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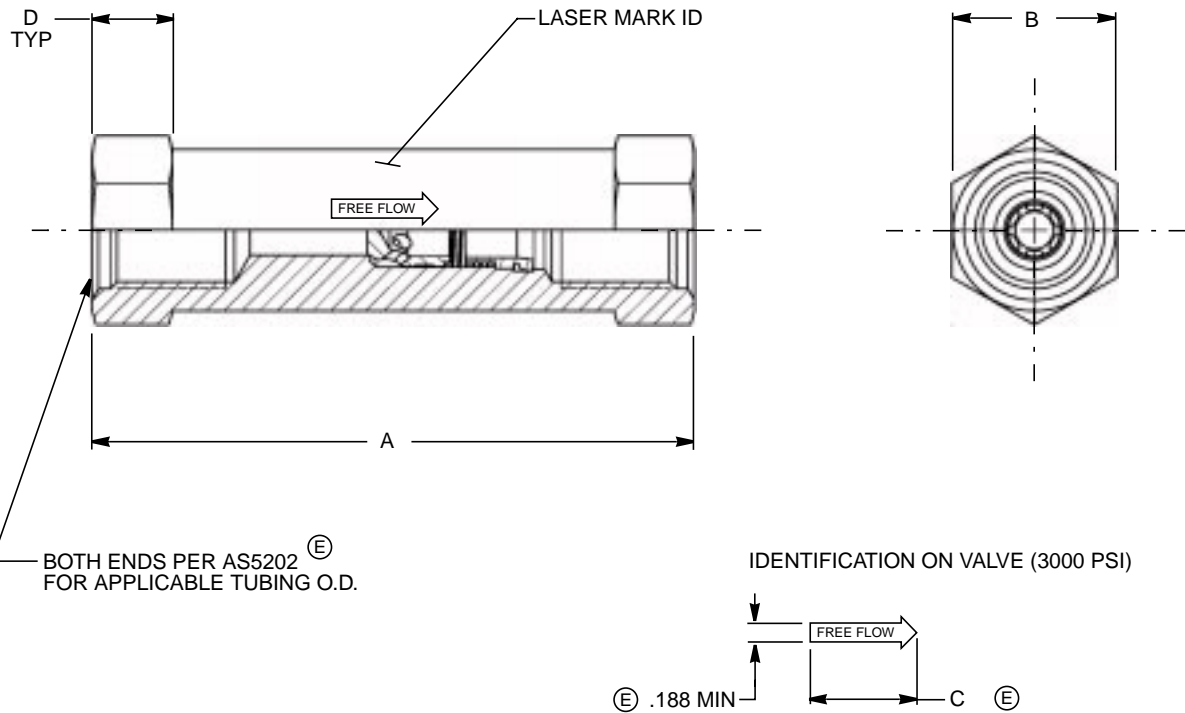
**de HAVILLAND**

**CAGE CODE 71867**

**SOURCE CONTROL DRAWING**

ONLY THE ITEM(S) LISTED ON THIS DRAWING AND IDENTIFIED BY VENDOR'S NAME(S), ADDRESS(ES) AND PART NUMBER(S) HAVE BEEN APPROVED FOR USE IN DE HAVILLAND AIRCRAFT. A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR APPROVAL BY DE HAVILLAND ENGINEERING STANDARDS

**SOURCE CONTROL DRAWING**



**TABLE 1: DSC190 - CHECK VALVE, ALUMINUM ALLOY**

PART NUMBER	TUBING OD	RATED FLOW CAPACITY (GPM)	A ± .031	B	C MIN	D MIN	APPROVED VENDORS		
							PARKER- HYDRAULIC VALVE- DIVISION (HVD)	TELEDYNE INDUSTRIES INC.	DH PART NO. (REF)
DSC190-4	.250	1.2	2.750	.688	.875	.312	443-4D52-6	3-1582-1-1	7SC0106-004
DSC190-6	.375	3.5	3.000	.813	1.000	.375	443-6D52-6	3-1582-1-3	7SC0106-006
DSC190-8	.500	6.0	3.625	1.063	1.000	.500	443-8D52-6	3-1582-1-4	7SC0106-008
DSC190-12	.750	16.0	4.500	1.438	1.000	.625	443-12D52-6	3-1582-1-6	7SC0106-012

**LIST OF CURRENT SHEETS**

SHEET	1	2	3
REVISION	E	A	A

SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	KROMKAMP	<b>VALVE - CHECK INTERNAL PORTS, 3000 PSI</b>	<b>DSC 190</b>
CHECKED	LINTS		
STRESS	LINDEN		PAGE 1 OF 3
APPROVED	SCHRATTNER		

REVISION TABLE UPDATED, SHEET "1" HAS BEEN RAISED AT ISSUE "E"  
(E) FITTING END SPECIFICATION REVISED "AS5202" WAS "AND10050"  
DIMENSION CALL OUTS FOR CHECK VALVE IDENTIFICATION REVISED TO BE SHOWN VICE VERSA

