

A3PH High Pressure Piston Pumps

High Pressure Hydraulic Piston Pumps, 600-700 Bar Working Pressure,
High Pressure, High Rotational Speed, High Efficiency, Slim Design.
Cast Iron Pump Body, Re-Designed.

Designation;

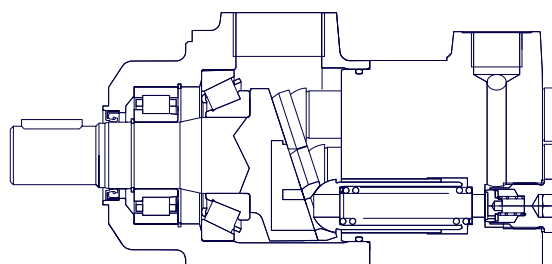
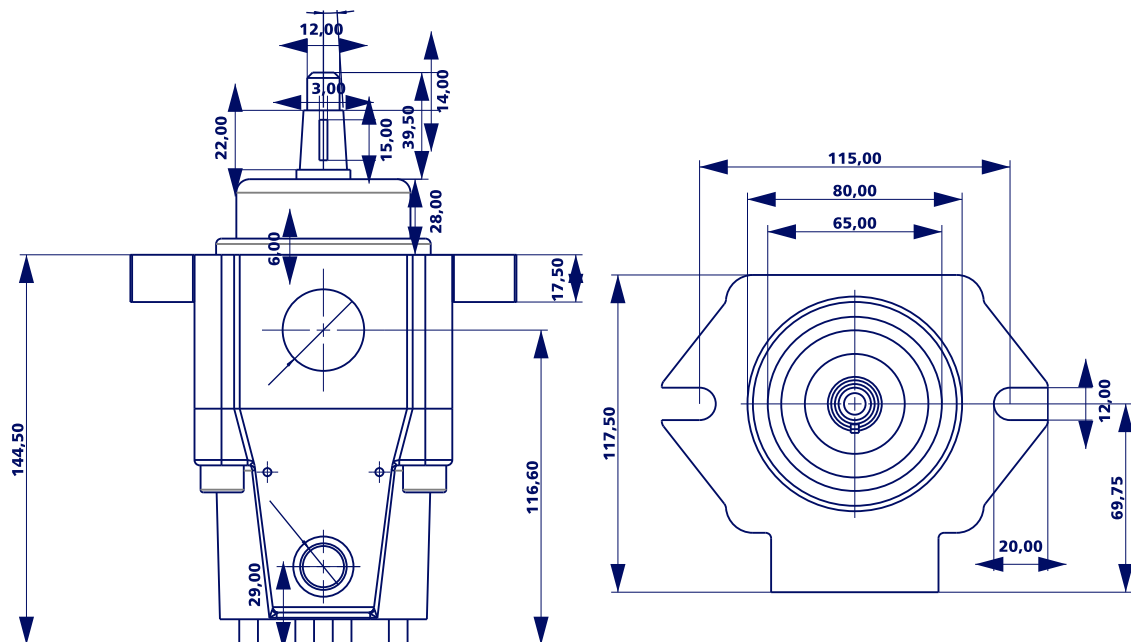
02 Liter, 04 Liter, 06 Liter, 12 Liter,
15 Liter, 22 Liter.

