



B.F.E. S.p.A.
BONNET FORGE
VALVE LICENSEE

SECS LEGALE
S.p.A. Valva, Italy
38100 BELLUNO (ITALY)

HEAD OFFICE - FORGED VALVE PLANT
Via Trieste 100 - 33051 Belluno & Alcamo (SS) Italy
Phone 0432 441111 Fax 0432 441112

TEST CERTIFICATE
(DECLARATION OF CONFORMITY)

N. 4207/03

E 6 OF 12

CUSTOMER

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28806 ALCALA DE HENARES
SPAIN

YOUR PURCHASE ORDER NO.

3697

DATE

25.02.03

☒ PARTIAL ORDER

BALANCE ORDER

REMARKS:

030408

EN 10204 3.1.B

API 508
BS 6755

MATERIAL TESTED										TEST				COMPONENT	CHEMICAL ANALYSIS																										
Q.TY		PART. N.		DESCRIPTION		☒ PSI		☐ BAR		HYDROSTATIC		☐ PNEUM.		HEAT CODE/MATERIAL		HEAT NR./SUPPLIER		TENSILE N/mm2		YIELD N/mm2		ELONGATION OF AREA %		IMPACT TEST		TEST. TEMP °C		HARDNESS HB		C.E.											
						SHELL		SEATS		SEATS		SEATS						C		MN		SI		P		S		CR		NI		MO		CU		V		HB			
100	5	135578	GATE VALVE OS&Y BB FB		5575		4075		100				BODY		SA105N		0,210		0,920		0,200		0,012		0,020		0,060		0,080		0,010		0,160		0,018		0,000				
			9H 104B/T SW										73362		RIVA		495,00		321,00		35,00		65,00		45,00		41,00		55,00		+20		145,00				0,396				
			3/4" SA105N./CR13* 1500 LBS										BODY				C		MN		SI		P		S		CR		NI		MO		CU		V		NB				
			S330		COMPONENT KEY VAR 24003374								AHS		SA105N		0,195		0,960		0,210		0,011		0,020		0,050		0,010		0,160		0,023		0,000						
					MAT.NO. 1040882								73405		RIVA		489,00		326,00		28,00		59,00		83,00		89,00		87,00		+20		140,30				0,385				
110			BONNET														C		MN		SI		P		S		CR		NI		MO		CU		V		NB				
	2	135580	GATE VALVE OS&Y BB FB		5575		4075		100				ALX		SA105N		0,205		1,030		0,260		0,009		0,020		0,090		0,060		0,010		0,150		0,017		0,000				
			9H 107C/T SW										279737		RIVA		522,00		332,00		32,40		54,80		54,00		57,00		+20		150,00				0,413						
			1 1/2" SA105N./CR13* 1500LBS										BONNET				C		MN		SI		P		S		CR		NI		MO		CU		V		NB				
			S330		COMPONENT KEY VAR 24003374								ACA		SA105N		0,180		0,890		0,200		0,017		0,023		0,150		0,080		0,010		0,250		0,002		0,000				
120			74347										RIVA				493,00		326,00		38,00		60,00		133,00		146,00		151,00		+20		157,40				0,382				
			BODY														C		MN		SI		P		S		CR		NI		MO		CU		V		NB				
			CHZ		SA105N		0,195		0,960		0,170		0,025		0,025		0,140		0,100		0,010		0,250		0,002		0,000		0,000		0,000		0,000		0,000						
			70491		TANARO		520,00		320,00		27,40		55,90						520,00		320,00		27,40		55,90						149,00				0,408						
			BONNET				C		MN		SI		P		S		CR		MO																						
150			LPT		F11 CL.2		0,105		0,410		0,700		0,013		0,001		1,330		0,460																						
			408701		VALBRUNA		522,00		391,00		36,00		58,00		98,00		84,00		93,00		+20		169,70																		
			BODY				C		MN		SI		P		S		CR		MO																						
			LRC		F11 CL.2		0,120		0,420		0,610		0,006		0,001		1,360		0,520																						
			43007		BUDERUS		552,00		376,00		27,40		68,60						172,00																						
180			BONNET				C		MN		SI		P		S		CR		MO																						
			ZCR		F22 CL3		0,110		0,410		0,390		0,008		0,008		2,130		0,920																						
			5402		VALBRUNA		562,00		404,00		31,40		75,40						163,00																						
			BODY				C		MN		SI		P		S		CR		MO																						
			ZEV		F22		0,100		0,500		0,310		0,007		0,001		2,310		0,990																						
			45952		BUDERUS		526,00		330,00		33,40		77,00						160,00																						
			BONNET				C		MN		SI		P		S		CR		MO																						
			ZER		F22		0,090		0,460		0,390		0,016		0,002		2,340		0,940																						
			408714		VALBRUNA		570,00		452,00		22,50		40,00		135,00		128,00		130,00		-20		173,30																		

