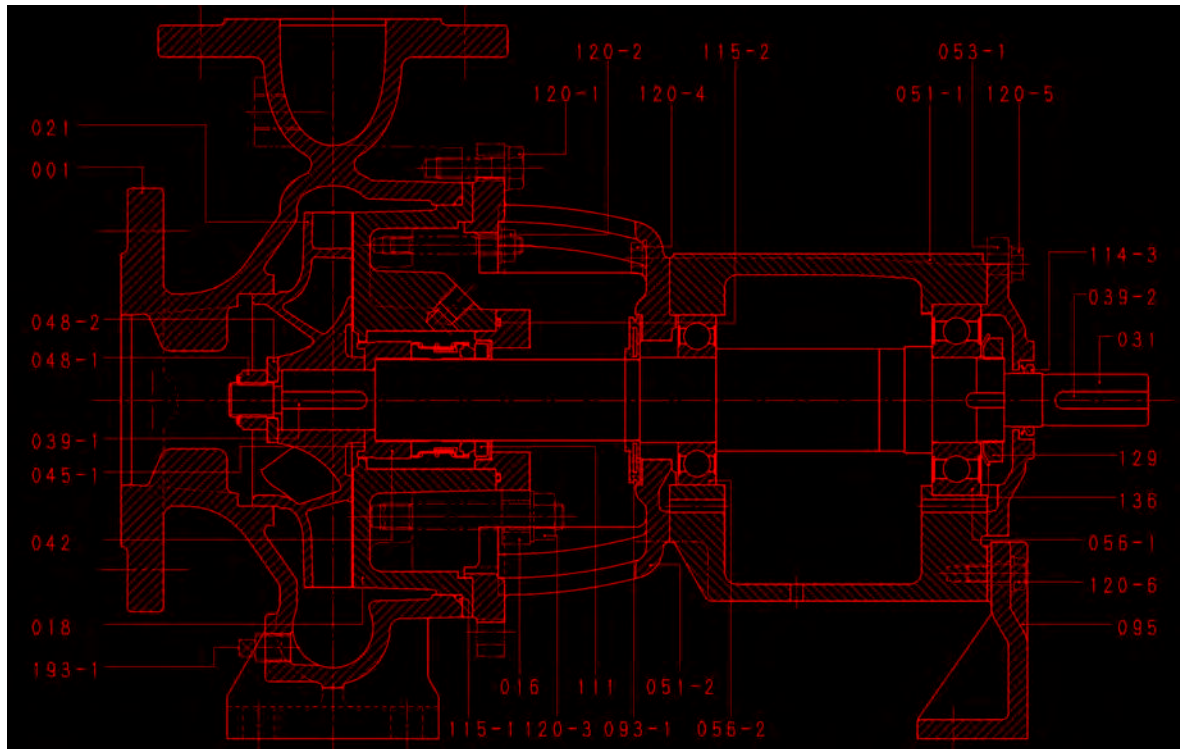
Main Applications

- **FOOD INDUSTRY**
 - Low viscosity (up to 100cP)
 - Middle viscosity (up to 400cst)
 - Starch, Molasses, Wort
 - Filtration pump
 - Cleaning in place pump
- **PAPER AND PULP INDUSTRY**
 - Material production process
(Around digester, Chemical recovery)
 - Preparation process (Chemical Pump)
 - Paper making process (Pulp pump 0.3% and below)
- **PETROCHEMICAL INDUSTRY**
 - Chemical process
- **INORGANIC CHEMICAL INDUSTRY**
 - Acid
 - Alkali
- **SEMICONDUCTOR INDUSTRY**
 - Ultrapure water production line (Pure water pump)
- **MOTOR VEHICLE INDUSTRY**
 - Machining line (Coolant centralization)
 - Painting line (Chemical conversion treatment, Electrodeposition paint)
- **STEEL INDUSTRY**
 - Rolling facility (Scale pit pump)
 - Plating facility
- **METAL GOODS INDUSTRY**
 - Plating facility (Degreasing washing, Rinse water drainage)
- **FISHERIES INDUSTRY**
 - Aquaculture (Seawater)