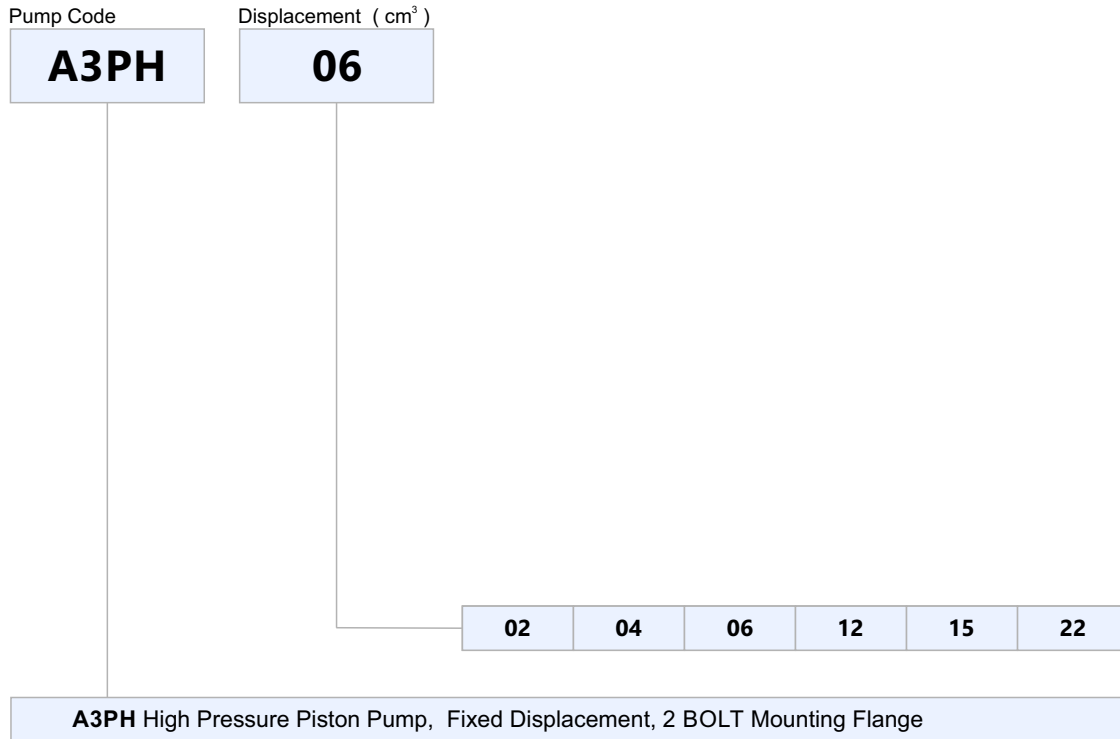


Hidrapac **Store**

www.HIDRAPAC.com.tr

		02	04	06	12	15	22
Displacement	Liter	1,56	2,70	4,40	7,80	10,50	14,73
Theoretical oil flow l/min at pump speed	1000 rpm	1,56	2,70	4,40	7,80	10,50	14,73
	1500 rpm	2,34	4,05	6,60	11,70	15,75	22,09
Maximum Pump Speed							
- Continuous	rpm	3000	3000	3000	2800	2800	2800
- Limited	rpm	3500	3500	3500	3000	3000	3000
Max. Continuous Pressure	bar	600	600	600	450	400	400
Max. Peak Pressure	bar	700	700	700	500	500	500
Weight							
- Without inlet fitting	kg	5,50	5,50	5,50	8,00	8,00	8,00
- With inlet fitting	kg	5,60	5,60	5,60	8,15	8,15	8,15
Fluid		Mineral Based Hydraulic Oils					
Inlet		G 1"	G 1"	G 1"	G1 1/4"	G1 1/4"	G1 1/4"
Outlet		G 3/8"	G 3/8"	G 3/8"	G 1/2"	G 1/2"	G 1/2"

