



# HORIZONTAL END SUCTION VOLUTE PROCESS PUMP MODEL GSO

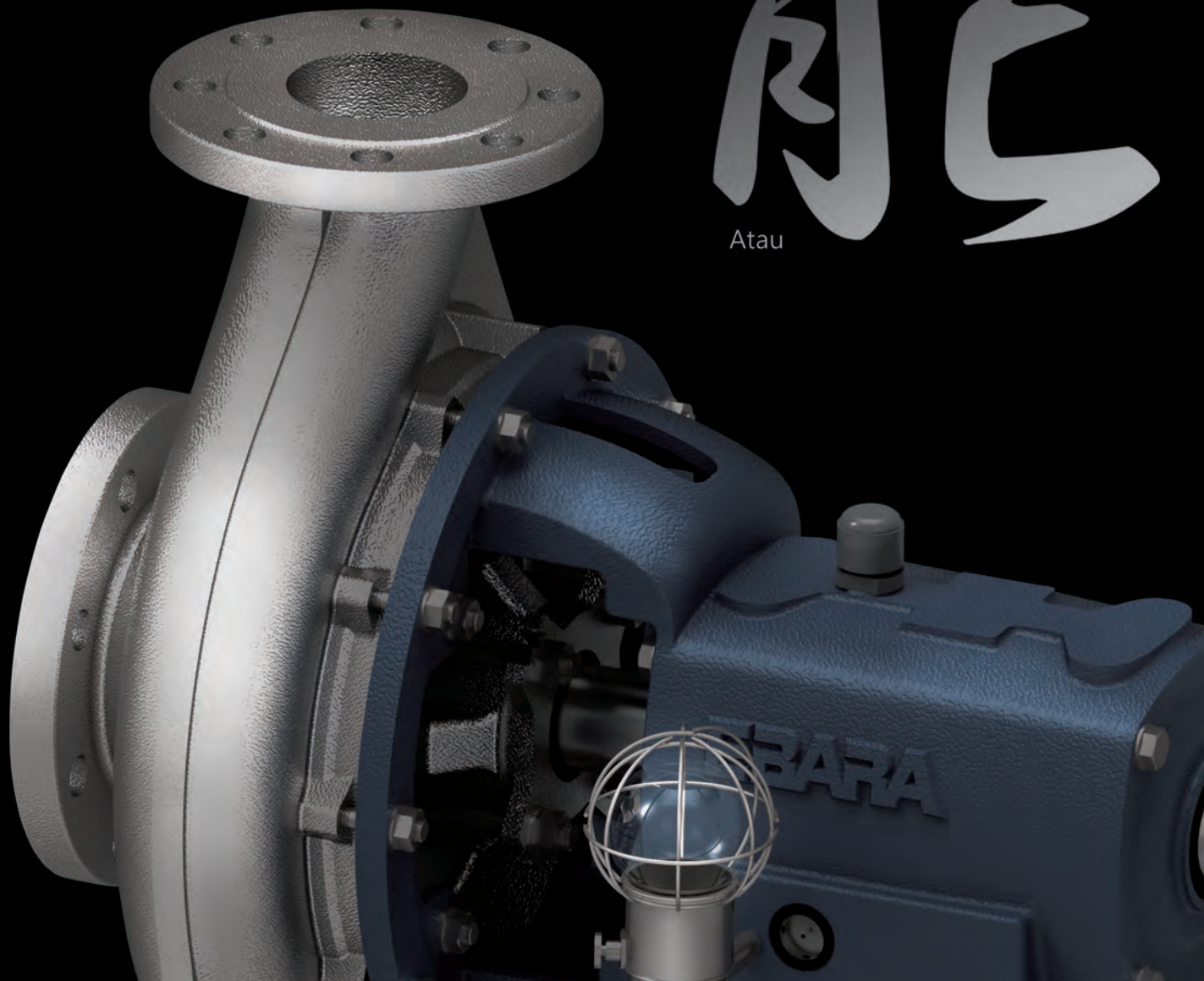
ISO2858/5199

eDYNAMiQ

Eco, Dynamic and Integrated Quality

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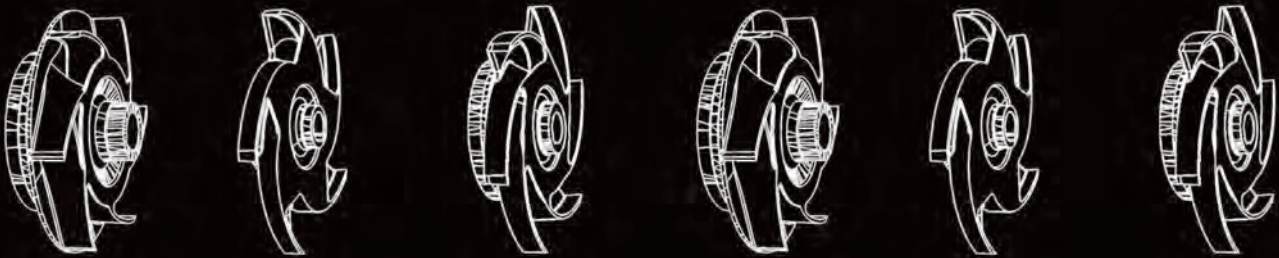
Atau



# 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 1400m<sup>3</sup>/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



