

Industrial  
Hydraulics

Mobile  
Hydraulics

Hydraulic  
Power Packs

Hydraulic  
Cylinders

Servo  
Hydraulics



**THM HUADE HYDRAULICS (P) LTD**

F-127, PHASE - VIII, FOCAL POINT, LUDHIANA - 141010 (PUNJAB) INDIA

PHONE: +91 88722-42200, +91 88722-42500

E-mail: salesho@thmhuade.com

Website: www.thmhuade.com

***We perform Best  
under Pressure!***

follow us:

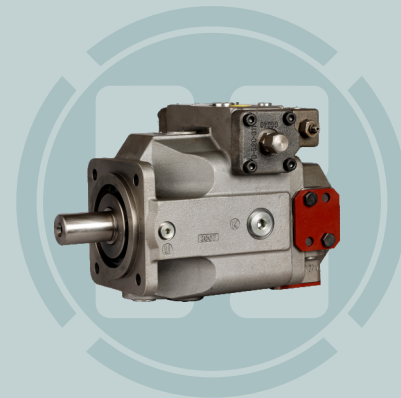


www.thmhuade.com





*We perform Best  
under Pressure!*



### About Us

THM Huade Hydraulics (P) Ltd, Ludhiana, is the indian arm of Beijing Huade Hydraulics Industrial Group Co., Ltd,, which is one the largest manufacturers of Hydraulics components in China, holding a strong presence and manufacturing base with 5 plants for different product group with the technology of the group introduced from Germany, the range is comprehensive and includes a full spectrum of valves and pumps

Beijing Huade Hydraulics, is a large scale Chinese government initiative originally established as a joint venture company in Beijing, PRC during/on July 13th, 1995, named as "Rexroth (Beijing) Hydraulic Co.Ltd."

The joint venture was terminated in 2002 and the company was renamed as Beijing Huade Hydraulics Industrial Group Co. Ltd, hence operating independently across the globe.

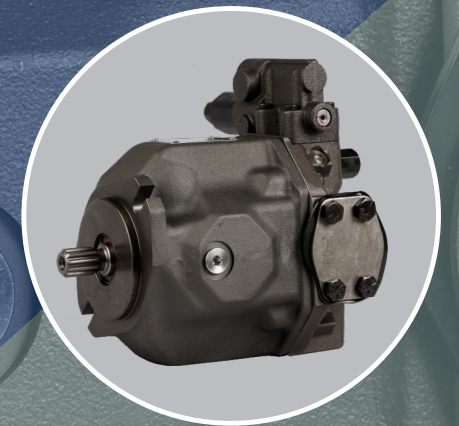
Besides representing these quality products, THM-Huade can also design and produce hydraulic systems for various applications. We ensure that our customers are given all the necessary support and taken care of from the day they use our products.

The Vision of the group : "To be the most preferred suppliers in this field of Hydraulics." We are accumulating stocks and appointing dealer network to offer our products and the shelf

Channel Partner :



# Hydraulic Components & Control Systems



CONTENTS	PAGE NO.
AXIAL PISTON PUMPS	02
AXIAL PISTON MOTORS	06
ORBITAL MOTORS	07
ABER'S HYDRAULIC PISTON PUMPS	08
ABER'S HYDRAULIC GEAR PUMPS	09
ABER'S HYDRAULIC MOTORS	09
HIGH PRESSURE GEAR PUMPS	12
INTERNAL GEAR PUMPS	14
VANE PUMPS	14
EXCAVATORS SOLUTIONS	18
DIRECTIONAL VALVES	20
CHECK VALVES	23
PRESSURE VALVES	24
PROPORTIONAL VALVES	26
FLOW CONTROL VALVES	29
ACCESSORIES	30
ELECTRIC COMPONENTS	32
SPARES & SEAL KITS	32
AIR OIL COOLERS	33
HYDRAULIC CYLINDERS	33
MODULAR VALVES	34
MEGMEET CONTROLLER FOR IMM	34



# HYDRAULIC PUMPS

## OPEN CIRCUIT AXIAL PISTON PUMPS

### A2F

Fixed-displacement pump/motor A2F



Size: 10, 12, 23, 28, 45, 55, 63, 80, 107, 125, 160, 200, 250, 355, 500

**Note:**

Fixed displacement pump/motor A2F is an axial piston of bent axis design, suitable for use in both open and closed circuit hydrostatic drives. Output flow is proportional to the flow of fluid through the pump. Output speed is proportional to the flow of fluid through the motor and inversely proportional to motor displacement. Output torque increase with the pressure drop across the motor between the high and low pressure sides.

**Particular Characteristics:**

With high performance spheric valve plate rotary group.  
Automatic centering  
High Efficiency  
Long Life  
Low Noise

### A2FO

Fixed-displacement bent axis piston pump



Size: 10, 12, 16, 23, 28, 32, 45, 56, 63, 80, 90, 107, 125, 160, 180, 200

**Note:**

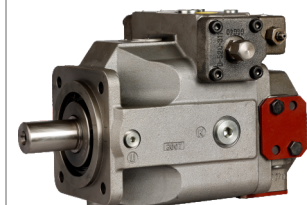
Axial piston pump, bent axis type, fixed displacement suitable for open circuits.

**Features:**

Fixed displacement pump A2FO of axial piston, bent axis design is made suitable for hydrostatic drives in open circuits, suitable for use in mobile or industrial application, output flow is proportional to drive speed and displacement, the drive shaft bearings are designed to give the service life expect in these areas of operation, careful selection to the displacements offered, permit sizes to be matched to practically every application

### A4VSO

Variable displacement pump A4VSO



Size: 40, 71, 125, 180, 250, 300, 355

**Note:**

Pump A4VSO of swash plate design is design for hydrostatic transmission in an open circuit. Flow is proportional to input speed & displacement, and is infinitely variable by adjustment of the swash plate.

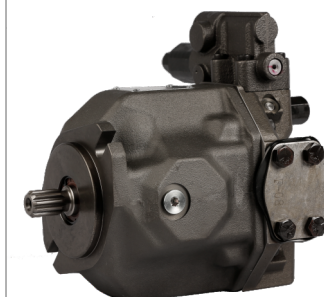
**Feature:**

Slot-control swash plate design, continuous variable displacement, good suction characteristics, permissible continues operating pressure 350bar, low noise level, long service life, the drive shaft capable of absorbing the axial and radial loads, high power/weight ratio, modular design, the pump combinations possible, pump position optional, mounting position optional, operation on HFC Fluids under reduced operational parameter possible in preparation.

### A10V(S)O

Variable displacement Axial Piston Pump

Size: 10, 18, 28, 45, 71, 100, 140



**Note:**

Axial piston pump, swash plate design for hydrostatic open circuit system used in varied medium duty application in industrial & mobile machines.

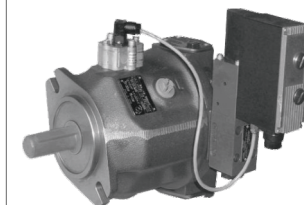
**Features:**

Flow is proportional to drive speed and displacement it can be infinitely varied by adjustment of the swash plate ISO mounting flange, flange connection to SAE metric, 2 case drain port, good suction characteristics, permissible continuous pressure 280 bar, low noise level, long service life, axial and radial loading of drive shaft possible, high power-weight ratio, wide range of controls, short response times, through drive option for multi-circuit system

## OPEN CIRCUIT AXIAL PISTON PUMPS

### A10VSODFE/DFEE

Control type SYDFE/SYDFEE



Size: 28, 45, 71, 100, 140

**Note:**

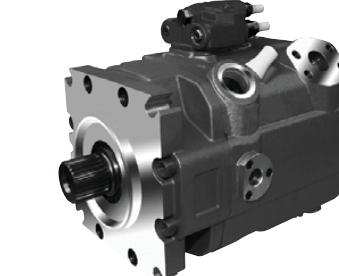
Axial piston pump, swash plate design for hydrostatic open circuit system used in varied medium duty application in industrial & mobile machines.

**Features:**

Flow is proportional to drive speed and displacement it can be infinitely varied by adjustment of the swash-plate ISO mounting flange, flange connection to SAE metric, 2 case drain port, good suction characteristics, permissible continuous pressure 280 bar, low noise level, long service life, axial and radial loading of drive shaft possible, high power-weight ratio, wide range of controls, short response times, through drive option for multi-circuit system

### A15VSO

Variable Axial Piston Pump



**Open circuit**  
**Sizes 110 to 280**

**Nominal pressure: 350 bar**  
**Maximum pressure: 420 bar**

**Features:**

Variable axial piston pump of swash plate design for hydrostatic drives in open circuit. The flow is proportional to the drive speed and displacement. Compact design  
High efficiency  
High power density  
Low noise level

### A7V

Variable displacement pump A7V



Size: 20, 28, 40, 55, 58, 80, 78, 107, 117, 160, 250, 355, 500

**Note:**

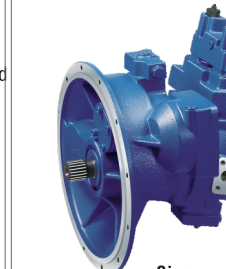
Variable displacement pump, axial piston bent axis design, for hydrostatic transmissions in open circuits. The flow is proportional to the drive speed and the displacement and steplessly variable at constant drive speed. Comprehensive program of control devices for every control and regulating function. Operation on both mineral and fire-resistant fluids

**Features:**

High performance rotary group, the drive shaft capable of absorbing the radial loads, long life, low noise.

### A8V

Variable double pump A8V



Size: 28, 55, 58, 80, 107, 125, 160

**Note:**

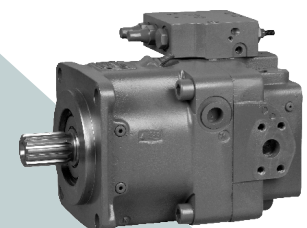
Two variable pumps in a common housing, the splitter box, an SAE flange for direct mounting on to the prime mover and the control device usually summation HP control. Flow is proportional to speed by change the swivel angle.

**Features:**

The various design options with auxiliary drive and the possibility of multi-circuit control allow optimum matching to individual drive applications. High pressure long service life.

### A11VO/A11VLO

Variable displacement pump with axial piston drive



Displacement: 40~260 ml/r

**Note:**

Variable displacement pump with axial piston drive swash plate design for hydrostatic drives in open circuit

**Features:**

Variable displacement pump with axial piston drive swash plate design for hydrostatic drives in open circuits. Designed primarily for use in mobile applications. Pump operation either self-priming, with tank charging or charging pump. A comprehensive range of variable units is available for different control functions. Power can be adjusted from the outside, even when the machine is running. The through drive is suitable for attachment of gear pumps and axial piston pumps up to the same size, i.e. 100% through drive. The volume flow is adjustable in proportion to the drive speed.

### A2VK

Variable Pump



Size: 12, 28, 55, 107

**Series 1 and 4, for open circuits**

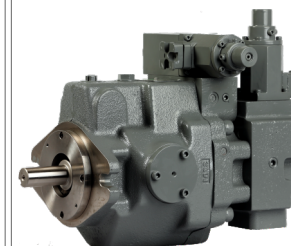
**Nominal pressure upto 250 bar**

**Features:**

High metering accuracy and repeatability of the variable flows.  
Manual control via handwheel with built-in-precision measuring scale or alternatively mechanical rod control, for mounting pneumatic or hydraulic control cylinders (remote control)  
Operating pressure up to 250 bar  
Low suction pressure, even when pumping highly viscous fluids  
Very little pulsation of flow

### "A" Series

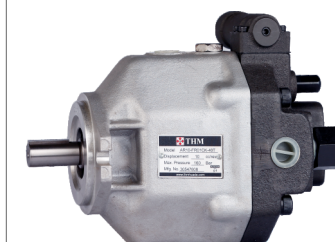
Variable displacement piston pump



High volumetric efficiency upto 98% and overall efficiency is more than 90%. Low noise level. the "A" Series variable displacement pump accomplish high energy saving characteristics, widely used in plastic injection machinery, machine tools and medium duty industrial application covering a broad segment of the industry requirement. Two kinds of control type, which are pressure compensator type("01" type) and proportional electro-hydraulic load sensing type("04" type).

### AR SERIES

Axial Piston Pump



Sizes : 10, 16, 22 cc/rev

**Nominal pressure: 165 bar**

**Max. Pressure: 210 bar**

**Features:**

Small and light design, space saving.  
Special alloy material, power saving, low noise, long life.  
Easy to assemble, clean appearance and light weight. Application for CNC lathe machine, bending machine, punch hydraulic press, high efficiency machine.

### HY SERIES

Variable displacement axial piston pump



**Displacement: 10~320 ml/r**  
**Max. pressure up to 400 bar**

**Features:**

The HY14-1B Hydraulic Pump is of axial piston type with hydrostatic film lubrication of bearing. It makes a feature of compact size, light weight, high efficiency, longer life, simple construction and easy maintenance. This Hydraulic Pump nominal displacement up to (10, 25, 63, 160, 250) ml/r and carries its rating pressure up to 315Bar and a maximum pressure up to 400Bar, and can run with a speed upto 1500rpm.



...in service more than a decade!



## OPEN CIRCUIT AXIAL PISTON PUMPS

### MV Series Bi-directional Axial Piston Pump For Servo Applications



**Sizes:** 8, 10, 12, 15, 18, 23, 25, 38, 42, 50, 70  
**Operating pressure** 175 Bar  
**Max. Pressure** 250 bar  
**Features:**  
 MV Series pump, new design for changeable angle of swash plate, wide applications. Special design, low noise level during full pressure time. Modular control, easy to design system, advantages are: power saving, small size, low cost. Low power consuming, low oil temperature rising, suitable applications for assembling small power units

### CY SERIES Fixed-displacement pump/motor

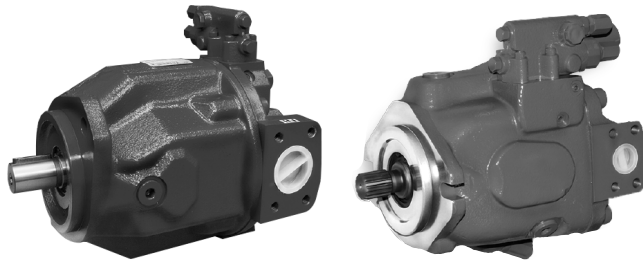


Size 1.5.....400

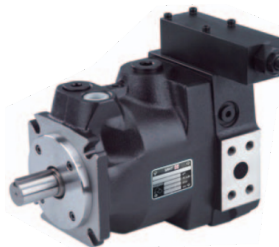
**Series 14-1B**  
**Nominal pressure up to 350 bar**  
**Features:**  
 CY 14 type axial piston pump is to use the oil pan with oil, piston cylinder axis of rotation between the shoe and the variable because the head, using a hydrostatic equilibrium structures with oil pan and cylinder block, as compared with other types of pumps, it has a simple structure, small size, high efficiency, long life, light weight, strong self-priming capacity. It is suitable for machine tools, forging, metallurgy, engineering, mining and other machinery, and other hydraulic transmission system. The pump just want to change the motor oil pan can also be made using a hydraulic motor.

### TP Series Bi-Directional Axial Piston Pump

**Flow:** 30, 50, 90, 110, 140, 170, 200, 250, 320, 480;  
**Max. Pressure:** 320 bar



### PV Axial Piston pump



**Size:** 16.....270  
**Nominal pressure upto 350 bar**

**Features:**  
 New type of swash plate and large servo piston with strong bias spring achieves fast response, reduce the noise due to active decompression of system at down stroke. Wide application in automobile industrial, ships, forging machines, tire machines, injection moulding machines, machine tools, special purpose machine. Nine pistons and new pre-compression technology (pre-compression filter volume) result in unbeaten low outlet flow pulsation. Rigid and FEM - optimized body design for lowest noise level.

### PVB Axial piston pump



**Sizes:** 5, 6, 10, 15  
**Max Pressure:** 2108bar  
**Max Flow:** 391.6 l/min

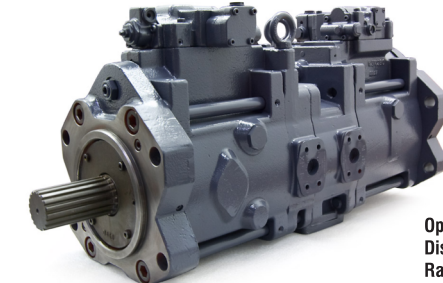
**Introduction**  
 Variable displacement axial-piston pumps in swashplate design are used for hydraulic actuators combined of pump and motor, operating in closed circuit systems. They are used for driving mobile machines like harvesters or rotating technological equipment like transit mixer drums etc.

### K-AP Bent Axis Piston Pump



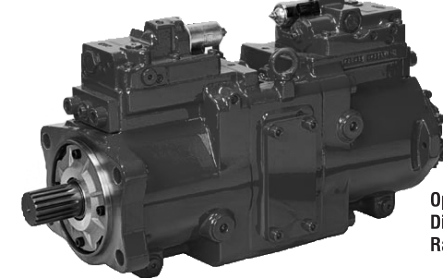
**Sizes:** 22 to 125 cc/rev  
**Max. pressure up to 350 bar**  
**Maximum Speed:** 4300 r/min  
**Minimum Speed:** 1750 r/min

### K3V Series Axial Piston Pump



**Open circuit**  
**Displacement:** 65~280 cm<sup>3</sup>/rev  
**Rated Pressure:** 340 Bar

### K7V Series Axial Piston Pump



**Open circuit**  
**Displacement:** 65~140 cm<sup>3</sup>/rev  
**Rated Pressure:** 350 Bar



## HYDRAULIC PUMPS

## CLOSED CIRCUIT AXIAL PISTON PUMPS

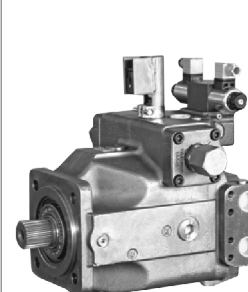
### A4VTG Variable Displacement Axial Piston Pump



Size: 71,90

**Note:**  
 Axial piston pump, swash plate design for hydrostatic close loop circuit system used in varied medium duty application in industrial & mobile machines.  
**Features:**  
 flow is proportional to drive speed and displacement it can be infinitely varied by adjustment of the swash plate ISO mounting flange, flange connection to SAE metric, 2 case drain port, good suction characteristics, permissible continuous pressure 280 bar, low noise level, long service life, axial and radial loading of drive shaft possible, high power-weight ratio, wide range of controls, short response times, through drive option for multi-circuit system.