SECTIONAL VIEW

Standard Feature

Mechanical seal type with grease lubrication bearings



| No. | Name of Part | Q'ty |
|-------|---------------------------|-------|
| 001 | Casing | 1 |
| 016 | Seal Gland Plate | 1 |
| 018 | Gland Cover | 1 |
| 021 | Impeller | 1 |
| 031 | Shaft | 1 |
| 039-1 | Key - Impeller | 1 |
| 039-2 | Key - Coupling | 1 |
| 042 | Seal Spacer | 1 |
| 045-1 | Impeller Shim | 1 set |
| 045-5 | Bearing Distance (*1) | 1 |
| 048-1 | Impeller Nut | 1 |
| 048-2 | Impeller Washer | 1 |
| 051-1 | Bearing Housing | 1 |
| 051-2 | Adapter - Bg Housing (*2) | 1 |
| 051-3 | Bracket - Casing (*3) | 1 |
| 053-1 | Bearing Cover (M) | 1 |
| 053-2 | Bearing Cover (P) (*4) | 1 |

| No. | Name of Part | Q'ty |
|-------|------------------------|-------|
| 056-1 | Ball Bearing (M) | 1 |
| 056-2 | Ball Bearing (P) | 1 |
| 093-1 | Deflector | 1 |
| 095 | Stay | 1 |
| 111 | Mechanical Seal | 1 set |
| 114-3 | V Ring - Bg Cover | 1 |
| 115-1 | O-ring - Gland Cover | 1 |
| 115-2 | O-ring - Gland Plate | 1 |
| 120-1 | Bolt - Casing | 1 set |
| 120-2 | Bolt/nut - Gland Cover | 1 set |
| 120-3 | Bolt/nut - Gland Plate | 4 |
| 120-4 | Bolt - Bg Housing | 4 |
| 120-5 | Bolt - Bg Cover | 4 |
| 120-6 | Bolt - Stay | 2 |
| 129 | Bearing Nut | 1 |
| 136 | Bearing Washer | 1 |
| 193-1 | Plug - Casing | 1 |

(*1) SHAFT NO. 75AB only

(*2) SHAFT NO. 40, 50, 60 only

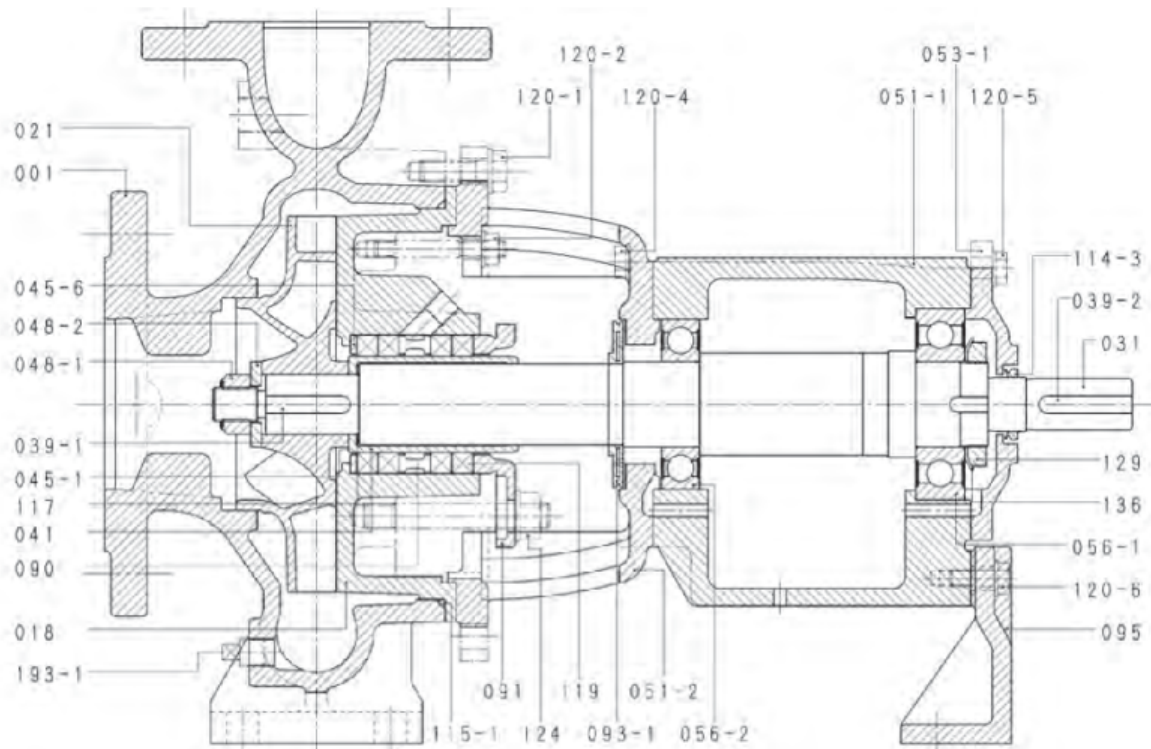
(*3) for SHAFT NO. 75AB, 90 except 200-150-315

