



# STANDARD HYDRAULIC POWER UNITS/POWER PACKAGES

Type	Model Numbers	Max. Operating Pres. MPa	Reservoir Capacity L							Geometric Displacement cm <sup>3</sup> /rev					Page		
			1	2	5	10	20	50	100	200	1	2	5	10		20	50
Low Noise & Small Type Hydraulic Power Units <b>YP Pack</b>	YP10	7/16															K-3
	YP16	16															
	YP22																
	YP37																
Low Noise Type Hydraulic Power Units <b>YA Pack</b>	YA10	7/16															K-13
	YA16																
	YA22	7															
	YA37																
Small Type Hydraulic Power Units <b>YA-Light Pack</b>	YAL8	3.5/7															K-32
	YAL16																
Energy-Saving Hydraulic Power Units <b>YA-e Pack</b>	E-YA10	7/16															K-43
	E-YA16																
	E-YA22	7															
	E-YA37																
Energy-Saving Control System for Hydraulic Units	AMC-IV	—	—							—					K-48		
Power Packages	PMR2	14															K-52
	PPF2	10.5															
<b>IH Servo Drive Pack</b>	YSD1	10.5															K-61
	YSD2	21															
	YSD3																

- Yuken provides various hydraulic units in accordance with the specifications.
- High efficiency energy-saving hydraulic power units equipped with PM motor are also available. For details, please contact us separately.

## Hydraulic Fluids

### Type of Fluids

Use petroleum base clean oils equivalent to ISO VG 32 or VG 46.

### Recommended Viscosity and Oil Temperature

Use hydraulic fluids which satisfy the both recommended viscosity and oil temperature given in the table below.

Type		Viscosity	Oil Temperature
<ul style="list-style-type: none"> <li>◦ YP Pack</li> <li>◦ YA Pack</li> <li>◦ IH Servo Drive Pack</li> </ul>		20 - 400 mm <sup>2</sup> /s	0 - 60 °C
<ul style="list-style-type: none"> <li>◦ YA Series L Pack</li> </ul>		20 - 400 mm <sup>2</sup> /s	5 - 60 °C
<ul style="list-style-type: none"> <li>◦ YA-e Pack</li> </ul>		20 - 220 mm <sup>2</sup> /s	5 - 60 °C
◦ Power Packages	PMR2	20 - 400 mm <sup>2</sup> /s	0 - 70 °C
	PPF2	10 - 400 mm <sup>2</sup> /s	

### Control of Contamination

Due caution must be paid to maintaining control over contamination of the hydraulic fluids which may otherwise lead to breakdowns and shorten the life of the equipments. Please maintain the degree of contamination below.

Type	Contamination Degree
YP Pack, YA Pack, YA Series L Pack, YA-e Pack	Within NAS Grade 10
Power Packages (PMR2/PPF2)	Within NAS Grade 12
IH Servo Drive Pack	Within NAS Grade 9

## Interchangeability in Installation between Current and New Design

Model change has been made on the following products.

Name	Model Numbers		Mounting Interchangeability	Page	Major Changes
	Current	New			
YP Pack	YP10- * - * - * -22	YP10- * - * - * -23	Yes	K-5	Increase Mass of Pres. Adj. Range "B"
YA Pack	YA10-B- * -0.75-51 YA10-B-3-1.5-51 YA10-B-4-1.5-51 YA16-B- * -0.75-50 YA16-B-4-1.5-50	YA10-B- * -0.75-52 YA10-B-3-1.5-52 YA10-B-4-1.5-52 YA16-B- * -0.75-52 YA16-B-4-1.5-52	Yes	K-30, K-31	Change The Built-in Motor
YA Series L Pack	YAL * - * - * - * -10	YAL * - * - * - * -20	No	K-37, K-38	Change The Built-in Motor [Comply with The Top Runner Criteria]
YA-e Pack	E-YA16-B-2-0.75-50	E-YA16-B-2-0.75-52	Yes	K-47	Change The Built-in Motor
Power Packages	PMR2- * - * - * - * -35	PMR2- * - * - * - * -40	Yes	K-59	Bring Built-in M Series Motor into Compliance with The Top Runner Criteria.
IH Servo Drive Pack	YSD1- * - * - * - * - * -10	YSD1- * - * - * - * - * -20	Yes	K-73 - K-76	Change Servo Motor and Servo Pack
	YSD <sub>3</sub> <sup>2</sup> - * - * - * - * - * - * -20	YSD <sub>3</sub> <sup>2</sup> - * - * - * - * - * - * -30			