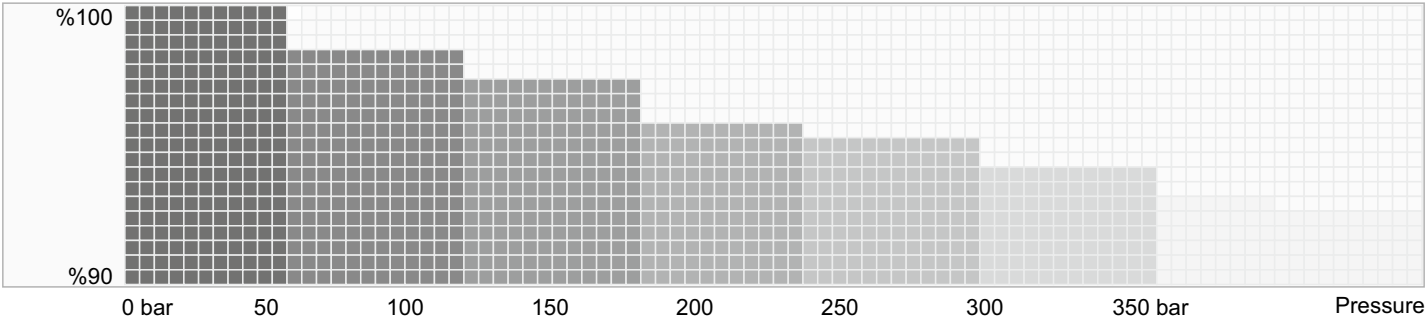




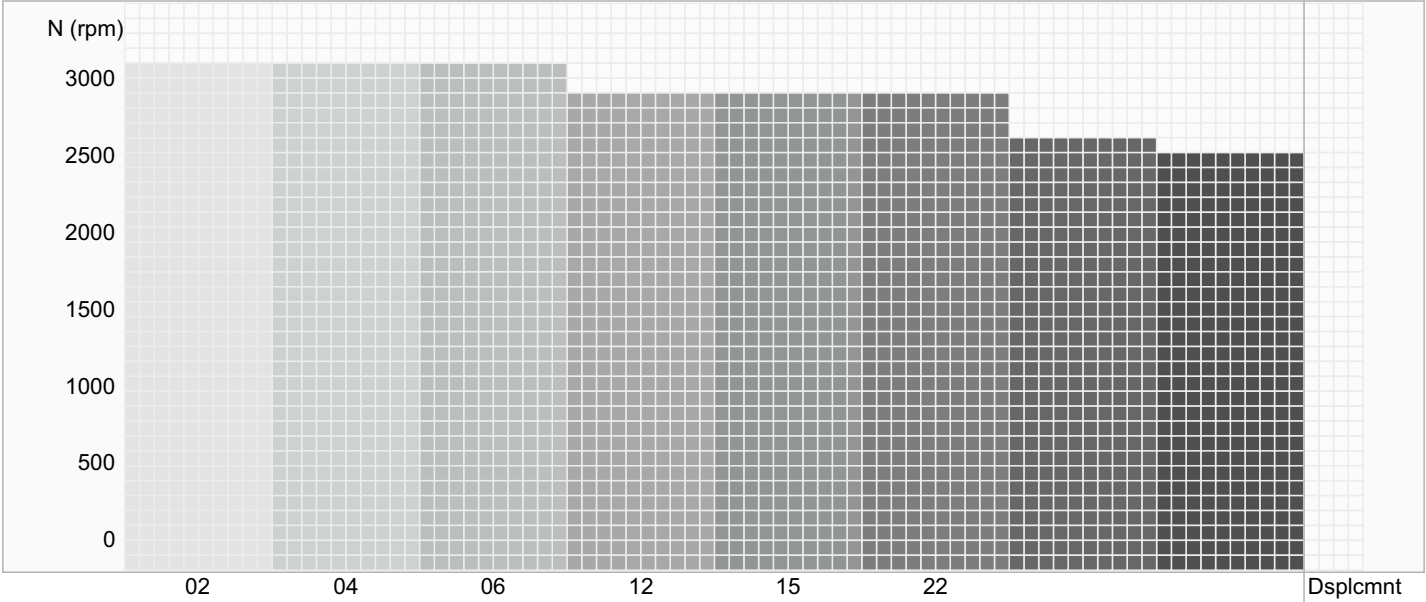
Formulas			
Pump Output Flow	GPM	$GPM = (Speed \text{ (rpm)} \times disp. \text{ (cu. in.)}) / 231$	$GPM = (n \times d) / 231$
Pump Input Horsepower	HP	$HP = GPM \times Pressure \text{ (psi)} / 1714 \times Efficiency$	$HP = (Q \times P) / 1714 \times E$
Pump Efficiency	E	Overall Efficiency = Output HP / Input HP	$E_{overall} = HP_{out} / HP_{in} \times 100$
		Overall Efficiency = Volumetric Eff. $\times$ Mechanical Eff.	$E_{overall} = EffVol. \times EffMech.$
Pump Volumetric Efficiency	E	Volumetric Efficiency = Actual Flow Rate Output (GPM) / Theoretical Flow Rate Output (GPM) $\times$ 100	$EffVol. = Q_{act.} / Q_{theo.} \times 100$
Pump Mechanical Efficiency	E	Mechanical Efficiency = Theoretical Torque to Drive / Actual Torque to Drive $\times$ 100	$EffMech = T_{theo.} / T_{act.} \times 100$
Pump Displacement	CIPR	$Displcmnt \text{ (In.}^3 \text{ / rev.)} = Flow \text{ Rate (GPM)} \times 231 / Pump \text{ RPM}$	$CIPR = GPM \times 231 / RPM$
Pump Torque	T	Torque = Horsepower $\times$ 63025 / RPM	$T = 63025 \times HP / RPM$
		Torque = Pressure (PSIG) $\times$ Pump Displacement (CIPR) / 2π	$T = P \times CIPR / 6.28$