(*4) SHAFT NO. 75AB, 90 only

SECTIONAL VIEW

Standard Feature

Gland packing type with grease lubrication bearings



| No. | Name of Part | Q'ty | No. | Name of Part | Q'ty |
|-------|---------------------------|-------|-------|------------------------|-------|
| 001 | Casing | 1 | 056-2 | Ball Bearing (P) | 1 |
| 018 | Gland Cover | 1 | 90 | Lantern Ring | 1 |
| 021 | Impeller | 1 | 091 | Gland | 1 |
| 031 | Shaft | 1 | 093-1 | Deflector | 1 |
| 039-1 | Key - Impeller | 1 | 095 | Stay | 1 |
| 039-2 | Key - Coupling | 1 | 114-3 | V Ring - Bg Cover | 1 |
| 041 | Packing Sleeve | 1 | 115-1 | O-ring - Gland Cover1 | |
| 045-1 | Impeller Shim | 1 set | 117 | Gasket - PK Sleeve | 1 |
| 045-5 | Bearing Distance (*1) | 1 | 119 | Gland Packing | 1 set |
| 045-6 | Spacer - GPK | 1 | 120-1 | Bolt - Casing | 1 set |
| 048-1 | Impeller Nut | 1 | 120-2 | Bolt/nut - Gland Cover | 1 set |
| 048-2 | Impeller Washer | 1 | 120-4 | Bolt - Bg Housing | 4 |
| 051-1 | Bearing Housing | 1 | 120-5 | Bolt - Bg Cover | 4 |
| 051-2 | Adapter - Bg Housing (*2) | 1 | 120-6 | Bolt - Stay | 2 |
| 051-3 | Bracket - Casing (*3) | 1 | 124 | Gland Bolt | 2 |
| 053-1 | Bearing Cover (M) | 1 | 129 | Bearing Nut | 1 |
| 053-2 | Bearing Cover (P) (*4) | 1 | 136 | Bearing Washer | 1 |
| 056-1 | Ball Bearing (M) | 1 | 193-1 | Plug - Casing | 1 |

