

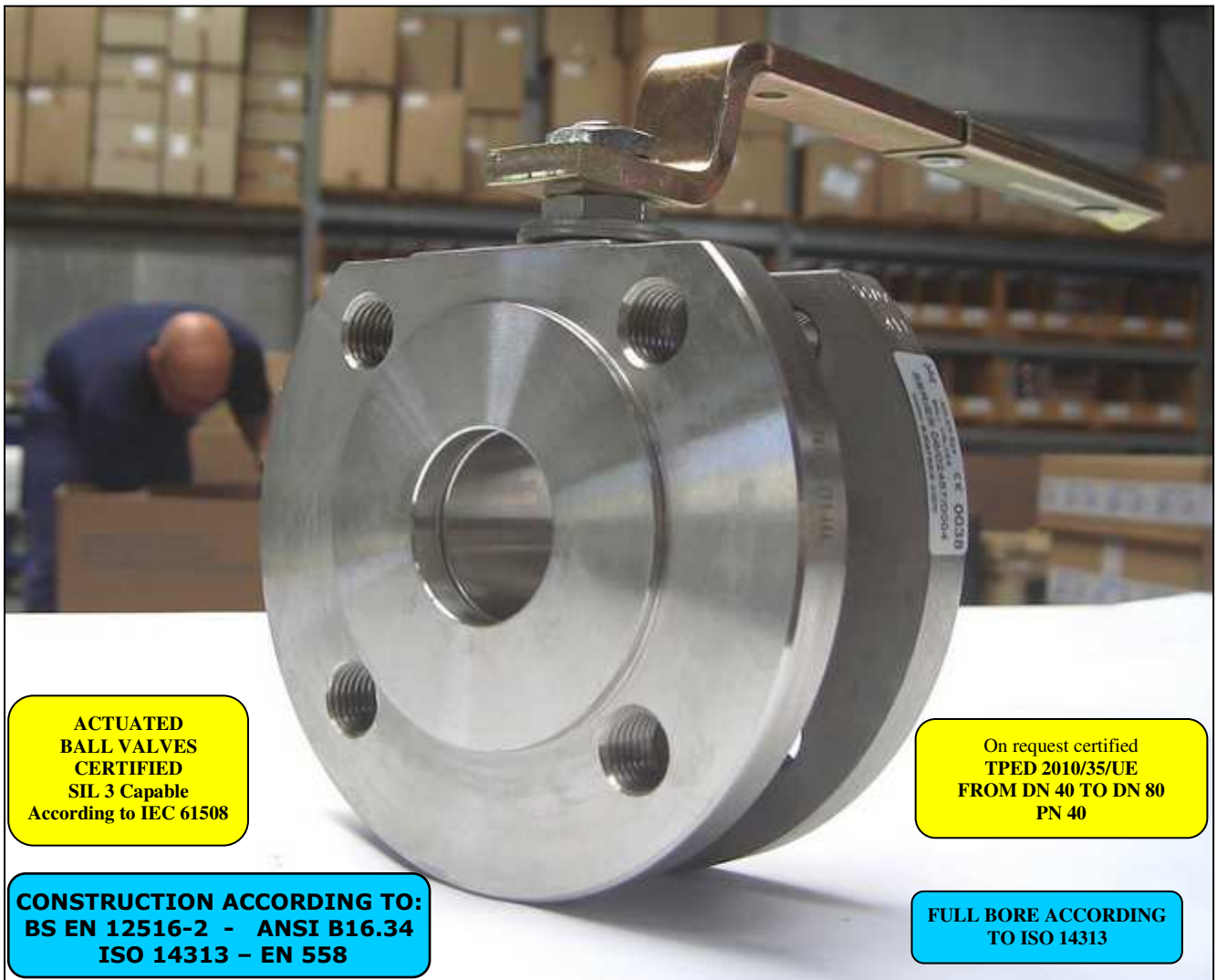


ISO 9001 by L.R.  
PED DIR. 2014/68/UE by L.R.  
ATEX DIR. 2014/34/UE by B.V.  
FIRE SAFE EXECUTION BS6755/API 607 by L.R.  
FIRE SAFE TESTED ISO 10497 by L.R.  
ISO 15848 by TÜV  
ANTISTATIC DEVICE by L.R.  
EAC CERTIFICATION by B.V.

TYPE  
**FB1**  
PN 10 ÷ 40  
ANSI 150

NORME E DIRETTIVE APPLICATE DISPONIBILI AL SEGUENTE LINK:  
STANDARD AND DIRECTIVE APPLIED AVAILABLE AT FOLLOWING LINK:  
[http://www.adlerspa.com/pdf/NORME\\_ADLER.pdf](http://www.adlerspa.com/pdf/NORME_ADLER.pdf)

## VALVOLE A SFERA "CORPO PIATTO" PASSAGGIO TOTALE



ACTUATED  
BALL VALVES  
CERTIFIED  
SIL 3 Capable  
According to IEC 61508

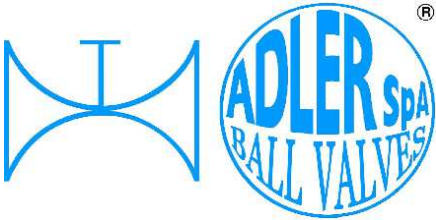
On request certified  
TPED 2010/35/UE  
FROM DN 40 TO DN 80  
PN 40

CONSTRUCTION ACCORDING TO:  
BS EN 12516-2 - ANSI B16.34  
ISO 14313 - EN 558

FULL BORE ACCORDING  
TO ISO 14313

**BALL VALVES "WAFER TYPE" FULL BORE**  
**ROBINETS A BOISSEAU SPHERIQUE**  
**"WAFER" PASSAGE INTEGRAL**  
**FLANSCHKUGELHÄHNE IN "KOMPAKTBAUWEISE"**  
**VOLLER DURCHGANG**

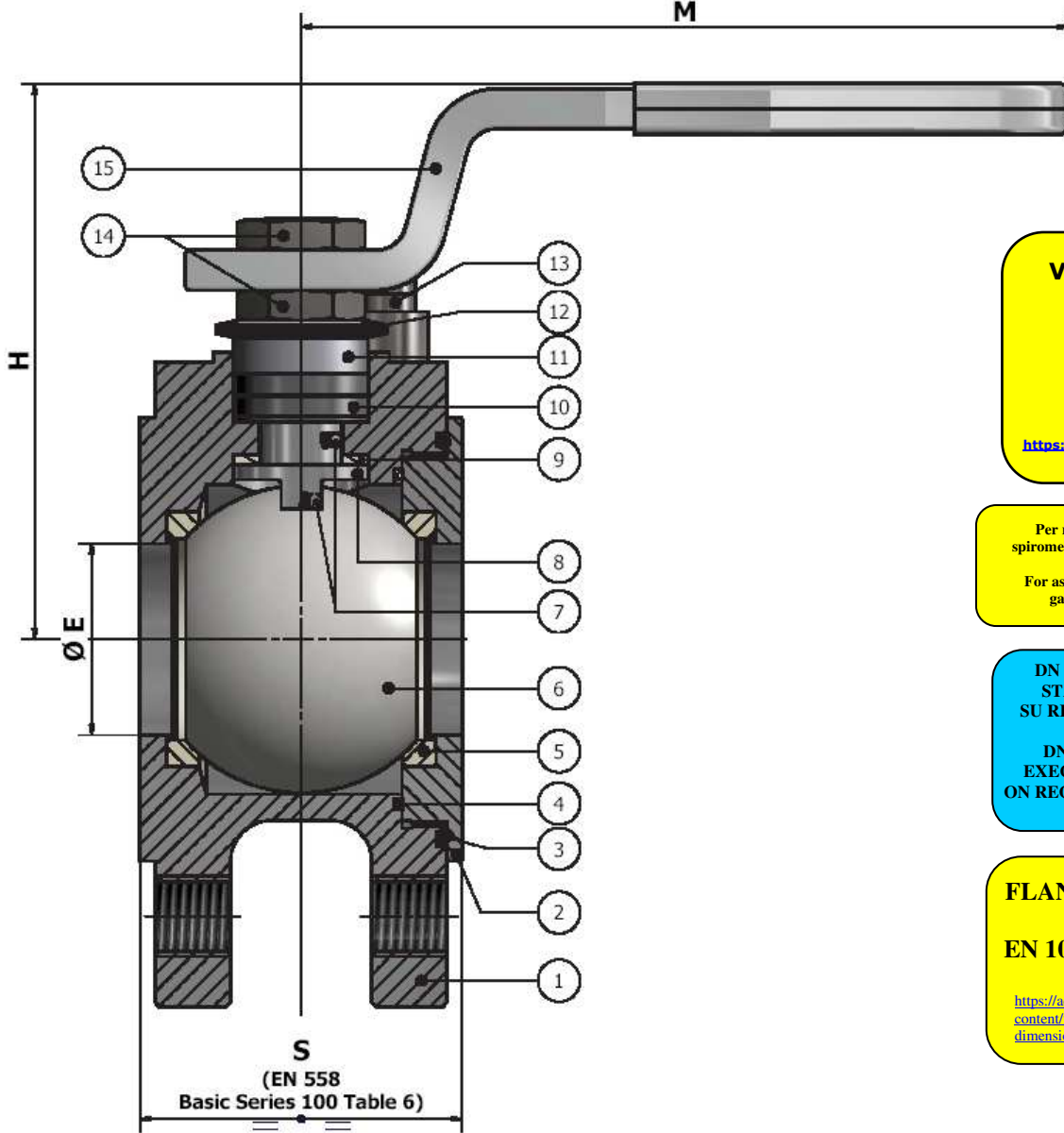
WEB SITE: [WWW.ADLERSPA.COM](http://WWW.ADLERSPA.COM)



