

ISO 9001:2008 by L.R.  
PED DIR. 97/23/EC by L.R.  
ATEX DIR. 94/9/EC by B.V.  
FIRE SAFE EXECUTION by L.R.  
ISO 15848 by TÜV  
ANTISTATIC DEVICE by L.R.  
FIRE SAFE TESTED ISO 10497 by L.R.

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

TYPE

**FA4**

PN 10 ÷ 40  
ANSI 150

**BALL VALVES "3 WAY WAFER" FULL BORE 90°  
ROBINETS A BOULE "3 VOIES WAFER"  
PASSAGE INTEGRAL 90°  
KUGELHÄHNE "3 WEGE KOMPAKTHAHN"  
VOLLER DURCHGANG 90°**

ISO nbr° LRC 0160281 QMS issued by L.R.Q.A. PED nbr° COV 0212112/01 issued by L.R.V.  
ATEX nbr° 40.2003.4392 issued by B.V. ISO 15848 nbr° I-148466/1-2 issued by TÜV



**CONSTRUCTION IN ACCORDING TO:  
ANSI B16.34 - ANSI B 16.5  
UNI EN 1092-1 - BS EN 12516-2**

On request  
**FIRE SAFE**  
According to ISO 10497  
"ISO-FT"

FA4/08 RIPRODUZIONE VIETATA - COPYRIGHT

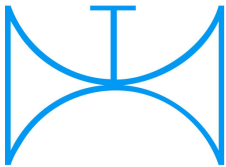
PRZEDSTAWICIEL W POLSCE:

**ARA**  
PNEUMATIK

53-012 Wrocław tel. 71 364 72 85  
ul. Wyścigowa 38 fax 71 364 72 83

[www.arapneumatik.pl](http://www.arapneumatik.pl)

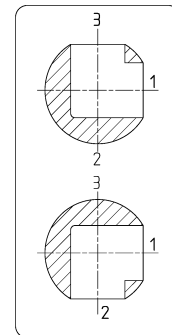
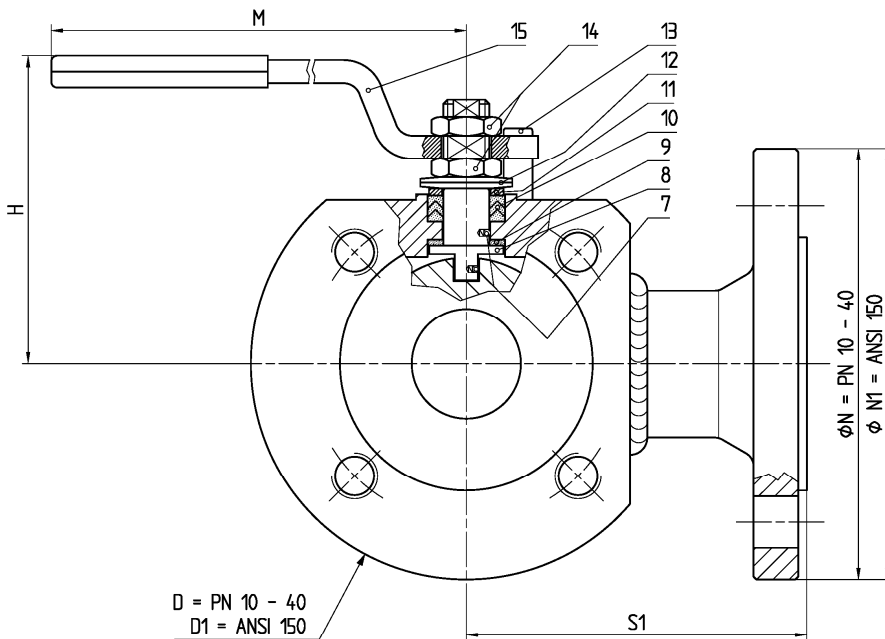




