

TECHNICAL SPECIFICATION	SPEC NO : 2080253
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DESCRIPTION: VALVE CYL FLAM DUAL PORT DIN 1 1934133D					COMPILED : R Goodhall			
TITLE: CYLINDER VALVE CEODEUX, FLAMMABLES, TIED DIAPHRAGM, HANDWHEEL, DUAL PORT, EN 629-1 25E x DIN 477 No 1 (1934133D)					DATE : 24-11-97			
					V200 NO : -			
PRESSURE	200B	DEGREASE	Y	QUALITY LEVEL:	3	CHECKED : -		
UNIT: SPECIALITY GASES					DES AUTH : -			
ISS NO	V300	DATE	REVISION			BY	CHKD	DES AUTH
1	-	-	ORIGINAL ISSUE			-	-	-
2	3720	25-10-04	Re-written, Valve Data sheet & drawing added.			KSH	MEN	DWB
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BOC GASES VALVE DATA SHEET
READ IN CONJUNCTION WITH BOC SPEC. CV1 'CYLINDER VALVE PERFORMANCE'

BOC Valve Family:		a	1	b	9	c	3	4	4	1	1	3	3	g	3				D
BOC GASES COMPANY	GASES EUROPE	1 Simple 2 MPR/ NRV 3 Pressure reducing 9 Other	0 Key 1 h/wheel top 2 h/wheel side 3 actuated 9 Other	1 top outlet 2 side outlet 3 multiport 9 Other	1 diaphragm 2 packed 3 o-ring 4 tied diaphragm 9 Other	1 no safety device 2 safety device	1 Male RH 2 Female RH 3 Male LH 4 Female LH 5 Pin Index 6 DIS 9 Other	1 LT Brass 2 HT Brass 3 SS 316L 4 SS Other 5 Nickel 6 Hastalloy 9 Other	A Tapped Outlet	B Electro polish	C Clean Room Assy	D Cap, nut, chain							
Gas Service	FLAMMABLES																		
Manufacturer's Name & Part Number		CEODEUX PART No 498909000007																	
		BOC Part No. 2080253																	

DATA SHEET APPROVED:	No:	<input type="checkbox"/>	Yes:	<input type="checkbox"/>	CHECKED BY:	DATE:
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BOC VALVE FAMILY	
a	Type: Simple: <input checked="" type="checkbox"/> MPR/ NRV: <input type="checkbox"/> Pressure Reducing: <input type="checkbox"/> Other: <input type="text"/>
b	Operating Mechanism: Handwheel: <input checked="" type="checkbox"/> Key: <input type="checkbox"/> Actuated: <input type="checkbox"/> Other: <input type="text" value="SERVES TWO MECHANISMS"/>
c	Outlet Orientation: Top: <input type="checkbox"/> Side: <input type="checkbox"/> Multi: <input checked="" type="checkbox"/> Outlet Cap: <input checked="" type="checkbox"/>
d	Gland Seal mechanism: Diaphragm: <input type="checkbox"/> Packed: <input type="checkbox"/> O-Ring: <input type="checkbox"/> Tied Diaphragm: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>
e	Safety Devices:
	Burst disc: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Setting <input type="text"/> Barg at <input type="text"/> °C Reference temperature
	Fusible element: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Setting <input type="text"/> °C <input type="text"/> °F
	Relief valve: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Pressure <input type="text"/> Barg
	Excess flow valve: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Max flow <input type="text"/> litres/ min
f	Outlet Thread National Standard & Reference: <input type="text" value="DIN477 No 1 (2 OFF)"/> Outlet Type: <input type="text" value="MALE LH"/>
g	Valve body material: <input type="text" value="STAINLESS STEEL"/> Specification: <input type="text" value="AISI 316L"/>