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 ANTISTATIC DEVICE by L.R.  
 EAC CERTIFICATION by B.V.

TYPE  
**FB1**  
 PN 10 ÷ 40  
 ANSI 150

**VALVOLA A SFERA "CORPO PIATTO" PASSAGGIO TOTALE**  
**BALL VALVES "WAFFER TYPE" FULL BORE**  
**ROBINETS A BOISSEAU SPHERIQUE "WAFER" PASSAGE INTEGRAL**  
**FLANSCHKUGELHÄHNE IN "KOMPAKTBAUWEISE" VOLLER DURCHGANG**



**VISUALIZZA 3D**  
**VIEW 3D**

<https://adlerspa.com/prodotti/fb1>

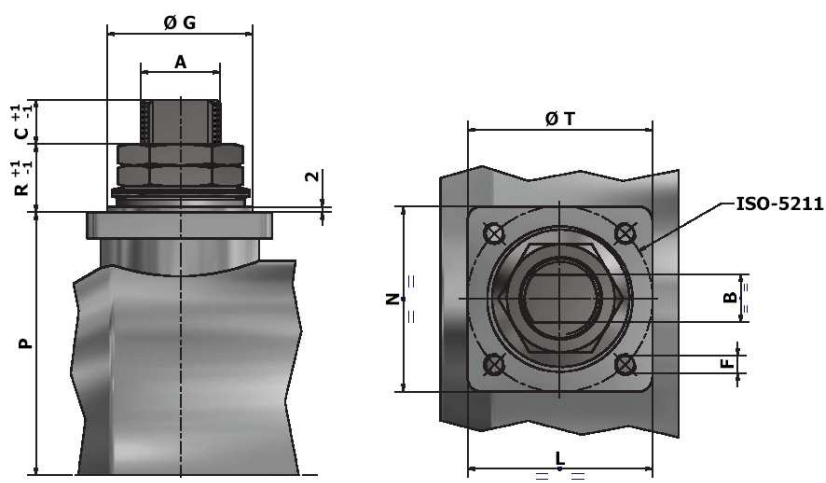
Per montaggio con guarnizioni  
 spirometalliche, contattare Adler Spa.  
 For assembling with spiral-wound  
 gaskets, contact Adler Spa

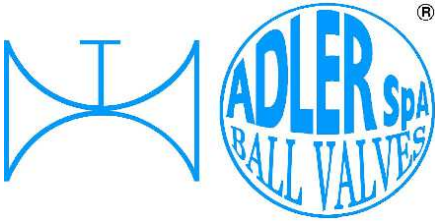
DN 65 PN 16 ESECUZIONE  
 STANDARD CON 4 FORI  
 SU RICHIESTA DISPONIBILE  
 CON 8 FORI  
 DN 65 PN 16 STANDARD  
 EXECUTION WITH 4 HOLES  
 ON REQUEST AVAILABLE WITH  
 8 HOLES

**FLANGE DIMENSIONS**  
 according to  
 EN 1092-1 or ANSI B16.5  
 see table

<https://adlerspa.com/wp-content/uploads/2023/11/Tabella-dimensioni-flange-valvole-Adler.pdf>

ADLER BALL VALVES FB1/22 RIPRODUZIONE VIETATA - COPYRIGHT





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 EAC CERTIFICATION by B.V.

