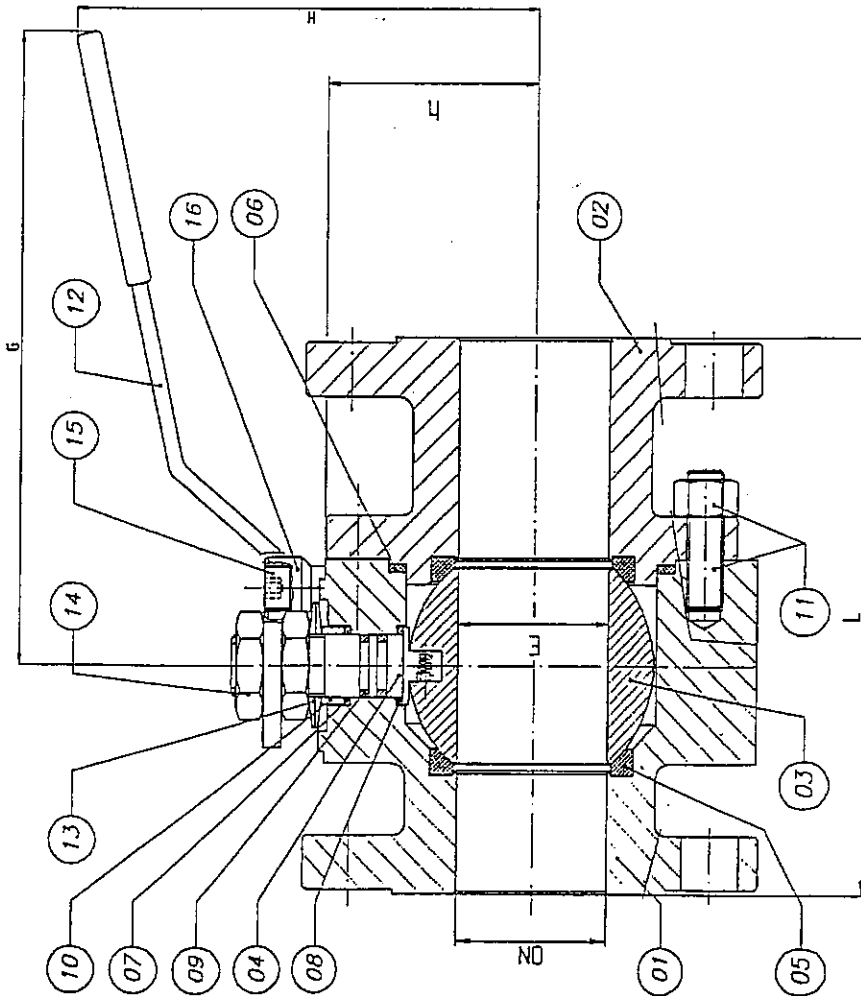


KLAUS UNION ORDER: H410170
 CLIENT : PG ENGINEERING LURGA DEL GAS CIEME G4081
 PART NO: HK 301
 LURGA CONTRACT NO: 169666-10-CEM
 LURGA P.O. - NO: 455205-000/169666/136
 PROJECT TITLE: MEGA PETROCHEMICAL PLANT ZAGREB PETROCHEMICAL
 COMPANY SITE BAKAR ASSALUVEH BAN



POS.	DESCRIPTION	MATERIAL	NOTE
01	BODY	ASTM A305	
02	BODY ADAPTER	ASTM A305	
03	BALL	ASTM A179 316	
04	STEM	ASTM A179 316	
05	SEAT	PTFE	
06	BODY GASKET	PTFE	
07	STEM GASKET	GRAPHITE	
08	STEM GASKET	PTFE	
09	O-RING	NITRILE	
10	SPACER	C.S. ZINC PL.	
11	BOLTING	A193 B7 - A194 2H	
12	HANDLE	C.S. ZINC PL. + PVC	
13	CLIP SPRINGS	50CrV4	
14	STEM NUTS	SF 568 65	
15	HEX. SOCKET HEAD SCREW	SF 568 88	
16	STOP PIN	C.S. ZINC PL.	