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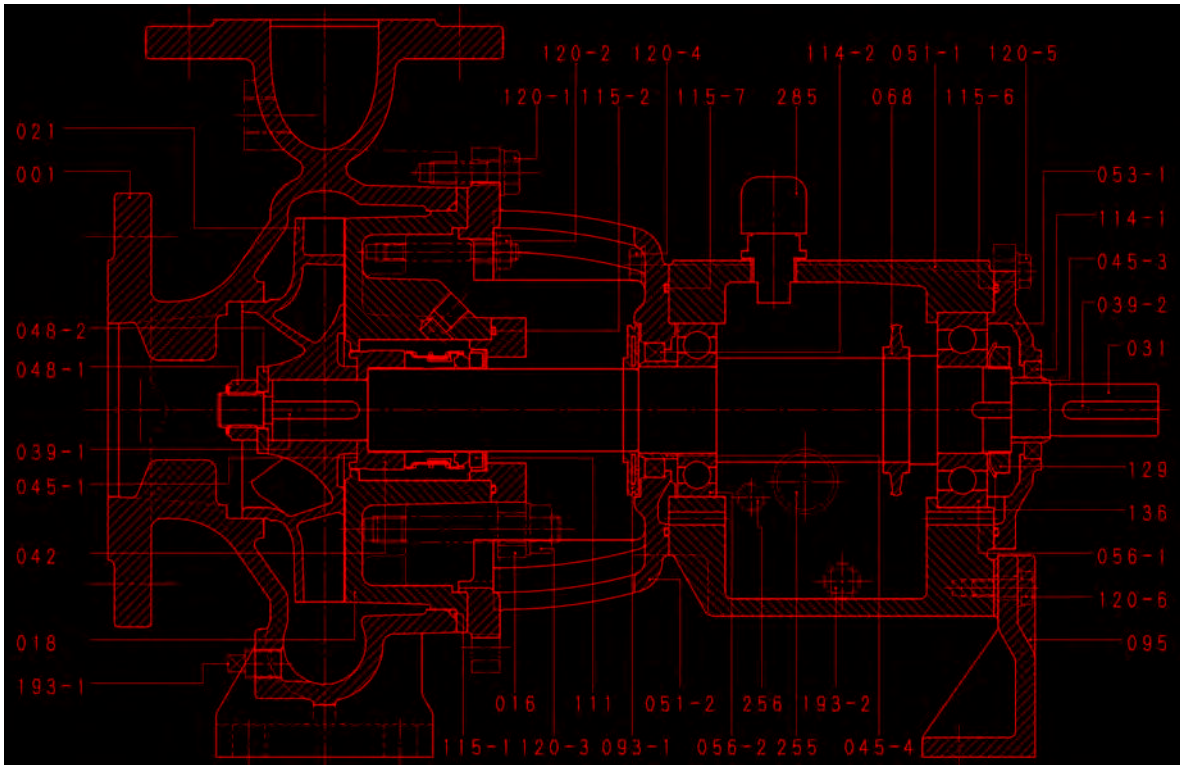
(*3) for SHAFT NO. 75AB, 90 except 200-150-315

(*4) SHAFT NO. 75AB, 90 only

SECTIONAL VIEW

Optional Feature

Mechanical seal type with oil lubrication bearings



| No. | Name of Part | Q'ty |
|-------|---------------------------|-------|
| 001 | Casing | 1 |
| 016 | Seal Gland Plate | 1 |
| 018 | Gland Cover | 1 |
| 021 | Impeller | 1 |
| 031 | Shaft | 1 |
| 039-1 | Key - Impeller | 1 |
| 039-2 | Key - Coupling | 1 |
| 042 | Seal Spacer | 1 |
| 045-1 | Impeller Shim | 1 set |
| 045-3 | Oil Seal Sleeve (M) | 1 |
| 045-4 | Oil Seal Sleeve (P) | 1 |
| 045-5 | Bearing Distance (*1) | 1 |
| 048-1 | Impeller Nut | 1 |
| 048-2 | Impeller Washer | 1 |
| 051-1 | Bearing Housing | 1 |
| 051-2 | Adapter - Bg Housing (*2) | 1 |
| 051-3 | Bracket - Casing (*3) | 1 |
| 053-1 | Bearing Cover (M) | 1 |
| 053-2 | Bearing Cover (P) (*4) | 1 |
| 056-1 | Ball Bearing (M) | 1 |
| 056-2 | Ball Bearing (P) | 1 |
| 068 | Oil Flinger | 1 |