- Horsepower for driving a pump** : For every 1 hp of drive, the equivalent of 1 gpm @ 1500 psi can be produced.
- Horsepower for idling a pump** : To idle a pump when it is unloaded will require about 5% of it's full rated power
- Wattage for heating hydraulic oil** : Each watt will raise the temperature of 1 gallon of oil by 1° F. per hour.
- Flow velocity in hydraulic lines** : Pump suction lines 2 to 4 feet per second, pressure lines up to 500 psi - 10 to 15 ft./sec., pressure lines 500 to 3000 psi - 15 to 20 ft./sec.; all oil lines in air-over-oil systems; 4 ft./sec.

Efficiency Curves (1000 rpm)



Flow



[illegible]

CW
Rotation :
Fixed-Clock Wise

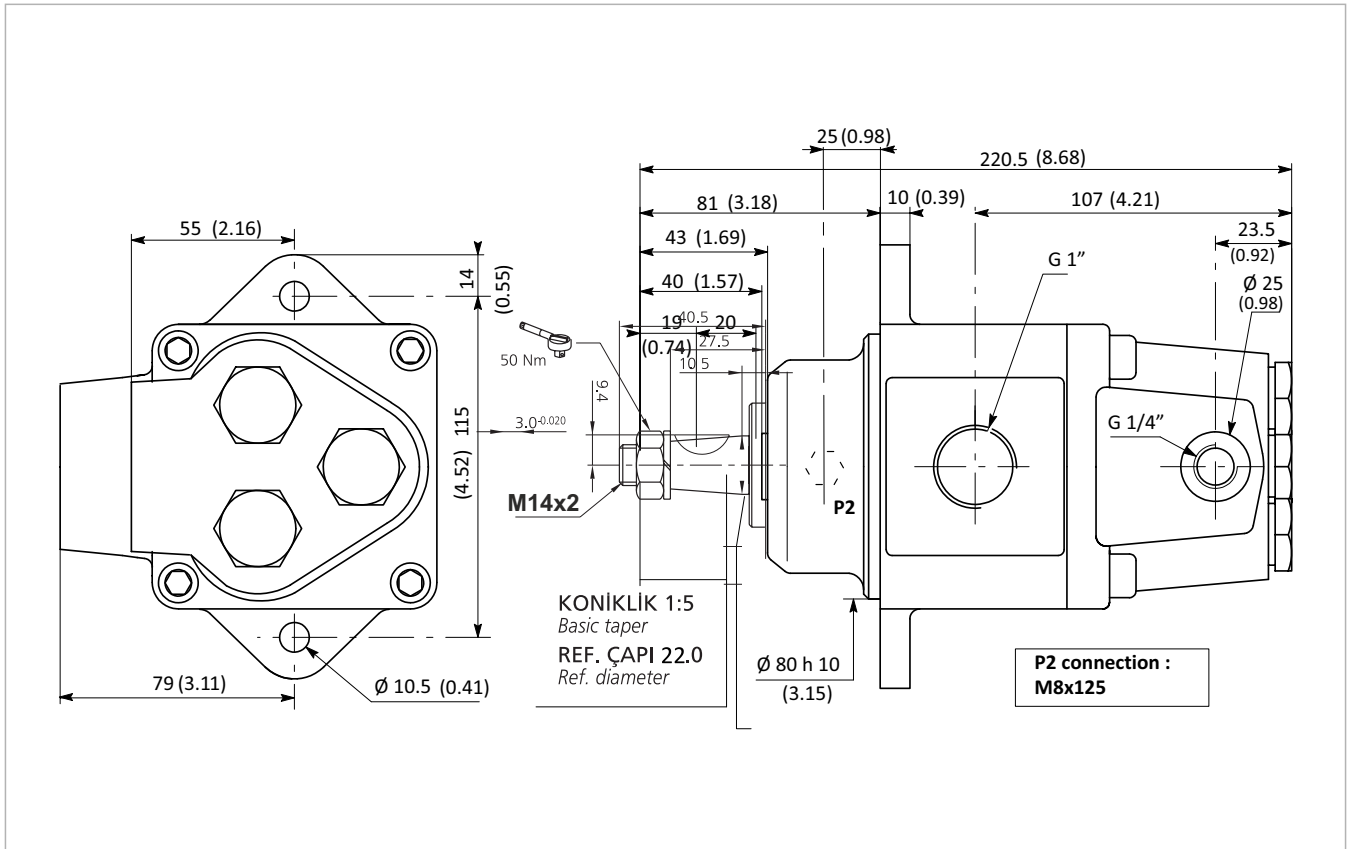
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Rotation :
Fixed-Clock Wise