(**) RECOMMENDED SPARE PARTS

DN	E	L	G	H	ISO
		CLASS 150			5211
		RF			
1 1/2"	38	165	250	60	168
4"	96	229	450	106	230
					F05
					F10



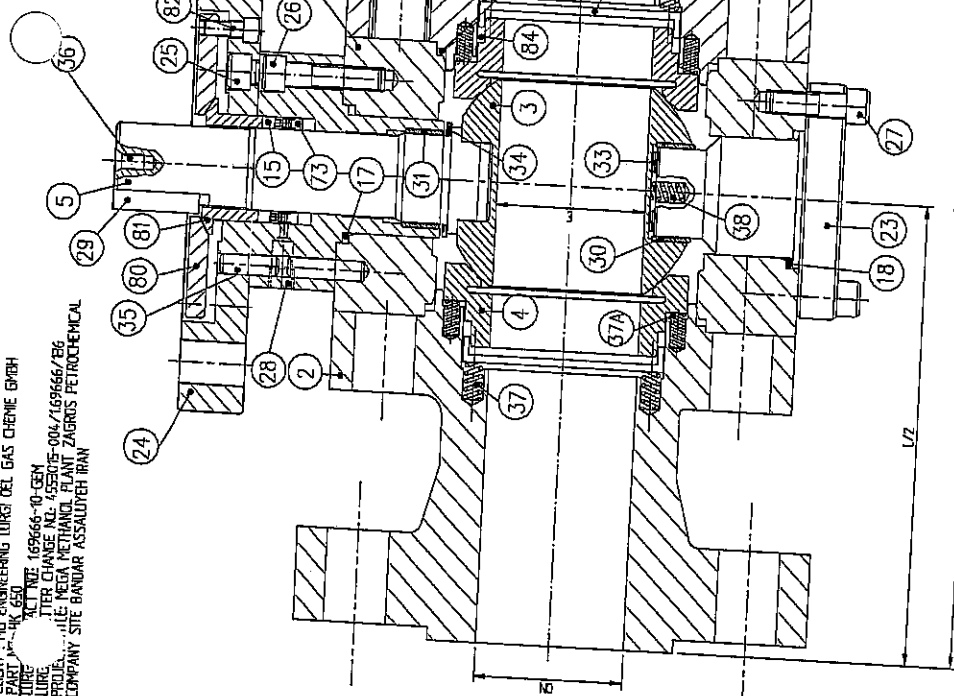
SFEROVA®
 VIA E. MATTEI 18
 20050 RONCO BRIANTINO (MI)
 ITALY

PHONE: 039/6079599
 FAX: 039/6079502
 E-MAIL: sferova@promoil.it

3					
2					
1	REVISED				25-03-0
REV.	DATE	DESCRIPTION	MOOF.	PASSED	DATE
20-03-03					
DRAFT	PASSED	SCALE	N.T.S.		
NATIONAL		GENERAL TOLERANCES			
VALVE TYPE	TQ2	UN ISO 2768 - mK			
PART NAME	BALL VALVES	CLASS	/		
REV	0A1A.00	1,0,1			

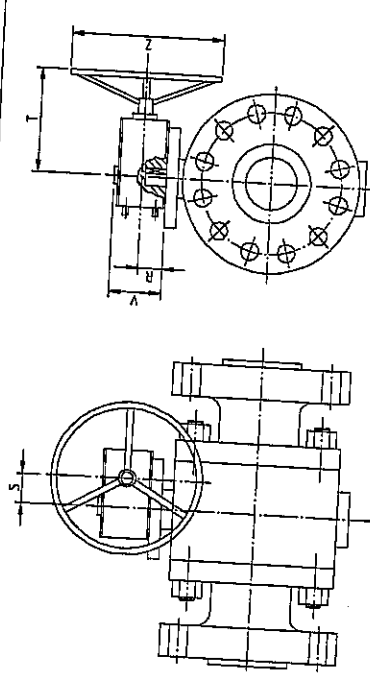
LA SFEROVA S.p.A. SI RISERVA A TERMINI DI LEGGE LA PROPRIETA' DEL PRESENTE DISEGNO
 THIS DRAWING IS PROPERTY OF SFEROVA S.p.A. RIGHTS OF USE AND REPRODUCTION ARE RESERVED

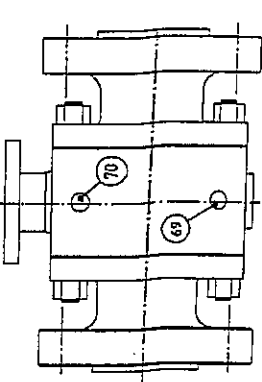
KLAVIS UNIV. ORDER: H401970-04
CLIENT : MG ENGINEERING LURGI DEL
PART No. HK 250



GEAR DIMENSIONS										
DN		E	L		h	R	S	T	V	Z
			600	RF						
4"		102	432	235	50	86	350	105	500	

POS.	DESCRIPTION	PO#_JUAL
01	BODY	ASTM A479 321
02	CLOSURE	ASTM A479 321
03	BALL	A479 321 + CHROMIUM CARBIDE
04	SEAT	A479 321 + CHROMIUM CARBIDE
05	STEM	ASTM A479 321
08	BODY GASKET	GRAPHITE
10	BOLLING	A 193 B8 ALZ-A 194 gr3
15	STEM GASKET	GRAPHITE
17	GLAND GASKET	GRAPHITE
18	TRUNNIN GASKET	GRAPHITE
22	GLAND PLATE	ASTM A479 321
23	TRUNNIN	ASTM A479 321
24	ADAPTER FL	ASTM A479 321
25	ADAPTER FL CAP SCREW	ASTM A479 321
26	GLAND CAP SCREW	A4-70
27	TRUNNIN CAP SCREW	A4-70
28	STEM GREASE SEAL	ASTM A479 321
29	STEM KEY	C100
30	BALL BEARING	STAINLESS STEEL
31	STEM BEARING	STAINLESS STEEL
34	LOWER THRUST WASHER	STAINLESS STEEL
34	STEM THRUST WASHER	STAINLESS STEEL
35	STOP PINS	C100
37	SEAT SPRINGS	INCOEL X750
37A	SEAT SPRINGS	INCOEL X750
38	ANTISTATIC DEVIKLE SPRING	INCOEL X750
69	DRAW PLUG	ASTM A479 321
70	VENT PLUG	ASTM A479 321
73	LANTERN	ASTM A479 321
80	STEM GASKET FL	ASTM A479 321
81	GLAND PLATE	ASTM A479 321
82	GLAND CAP SCREW	A4-70
83	GASKET RING	ASTM A479 321
84	SEAT GASKET	GRAPHITE

[illegible]



DN	E	L		h	H	S	T	V	Z
		600	HF						
3"	76	356	230	50	86	350	105		500
4"	102	432	255	50	86	350	105		500

POS	DESCRIPTION	MATERIAL
01	BODY	ASTM A779 321
02	CLOSURE	ASTM A779 321
03	BALL	A779 321 - CHROMIUM CARBIDE
04	SEAL	A779 321 - CHROMIUM CARBIDE
05	STEM	ASTM A779 321
06	BODY GASKET	GRAPHITE
07	BOLTING	A 193 B8 CL-1-A 1/4" 9#
08	STEM GASKET	GRAPHITE
09	CLAND GASKET	GRAPHITE
10	TRIMMER GASKET	GRAPHITE
11	CLAND PLATE	ASTM A779 321
12	TRIMMER	ASTM A779 321
13	ADAPTER FL	ASTM A779 321
14	ADAPTER FL CAP SCREW	AL-70
15	CLAND CAP SCREW	AL-70
16	TRIMMER CAP SCREW	AL-70
17	STEM GREASE SEAL	ASTM A779 321
18	STEM KEY	C 100
19	BALL BEARING	STAINLESS STEEL
20	STEM BEARING	STAINLESS STEEL
21	LOWER THROST WASHER	STAINLESS STEEL
22	STEM THROST WASHER	STAINLESS STEEL
23	STEM TWS	C 100
24	SEAL SPRINGS	MODEL X750
25	SEAL SPRINGS	MODEL X750
26	ANTISTATIC LEAFY SPRING	MODEL X750
27	ORAM PLUG	ASTM A779 321
28	VENT PLUG	ASTM A779 321
29	VENT PLUG	ASTM A779 321
30	LANDING	ASTM A779 321
31	STEM GASKET FL	ASTM A779 321
32	CLAND PLATE	ASTM A779 321
33	CLAND CAP SCREW	AL-70
34	GASKET RING	GRAPHITE
35	SEAL GASKET	GRAPHITE