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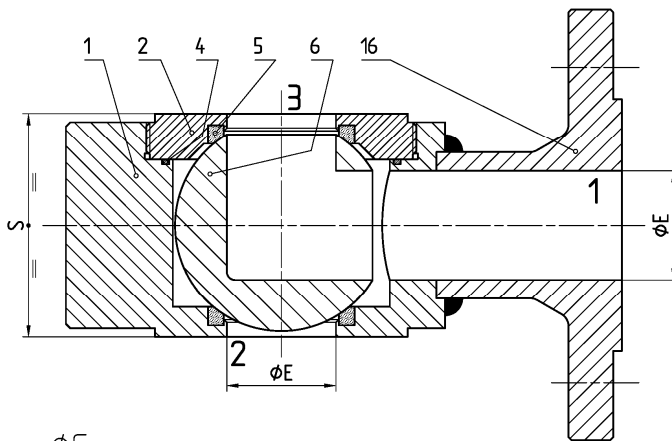
TYPE  
**FA4**  
 PN 10 ÷ 40  
 ANSI 150

VALVOLA A SFERA "3 VIE CORPO PIATTO" PASSAGGIO TOTALE 90°  
 BALL VALVES "3 WAY WAFER" FULL BORE 90°  
 ROBINETS A BOULE "3 VOIES WAFER" PASSAGE INTEGRAL 90°  
 KUGELHÄHNE "3 WEGE KOMPAKTHAHN" VOLLER DURCHGANG 90°

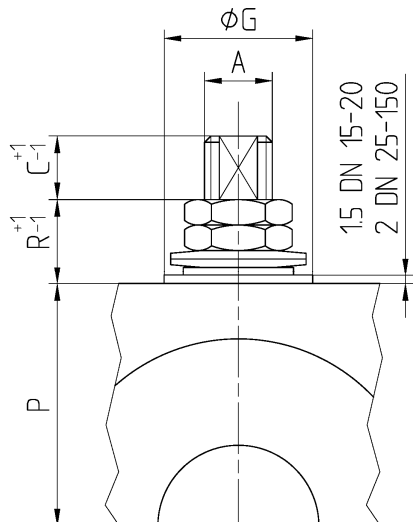


POSIZIONI OTTENIBILI  
 OBTAINABLE POSITIONS  
 POSITIONS OBTENABLES  
 MÖGLICHE STELLUNGEN

D = PN 10 - 40  
 D1 = ANSI 150

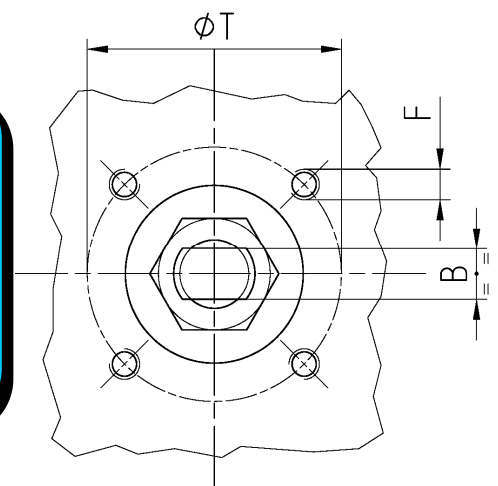


CONSTRUCTION IN ACCORDING TO:  
 ANSI B16.34 - ANSI B 16.5  
 UNI EN 1092-1 - BS EN 12516-2



- ACCOPPIAMENTO VALVOLA ATTUATORE
- CONNECTION VALVE ACTUATOR
- ACCOUPLEMENT ROBINET-ACTIONNEUR
- ZUSAMMENBAU KUGELHAHN ANTRIEB

**ISO-5211**



N.	DESCRIZIONE DESCRIPTION DESCRIPTION BESCHREIBUNG	MATERIALI MATERIALS MATERIAUX WERKSTOFFE
1	CORPO BODY CORPS KÖRPER	ASTM A105 ASTM A 182 F316- A479 S31600
2	GHIERA INSERT EMBOUT GEWINDEDRUCKRING	ASTM A105 ASTM A 182 F316- A479 S31600
3		
4*	ANELLO SEAL ANNEAU DICHTUNGSRING	P.T.F.E.
5*	SEDE SEAT SIEGE SITZRING	P.T.F.E.
6	SFERA BALL BOULE KUGEL	ASTM A182 F304-A479 S30400 ASTM A351 CF8 ≥ DN 40
		ASTM A182 F316-A479 S31600 ASTM A351 CF8M
7	DISPOSITIVO ANTISTATICO ANTISTATIC DEVICE CONTACT ANTISTATIQUE ANTISTATIK VORRICHTUNG	ASTM A479 S31600
8	STELO STEM TIGE SPINDEL	ASTM A182 F304 A479 S30400 ≥ DN 40
		ASTM A182 F316 A479 S31600

N.	DESCRIZIONE DESCRIPTION DESCRIPTION BESCHREIBUNG	MATERIALI MATERIALS MATERIAUX WERKSTOFFE
9*	BUSSOLA STEM SEAL JOINT TIGE UNTERE SPINDELABDICHTUNG	P.T.F.E.
10*	PACCO A "V" CHEVRON RINGS JOINT A "V" 3 FACHE DACHMANSCHETTE	P.T.F.E. / GRAFITE P.T.F.E. / GRAPHITE P.T.F.E. / GRAPHITE P.T.F.E. / GRAPHIT
11	PREMBUSSOLA PRESSING BUSH PRESSE RONDELLE STOPFBUCHSDRUCKRING	ASTM A479 S31600
12	MOLLE A TAZZA SPRING WASHERS RONDELLES BELLEVILLE TELLERFEDERN	C72/50Cr V <sub>4</sub> ZINCATO - GALVANIZED ZINGUE - VERZINKT
13	VITE DI FERMO E FERMO PIN AND STOP PIN PLONT ET PLOT D'ARRET ANSCHLAGBOLZEN	UNI 3740 - 8.8 ZINCATO - GALVANIZED ZINGUE - VERZINKT
14	DADO - CONTRODADO NUT - LOCK NUT ECROU - CONTRE-ECROU MUTTER - KONTERMUTTER	UNI 3740 - 6S ZINCATO - GALVANIZED ZINGUE - VERZINKT
15	LEVA WRENCH LEVIER HANDHEBEL	UNI 5946 Fe 37 ZINCATO - GALVANIZED ZINGUE - VERZINKT
16	FLANGIA FLANGE BRIDE FLANSCH	ASTM A105 ASTM A 182 F316- A479 S31600

\* RICAMBI CONSIGLIATI - RECOMMENDED SPARE PARTS - PIÉCES DE RECHANGE CONSEILLÉES - ERSATZTEIL EMPFEHLUNG

## DIMENSIONI - DIMENSION - DIMENSIONS - ABMESSUNGEN

DN	10	15	20	25	32	40	50	65	80	100	100	125	150		
AxB		10x16	10x6	12x8	12x8	16x10	16x10	22x14	22x14	30x18	30x18	30x18	42		
C		7	7	10	10	15	15	17	12	17	17	17	19		
ØD		95	105	115	140	150	165	188	208	220	234	249	340		
ØD <sub>1</sub>		89	99	108	118	128	153	188	208	229		258	340		
ØE		15	19	25	30	38	51	64	69	87	87	108	136		
F		M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M10	M12		
ISO		F03	F03	F03	F03	F05	F05	F07	F07	F10	F10	F10	F12		
G		25	25	25	25	35	35	55	55	70	70	70	85		
H		70	75	90	95	112	122	175	149	174	174	187	255		
M		145	145	185	185	280	280	370	370	470	470	650	750		
ØN		95	105	115	140	150	165	185	200	220	234	249	283		
ØN <sub>1</sub>		89	99	108	118	128	153	178	190	229		254	283		
P		36,6	41	46	51	57	67	85	91,5	99,5	107	114	144		
R		8	8	17	17	20	20	23	23	27	18	25	34		
S		42	50	56	66	78	98	119	124	154	154	182	288		
S <sub>1</sub>		85	90	95	110	115	125	150	165	170(1)	190	190(2)	230		
T		36	36	36	36	50	50	70	70	102	102	102	125		
~Kg		2,5	4	5	9	12	18	28	37	50	55				

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

(1) 180 ANSI 150

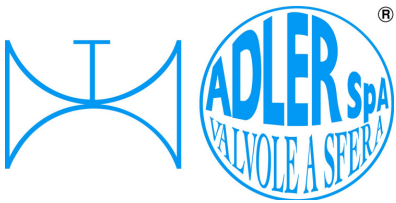
(2) 200 ANSI 150

PN 10 ÷ 16

PN 25 ÷ 40



ADLER SpA - VALVOLE A SFERA  
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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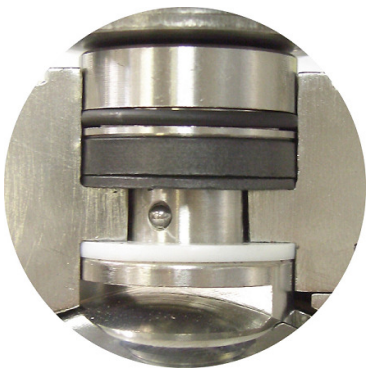
TYPE  
**FA4**  
 PN 10 ÷ 40  
 ANSI 150