SERVICE	
Working Pressure:	<input type="text" value="200"/> Barg at: <input type="text" value="15"/> °C Reference temperature
Outlet Pressure:	Nominal <input type="text" value="200"/> Barg Min <input type="text" value="VAC"/> Barg Max <input type="text" value="240"/> Barg
Valve operating temperature range:	Min <input type="text" value="-20"/> °C Max <input type="text" value="60"/> °C

DESCRIPTION	
Valve Guarded:	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Valve to be maintainable? No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>
Valve Finish:	As machined <input checked="" type="checkbox"/> Plated <input type="checkbox"/> Coated <input type="checkbox"/> Comment <input type="text"/>
Surface Profile of Gas Wetted Areas:	As machined: <input checked="" type="checkbox"/> Other: <input type="text"/>
Valve Seal:	Hard <input type="checkbox"/> Soft <input type="checkbox"/> Material Specification: <input type="text" value="PCTFE"/>
Inlet Thread National Standard & Reference:	<input type="text" value="EN629-1 25E"/>
Outlet flow restrictor tapping:	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Tapping Thread designation: <input type="text"/>
Dip tube tapping:	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Fixing: ¼" BSP <input checked="" type="checkbox"/> Other <input type="text" value="IN LIQUID PHASE PORT"/>
Spindle key operation:	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 9/32" square: <input type="checkbox"/> ISO407: <input type="text"/>
Colour:	Handwheel <input type="text" value="RED"/> Insert <input type="text" value="WHITE / BOC LOGO (RED)"/>
Batch traceability required:	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Individual Valve Serial numbers: No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>
Clean room assembly:	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Clean to Oxygen service standard: No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>

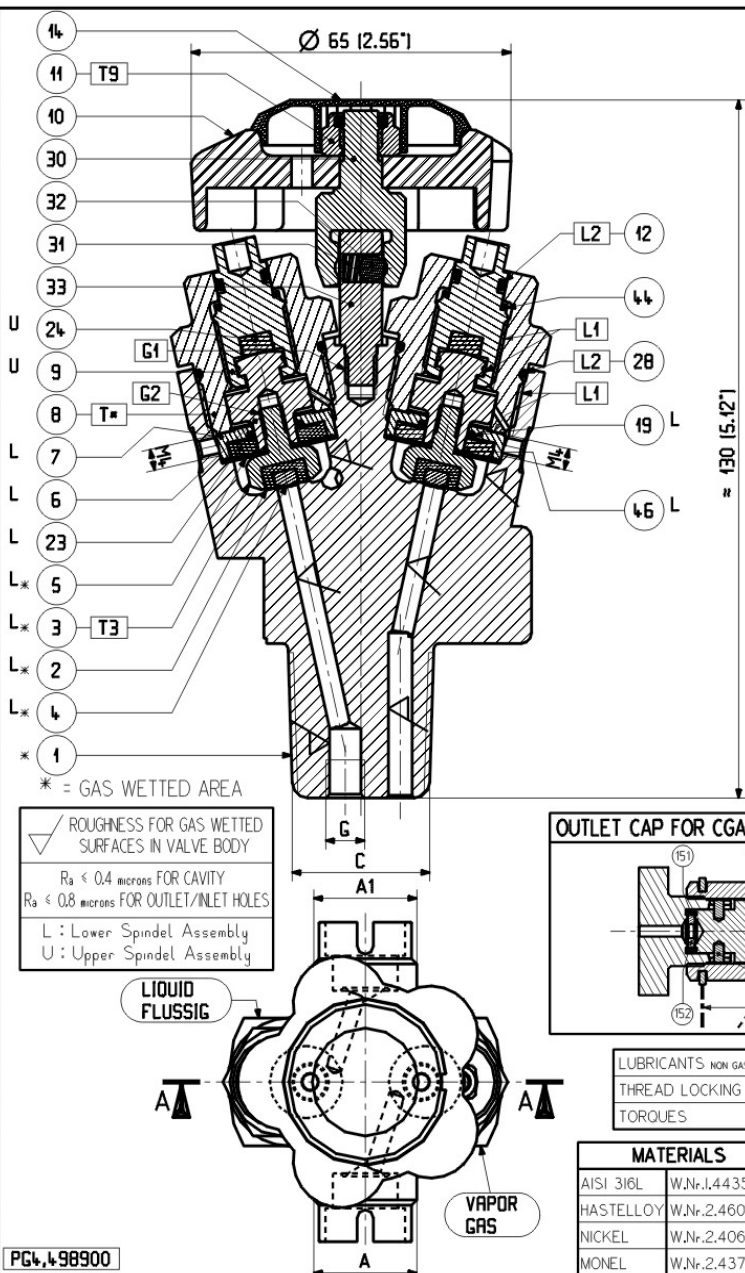
OTHER REQUIREMENTS	<input type="text" value="Dual port valve, two mechanisms operated by a centrally stowed handwheel, 2 Capnuts"/>
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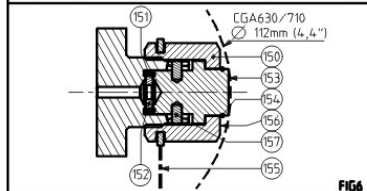
Indications des états de surface ISO 1302
Tolérances de forme et de position ISO 1101 et 8015
Classification des cotés et finitions : critiques \diamond majeures Δ