TYPE  
**FB1**  
 PN 10 ÷ 40  
 ANSI 150

| N. | DESCRIZIONE<br>DESCRIPTION<br>DESCRIPTION<br>BESCHREIBUNG                                      | MATERIALI<br>MATERIALS<br>MATERIAUX<br>WERKSTOFFE                           |
|----|--|---|
| 1  | CORPO<br>BODY<br>CORPS<br>MITTE  | ASTM A 351 CF8<br>ASTM A 351 CF8M   |
| 2  | GHIERA<br>INSERT<br>EMBOUT<br>GEWINDEDRUCKRING   | ASTM A479 304/304L<br>ASTM A479 316/316L                                    |
| 3* | O-RING   | FKM - (VITON)   |
| 4* | ANELLO<br>SEAL<br>ANNEAU<br>DICHTUNGSRING  | P.T.F.E.  |
| 5* | SEDE<br>SEAT<br>SIEGE<br>SITZRING  | P.T.F.E.<br>R.P.T.F.E. (OPTIONAL)   |
| 6  | SFERA<br>BALL<br>BOULE<br>KUGEL  | ASTM A479 304/304L<br>ASTM A351 CF8<br>ASTM A479 316/316L<br>ASTM A351 CF8M |
| 7  | DISPOSITIVO ANTISTATICO<br>ANTISTATIC DEVICE<br>CONTACT ANTISTATIQUE<br>ANTISTATIK VORRICHTUNG | ASTM A479 316/316L  |
| 8  | STELO<br>STEM<br>TIGE<br>SPINDEL   | ASTM A479 304/304L<br>ASTM A479 316/316L                                    |

| N.  | DESCRIZIONE<br>DESCRIPTION<br>DESCRIPTION<br>BESCHREIBUNG                            | MATERIALI<br>MATERIALS<br>MATERIAUX<br>WERKSTOFFE  |
|-----|--|--|
| 9*  | BUSSOLA<br>STEM SEAL<br>JOINT TIGE<br>UNTERE SPINDELABDICHTUNG                       | P.T.F.E.   |
| 10* | PACCO A "V"<br>CHEVRON RINGS<br>JOINT A "V"<br>3 FACHE DACHMANSCHETTE                | P.T.F.E. / GRAFITE<br>P.T.F.E. / GRAPHITE<br>P.T.F.E. / GRAPHITE<br>P.T.F.E. / GRAPHIT                     |
| 11  | PREMIBUSSOLA<br>PRESSING BUSH<br>PRESSE RONDELLE<br>STOPFBUCHSDRUCKRING              | ASTM A479 304  |
| 12  | MOLLE A TAZZA<br>SPRING WASHERS<br>RONDELLES BELLEVILLE<br>TELLERFEDERN              | C72/50Cr V4 ZINCATO - GALVANIZED -<br>ZINGUE - VERZINKT<br>X10CrNi18.8 ON REQUEST                          |
| 13  | VITE DI FERMO E FERMO<br>PIN AND STOP PIN<br>PLONT ET PLOT D'ARRET<br>ANSCHLAGBOLZEN | UNI3740 8.8 ZINCATO - GALVANIZED -<br>ZINGUE - VERZINKT<br>UNI 3951 A2-70 ON REQUEST                       |
| 14  | DADO - CONTRODADO<br>NUT - LOCK NUT<br>ECROU - CONTRE-ECROU<br>MUTTER - KONTERMUTTER | AISI 1010 ZINCATO - GALVANIZED -<br>ZINGUE - VERZINKT<br>ASTM A479 304 ON REQUEST                          |
| 15  | LEVA<br>WRENCH<br>LEVIER<br>HANDHEBEL  | AISI 1010 GALVANIZED AND PAINTED FOR<br>S.S. VALVES<br>PAINTED FOR C.S. VALVES<br>ASTM A479 304 ON REQUEST |
| 16  |  |  |

