

# Inserta Products, Inc.

## CHECK VALVE GUIDED DISC THREAD-IN TYPE STAINLESS STEEL

INSERTA® IGT (Stainless Steel) Check Valves Guided Disc, Thread-In type, with threads compatible with O-ring port cavities made to SAE J1926-1, can be inserted in manifolds, subplates, flanges, and integrated valve systems.

Valve components are made from austenitic and precipitation hardened stainless steels. They may be considered in applications where broader operating temperature ranges are required, or for use with operating media that may be corrosive to standard steels.

The guided disc design (patent pending) provides superior resistance to wear in conditions prone to turbulence, which may induce valve disc flutter in an unguided disc. The guided disc is also less prone to chatter in low flow states.

Valve discs and seats are hardened and flat lapped for positive fluid shut off.

The valve disc may be provided with a customer specified orifice to provide fixed orifice flow control function in the checked direction.



Patent Pending

### ORDERING INFORMATION

**IGT-A-06-N015-RØ-SS**

INSERTA®  
CHECK VALVES  
GUIDED DISC  
THREAD-IN TYPE

DESIGN CODE

NOMINAL SIZE (Thread Size)

04 = 7/16 - 20  
06 = 9/16 - 18  
10 = 7/8 - 14  
12 = 1 1/16 - 12  
16 = 1 5/16 - 12

BODY MATERIAL  
SS = STAINLESS STEEL

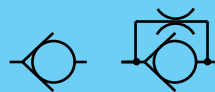
FLOW CONTROL OPTION  
R = FIXED RESTRICTIVE ORIFICE  
Ø = DIAMETER (INCH) OF THE FIXED ORIFICE. CUSTOMER MUST SPECIFY THE ORIFICE DIAMETER  
SEE "RØ" ON DATA SHEET FOR ORIFICE DATA.  
(OMIT FOR STANDARD CHECK VALVE)

CRACKING PRESSURE  
003 = 3 PSI  
007 = 7 PSI  
015 = 15 PSI (STANDARD)

SEAL COMPOUND  
N = BUNA-N (STANDARD)  
V = VITON

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CHECK VALVES  
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TYPE