TEST RESULT

THIRD AUTHORITY

CUSTOMER INSPECTOR

DATE

INSPECTION REPORT

DATE

DATE

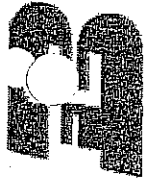
HYDROSTATIC AND

SATISFACTORY

B.F.E. S.p.A.
BONNET FORGE VALVE LICENSEE

QA/QC Dept
E. AZZOLA

23/07/03



B.F.E. S.p.A.

BONNEY FORGE

VALVE LICENSEE

SEDE LEGALE
via A. Volta, n. 10
38100 Bolzano (ITALY)

HEAD OFFICE - FORGED VALVE PLANT
via Dante, 204 - 38100 Bolzano (ITALY)
Telefono (0471) 234111 - Telefax (0471) 234112

TEST CERTIFICATE

(DECLARATION OF CONFIDENTIALITY)

N. 4207/03

CUSTOMER

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2.400
28806 ALCALA DE HENARES
SPAIN

YOUR PURCHASE ORDER NO.

3697

OUR JOB NO.

030408

DATE

25.02.03

☒ PARTIAL ORDER

☐ BALANCE ORDER

REMARKS:

MATERIAL TESTED		
ITEM	Q.TY	PART. N. DESCRIPTION
8 210	1"	F22/CR13* 1500 LBS
	V481	COMPONENT KEY VAR 66014433
		MAT.NO. 1044048
	7	187676
		PISTON CHECK VALVE BB FB SPRING LOAD.
8 60	15H	405A/BW80 + M BW.SCH.80
	1"	F11/CR13* 1500 LBS
	RV472	COMPONENT KEY VAR 66414323
		MAT.NO. 1047792
	11	089939
8 80	GATE	VALVE OS&Y BB FB
	H	104AT SW
	3/4"	A105N/CR13* 800 LBS
	S306	COMPONENT KEY VAR 24003254
		MAT.NO. 1046974
8 270	12	091225
	GATE	VALVE OS&Y BB FB
	H	105AT SW
	1"	A105N/CR13* 800 LBS
	S306	COMPONENT KEY VAR 24003254
8 100		MAT.NO. 1046727
	4	148338
	GATE	VALVE OS&Y BB FB
	H	107C/T SW
	1 1/2"	A105N/CR13* 800 LBS
S306	COMPONENT KEY VAR 24003254	
8 100		MAT.NO. 1053142
	3	135578
	GATE	VALVE OS&Y BB FB
	9H	104B/T SW

TEST RESULT

HYDROSTATIC AND

SATISFACTORY

THIRD AUTHORITY

CLIENT INSPECTOR

DATE

INSPECTION DEPT.

B.F.E. S.p.A.

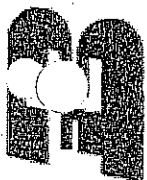
BONNEY FORGE VALVE LICENSEE

QA/QC. Dtd

DATE

23/07/03

E. AZZOLA



B.F.E. S.p.A.
BONNEY FORGE
VALVE LICENSEE

SEDE LEGALE
Via A. Volta, 17/A
38100 Bolzano (ITALY)

HEAD OFFICE FORGED VALVE PLANT
Via Torreggata, 20 - 41013 Ostellato S. Alessandro (MO) Italy
Tel. 059/451111 - Telex 310611 - B.F.E. S.p.A.

(DECLARATION OF CONFIRMITY)

N. 4207/03

CUSTOMER

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28806 ALCALA DE HENARES
SPAIN

YOUR PURCHASE ORDER NO.

3697

OUR JOB NO.

030408

REMARKS:

DATE

25.02.03

☒ PARTIAL ORDER

☐ BALANCE ORDER

☒ API 598
BS 6755

☒ EN 10204 3.1.B

CHEMICAL ANALYSIS																									
MECHANICAL PROPERTIES																									
ITEM	Q.TY	PART. N.	DESCRIPTION	TEST		COMPONENT	TENSILE																		
				PSI	BAR		HEAT CODE/MATERIAL		HEAT NR./SUPPLIER		TENSILE		YIELD		ELONGATION		RED. OF AREA		IMPACT TEST		TEST. TEMP		HARDNESS		C.E.
				HYDROSTATIC	PNEUM.																				
				SHELL	SEATS																				
200	1" A105N/CR13 800 LBS																								
	RV350																								
	3 138239																								
	PISTON CHECK VALVE BB FB SPRING LOAD.																								
	H 405AT + M SW																								
330	1" A105N/CR13* 800 LBS																								
	RV355																								
	1 128648																								
	GLOBE VALVE OS&Y BB FB																								
	9H 305B/T SW																								
310	1" A105N/CR13* 1500 LBS																								
	V305																								
	1 076311																								
	GLOBE VALVE OS&Y BB RB																								
	HL 304AT SW																								
	3/4" A105N/CR13 800 LBS																								
	V350																								
	COMPONENT KEY VAR 66013234																								
	MAT.NO. 1041237																								
								</																	



B.F.E. S.P.A.
BONNEY FORGE
VALVE LICENSEE

(DECLARATION OF CONFORMITY)

N. 4207/03

DATE 10 OF 2202

SEDE LEGALE
via A. Volta, n° 9
38100 Bolzano (ITALY)

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28806 ALCALA DE HENARES
SPAIN

HEAD OFFICE - FORGED VALVE PLANT
Via Tonalè 70/A - 20091 Albano S. Alessandro (BG) Italy
Numero Verde 800 204 666

YOUR PURCHASE ORDER NO.

3697

OUR JOB NO.

030408

REMARKS:

DATE

25.02.03

☒ PARTIAL ORDER

☐ BALANCE ORDER

TEST

MATERIAL TESTED

ITEM Q.TY PART. N. DESCRIPTION

☒ PSI

HYDROSTATIC

SHELL SEATS

BAR

PNEUM.

SEATS

COMPONENT

HEAT CODE/MATERIAL

HEAT NR./SUPPLIER

MAX.

ASTM A182 F11/2 MIN.

MAX.

MIN.

MAX.

ASTM A182 F22/3 MIN.

MAX.

MIN.

MAX.

EC DECLARATION OF CONFORMITY

B.F.E. SPA, VIA TONALE 70/A, ALBANO S.A.(BG) ITALY
ACCORDING TO ANNEX VII OF DIRECTIVE 97/23/CE,
HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE
ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/CE AND
HAVE BEEN MANUFACTURED IN ACCORDANCE WITH
CONFORMITY ASSESSMENT MODULE H AS APPROVED BY

CHEMICAL ANALYSIS

MECHANICAL PROPERTIES

TENSILE N/mm2 YIELD N/mm2 ELOGATION RED. OF AREA %

1 JOULE 2 JOULE 3 JOULE

IMPACT TEST °C

HARDNESS HB C.E.

187,00

1,000 0,440

1,500 0,650

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

2,000 0,870

2,500 1,130

156,00

207,00

TEST RESULT

HYDROSTATIC AND

SATISFACTORY

THIRD AUTHORITY

CLIENT INSPECTOR

DATE

INSPECTION DEPT.

B.F.E. S.p.A.

BONNEY FORGE VALVE LICENSEE

DATE

23/04/03

F A7701 A



B.F.E. S.P.A.
BONNET FORGE
VALVE LICENSEE

SEDE LEGALE
VIA A. VALLA, 17/A
38100 BRESSANONE (ITALIA)

HEAD OFFICE - FORGED VALVE PLANT
(in Accordance with ASME Section VIII, Division 1)
Via Torricelli 11/A - 40019 Alfonsine (BO) Italy

YOUR PURCHASE ORDER NO.

3697

CUSTOMER NO.

030408

REMARKS.

DATE

25.02.03

☒

PARTIAL ORDER

BALANCE ORDER

(DECLARATION OF CONFIRMITY)

N. 4207/03

CUSTOMER

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28806 ALCALA DE HENARES
SPAIN

11 OF

2202

☒

API 598

BS 6755

☒

EN 10204 3.1 B

CHEMICAL ANALYSIS

MECHANICAL PROPERTIES

MATERIAL TESTED			TEST				COMPONENT	CHEMICAL ANALYSIS												MECHANICAL PROPERTIES											
ITEM	Q.TY	PART. N.	DESCRIPTION	☒ PSI	HYDROSTATIC		BAR	HEAT CODE/MATERIAL	HEAT NR/SUPPLIER	TENSILE N/mm2	YIELD N/mm2	ELOGATION %	RED. OF AREA %	IMPACT TEST		TEST TEMP °C	HARDNESS HB	HARDNESS HB	C.E.	%	%	%	%	%	%						
				SHELL	SEATS	SEATS								1 JOULE	2 JOULE											3 JOULE					
			DET NORSKE VERITAS (COD.0434) OF VERITASVEIEN 1, 1322 HOVIK, NORWAY.																												
			CATEGORY :III																												
			FLUID GROUP :I																												
			APPLICABLE STDS.(MANUFACTURING) : ANSI B16.34, API 602, BS 5352 & CUSTOMER SPECIFICATIONS.																												
			APPLICABLE STDS.(TESTING) : API 598, BS 6755 , DIN 3230 & CUSTOMER SPECIFICATIONS.																												
			OTHERS APPLICATION DIRECTIVES : 93/68/EEC																												
			EC DECLARATION OF CONFORMITY																												
			B.F.E. SPA,VIA TONALE 70/A,ALBANO S.A.(BG) ITALY DECLARE THAT UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCTS DETAILED ABOVE HAS BEEN MANUFACTU- RED ACCORDING TO SOUND ENGINEERING PRACTICE IN AN ENVIRONMENT ASSESSED AND CERTIFIED TO MODULE H OF THE PRESSURE EQUIPMENT DIRECTIVE 97/23/CE, AND MEETS THE REQUIREMENTS OF THE PED ACCORDING TO ARTICLE 3 PARAGRAPH 3.																												
			SIGNED..... 																												

TEST RESULT

HYDROSTATIC AND

SATISFACTORY

THIRD AUTHORITY

CLIENT INSPECTOR

DATE

INSPECTION DEPT.

B.F.E. S.p.A.

BONNET FORGE VALVE LICENSEE

DATE

DATE

23/07/03

E 47701 A



Sede Legale
Via A. Volta, 174
38100 Bolzano (ITALY)

(DECLARATION OF CONFIDENTIALITY)

N. 4207/03
CUSTOMER
CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28808 ALCALA DE HENARES
SPAIN

SEDE LEGALE
Via A. Volta, 174
38100 Bolzano (ITALY)

BONNEY FORGE
VALVE LICENSEE

HEAD OFFICE-FORGED VALVE PLANT
Via Torale 7024 - 24041 Adeno S. Alessandro (BG) Italy
tel. 035 422 4111 fax 035 422 4112

YOUR PURCHASE ORDER NO.		DATE		PARTIAL ORDER		BALANCE ORDER	
3697		25.02.03		☒		☐	
OUR JOB NO.		REMARKS:					
030408							

MATERIAL TESTED				TEST				COMPONENT	CHEMICAL ANALYSTS											
ITEM	Q.TY	PART. N.	DESCRIPTION	PSI		BAR		HEAT CODE/MATERIAL	HEAT NR./SUPPLIER	TENSILE N/mm2	YIELD N/mm2	ELONGATION %	RED. OF AREA %	IMPACT TEST			REST. TEMP °C	HARDNESS		C.E.
				HYDROSTATIC	BAR	1 JOULE	2 JOULE							3 JOULE	HB	HR				
			PRINT NAME : M. SARTORI TITLE : GENERAL MANAGER	☒																
			- VISUAL DIMENSIONAL EXAMINATION HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT.																	
			- TRIM MATERIAL (DISK-SEAT-STEM) AND BOLTING ARE ACCORDING TO THE P.O. AND MATERIAL SPECIFICATIONS.																	
			- A105 MATERIAL HAS BEEN NORMALIZED ACCORDING TO ASTM A105 SPECIFICATIONS: TEMP. 900°C AND COOLING IN STILL AIR.																	
			- F11 MATERIAL HAS BEEN NORMALIZED TO 960°C AND TEMPERED TO MIN 677°C.																	
			- F22 MATERIAL HAS BEEN NORMALIZED TO 960°C AND TEMPERED TO 700°C MIN.																	

TEST RESULT	THIRD AUTHORITY	CUSTOMER INSPECTOR	DATE	INSPECTION DEPT.	DATE
HYDROSTATIC AND	SATISFACTORY			B.F.E. S.p.A. BONNEY FORGE VALVE LICENSEE	23/07/03

GENERAL SALES CONDITION

WARRANTY

All B.F.E. products are warranted to be free from manufacturing defects for a period of one (1) year from date of shipment, and any found to be defective within that period will be replaced without charge, provided (1) that the product was used as recommended and in accordance with approved installation and operating practice, (2) that its failure resulted from a manufacturing defect and not from damage due to corrosive, abrasive, or other wear normally to be expected in the service involved, (3) that the product was not modified or changed (unless written approval was given by B.F.E.), and (4) that written notice of such defect is delivered to B.F.E. during such one (1) year period. No labor cost or other expense or liability will be assumed.

PARTIAL SHIPMENT AND PAYMENTS

B.F.E. reserves the right to make partial shipment from time to time, and to tender invoices therefor which shall be due and payable as provided in said invoices. If the Purchaser becomes overdue in any such partial payment, B.F.E. shall be entitled to suspend work and/or avail itself of other legal remedies.

DELAYS

All promises of shipments from are estimated as closely as possible, and we will use our best effort to ship within the time promised but do not guarantee to do so, and assume no liability for not doing so. Materials stated to be in stock are subject to prior sale.

RETURN OF MATERIAL

No product of our manufacture may be returned without written consent. All goods returned are subject to a handling charge plus freight in both directions and charges for any required reconditioning, unless otherwise specified in writing by B.F.E.

PATENTS

The Purchaser will indemnify and hold harmless B.F.E. against and from any claims, costs (including attorneys' fees) and liabilities arising out of any suit alleging infringement of any United States patent by any product supplied by B.F.E. under the contract and made in accordance with the design and/or specification furnished by the Purchaser to B.F.E.

FORCE MAJEURE

Any delays in or failure of performance of B.F.E. shall not constitute default or give rise to any claims for damages if and to the extent that such delay or failure is caused by occurrences beyond the control of B.F.E., including, but not limited to: acts of God or the public enemy, expropriation or confiscation of facilities, compliance with any order or request of any governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom; embargoes or other export restrictions, fires, floods, explosions, accidents, breakdowns, riots or strikes or other concerted acts of workmen, whether direct or indirect; or any other causes whether or not of some class or kind as those specifically above named which are not within the control of B.F.E. and which, by the exercise of reasonable diligence, B.F.E. is unable to prevent or provide against.

CLAIMS AND ORDER CANCELLATIONS

Claims will be considered only if made in writing 10 days from receipt of goods. Partial or complete cancellations of order can be accepted only upon previous agreement or by written consent and, in no case later than 15 days from order date. Any claims or disputes will be referred to the Court of Bergamo.

CONDIZIONI GENERALI DI VENDITA

VALIDITA' DELL'OFFERTA

La merce è sempre resa "Franco Fabbrica", salvo patto contrario.

CONSEGNA MATERIALI

La B.F.E. s.p.a. non assume alcuna responsabilità per ritardi nelle consegne che s'intendono sempre indicative e non vincolanti. I rischi dovuti al trasporto della merce sono a carico del destinatario anche nel caso che la spedizione sia effettuata in porto franco.

GARANZIA

La B.F.E. s.p.a. garantisce tutti i suoi prodotti da difetti di materiale e/o lavorazione nelle condizioni di esercizio, previste dalle norme per un periodo, salvo patto contrario, di un anno dalla data di spedizione.

La responsabilità della B.F.E. s.p.a. si riferisce soltanto all'avvenuta sostituzione gratuita delle parti o prodotti difettosi, sempreché siano stati osservati i termini di cui sopra e l'impiego secondo quanto previsto dalla norma, comunque solo dopo la restituzione della merce difettosa.

RECLAMI E CANCELLAZIONI ORDINI

Nessun reclamo verrà preso in considerazione trascorsi dieci giorni dal ricevimento della merce. Le cancellazioni parziali o totali degli ordini, potranno essere accettate solo quando preventivamente concordate e confermate per iscritto, e comunque non oltre 15 giorni dalla data degli ordini. Per ogni controversia Foro competente è quello di Bergamo.

FORGED VALVE

ABBREVIATIONS	DESCRIPTION	DESCRIZIONE
BB	Bolted Bonnet	Coperchio bullonato
BBRJ	Bolted Bonnet Ring Joint Type	Coperchio bullonato tipo Ring Joint
BEL	Belows Sealed	Soffietto di tenuta
BW	Butt Weld	Saldatura di testa
CRY	Cryogenic Service	Servizio Criogenico
FB	Full Port	Passaggio Pieno
FF SM.F	Flat Face Smooth Finish	Faccia Piana Finitura Liscia
FF ST.F	Flat Face Stock Finish	Faccia Piana Finitura Fotografica o Concentric
FLG	Integral Flanges	Flange Integrali
FP	Full Penetration	Piena Penetrazione
FPWB	Welded Bonnet Full Penetration	Coperchio Saldato Piena Penetrazione
IS	Inside Screw	Vite Interna
L.G.	Large Groove	Incastro femmina largo
MF	Male - Extended Body	Maschio - Femmina
NEED - INT	Integral Needle	Spillo Integrale
NEED - LOO	Loose Needle	Spillo Snodato
NPT	Threaded	Fillettato
OS & Y	Outside Screw & Yoke	Vite Esterna
RB	Reduced Port	Passaggio Ridotto
RF SM.F	Raised Faced Smooth Finish	Faccia con Risalto Finitura Liscia
RF ST.F	Raised Faced Stock Finish	Faccia con Risalto Finit. Fotografic. o Concentric
RJ	Ring Joint	Anello di Giunzione
SM GR.	Small Groove	Incastro femmina stretto
SW	Socket Weld	Tasca a Saldare
SWB	Seal Welded Bonnet	Coperchio filettato con saldatura di sigillo
WB	Welded Bonnet	Coperchio Saldato
WFLG	Welded Flanges	Flange Saldate
*	Stallited	Stallitato

TEST CERTIFICATE

(DECLARATION OF CONFORMITY)

F.E. S.P.A.
SEDE LEGALE
via A.Volpe, n°4
39100 Bolzano (ITALY)

BONNET FORGE
VALVE LICENSEE

HEAD OFFICE: FORGED VALVE PLANT
via A.Volpe, n°4
39100 Bolzano (ITALY)
Phone 035.264.111 (10 lines)
Telex 035.580022

CUNADO INTERNACIONAL, S.A.
CTRA. DE DAGANZO KM. 2,400
28806 ALCALA DE HENARES
SPAIN

☒ PARTIAL ORDER
BALANCE ORDER

DATE
25/02/2003

YOUR PURCHASE ORDER N.
3697

REMARKS:
030408

☒ API 598
BS 6755

☒ EN 10204 3.1B

CHEMICAL ANALYSIS									
% % % % % % % % % %									
MECHANICAL PROPERTIES									
IMPACT TEST									
1. JOULE 2. JOULE 3. JOULE TEMP °C									
HARDNESS									
HB HB HB									
C.E.									
TENSILE									
YIELD ELONGATION RED. OF AREA %									
N/mm2 %									
C MN SI P S CR NI MO CU V NB									
0.185 0.970 0.180 0.012 0.020 0.100 0.050 0.010 0.210 0.020 0.002									
500.00 354.00 25.00 43.40 36.00 35.00 40.00 +20 149.00 0.389									
C MN SI P S CR NI MO CU V NB									
0.185 1.010 0.190 0.015 0.022 0.100 0.060 0.010 0.200 0.017 0.001									
497.00 331.00 26.80 30.80 35.00 92.00 43.00 +20 150.66 0.395									
C MN SI P S CR NI MO CU V NB									
0.180 1.010 0.240 0.008 0.020 0.100 0.050 0.010 0.170 0.018									
517.00 345.00 33.70 66.00 43.00 56.00 46.00 +20 145.00 0.387									
C MN SI P S CR NI CU V NB									
0.200 1.000 0.190 0.010 0.020 0.090 0.050 0.210 0.170 0.010									
500.00 339.00 32.00 60.50 78.00 62.00 68.00 +20 143.33 0.435									
C MN SI P S CR NI MO CU V NB									
0.180 1.020 0.240 0.013 0.020 0.080 0.060 0.010 0.200 0.019 0.002									
501.00 320.00 33.60 57.00 52.00 39.00 36.00 +20 152.00 0.388									
C MN SI P S CR NI CU V NB									
0.185 0.970 0.200 0.015 0.020 0.100 0.060 0.250 0.020									
501.00 323.00 30.20 56.10 53.00 65.00 67.00 +20 151.33 0.390									
C MN SI P S CR NI MO CU V NB									
0.180 1.020 0.240 0.013 0.020 0.080 0.060 0.010 0.200 0.019 0.002									
501.00 320.00 33.60 57.00 52.00 39.00 36.00 +20 152.00 0.388									
C MN SI P S CR NI MO CU V NB									
0.180 1.010 0.240 0.008 0.020 0.100 0.050 0.010 0.170 0.018									
517.00 345.00 33.70 66.00 43.00 56.00 46.00 +20 145.00 0.387									
C MN SI P S CR NI MO CU V NB									
0.180 1.020 0.240 0.013 0.020 0.080 0.060 0.010 0.200 0.019 0.002									
501.00 320.00 33.60 57.00 52.00 39.00 36.00 +20 152.00 0.388									
STANDARD MATERIAL SPECIFICATION									

INSPECTION DEPT. BONNET FORGE VALVE LICENSEE									
CAJAS DEPT. E. ZOLA									
23/12/03									

WARRANTY

All B.F.E. products are warranted to be free from manufacturing defects for a period of one (1) year from date of shipment, and any found to be defective within that period will be replaced without charge, provided (1) that the product was used as recommended and in accordance with approved installation and operating practice, (2) that its failure resulted from a manufacturing defect and not from damage due to corrosive, abrasive, or other wear normally to be expected in the services involved, (3) that the product was not modified or changed (unless written approval was given by B.F.E.) and (4) that written notice of such defect is delivered to B.F.E. during such one (1) year period. No labor cost or other expense or liability will be assumed.

PARTIAL SHIPMENT AND PAYMENTS

B.F.E. reserves the right to make partial shipment from time to time, and to render invoices therefor which shall be due and payable as provided in said invoices. If the Purchaser becomes overdue in any such partial payment, B.F.E. shall be entitled to suspend work and/or avail itself of other legal remedies.

DELAYS

All promises of shipments from are estimated as closely as possible, and we will use our best effort to ship within the time promised but do not guarantee to do so, and assume no liability for not doing so. Materials stated to be in stock are subject to prior sale.

RETURN OF MATERIAL

No product of our manufacture may be returned without written consent. All goods returned are subject to a handling charge plus freight in both directions and charges for any required reconditioning, unless otherwise specified in writing by B.F.E.

PATENTS

The Purchaser will indemnify and hold harmless B.F.E. against and from any claims, costs (including attorney fees) and liabilities arising out of any suit alleging infringement of any United States patent by any product supplied by B.F.E. under the contract and made in accordance with the design and/or specification furnished by the Purchaser to B.F.E.

