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FLOW CONTROLS

Valve Type	Graphic Symbols	Maximum Operating Pressure MPa (PSI)	Maximum Flow												Page
Flow Control Valves		21 (3050)	FG	01	02	03	06	10							277
Flow Control and Check Valves		21 (3050)	FCG	01	02	03	06	10							277
Pilot Operated Flow Control Valves		21 (3050)	FHG		02	03	06	10							289
Pilot Operated Flow Control and Check Valves		21 (3050)	FHCG		02	03	06	10							289
Restrictors		25 (3630)	SRT/SRG		03	06	10	SRF-16	(Rated Flow)★						299
One Way Restrictors		25 (3630)	SRCT/SRCG		03	06	10	SRCF-16	(Rated Flow)★						299
Throttle Modules		25 (3630)	TC1G		01	03									305
Throttle & Check Modules		25 (3630)	TC2G		01	03									305
Deceleration Valves		21 (3050)	ZT/ZG		03	06	10								310
Deceleration & Check Valves		21 (3050)	ZCT/ZCG		03	06	10								310
Feed Control Valves		14 (2030)	UCF1G/UCF2G	01	03	04									318
Needle Valves		35 (5080)	GCT/ GCTR	02											325

★ Rated flow stands for approximate flow rate when the pressure drop between inlet and outlet ports of the valve in fully opened condition becomes 0.3 MPa (44 PSI) maximum at fluid's specific gravity of 0.85 and kinematic viscosity of 20 mm²/s (98 SSU).

Hydraulic Fluids

Fluid Types

Any type of hydraulic fluids listed in the table below can be used.

Petroleum base oils	Use fluids equivalent to ISO VG 32 or VG 46.
Synthetic fluids	Use phosphate ester or polyol ester fluid. When phosphate ester fluid is used, prefix "F-" to the model number because the special seals (fluororubber) are required to be used.
Water containing fluids	Use water-glycol fluid.

Note: For use with hydraulic fluids other than those listed above, please consult your Yuken representatives in advance.

Recommended Viscosity and Oil Temperatures

Use hydraulic fluids which satisfy the recommended viscosity and oil temperatures given below.

Name	Viscosity	Temperature
Flow Control Valves Flow Control and Check Valves Pilot Operated Flow Control Valves Pilot Operated Flow Control and Check Valves Feed Control Valves	20 - 200 mm ² /s (98 - 900 SSU)	-15 - +70°C (5 - 158°F)
Restrictors One Way Restrictors Throttle Modules Throttle and Check Modules Deceleration Valves Deceleration and Check Valves Needle Valves	15 - 400 mm ² /s (77 - 1800 SSU)	

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 valves. Please maintain the degree of contamination within NAS 1638-Grade 12. Use 25 μm or finer line filter.