RECOMMENDED SPACE PARTS



SFEROVA®
VIA E. MATTEI 13
50050 RONCO BRIANTINO (FI)

VIA E. MATTEI 13
20050 RONCO BRIANTINO (MI)

ITALY

PHONE: 039/6079599

FAX: 039/6079582

E-MAIL: SFEROVA@PRD.MO.IT

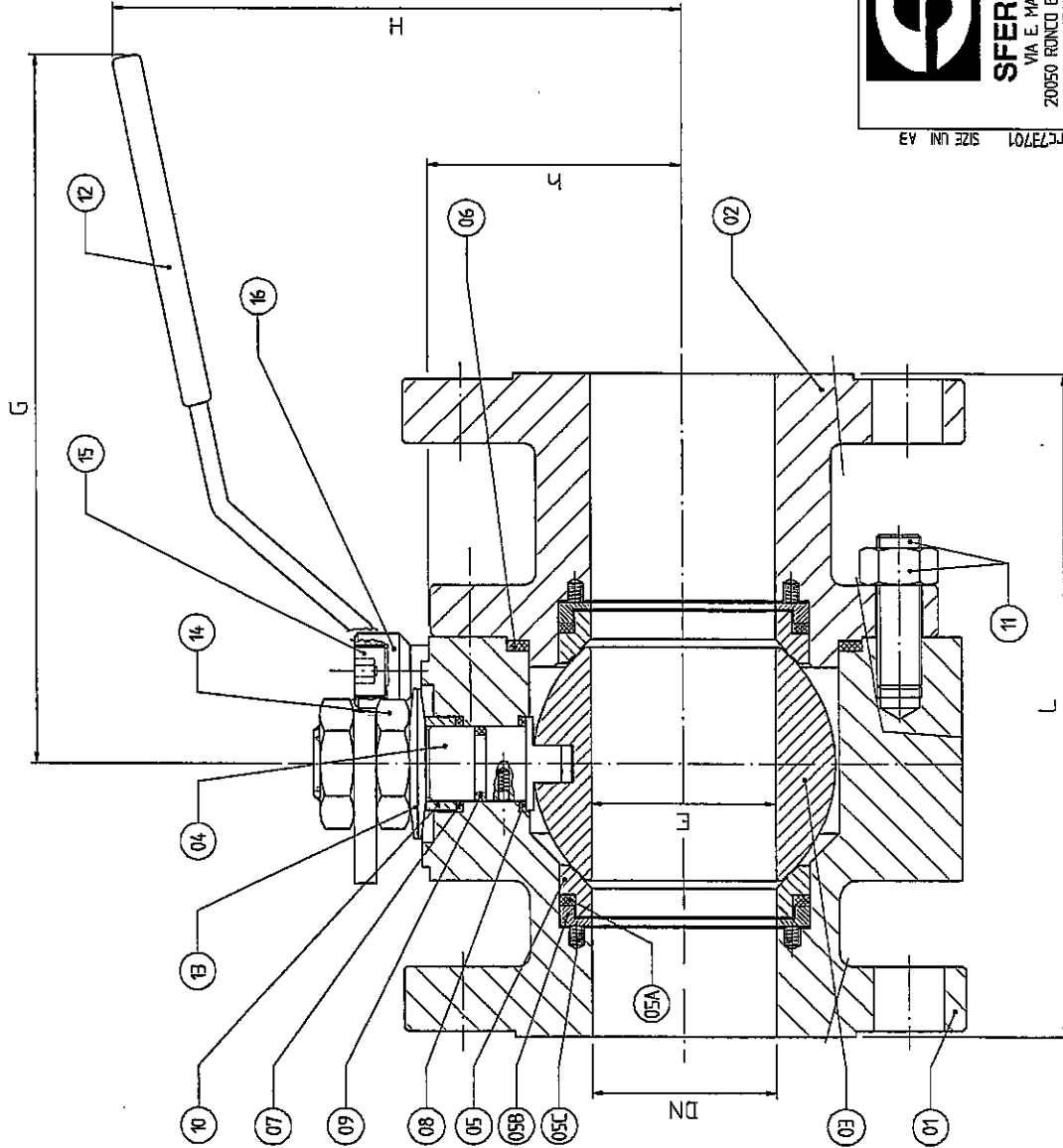
SEEDS

[illegible]

**DALLA VALLE PI. TO PI.
ELVA A TRINNI IN FEGGE LA RONDICCI.**

[illegible]

KLAUS UNION ORDER: 1H01970-05
CLIENT : MG ENGINEERING LURGI DEL GAS CHEME GMBH
PART NO.: HK 650
LURGI CONTRACT NO.: 169666-10-DEM
LURGI P.O. NO.: 455207E-005/169666/135
PROJECT TITLE: MEGA METHANOL PLANT ZAGROS PETROCHEMICAL
COMPANY SITE: BANDAR ASSALUYEH IRAN



POS.	DESCRIPTION	MAT.	NOTE
01	BODY	ASTM A479 type 321	
02	BODY ADAPTER	ASTM A479 type 321	
03	BALL	ASTM A479 type 321	3
04	STEM	ASTM A479 type 321	
05	SEAT	ASTM A479 type 321	3
05A	SEAT GASKET	GRAPHITE	
06	SEAT RING	ASTM A479 type 321	
07	SEAT SPRINGS	INCONEL X750	
08	BODY GASKET	GRAPHITE	
09	STEM GASKET	GRAPHITE	
10	O RING	/	
11	SPACER	AISI 304	
12	BOLTING	A193 B8A2 / A194 GR8	
13	HANDLE	C.S. ZINC PL. + PVC	
14	CLIP SPRINGS	X12CN17.7	
15	STEM NUTS	A4-70	
16	HEX. SOCKET HEAD SCREW	A4-70	
16	STOP PIN	AISI 304	