Dimensions en mm sauf autres indications
Tolérances générales ISO 2768-mH
Arrêtes ISO 13715

Se reporter à la clause de protection ISO 6006



OUTLET CAP FOR CGA DISS CONNECTION



LUBRICANTS NON GAS WETTED PARTS	L1	L2
THREAD LOCKING	G1	G2
TORQUES	Tx	T3 T9

MATERIALS	STANDARD	TORQUES
AI SI 316L	W.Nr.1.4435	EN 10 088-3 T40
HASTELLOY	W.Nr.2.4602	VdTV BI.479 T35
NICKEL	W.Nr.2.4066	DIN 17740 DIN 17754 T33
MONEL	W.Nr.2.4375	DIN 17743 DIN 17754 T33

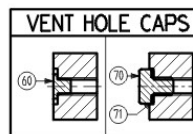
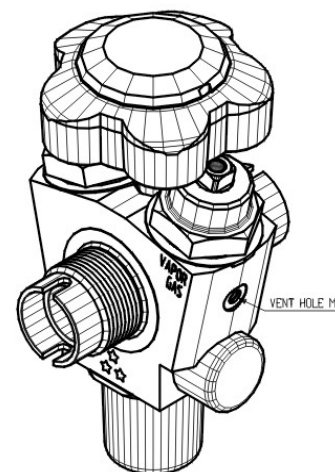
TECHNICAL PERFORMANCES

WORKING PRESSURE	200 bar/3000psi
LEAK RATES	INTERNAL $\leq 1 \times 10^{-8}$ mbar.l./s EXTERNAL $\leq 1 \times 10^{-8}$ mbar.l./s SAFETY -
OPERATION TORQUE	3-4 Nm / 2,25-3 ft-lbs
FLOW COEFFICIENT	$C_v = 0,25$
SEAT ORIFICE SIZE	4 mm / 0.16 inches
TEMPERATURE RANGE	-20°C...70°C / -4°F...158°F

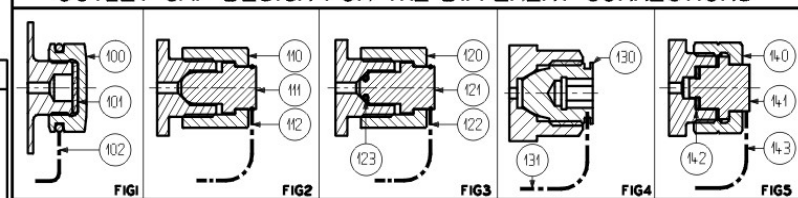
MARKINGS

TYPE	YES
MATERIAL	YES
MANUFACTURING DATE	MM / JJ
MANUFACTURER LOGO : 3 STARS	☆☆☆
MANUFACTURER IDENT.-NUMBER	YES
WEIGHT	NO
INLET CONNECTION	YES
OUTLET CONNECTION	YES
SEAT MATERIAL	YES
APPROVAL NUMBER	

