

YUKEN

IN-LINE CHECK VALVES
CIT-02 / 03 / 06 / 10 (1/4,3/8,3/4,1-1/4)
RIGHT ANGLE CHECK VALVES
CRT / CRG-03 / 06 / 10 (3/8,3/4,1-1/4)

DIRECTIONAL CONTROLS

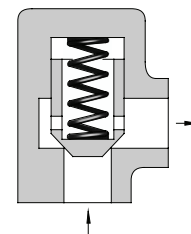
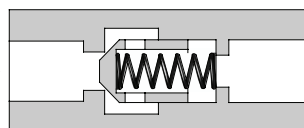
Up to 25 MPa (3630 PSI), 1300 L/min (343 U.S.GPM)

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.

In-Line Check Valves and Right Angle Check Valves are available.

■ In-Line Check Valves....Page 2

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Graphic Symbol



Graphic Symbol



■ 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

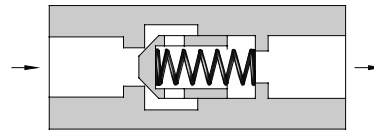
Viscosity ranging between 15 - 400 mm²/s (77 - 1800 SSU).

Oil temperatures between -15/+70°C (5 - 158°F).

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

● 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.



Specifications

Model Numbers	Rated Flow* L/min (U.S.GPM)	Max. Operating Pres. MPa (PSI)	Cracking Pres. MPa (PSI)	Approx. Mass kg (lbs.)
CIT-02-* -50/5080/5090	16 (4.23)	25 (3630)	0.04 (6) 0.35 (50) 0.5 (70)	0.1 (.22)
CIT-03-* -50/5080/5090	30 (7.93)			0.3 (.66)
CIT-06-* -50/5080/5090	85 (22.5)			0.8 (1.8)
CIT-10-* -50/5080/5090	230 (60.8)			2.3 (5.1)

★ Rated flow is the approximate flow rate, when there is a free flow pressure drop of maximum 0.3 MPa (44 PSI), the fluid has a specific gravity of 0.85 and a kinematic viscosity of 20 mm²/s (98 SSU), and the cracking pressure is 0.04 MPa (6 PSI).

Model Number Designation

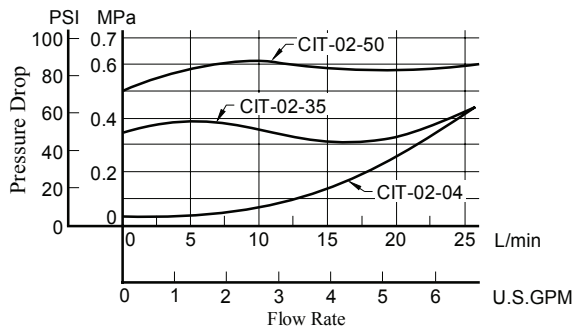
CI	T	-03	-04	-50	*
Series Number	Type of Connection	Valve Size	Cracking Pressure MPa (PSI)	Design Number	Design Standards
CI: In-Line Check Valve	T: Threaded Connection	02	04: 0.04 (6) 35: 0.35 (50) 50: 0.5 (70)	50	None: Japanese Std. "JIS" 80: European Design Std. 90: N. American Design Std.
		03		50	
		06		50	
		10		50	

Note: For In-Line Check Valves, standard type (for petroleum base oils) can be used phosphate ester type fluid.