| No. | Name of Part | Q'ty |
|-------|---------------------------|-------|
| 093-1 | Deflector | 1 |
| 095 | Stay | 1 |
| 111 | Mechanical Seal | 1 Set |
| 114-1 | Oil Seal (M) | 1 |
| 114-2 | Oil Seal (P) | 1 |
| 115-1 | O-ring - Gland Cover | 1 |
| 115-2 | O-ring - Gland Plate | 1 |
| 115-6 | O-ring - Bg Cover(M) | 1 |
| 115-7 | O-ring - Bg Cover (P) | 1 |
| 120-1 | Bolt - Casing | 1 set |
| 120-2 | Bolt/nut - Gland Cover | 1 set |
| 120-3 | Bolt/nut - Gland Plate | 4 |
| 120-4 | Bolt - Bg Housing | 4 |
| 120-5 | Bolt - Bg Cover | 4 |
| 120-6 | Bolt - Stay | 2 |
| 129 | Bearing Nut | 1 |
| 136 | Bearing Washer | 1 |
| 193-1 | Plug - Casing | 1 |
| 193-2 | Plug - Oil Drain (*5) | 1 |
| 193-3 | Plug - Oiler | 1 |
| 255 | Oil Level Gauge | 1 |
| 256 | Constant Level Oiler (*6) | 1 set |
| 285 | Air Breather | 1 |

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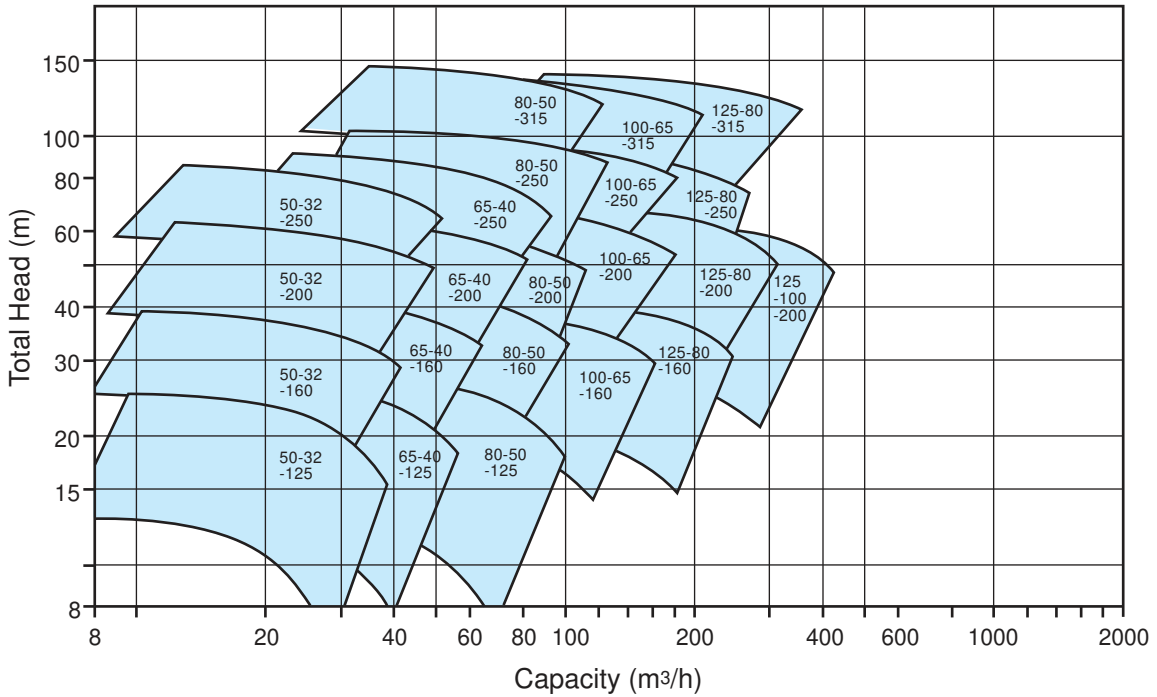
(*4) SHAFT NO. 75AB, 90 only