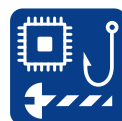
- Motor vehicle



- Steel



- Paper and pulp



- Semiconductor
- Metal goods
- Fisheries

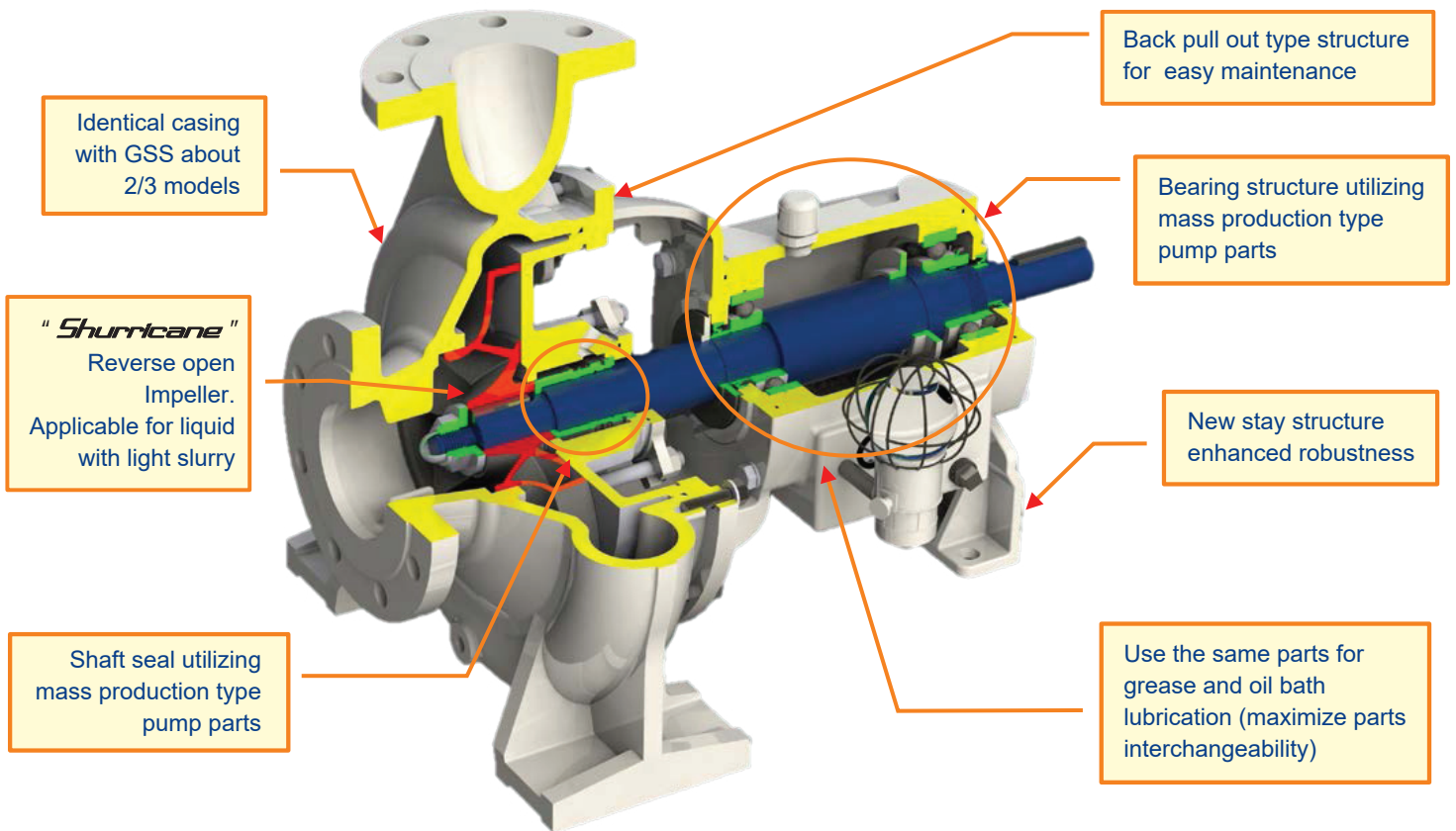


- Food

- **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.