SERIES 0395



OUTLET CAP DESIGN FOR THE DIFFERENT CONNECTIONS



BASIC DESIGN

Ind. No. Mod.	Drawing updated	IF	31.10.01
Matiere :	Modification	Mod.par	Date
Echelle : 1/1	Date : 22.7.98	Designation : HIGH PRESSURE, DUAL PORT CYL. VALVE, TIED DIAPHRAGM SEAL TYPE, FOR UHP GASES	Art. :
Dessine : Hristov	Verifie :	Plan No. :	Mat.Piece :
CEDEX	Ultra Pure Equipment Technology S.A.	17-4142	a

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HIGH PRESSURE STAINLESS STEEL DUAL PORT CYLINDER VALVE, TIED DIAPHRAGM SEAL TYPE FOR UHP GASES

Customer: BOC EUROPE
Series: D395 1
Drwg.Nbr: 17-4142a

CEODEUX part- nbr: 498909000007
Customer part- nbr : 12080253

Connections:

Inlet connection: C = 25E / EN629-1
Outlet connection: A = DIN477-1 N°1 (Vapor)
Outlet connection: A1 = DIN477-1 N°1 (Liquid)
Dip tube thread: G = 1/4"BSP

Markings :

Manufacturing date; logo: 3 stars;
Identification number;
Type: 498909;
Material: 316L;
Inlet connection: 25E;
Outlet connection A: DIN-1;
Outlet connection A1: DIN-1;
Seat material: PC;
Weight: ...grs;
Approved acc. TPED: π
Customer reference: 2080253, BOC;

Pos.	Nbr.	Art.-Nbr.	Name of part	Material	Remarks
1	1		Body	St.Steel AISI 316L	*
8	2		Gland	St.Steel AISI 303	
10	1		Handwheel	Aluminium	Color red
11	1		Nut	Steel nickel plated	
12	2		O-Ring	Nitril rubber	
14	1		Cap with BOC gases	Plastic PE	Color white
28	2		O-Ring	Nitril rubber	
30	1		Bush	Brass nickel plated	
31	1		Spring	Steel	
32	1		Ball	St. Steel	
33	1		Stem	St.Steel AISI 303	
44	2		Washer	Nylon	
60	1		Vent hole cap	PE	
	2		Assembly L		
	2		Assembly U		
	1		Outlet cap/ plug and		

Assembly L:

Pos.	Nbr.	Art.-Nbr.	Name of part	Material	Remarks
2	1		Seat disc	PCTFE	*
3	1		Spindle	St.Steel AISI 316L	*
4	1		Plug	St.Steel AISI 316L	*
5	2		Diaphragm	Hastelloy C-276	* Welded
6	1		Spindle	St.Steel AISI 303	
7	1		Mounting	St.Steel AISI 303	
19	1		Back-up ring	PTFE, Glass fiber filled	
23	1		Washer	Special rubber	
46	3		Washer	Copper beryllium	

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**HIGH PRESSURE STAINLESS STEEL DUAL PORT CYLINDER VALVE,
TIED DIAPHRAGM SEAL TYPE FOR UHP GASES**

Customer: BOC EUROPE

Series: D395 1

Drwg.Nbr: 17-4142a

CEODEUX part- nbr: 498909000007

Customer part- nbr : 12080253

Assembly U:

Pos.	Nbr.	Art.-Nbr.	Name of part	Material	Remarks
9	1		Spindle	St.Steel 430 F	
24	1		Disc	Duroplast	

* gas wetted parts

Other :

Individual packaging: **no**

Clean room assembly: **no**

Valve guarded: **yes**

Cleaning for oxygen: **no**

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