FORCE MAJEURE

Any delays in or failure of performance of B.F.E. shall not constitute default or give rise to any claims for damages if and to the extent that such delay or failure is caused by occurrences beyond the control of B.F.E., including, but not limited to: acts of God or the public enemy, expropriation or confiscation of facilities, compliance with any order or request of any governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom; embargoes or other export restrictions, fires, floods, explosions, accidents, breakdowns, riots or strikes or other concerted acts of workmen, whether direct or indirect; or any other causes whether or not of same class or kind as those specifically above named which are not within the control of B.F.E. and which, by the exercise of reasonable diligence, B.F.E. is unable to prevent or provide against.

CLAIMS AND ORDER CANCELLATIONS

Claims will be considered only if made in writing 10 days from receipt of goods. Partial or complete cancellations of order can be accepted only upon previous agreement or by written consent and, in no case later than 15 days from order date.

Any claims or disputes will be referred to the Court of Bergamo.

CONDIZIONI GENERALI DI VENDITA**VALIDITA' DELL'OFFERTA**

La merce è sempre resa "Franco Fabbrica", salvo patto contrario.

CONSEGNA MATERIALI

La B.F.E. s.p.a. non assume alcuna responsabilità per ritardi nelle consegne che s'intendono sempre indicative e non vincolanti. I rischi dovuti al trasporto della merce sono a carico del destinatario anche nel caso che la spedizione sia effettuata in porto franco.

GARANZIA

La B.F.E. s.p.a. garantisce tutti i suoi prodotti da difetti di materiale e/o lavorazione nelle condizioni di esercizio, previste dalle norme per un periodo, salvo patto contrario, di un anno dalla data di spedizione. La responsabilità della B.F.E. s.p.a. si riferisce soltanto all'eventuale sostituzione gratuita delle parti o prodotti difettosi, sempreché siano stati osservati i termini di cui sopra e l'impiego secondo quanto previsto dalle norme, comunque solo dopo la restituzione della merce difettosa.

RECLAMI E CANCELLAZIONI ORDINI

Nessun reclamo verrà preso in considerazione trascorsi dieci giorni dal ricevimento della merce. Le cancellazioni parziali o totali degli ordini, potranno essere accettate solo quando preventivamente concordate e confermate per iscritto, e comunque non oltre 15 giorni dalla data degli ordini.

Per ogni controversia Foro competente è quello di Bergamo.

ABBREVIATIONS	DESCRIPTION	DESCRIZIONE
BB BBRJ BEL BW	Bolted Bonnet Bolted Bonnet Ring Joint Type Bellows Sealed Butt Weld	Coperchio bullonato Coperchio bullonato tipo Ring Joint Soffietto di tenuta Saldatura di testa
CRY	Cryogenic Service	Servizio Criogenico
FB FF SM. F FF ST. F FLG FR FPWB	Full Port Flat Face Smooth Finish Flat Face Stock Finish Integral Flanges Full Penetration Welded Bonnet Full Penetration	Passaggio Pieno Faccia Piana Finitura Liscia Faccia Piana Finitura Fonografica o Concentr. Flange Integrati Piena Penetrazione Coperchio Saldato Piena Penetrazione
IS	Inside Screw	Vite Interna
L.G.	Large Groove	Incastro femmina largo
MF	Male - Extended Body	Maschio - Femmina
NEED - INT NEED - LOO NPT	Integral Needle Loose Needle Threaded	Spillo Integrato Spillo Snodato Filettato
OS & Y	Outside Screw & Yoke	Vite Esterna
RB RF SM. F RF ST. F RJ	Reduced Port Raised Faced Smooth Finish Raised Faced Stock Finish Ring Joint	Passaggio Ridotto Faccia con Rialzo Finitura Liscia Faccia con Rialzo Finit. Fonograf. o Concentr. Anello di Giunzione
SM. GR. SW SWB	Small Groove Socket Weld Seal Welded Bonnet	Incastro femmina stretto Tasca a Saldare Coperchio filettato con saldatura di sigillo
WB WFLG	Welded Bonnet Welded Flanges	Coperchio Saldato Flange Saldate
*	Stellited	Stellitato