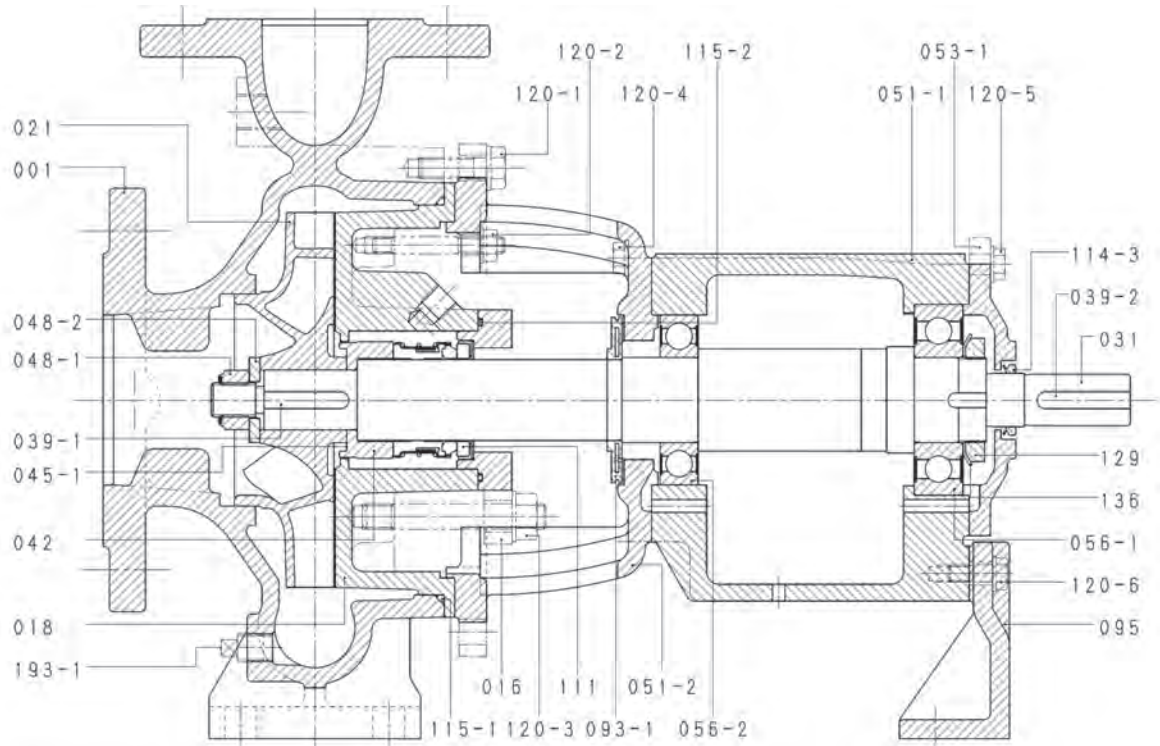
## Main Applications

- **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