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Rotation :
Fixed-Clock Wise

A3PH 12 Liter - High Pressure Piston Pump



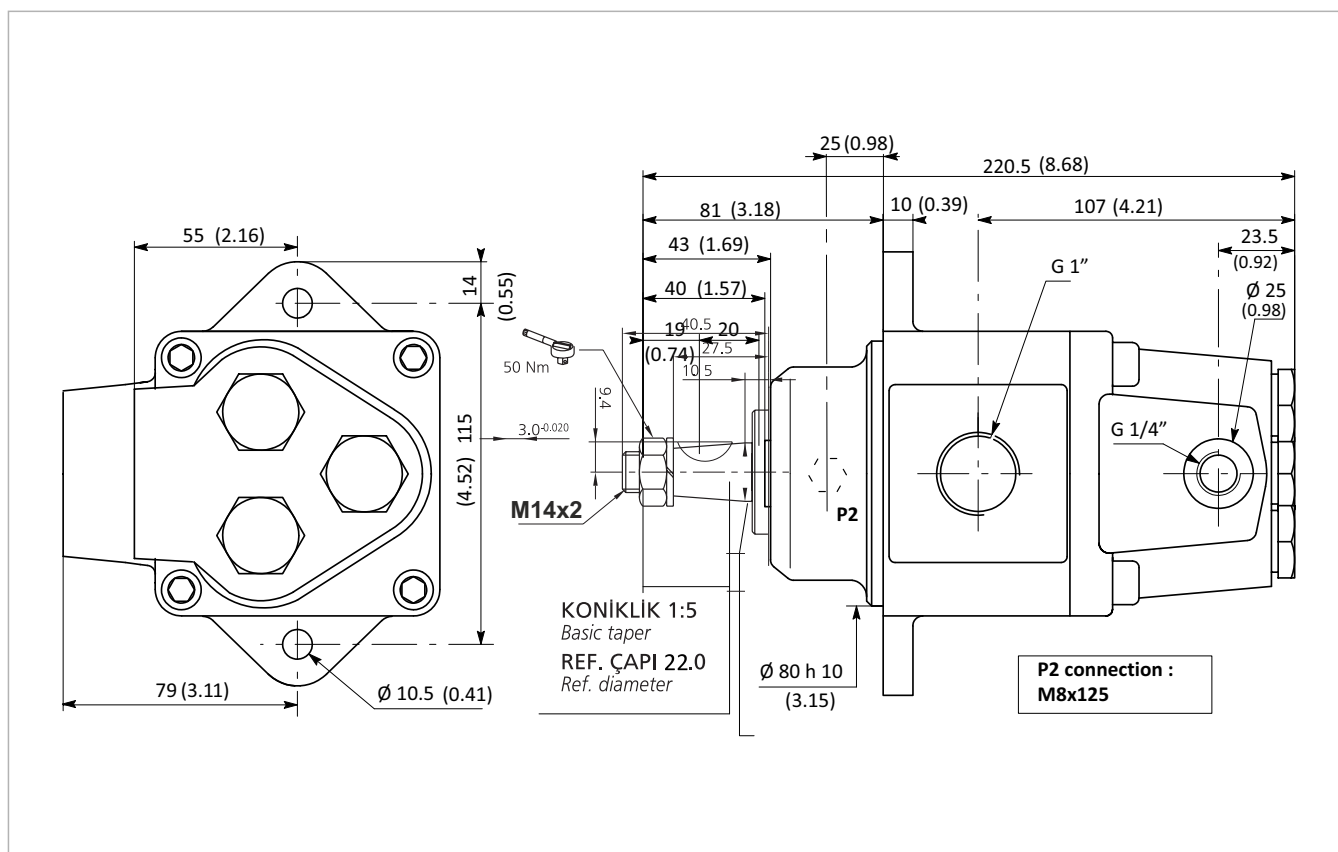
x 1000 rpm	7,80 Liter
x 1500 rpm	11,70 Liter
Max. Continuous Pump Speed	2800 rpm
Max. Limited Pump Speed	3000 rpm
Max. Continuous Pressure	450 bar
Max. Intermit. Peak Pressure	500 bar
Weight without inlet fitting	8,00 kg
Weight with inlet fitting	8,15 kg
Fluid	Min.B.Hyd.Oil
Inlet	G1 1/4"
Outlet	G 1/2"