NOTE:
31 CHROMIUM CARBIDE COATED
(**): RECOMMENDED SPARE PARTS
(***): OPTIONAL SPARE PARTS

DN	E	L	G	h	H	ISO
3/4"	19	191	166	43	97	F05

-FULL BORE
-FACE TO FACE : ASME 816.10 (LONG PATTERN)
-RATING : ASME B16.34

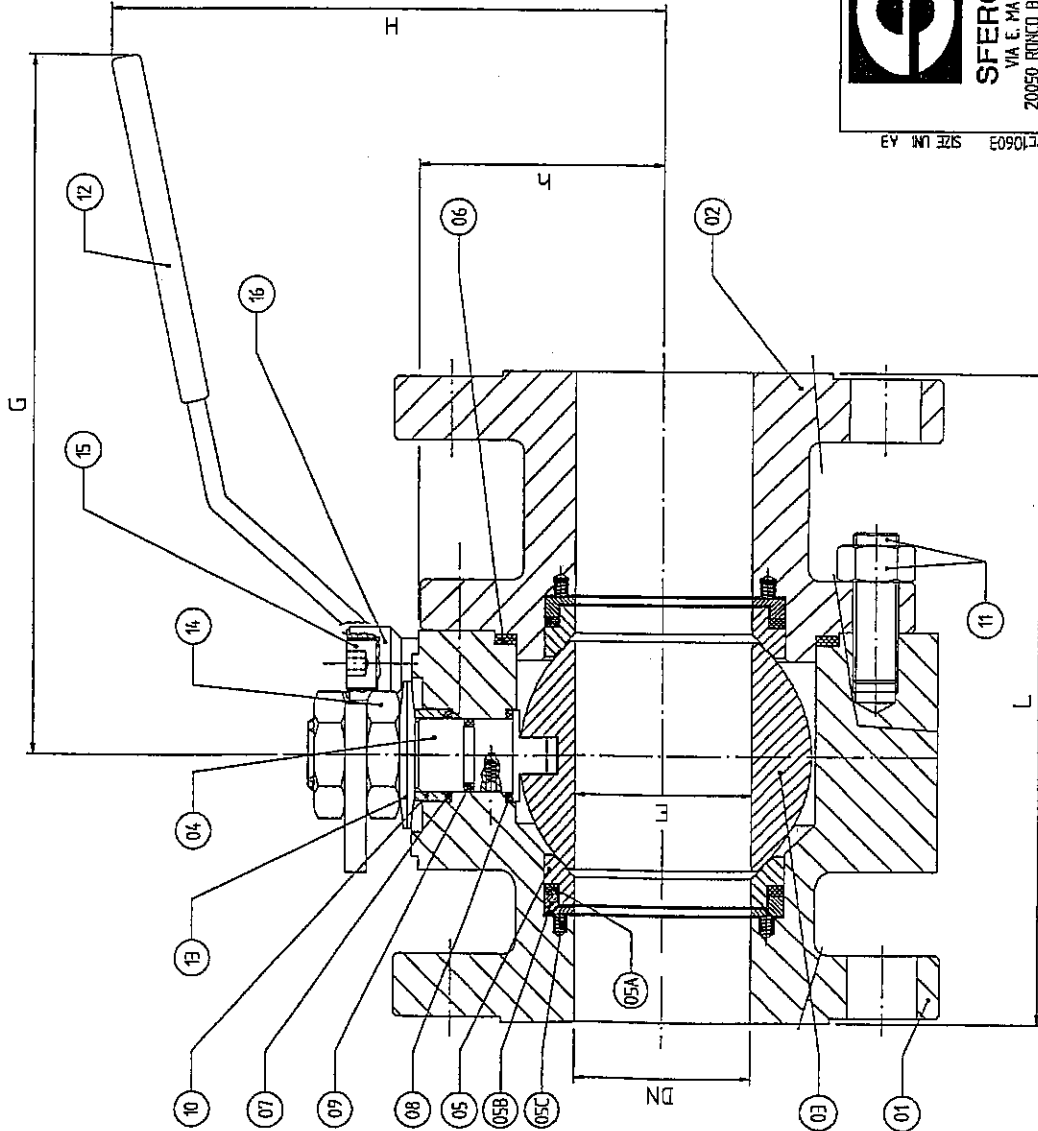


SFEROVA®
VIA E. MATTEI 18
20050 RONCO BRIANTINO (MI)
ITALY
PHONE: 039/6079559
FAX: 039/6079582
E-MAIL: sferova@promat.it

LA SFEROVA S.p.A. SI RISERVA A TERMINI DI LEGGE LA PROPRIETA' DEL PRESENTE DISEGNO
THIS DRAWING IS PROPERTY OF SFEROVA S.p.A. RIGHTS OF USE AND REPRODUCTION ARE RESERVED

REV.	DATE	10-10-03	DESCRIPTION	GENERAL TOLERANCES UNI ISO 2768 - mK	SCALE	NTS	MODIF.	PASSED	DATE
3									
2									
1									
MATERIAL		VALVE TYPE		SIZE		CLASS		DRAWING N°	
/		G1-F		/		/		0A.19.16.0.0	
PART NAME		BALL VALVES		/		/		REV.	
/		/		/		/		0A.19.16.0.0	