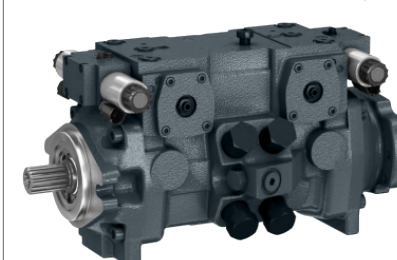
### A4VSG Variable displacement axial piston pump



**Displacement:** 40~750 ml/r  
**Nominal pressure up to 400 bar**  
**Max. pressure up to 450 bar**

**Features:**  
 Axial piston variable displacement pump of swash plate construction for hydrostatic pressure in closed circuit transmission. The flow is proportional to the drive speed and displacement and can be adjusted steplessly. Output flow increases from zero to maximum with swash plate swing angle. When the swash plate passes through the neutral position, the hydraulic oil flow direction will change smoothly. A variety of highly compatible control devices, providing various control and adjustment functions. Each high pressure side is equipped with two relief valves to prevent hydrostatic transmission(pump and motor) overload.

### A22VG Axial Piston Variable Double Pump



**For Closed Circuit**  
**Size:** 45cc/rev  
**Nominal Pressure:** 380 bar  
**Maximum pressure:** 420 bar

### A4VG Variable displacement axial piston pump



**Displacement:** 40~125 ml/r  
**Flow:** 160~356 l/min  
**Max. pressure up to 450 bar**

**Features:**  
 Axial piston variable displacement pump of swash plate construction for hydrostatic pressure in closed circuit transmission. The flow is proportional to the drive speed and displacement and can be adjusted steplessly. Output flow increases from zero to maximum with swash plate swing angle. When the swash plate passes through the neutral position, the hydraulic oil flow direction will change smoothly. A variety of highly compatible control devices, providing various control and adjustment functions. Each high pressure side is equipped with two relief valves to prevent hydrostatic transmission(pump and motor) overload.

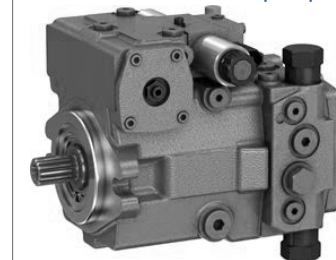
### PVH & PVH2 SERIES Variable Displacement Axial piston pump, Swashplate Design



**Displacement:**  
**PVH:** 33 to 110 cc/rev.  
**PVH2:** 75 to 112 cc/rev.  
**Rated pressure:** 420 bar

**Features:**  
 Variable displacement axial-piston pump for hydraulic systems with closed circuit. They are used in hydrostatic transmission of stroke drive or operating equipment of combines, road and construction mobile machines.  
**Applications:**  
 Combines  
 Concrete mixer trucks  
 Road rollers

### A10VG Axial Piston Variable pump



**Medium pressure pump for closed-circuit applications**  
**Size** 18 ... 63  
**Nominal pressure** 300 bar  
**Maximum pressure** 350 bar  
**Closed circuit**



# HYDRAULIC MOTORS

## AXIAL PISTON MOTORS

### A2FM

Fixed displacement Bent Axis Piston Motor



**Size:** 16...180  
**Nom. Pressure:** 400 bar  
**Features:**  
Fixed displacement motor A2FM of axial piston, bent axis design suitable for hydrostatic drives in open and closed circuits, use in mobile and industrial applications, output speed is proportional to input flow and inversely proportional to displacement, drive torque increases with the pressure drop across the unit, careful selection of the displacement offered, permit sizes to be matched to practically every application, favorable power/weight ratio compact design optimum efficiency, economical conception, one piece piston with piston rings.

### A2FE

Fixed-displacement plug-in motor A2FE



**Size:** 55, 80, 107, 125, 160

**Note:**  
It is mainly installed in the mechanical gearbox, e.g. track drive gearbox.  
**Features:**  
The design of the motor with the mounting flange in the center of the housing allows it to be almost fully integrated into a mechanical gearbox to give an extremely compact unit. You can just plug the motor into the gearbox without considering the tolerance.

### BVD

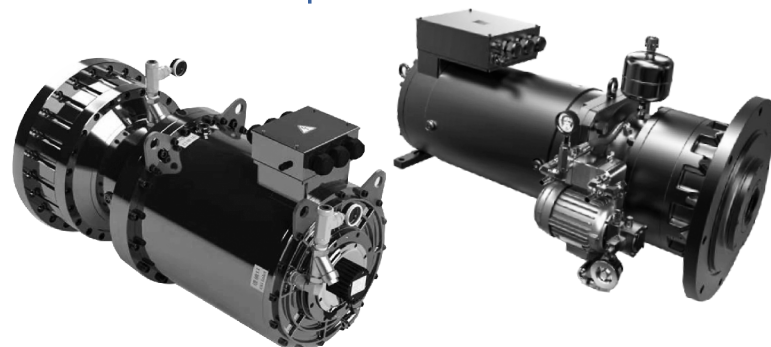
Counterbalance valve



**Size** NG20, 25  
**Nominal pressure** 350 bar  
**Peak pressure** 420 bar  
for travel drives, winch drives and track drives

### TDDG250, 300 & 350 Series

Servo Motor with Gear Box for plastic machines



**Max. Torque:**  
TDDG250: 1402 to 4586 Nm  
TDDG300: 5821 to 13230 Nm (193 rpm)  
TDDG300: 4057 to 16317 Nm (113 rpm)  
TDDG350: 14611 to 22650 Nm  
**Power:** 25 to 393 kW  
**Features:**  
- High Torque  
- Long Life  
- High Efficiency  
- Saving Energy  
- Small Volume and light weight  
- Patented Oil cooling system, will not increase Motor temperature  
- IP65 Protection  
- Smooth housing surface, easy to clean



### A6V

Variable displacement motor A6V



**Size:**  
28, 55, 80, 107, 160, 225, 500

**Note:**  
Variable displacement motor A6V is design for hydrostatic drive. The displacement of infinitely variable in the range  $V_{max}/V_{min} = 3.47$   
**Special Features:**  
Wide control range for hydrostatic drives. Various control regulating devices. Cost saving through elimination of gearbox and possibility of using smaller pumps. Compact, low unit power. Good starting characteristics. Low inertia.

### A6VE

Variable displacement plug-in motor A6VE



**Size:** 55, 80, 107, 160

**Note:**  
It is mainly installed in the mechanical gearbox, e.g. track drive gearbox.  
**Features:**  
The design of the motor with the mounting flange in the centre of the housing allows it to be almost fully integrated into a mechanical gearbox to give an extremely compact unit. You can just plug the motor into the gearbox without considering the tolerance.

### A6VM

Variable Axial Piston Motor



**Sizes:** 107, 160  
**Flow:** 380, 496 L/min  
**Max. pressure:** 400 Bar  
**Features:**  
Wide control range with hydrostatic transmissions  
Wide selection of control devices  
Small swing torque  
High power density  
Good starting characteristics  
Cost savings through elimination of gear shifts and possibility of using smaller pumps  
Compact, robust motor with long service life  
For use in mobile applications.

## ORBITAL MOTORS

### BMM (OMM)



**Displacement(cc/rev):** 8, 12.5, 20, 32, 40, 50  
**Maximum pressure drop continuous:** 100 bar  
**Maximum flow continuous:** 20 l/min  
**Maximum Torque continuous up to** 46 Nm

### BMP (OMP)



**Displacement :** 50, 80, 100, 125, 160, 200, 250, 315, 400  
**Maximum Pressure drop continuous** 125 bar  
**Maximum flow continuous** 60 lpm  
**Maximum Torque continuous upto** 334Nm

### BMR (OMR)



**Displacement(cc/rev):** 36, 50, 80, 100, 125, 160, 200, 250, 315, 375  
**Maximum pressure drop continuous:** 175 bar  
**Maximum flow continuous:** 20 l/min  
**Maximum Torque continuous up to** 46 Nm

### BMSY(OMS/BM3Y)



**Displacement :** 80, 100, 125, 160, 200, 250, 315, 400  
**Maximum Pressure drop continuous** 225 bar  
**Maximum flow continuous** 75 lpm  
**Maximum Torque continuous up to** 560Nm

### BMT (OMT/BM4U)



**Displacement :** 160, 200, 250, 320, 400, 500  
**Pressure Drop continuous** 200 bar  
**Flow continuous** 100 lpm  
**Max. Torque continuous upto** 1121 Nm

### BMV (OMV/BM5U)



**Displacement:** 315, 400, 500, 630, 800, 985  
**Maximum pressure drop continuous** 200 bar  
**Maximum flow up to** 150 lpm  
**Maximum torque continuous** 1900 Nm

### BMH (OMH)



**Displacement(cc/rev):** 200, 250, 315, 400, 500  
**Maximum pressure drop continuous:** 175 bar  
**Maximum flow continuous:** 75 l/min  
**Maximum Torque continuous up to** 850 Nm

### BMK2/BMK6

Eaton 2000 and 6000 series motor



**BMK2**  
**Displacement(cc/rev):** 65, 80, 100, 125, 160, 200, 250, 315, 400, 475  
**Maximum pressure drop continuous:** 210 bar  
**Maximum flow continuous:** 75 l/min  
**Maximum Torque continuous up to** 845 Nm



**BMK6**  
**Displacement(cc/rev):** 200, 250, 315, 400, 500, 630, 800, 1000  
**Maximum pressure drop continuous:** 200 bar  
**Maximum flow continuous:** 150 l/min  
**Maximum Torque continuous up to** 1675 Nm

### BMR-BK01

Hydraulic motor with brake



**Displacement(cc/rev):** 50, 80, 100, 125, 160, 200, 250, 315, 375  
**Maximum pressure drop continuous:** 140 bar  
**Maximum flow continuous up to** 65 l/min  
**Maximum Torque continuous up to** 465 Nm

### BMRYB



**Dual Shaft Hydraulic Orbital Motor**  
**Sizes:** 80-400 cc/rev  
**Max. flow up to** 75 l/min  
**Max. pressure up to** 225 bar  
**Max. Torque up to** 680 Nm  
**Max. output power up to** 25 kW



**THM**  
HYDRAULICS  
**QUALITY**  
ASSURED





# ABER

Manufacturing Hydraulic Excellence since 1972



MADE IN  
PORTUGAL  
EUROPE



## EXAMPLE OF APPLICATIONS



## HYDRAULIC PUMPS

### AXIAL PISTON PUMPS

#### VDP Series

Variable Displacement Pumps



**Displacement:** 40.1, 60.6, 76.4, 92.6, 109.4  
**Operating pressure** 410 Bar  
**Max. Pressure** 450 bar  
ABER's VDP Designed with care for the needs and applications in the hydraulic trucks industry, it can be used for a wide range of applications.  
**Features:**  
Adaptable pressure  
Fast Reaction  
Flow Reset  
High Pressure  
Long Service Life  
Low Noise  
Compact Design  
High Efficiency  
Efficient Cooling

#### BIF Series

Iron Cast Bent Axis Piston Pumps



**Displacement:** 17, 26, 32, 42, 50, 60, 81  
**Operating pressure** 350 Bar  
**Max. Pressure** 400 bar  
Iron cast BIF Series pumps were designed to be very compact. The BIF series configuration, gives particular advantage on mobile applications such as trucks with high collision probability between the rear axle truck transmission and the hydraulic pump  
**Features:**  
Higher Pressure  
Less Pulse  
Maximum Efficiency  
Compact Design  
Fits on ZF Astronic Gearbox Transmissions

#### BI Series

Single Bent Axis Piston Pumps



**Displacement:** 17, 26, 32, 42, 50, 60, 80, 81, 108, 126, 136, 142, 156, 172  
**Operating Pressure** 350 Bar  
**Peak Pressure** 400 Bar  
BI Series allow a change in the rotation way in an easy and safe way for all the pump components.  
**Features:**  
Maximum Efficiency  
Less Pulse  
Switchable Sense of Rotation  
Reversible

#### BID Series

Double Bent Axis Piston Pumps



**Displacement:** 57+28, 38+37, 80+38, 58+60, 70+66  
**Operating pressure** 350 Bar  
**Max. Pressure** 400 bar  
**Operating rotation speed:** 1650rpm  
**Max Rotation Speed:** 2300 rpm  
Bent Axis Piston Pump with two outlets, which work on independent pressure and on independent circuits, when use to serve two independent oil circuits.  
**Features:**  
Two Oil Outlets  
Maximum Efficiency  
Switchable Sense of Rotation  
Reversible

#### BH Series

Straight Piston Pumps



**Displacement:** 14, 19, 25, 32, 40, 45, 50, 52, 60, 80, 86, 110  
**Operating Pressure** 350 Bar  
**Peak Pressure** 400 Bar  
ABER BH Series are very robust. They are equipped with radial and axial bearings. To manufacturer this pumps, ABER uses high resistant material in strategic points.  
**Features:**  
Maximum Efficiency  
Robustness  
Great Performance  
Low Noise  
Continuous Flow  
Bidirectional

#### BHD Series

Double Straight Piston Pumps



**Displacement:** 20+20, 25+25, 30+30, 40+40, 45+45, 50+50, 53+53, 60+30, 65+22, 72+38, 80+21, 80+27, 83+42  
**Operating pressure** 400 Bar  
**Max. Pressure** 450 bar  
Straight Piston Pump with two outlets, which work on independent pressure and on independent circuits, when use to serve two independent oil circuits.  
**Features:**  
Two Oil Outlets  
Robustness  
Bidirectional



## HYDRAULIC GEAR PUMP

### B2 Series

Oil Hydraulic Gear Pump



**Displacement:** 12, 16, 20, 26, 32, 39  
**Operating pressure** 280 Bar  
**Max. Pressure** 300 bar  
**Features:**  
Small  
Fast to Mount  
Bidirectional

### B3 Series

Oil Hydraulic Gear Pump



**Displacement:** 38, 45, 52, 61, 70, 82, 91, 102, 116, 125  
**Operating pressure** 300 Bar  
**Max. Pressure** 335 bar  
**Features:**  
Medium Size  
Fast to Mount  
Bidirectional

### B3D Series/Tandem Pumps

Oil Hydraulic Tandem Gear Pump



**Displacement:** 17, 26, 32, 42, 50, 60, 80, 81, 108, 126, 136, 142, 156, 172  
**Operating Pressure** 350 Bar  
**Peak Pressure** 400 Bar  
Tandem gear pump with bidirectional sense of flow, with side outlet, prepared for mounting of UNI gear pumps.  
**Features:**  
Medium Size  
Fast  
Assembled up to Three Pumps  
Bidirectional

### B35 Series

Double Bent Axis Piston Pumps



**Displacement:** 64.5, 74.7, 83.8, 94.0, 104.2, 114.5, 124.7, 133.7, 154.2  
**Operating pressure** 300 Bar  
**Max. Pressure** 320 bar  
The B35 series brings another dimension to our range of products, it is a high performance pump, double support by taper roller bearings on the main shaft, built to endure extreme working conditions.  
**Features:**  
High Performance  
Long Life Period  
Stronger  
Reinforced  
Bidirectional

### PV Series

Hydraulic Gear Pumps with Integrated Valve

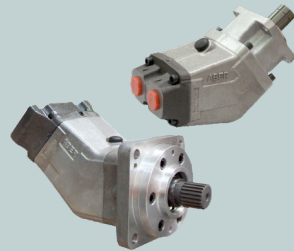


**Displacement:** 82, 105  
**Max. Pressure** 210 Bar  
**Features:**  
Sensitive Valve  
Quick Relief  
Efficient Cylinder Protection  
Easy to Apply  
Fast to Mount

## HYDRAULIC MOTORS

### MBI Series

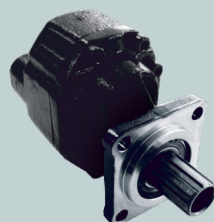
Bent Axis Piston Motors



**Displacement:** 17, 26, 32, 42, 50, 60, 80, 81, 108, 126, 136, 142, 156, 172  
**Operating pressure** 350 Bar  
**Max. Pressure** 400 bar  
**Features:**  
Excellent Performance  
Low Noise  
High Efficiency  
Bidirectional

### MB3 Series

Hydraulic Gear Motor



**Displacement:** 38, 45, 52, 61, 70, 82, 91, 102, 116, 125  
**Operating Pressure** 300 Bar  
**Peak Pressure** 335 Bar  
**Features:**  
Medium Size  
Fast to Mount  
Bidirectional

### MBIF Series

Iron Cast Bent Axis Piston Motor



**Displacement:** 17, 26, 32, 42, 50, 60, 81  
**Operating pressure** 400 Bar  
**Max. Pressure** 450 bar  
**Features:**  
Higher Pressure  
Compact Design  
High Reliability  
Bidirectional

## HAND PUMPS



**NEW!**

**Displacement:** 20, 50, 70  
**Max. Pressure** 350 Bar  
**Features:**  
Double acting, for single acting circuit, with lowering valve;  
Lever connection Ø27;  
Cast iron body;  
Standard color black;  
Niploy treated piston, white zinc plated support lever and external parts.

## ACCESSORIES



## PNEUMATIC ACCESSORIES

### Pneumatic Controls



### Pneumatic Kits Vacuum kits



## POWER TAKE OFF'S & GEARBOXES



### PTO'S

We have an extended range of Power Take Off's, (PTO'S) always working to adapt to the needs of our clients.

### Gearboxes

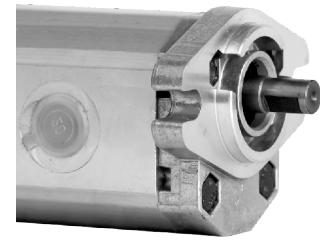
**Continuous Torque:** 800 Nm  
**Power at 1000 rpm:** 82 kW





# GEAR PUMPS

## HIGH PRESSURE GEAR PUMPS



### TPF2G0.5-M

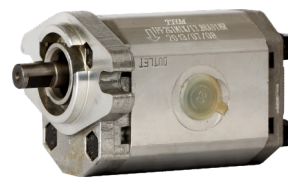
#### High Pressure Gear Pump



**Series:** 11 to 19  
**Flow:** 0.19 to 2.00cc  
**Max. Operating pressure:** 210 bar  
**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerized test bench, long service life, pump in "V" option available to operate up to -10 degree C and 120 degree C, "G"-BSP ports as per ISO228/1 as standard and other threaded and flange port available, new principle of hydraulic gap compensation

### TPF2G1-M

#### High Pressure Gear Pump



**Series:** 11 to 19  
**Flow:** 1.4 to 13.8cc  
**Max. Operating pressure:** 250 bar  
**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerised test bench, long service life, pump in "V" option available to operate up to -10 degree c and 120 degree c, "G"-BSP ports as per ISO228/1 as standard and other threaded and flange port available, new principle of hydraulic gap compensation.