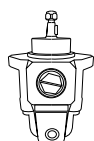
CW

Rotation :
Fixed-Clock Wise

A3PH 15 Liter - High Pressure Piston Pump



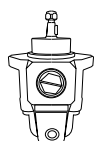
x 1000 rpm	10,50 Liter
x 1500 rpm	15,75 Liter
Max. Continuous Pump Speed	2800 rpm
Max. Limited Pump Speed	3000 rpm
Max. Continuous Pressure	400 bar
Max. Intermit. Peak Pressure	450 bar
Weight without inlet fitting	8,00 kg
Weight with inlet fitting	8,15 kg
Fluid	Min.B.Hyd.Oil
Inlet	G1 1/4"
Outlet	G 1/2"



CW

Rotation :
Fixed-Clock Wise

x 1000 rpm	14,73 Liter
x 1500 rpm	22,09 Liter
Max. Continuous Pump Speed	2800 rpm
Max. Limited Pump Speed	3000 rpm
Max. Continuous Pressure	400 bar
Max. Intermit. Peak Pressure	500 bar
Weight without inlet fitting	8,00 kg
Weight with inlet fitting	8,15 kg
Fluid	Min.B.Hyd.Oil
Inlet	G1 1/4"
Outlet	G 1/2"



CW

Rotation :
Fixed-Clock Wise

High Pressure Piston Pumps designed for Industrial Area.

INSTALLATION

- Remove the protective covers off the inlet and output ports when connecting tubes or hosing.
- Rinse the tank and the tubes or hoses well to remove any possible contaminants.
- Before connecting up the pump inlet port, fill the tank and allow the oil to flow into a receptacle. This oil can be re-used after proper filtration.

OIL SUPPLY

Oil and supply line should be clean, and the supply line is airtight.

SUCTION LINE

Connect the suction line, tighten the suction connection bolts in diametric pairs.
Connect the pressure line.

REPAIR

We offers a comprehensive range of services for the repair of our Piston Pumps.
Repairs to the High Pressure Pump may only be performed by authorized, skilled and instructed personnel.
Only use original and pre-installed our spare parts from supplied to Manufacturer..