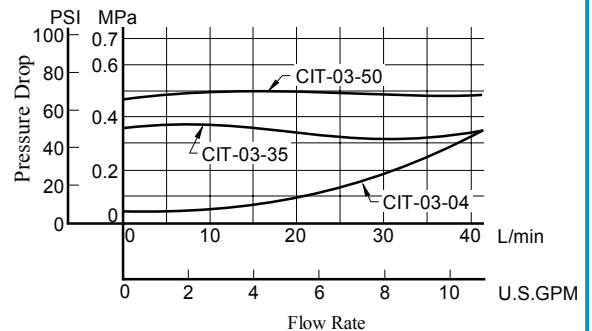
Pressure Drop

Hydraulic Fluid: Viscosity 30 mm²/s (141 SSU), Specific Gravity 0.850

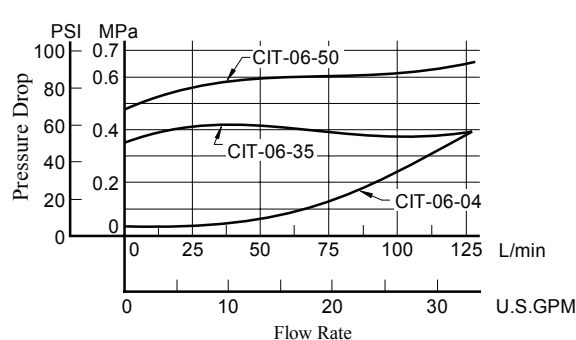
● CIT-02



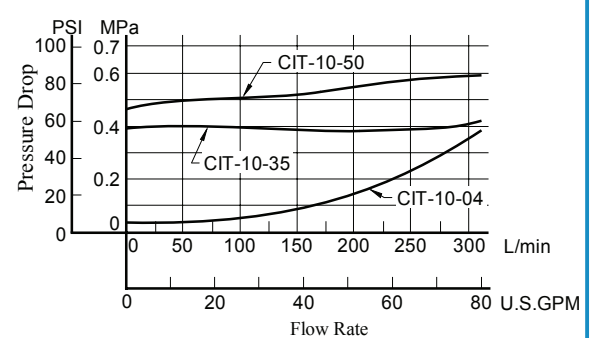
● CIT-03



● CIT-06

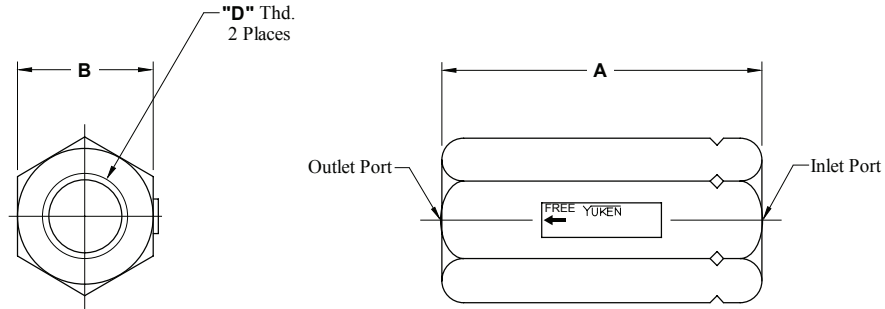


● CIT-10



CIT-02-*-50/5080/5090
CIT-03-*-50/5080/5090
CIT-06-*-50/5080/5090
CIT-10-*-50/5080/5090

DIMENSIONS IN
MILLIMETRES (INCHES)



Model Numbers	mm (Inches)		"D" Thd.
	A	B	
CIT-02-*-50	58 (2.28)	19 (.75)	Rc 1/4
CIT-02-*-5080	65 (2.56)	22 (.87)	1/4 BSP.F
CIT-02-*-5090	58 (2.28)	19 (.75)	1/4 NPT
CIT-03-*-50	76 (2.99)	27 (1.06)	Rc 3/8
CIT-03-*-5080	83 (3.27)		3/8 BSP.F
CIT-03-*-5090	76 (2.99)		3/8 NPT
CIT-06-*-50	95 (3.74)	41 (1.61)	Rc 3/4
CIT-06-*-5080	102(4.02)		3/4 BSP.F
CIT-06-*-5090	95 (3.74)		3/4 NPT
CIT-10-*-50	133(5.24)	60 (2.36)	Rc 1-1/4
CIT-10-*-5080			1-1/4 BSP.F
CIT-10-*-5090			1-1/4 NPT