### TPF2G2-M

#### High Pressure Gear Pump



**Series:** 11 to 19 or 30 to 39  
**Flow:** 3 to 30cc  
**Max. Operating pressure:** 270 bar  
**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerized test bench, long service life, pump in "V" option available to operate up to -10 degree C and 120 degree C, "G"-BSP ports as per ISO228/1 as standard and other threaded and flange port available, new principle of hydraulic gap compensation

### TPF2G2.6

#### High Pressure Gear Pump



**Series:** 11 to 19  
**Flow:** 10 to 45cc  
**Max. Operating pressure:** 270 bar  
**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerized test bench, long service life, pump in "V" option available to operate up to -10 degree C and 120 degree C, "G"-BSP ports as per ISO228/1 as standard and other threaded and flange port available, new principle of hydraulic gap compensation

### TPF2G3-M

#### High Pressure Gear Pump

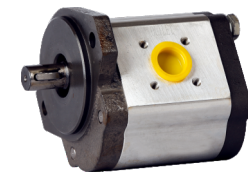


**Series:** 11 to 19  
**Flow:** 20 to 71cc  
**Max. Operating pressure:** 250 bar  
**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerised test bench, long service life, pump in "V" option available to operate up to -10 degree C and 120 degree C, completely manufactured on CNC machines, threaded and flange port available, covers applications for high pressures, substituting costly piston pump application, new principal of hydraulic gap compensation.

## HIGH PRESSURE GEAR PUMPS

### TPF2G4-M

#### High Pressure Gear Pump



**Size:** 80 ,90, 100

**Features:**  
 Unique sealing design to operate up to 250 bar continuous, special alloy bush with unique lock design for maximum rigidity modified gear tooth to lower operating torque, 100% testing on computerized test bench, long service life, pump in "V" option available to operate up to -10 degree C and 120 degree C, completely manufactured on CNC machines, threaded and flange port available, covers applications for high pressures, substituting costly piston pump application, new principal of hydraulic gap compensation.

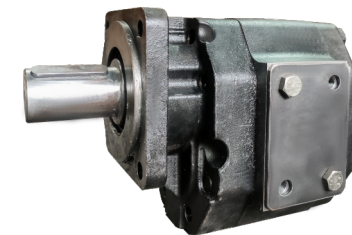
### CBB



The CB-B gear pump is a power component in a hydraulic system. The pump uses high-precision gears, high-strength cast iron shells and other structures. The mechanical energy transmitted by the motor is converted into a hydraulic energy conversion device by intermeshing gears. In the hydraulic system to provide a fixed hydraulic energy. The pump has the advantages of simple structure, reliable operation, convenient maintenance, good adaptability to impact load, widely used in the hydraulic system of the machine tool, and can be used in hydraulic systems of other machines.

### CBZTG3

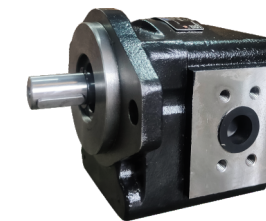
#### Cast Iron Gear Pump



**Displacement:** 125, 140, 150, 160, 170, 180, 200 mL/r  
**Operating pressure:** 160 Bar  
**Max. Pressure:** 200 bar  
**Rated Speed:** 2000r/min  
**Speed range:** 600 to 2800 r/min

### CBGTAL

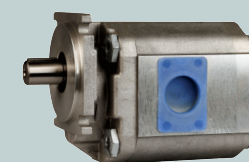
#### Cast Iron Gear Pump



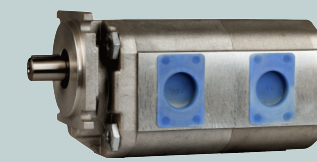
**Displacement:** 26, 32, 36, 40, 50, 55, 63  
**Operating pressure** 200 Bar  
**Max. Pressure** 250 bar  
**Minimum speed:** 800 r/min  
**Rated speed:** 2000 r/min  
**Maximum speed:** 3000 r/min

### CBKP

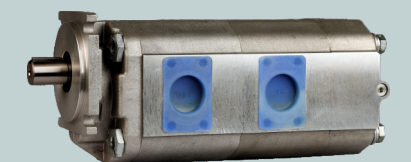
Single, Double & Triple Gear Pump with roller bearings



**CBKP1**  
**Size:** 32cc to 100cc  
**Max Pressure:** 250 Bar



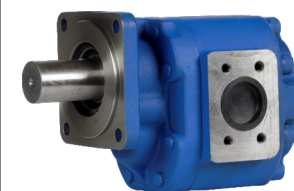
**CBKP2**  
**First pump :** 40cc to 100cc  
**Second pump :** 32cc to 100cc  
**Max Pressure:** 250 Bar



**CBKP3**  
**First pump :** 50cc to 100cc  
**Second pump :** 32cc to 100cc  
**Third pump :** 32cc to 100cc  
**Max Pressure:** 250 Bar

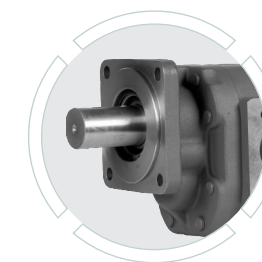
### TP7600-F\*\*\*P

#### Cast Iron Gear Pump



**Nom Pressure:** 200 bar  
**Max pressure:** 250 bar

**Features:**  
 Patented 2 Pcs housing design, lower leakage, high efficiency.  
 Big displacement up to 200cc/r, high pressure design. 45mm parallel shaft specially designed for general applications (splined shaft also available on demand).  
 High strength gear material for long life.



*We perform Best under Pressure!*





## PUMPS FOR SERVO SOLUTION

### IGP 1,2,3 & DIGP

High pressure Internal Gear Pump



**Large Suction & Delivery Ports Available**  
Size: 8, 10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 160

cc/rev: IGP(1)8...20 IGP(2)25...63  
IGP(3)80...160  
DIGP(11)8...20 DIGP(21)(22) 25...63  
DIGP(32)(33)80...160

#### Features:

Low pulsation of oil flow, fixed displacement, Low operating noise, due to sealing gap compensation high efficiency at low speed and viscosity, wide speed ranges can operate up to 3000r/min peak pressure up to 350 bar option for double pump. Double pumps are also available in different combination of sizes.

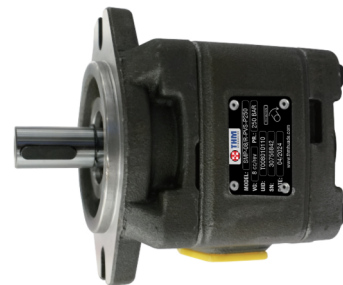
### IGP05 Series



**For Servo applications**  
High pressure internal gear pump  
Sizes: 3.5, 4, 5, 6.3  
Flow: 3.6, 4, 5.3, 6.5 mL/r  
Max. Pressure: 315 bar

### SMP Series

Internal gear pump



Suitable for 2200 rpm  
Displacement: 8~160cc/rev  
Max. Operating pressure up to 250 Bar  
Single, Double & Triple Pump

### VPS1,2,3

SERVO VANE PUMP  
16cc ~ 180cc



Size: 16, 20, 25, 32, 40, 50, 64, 70, 80, 100, 125, 160, 180

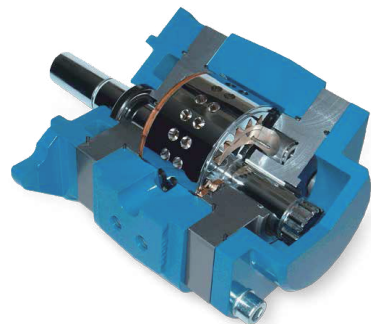
cc/rev: VPS(1)16...64 VPS(2)64...125 VPS(3) 160...180

The construction of the pump incorporates a leakage line help reducing the pump holding temperature enhancing the life and the stability of the pump. The design enables the pump to perform at low speed and high pressure. Low noise, wide spread range, better resistance to oil contamination. Wide range to displacement 16cc-200cc/rev, speeds upto 2800 rpm, pressure upto 280 bar. Cartridge assembly replacement available as spares. This pump is specially designed for servo system application offering fast and low speed, with excellent response to switching.

### ITH Series

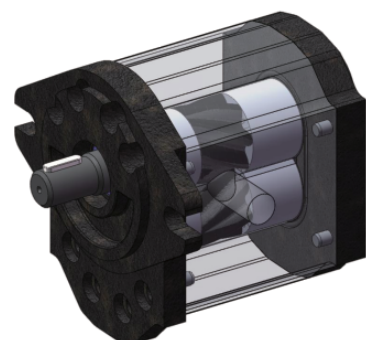
Internal gear pump with radial and axial seal clearance compensation

Displacement:  
2: 8, 11, 13, 16, 20  
3: 25, 32, 40, 50, 64  
6: 80, 100, 125, 145, 160  
Maximum pressure up to 345 Bar



### TGR Series

Helical Silent Gear Pump



Displacement : 4 ~ 200 cc/rev  
Max. Cont. pressure up to 270 Bar  
Max. Peak Pressure up to 300 Bar

## VANE PUMPS

### PV2R1,2,3

Fixed Vane Pump

Nom Pressure: 200 bar  
Max pressure: 250 bar



#### Features:

Patented 2 Pcs housing design, lower leakage, high efficiency.  
Big displacement up to 200cc/r, high pressure design.  
45mm parallel shaft specially designed for general applications (splined shaft also available on demand).  
High strength gear material for long life.

### PV2R5

Fixed Vane Pump (Large Flow)



Max pressure: 120 bar

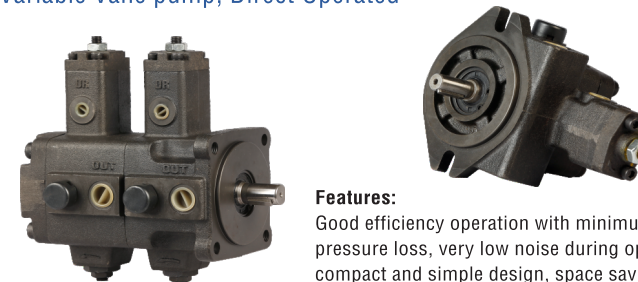
#### Features:

PV2R5- Series are high performance vane pump with long life for medium pressure application. High volumetric efficiency upto 92% @120bar Maximum operating pressure up to 120bar Twelve Vane Design for quite operation Versatile, rugged and optimized design Compact, Four flow option Cartridge design

Sizes : 230, 272, 320, 348 cc/rev

### TVCM...8/12/15/20/30/40/50

Variable Vane pump, Direct Operated



Displacement : 4.4 cc to 28 cc  
Max pressure: 70bar

#### Features:

Good efficiency operation with minimum pressure loss, very low noise during operation, compact and simple design, space saving sturdy structure for high efficiency and long service life, adjustable displacement volumes, highly preferred for CNC and special purpose machines.

### VDN

Variable Volume Vane Pump



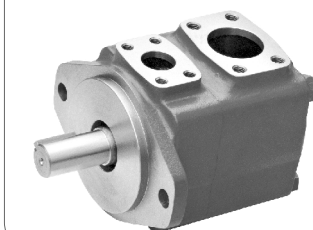
Size: 8, 16 cm³/rev  
Max. Pressure: 80Bar

#### Features :

Energy efficient high performance  
Lightweight, compact design  
Low noise, long life  
High volumetric efficiency and low leakage will cause less heat generation and improves the accuracy.  
Space saving.

### V SERIES

High Performance Intravane pumps for Industrial applications



Displacement : 20V: 7.5~45 mL/r  
25V: 32.5~67 mL/r  
35V: 67~142 mL/r  
45V: 138~237 mL/r  
Max. pressure up to 210 bar

### HVP

Medium pressure Variable Vane pump



Flow: 16.7, 22.2 cc/rev.  
Max. pressure: 140 Bar  
Min. speed: 800 r/min  
Max. speed: 1800 r/min

#### Features:

**Low noise:** It adopts anti-vibration and sound-proof mechanism, and it can effectively eliminate the vibration under high pressure by controlling the special three-point support of the piston and the offset piston, and the operation is quiet;  
**High sensitivity:** pilot-type oil control mode, the flow quickly follows the change of working conditions;  
**High pressure:** using high-quality materials and special pressure control mechanism and forced balance mechanism, the pressure can be effectively and smoothly operated under 140bar.



**THM**  
HYDRAULIC  
FOR MACHINE TOOL





**THM**  
HYDRAULICS

*Living our future today  
with industry leaders...*



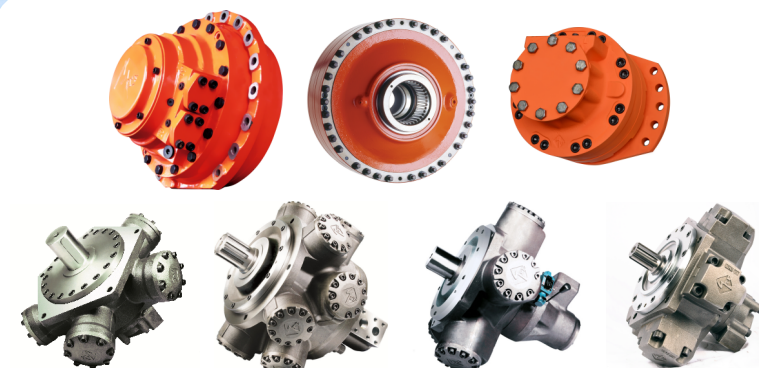
#### HIGH-PERFORMANCE INTERNAL GEAR PUMP

WITH THE HIGH-PERFORMANCE INTERNAL GEAR PUMP MANUFACTURED BY THE JAPANESE COMPANY SUMITOMO, THM OFFERS COUNTRY-WIDE SOLUTIONS FOR ALL PRESSURE RANGES. DEVELOPED TO MATCH THE SUMITOMO INTERNAL GEAR PUMP, THM OFFERS AND VALUE ADDS CUSTOMISED APPLICATION-SPECIFIC COMPLETE SOLUTIONS – TO MEET THE REQUIREMENT/DEMAND PROFILE.



#### HYDRAULIC MOTORS & TRANSMISSION

STF HYDRAULIC TRANSMISSIONS COMPANY LIMITED IS A JOINT VENTURE COMPANY SPECIALISING IN THE RESEARCH, DEVELOPMENT AND MANUFACTURE OF THE HYDRAULIC OPEN & CLOSE LOOPS TRANSMISSION, MOTORS, HYDRAULIC VALVES. WE HAVE GATHERED TOGETHER AN OUTSTANDING MANAGEMENT TEAM, EXCEPTIONALLY QUALIFIED ENGINEERS AND EMPLOYED THE WORLD'S LEADING PRACTICES IN THE DESIGN AND MANUFACTURE OF HYDRAULIC MOTORS, TO BRING YOU ONLY PRODUCTS OF THE HIGHEST STANDARD.



#### SERVO MOTORS & DRIVES

HILECTRO DRIVE UPHOLDS THE PURPOSE OF HAITIAN GROUP INNOVATION, PUTTING FORWARD THE SLOGAN "INNOVATION DRIVES THE FUTURE". WE CONSTANTLY IMPROVE PRODUCTS AND SERVICE QUALITY THROUGH INNOVATION, SO AS TO ENHANCE THE OVERALL COMPETITIVENESS OF OUR PRODUCTS. WE FIRMLY BELIEVE GOOD PRODUCTS CAN PUT CUSTOMERS AT EASE AND ALSO THAT GOOD PRODUCTS CAN ENHANCE MARKET COMPETITIVENESS.

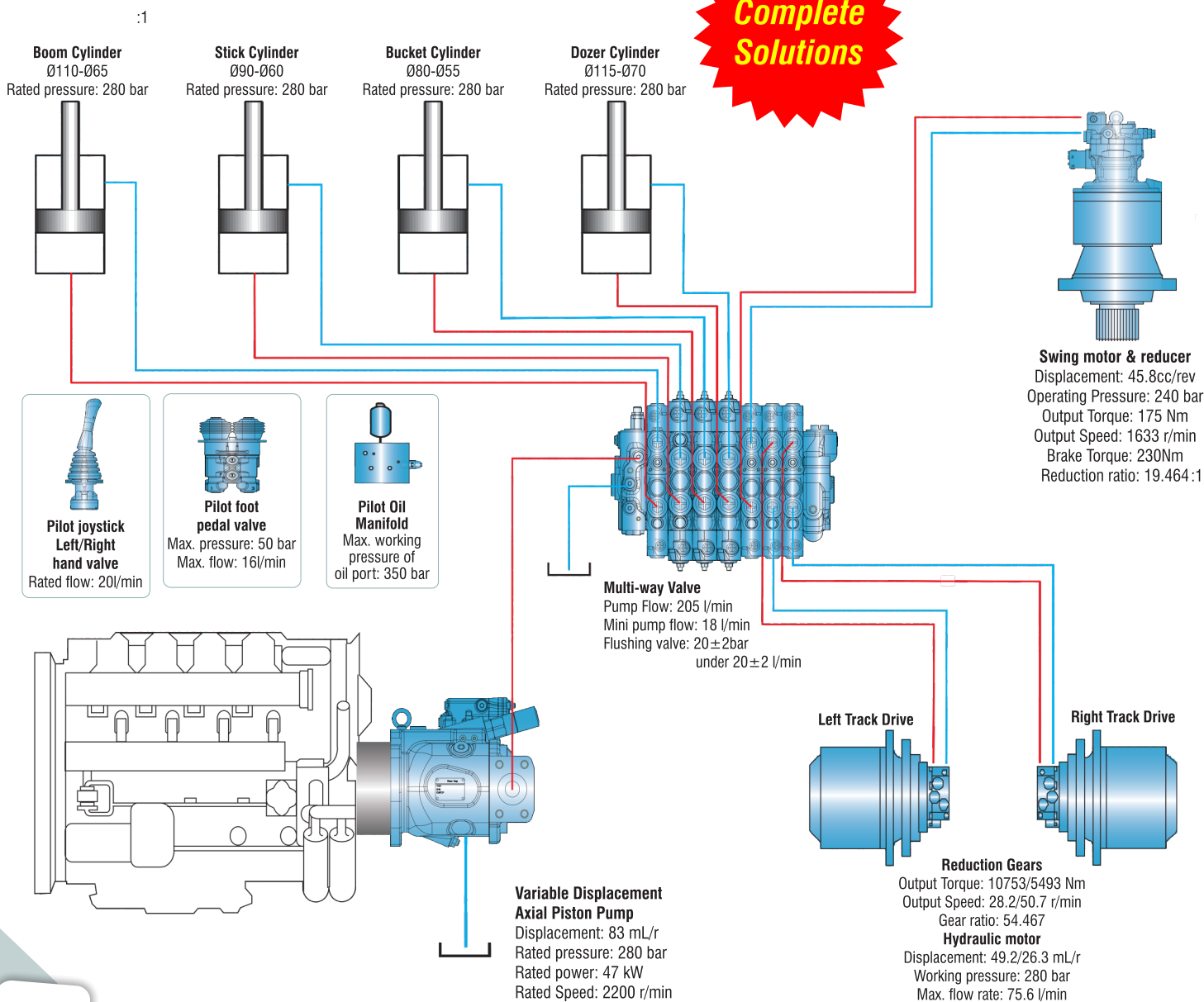




# THM HYDRAULIC COMPONENTS AVAILABLE FROM 6.5 TONNE TO 45 TONNE EXCAVATORS ALONG WITH CYLINDERS



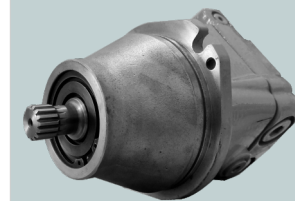
**Complete  
Solutions**



Note: The above specs is for Excavators from 6.5 Tonne to 8 Tonne.