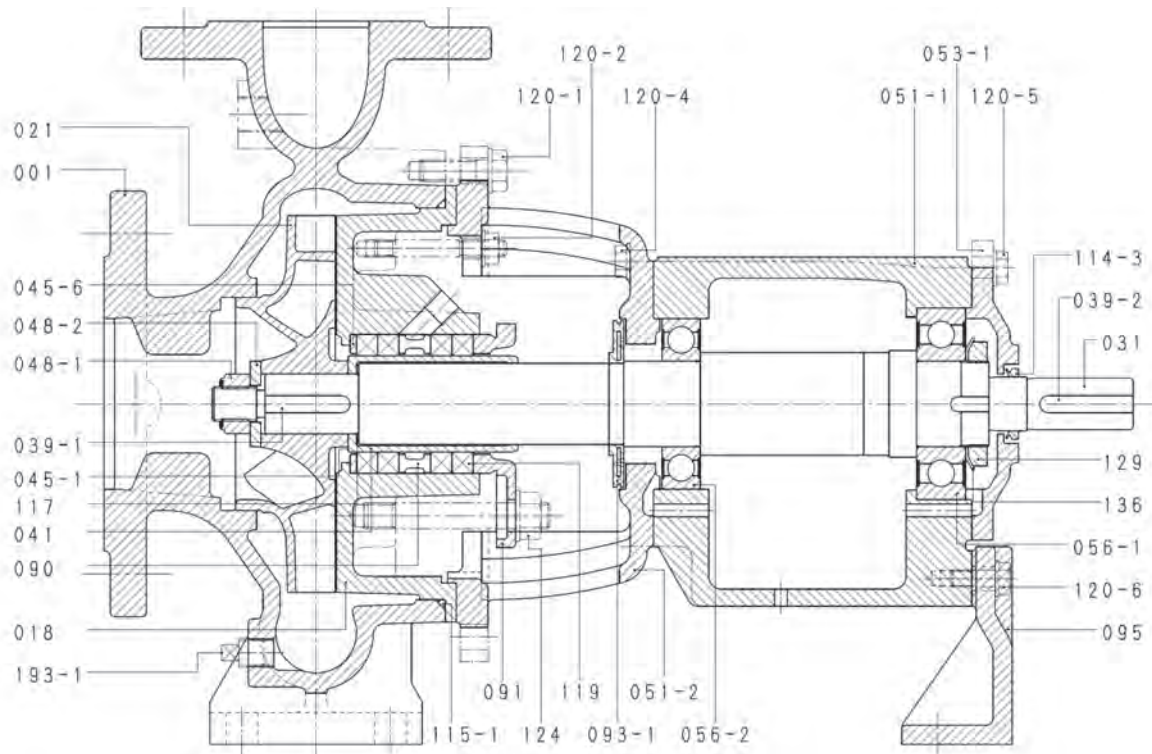
(\*3) for SHAFT NO. 75AB, 90 except 200-150-315