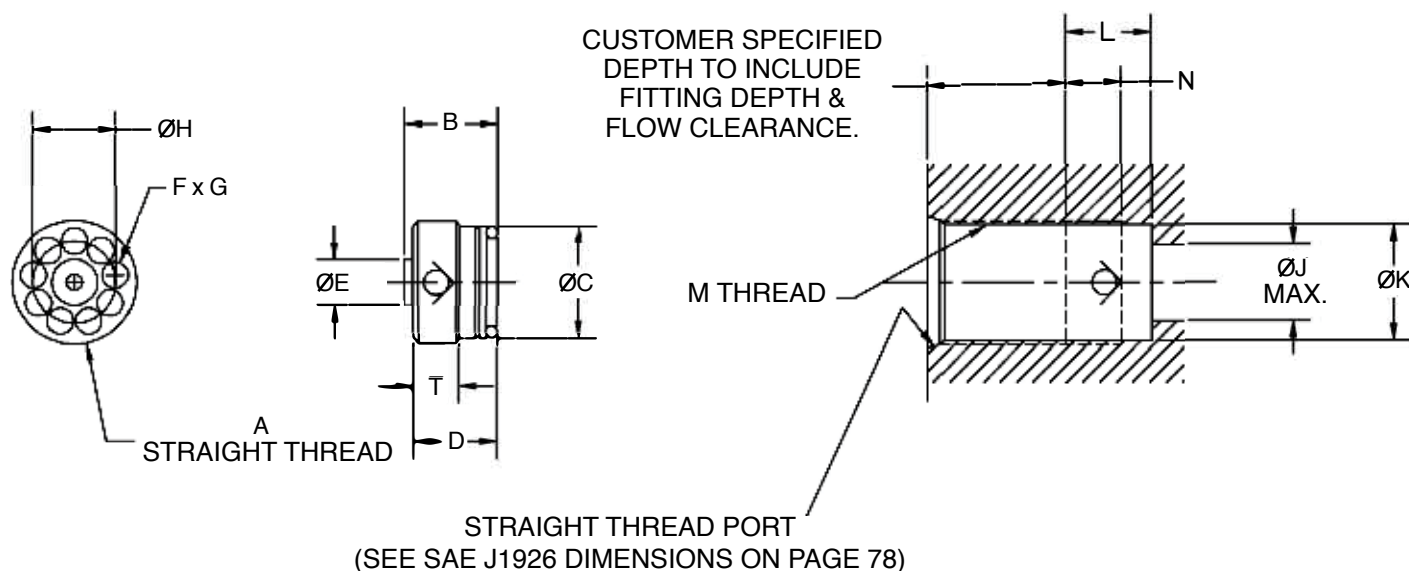


| VALVE SIZE | NOMINAL FLOW (GPM) | VALVE DIMENSIONS |       |       |      |      |   |     |      |      | O-RING SIZE NO. (mm) | INSTALLATION TOOL | SEATING TORQUE LB-FT | RØ MAX |
|------------|--------------------|------------------|-------|-------|------|------|---|-----|------|------|----------------------|-------------------|----------------------|--------|
|            |                    | A                | B     | C     | D    | E    | F | G   | H    | T    |                      |                   |                      |        |
| 04         | 3                  | 7/16-20          | .470  | .372  | .470 | --   | 3 | **  | .248 | .352 | 011                  | IMT-G-04          | 1-2                  | --     |
| 06         | 6                  | 9/16-18          | .459  | .494  | .459 | -    | 6 | .10 | .345 | .271 | 012                  | IMT-C-06          | 1-2                  | .044   |
| 08         | 12                 | 3/4-16           | .575  | .673  | .530 | .240 | 8 | .15 | .453 | .290 | (13X2)               | IMT-C-08          | 2-3                  | .055   |
| 10         | 17                 | 7/8-14           | .690  | .787  | .635 | .300 | 8 | .17 | .565 | .359 | (16X2)               | IMT-C-10          | 7-8                  | .078   |
| 12         | 12                 | 3/4-16           | .575  | .673  | .530 | .240 | 8 | .15 | .453 | .290 | (13X2)               | IMT-C-08          |                      | .055   |
| 16         | 35                 | 1 5/16-12        | 1.024 | 1.210 | .898 | .490 | 9 | .27 | .875 | .515 | 213                  | IMT-C-16          | 27-29                | .200   |

\*Torques specified are for lubricated surfaces

\*\* .064 Wide Slots

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 cracking pressure of 15 PSI is recommended.



**SEE PAGE 72 FOR  
INSTALLATION TOOL  
ORDERING INFORMATION**

| VALVE SIZE | MACHINED CAVITY DIMENSIONS |            |       |           |      |
|------------|----------------------------|------------|-------|-----------|------|
|            | J                          | K<br>-.005 | L     | M         | N    |
| 04         | .188                       | .389       | .470  | 7/16-20   | .315 |
| 06         | .281                       | .508       | .459  | 9/16-18   | .300 |
| 08         | .406                       | .689       | .575  | 3/4-16    | .365 |
| 10         | .500                       | .804       | .690  | 7/8-14    | .430 |
| 12         | .625                       | .978       | .815  | 1 1/16-12 | .522 |
| 16         | .813                       | 1.228      | 1.024 | 1 5/16-12 | .671 |

**MATERIAL:**

BODY 316 STAINLESS STEEL  
VALVE DISC 17-4 PH STAINLESS STEEL  
VALVE SEAT 17-4 PH STAINLESS STEEL

**MOUNTING POSITION:  
OPTIONAL**

**MAXIMUM OPERATING PRESSURE:**  
6000 PSI (Contact the Factory for Pressures up to 7250 PSI)

**TEMPERATURE RANGE:**  
-40°F (-40°C) To 200°F (93°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)

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**CHECK VALVES  
GUIDED DISC  
SLIP-IN TYPE**