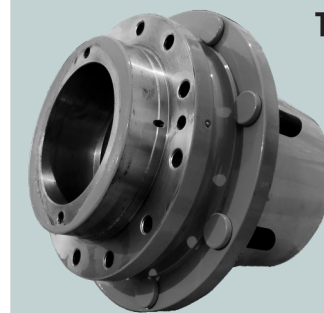
## Track Drive & Motor for Horizontal Drilling Machines

### Track Motor



Max. Displacement: 45 ml/r  
Min. Displacement: 17.5 ml/r  
Max. pressure: 350 bar  
Max. speed (at max. disp.): 3500 r/min  
Max. speed (at min. disp.): 4650 r/min  
Output torque: 0.75Nm/bar

### Track Drive



Max. input speed: 3500 r/min  
Max. output torque: 6000 Nm  
Reduction Ratio (I): 53  
Brake parameters  
Static braking torque: ≥220Nm  
Minimum cracking pressure: 10-12 bar

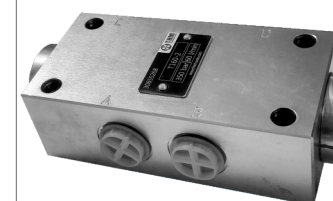
### Pilot Joystick Left/Right hand valve



Max. input pressure: 100 bar  
Max. flow: 16 l/min  
Working medium temperature: -20°-100°C  
Ambient temperature: -20°C~45°C  
Hydraulic Oil Viscosity: 42-74 mm²/s



### Pilot Operated Check valve



Opening pressure: 3.5 bar  
Max. pressure: 350 bar  
Max. flow: 60 l/min  
Pilot ratio: 6.5:1

### Multi way valve



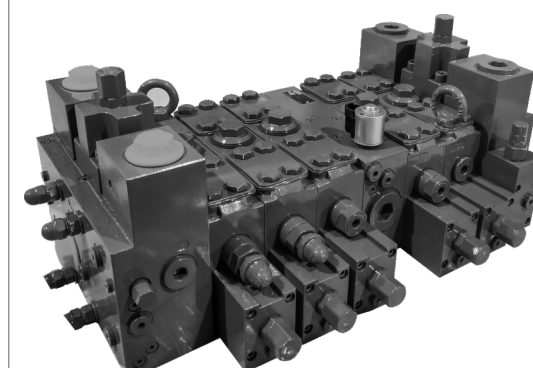
Nominal pressure: 315 bar  
Nominal flow: 160 l/min  
Solenoid valve voltage: 12VDC

### Two way balance valve



Maximum pressure: 350 bar  
Rated flow: 60 l/min  
Pilot ratio: 4.2:1  
Port Size: G3/8

### Mobile Control block in sandwich plate design



Size 25  
Maximum flow  
— on the pump side 1 x 700 l/min or 2 x 600 l/min  
— on the consumer side 700 l/min  
Maximum working pressure  
— on the pump side 380 bar  
— on the consumer side 420 bar  
Features:  
• Unloading function for  
— Improved responsiveness  
— Flushing and cooling  
• Closed center for variable pump  
• Load pressure independent flow sharing



## DIRECTIONAL VALVES

### HD-WE

Directional control valve, electrically operated, Type HD-WE



Directional solenoid actuated directional spool valve high performance version  
Wet pin DC or AC solenoids with removable coil (it is necessary to open the pressure tight chamber when changing the coil)  
Solenoid coil can be rotated through 90 degree  
Hand override, optional  
Electrical connection as individual connection  
Mounting type sub-plate

Size	5	6	10
Type	HD-WE		
Max operating pressure bar	250	350	315
Flow L/min Max	14		120

### HD-WE4....20/ Directional control, electrically operated type HD-WE4....20/

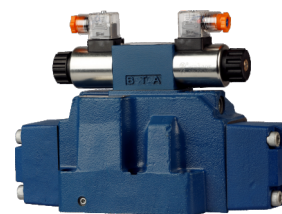


Direct solenoid actuated directional spool valve high performance version  
Wet pin DC or AC solenoids with removable coil (it is not necessary to open the pressure tight chamber when changing the coil)  
Solenoid coil can be rotated through 90 degree  
Hand override, optional  
Electrical connections as individual connection  
Mounting type: Sub-plate mounting

Size	4
Type	HD-WE4-20/
Max operating pressure bar	210
Max Flow L/min	30

### HD-(H)-WEH/WH

Pilot operated directional valve, Type HD(H)-WEH/WH



Electro-hydraulic operation  
Spring or pressure-centered  
Stroke adjustment at main spool, optional  
Pre-load valve in the P-channel of the main valve, optional  
Wet-pin DC or AC solenoids, optional  
Electrical connections as individual connection  
Manual override, optional  
Shifting time adjustment, optional  
Mounting type sub plate mounting

Size	10	16	25	32
Type	HD-(H)-WEH/WE			
Max operating pressure bar	28/350	28/350	28/350	28/350
Max. Flow L/min	160	300	650	1100

### HD-WH

Directional valve with fluidic operation, Type HD-WH,

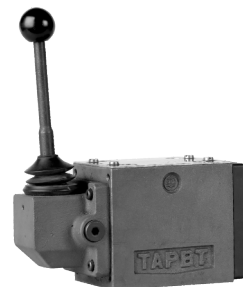


Hydraulic operated spool valve  
Spring or pressure-centered  
2-way valve with dedent, optional  
Mounting type: sub-plate mounting

Size	6	10
Type	HD-WH	HD-WH
Max. operating pressure bar	315	315
Max. Flow L/min	60	120

### HD-WMM10....30/

Directional control valve with hand lever, Type HD-WMM, series 30



Direct actuated directional spool valve with hand lever  
With spring return or detent, Sub-Plate Mounting

Size	10
Type	HD-WMM10....30/
Max operating pressure bar	350
Flow L/min Max	100

### HD-WMU/R

Roller operated directional valve Type HD-WMU/R



Directed operated directional spool valve with adjustable roller operation  
Roller lever assembly may be stepped in 90 degree increments

Size	6	10
Type	HD-WMUR	
Max operating pressure bar	315	315
Flow L/min Max	60	120

### Z4WE6...3XT



4/2 way isolator valve  
Size 6  
Up to 315 bar  
Up to 40 L/min

**Features :**  
Solenoid operated directional spool valve is the standard version.  
Porting pattern to DIN 24 340 form A, ISO 4401 and CETOP-RP 121 H,  
Free-flow through ports P and T in all switched positions.  
Sandwich plate valve  
Wet pin AC or DC solenoids  
Hand override, (optional)

### 4WEH-12-SG

Fixed displacement Vane Pump single excution



Flow: 30lpm / 40lpm  
Voltage: Ac110v / Ac220v / Dc24v

**Features:**  
Solenoid controlled pilot operated direction control valve for shock less type of machine tool application demanding smooth reversal, mechanical screw to adjust the spool shifting time, hence optimizing shocks to the machines, reducing oil hammering / piping vibration / jerks and machine vibration, spool stroke adjustment screw + meter out pilot oil flow adjustment screw + pilot oil tank line throttle adjustment screw makes a combination of valve suitable for these type of application, highly suitable for surface grinding machine applications & others.

## DIRECTIONAL VALVES

### HD-M-SEW6/10

Poppet directional valves, solenoid actuated. Type HD-M-SEW6

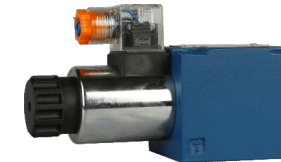


Direct operated directional poppet valve, solenoid actuated  
Closed port is leak free  
Switching is ensured even after long periods of being under pressure  
Air gap DC solenoids with removable coil) it is not necessary to open the pressure tight chamber when charging the coil)  
Solenoid coil can be rotated by 90degree  
With protected hand override, optional  
Individual electrical connection  
Mounting type sub plate mounting

Size	6	10
Type	HD-M-SEW6	
Max operating pressure bar	630	630
Max. Flow L/min	25	40

### M3-SED6/10

3/2- and 4/2-way directional poppet valves with solenoid actuation



Size 6  
Max. Pressure up to 350 Bar  
Max. flow up to 25L/min

**Features:**  
Direct operated directional poppet valve with solenoid actuation  
Closed port is leak-free  
Individual electrical connection  
With protected manual override, optional  
Porting pattern to DIN 24340 form A, ISO 4401and CETOP-RP 121H



### P40/P80/P120

Monoblock Directional Control valve

Nom Pressure: 210 bar  
Max pressure: 250 bar  
Max flow: 40 Ltr / 80 Ltr / 120 Ltr

**Features:**  
Manually or mechanically controlled hydraulic directional control valve P40/P80/P120 are designed for distribution and control the flow of oil between pump and the cylinder / hydro-motor etc. It is manufactured with 1 to 6 spools, with parallel or series function, with common or individual back valve for each spool, with or without safety valve

### SD4

Monoblock Directional Control Valve



Maximum Flow 45L/min  
Operating Pressure up to 315 Bar

**Features:**  
Simple, compact designed, this valve is only one section for open centre and closed centre hydraulic systems.  
Fitted with a main pressure relief valve.  
Diameter 16 mm interchangeable spools.  
Available manual and remote with flexible cables spool control kits.

### SD8

Sectional Directional Control Valve



Maximum Flow 90L/min  
Operating Pressure up to 315 Bar

**Features:**  
Simple, Compact and heavy duty designed sectional valve from 1 to 14 sections for open and closed center hydraulic systems.  
Fitted with a main pressure relief valve and a load check valve on every working section.  
Available in manual control only.  
Optional carry-over port.  
A wide range of port and circuit valves.  
Intermediate sections for several types of circuit.  
Diameter 18mm interchangeable spools.  
Available with parallel, tandem or series circuit.

### DCV 140/200 L/min

Sectional Directional Control Valve



Maximum Flow: 140, 200 l/min  
Maximum Pressure up to 350 Bar

**Features:**  
DCV directional control valve is designed for high pressure hydraulic system such as drilling machine, sanitation etc.  
Auxiliary valve: over-load valve, anti-cavitation valve, combined valve etc.  
Control type: manual, joystick, cable, pneumatic, solenoid, electro-pneumatic, electro-hydraulic etc.  
Structure: sectional type.  
Carry-over port as hydraulic source for other parts.



### Z50

Solenoid Direction Control Valve



Spool: 1 to 6  
Max Pressure: 315 Bar  
Max Flow: 5 l/min

**Features:**  
Built-in check valve: The check valve inside the valve body is to ensure the hydraulic oil does not return.  
Built-in relief valve: The relief valve inside the valve body is provided to adjust the hydraulic system working pressure.  
Oil way: Parallel circuit, power beyond option  
Coils, Connector ISO4400: 12VDC, 24VDC  
Threads: P,T ports - G1/2", A,B ports - G3/8"  
Valve construction: Monoblock construction, 1-7 spools.



## DIRECTIONAL VALVES

### HD-LC

2-way cartridge valve for directional control function LC

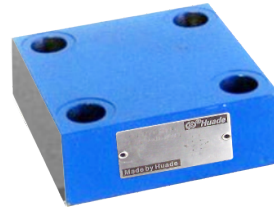


Mounting type: As cartridge structure, Encased in block  
2 area ratio: 2:1=A(annulus area=50%)  
14.3:1=B(annulus area=7%)  
4 different springs  
Valve poppet with or without damping nose

Size	16	25	32	40	50	63
Type	HD-LC					
Max operating pressure bar	420	420	420	420	420	420
Flow L/min	200	550	750	1500	2700	3000

### HD-LFA

2-Way control cover for directional control function, Type LFA



Control cover with built-in poppet valve  
Control cover with built-in shuttle valve  
Control cover for mounting directional spool valves with or without built-in shuttle valve  
Control cover for mounting directional poppet valves with or without built-in shuttle valve

Size	16	25	32	40	50	63
Type	HD-LFA					
Max Operating Pressure bar	420	420	420	420	420	420

### Series S4WE6

Solenoid operated directional valve with spool position monitoring

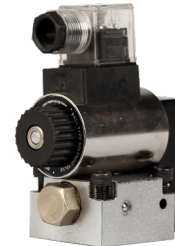


The proximity sensor monitor the working position of spool accurately. Either PNP or NPN can be chosen for the sensor. Rapid response, high factor of safety, long service life. Compact structure make it convenient for building up and wiring. The position of the proximity sensor is suitable for the double solenoid as well as for the single one.

**NEW!**

### 23QDF

Ball type solenoid valve



Size : 06, 10

Maximum Pressure upto 315 Bar

The ball type electromagnetic valve is used to realize leak-free pilot control for two-way plug-in valve hydraulic system. Under the desired pressure drop and flow

**Features:**  
It may also be used as control components for other executive device.  
The valve core adopts high quality precision steel ball without axial length.

### Series LFV

2-way cartridge valves with spool position monitoring



Size: LFV16, 25, 32, 45, 50

2 way cartridge valve with spool position monitoring, provide feedback to inductive switch signal to sensor spool correct position, to secure equipment operating under safety operation according to hydraulic circuit design and detection requirement. When inductive position switch feedbacks error signal, the equipment stop operating immediately to ensure operator safety.

**NEW!**

### DCT/DCG

Cam Operated Directional Control Valves

Size: 01, 03  
Max Pressure: 210, 250 Bar  
Max Flow: 30, 100 l/min



### Z-TVC

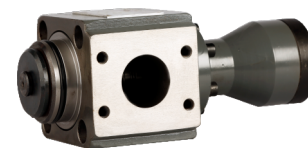
Prefill valve



Max Pressure upto 250 bar  
Flow upto 2500 lpm  
Sizes: 50, 80, 90, 100, 125, 150

TVS & TVC series of prefill valve allows transfer large volume of fluid from tank or cylinder in short intervals. It can cut down oil movement in valves and piping. Pilot control pressure oil opens and closes the prefill valves on demand according to the application and the hydraulic circuit.

### Prefill and Exhaust Valve



Sizes : 32 to 80 cc

**Features:**  
Seat type construction.  
Allows free flow from it's port A to port B.  
Flow from port B to port A can be had by applying pilot pressure to it's port X.  
Model with decompression feature opens in two stages progressively, allowing smooth and rapid exhaust of the compressed oil.  
Opening and closing time of the valve can be influenced by providing Throttle / Check Valves in the X port line.

## CHECK VALVES

### HD-S

Check free flow valve type HD-S



Preferably closing a flow leak free in one direction and to permit free flow in the opposite direction  
5 cracking pressures  
3 mounting types: Sub-plate mounting, Threaded connection, Cartridge connection

Size	6	8	10	15	20	25	30
Type	HD-S	HD-SHD-S	HD-SHD-S	HD-S	HD-S	HD-S	HD-S
Max operating pressure bar	315	315	315	315	315	315	315
Max Flow L/min	18	36	60	150	250	350	450

### HD-SV/SL

Hydraulically pilot operated check valve, Type HD-SV/SL, Series 40



With or without leakage port with or without pre-opening  
4 opening pressures  
2 mounting types: Sub-plate mounting, Threaded connection

Size	10	20	30
Type	HD-SV/SL		
Max operating pressure bar	315	315	315
Max Flow L/min	150	350	550

### HPLK

Pilot operated check valve



**Introduction :**  
Flow is allowed to pass from V1 to C1 when pressure at V1 rises above the spring bias pressure and poppet is pushed from its seat.

The valve is allowed closed (checked) from C1 to V1; when sufficient pilot pressure is present at X port, the pilot piston acts to push the poppet from its seat and flow is allowed from C1 to V1  
Precision machining and hardening processed allow virtually leak-free performance in the checked condition.

### HD-RVP

Check valve type HD-RVP



Preferably closing a flow leak free in one direction and to permit free flow in the opposite direction  
mounting type-sub plate

Size	6	8	10	12	16	20	25	30	40
Type	HD-RVP								
Max operating pressure bar	315	315	315	315	315	315	315	315	315
Flow L/min Max	40	70	110	160	240	440	600	600	600

### MCP/MCT

Check Modular valves



Size: 01  
Max Pressure: 315 Bar  
Max Flow: 35 l/min

### HD-Z1S

Check valve, type HD-Z1S



Preferably closing a flow leak free in one direction and to permit free flow in the opposite direction.  
Sandwich plate valve for use in vertical stacking assemblies

Size	6	10
Type	HD-Z1S	HD-Z1S
Max operating pressure bar	315	315
Flow L/min Max	40	100

### HD-Z2S

Check Valve, Hydraulically pilot operated type HD-Z2S



For leakage-free closure of one or two actuator parts, sandwich plate valve for use in vertical stacking assemblies

Size	6	10	16	22
Type	HD-Z2S			
Max operating pressure bar	315	315	315	315
Flow L/min Max	60	120	300	450

### CRT/CRG

Right Angle Check Valves



Sizes: 03, 06, 10  
Max working pressure: 250 bar  
Max. Flow: 250 l/min

### CPDT/CPDG/CPDF

Pilot Operated Check valve



Sizes:  
CPDT: 04, 06, 10  
CPDG: 03, 06, 10  
CPDF: 10, 16  
Rated Flow: 50, 125, 315, 500 l/min  
Max. pressure: 250 kgf/cm<sup>2</sup>



## PRESSURE VALVES

### HD-DA/DAW

Pilot operated shut-off valve, Type DA/DAW

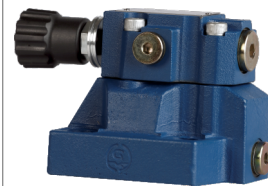


Solenoid actuated unloading via a built on directional valve type DAW  
10% version, 17% version  
4 pressure adjustment element optional  
4 pressure ranges (in bar) 50, 100, 200, 315  
For sub plate mounting

Size	10	20	30
Type	HD-DA/DAW		
Max. operating pressure bar	315	315	315
Version 10%	40	80	120
Version 17%	6	120	240

### HD-DB....50/.....

Pilot operated pressure relief valve,  
Type HD-DB....50/...



5 pressure ranges: 50, 100, 200, 315, 350  
3 pressure adjustment element, optional  
3 mounting types: sub-plate mounting  
threaded mounting, manifold mounting

Size	10	15	20	25	30
Type	HD-DB....50/.....				
Max. operating pressure bar	350	350	350	350	350
Max. Flow L/min	250	500	500	500	650

### HD-DB....K

Pilot operated pressure relief valve,  
cartridge connection type HD-DB....K

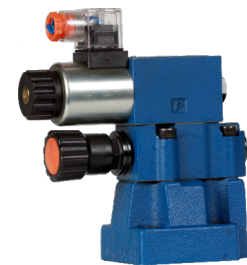


4 pressure ranges (in bar): 50, 100, 200, 315  
4 pressure adjustment elements, optional  
mounting type: cartridge connection

Size	6	10	20
Type	HD-DB....K		
Max operating pressure bar	315	315	315
Max Flow L/min	50	120	250

### HD-DBW....50/....

Pilot operated pressure relief valve,  
Type HD-DBW....50/....

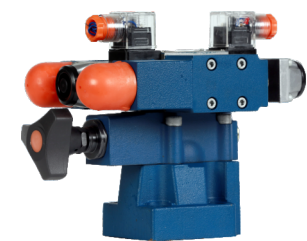


Solenoid operated unloading via a built on directional spool valve  
5 pressure ranges (in bar) 50, 100, 200, 315, 350  
3 pressure adjustment elements, optional  
3 mounting types: sub-plate mounting,  
threaded connection, manifold mounting

Size	10	15	20	25	30
Type	HD-DBW				
Max operating pressure bar	350	350	350	350	350
Max flow L/min	250	500	500	500	650

### HD-DB3U10-30...30/...

Pilot operated pressure relief valve,  
with two or three pressure rating  
Type HD-DB3U10-30...30/...



Solenoid operated control via mounted directional valve  
2 pressure ranges (in bar) 100, 315bar  
3 pressure adjustment elements, optional  
3 mounting type: sub-plate mounting,  
threaded connection, manifold mounting

Size	10	15	20	25	30
Type	HD-DW3U				
Max operating pressure bar	315	315	315	315	315
max flow L/min	200	200	400	400	600

### HD-DR....DP

Direct operated pressure reducing valve  
type HD-DR....DP



Direct operated pressure reduction in 3 ports  
3 or 4 pressure adjustment elements, optional  
5 pressure ranges (in bar): 25, 75, 150, 210, 315  
Mounting type: sub plate mounting

Size	5	6	10
Type	HD-DR....DP		
Max operating pressure bar	315	210	210
Max flow L/min	15	60	80

### HD-DR

Pilot operated pressure reducing valve, Type DR (50 series)



Pilot operated pressure reducing valve  
4 pressure adjustment elements, optional  
4 pressure ranges (in bar): 50, 100, 200, 315  
Check valve optional  
2 mounting type: sub-plate mounting  
threaded connection

Size	10	15	20	25
Type	HD-DR			
Max. Operating pressure bar	315	315	315	315
Max Flow L/min	150	300	300	400

### RT/RG/RCT/RCG

Pressure Reducing Valves /  
Pressure Reducing and Check Valves

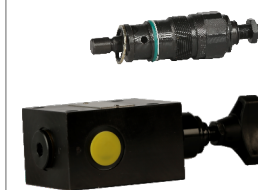


**Sizes: 03, 06, 10**  
**Max pressure: 210 bar**  
**Max. flow: 50, 125, 250 l/min**  
**Introduction:**  
Pressure reducing valves are used to set the pressure of a hydraulic circuit below that of the main circuit. In addition, operation under remote control is possible by using the remote control port. Pressure reducing and check valves have check valves, which allow a free flow from the secondary side to the primary.

## PRESSURE VALVES

### HD-DBD

Pressure relief valve, direct operated, Type DBD

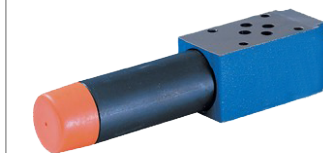


3 pressure adjustment element, optional  
3 mounting types: cartridge connection,  
threaded connection, sub plate mounting

Size	6	8	10	15	20	25	30
Type	HD-DBD						
Working pressure bar	400	400	630	315	315	315	315
Flow L/min	50	120	120	250	250	350	350

### HD-DZ...DP

Direct operated sequence valve  
type HD-DZ....DP



-3 or 4 pressure adjustment element, optional  
-5 pressure ranges (in bar) 25, 75, 150, 210, 315  
-check valve optional  
-For sub-plate mounting

Size	5	6	10
Type	HD-DZ....DP		
Max operating pressure bar	315	210	210
Flow L/min Max	30	60	80

### HD-LC DB

2-way cartridge valve for relief  
control function LC...DB



Mounting type: As cartridge structure,  
encased in block  
With or without throttle element  
poppet valve, spool valve

Size	16	25	32	40	50	63
Type	HD-LC...DB					
Max operating pressure bar	420	420	420	420	420	420
Flow L/min	250	400	600	1000	1600	2500

### HD-DBT/DBWT

Pressure remote relief valve, Type HD-DBT/DBWT

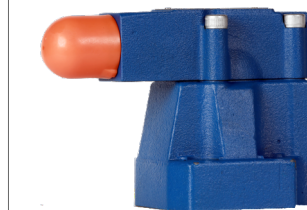


Remote control in long distance  
3 pressure adjustment elements, optional  
Mounting type: sub-plate mounting

Type	HD-DBT/DBWT	
Max. operating pressure bar	315	
Max. Flow L/min	3	

### HD-DZ

Pilot operated pressure sequence valve, type HD-DZ

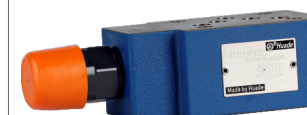


4 pressure adjustment elements, optional  
4 pressure ranges (in bar): 50, 100, 200, 315  
Check valve optional  
For sub-plate mounting

Size	10	20	30
Type	HD-DZ		
Max operating pressure bar	315	315	315
Max flow L/min	200	400	600

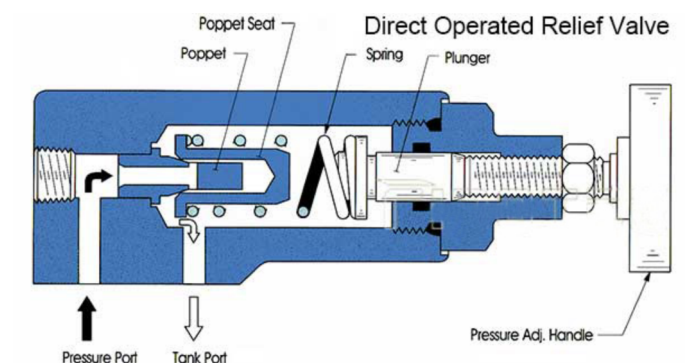
### HD-ZDB/Z2DB

Pilot operated pressure relief valve  
type HD-ZDB/Z2DB



Sandwich plate valve  
With one or two pressure relief cartridges  
4 pressure ranges: 50, 100, 200, 315  
3 pressure adjustment elements, optional  
5 circuit options (size 6) or 6 circuit options (size 10)

Size	6	10
Type	HD-ZDB/Z2DB	HD-ZDB/Z2DB
Max operating pressure bar	315	315
Flow L/min max	60	100



### HD-ZDR

Direct operated pressure reducing valve,  
Type HD-ZDR



Sandwich plate design  
4 pressure range (in bar) 25, 75, 150, 210  
4 pressure adjustment element, optional  
Pressure reduction in ports A, B or P  
Check valve optional

Size	6	10
Type	HD-ZDR	HD-ZDR
Max operating pressure bar	210	210
Max flow L/min	30	50



## PROPORTIONAL VALVES



**Smarter  
Faster  
Easier**

### HD-2FRE

Proportional flow control valve 2-way version, type HD-2FRE

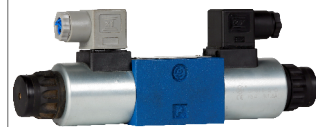


According to electrical command value controlling the volume flow of a hydraulic fluid  
With a pressure compensator for the pressure compensated control of a flow  
Actuation via a proportional solenoid  
With electrical position feedback of the control orifice Both valve and electronic control from one supplier. Flow control is possible in both directions by using a rectifier sandwich plate  
Mounting type: sub-plate mounting

Size	6	10	16
Type	HD-2FRE		
Max operating pressure bar	210	315	315
Max Flow L/min	25	60	160

### HD-3DREP6

Proportional pressure reducing valve of 3-way design, Type HD-3DREP6



The 3 way pressure reducing valve is directly actuated by proportional solenoids, limiting a system pressure. Wet pin DC proportional solenoids. Both valve and electronic control from one supplier Mounting type: Sub-plate mounting

Size	6
Type	HD-3DREP6
Max operating pressure bar	100
Max Flow L/min	15
Delay components	<3
Repeatability Precision	<1
Electronic control with	1 ramp times VT-3000S30
Electronic control with	5 ramp times VT-3006S30

### HD-4WRA

Proportional directional valves, Direct actuated, without electrical feedback, type HD-4WRA

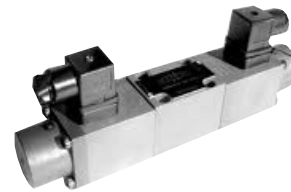


Direct actuated proportional valve for controlling the direction and volume flow of the hydraulic fluid. Wet pin DC proportional solenoids Spring centered control spool  
Both valve and electronic control from one supplier. For sub plate mounting:

Size	6	10
Type	HD-4WRA	
Max operating pressure bar	315	315
Max flow L/min	43	95

### HD-4WRE

Proportional Directional valves, Type HD-4WRE



Direct actuated proportional valve for controlling the direction and volume flow of a hydraulic fluid  
Electrical feedback  
Wet pin DC Proportional solenoids  
Spring centered control spool  
Both valve and electronic control from one supplier  
Mounting type: Sub-plate

Size	6	10
Max operating pressure bar	315	315
Max Flow L/min	80	180

### PV-3/PV-4 Series Proportional Valves



**Max. Flow: 140 l/min**  
**Max. pressure: 350 bar**  
**Applications:**  
For Mobile & Industrial hydraulic applications

### LSPV Series

Load Sensing Proportional Control valve

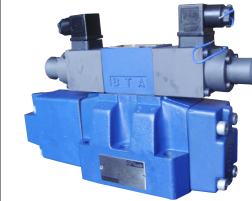


**LSPV 15**  
**Rated pressure: 350 bar (pump side)**  
**420 bar (actuator side)**  
**Rated Flow: 200 L/min**  
**Applications:**  
Aerial work platform, Forestry machine  
Drilling rigs, Mining truck, Mining truck  
Crane, Telehandler, Stone Crusher

## PROPORTIONAL VALVES

### HD-4WR

Proportional Directional valves pilot operated type HD-4WRZ External pilot operated type HD-4WRH

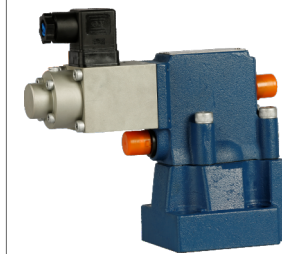


Pilot (WRZ) and direction (WRH) proportional valve for controlling both direction and flow of a hydraulic fluid. Wet pin DC proportional solenoids Spring centred control spool. Both valve and electronic control from one supplier  
Mounting type: Sub-plate mounting

Size	10	16	25	32
Type	HD-4WR			
Max operating pressure bar	350	350	350	350
Max Flow L/min	270	460	877	1600
Delay components	<6	<6	<6	<6
Repeatability Precision	<3	<3	<3	<3

### HD-DBE/DBEM

Proportional pressure relief valve type HD-DBE/DBEM



In relation to the electrical command value the pressure can be limited and be infinitely set  
Optional maximum pressure protecting adjustment  
Both valve and electronic control from one supplier  
Mounting type sub plate mounting, manifold mounting  
Size 10 30 20  
Type HD-DB/DBEM  
Max operating pressure bar 315 315 315  
Max flow L/min 200 600 400  
Delay components 1.5 with buffering 4.5 without buffering  
Repeatability Precision <+/-2  
Electronic control VT-2000S 40

### HD-DBETR

Proportional pressure relief valve, Type HD-DBETR

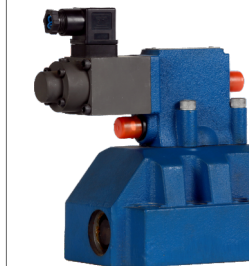


Valve for electrical remote control of pressure, limiting in a system pressure  
Proportional solenoid actuation with inductive position transducer  
Both valve and electronic control from one supplier  
Mounting type: Sub-plate mounting

Size	6
Type	HD-DBETR
Max operating pressure bar	25 80 180 315
Max Flow L/min	10 3 3 2
Delay components	<1
Repeatability Precision	<0.5
Electronic control	VT-5003S30

### HD-DRE/DREM

Proportional pressure reducing valve type HD-DRE/DREM



Used for the reduction of a working pressure  
Optional maximum pressure protecting adjustment. Both valve and electronic control from one supplier  
Mounting type sub: plate mounting, manifold mounting  
Size 10 20 30  
Type HD-3DREP6  
Max operating pressure bar 315 315 315  
Max. Flow L/min 200 400 600  
Delay components 1.5 with buffering 4.5 without buffering  
Repeatability Precision <+/-2 <+/-2 <+/-2  
Electronic control VT-2000S 40

### 4WRPEH6/10

Servo Solenoid Proportional Valve



**Max. working Pressure : 315 bar**  
**Nominal flow rate 40lpm and 100lpm,**  
**max. ( p = 70 bar)**

With control spool and sleeve in servo quality  
Operated on one side, 4/4-fail-safe position in switched off state.  
Electric position feedback and integrated electronics (OBE), calibrated in the factory.  
Electrical connection 6P+PE  
Signal input differential amplifier with interface "A1"±10V or interface "F1" 4.....20mA(Rsh = 200Ω)  
Use for electro-hydraulic controls in production and testing systems.

Size : 06, 10

### DBETX.....1XT

Proportional pressure relief valve



**NG6**  
**Max. Pressure 315 bar**  
**Nominal flow 1 lpm**  
**Features :**  
Direct operated valves for the limiting system pressure. Adjustable by means of the solenoid current, see performance curve, Technical data and selected valves electronics.  
Pressure limitation to a safe level even with electric failure (solenoid current I > I<sub>max</sub>.)  
For subplate attachment, mounting hole configuration to ISO4401  
External trigger electronics with ramps and value calibration (order separately).

### VT-DFP

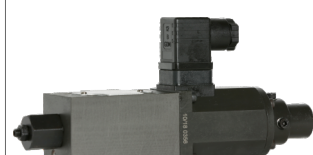
Pilot Control Valve, 24VDC, 350 bar



**Features:**  
Pilot valve for the pressure and flow control system SYDFE  
In conjunction with amplifier VT5041, it controls the swash-plate angle of the pump in either closed loop pressure or flow control  
Component series 2X  
This valve is to be considered a part and not a complete control  
Standard spool design  
Radial to the pump axis

### EDG-01

Proportional Pressure Relief And Flow Valves Pilot Operated



This valve consists of a small DC solenoid and a direct-acting relief valve. It serves as a pilot valve for a low flow rate hydraulic system or a proportional electro-hydraulic control valve and controls the pressure in proportion to the input current. Note that this valve is used in conjunction with the applicable power amplifier.



## PROPORTIONAL VALVES

### EBG 03/06

Electro proportional pressure relief valve



This valve is combined with a proportional electro-hydraulic pilot relief valve and a specially developed low-noise relief valve. Owing to special vent restrictor, this valve can make pressure control more precise and stable.

Size : 03, 06

### HD-(Z)DBE and HD-(Z)DBEE

Proportional pressure relief Valve



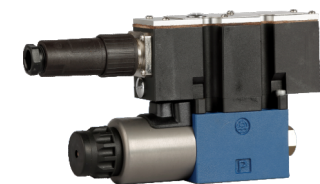
Size: 6  
Working Pressure 315bar  
Max. Flow 30L/min

#### Features :

Valve for limiting a system pressure  
Actuation via proportional solenoids  
For sub-plate mounting or sandwich plate design  
Valve and control electronics from a single source  
Types HD-DBEE and HD-ZDBEE with integrated control electronics:  
Low example spread of the command value pressure characteristic curve  
Independently adjustable up and down ramps

### HD-4WRA(E)6...2X

New Series Proportional Directional valve



**Direct operated with integrated electronic**  
**Working pressure bar 315**  
**Max Flow L/min 30**

For sub-plate mounting  
Direct actuated proportional valve for controlling the direction and volume of a flow  
Spring centered control spool  
Integrated control electronics, interface A1 or F1 for type 4WRAE  
Actuation by means of proportional solenoids with central thread and removable coil  
Control electronics for type 4WRA

### E-510 Series

Plug-in Proportional Valve Amplifier



**Introduction :** STM Microprocessor Chip, Embedded Digital Amplifier and Software with Intellectual Property, PWM negative current feedback. Shell is the standard Hirshmann DIN plug with convenient shape, less heat generated and IP65 protection. The maximum output current is 3.3A with current limiting protection. Two LED indicators of input signal and output current status. Preset PWM frequency parameters, the built-in potentiometers can change bias, ramp and scale parameters. The inputs are 0-10V, 0-20mA, 4-20mA or on-off input. Provide many options such as enable control, logic control, power limitation and so on.

### EFBG-02/03/06/10

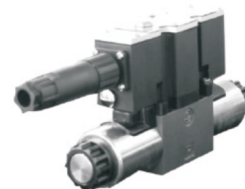
Proportional Pressure Relief And Flow Valves  
Pilot Operated



Pressure and flow is proportional to the input signal of the proportional solenoids. This proportional valve adopts two electrical loops to control pressure and flow of hydraulic system respectively. The power losses is very low and overall efficiency high, hence reduced power consumption. Using very small pressure drop to track load pressure and control the pump pressure. This relief and flow control valve is energy saving type that provide flow and pressure as per programmed for actuator / drive. It is an high efficiency and energy-saving valve.

### 3DREPE6

Proportional pressure reducing valve of 3-way design

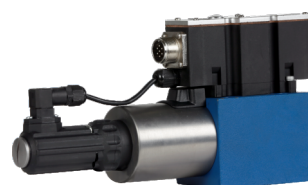


#### Features:

Directly controlled proportional valves for the control of the pressure and directional of flow  
Actuated via proportional solenoids with central thread and removable coil. Hand override, optional Spring centered control spool. Type HD-3DREPE with integrated electronics, interface A1  
External control electronics for type HD-3DREP Analogue amplifier type HD-VT-VSPA2-50-1X/... in Eurocard format. Digital amplifier type HD-VT-VSPD-1-1X/... in Eurocard format  
Electrical amplifier type HD-VT-11118 of modular design. Valve and proportional control electronics from a single source.

### HD-4WRE(E)...2X

New Series Proportional Directional valve

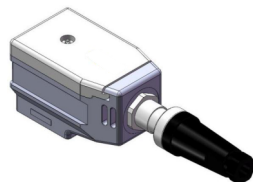


**With integrated electronics and position feedback**  
**Size: 6 and 10**  
**Working pressure bar 315**  
**Flow L/min 180**

Directly controlled proportional directional valve for the control of the direction and magnitude of a flow. For sub-plate mounting  
Electrical position feedback  
Spring centered control spool  
Type 4WREE, integrated valve electronics with interface A1 or F1  
Actuation is by proportional solenoids with central thread and removable coil  
Valve and electronic control from one source

### VT-PPDA1

Plug-in Amplifier Connector for proportional valve



**Component Series: 3X**  
**Operating voltage: 12...32V**  
**Features**

Plug-in amplifiers are easy to operate and install  
Digital proportional amplifier for mobile phone Bluetooth control  
Data can be monitored by mobile phone  
Users can configure parameters according to actual working conditions  
For proportional valves without position control

## PROPORTIONAL VALVES

### HD-4WRZE10

Proportional Directional Valve



Valves of type 4WRZE10 are pilot operated 4-way directional valves with operation by proportional solenoids. They control the direction and magnitude of flow.

#### Features:

Pilot operated 2-stage proportional directional valves with integrated electronics (OBE)  
Control the direction and magnitude of flow  
Manual override  
Spring-centered control spool

### HD-4WRKE10,16,25,32,35

Proportional Directional Valve, Pilot Operated with Electrical position feedback type



Size 10 16 25 32 35  
Flow L/min 170 460 870 1600 3000

**Pilot Operated, with integrated electronics**  
**Working Pressure bar 350**

Valve for limiting a system pressure  
Actuation via proportional solenoids  
For sub-plate mounting or sandwich plate design  
Valve and control electronics from a single source  
Types HD-DBEE and HD-ZDBEE with integrated control electronics:  
Low example spread of the command value pressure characteristic curve  
Independently adjustable up and down ramps



## FLOW CONTROL VALVES

### HD-2FRM

2-way flow control valve, Type HD-2FRM



For maintaining a continuous set flow, independent of pressure and temperature  
Lock able key optional  
External closing of the pressure compensator optional. Check valve optional  
A rectifier sandwich plate type Z4S should be fitted below to control a flow through the valve in both directions. For sub plate mounting.

Size	5	6	10	16
Type	HD-2FRM			
Max operating pressure bar	210	315	315	315
Flow L/min Max	15	25	50	160

### HD-2FRM6....31/

2-Way flow control valve, type HD-2FRM6.....31/



For maintaining a continuous set flow, independent of pressure and temperature  
Lock able, Key optional  
External closing of the pressure compensator optional. Check valve optional  
A rectifier sandwich plate type Z4S should be fitted below to control a flow through the valve in both directions. For sub plate mounting

Size	6
Type	HD-2FRM-...31/
Max operating pressure bar	315
Flow L/min Max	32

### HD-DV/DRV

Throttle check valve, type HD-DV/DRV



For setting and shut-off flow of fluid  
Throttle valve type DV and throttle check valve type DRV  
2 mounting type sub-plate mounting threaded connection

Size	6	8	10	12	16	20	25	30	40
Type	HD-DV/DRV								
Max operating pressure bar	350	350	350	350	350	350	350	350	350
Flow L/min Max	20	50	60	85	180	300	300	300	300

### HD-FD

Check Q meter valve, Type HD-FD



Pilot operated check valve leak-free  
2 mounting type : sub plate mounting, threaded connection  
By pass valve, free flow in opposite direction  
Optional built-on secondary pressure relief valve (only for valve with flange connection)  
3 mounting type manifold mounting (cartridge valve), sub plate mounting, SAE flange connections.

Size	12	16	25	32
Type	HD-FD			
Max operating pressure bar	315	315	315	315
Flow L/min Max	80	200	320	560



## FLOW CONTROL VALVES

### HD-MG/MK

Throttle and throttle check valve, Type HD-MG/MK



Suitable for direct in line mounting  
Pressure and viscosity dependent  
Throttle valve type MG and throttle check valve type MK  
Mounting type: Threaded connection

Size	6	8	10	15	20	25	30
Type	HD-MG/MK						
Max operating pressure bar	315	315	315	315	315	315	315
Flow L/min Max	15	30	50	125	200	300	400

### HD-Z2FS

Double throttle check valve, Type HD-Z2FS



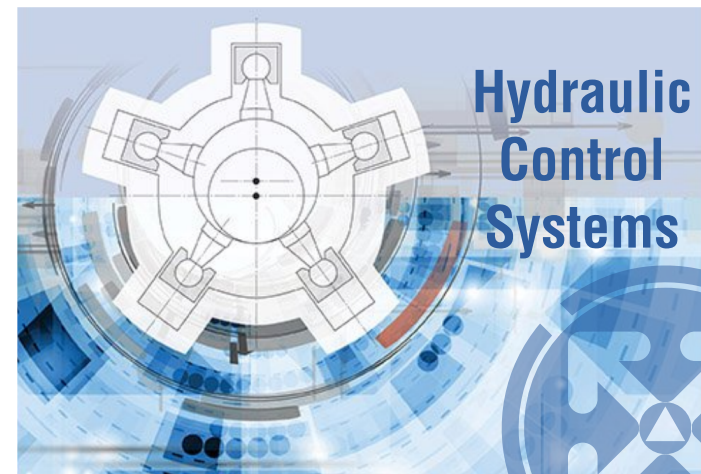
For limiting the main or pilot fluid flow of 2 actuator connections  
For meter-in or meter-out control  
Sandwich plate valve

Size	6	10	16	22
Type	HD-Z2FS			
Max operating pressure bar	315	315	315	315
Max. Flow L/min	15	50	125	200

### LFA



**Flow control valve**  
**Size: NG30**  
**Max. Pressure upto 210 Bar**  
**Max. Flow upto 300L/min**  
**Features:**  
It consist of pressure compensator and throttle valve  
Flow rate is adjusted by the handle regulated with in a range of 120  
The pressure relief valve can be with or without stroke regulator.



## ACCESSORIES

### HD-AF6E

Pressure gauge-Isolator valve type HD-AF6E



3-way longitudinal valve  
Push button operated  
Mounting type: Sub-plate mounting, Threaded connection

Size	6
Type	HD-AF6E
Max operating pressure bar	315

### WMAP

Pressure switches with fixed differential



**Max. Pressure upto 350 Bar**  
Pressure switches are designed to operated in hydraulics systems with hydraulic mineral oil or synthetic fluid having similar lubricating characteristics.

### HD-HED1

Hydro-electric pressure switch, type HD-HED1



For changing the pressure signal to electrical signal  
With of without drain port, optional  
With of without control lamp

Type	HD-HED1
Max operating pressure bar	500

### HD-HED4/HED8

Hydro-electric pressure switch type HD-HED4/HED8



For changing the pressure signal to electrical signal  
3 Max. setting pressures  
3 Mounting type: sub plate mounting, threaded connection, as vertical stacking element

Type	HD-HED4/HED8
Max operating pressure bar	350

## ACCESSORIES

### HD-MS2A

Multi-circuit gauge isolator, type HD-MS2A



Valve housing with threaded connections  
6 measuring points  
With built-in pressure gauge  
Flange mounting

Size	6
Type	HD-MS2A
Max operating pressure bar	315

### ET-02

Check valve manufacturer ET-02 lift valve



**Flow: 20L/min**  
**Max Pressure: 210bar**

**Features:**  
Spool position: normally close; Used in hydraulic lifting platform under solenoid valve voltage of AC220V, AC110V or DC24V., the whole lift process can be done stable and the rate of the decline will not be influenced by the load.

### KHB/KHM

Ball Valves



**Features :**  
THM 2-way High pressure Ball Valves are of a compact construction.  
Working temperature depending upon sealing material - 20 degree C to + 250 degree C.  
Easy handling even at high pressure (switching through 90 degree).  
Working pressure up to 450bar.  
Individual pressure testing of valves ensures safety.  
If the ball valve are to be used for gas, oxygen or any other special application, please give full details when ordering with temperature and pressure. Also manufactured in stainless steel.

### OSPT

Hydraulic Steering Unit

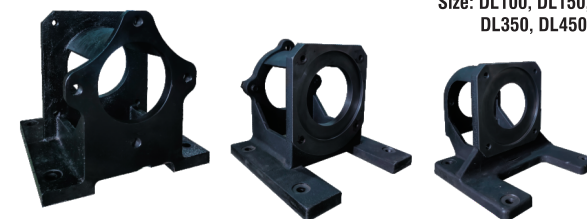


**Flow: 40lpm**  
**Max Pressure: 175 bar**  
**Displacement: 50 to 400cc/rev**

**Features:**  
High efficiency, long service life, compact and convenient low pressure drops & steering torque ports available to DIN, ISO or SAE Size 50 to 400cc/rev available with built-in value functions shock, inlet check suction and relief valves, according to European & US standards, extensively used in forklift, tractor, combines and loaders.

### Bell Housing Bracket

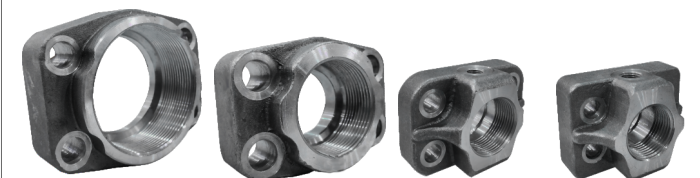
Servo Assembly Spares



Size: DL100, DL150, DL250, DL350, DL450, DL650

### SAE Flanges

Sizes: G3/4, G1, G1 1/4, G1 1/2, G2, G2 1/2, G3



### Minimess coupling



**Applications:**  
Monitoring/ testing of pressure  
Lubrication  
Air bleeding  
Oil sampling

### Accessories- Joysticks



**Applications:**  
For Monoblock Directional control valves and Sectional Directional control valves

### US-P1 User Manual



**Operating voltage: 8~32VDC**  
**Signal Input: 4~20 mA**  
**Output current: 0-3A**  
**Dither frequency: 50-450Hz**  
**Opposite time: 0-99.9 S**  
**Reference voltage: 5V**  
**Protection level: IP65**  
**Operating temperature: -40 to 70°C**

**THM**  
HYDRAULICS  
**QUALITY ASSURED**





## ELECTRONIC COMPONENTS

### T-FTC-400

Electronic Temperature Switch split-type



#### Introduction :

Type TFC-400 is a temp. controlling unit, gathering displaying and controlling functions. It is high in precision, small in volume, which can be matched with temp. sensor with oil tank (TFGW-100) mainly control the temp. In hydraulic and lubricate drive system. It has one or two switch value outputs (transistor output), selecting standard-analogue valve output of one way (4~20mA), and wiring with upper computer and PLC controlling system, you can set the switch point and prolongation by pushing button.

### TMRPD

Amplifier card



Suitable for the control of variable piston pump (type A4VSO and A4VSG)  
Powerful 32-bit processor  
Command 0...10 V  
2 PWM output ports  
Enable  
Fault diagnosis function, power supply voltage, coil short circuit, open circuit or other abnormal conditions prompted  
35mm rail mounting or screw holes

### TFPC-400

Electronic Pressure Switch



#### Features

Type TFPC is a compact electronic pressure switch with built in digital display in three digits. The switching point and the corresponding hysteresis can be adjusted via keypads. It is high in precision, small in volume. Switching points and switch-back hysteresis can be adjusted independently. Accuracy class 1% TFPC can be used in carrying one or two switching output or one analogue signal output besides directly measure the pressure value. Four different output models are available : With one switching point, with two switching points and both models can also have an additional analogue output signal 4...20mA. It can mainly be used in exactly monitoring pressure of hydraulic and pneumatic system. It can be used in places which needs high switching frequency with high precision where the normal mechanical pressure relay/switch cannot fulfill the demands.

### TEDS-3xx Series

Pressure switch with digital display



Pressure up to 400 bar  
Voltage 20...32 VDC  
Output 4-20mA/ Switching

#### Features:

The TEDS 3xx is a compact, electronic pressure switch with integrated digital display. The integrated pressure sensor is based on a measurement cell with thin-film strain gauge on a stainless steel membrane. Four different output models are available: with one switch point or with two switch points and both models can also have an additional analogue output signal 4...20 mA.

Rotary group and spares for A2F



Rotary group and spares for A2FO



Rotary cartridge for Vane Pumps  
T6C/D/E and 20V/25V/30V/35V



Rotary group and spares for A10V0/VSO



# SPARES AND SEAL KITS

## AIR COOLERS

Enhanced performance  
and LOW NOISE

### AJ0510

AC/DC fan motor series



Rate of flow 10L/min  
Max Working Pressure 15 Bar  
Fan Power 48 Bar  
Fan Voltage 220V~ 240V

Used in: Very suitable for machine tools, special purpose machine tools and small power packs.

### AH608L

AC/DC fan motor series



Used in: Very suitable for machine tools, special purpose machine tools and small power packs.

#### Features:

Application for cooling of the oil drain pipes of variable vane and piston pumps and small hydraulic power packs, the cooler is assembled with a high-performance axial flow electric fan with tightly structured high heat dissipation type fins, single-fan and double-fan cooling is available according to the heat generated in a hydraulic system, standard ports for inlet and outlet are available with PT and BSP screw threads operating voltages available are DC 12v, DC 24v, AC 110v and AC 220v.

### AW0607-FMA2

AC/DC fan motor series



Used in: Very suitable for machine tools, special purpose machine tools and small power packs.

#### Features:

Application for cooling of the oil drain pipes of variable vane and piston pumps and small hydraulic power packs, the cooler is assembled with a high-performance axial flow electric fan with tightly structured high heat dissipation type fins, single-fan and double-fan cooling is available according to the heat generated in a hydraulic system, standard ports for inlet and outlet are available with PT and BSP screw threads operating voltages available are DC 12v, DC 24v, AC 110v and AC 220v.

### AH1012,AH1245

AC/DC fan motor series



Used in: Very suitable for machine tools, special purpose machine tools and small power packs.

#### Features:

Application for cooling of the oil drain pipes of variable vane and piston pumps and small hydraulic power packs, the cooler is assembled with a high-performance axial flow electric fan with tightly structured high heat dissipation type fins, single-fan and double-fan cooling is available according to the heat generated in a hydraulic system, standard ports for inlet and outlet are available with PT and BSP screw threads operating voltages available are DC 12v, DC 24v, AC 110v and AC 220v.

### EH SERIES

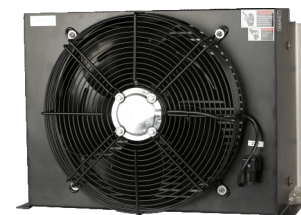
Oil Cooler with Hydraulic Motor



Model: EH24D-HM  
Gear motor displacement: 12.6 mL/r  
Motor Max. pressure: 250 bar  
Air Oil Cooler flow: 380 L/min  
Cooler Max. pressure: 24 bar

### AH1417-1890

Oil-air Cooler, AC fan motor series



Used in: Machine tools, special-purpose machinery, engineering machinery, tunnel and port machinery, hydraulic power station & lubricating system.

#### Features:

The product is designed to achieve the best cooling effect with 35 bar dynamic axial flow fan and tightly structured high-efficiency fan, single-fan cooling or double fan cooling is available according to the heat generation of the system, standard for oil inlet and outlet: PT(RC) screw thread; other threads can be custom-made, operating voltage: AC 110V, AC220V, AC 380V, DC 12V and DC 24V, in case that special voltage is required please contact THM

## HYDRAULIC CYLINDERS

### THM-OB/OD Series

OB/OD Medium Duty Tie Rod Hydraulic Cylinder



Working pressure: 140 bar  
Bore size(mm): Ø40, Ø50, Ø63, Ø80, Ø100, Ø125, Ø150, Ø180, Ø200  
Standard Stroke(mm): 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000

We Can Provide  
Customised Cylinders



## Modular Valves NG16, NG22, NG32

**First Time  
in India**

### ZRP/ZRA/ZRB

Pressure Reducing Modular Valves



Size: NG16, NG22, NG32  
Max. operating pressure up to 350 bar  
Max. flow up to 800 L/min.

### ZSW/ZSA/ZSB

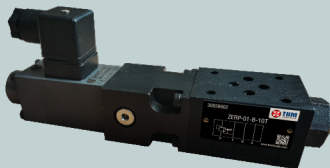
Throttle check Modular Valves



Size: NG16, NG22, NG32  
Max. operating pressure up to 350 bar  
Max. flow up to 800 L/min.

### ZERP/ZERA/ZERB

Reducing modular  
proportional valve



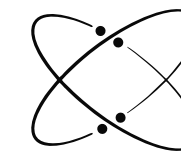
Sizes: 01, 03  
Rated Flow: 30, 70 l/min  
Max. pressure: 250 bar  
**Introduction:**  
The valve combines the advantages of a superposition valve and a proportional valve is easy to install and can adjust the secondary side pressure in proportion to the input current of the proportional electromagnet.

### ZPW/ZPA/ZPB

Pilot operated check Modular Valves



Size: NG16, NG22, NG32  
Max. operating pressure up to 350 bar  
Max. flow up to 800 L/min.



**ATOM METRIC**  
FINEST MEASUREMENTS, HIGHEST PRECISION

**NEW  
ARRIVAL**

## RH/RP Displacement Sensor Analog Output



## RH/RP Displacement Sensor SSI Output



## MH Series – Magnetostrictive Displacement Sensors



## HP Position Sensor



## EP Displacement Sensors



## ED Displacement Sensors

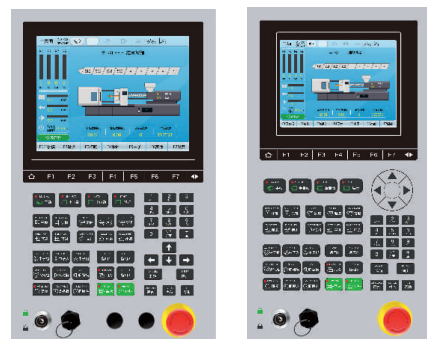


**First Time  
in India**

# MEGMEET®

## Controller for IMM Operations

### GK Series Controller



Models: GK8E, GK10M, GK10E, GK12E,  
GK10V, ET10V

#### Configuration Features

- Various appearance styles can be selected: horizontal screen, vertical screen and aluminium alloy frame integrated electric box.
- Multiple screen sizes are available for a wide range of applications.
- A variety of theme backgrounds, new visual upgrades.

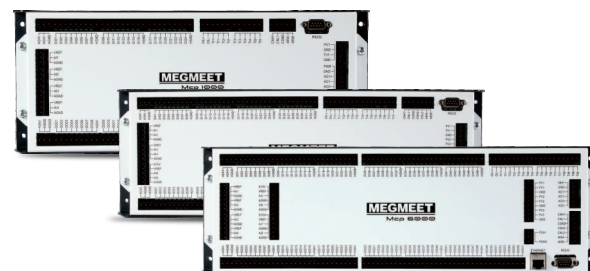
#### Operation style

- The key layout is reasonable and easy to operate.
- New operation interface, accord with the market mainstream operation habits.

#### Function Introduction

- Use U disk to achieve program upgrade, data upload and download, screen capture and other functions.
  - Support network expansion function to achieve remote monitoring.
  - I/O points, analog quantities and electronic ruler user-defined features.
  - Output points are programmable
  - The database function built by the manufacturer is convenient for debugging by customers.
  - More secure and efficient staged encryption algorithm
- Built in 9 languages: Chinese, English, Korean, Russian, French, Spanish, Portuguese, Vietnamese and Arabic.

### MCP Series Controller



Models: MCP1000, MCP2000  
MCP3000, MCP6000

#### Features

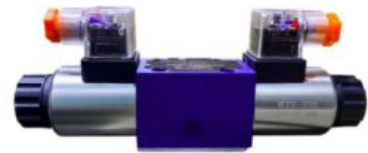
The control cycle is 250us, which can realize faster, more accurate and more stable control.  
Shrapnel type pressing terminal, convenient and quick user connection  
Multi-core control, rich hardware resources, to meet all injection molding machine configuration requirements.  
Full isolation design, strong anti-interference ability, output point short-circuit protection.  
Intelligent opening and closing algorithm: easy debugging, fast, flexible accurate and stable control.  
Self learning temperature control algorithm: accurate temperature control.





# Introducing the latest Make in India hydraulic valves!

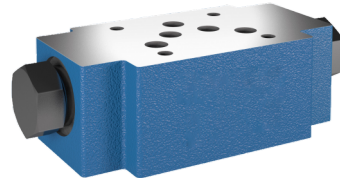
Engineered for optimal performance, these valves showcase cutting-edge technology, precision manufacturing, and adhere to international quality standards. Enhance your hydraulic systems with our reliable and efficient valves, proudly made in India to meet the diverse needs of Industries.



**4WE 6,10**  
Solenoid Operated  
Direction Control Valve



**ZDR6, 10**  
Pressure Reducing  
Valve



**Z2S6, 10**  
Pilot Operated  
Check Valve



**S Type 6 to 30**  
Check Valve  
Threaded Mounting



**DPRH 6, 10**  
Direct Operated  
Pressure Relief valve



**Z2FS6, 10**  
Double throttle  
and check valves



**PCM**  
Pressure Control Module



**1PS10/1PS**  
Pressure Switch



**"Empower Your Machinery:  
Make in India Hydraulic Valves  
Where Reliability Meets Revolution."**



# Introducing THM's HYBRID SERVO HYDRAULIC SOLUTION

## Electro-hydraulic Servo Drive

THSD-23 Series

Power :- 5.5~400kW; Single and Three Phase



## Hydraulic Servo Motor

THH Series

Power :- 5.5~61.8kW; Rated Speed: 1500-1700-2000 rpm

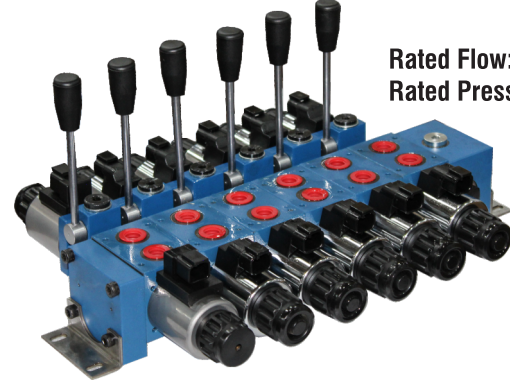
*"Step into the future of automation with our THM Servo System.  
Get ready to experience unparalleled accuracy and efficiency  
like never before."*



## NEW ARRIVAL

### DCF6

Electromagnetic multi way valve  
Solenoid Proportional Control/  
Manually Proportional Control



Rated Flow: 40 l/min  
Rated Pressure: 250 Bar

**THM**  
HYDRAULICS  
**QUALITY**  
**ASSURED**

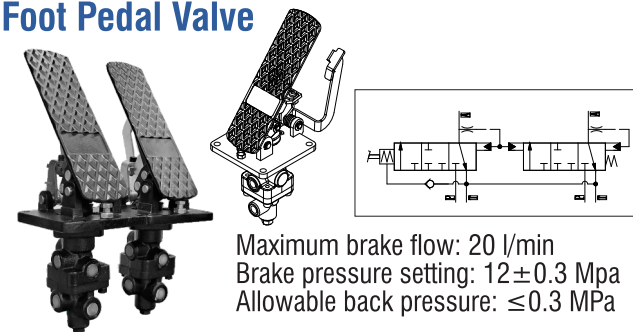
### VBS0

Dual counterbalance valve



Sizes: 6, 10, 15, 20  
Flow Rate: 30, 40, 60, 80 L/min  
Max. Working pressure up to 350 Bar

### Foot Pedal Valve



Maximum brake flow: 20 l/min  
Brake pressure setting:  $12 \pm 0.3$  Mpa  
Allowable back pressure:  $\leq 0.3$  MPa

### USDAS1

User Manual



Supply Voltage: 8-32 VDC  
Command Input: 4-20 mA

### MSE02

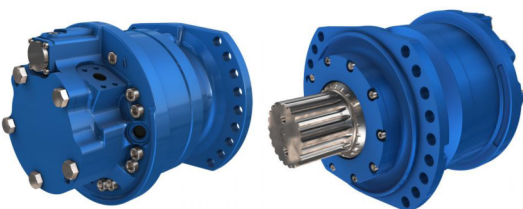
Hydraulic Motor



Direct drive motor up to 22 kW ideal for wheel motor or tool drive, from 172 to 398cc, from 400 to 450 bar max (max torque 2500 N.m) and high speed reached at 900 rpm with multispeed conception. The modular design ease the use on all demanding application for the most demandable market as construction equipment, material handling, agricultural, environment, mining, on rail, marine, industry...

### MSE18

Hydraulic Motor



Direct drive motor up to 70 kW ideal for wheel motor or tool drive, from 1091 to 2812cc, from 400 to 450 bar max (max torque 17900 N.m) and high speed reached at 170 rpm with multispeed conception. The modular design ease the use on all demanding application for the most demandable market as construction equipment, material handling, agricultural, environment, mining, on rail, marine, industry...

## ROTARY ACTUATOR

**NEW**  
**ARRIVAL**



### SAM Series

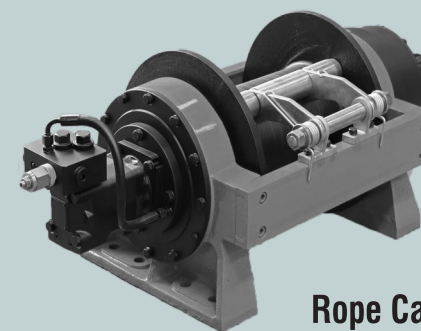
Rotary Actuator  
Displacement: 155, 256, 513, 827, 1253 cc/rev

SAM series rotary actuator is mainly designed for all kinds of aerial work platform. Customized product solutions according to customer requirements for different equipment can also be realized.



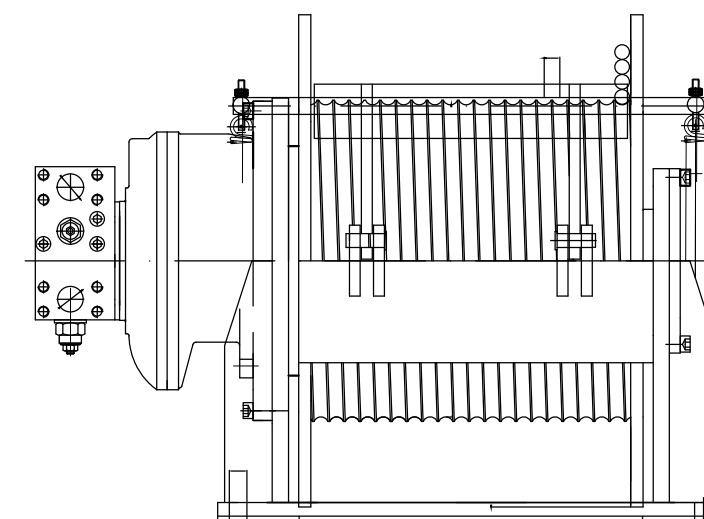
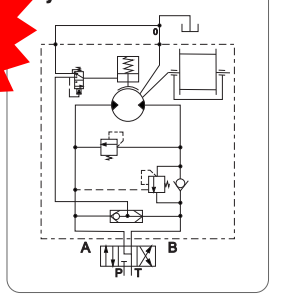
## HYDRAULIC WINCH

**NEW**  
**ARRIVAL**



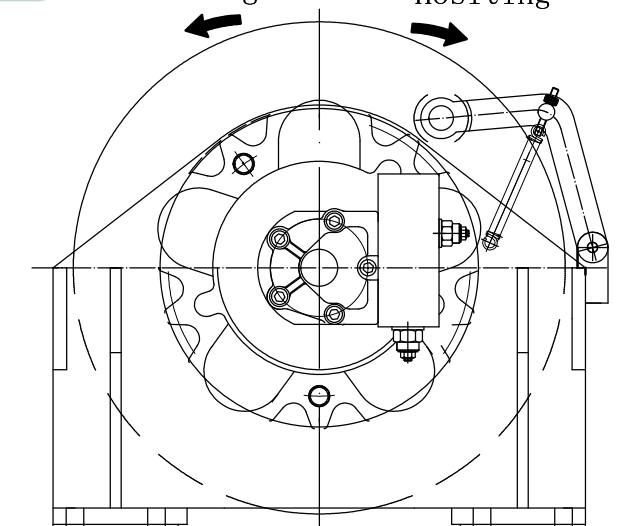
Rope Capacity: 2.5, 5, 10 Tonne

Hydraulic Schematic



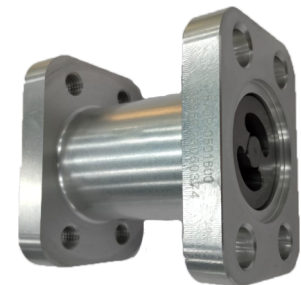
Lowering

Hositing

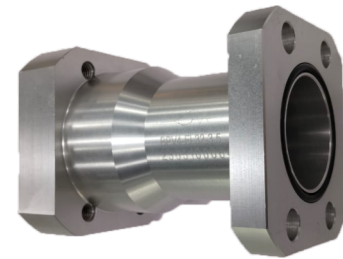




## Hydraulic valves For Mobile Applications



**Back Pressure Valve**  
Flow rate: 300 L/min  
Opening Pressure: 3 Bar



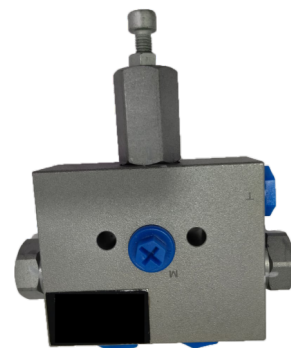
**Oil Return Check Valve**  
Flow rate: 500 L/min  
Rated Pressure: 50 Bar  
Opening pressure:  $3.5 \pm 0.2$  bar



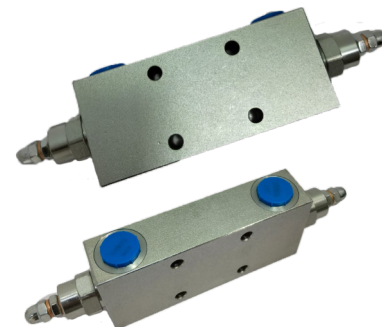
**Back Pressure Valve**  
Flow rate: 600 L/min  
Opening Pressure:  $4.5 \pm 0.45$  Bar



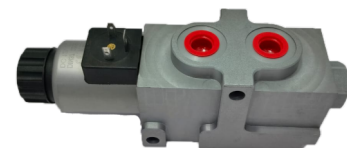
**2 Position 8 way switching valve**  
Flow rate: 20 L/min  
Rated Pressure: 100 Bar



**Flush Valve**  
Flow rate: 60 L/min  
Rated Pressure: 450 Bar  
Opening pressure: 0-30 bar



**Double Overcenter Balancing Valve**  
Flow rate: 60 L/min  
Rated Pressure: 350 Bar



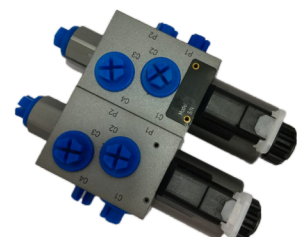
**2 Position 6 way solenoid valve**  
Flow rate: 60 L/min  
Rated Pressure: 250 Bar



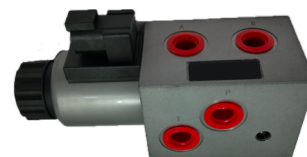
**2 Position 8 way solenoid valve**  
Flow rate: 10 L/min  
Rated Pressure: 100 Bar



**Selector Valve**  
Flow rate: 50 L/min  
Rated Pressure: 315 Bar



**2-link-2 Position 6 way solenoid valve**  
Flow rate: 25 L/min  
Rated Pressure: 250 Bar



**2 Position 6 way solenoid valve**  
Flow rate: 120 L/min  
Rated Pressure: 350 Bar

## Aerial Work Platform (Scissor-Lift)



### BCW Series Orbital Hydraulic Motor



Sizes: 120 to 620 cm<sup>3</sup>/rev  
Max. Cont. Speed up to 374 r/min  
Max. Cont. Flow up to 83 l/min  
**Introduction:**  
The BCW series orbital hydraulic motor, which boasts superior mass-to-power ratio, has been extensively used in all kinds of mobile and rotary conditions, particularly for low flow and large torque load starting conditions.

### BBK Series Hydraulic Brake



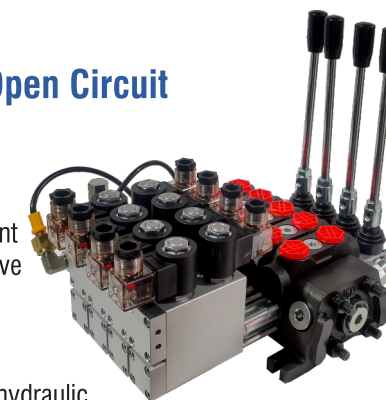
Min. Static Torque: 1150, 1500 Nm  
Brake Release pressure: 28 Bar  
Max. Bearing capacity: 250 Bar  
Max. Speed: 250 r/min  
**Introduction:**  
The BBK series brakes are normally-off oil wet static hydraulic brakes, which utilize spring action to produce the braking force, while oil pressure is used to release the brake.

### CVM Series Multi-way Control valve Open Circuit

Rated Flow up to 80 l/min

#### Features:

Low pressure loss for energy saving  
Sandwich structure, flexible adjustment  
Secondary pressure valve, charge valve equipped  
Small size and light weight  
Various control methods like manual, pneumatic, electrical control, electro-hydraulic



### TKC Series Axial Piston Variable Displacement Motor apply to open or close circuit

Size : 25 | 38 | 45  
Nominal pressure : 210 | 210 | 175  
Max pressure : 415 | 415 | 350



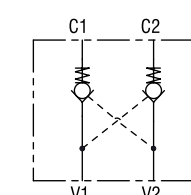
### TMCR/TMCRE Series

Hydraulic Motor  
Frame Sizes: 03, 05, 10



### VRDE Double acting pilot

HYDRAULIC CIRCUIT :



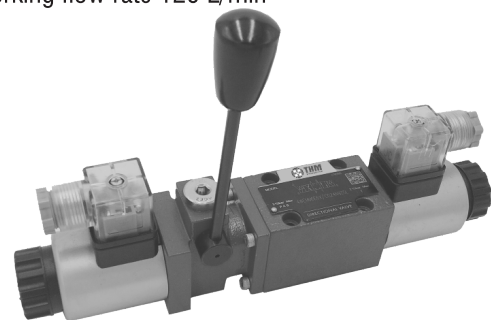


## NEW ARRIVALS

### WEMM

Solenoid Operated Directional Valve with Emergency Handle

Size 6 to 10  
Max. working pressure 350 bar  
Max. working flow rate 120 L/min



### 1RC

Radial Piston Pump  
Max. Pressure up to 350 Bar



#### Features:

- Radial piston arrangement, with 3, 5 or 7 pumping elements. Oil immersed or external mounting type.
- Face mounting, Valve controlled, Fixed delivery.
- Bi-directional rotation of shaft. Available with extension shaft for through drive.
- With extension bracket assembly for coupling a low pressure pump having standard flange

### PUMPING UNIT

Motor plus Pump Assembly  
(Variable Vane Pump / Gear Pump)



Motor Size: 0.5HP, 1HP, 2HP, 3HP, 5HP, 7.5HP, 10HP  
Variable Vane Pump Size: 8 cc & 16 cc

#### Features :

- High efficiency - Combining high efficient motor (complies with IE3 requirement) can save 20% more energy compared to normal motors and pumps
- Low temperature
- High volumetric efficiency and low leakage will cause less heat generation and improves the accuracy.
- Space-saving, Long Working life, Low noise

### FC/FCR Series

Full range Pressure Compensating Variable Flow Control Valve  
Max. Flow Setting up to 114 l/min



#### Features:

In order to vary the flow of fluid, the full range pressure compensating variable flow control valve is designed so that the orifice area varies as the lever is rotated. It has compensator spool inside the valve body. No matter how the pressure varies, that is, no matter the orifice area varies from closed to open, the outlet flows will be constant and stable.

### THAD Series

Diaphragm Accumulators



Sizes: 0.075Ltr~3.5Ltrs  
Max. Working pressure up to 330 Bar

### AB330 Series Bladder Accumulators

Operating Pressure: 315Bar  
Nominal Volume: 4~50L

#### Description:

Bladder accumulators are a very versatile and cost effective option for numerous types of hydraulic systems involving energy storage, shock absorption, pulsation dampening, leakage loss compensation and volume compensation. They are a first choice for a great variety of general applications and have the widest range of standard sizes and model options. Bladder accumulators also have very quick shock response characteristics in sizes much larger than diaphragm accumulators.



## NEW ARRIVALS

### TSR Series

Screw Pump

Shaft Speed up to 3600 rpm  
Flow up to 8000 l/min  
outlet pressure 0~80 Bar  
Inlet pressure -0.7~3 Bar



### TPN Series

Brush Less Motor



Voltage: 12, 24V  
Rated Power up to 120W  
Rated Current up to 7.2A  
Rated Speed up to 3000 rpm  
Rated Torque up to 0.382Nm  
Motor Life: 2000 Hours

### TA10

Linear Actuator



Input : 12V & 24V  
Load Force: Max. 1500N/150Kg/330lbs  
Speed: Max. 90mm/s  
Operation temperature: -26°C~+65°C

### TA14

Linear Actuator



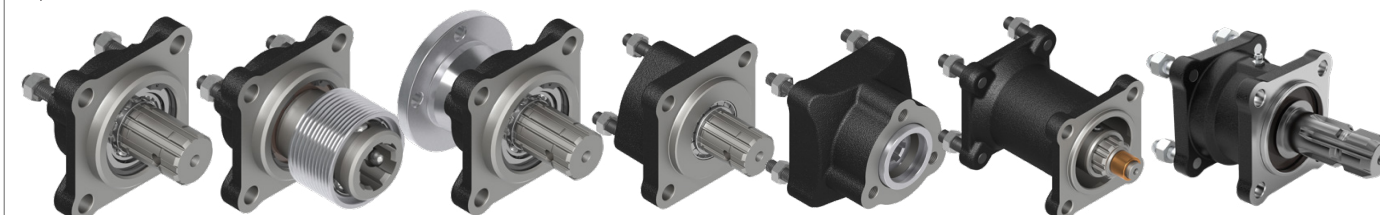
Input : 12V & 24V  
Load Force: Max. 4000N/400KG/880LBS  
Speed: Max. 26mm/s  
Operation temperature: -26°C~+65°C

### ADAPTERS

- 3/4 SHORT ADAPTER
- 3/4 SHORT ASAE ADAPTER
- 3/4 SHORT TRC ADAPTER
- 3/4 SHORT FLANGE ADAPTER
- 3/4 ADAPTER WITH SHORT BEARING AND FLANGE
- 3/4 LONG ADAPTER
- 3/4 LONG FLANGE ADAPTER

- 3/4 ADAPTER WITH LONG BEARING AND FLANGE
- 4/3 ADAPTER
- 4/3 ASAE ADAPTER
- PITCH LENGTHENING
- NGE ADAPTER
- LONG PITCH LENGTHENING ADAPTER WITH BEARING
- TRACTOR ADAPTER

- SAE A - ISO ADAPTER
- SAE B - ISO ADAPTER
- ISO - ASAE ADAPTER







## NEW ARRIVALS

### T-D1FP & T-D3FP

Direct-acting high-frequency response servo directional valve electrical position feedback and integrated amplifier

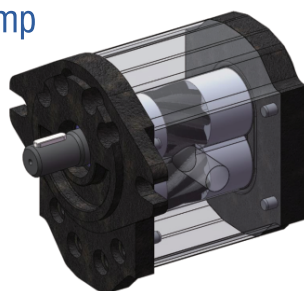
Size: NG6 & NG10  
Maximum pressure: 350 Bar  
Rated Flow:  
NG6 : 3~40 L/min  
NG10: 50~100L/min  
( $\Delta p=70\text{bar}$ )



### TGR Series

Helical Silent Gear Pump

Max. Continuous pressure up to 270 bar  
Max. Peak pressure up to 300 bar



### VBCD Series

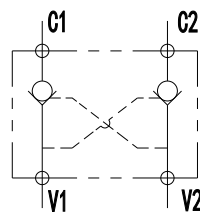
Single & Double Counterbalance valve



Sizes: 6, 10, 15, 20  
Flow Rate: 30, 40, 60, 80 L/min  
Max. Working pressure up to 350 Bar

### VRPDB

Double Pilot Check Valve



Operating Pressure: 3.5 Bar  
Maximum pressure up to 350 Bar  
Maximum flow up to 100 L/min

### T-D\*1FP

Pilot-operated three-position four-way servo directional valve  
VCD voice coil motor driver  
With electrical position feedback with integrated amplifier



Sizes: 10~ 27  
Maximum pressure: 350bar  
Rated flow: 60~600L/min

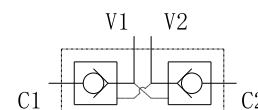
### Single Counterbalance Valve



Flow Range: 60~200 L/min  
Pressure Range: 250~315 Bar

### DPOCV

Double Pilot Check Valve



Operating Pressure: 3.5 Bar  
Maximum pressure up to 350 Bar  
Maximum flow up to 80 L/min

## NEW ARRIVALS

### "Advanced Hydraulic Cartridges for Mobile and Industrial Systems: Powering Performance"



## CARTRIDGE VALVE TYPES

Pressure Control

Proportional Control

Flow Control

Counterbalance

Directional Control (Solenoid Operated)

Pilot Check Valve

\*We can provide customised solutions.\*



## NEW ARRIVALS

### TKC Series

Axial Piston Variable Displacement Motor  
Apply to open or close circuit



Size: 25, 38, 45  
Nom. pressure up to 210 Bar  
Max. pressure up to 415 Bar

### GFT Series

Planetary Gearbox

#### Features:

- Compact, space-saving planetary gearbox design
- Planet wheel carried in full-complement bearings
- Robust bearing system absorbing the forces exerted by the cable pull
- Simple mounting
- Integrated multiplate parking device
- GFT winch drives are used in all kinds of winches mobile and crawler cranes, railroad cranes, shipboard, dockside and container cranes.



### QL Series Remote controller

Transmitter and receiver



Models:  
Transmitter QL-02-SC001  
Transmitter QL-04-SC001  
Transmitter QL-05-SC001  
Transmitter QL-06-SC001  
Transmitter QL-04-SC003(P)  
Receiver

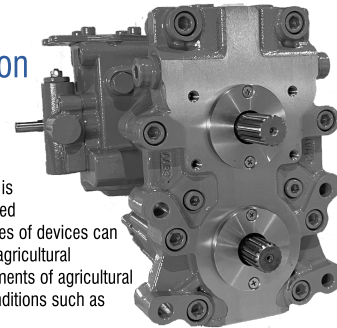
\* Both Transmitter and Receiver Support Customization

### HT S10 Series

Hydrostatic Transmission

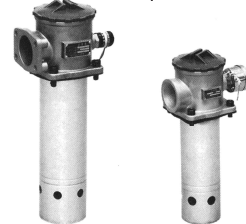
Displacement: 56 mL/r  
Rated pressure: 320 Bar  
Maximum pressure: 390 Bar

The HT S10 series hydrostatic transmission is an integrated unit of pump + motor developed for the agricultural machinery field. This series of devices can give full play to the driving performance of agricultural machinery and meet the application requirements of agricultural machinery customers for harsh working conditions such as high pressure and high speed.



### TF Series

Tank Mounted suction filter  
Maximum flow up to 1300 l/min



### DF Series

Pressure Line Filter  
Rated flow: 160, 256 l/min



### THTM Series

Travel Motor



Sizes: THTM01~THTM200  
Capacity up to 98 ton

### 2FRE Series

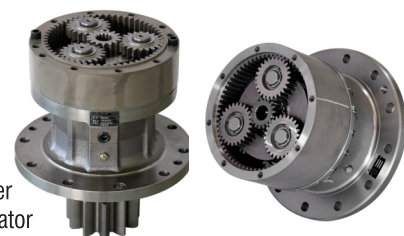
2-Way Proportional Flow Control Valve

Size 6  
Maximum working pressure 210bar  
Maximum working flow 25 L/min



### SG Series

Swing Reducer



SG Series Swing Reducer  
used for 6-50 ton Excavator

### VUBA Series

Hose Burst Cartridge Valves

Sizes: G1/4", G3/8", G1/2", G3/4", G1"  
Max. Flow: 30, 50, 80, 110, 180 L/min  
Max. pressure up to 350 Bar



## HYDRAULIC QUICK RELEASE COUPLINGS

Hydraulic quick couplings are connectors designed for easy and fast connection and disconnection of fluid lines in hydraulic systems, often without the need for tools. These couplings are crucial in applications where frequent or quick fluid line connections are needed, reducing downtime and improving efficiency. Below are the common subheadings under a detailed section on hydraulic quick couplings:

### TYPES OF HYDRAULIC QUICK COUPLINGS

- **Threaded Couplings:**  
Ideal for high-pressure systems
- **Non-Spill Couplings:**  
Prevents fluid spillage during connection/disconnection
- **Flat-Face Couplings:**  
Common in mobile and industrial applications
- **Ball and Sleeve Couplings:**  
Used in various hydraulic applications for durability
- **Push-to-Connect Couplings:**  
Easy and tool-free connection

THM-FF Flat face type  
hydraulic quick coupling (steel)



THM-S1 Close type  
hydraulic quick coupling (steel)



THM-S1SS  
hydraulic quick coupling (Stainless-steel)



THM-S4 Ball type  
Hydraulic quick coupling (steel)



THM-KZE-B Thread lock type  
Hydraulic quick coupling (steel)



THM-S5 & S5C Push & Pull type  
Hydraulic quick coupling (steel)



NOTE: FOR MORE REQUIREMENT PLEASE CONTACT THM.

**Hydraulic Quick Couplings:**

**Efficient Connectors for Fast and Secure**

**Hydraulic System Connections**





## COMPACT POWER UNIT

### Applications

- Wing Body truck
- Carrier for Agriculture
- 2 Post Car Lift
- Man Lift
- Tipper truck
- Tire changer
- Scissor Lift
- Solar panel
- Stacker
- CAN Press
- Tail Lift
- Elevator
- Dock leveler
- Wheel Chair Lift
- Aerial work platform
- Parking system
- Table lift
- 4 Post Car Lift
- Wheel alignment scissor lift
- Farm machinery

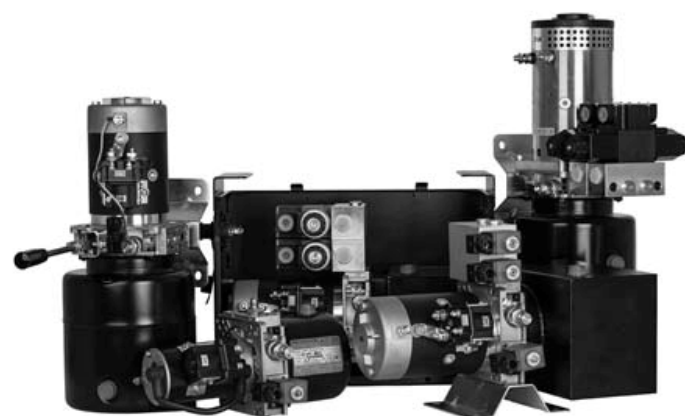
### AC power packs for car lifts



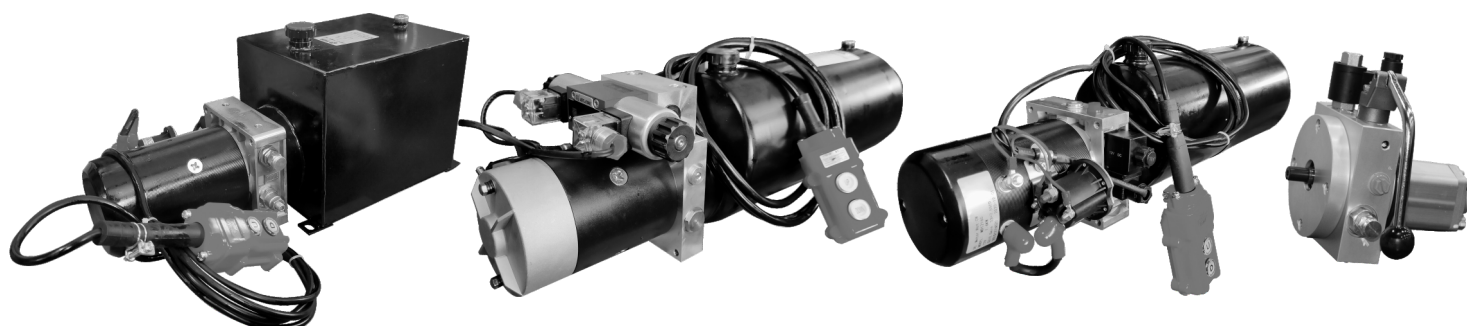
### AC power packs for industrial lifts and machinery



### DC Power Packs



### PTO Power Packs



\*Any other Specific Requirement Please Contact THM



## HYDRAULIC SPARE PARTS

Replacement for Rexroth, Kawasaki, Hitachi, Caterpillar, Sauer, Vickers, Nachi etc.



<b>Komatsu</b>	PC50/60/100/120/150/200/220/300/400(-1/2/3/4/5/6/7)/650;PC45R-8swing motor
	A10V(S)010/16/18/28/45/63/71/85/100/140 (H & E first products)
	A2F10/12/23/28/45/55/63/80/107/125/160/200/225/250/355/500/915/1000; (A2VK...)
	A2F010/12/16/23/28/32/45/56/63/80/90/107/125/160/180/250/355/500
	A2FE28/32/45/56/63/80/90/107/125/160/180/250/355
	A4V(SO)40/45/50/56/71/90/125/180/250/355/500
<b>Rexroth</b>	A4VG25/28/40/45/50/56/71/90/125/140/180/250
	A6V(M)28/55/80/107/140/160/200/250/355/500
	A7V(O)28/55/80/107/140/160/200/250/355/500/1000
	A8V(O)28/55/80/107/140/160/200/250/355/500
	A10VG028/45/63
	A11V(L)050/60/75/95/130/145/160/190/250/260
	A11VG50
<b>Uchida</b>	A8V86; A10VD17/43/71; AP2D14/21/25/36; PSVD2-19E/21E/27E
<b>Sauer</b>	SPV20/21/22/23/24/25/26, SPV6/119; MPV046;PV90R30/42/55/75/100/250
<b>Eaton</b>	3331; 3932; 4621/31; 5421/23/31;6421/23/31;7620/21
	PVXS-066/090/180
	PVB5/6/10/15/20/29
<b>Vickers</b>	PVE19/21; TA1919; MFE15/19
	PVH57/74/98/131; PVM028
	SPV15/18
<b>Cat</b>	12G/14G/16G/215/225/235/245/992/963; CAT320(AP-12);CAT320C;CAT330B
<b>Caterpillar</b>	Caterpillar SPK10/10(E200B); E200B NEW TYPE; SPV10/10; CAT120
<b>Liebherr</b>	LPVD35/45/64/75/90/100/125/140/165
<b>Yuken</b>	A37/40/45/56/70/90/120/140/145
<b>Linde</b>	BPR105/140/186/260;BPV35/50/70/100/200;B2PV35/50/75/105;H3.0/H4.5 travel
	HPR75/90/100/130/160;BMV50/55/75/105;BMF35/75/105/140/186/260;MPF55, MPR63
<b>Hitachi</b>	HPV091/102/105/116/130/135/145
<b>Kawasaki</b>	K3V45/63/112/140/180/280; K5V80/140/200
	K3SP36; K3SP30 ; KVC925/930/932; DNB08; NVK45DT; SBS120/140
	NV64/84/90/111/137/172/270; NX15; BE725
	MX150/173/500; M2X63/96/120/128/146/150/170/210; M5X130/180
<b>Kobelco</b>	SK30/60/100-7/200-1/3/6/7/220-2/3/320; HD450V; LUCAS400/500
<b>Kayaba</b>	MAG150/170; MSF85/PSVS-90C; PSVL-54; KYB87,KMF90; MSF23
<b>Hawe</b>	V30D75/95/140/250; V60
<b>Tadano</b>	100
<b>Parker</b>	PAVC100; PV040/092/140; P200Q; PVP16/76
<b>Denison</b>	PV29/74; PVT38
<b>Toshiba</b>	SG025/04/08/20
<b>Sumitomo</b>	PSV2-55T/63
<b>Nachi</b>	PVD-2B-32/34/36/100;PVD-3B-54P; PVK-2B-505
<b>Daikin</b>	V15;V38/-50/80;V70
<b>Volvo</b>	F11,F12
<b>Kyokuto</b>	MKV23/33
<b>Kato</b>	311
<b>Others</b>	MF16(type/motor);MF500; PVG130; 3V-SH-2B and More