APPROVED: 18 FEB 1967 REV: A - 22 FEB 1977 REV: B - 25 MAY 1982 REV: C - 07 DEC 2010 REV: D - 07 MAR 2011 REV: E - 08 APR 2011 REV:

**SOURCE CONTROL DRAWING**

**TABLE 2: DSC190 - CHECK VALVE, CRES**

PART NUMBER	TUBING OD	RATED FLOW CAPACITY (GPM)	A .031	B	C MIN	D MIN	APPROVED VENDORS <sup>(A)</sup>	
							PARKER-HYDRAULIC-VALVE-DIVISION (HVD)	CRISSAIR INC
DSC190-6C	.375	3.5	3.000	.813	1.000	.375	443-6SS52-6	1C5662

**NOTES:**

- THE VALVE SHALL CONFORM TO MIL-V-19069 AND IS SIMILAR TO MS28771 WITH THE FOLLOWING EXCEPTION:  
(a) SEAL MATERIAL SHALL BE COMPATIBLE WITH PHOSPHATE ESTER BASED FLUIDS.
- GENERAL REQUIREMENTS ARE IN ACCORDANCE WITH DH SPECIFICATION "EPS 7/4-9".
- CRACKING PRESSURE: 6 PSI  $\pm$ 2.
- DSC190 - CRES CHECK VALVE REQUIREMENTS:**

FLUIDS: PHOSPHATE ESTER BASED FLUIDS

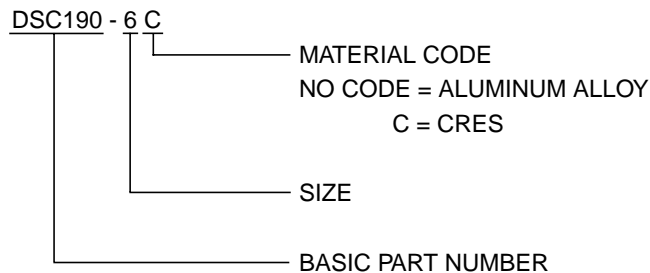
PRESSURES: OPERATING: 3000 PSIG  
PROOF: 4500 PSIG  
BURST: 7500 PSIG  
CRACKING: 4 TO 8 PSIG

LEAKAGE: EXTERNAL: NONE  
INTERNAL: 1 DPM MAX AT 5 PSIG  
NONE AT 1000 TO 3000 PSID

TEMPERATURE: -65° F TO +275° F

HEAT TREAT: Rc 50-60 PER MIL-H-6875

- EXAMPLE OF PART NUMBER BREAKDOWN:



SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	E. DANESH	<b>VALVE - CHECK INTERNAL PORTS, 3000 PSI</b>	<b>DSC 190</b>
CHECKED	B. EDWARDS		
STRESS	E. GIOVANNETTI		
APPROVED	B. EDWARDS		PAGE 2 OF 3

TABLE 2 UPDATED: DSC190-4C, -8C, & -12C REMOVED - "PARKER HVD" REMOVED & "CRISSAIR INC" ADDED  
NOTES REVISED TO INCLUDE "DELTA NOTE 4" REPRESENTING REQUIREMENTS FOR CRES CHECK VALVES  
(SEE APPROVAL SHEET FOR REVISION RECORD)

REV: REV: REV: REV: REV: A - 07 MAR 2011 REV: APPROVED: 07 DEC 2010

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**SOURCE CONTROL DRAWING**

**(A) PROCUREMENT INFORMATION:**

PROCUREMENT DEPARTMENT SHALL SPECIFY THE DSC NUMBER AND THE MANUFACTURERS PART NUMBER ON THE PURCHASE ORDER.

**(A) APPROVED VENDORS ADDRESSES AND CAGE CODES:**

**PARKER HANNIFIN CORPORATION  
HYDRAULIC VALVE DIVISION**

711 TAYLOR ST.  
ELYRIA OH 44035  
USA CAGE CODE: 26433

**TELEDYNE INDUSTRIES INC.  
TELEDYNE FLUID SYSTEM REPUBLIC**

10367 BRECKSVILLE RD.  
BRECKSVILLE OH 44141  
USA CAGE CODE: 86768

**CRISSAIR INC.**

38905 10TH ST. EAST  
PALMDALE, CA 93550  
USA CAGE CODE: 99240

SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	E. DANESH
CHECKED	B. EDWARDS
STRESS	E. GIOVANNETTI
APPROVED	B. EDWARDS

**VALVE - CHECK  
INTERNAL PORTS, 3000 PSI**

**DSC 190**

PAGE 3 OF 3

REV:

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REV: A - 07 MAR 2011

APPROVED: 07 DEC 2010

(A) PROCUREMENT INFORMATION ADDED  
(A) APPROVED VENDORS INFO REVISED: "PARKER HVD" REMOVED - "CRISSAIR INC" ADDED - "TELEDYNE" INFO UPDATED