

Inserta Products, Inc.

CHECK VALVES THREAD-IN TYPE

INSERTA® ICT Check Valves, Thread-In Type, with external SAE threads, can be inserted in manifolds, subplates, flanges or integrated valve systems. This compact design eliminates external leak points associated with line mounted check valves.

These disc check valves are also available with a fixed orifice for customer's specific quantity requirement.

INSERTA® ICT Check Valves, Thread-In Type, are all steel construction with hardened, lapped discs and seats providing positive fluid shut off. They come complete with a sealing O-ring.



ORDERING INFORMATION

INSERTA®
CHECK VALVES
THREAD-IN TYPE

DESIGN CODE

NOMINAL SIZE (Thread Size)

02 = 5/16 - 24	16 = 1 5/16 - 12
03 = 3/8 - 24	20 = 1 5/8 - 12
04 = 7/16 - 20	24 = 1 7/8 - 12
06 = 9/16 - 18	32 = 2 1/2 - 12
08 = 3/4 - 16	40 = 3 - 12
10 = 7/8 - 14	48 = 3 1/2 - 12
12 = 1 1/16 - 12	

ICT-B-24-N015-RØ

FLOW CONTROL OPTION

R = FIXED RESTRICTIVE ORIFICE
Ø = DIAMETER (INCH) OF THE FIXED ORIFICE. CUSTOMER MUST SPECIFY THE ORIFICE DIAMETER.
SEE "RØ" ON DATA SHEET FOR ORIFICE DATA.
(OMIT FOR STANDARD CHECK VALVE)

CRACKING PRESSURE

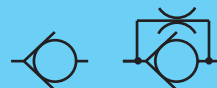
003 = 3 PSI	
007 = 7 PSI	
015 = 15 PSI (STANDARD)	
030 = 30 PSI	
060 = 60 PSI	} Optional Longer Check Valve
090 = 90 PSI	

SEAL COMPOUND

N = BUNA-N (STANDARD)
V = VITON

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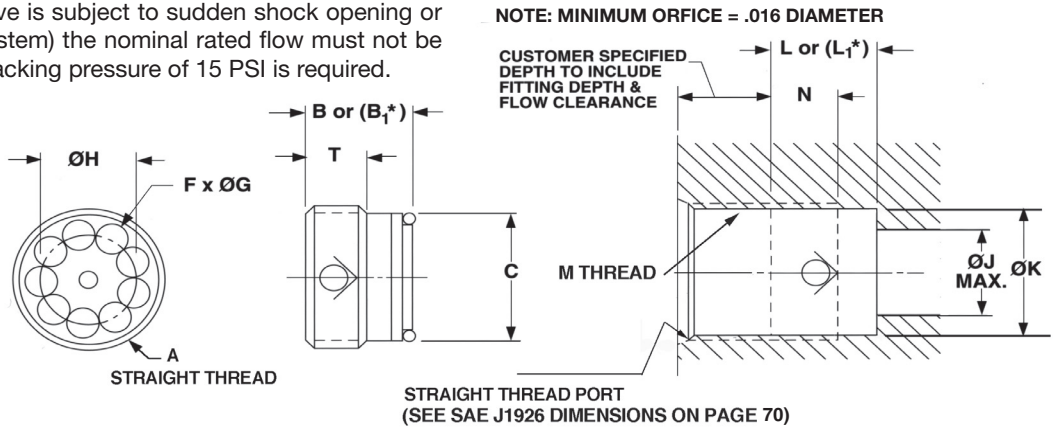
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VALVE SIZE	NOMINAL FLOW (GPM)	VALVE DIMENSIONS								RØ MAX	T	O-RING SIZE NO. (mm)	INSTALLATION TOOL	SEATING TORQUE LB-FT
		A	B	B1 *	C	F	G	H						
02	1.0	5/16-24	.412	—	.245	4	.06	.175	.024	.270	(4.5x1)	IMT-C-02	.5-1	
03	1.8	3/8-24	.428	—	.333	4	.07	.224	.039	.270	(6.2X1)	IMT-C-03	.5-1	
04	3.0	7/16-20	.435	.630	.376	4	.10	.228	.039	.255	010	IMT-C-04	1-2	
06	6.0	9/16-18	.455	.710	.494	6	.12	.328	.078	.255	012	IMT-C-06	1-2	
08	12	3/4-16	.535	.750	.673	8	.15	.453	.078	.285	(13x2)	IMT-C-08	2-3	
10	17	7/8-14	.630	.770	.787	8	.17	.565	.078	.350	(16x2)	IMT-C-10	7-8	
12	25	1 1/16-12	.750	1.045	.963	8	.22	.693	.140	.430	116	IMT-D-12	16-17	
16	35	1 5/16-12	.910	1.340	1.210	9	.28	.875	.218	.510	213	IMT-D-16	27-29	
20	63	1 5/8-12	1.420	2.440	1.535	10	.31	1.161	.275	.940	219	IMT-E-20	45-50	
24	80	1 7/8-12	1.655	3.000	1.769	10	.37	1.340	.394	1.055	222	IMT-E-24	80-90	
32	135	2 1/2-12	2.520	—	2.391	10	.50	1.804	.394	1.531	227	IMT-E-32	90-100	
40	155	3-12	2.988	—	2.883	10	.59	2.187	.394	1.750	231	IMT-E-40	300-340	
48	175	3 1/2-12	3.113	—	3.385	10	.69	2.562	.394	1.750	235	IMT-E-48	400-430	

In applications where the valve is subject to sudden shock opening or closing (e.g. Accumulator System) the nominal rated flow must not be exceeded and a minimum cracking pressure of 15 PSI is required.

NOMINAL FLOW RATES ARE WITH A ΔP OF 30 TO 40 PSI



SEE PAGE 64 FOR INSTALLATION TOOL ORDERING INFORMATION

MACHINED CAVITY DIMENSIONS						
VALVE SIZE	J	K -.005	L	L1*	M	N
02	.125	.255	.412	—	5/16-24	.291
03	.190	.345	.428	—	3/8-24	.291
04	.188	.389	.435	.630	7/16-20	.275
06	.281	.508	.455	.710	9/16-18	.275
08	.406	.689	.535	.750	3/4-16	.335
10	.500	.804	.630	.770	7/8-14	.415
12	.625	.978	.750	1.045	1 1/16-12	.495
16	.813	1.228	.910	1.340	1 5/16-12	.590
20	1.031	1.541	1.420	2.440	1 5/8-12	1.025
24	1.250	1.798	1.655	3.000	1 7/8-12	1.420
32	1.750	2.416	2.520	—	2 1/2-12	1.750
40	2.062	2.915	2.988	—	3-12	1.875
48	2.500	3.415	3.113	—	3 1/2-12	1.875

MOUNTING POSITION:
OPTIONAL
MAXIMUM OPERATING PRESSURE:
5000 PSI (Contact the Factory for pressures up to 7250 PSI)
TEMPERATURE RANGE:
-22°F (-30°C) To 175°F (80°C)
(Depending on seal material)

OPERATING MEDIUM:
HYDRAULIC FLUID
VISCOSITY RANGE:
50 SSU TO 2000 SSU
CRACKING PRESSURE:
3 PSI, 7 PSI, 15 PSI (STANDARD)
OR 30 PSI.
*60 PSI & 90 PSI, OPTIONAL WITH LONGER CHECK VALVE.

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