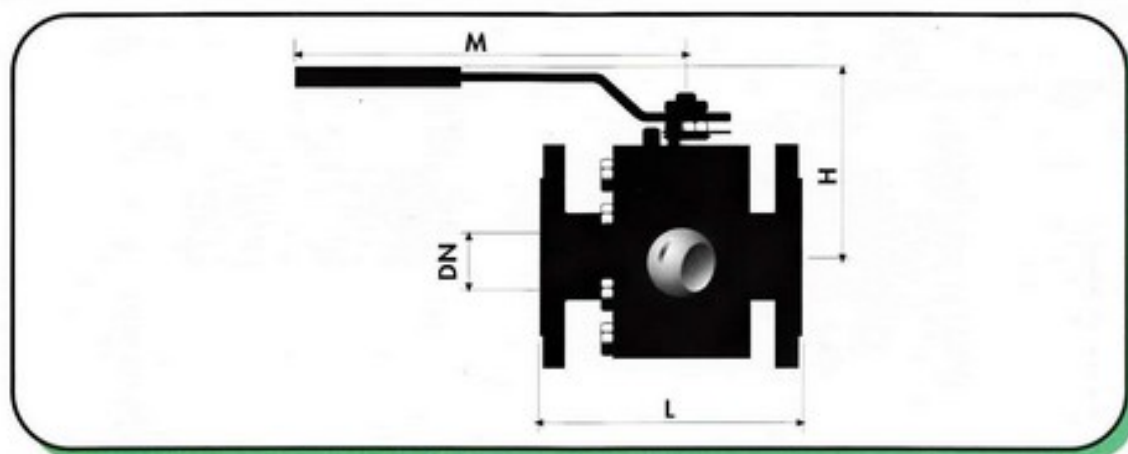


# TF6F TWO-PIECE BALL VALVES

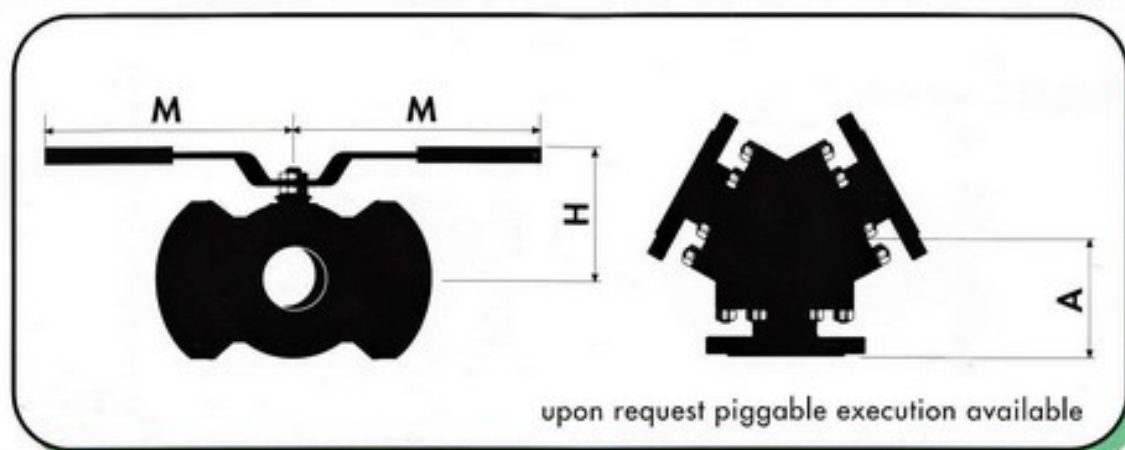
## VALVOLA SFERA IN DUE PEZZI



DN	15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"	300 12"
L (DIN 74 75)	115	120	125	130	140	150	170	180	190	325	350	400	450	500
L (ANSI 150)	108	117	127	140	165	178	190	203	229	254	267	292	530	610
L (ANSI 300)	140	152	165	178	191	216	241	283	305	381	403	419	-	-
L (ANSI 600)	165	191	216	229	241	292	330	356	432	-	-	-	-	-
H	85	90	90	100	120	125	140	160	190	-	-	-	-	-
M	145	145	185	185	260	260	330	330	400	-	-	-	-	-

# TF3Y 3WAY Y TYPE

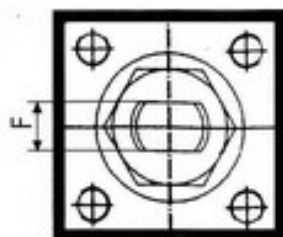
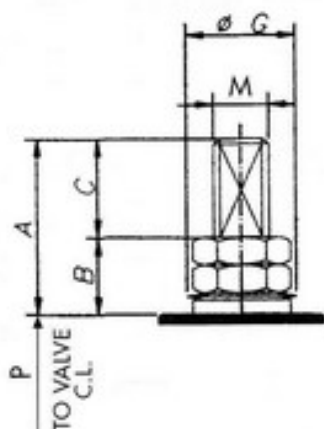
## 3VIE Y TRANSFLOW



DN	40 1 1/2"	50 2"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	250 10"
A	110	120	140	150	165	180	220	248	310
H	120	125	150	160	190	-	-	-	-
M	260	260	330	330	350	-	-	-	-
Kg.	13	18	32	45	53	77	140	220	380

# TOPWORK DIMENSIONS

## AGGIUNTI VALVOLA-ATTUATORE ISO 5211



N holes  $\varnothing D \times K$  deep on L.P.C.D.

200	56	36	20	190	M16	32	90	48	F14
150	62	28	34	150	M12	22	70	39	F12
125	44	20	24	119	M10	18	60	30	F10
100	44	20	24	104	M10	18	60	30	F10
80	40	18	22	90	M8	14	45	22	F07
65	40	18	22	80	M8	14	45	22	F07
50	37	21	16	69	M6	10	31.5	16	F05
40	37	21	16	64	M6	10	31.5	16	F05
32	30	18	12	64	M5	7	25	12	F04
25	24	13	11	47	M5	7	25	12	F04
20	23	14	9	40	M5	6	20	10	F03
15	17	13	4	35	M5	6	20	10	F03
DN	A	B	C	P	D	F	$\varnothing G$	M	ISO

Due to continuous development of our product range, we reserve the right to alter the dimensions and information contained in this leaflet as required.  
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## VALVE OPERATING FORCES

### COPPIE DI SPUNTO

RATING: UNI-DIN

DN PN/BAR	15	20	25	32	40	50	65	80	100	125	150	200	Nm
6	5	10	13	14,5	29,5	37,5	63,5	72,5	127,5	136,5	290,5	435,5	
10	5,5	10,5	13,5	15,5	30,5	38,5	64,5	74,5	130,5	140,5	310,5	470,5	
16	5,9	11,3	14	16,5	31,5	40,5	66,5	78,5	140,5	158,5	340,5	510,5	
25	6,3	12	14,5	17,5	32,5	42,5	69,5	84,5	148,5	190,5	440,5	580,5	
40	7	13	15	18,5	33,5	44,5	72,5	88,5	156,5	230,5	520,5	610,5	
64	7,5	13,9	16	20,5	36,5	53,5	75,5	92,5	162,5	300,5	595,5	-	
100	9	14,7	17,5	22,5	40,5	55,5	80,5	100,5	180,5	380,5	680,5	-	
160	9,8	15,5	18,5	24,5	44,5	59,5	86,5	108,5	200,5	-	-	-	

RATING: ANSI

CLASS DN BAR	15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 3"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	200 8"	Nm
150	21	6,2	11,7	14,3	17	32	41,5	68,5	80,5	144,5	165,5	380,5	560,5
300	56	7,3	13,5	15,5	20	35,5	48,5	74,5	90,5	160,5	270,5	570,5	680,5
400	74	8,3	14,3	16,5	21,5	38,5	54,5	77,5	94,5	170,5	330,5	630,5	-
600	112	9,3	15	18	32	42,5	57,5	-	-	-	-	-	-
900	168	9,9	15,6	18,8	25	45,5	60,5	-	-	-	-	-	-
1500	281	12,5	18,5	22,5	28,5	53,5	70,5	-	-	-	-	-	-

RATING: API

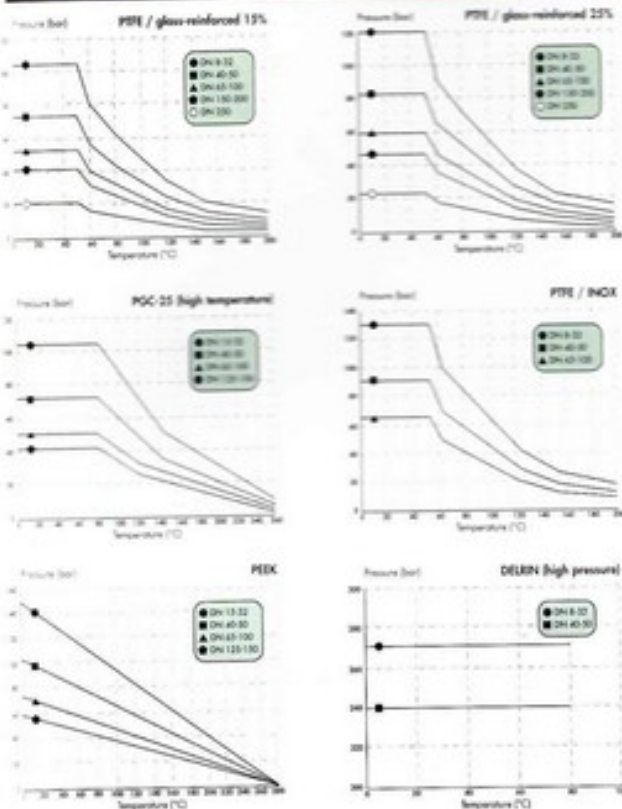
CLASS DN BAR	15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 3"	65 2 1/2"	80 3"	100 4"	Nm
800	56	7,3	13,5	15,5	19,5	35,5	48,5	74,5	90,5	160,5
1500	105	9,1	14,8	17,8	23	41,5	56,5	81,5	101,5	-
3000	210	10,9	16,5	20,5	26,5	48,5	67,5	90,5	115,5	-

These torques are calculated with unfilled PTFE seats with clean water and at ambient temperature. At higher temperature and if the valve remains for a long time without having been operated under differential pressure, the torques values may double. For filled PTFE seats, increase the torques by 20%. For DELRIN seats, increase the torques by 40%.

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Information given in this leaflet is made in good faith and based upon specific testing but does not, however, constitute a guarantee.

## PRESSURE VS TEMPERATURE CURVES DIAGRAMMA PRESSIONE/TEMPERATURA



## TESTS COLLAUDI

DIN												Reference : BS 6755 - Part. 1:1986								
Hydrostatic body test						: BAR			Hydrostatic seat test			: BAR			Pneumatic seat test			: BAR		
PN6	PN10	PN16	PN25	PN40	PN64	PN100	PN6	PN10	PN16	PN25	PN40	PN64	PN100	PN6 + PN100			6+7			
9	13	24	38	60	96	150	7	11	18	28	44	71	110							

ANSI										Reference : BS 6755 - Part. 1:1986											
Hydrostatic body test					: BAR					Hydrostatic seat test			: BAR			Pneumatic seat test			: BAR		
CL 150	CL 300	CL 600	CL 800	CL 150	CL 300	CL 600	CL 800	CL 150-800	CL 150-800			6+7									
(1) 30	76	150	207	22	55	110	152	6+7													
(2) 30	64	130	178	22	47	94	129	6+7													
(3) 30	54	107	148	22	40	79	109	6+7													

- (1) Ref. BS 1560 : Part. 2, Tab. PE-1 : ASTM A 105 - ASTM A216 WCB; PE-10 : ASTM A 182 F 321 - F 347 - ASTM A 351 CF8C; PE-11 : ASTM A 182 F 316 - ASTM A 351 CF8M.  
 (2) Ref. BS 1560 : Part. 2, Tab. PE-8 : ASTM A 182 F 304 - ASTM A 351 CF8.  
 (3) Ref. BS 1560 : Part. 2, Tab. PE-9 : ASTM A 182 F 304L - ASTM A 182 F316L.

TABLE A					Reference : BS 6755 - Part. 1:1986			
DIN	Duration of hydrostatic body test			Duration of hydrostatic seat test				
	8-50	55-200	250+450	1/4	minutes	1/4	minutes	
				1		1/4	minutes	
				3		1/2		

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## MATERIALS OF CONSTRUCTION (Standard) MATERIALI STANDARD DI COSTRUZIONE

COMPONENT	CARBON STEEL VALVES	LOW TEMP. CARBON STEEL VALVES	STAINLESS STEEL VALVES
BODY/ADAPTOR (Forged) - CORPO	A 105	A350 LF2	A182 F316
BOLTING (Studs) (Nuts) - BULLONERIA	B7/B7M 2H/2HM	L7/77M Gr7/Gr7M	B8/B8M GrB/Gr8M
BALL - SFERA	316	316	316
STEM - STELO	316	316	316
SEATS - SEDI	PTFE	PTFE	PTFE
PRIMARY SEALS - GUARNIZIONI	VITON B PTFE virgin & reinforced	HNBR PTFE virgin & reinforced	Viton B PTFE virgin & reinforced
FIRE SEALS	INHIBITED GRAPHITE	INHIBITED GRAPHITE	INHIBITED GRAPHITE

## ALTERNATIVE MATERIALS ALTRI MATERIALI

BODY AND TRIM CORPO E TRIM	Duplex Stainless Steels Titanium Inconel Hastelloy	Other materials available on request.
SEATS SEDI	Reinforced PTFE PEEK (KEL-F)	low temp./low pressure, suitable up to Class 600 only low temp./high pressure low temp./high pressure
PRIMARY SEALS GUARNIZIONI	(HNBR) Fluorosilicon Graphite	low temp. service methanol low temp. service high temperature service
NACE	All ball valves conform to the requirement of NACE MR 01 75 (latest revision)	
CERTIFICATION CERTIFICATI	Standard certification includes:	works hydrostatic test certificate fire test certification material certification to: EN 10024 - DIN 50049 3.1b (body, ball, stem & trunion)
	Other test and/or material certification is available to customer requirement.	

Our technical department will be pleased to assist in the selection of suitable materials for any given service.