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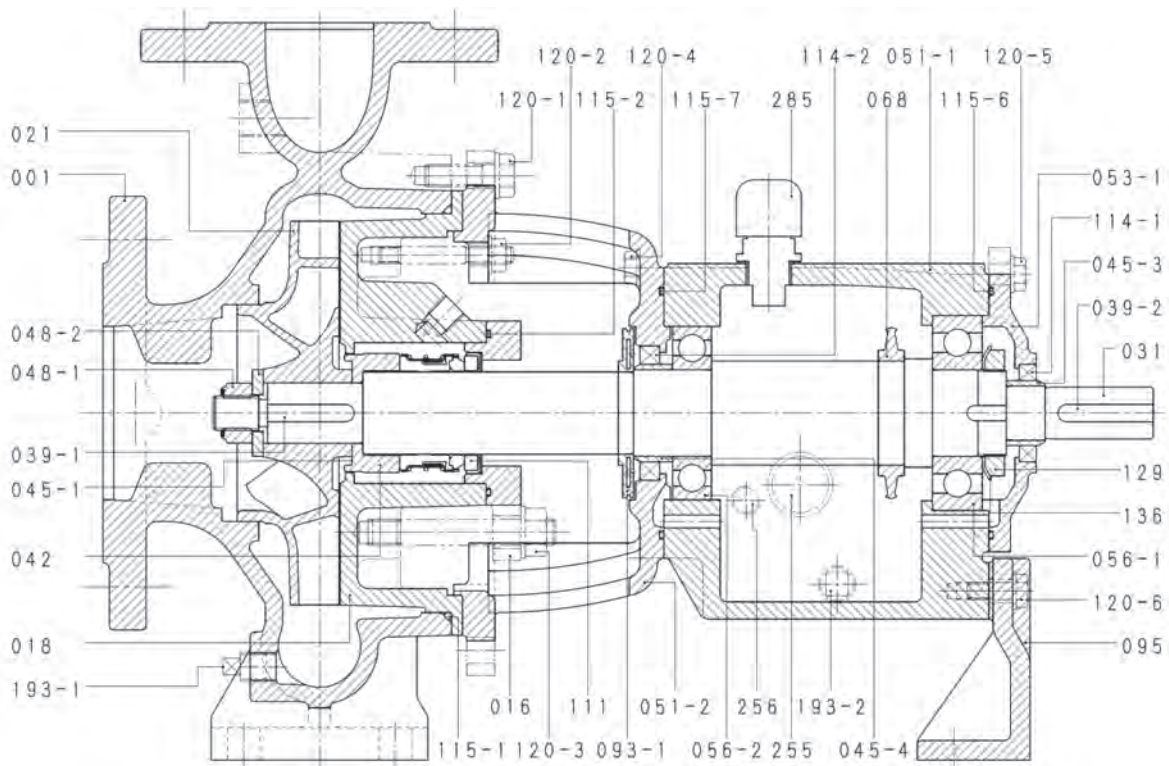
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(\*4) SHAFT NO. 75AB, 90 only

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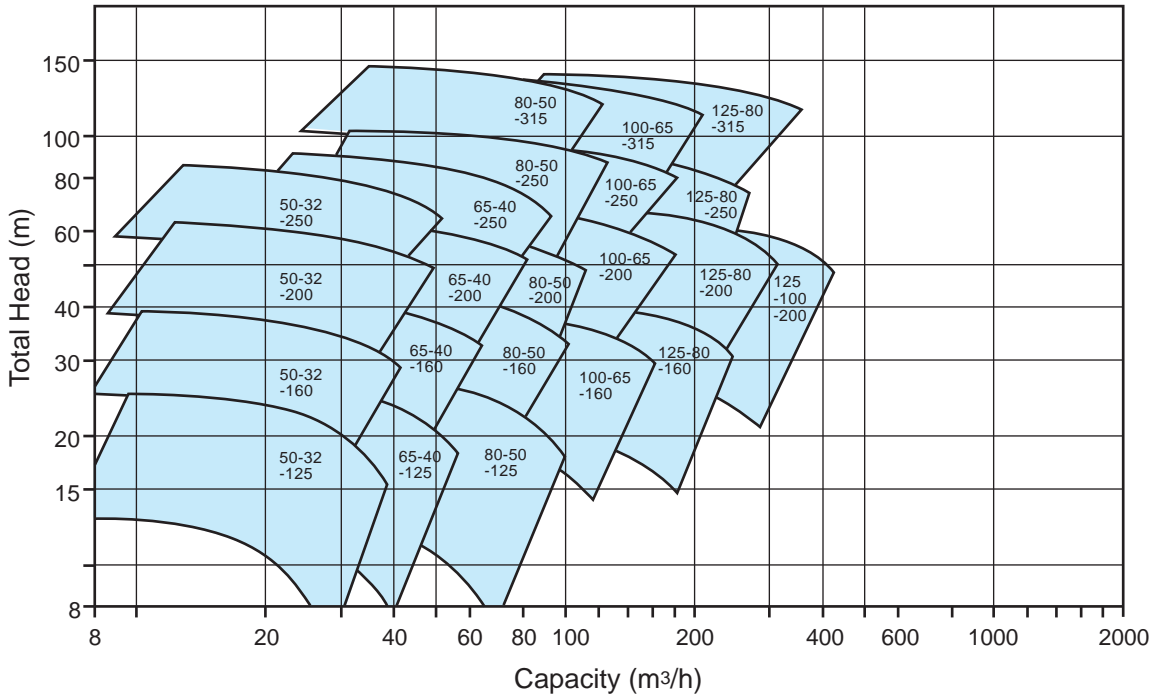
(\*4) SHAFT NO. 75AB, 90 only