KLAS UNION ORDER: H401970-01
 CLIENT : MG ENGINEERING LURGI OEL GAS CHEMIE GMBH
 PART NO: EK 650
 LURGI CONTRACT NO: 169666-10-CEM
 LURGI P.O. NO: 6553075-007/169666/196
 PROJECT TITLE: MEGA PETRHAND PLANT ZAGROS PETROCHEMICAL
 COMPANY SITE BANDAR ASSALUYEH IRAN



POS.	DESCRIPTION	MATERIAL	NOTE
01	BODY	ASTM A479 type 321	
02	BODY ADAPTER	ASTM A479 type 321	
03	BALL	ASTM A479 type 321	3
04	STEM	ASTM A479 type 321	
05	SEAT	ASTM A479 type 321	3
05A	SEAT GASKET	GRAPHITE	
05B	SEAT RING	ASTM A479 type 321	
05C	SEAT SPRINGS	INCONEL X750	
06	BODY GASKET	GRAPHITE	
07	STEM GASKET	GRAPHITE	
08	STEM GASKET	GRAPHITE	
09	D RING	/	
10	SPACER	ALSI 304	
11	BOLTING	A193 B8U2 / A194 GR8	
12	HANDLE	C.S. ZINC PL. + PVC	
13	CLIP SPRINGS	X12C-NIT77	
14	STEM NUTS	A4-70	
15	HEX. SOCKET HEAD SCREW	A4-70	
16	STOP PIN	ALSI 304	

NOTE:
 31 CHROMIUM CARBIDE COATED
 (**): RECOMMENDED SPARE PARTS
 (***): OPTIONAL SPARE PARTS

DN	E	L	G	h	H	ISO
1"	24	216	183	48	130	F05

-FULL BORE
 -FACE TO FACE : ASME B16.10 (LONG PATTERN)
 -RATING : ASME B16.34



SFEROVA®
 VIA E. MATTEI 18
 ITALY
 20050 RONCO BRIANTINO (MI)

PHONE: 039/6079599
 FAX: 039/6079582
 E-MAIL: sferova@stetnolli

AUTOCAD FILE NAME: DTT10603 SIZE: UNITS: A3

REV.	DATE	DESCRIPTION	SCALE	MOD.	PASSED	DATE																								
1	09-05-03	TRAFIT	PASSED	N.T.S.																										
<table border="1"> <tr> <td colspan="2">GENERAL TOLERANCES</td> <td colspan="2">GENERAL FINISHES</td> </tr> <tr> <td colspan="2">UN ISO 2768 - mK</td> <td colspan="2">UN ISO 468 - Ra 3.2</td> </tr> <tr> <td colspan="2">VALVE TYPE</td> <td colspan="2">CLASS</td> </tr> <tr> <td colspan="2">IC1-F</td> <td colspan="2">/</td> </tr> <tr> <td colspan="2">PART NAME</td> <td colspan="2">DRAWING N°</td> </tr> <tr> <td colspan="2">BALL VALVES</td> <td colspan="2">0A1016101</td> </tr> </table>							GENERAL TOLERANCES		GENERAL FINISHES		UN ISO 2768 - mK		UN ISO 468 - Ra 3.2		VALVE TYPE		CLASS		IC1-F		/		PART NAME		DRAWING N°		BALL VALVES		0A1016101	
GENERAL TOLERANCES		GENERAL FINISHES																												
UN ISO 2768 - mK		UN ISO 468 - Ra 3.2																												
VALVE TYPE		CLASS																												
IC1-F		/																												
PART NAME		DRAWING N°																												
BALL VALVES		0A1016101																												

LA SFEROVA S.p.A. SI RISERVA A TERMINI DI LEGGE LA PROPRIETA' DEL PRESENTE DISEGNO
 TUTTI I DIRITTI DI SFEROVA S.p.A. SONO RISERVATI. I DIRITTI DI REPRODUZIONE SONO RISERVATI.