Tested and pre-installed pumps successful repair requiring only little time.

SPARE PARTS

The spare parts list and the pump order specific.
When ordering spare parts, quote the material and complete Ordering code number of the Piston Pump as well as the right numbers of the spare parts.

RISK OF DAMAGE!

Do not touch the drive shaft of the Piston Pump
Do not touch sensor, valves and fittings
Do not touch sealing surfaces.

DIMENSIONS & WEIGHTS

		02	04	06	12	15	22
- Without inlet fitting	kg	5,50	5,50	5,50	8,00	8,00	8,00
- With inlet fitting	kg	5,60	5,60	5,60	8,15	8,15	8,15

Address all questions regarding spare parts to your responsible Our Service Partner or the technical service department of the manufacture's plant / factory for the Piston Pumps.

**AVAILABLE VIA E-MAIL ON REQUEST OR EACH PUMP IS
SUPPLIED VIA STARTING AND INSTALLATION DATASHEETS**

Hydraulic Pumps



K2FA (DIN)

BENT AXIS PISTON PUMPS



K2FL (DIN)

ALUMINUM BODY
BENT AXIS PISTON PUMPS



A2FD (DIN)

DUAL FLOW
BENT AXIS PISTON PUMPS



A2FO (ISO)

BENT AXIS PISTON PUMPS



A2FS (SAE)

BENT AXIS PISTON PUMPS



AXVP Series

VARIABLE DISPLACEMENT
PISTON PUMPS



A3PP Series

AXIAL PISTON PUMPS



A3PH Series

HIGH PRESSURE
PISTON PUMPS



ByPass Valve

FOR
BENT AXIS PISTON PUMPS



LS Adapters

FOR
VARIABLE PISTON PUMPS

Hydraulic Motors



K2FM (DIN)

BENT AXIS PISTON MOTORS



A2FM (ISO)

BENT AXIS PISTON MOTORS



A2MS (SAE)

BENT AXIS PISTON MOTORS



A2FE (FixedPlug)

BENT AXIS PISTON MOTORS



Anti Cavitation

VALVE
BENT AXIS PISTON MOTORS

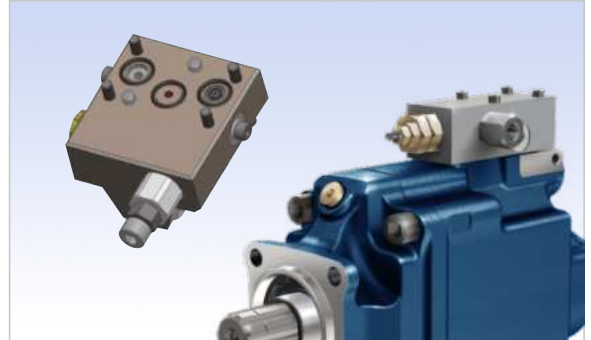
ByPass Valve

for Bent Axis Piston Pumps



LS Adapter

for Variable Displacement Piston Pump



Suction Fittings

for Bent Axis Piston Pumps



Flushing Valve

for Bent Axis Piston Motors



Adapter

for Bent Axis Piston Pumps



Flange, Couplar

for Bent Axis Piston Pumps



Hydraulic Pumps, Hydraulic Motors

Bent Axis Hydraulic Piston Pumps, Bent Axis Piston Motors,
Dual Flow Hydraulic Piston Pumps, Variable Displacement Piston Pumps,
High Pressure Piston Pumps, Straight Axial Piston Pumps..



Address;

HIDRAPAC HYDRAULIC PUMP & MOTORS

Address; (PRODUCTION)

Fevzicakmak Mah. Sila Cad. Kobisan 3 San. Sit.
No: 73 / C Karatay – Konya, PO Code; 42050, Turkiye

Address; (ASSEMBLE, SHIPMENT)

Fevzicakmak Mah. Sila Cad. Kobisan 3 San. Sit.
No: 71 / AD Karatay – Konya, PO Code; 42050, Turkiye

Phone; +90 551 111 77 44