(\*5) MAGNETIC TYPE

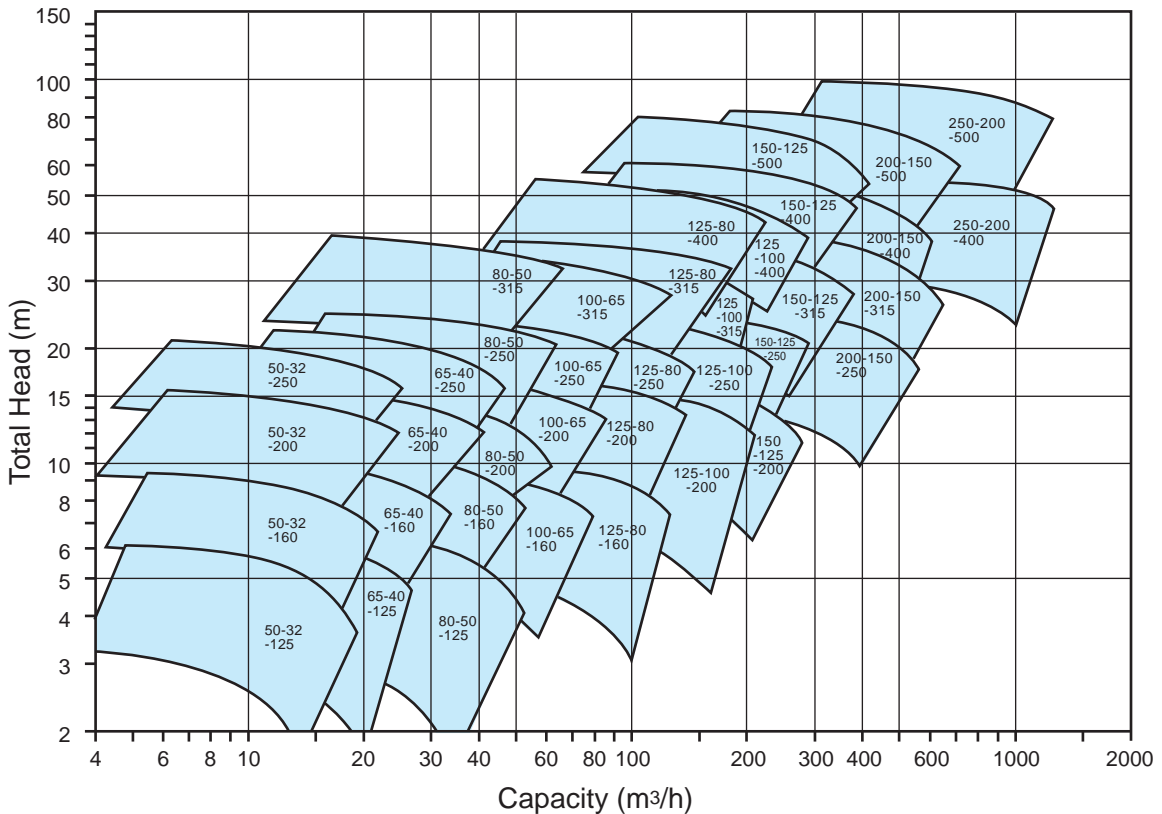
(\*6) OPTIONAL

## SELECTION CHART

2 Pole



4 Pole



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



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Authorised dealer: