









# **AGS-TECH Inc. HYDRAULIC**

**YUKEN SERIES VANE PUMPS**

**YUKEN SERIES VALVES**

## YUKEN SERIES VANE PUMPS

Part Name	Picture	Comments
"PVL" Series Single Pumps		Low noise, small pulsation, small flow and designed for mini-machine PVL1-2-*-RA-*-31, PVL1-3-*-RA-*-31 PVL1-4-*-RA-*-31, PVL1-6-*-RA-*-31, PVL1-8-*-RA-*-31, PVL1-11-*-RA-*-31
"LM" Series Motor-pumps		Perfect combination of vertical machine and PVL1 series pump with Low noise, small pulsation. LM-2-A-*-14, LM-3-A-*-14, LM-4-A-*-14, LM-6-A-*-14, LM-8-A-*-14, LM-11-A-*-14.
Single Vane Pumps		Steady performance, wide flow scope. Applied to hydraulic oil-source system. 50T-7, 50T-12, 50T-17, 50T-23, 50T-26, 50T-36 150T-48, 150T-61, 150T-75, 150T-94, 150T-116.
Double Vane Pumps		Two outlets. Composed of two parallel single pumps. 5050T-*-*-RL-40, 50150T-*-*-RL-40, 150150T-*-*-RL-20, 50250F-*-*-RL-40 150250F-*-*-RL-40, 250250F-*-*-RL-20
Combination Vane Pumps		The pressure of each pump can be adjusted separately. Supports telecontrol and double pressing control. 5050ST-*-*-RL-40, 5050CT-*-*-RL-40 50150ST-*-*-RL-40, 50150CT-*-*-RL-40
"PV2R" Series Single Vane Pumps		High pressure, high-performance and low noise. Flow scope from 5.8-237 cm <sup>2</sup> /rev. Applied to injection moulding machine etc. PV2R1*, PV2R2*, PV2R3*, PV2R4*

“PV2R4A” Series Single Vane Pumps



Energy saving high pressure and high-performance pump for saving space.

- PV2R4A-138-\*-RAA-10
- PV2R4A-162-\*-RAA-10
- PV2R4A-193-\*-RAA-10

“PV2R” Series Double Vane Pumps



Composed of two parallel PV2R series single pumps.

- PV2R12\*, PV2R13\*, PV2R23\*
- PV2R33\*, PV2R14\*, PV2R24\*, PV2R34\*

“PV2R24A/34A” Series Double Vane Pumps



New developed products on the basis of PV2R4A Series pumps

- PV2R24A\* series
- PV2R34A\* series

“PV11R” Series Single Vane Pumps



Newest ultrahigh pressure products. Adopt lubricating technology, solve problem of wear and tear.

- PV11R10-2, PV11R10-5, PV11R10-7, PV11R10-10, PV11R10-12
- PV11R20-15, PV11R20-19, PV11R20-22

“R1M” Series Motor-pumps



Composed of PV2R1 single pump and electromotor.

“R1M” Series Motor-pumps,

PV2R Series Cartridge



Cartridges for PV2R Series Vane Pumps. Can be provided as per your specific needs






- PV2R1\*, PV2R2\*, PV2R3\*, PV2R4\* etc.

Accessory Products



Accessory products for above-mentioned Pumps such as 50T,150T series and PV2R series etc, which including cover, sealing, screw, stator etc.

## YUKEN SERIES VALVES

Part Name	Picture	Comments
<b>Pressure Control Valves</b> <b>Remote Control Relief Valves</b>		Used as a remote control valve for pilot operated type pressure control valves. DT-01-22* DG-01-22*
<b>Direct Type Relief Valves</b>		Used in a hydraulic circuit to prevent damage due to over pressure and to adjust the maximum circuit pressure of small capacity. DT-02-*-22* DG-02-*-22*
<b>Pilot Operated Relief Valves</b>		These valves protect the hydraulic system from excessive pressure. Can be used to maintain constant pressure in a hydraulic system. BT-03-*-32, BT-06-*-32, BT-10-*-32, BG-03-*-32, BG-06-*-32, BG-10-*-32,
<b>Low Noise Type Pilot Operated Relief Valves</b>		Particularly developed as low-noise types. Able to protect pumps and control valves against excessive pressures. S-BG-03-*-40*, S-BG-06-*-40*, S-BG-10-*-40*
<b>Solenoid Controlled Relief Valves</b>		The combination of a pilot operated relief valve and a solenoid operated Directional valve. BST-03-*-48, BST-06-*-48, BST-10-*-48, BSG-03-*-48, BSG-06-*-48, BSG-10-*-48

### Low Noise Type Solenoid Controlled Relief Valves



It is used for no-load pump operation by using electric signals or, together with a remote control relief valve, for two or three pressure control of the hydraulic system.

S-BSG-03-\*\*-\*\*-51, S-BSG-06-\*\*-\*\*-51,  
S-BSG-10-\*\*-\*\*-51,  
S-BSG-03-\*\*-\*\*-53, S-BSG-06-\*\*-\*\*-53,  
S-BSG-10-\*\*-\*\*-53,

### H Type Pressure Control Valves



These valves are hydraulically damped, direct operated, pressure control valves which can be actuated by internal or external pilot pressure.

HT-03-\*\*-\*\*-22, HT-06-\*\*-\*\*-22,  
HT-10-\*\*-\*\*-22,  
HG-03-\*\*-\*\*-22, HG-06-\*\*-\*\*-22,  
HG-10-\*\*-\*\*-22

### HC Type Pressure Control Valves



They're available with integral check valve for use when free reverse flow from secondary port to the primary port is desired.

HCT-03-\*\*-\*\*-22, HCT-06-\*\*-\*\*-22,  
HCT-10-\*\*-\*\*-22,  
HCG-03-\*\*-\*\*-22, HCG-06-\*\*-\*\*-22,  
HCG-10-\*\*-\*\*-22

### Pressure Reducing Valves & Pressure Reducing and Check Valve



The two are used to set the pressure of a hydraulic circuit below that of the main circuit. Operation under remote control is also possible by using the remote control port.

RT/RCT-03-\*\*-22, RT/RCT-06-\*\*-22,  
RT/RCT-10-\*\*-22,  
RG/RCG-03-\*\*-22, RG/RCG-06-\*\*-22,  
RG/RCG-10-\*\*-22

### Pressure Reducing And Relieving Valves



Composite pressure control valves having pressure reducing and counterbalancing functions developed for hydraulic balancing circuits.

RBG-03-\*\*-10\*, RBG-06-\*\*-10\*

### Unloading Relief Valve



These valves are used to operate the pumps with minimum load in accumulator circuits or in high-low pump circuits.

BUCG-06-\*\*-30, BUCG-10-\*\*-25

### Pressure Switches



Used in hydraulic systems to make or break an electrical circuit at a preset hydraulic pressure.

ST-02-\*-20, SG-02-\*-20

### Flow Control Valves

#### Flow Control Valves/Flow Control and Check Valves



They're pressure and temperature Compensating type valves and maintain a constant flow rate independent of change in system pressure (load) and temperature (viscosity of the fluid).

FG/FCG-01-4/8-\*-11, FG/FCG-02-30-\*-30  
FG/FCG-03-125-\*-30, FG/FCG-06-250-\*-30  
FG/FCG-10-500-\*-30

**Pilot Operated Flow Control Valves & Pilot Operated Flow Control and Check Valves**



Continuously functioning by a hydraulically operated pilot piston mechanism which controls opening area of the orifice of the valve.

FH(C)G -02-30-\* -13, FH(C)G -03-125-\* -13, FH(C)G -06-250-\* -13, FH(C)G -10-500-\* -13

**Restrictors & One Way Restrictors**



This valve is used to regulate an actuator speed in a circuit where line pressure is almost steady and small fluctuation of oil flow due to pressure changes is permitted.

SRT-03-50, SRT-06-50, SRT-10-50, SRCT-03-50, SRCT-06-50, SRCT-10-50, SRG-03-50, SRG-06-50, SRG-10-50, SRCG-03-50, SRCG-06-50, SRCG-10-50,

**Throttle Modules & Throttle And Check Modules**



Used as pilot choke valves for solenoid controlled pilot operated directional valves.

TC1G-01-40, TC2G-01-40, TC1G-03-\* -40, TC2G-03-\* -40

**Deceleration Valves & Deceleration And Check Valves**



These valves are available either with or without an integral check valve which allows free reverse flow. Flow rate through the valve is regulated by the movement of the spool, which is operated by a cam.

Z(C)T-03-\* -\* -22, Z(C)T-06-\* -\* -22, Z(C)T-10-\* -\* -22, Z(C)G-03-\* -\* -22, Z(C)G-06-\* -\* -22, Z(C)G-10-\* -\* -22

**Feed Control Valves**



The combination of flow control valve, a deceleration valve and a check valve and used mainly for controlling rapid traverse and feed cycles of machine tools.

UCF1G-01-4-A-\* -11, UCF1G-01-4-B-\* -11, UCF1G-01-4-C-\* -11, UCF1G-01-8-A-\* -11, UCF1G-01-8-B-\* -11, UCF1G-01-8-C-\* -11, UCF1G-03-4-\* -10, UCF1G-03-8-\* -10, UCF2G-03-4-\* -10, UCF2G-03-8-\* -10, UCF1G-04-30-30, UCF2G-04-30-30

## Needle Valves



Used as stop valves for pressure gauge lines and small-capacity line. Also can be used as restrictors for regulating flow rates in pilot lines.

GCT-02-32 and GCTR-02-32

## Directional Control Valves

### Solenoid Operated Directional Valves (DSG-01 Series)



These are Solenoid Operated Directional Valves of high pressure, high flow and low pressure drop, the features being materialized by employing a powerful wet type solenoid and the rational flow channel design.

DSG-01-3C\*-\*-50, DSG-01-2D2\*-\*-50, DSG-01-2B\*-\*-50

S-DSG-01-3C\*-\*-50, S-DSG-01-2B2\*-\*-50

### Solenoid Operated Directional Valves (DSG-03 Series)



High pressure, high flow which have been developed incorporating a unique design concept into every part of the valve including the solenoid.

DSG-03-3C\*-\*-50, DSG-03-2D2\*-\*-50, DSG-03-2B\*-\*-50

S-DSG-03-3C\*-\*-50, S-DSG-03-2B2\*-\*-50

### Electronic Relay Incorporated Solenoid Operated Directional Valves



The valve has electrical switch. The electric current signal controls the switch and Solenoid Operated Directional Valves

T-DSG-01-3C\*/2D2/3B\*-D24\*-70

T-S-DSG-01-3C\*/2B2-D24\*-70

T-DSG-03-3C\*/2D2/3B\*-D24\*-50

T-S-DSG-03-3C\*/2B2-D24\*-50

### Solenoid Controlled Pilot Operated Directional Valves (DSHG-01,03,04,06,10 Series)



These valves are composed of a solenoid operated pilot valve and a pilot operated slave valve.

DSHG-01-3C\*/2B\*-\*-14

DSHG-03-3C\*/2N\*/2B\*-\*-14

(S-)DSHG-04-3C\*/2N\*/2B\*-\*-52

(S-)DSHG-06-3C\*/2N\*/2B\*/3H\*-\*-53

(S-)DSHG-10-3C\*/2N\*/2B\*/3H\*-\*-43



**Manually Operated  
Directional Valves  
(01.03,01/10,06,10 Series)**



These valves may be used to manually shift the spool position and change the direction of oil flow.

DMT-03-3C\*/3D\*/2D\*/2B\*-50  
DMT-06-3C\*/3D\*/2D\*/2B\*-30  
DMT-10-3C\*/3D\*/2D\*/2B\*-30  
DMG-01-3C\*/3D\*/2D\*/2B\*-10  
DMG-03-3C\*/3D\*/2D\*/2B\*-50  
DMG-04-3C\*/3D\*/2D\*/2B\*-21  
DMG-06-3C\*/3D\*/2D\*/2B\*-50  
DMG-10-3C\*/3D\*/2D\*/2B\*-40

**Manually Operated  
Directional Valves  
(special purpose)**



These valves may be used to manually shift the spool position and change the direction of oil flow.

DMG-01\*-3C\*-10Y, DMG-01\*-3D\*-10Y,  
DMG-01\*-2D\*-10Y, DMG-01\*-2B\*-10Y

**Cam Operated Directional  
Valves  
(01,03 Series)**



These valves may be used to shift the direction of oil flow by depressing the spool by way of a cam.

DCT-01-2B\*-40\*, DCT-03-2B\*-50\*,  
DCG-01-2B\*-40\*, DCG-03-2B\*-50\*

**In-Line Check Valves**



These valves allow free flow in one direction and prevent flow in the reverse direction. Cracking pressure specified is the pressure required to open the valve and allow free flow.

CIT-02-\*-50, CIT-03-\*-50,  
CIT-06-\*-50, CIT-10-\*-50

**Right Angle Check Valves**



These valves allow free flow in one direction and prevent flow in the reverse direction. Cracking pressure specified is the pressure required to open the valve and allow free flow.

CRT-03-\*-50, CRT-06-\*-50, CRT-10-\*-50,  
CRG-03-\*-50, CRG-03-\*-50, CRG-03-\*-50

**Pilot Controlled Check Valves**



These check valves allow flow in one direction and prevent flow in the reverse direction, until operated by pilot pressure to allow free reverse flow.

- CP\*T-03-\*-\*50, CP\*T-06-\*-\*50,
- CP\*T-10-\*-\*50,
- CP\*G-03-\*-\*50, CP\*G-06-\*-\*50,
- CP\*G-10-\*-\*50

**01 Series Modular Valves**

The modular valves are functional elements with which a hydraulic system can be composed and built easily by stacking them with the mounting bolts.

**Pressure Controlled Valves**  
**Relief Modular Valves**



- MBP-01-\*-\*30, MBA-01-\*-\*30, MBB-01-\*-\*30

**Reducing Modular Valves**



- MRP-01-\*-\*30, MRA-01-\*-\*30, MRB-01-\*-\*30

**Brake Modular Valves**



- MBR-01-\*-\*30

**Sequence Modular Valves**  
**&Counterbalance Modular Valves**



- MHP-01-\*-\*30, MHA-01-\*-\*30

**Flow Control Valves**  
**Pressure and Temperature Compensated Flow Control (and Check) Modular Valves**



- MFP-01-10
- MFA-01-\*-\*10, MFB-01-\*-\*10, MFW-01-\*-\*10

**Temperature Compensated Throttle and Check Modular Valves**



- MSTA-01-X-10, MSTB-01-X-10,
- MSTW-01-X-10

**Throttle Valves For "P" Line**



MSP-01-30

**Check and Throttle Valves For "P" Line**



MSCP-01-30

**Throttle and Check Modular Valves**



MSA-01-\*\*-30, MSB-01-\*\*-30, MSW-01-\*\*-30

**Directional Control Valve Check Modular Valves**



MCP-01-\*-30, MCT-01-\*-30

**Anti-Cavitation Modular Valve**



MAC-01-30

**Pilot Operated Check Modular Valve**



MPA-01-\*-40, MPB-01-\*-40, MPW-01-\*-40  
MPA-01-\*-4001, MPB-01-\*-4001, MPW-01-\*-4001

**Valve Plate And Bolt End Plates**



MDC-01-\*-30

**Connecting Plates**



MDS-01-\*-30

**Base Plates For Modular Valves**



MMC:MMC-01-\*-40  
Max. Operating Pressure-25MPa

**Mounting Bolt Kits For Modular Valves**



MBK: MBK-01-\*\*-30

**03 Series Modular Valves**

The modular valves are functional elements with which a hydraulic system can be composed and built easily by stacking them with the mounting bolts. Therefore, no piping is required for the manufacture of the hydraulic systems. Yuken's 03Series Modular Valves are widely used to compose the hydraulic systems for the various industrial and marine equipment including machine tools, special purpose machines, steel mill equipment and ships.

**Pressure Controlled Valves**

**Relief Modular Valves**



MBP-03-\*-20, MBA-03-\*-20, MBB-03-\*-20, MBW-03-\*-20

**Reducing Modular Valves**



MRP-03-\*-20, MRA-03-\*-20, MRB-03-\*-20

**Reducing Modular Valves For Pressure Setting**



MRLP-03-\*-10, MRLA-03-\*-10, MRLB-03-\*-10

**Sequence Modular Valves /Counterbalance Modular Valves**



MHP-03-\*-20  
MHA-03-\*-20, MHB-03-\*-20

**Flow Control Valves**

**Pressure and Temperature Compensated Flow Control (and Check) Modular Valves**



MFP-03-11  
MFA-03-\*-11, MFB-03-\*-11, MFW-03-\*-11

**Temperature Compensated Throttle and Check Modular Valves**



MSTA\*-03-X-20, MSTB\*-03-X-20, MSTW\*-03-X-20

**Throttle Modular Valves**



MSP-03-30

**Check and Throttle Modular Valves**



MSCP-03-20

**Throttle and Check Modular Valves**



MSA-03-\*-30, MSB-03-\*-30, MSW-03-\*-30

**Directional Control Valve**

**Check Modular Valves**



MCP-03-\*-10, MCA-03-\*-20, MCB-03-\*-20, MCT-03-\*-10

**Check Modular Valves For "P&T" Lines**



MCPT-03-P\*-T\*-10

**Anti-Cavitation Modular Valves**



MAC-03-10

**Pilot Operated Check Modular Valves**



MPA-03-\*-20, MPB-03-\*-20, MPW-03-\*-20

**Valve Plate And Bolt**

**End Plates**



MDC-03-\*-10

**Connecting Plates**



MDS:MDS-03-10

**Base Plates For Modular Valves**



MMC: MMC-03-T\*-21

**Mounting Bolt Kits For Modular Valves**



Max. Operating Pressure-25MPa

MBK: MBK-03-\*\*-10

**04 Series Modular Valves**

The modular valves are functional elements with which a hydraulic system can be composed and built easily by stacking them with the mounting bolts. Therefore, no piping is required for the manufacture of the hydraulic systems.

**Pressure Controlled Valves**

1/2 Reducing Modular Valves For "P,A & B" Lines



MRP-04-\*-10Y, MRA-04-\*-10Y, MRB-04-\*-10Y

**Flow Control Valves**

1/2 Throttle Check Modular Valves For "A,B & AB" Lines



MSA-04-X-10Y, MSA-04-Y-10Y, MSB-04-X-10Y, MSB-04-X-10Y, MSW-04-X-10Y, MSW-04-Y-10Y

**Directional Control Valve**

1/2 Pilot Operated Check Modular Valves For "A,B & AB" Lines



MPA-04-\*-10Y, MPA-04-\*-X-10Y, MPA-04-\*-Y-10Y, MPB-04-\*-10Y, MPB-04-\*-X-10Y, MPB-04-\*-Y-10Y, MPW-04-\*-10Y

**Bolt**

Mounting Bolt Kits For 1/2 Modular Valves



MBK: MBK-04-\*-10

**06 Series Modular Valves**

The 06 Series Valves are widely used to compose the hydraulic systems for the various industrial and marine equipment including machine tools, special purpose machines, presses, steel mill equipment and ships.

**Pressure Controlled Valves**

Reducing Modular Valves For "P,A & B" Lines



MRP-06-A-30, MRA-06-A-30, MRB-06-A-30, MRP-06-B/C/H-30, MRA-06-B/C/H-30, MRB-06-B/C/H-30

**Flow Control Valves**

**Throttle and Check  
Modular Valves For "A,B &  
AB" Lines**



MSA-06-X-30, MSA-06-Y-30,  
MSB-06-X-30, MSB-06-Y-30,  
MSW-06-X-30, MSW-06-Y-30

**Directional Control Valve**

**Pilot Operated Check  
Modular Valves For "A,B &  
AB" Lines**



MPA-06-\*-30, MPA-06\*-\*-X-30,  
MPA-06\*-\*-Y-30,  
MPB-06-\*-30, MPB-06\*-\*-X-30,  
MPB-06\*-\*-Y-30,  
MPW-06-\*-30

**Bolt**

**Mounting Bolt Kits For  
Modular Valves**



MBK: MBK-06-\*-30

**10 Series Modular Valves**

The modular valves are functional elements with which a hydraulic system can be composed and built easily by stacking them with the mounting bolts. Therefore, no piping is required for the manufacture of the hydraulic systems.

**Pressure Controlled Valves**

**Reducing Modular  
Valves For "P,A & B" Lines**



MRP-10-A-30, MRA-10-A-30, MRB-10-A-30  
MRP-10-B/C/H-30, MRA-10-B/C/H-30,  
MRB-10-B/C/H-30

**Flow Control Valves**

**Throttle and Check  
Modular Valves For "A,B &  
AB" Lines**



MSA-10-X-30, MSA-10-Y-30,  
MSB-10-X-30, MSB-10-Y-30,  
MSW-10-X-30, MSW-10-Y-30

**Directional Control Valve**

**Pilot Operated Check  
Modular Valves For "A,B &  
AB" Lines**



MPA-10-\*-30, MPA-10\*-\*-X-30,  
MPA-10\*-\*-Y-30,  
MPB-10-\*-30, MPB-10\*-\*-X-30,  
MPB-10\*-\*-Y-30,  
MPW-10-\*-30

**Bolt**

**Mounting Bolt Kits For  
Modular Valves**



MBK: MBK-10-\*-10

**Logic Valves**

Yuken Logic Valves comprise cartridge  
typed elements and covers with pilot  
passages. Various types may be combined  
for direction, flow rate and pressure

**Directional Control Logic  
Valves/Directional & Flow  
Control Logic Valves**



These valves are 2-way directional valves  
designed to open and close the circuits in  
accordance with pressure signals from the  
pilot lines.

LD-16, LD-25, LD-32, LD-40, LD-50, LD-63,  
LD-80, LD-100

**Solenoid Operated  
Directional Control Logic  
Valves(LDS)**



These solenoid operated directional  
control logic valves are composed of  
directional control valves and solenoid  
operated directional valves combined  
together.

LDS-25,LDS-32,LDS-40,LDS-50,LDS-63

**Relief Logic Valves(LB)**



The valves are used to protect pumps and  
control valves from excessive pressure and  
control the pressures of their hydraulic  
lines at constant levels.

LB-16-\*-\*-10, LB-25-\*-\*-10,  
LB-32-\*-\*-11, LB-50-\*-\*-11



**Solenoid Controlled Relief Logic Valves(LBS)**



These solenoid controlled relief logic valves are composite control valves having solenoid controlled directional and pilot relief valves and vent restrictors combined together.

LBS-16-\*-\*-\*10, LBS-25-\*-\*-\*10,  
LBS-32-\*-\*-\*11, LBS-50-\*-\*-\*11

**pilot operated compound-relief valve element**



BPL-K-L-10(For LB),BPLS-K-L-10(For LBS)  
ST797-40(For Backwater Valve)  
SB1039-A-10(For A line),  
SB1039-B-10(For B Line)

**Proportional Electro-Hydraulic Control Valves**

The valve can be used as a pilot valve of the Proportional Electro-Hydraulic Control Valves.The valve can also be used as a relief valve for the hydraulic system where a small flow rate and continuous pressure control are required.

**E Series Pilot Relief Valves**

**Proportional Electro-Hydraulic Pilot Relief Valves**



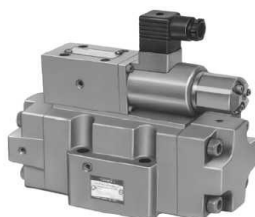
EDG-01\*-B/C/H-\*-P\*T\*-51

**Proportional Electro-Hydraulic Relief Valves**



EBG-03-C/H-\*-51, EBG-06-C/H-\*-51,  
EBG-10-C/H-\*-51

**Proportional Electro-Hydraulic Relieving and Reducing Valves**



ERBG-06-B/C/H-\*-51, ERBG-10-B/C/H-\*-51

**40 Ω Series Proportional  
Electro-Hydraulic Flow  
Control (and Check)Valves**



EFG-02-10/30-31,EFCG-02-10/30-31,  
EFG-03-60/125-26,EFCG-03-60/125-26,  
EFG-06-250-22,EFCG-06-250-22,  
EFG-10-500-11,EFCG-10-500-11

**40Ω- 10Ω Series  
Proportional  
Electro-Hydraulic Flow  
Control and Relief Valves**



EFBG-03-125-\* -15,EFBG-06-250-\* -15,  
EFBG-10-500-\* -15

**Power Amplifier**

Be used exclusively to operate the  
electro-hydraulic proportional valves.  
Various type and models are available for a  
variety of applications.

**Power Amplifier For  
Proportional valve**



AME-D-11-24-10(10Ω Series),  
AME-D-11-48-10(40Ω Series),  
AME-D-12-48-10(10Ω-40Ω Series),  
AME-D-12-24-10(10Ω-10Ω Series)