\* RICAMBI CONSIGLIATI - RECOMMENDED SPARE PARTS - PIECES DE RECHANGE CONSEILLEES - ERSATZTEIL EMPFEHLUNG

ON REQUEST P.T.F.E. AVAILABLE CERTIFIED BAM, FDA, MOCA

## DIMENSIONI - DIMENSION - DIMENSIONS - ABMESSUNGEN

| DN  | 15 | 20 | 25 | 32 | 40  | 50  | 65  | 80   | 100  | 125 | 150 | 200 | 250 | 300 |
|-----|----|----|----|----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| A   |    |    |    |    | 16  | 16  | 22  | 22   | 30   | 30  |     |     |     |     |
| B   |    |    |    |    | 10  | 10  | 14  | 14   | 18   | 18  |     |     |     |     |
| C   |    |    |    |    | 10  | 10  | 12  | 12   | 17   | 17  |     |     |     |     |
| E   |    |    |    |    | 38  | 51  | 64  | 76   | 101  | 118 |     |     |     |     |
| F   |    |    |    |    | M6  | M6  | M8  | M8   | M8   | M10 |     |     |     |     |
| ISO |    |    |    |    | F05 | F05 | F07 | F07  | F07  | F10 |     |     |     |     |
| G   |    |    |    |    | 35  | 35  | 55  | 55   | 55   | 70  |     |     |     |     |
| H   |    |    |    |    | 110 | 120 | 144 | 152  | 174  | 188 |     |     |     |     |
| L   |    |    |    |    | 58  | 56  | 67  | 68   | 70   | 97  |     |     |     |     |
| M   |    |    |    |    | 280 | 280 | 370 | 370  | 470  | 650 |     |     |     |     |
| N   |    |    |    |    | 54  | 54  | 70  | 70   | 70   | 97  |     |     |     |     |
| P   |    |    |    |    | 55  | 65  | 82  | 90,5 | 99,5 | 113 |     |     |     |     |
| R   |    |    |    |    | 20  | 21  | 24  | 24   | 27   | 27  |     |     |     |     |
| S   |    |    |    |    | 64  | 84  | 103 | 120  | 154  | 182 |     |     |     |     |
| T   |    |    |    |    | 50  | 50  | 70  | 70   | 70   | 102 |     |     |     |     |
| ~Kg |    |    |    |    | 5   | 7   | 11  | 15   | 20   | 31  |     |     |     |     |

TYPE  
**FA1**  
 VEDERE  
 SEE  
 VOIR  
 SIEHE  
 DN 15 ÷ 40  
 PN 10 ÷ 40  
 ANSI 150 ÷ 300

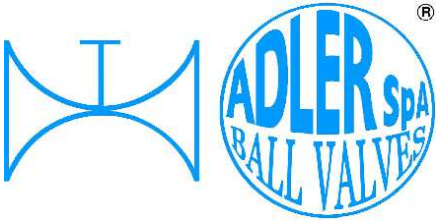
TYPE  
**FB2**  
 VEDERE  
 SEE  
 VOIR  
 SIEHE  
 DN 150 ÷ 250  
 PN 10 ÷ 40  
 ANSI 150 ÷ 300

OPTIONAL TYPE  
**FA2**  
 VEDERE  
 SEE  
 VOIR  
 SIEHE  
 DN 15 ÷ 250  
 PN 10 ÷ 40  
 ANSI 150 ÷ 300

- DATI E CARATTERISTICHE SOGGETTI A VARIAZIONI SENZA PREAVVISO
- SPECIFICATIONS SUBJECT TO MODIFICATIONS WITHOUT PRIOR NOTICE
- TOUS DROITS DE MODIFICATION RESERVES
- KONSTRUKTIONÄNDERUNGEN VORBEHALTEN



ADLER SpA - BALL VALVES  
 20010 S. STEFANO TICINO (MI) ITALY V.le BORLETTI, 14 Tel. +39/02974842.11 FAX +39/0297271698  
 E-mail: [adler@adlerspa.com](mailto:adler@adlerspa.com) <http://www.adlerspa.com>



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 ISO 15848 by TÜV  
 ANTISTATIC DEVICE by L.R.  
 EAC CERTIFICATION by B.V.

TYPE  
**FB1**  
 PN 10 ÷ 40  
 ANSI 150

· ESECUZIONI · EXECUTIONS · EXECUTIONS · AUSFÜHRUNGEN



EXECUTION 4- 12

ONLY FOR VALVES  $\geq$  DN 50 **S**

FORO DI BILANCIAMENTO  
 BALANCING HOLE  
 TROU DE BALANCEMENT  
 DRUCKENTLASTUNGSBOHRUNG

ON REQUEST AVAILABLE ON DN  $\leq$  40



EXECUTION 6 - 16

**S** STANDARD

**O** OPTIONAL

**1** **S**

-MONTAGGIO VITI – SCREW ASSEMBLING  
 -MONTAGE VIS – EINBAU MIT SCHRAUBEN

**2** **O**

-MONTAGGIO DI FONDO  
 -END TANK ASSEMBLING  
 -MONTAGE FOND DE CUVE  
 -EINBAU ALS BODENABLASSKUGELHAHN

**3** **O**

-MONTAGGIO BULLONI  
 -BOLTS ASSEMBLING  
 -MONTAGE BOULONS  
 EINBAU MIT ZUGBOLZEN

**4** **S**

-STELO ANTI ESPULSIONE -ANTI BLOW OUT STEM  
 -TIGE ANTIEXPULSION -AUSBLASGESICHERETE WELLE

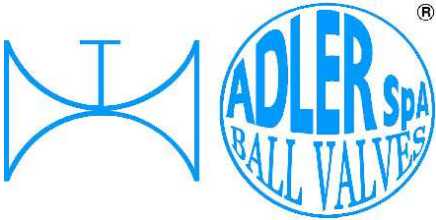
-PACCO A "V" -CHEVRON RINGS  
 -JOINT A "V" -3 FACHE DACHMANSCHETE  
 ANTISTATIC DEVICE ANTISTATIK VORRICHTUNG  
 BS 5146

ISO 15848 -1 CERTIFICATION

**6** **O**

BREVETTO – PATENTED  
 00219688 - 21-04-1993  
 FKM (VITON)

-“O” RING STELO “O” RING ON STEM  
 -TIGE AVEC “O” RING  
 -“O” RING IM SPINDELBEREICH



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 EAC CERTIFICATION by B.V.

TYPE  
**FB1**  
 PN 10 ÷ 40  
 ANSI 150

**7** **O**

-PROLUNGA STELO -STEM EXTENSION  
 -TIGE PROLONGEE -SPINDELVERLÄNGERUNG

**8** **O**

-PARTICOLARI INOX  
 -STAINLESS STEEL DETAILS  
 -ACCESSOIRES EN INOX  
 -EDELSTAHLTEILE

**9** **S**

-ATTACCO "ISO" -"ISO" CONNECTIONS  
 -SYSTEM "ISO" -ANSCHLUSS "ISO"

**10** **S**

-SFERA CONTENUTA -CONTENTS BALL  
 -BOULE CONTENUE  
 -NICHT RAUSRAGENDE KUGEL

**11** **O**

-TENUTE INTEGRALE -POCKETLESS SEATS  
 -TENUE INTEGRALE -TOTRAUMARM  
 -P.T.F.E. / R.T.F.E.

**12** **O**

FIRE SAFE  
 ISO 10497 "ISO-FT"  
 (BS 6755 / API 607)

**13** **S**

-DOPPIA TENUTA -DOUBLE SEALS  
 -DOUBLE ETANCHEITE -DOPPELTE ABDICHTUNG  
 -GHIERA A BATTUTA -METAL BEATING RING  
 -EMBOUT AVEC BATTUE MECANIQUE  
 -METALLISCHER ANSCHLAG DES  
 GEWINDEDRUCKRINGS

**14** **O**

VEDERE / SEE ANSI B16.34

FLUSSO  
 FLOW

-FORO DI SCARICO NELLA SFERA  
 -OVERPRESSURE HOLE INTO BALL  
 -TROU DECOMPRESSION DANS LA BOULE  
 -ENTLASTUNGSBOHRUNG IN DER KUGEL  
 VALVOLA MONO DIREZIONALE  
 MONO-DIRECTIONAL VALVE

**15** **O**

P.T.F.E./GRAPHITE  
 P.T.F.E.  
 100-250

-SERVIZIO CRIOGENICO - CRYOGENIC SERVICE  
 -SERVICE CRYOGENIQUE  
 -TIEFTEMPORATUR SERVICE

**16** **O**

-FIRE SAFE ISO FT+ "O" RING STELO  
 -FIRE SAFE ISO FT+ "O" RING ON STEM  
 -SECURITE FEU ISO FT+ TIGE AVEC "O" RING  
 -FEUERSICHERE AUSFÜHRUNG ISO FT +  
 "O" RING IM SPINDELBEREICH

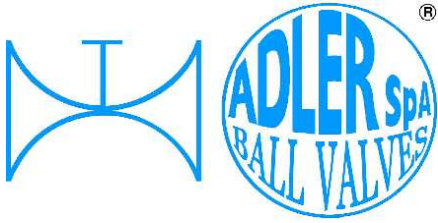
**ADLER**

UNA GAMMA COMPLETA  
 PRIVILEGIANDO LA QUALITA'

A COMPLETE RANGE PRIVILEGING  
 THE QUALITY

**18** **O**

-SFERA CIECA PER CAMPIONATURA  
 -BLIND BALL FOR SAMPLING  
 -PRISE-ECHANTILLON  
 KUGEL FÜR PROBEHAHME



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TYPE  
**FB1**  
 PN 10 ÷ 40  
 ANSI 150

VITI D'ASSEMBLAGGIO PER FB1 - ASSEMBLING SCREWS FOR FB1 - VIS D'ASSEMBLAGE POUR FB1- MONTAGESCHRAUBEN FÜR FB1

N° VITI - DIMENSIONE • N° SCREW - DIMENSIONS • N° VIS- DIMENSIONS • N° SCHRAUBEN-ABMESSUNGEN

### EUROPEAN NORM

| DN<br>PN | 10-15 | 20 | 25 | 32 | 40        | 50        | 65         | 80           | 100        | 125        | 150 |
|----------|-------|----|----|----|-----------|-----------|------------|--------------|------------|------------|-----|
| 10       |       |    |    |    | 8 M16 X35 | 8 M16 X40 | 8 M16 X40  | * 16 M16 X40 | 16 M16 X40 | 16 M16 X45 |     |
| 16       |       |    |    |    | 8 M16 X35 | 8 M16 X40 | 8 M16 X40  | 16 M16 X40   | 16 M16 X40 | 16 M16 X45 |     |
| 25       |       |    |    |    | 8 M16 X40 | 8 M16 X40 | 16 M16 X45 | 16 M16 X45   | 16 M20 X50 | 16 M24 X55 |     |
| 40       |       |    |    |    | 8 M16 X40 | 8 M16 X40 | 16 M16 X45 | 16 M16 X45   | 16 M20 X50 | 16 M24 X55 |     |

### ANSI METRIC

(STANDARD ADLER)

| Ø<br>Rating | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2"    | 2"        | 2 1/2"    | 3"        | 4"         | 5"         | 6" |
|-------------|------|------|----|--------|-----------|-----------|-----------|-----------|------------|------------|----|
| 150         |      |      |    |        | 8 M14 X35 | 8 M16 X40 | 8 M16 X40 | 8 M16 X45 | 16 M16 X45 | 16 M20 X50 |    |

### ANSI B1.1 UNC

(ON REQUEST)

| Ø<br>Rating | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2"        | 2"            | 2 1/2"        | 3"            | 4"             | 5"         | 6" |
|-------------|------|------|----|--------|---------------|---------------|---------------|---------------|----------------|------------|----|
| 150         |      |      |    |        | 8 1/2 X 1 1/2 | 8 5/8 X 1 1/2 | 8 5/8 X 1 3/4 | 8 5/8 X 1 3/4 | 16 5/8 X 1 3/4 | 16 3/4 X 2 |    |

Length of screws calculated considering a gasket with thickness of 2mm.