VALVOLE A SFERA "3 VIE CORPO PIATTO" PASSAGGIO TOTALE 90° - BALL VALVES "3 WAY WAFER" FULL BORE 90°  
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▪ ESECUZIONI ▪ EXECUTIONS ▪ EXECUTIONS ▪ AUSFÜHRUNGEN



EXECUTION 4 - 12



EXECUTION 6 - 16

**S** STANDARD

**O** OPTIONAL

**1** **S**

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

**2** **S**

INDICATORE DI FLUSSO  
 FLOW INDICATOR

**3** **S**

**DN 150**

UNIONE CORPO LATERALE CON VITE  
 BODY AND END ASSEMBLING WITH SCREW

Screw UNI 3740-8.8  
 GALVANIZED

**4** **S**

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

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



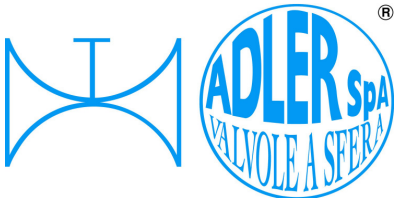
**6** **O**

**BREVETTO - PATENTED**  
**00219688**

FKM (VITON)

-"O" RING STELO "O" RING ON STEM  
 -TIGE AVEC "O" RING  
 -"O" RING IM SPINDELBEREICH



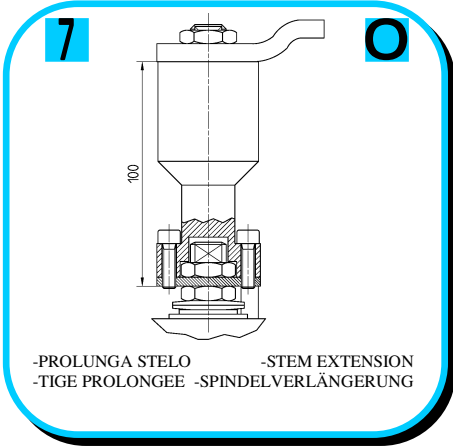


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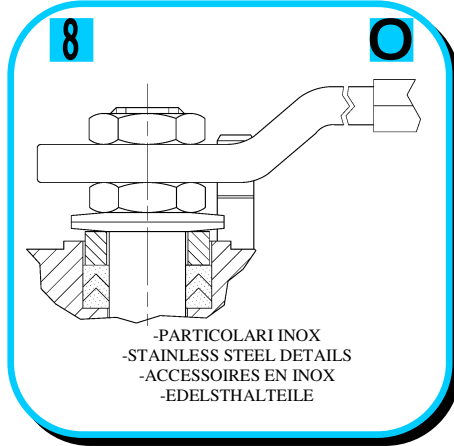
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**FA4**  
 PN 10 ÷ 40  
 ANSI 150

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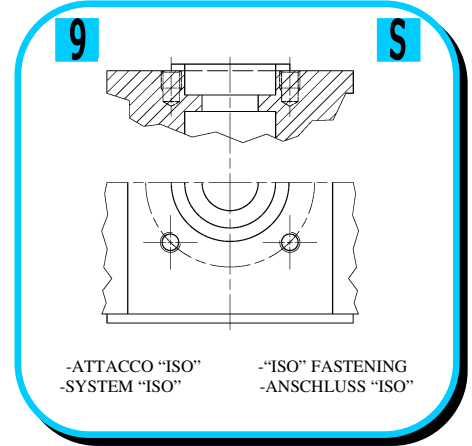
• ESECUZIONI • EXECUTIONS • EXECUTIONS • AUSFÜHRUNGEN



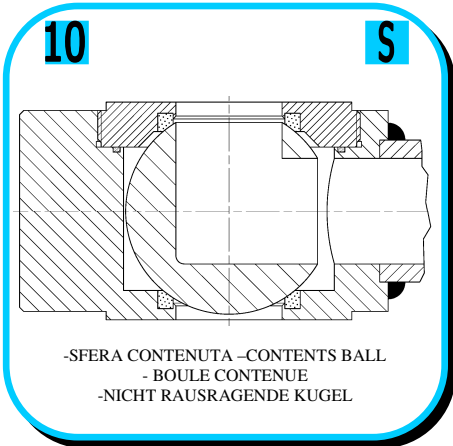
-PROLUNGA STELO -STEM EXTENSION  
 -TIGE PROLONGEE -SPINDELVERLÄNGERUNG



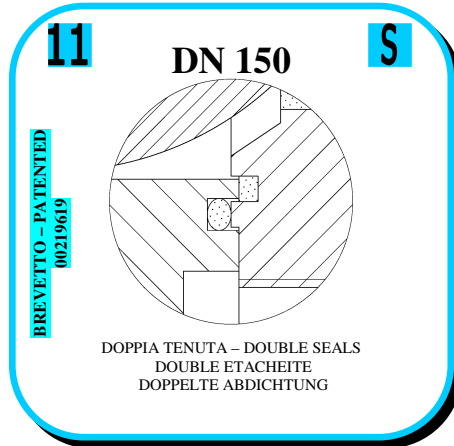
-PARTICOLARI INOX  
 -STAINLESS STEEL DETAILS  
 -ACCESSOIRES EN INOX  
 -EDELSTHALTEILE



-ATTACCO "ISO" -"ISO" FASTENING  
 -SYSTEM "ISO" -ANSCHLUSS "ISO"



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



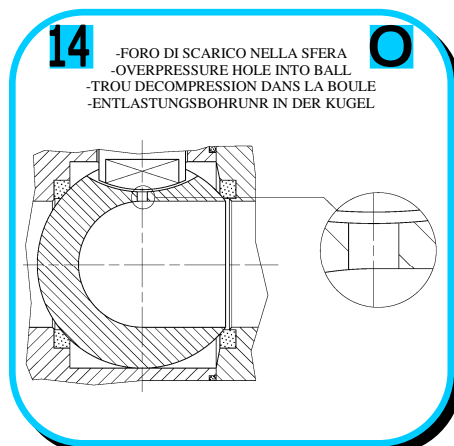
DOPPIA TENUTA - DOUBLE SEALS  
 DOUBLE ETACHEITE  
 DOPPELTE ABDICHTUNG



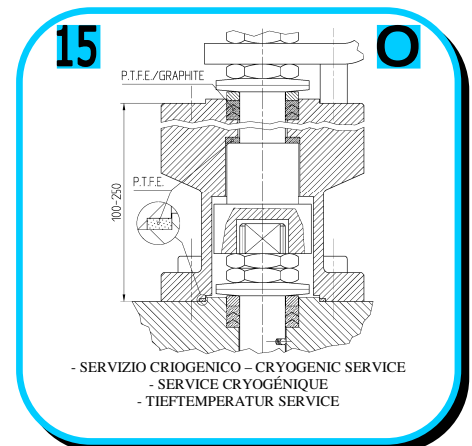
FIRE SAFE  
 ISO 10497 "ISO-FT"  
 (BS 6755 / API 607)



ANELLO CONTENUTO - CONTAINED SEAL  
 ANNEAU CONTENU - DICHRING GEKAMMERT  
 -GHIERA A BATTUTA -METAL BEATING RING  
 -EMBOUT AVEC BATTUE MECANIQUE  
 -METALLISCHER ANSCHLAG DES  
 GEWINDEDRUCKRINGS



-FORO DI SCARICO NELLA SFERA  
 -OVERPRESSURE HOLE INTO BALL  
 -TROU DECOMPRESSION DANS LA BOULE  
 -ENTLASTUNGSBOHRUNN IN DER KUGEL



-SERVIZIO CRIOGENICO - CRYOGENIC SERVICE  
 -SERVICE CRYOGÉNIQUE  
 -TIEFTEMPERATUR SERVICE



-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



N.D.T. QUALIFICATION IN ACC. TO  
 EN 473 LEVEL II -PT AND MT-



**VITI D'ASSEMBLAGGIO E DIMENSIONI FLANGIE PER FA4  
ASSEMBLING SCREWS AND FLANGE DIMENSION FOR FA4  
VIS D'ASSEMBLAGE ET DIMENSIONS DES BRIDES POUR FA4  
MONTAGESCHRAUBEN UND FLANSCHANSCHLUSSMASSE FA4**

**TABLE  
07-04-03**

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

**EUROPEAN NORM**

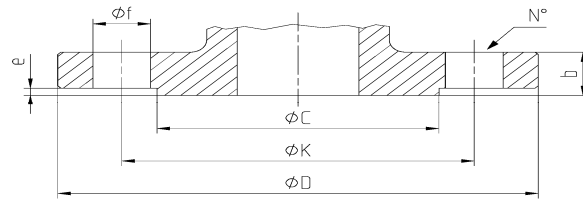
DN PN	10-15		20		25		32		40		50		65		80		100		125		150		200	
	10	8	M12 X30	8	M12 X30	8	M12 X35	8	M16 X35	8	M16 X35	8	M16 X40	8	M16 X40	* 16	M16 X40	16	M16 X40	16	M16 X45	16	M20 X45	
16	8	M12 X30	8	M12 X30	8	M12 X35	8	M16 X35	8	M16 X35	8	M16 X40	8	M16 X40	16	M16 X40	16	M16 X40	16	M16 X45	16	M20 X45		
25	8	M12 X30	8	M12 X35	8	M12 X35	8	M16 X40	8	M16 X40	8	M16 X40	16	M16 X45	16	M16 X45	16	M20 X50	16	M24 X55	16	M24 X55		
40	8	M12 X30	8	M12 X35	8	M12 X35	8	M16 X40	8	M16 X40	8	M16 X40	16	M16 X45	16	M16 X45	16	M20 X50	16	M24 X55	16	M24 X55		

**ANSI METRIC (STANDARD ADLER)**

Rating	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		5"		6"		8"	
	150	8	M14 X30	8	M14 X30	8	M14 X30	8	M14 X45	8	M14 X35	8	M16 X40	8	M16 X40	8	M16 X45	16	M16 X45	16	M20 X50	16	M20 X50	

**ANSI B1.1 UNC (ON REQUEST)**

Rating	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		5"		6"		8"	
	150	8	1/2 X 1 1/4	8	1/2 X 1 1/4	8	1/2 X 1 1/4	8	1/2 X 1 1/4	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	16	3/4 X 2	



**ANSI B16.5**

DN	Ref.	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
ANSI 150 RF	D	88.9	98.6	108	117.4	127	152.4	177.8	190.5	228.6	254	279.4			
	C	35.1	43	50.8	63.5	92	104.7	127	157.3	185.7	215.9	269.8			
	K	6035	69.9	79.2	88.9	98.6	120.7	139.7	152.4	190.5	215.9	241.3			
	N°	4	4	4	4	4	4	4	4	8	8	8			
	f	15.8	15.8	15.8	15.8	19.1	19.1	19.1	19.1	19.1	22.4	22.4			
	b	11.2	12.7	14.3	15.8	17.6	19.1	22.4	23.9	23.9	23.9	25.4			
e	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6				

**EN 1092-1**

DN	Ref.	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300
PN 10/16	D		95	105	115	140	150	165	185	200	220	250	285			
	C		45	58	68	78	88	102	122	138	158	188	212			
	K		65	75	85	100	110	125	145	160	180	210	240			
	N°		4	4	4	4	4	4	4	4*	8	8	8	8		
	f		14	14	14	18	18	18	18	18	18	18	22	22		
	b		16	18	18	18	18	18	18	18	20	20	22	22		
e		2	2	2	2	3	3	3	3	3	3	3	3			
PN 25/40	D		95	105	115	140	150	165	185	200	235	270	300			
	C		45	58	68	78	88	102	122	138	162	188	218			
	K		65	75	85	100	110	125	145	160	190	220	250			
	N°		4	4	4	4	4	4	4	8	8	8	8	8		
	f		14	14	14	18	18	18	18	18	22	26	26			
	b		16	18	18	18	18	18	20	22	24	24	26	28		
e		2	2	2	2	3	3	3	3	3	3	3	3			



ADLER SpA - VALVOLE A SFERA  
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