(*5) MAGNETIC TYPE

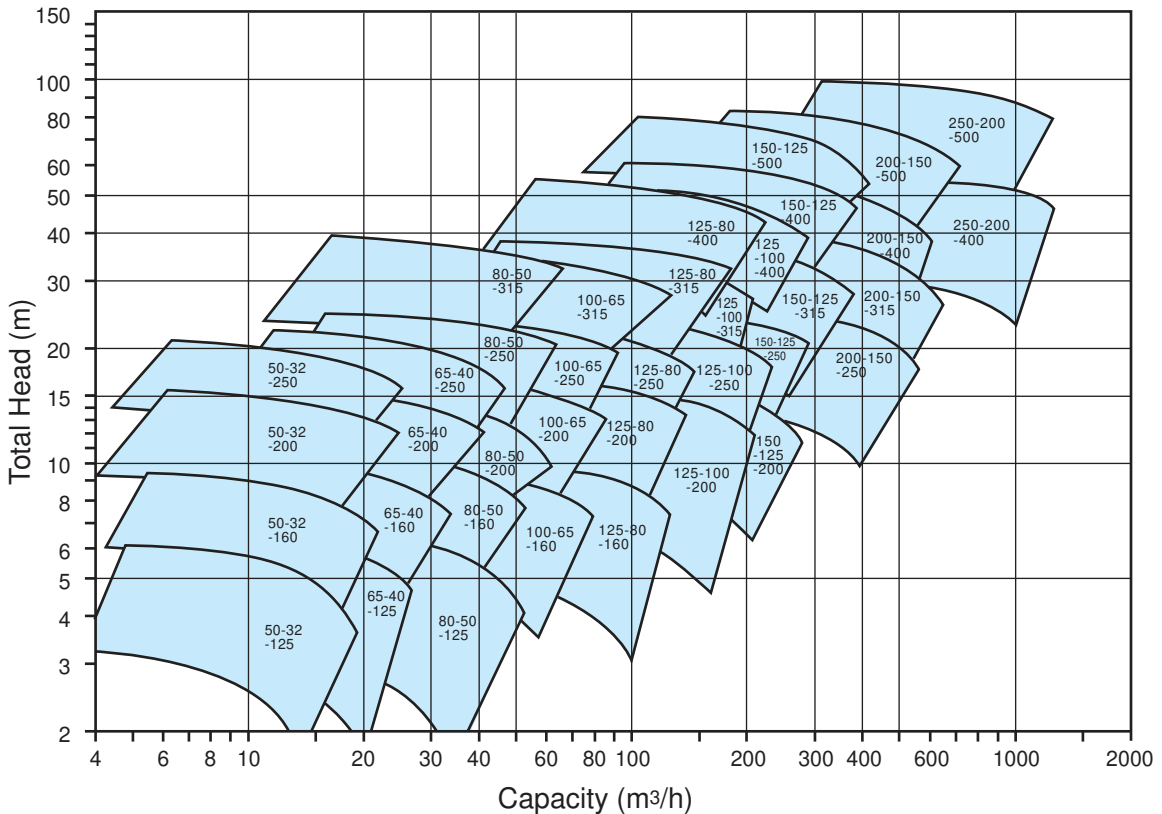
(*6) OPTIONAL

SELECTION CHART

2 Pole



4 Pole



* Dimensional details are provided for reference only.
 * All specifications are subject to change without prior notice.



EBARA Pumps Malaysia Sdn Bhd
 6, Jalan TP3, UEP Subang Jaya Industrial Park,
 47620 Subang Jaya, Selangor, Malaysia.
 Tel : 03-8023 6622 Fax : 03-8023 9355
 Email : sales@ebara.com.my
 Website : www.ebara.com.my



Approval No.0048594
 Approval No.0049022

Authorised dealer: