

ALFA 103/104

PN 10-40 / ANSI 150-600

ALFA 30/32

PN 10-40 / ANSI 150-300

ALFA M34

1000 PSI / PN63





CERTIFICATIONS / CERTIFICAZIONI



UNI EN ISO 9001:2015
Cert. Nr. 50 100 6417



- TA-Luft Certificate
- Fugitive emission ISO 15848-1 & 2



TR-CU-10, TR-CU-12 and TR-CU-32
(New GOST) certified for Russian market



ATEX certified by TÜV



CE Marking (Module H1, Category IV)
in accordance with PED 2014/68/EU
certified by TÜV



SIL (Safety integrity level)
certified by TÜV



Canadian Registration Number (CRN)
for Canadian market

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ALFA 103/104
PN 10-40 | ANSI 150-600



ALFA 103/4 - 104/4
PN 10-40 | ANSI 150-300



PRODUCT LINE

Linea prodotti

PRODUCT	CODE	TYPE						SIZE RANGES				RATING										MATERIALS		
		WAFLR	3 PICES	2 PICES SCREWED BODY	FLANGED	3 WAY WAFLR	TRUNNION	NPS 1/4 - 2 (DN 8 -50)	NPS 2 1/4 - 2 (DN 65-100)	NPS 5-8 (DN 125-200)	NPS 10-24 (DN 250-600)	PN 06	ANSI 150 (PN 10-16)	ANSI 300 (PN 25-40)	ANSI 600 (PN 63-100)	ANSI 900	ANSI 1500	ANSI 2500	800/1500 LBS	PN 63 (1000 PSI)	CARBON STEEL	STAINLESS STEEL	OTHER MATERIALS	
A10N - NF	A1N																							
A10 HP	A1H																							
A11N - NF	A1J																							
A10 CALL	A1C/D																							
A10 VAG	A1V																							
A20R/T	A2T/R																							
A22 EV	A2D																							
K20 T	K2T																							
A24K	A24																							
A60P/A64P	A6P																							
A50	A50																							
A54	A54																							
A506	A5S																							
A60	A60																							
A64	A64																							
A68	A68																							
A606	A6S																							
A609/615	A6Q																							
A625	A6V																							
A30	A30																							
A32	A32																							
M34	M34																							
A103	AC3																							
A104	AC4																							
A103/4	ACT																							
T2 FB	AT2																							
T2 RB	AT4																							
T3 FB	AT3																							
T3 RB	AT6																							

Caratteristiche principali

- **3 Ways ball valve: suitable for flow diverting (L Ball) or by-pass / mixing (T ball), acting on 2 or 3 ways / Valvola a 3 vie,** idonea per deviazione (sfera a L) o miscelazione / by-pass fluidi (sfera a T) , con 2 o 3 vie di lavoro possibili.
- **Available with working ways at 90° or 120°, with body construction wafer (A103), flanged (A30/32) or threaded (M34) /** Disponibile con posizionamento vie di lavoro a 90° o 120°, con costruzione corpo wafer (A103), flangiate (A30/32) o filettate (M34).
- **Available in different body materials (bar or casting), suitable to be coupled for simultaneous operation (i.e. duplex service) /** Disponibile in differenti materiali corpo (barra o fusione), idonee per essere accoppiate per movimento simultaneo (i.e. Servizio duplex)

CERTIFICATIONS									
PED (DN > 25)									
T PED									
TA LUFT (fugitive emission)									
MOCA									
API 6D									
FIRE TESTED									
SIL									
ATEX									

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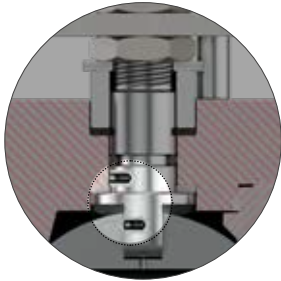
STANDARD FEATURES

Caratteristiche standard

- **Valve Design: three-way ball valve, wafer body / Valvola a 3 vie, corpo compatto**
- **Ball rotation / Rotazione sfera: 90° (180° optional 103/4)**
- **ALFA 103: 2 seats ball valve (3rd way always open), standard execution with L ball / Valvola a 2 sedi di tenuta (terza via sempre aperta), esecuzione standard sfera a L**
- **ALFA 103/4: 4 seats ball valve (all ways can be isolated), standard execution with T ball (L optional) / Valvola a 4 sedi di tenuta (tutte le vie possono essere isolate), esecuzione standard sfera a T (L optional)**
- **Size Range / Range di dimensioni: $\frac{1}{2}'' \leq DN \leq 6''$ / $15 \leq DN \leq 150$**
- **Standard pressure range / Range di pressioni standard: PN 10-40, ANSI 150 (optional ANSI 300 e 600)**
- **Temperature range / Temperatura: $-40^{\circ}\text{C} \leq T \leq +220^{\circ}\text{C}$**
- **Flange Facing RF according to / Finitura Flange RF secondo: ASME B.16.5, ANSI 150/300 or EN 1092-1**
- **Flange drilling, metric holes according / Foratura flange, fori metrici secondo: ASME B16.5 (ANSI 150) or EN 1092-1 (PN16)**
- **Face to face / Scartamento: Manufacturer standard**
- **Design according to / Progettazione secondo: ASME B16.34, EN 12516-1, PED 2014/68/UE**
- **Tightness class / Classe di tenuta: Grade A (Zero Leakage) acc. EN 12266-1**

STANDARD EXECUTIONS

Esecuzioni standard



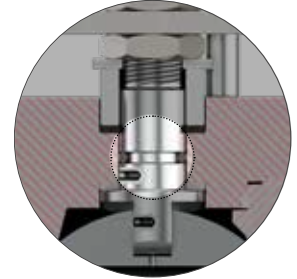
ANTISTATIC DEVICE ACCORDING /
DISPOSITIVO ANTISTATICO IN ACCORDO
A: API6D - ATEX 2014/34/UE

2 spring loaded balls guarantees electrical continuity between all metallic components of the valve / Garantisce continuità elettrica tra i componenti metallici della valvola grazie a due sfere posizionate sullo stelo



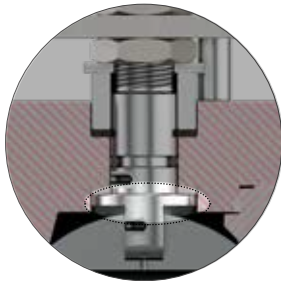
ISO 5211 TOP MOUNTING

Valve top flange is machined for actuator assembly according to ISO 5211 / Foratura premistoppa per montaggio comando secondo normativa ISO 5211



STEM O'RING / O'RING STELO

Maximum tightness from stem packing minimizing Fugitive Emissions (valve certified TA-LUFT e Fugitive Emissions EN 15848-1/-2) / Garantisce la tenuta ottimale dallo stelo minimizzando le emissioni in atmosfera, rendendo le valvole certificate TA-LUFT e Fugitive Emissions EN 15848-1/-2

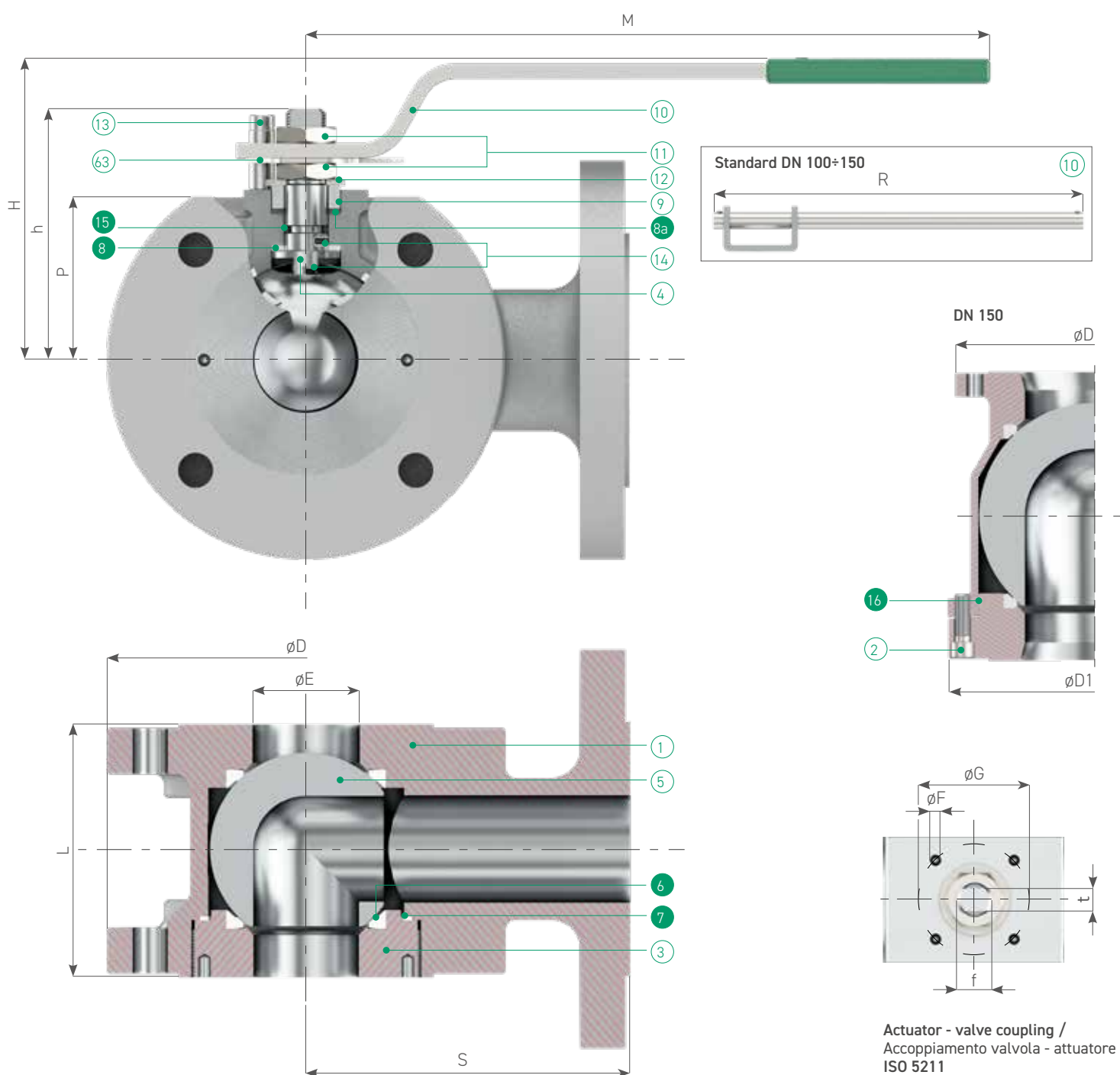
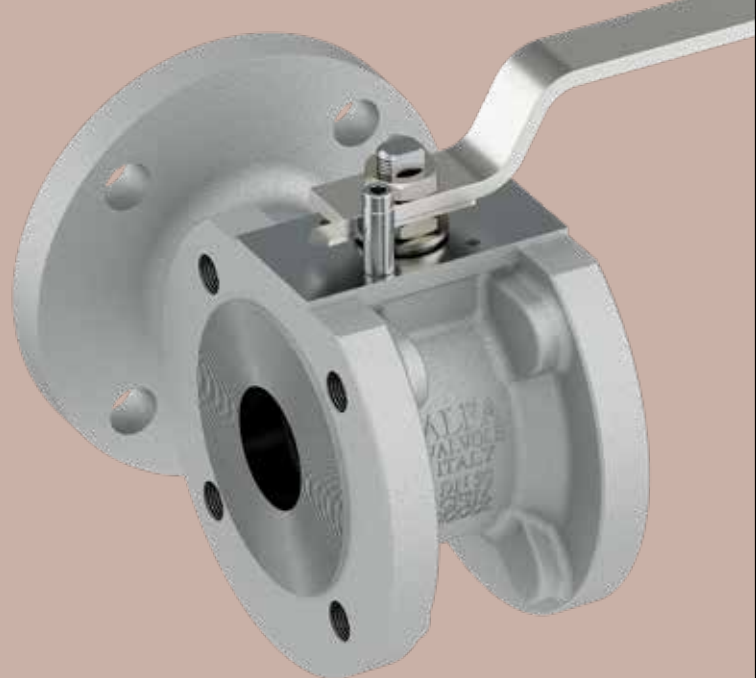


ANTI BLOW-OUT STEM DESIGN / STELO
ANTIESPULSIONE

In case of overpressure inside the valve it avoid the stem expulsion and the breakage of the operating element / Evita l'espulsione dello stelo in caso di sovrappressione all'interno della valvola e la rottura dell'elemento di manovra

ALFA 103 PN 10-40 | ANSI 150

Investment casting body
Corpo da fusione



Standard valve materials / Materiali costruzione valvola standard

	 PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI	
1	body corpo	1	ASTM A216 WCB	ASTM A351 CF8M
2	screw vite	8	C.I. 8.8 (DN 150)	A4-40 (AISI 316) (DN 150)
3	closure chiusura	1	ASTM A216 WCB	ASTM A351 CF8M
4	stem stelo	1	ASTM A479 F6a (AISI 410)	ASTM A182 316/316L
5	ball sfera	1	ASTM A351 CF8M	
6	 seats sedì	2	TFM	
7	 body gasket guarnizione corpo	1	P.T.F.E.	
8	 washer bussola	1	P.T.F.E.	
8a	 stem gasket guarnizione stelo	1	P.T.F.E.	
9	gland preguarnizione	1	Carbon Steel Zinc Coated	Stainless Steel 316
10	lever leva	1	Carbon Steel Zinc Coated	
11	stem nut dado stelo	2	Cl. 8	A4-40 (AISI 316)
12	spring washer molla a tazza	2	51CrV4 Zinc Coated	AISI 316
13	stop device dispositivo di arresto	1	Cl. 8.8 Zinc Coated	AISI 316
14	antistatic device dispositivo antistatico	2	AISI 316	
15	 stem o-ring o-ring stelo	1	VITON 75 Sh. A	
16	 body o-ring DN 150 only o-ring corpo	1	VITON 75 Sh. A	
17	trunnion perno	1	P.T.F.E. (DN 150)	
18	trunnion gasket guarnizione perno	1	C.I. 8.8 (DN 150)	A4-40 (AISI 316) (DN 150)
63	position indicator indicatore di posizione	1	AISI 316	

 Spares parts / Parti di ricambio

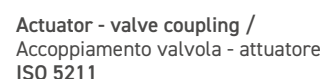
DIMENSIONS / DIMENSIONI

DN	15	20	25	32	40	50	65	80	100	150
ø"	½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"	6"
ø E	10	14	19	14	34	43	60	70	84	140
L	50	50	50	60	70	100	115	130	150	300
S ANSI 150	85	90	90	105	120	130	150	175	185	215
M/R	150/-	150/-	185/-	185/-	275/-	275/-	380/-	380/-	440/500	-/800
H	84	87	95	99	118	126	143	149	185	273
h	52	54	69	72	95	101	122	127	151	220
P	33	36	43	48	63	68,5	82	88,5	101,5	153
f/t	10/6	10/6	12/8	12/8	16/10	16/10	22/14	22/14	30/18	45/30
Kg. ANSI 150	2,5	3,5	4	5,3	7,5	12	20	24	34	80
ISO 5211	F03	F03	F03	F03	F05	F05	F07	F07	F10	F14
ø F	M5	M5	M5	M5	M6	M6	M8	M8	M10	M16
ø G	36	36	36	36	50	50	70	70	102	140
ø D/ ø D1 ANSI 150	89	99	108	118	127	152	178	190	229	284/300

Bar stock body

Corpo da barra

ANSI 300-600 on request



Standard valve materials / Materiali costruzione valvola standard

	 PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI	
1	body corpo	1	ASTM A105	ASTM A479 316/316L
2	screw vite	8	C.I. 8.8 (DN 150)	A4-40 (AISI 316) (DN 150)
3	closure chiusura	1	ASTM A105	ASTM A479 316/316L
4	stem stelo	1	ASTM A479 F6a (AISI 410)	ASTM A182 316/316L
5	ball sfera	1	ASTM A351 CF8	ASTM A351 CF8M
6	 seats sedì	2	TFM	
7	 body gasket guarnizione corpo	1	P.T.F.E.	
8	 washer bussola	1	P.T.F.E.	
8a	 stem gasket guarnizione stelo	1	P.T.F.E.	
9	gland preguarnizione	1	Carbon Steel Zinc Coated	Stainless Steel 316
10	lever leva	1	Carbon Steel Zinc Coated	
11	stem nut dado stelo	2	Cl. 8	A4-40 (AISI 316)
12	spring washer molla a tazza	2	51CrV4 Zinc Coated	AISI 316
13	stop device dispositivo di arresto	1	Cl. 8.8 Zinc Coated	AISI 316
14	antistatic device dispositivo antistatico	2	AISI 316	
15	 stem o-ring o-ring stelo	1	VITON 75 Sh. A	
16	 body o-ring DN 150 only o-ring corpo	1	VITON 75 Sh. A	
17	trunnion perno	1	P.T.F.E. (DN 150)	
18	trunnion gasket guarnizione perno	1	C.I. 8.8 (DN 150)	A4-40 (AISI 316) (DN 150)
63	position indicator indicatore di posizione	1	AISI 316	

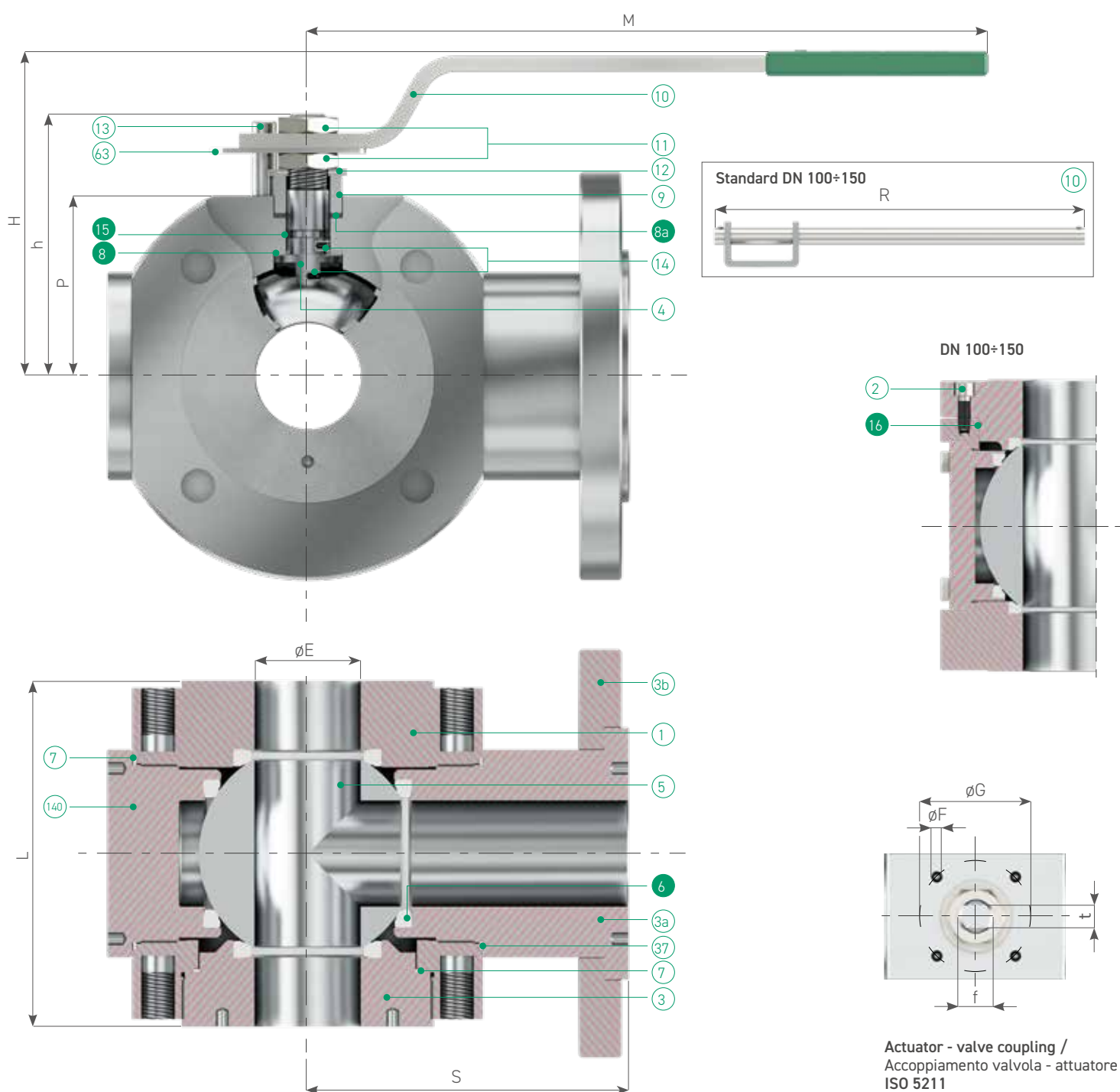
 Spares parts / Parti di ricambio

DIMENSIONS / DIMENSIONI

DN	15	20	25	32	40	50	65	80	100	125	150
ø"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"
ø E	10	14	19	14	34	43	60	70	84	110	140
L	50	50	50	60	70	100	115	130	150	185	300
S ANSI 150	85	90	90	105	120	130	150	175	185	200	215
M/R	150/-	150/-	185/-	185/-	275/-	275/-	380/-	380/-	440/500	440/500	-/800
H	84	87	95	99	118	126	143	149	185	200	273
h	52	54	69	72	95	101	122	127	151	167	220
P	33	36	43	48	63	68,5	82	88,5	101,5	120	153
f/t	10/6	10/6	12/8	12/8	16/10	16/10	22/14	22/14	30/18	30/18	45/30
Kg ANSI 150	3	4	5	6	9	17	22	30	44	65	111
ISO 5211	F03	F03	F03	F03	F05	F05	F07	F07	F10	F10	F14
ø F	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M16
ø G	36	36	36	36	50	50	70	70	102	102	140
ø D ANSI 150	89	99	108	128	138	152	178	195	218	258	298

ALFA 103/4 PN 10-40 | ANSI 150

ANSI 300 on request



Standard valve materials / Materiali costruzione valvola standard

	 PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI	
1	body corpo	1	ASTM A105	ASTM A479 316/316L
2	screw (DN ≥100) vite	8	C.I. 8.8 (DN ≥100)	A4-40 (AISI 316) (DN ≥100)
3	closure chiusura	1	ASTM A105	ASTM A479 316/316L
3a	closure 90° chiusura a 90°	1	ASTM A105	ASTM A479 316/316L
3b	slip of flange flangia girevole	1	ASTM A105	ASTM A479 316/316L
4	stem stelo	1	ASTM A479 F6a (AISI 410)	ASTM A182 316/316L
5	ball sfera	1	ASTM A182 F316/316L	
6	 seats sedi	4	TFM	
7	 body gasket guarnizione corpo	2	P.T.F.E.	
8	 washer bussola	1	P.T.F.E.	
8a	 stem gasket guarnizione stelo	1	P.T.F.E.	
9	gland premigarnizione	1	Carbon Steel Zinc Coated	AISI 316
10	lever leva	1	Carbon Steel Zinc Coated	
11	stem nut dado stelo	2	CL. 8	A4-40 (AISI 316)
12	spring washer molla a tazza	2	51CrV4 Zinc Coated	AISI 316
13	stop device dispositivo di arresto	1	CL. 8.8 Zinc Coated	AISI 316
14	antistatic device dispositivo antistatico	2	AISI 316	
15	 stem o-ring o-ring stelo	1	VITON 75 Sh. A	
16	 body o-ring o-ring corpo	1	VITON 75 Sh. A (DN ≥ 100)	
37	guarnizione chiusura 90° 90° connector gasket	1	P.T.F.E.	
63	position indicator indicatore di posizione	1	AISI 316	
140	blind closure chiusura cieca	1	ASTM A105	ASTM A479 316/316L

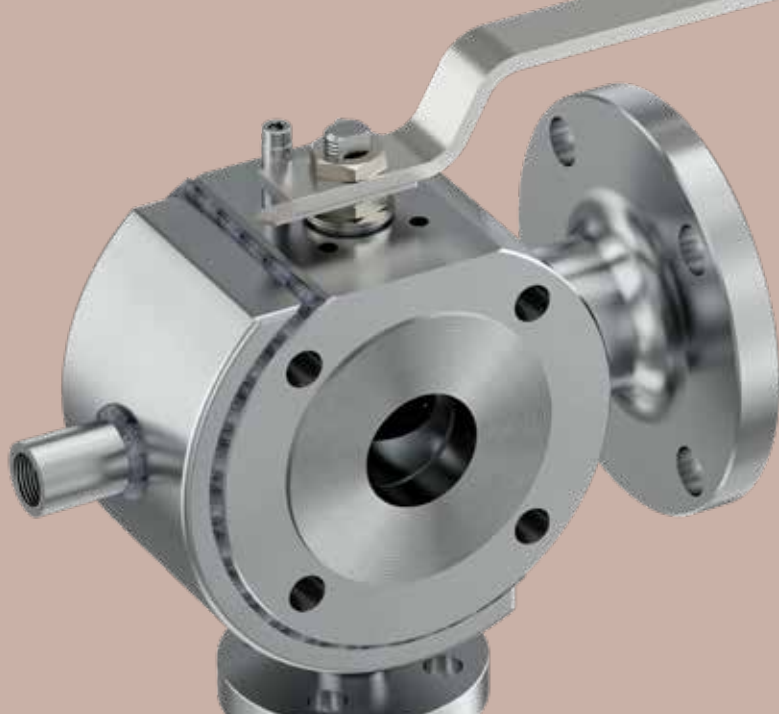
 Spares parts / Parti di ricambio

DIMENSIONS / DIMENSIONI

DN	20	25	32	40	50	65	80	100	150
ø"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"
ø E	14	19	14	34	43	60	70	84	135
L	65	72	60	120	140	150	180	230	340
S	90	100	105	121	130	150	175	200	270
H	88	98	99	121	131	147	153	193	277
M/R	150/-	185/-	185/-	275/-	275/-	380/-	380/-	440/500	800
f/t	10/6	12/8	12/8	16/10	16/10	22/14	22/14	30/18	45/30
ø F	M5	M5	M5	M6	M6	M8	M8	M10	M16
ø G	36	36	36	50	50	70	70	102	140
ISO 5211	F03	F03	F03	F05	F05	F07	F07	F10	F14

ALFA 104 - 104/4

PN 10-40 | ANSI 150



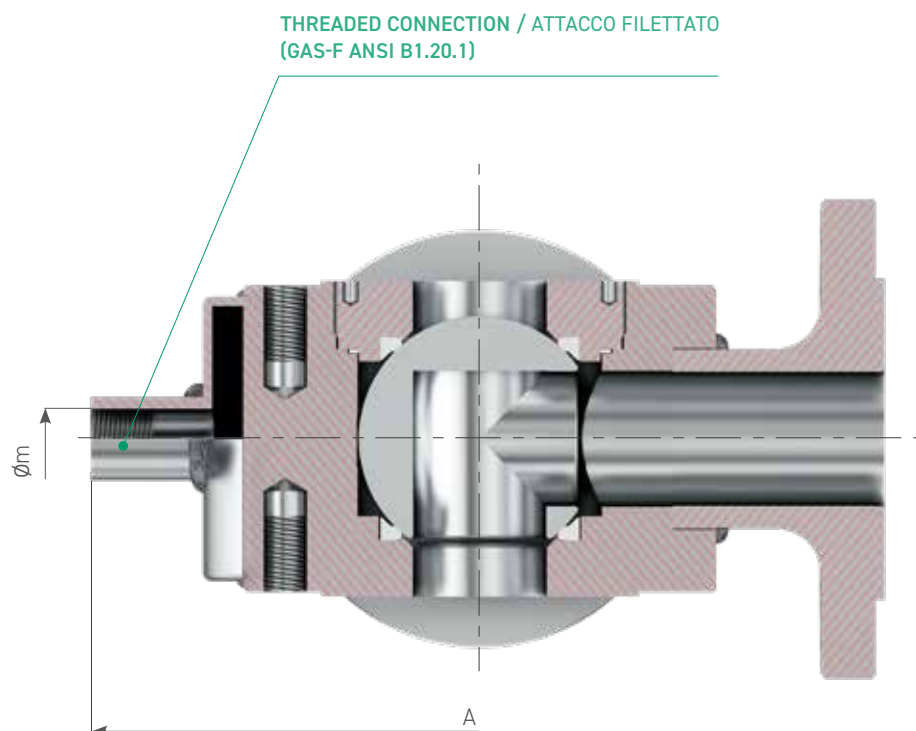
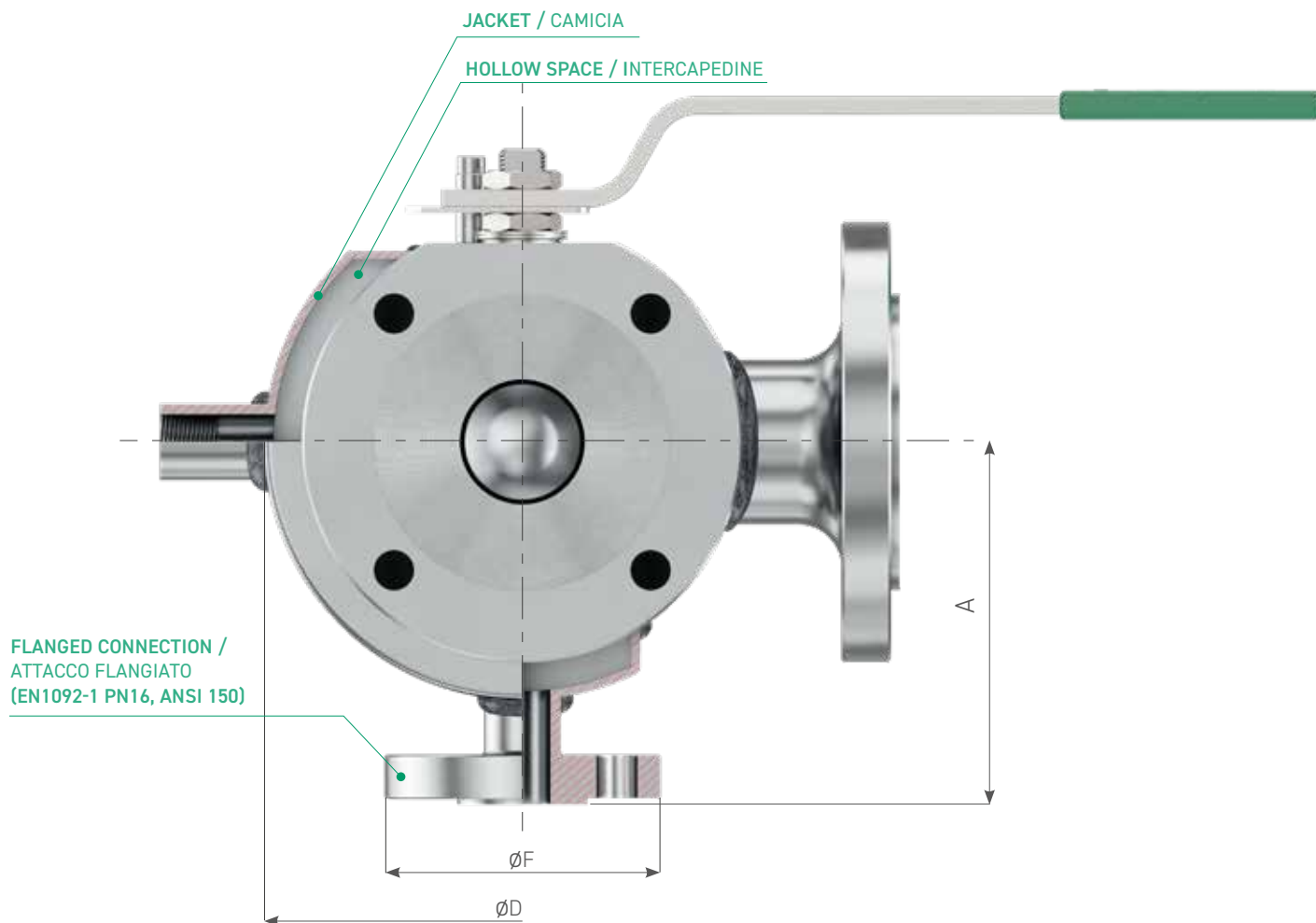
MAIN FEATURES / CARATTERISTICHE

- **Heating/cooling jacket integral to the valve body, applicable on bar stock valve (A10N) and on casting body valve (A10NF) /**
Camicia di riscaldamento/raffreddamento integrale, fornibile sia con valvola da barra (A10N) che valvola da fusione (A10NF).
- **For application requiring a fixed fluid temperature inside the valve body, through circulation inside the jacket of hot water, steam, diathermic oil or other fluid /** Per applicazioni che necessitano il mantenimento di una temperatura del fluido di processo all'interno della valvola costante, mediante circolazione all'interno della camicia di acqua calda, vapore, olio diatermico o altro fluido.
- **Metal thickness / Spessore lamiera: 3 mm**
- **Jacket hollow space / Intercapedine camera: 10 mm**
- **Maximum operating jacket pressure / Pressione massima di funzionamento camicia: 16 bar**
- **Jacket material / Materiale camicia:**
Carbon steel type S235 JR (Carbon steel body valves) / Acciaio al carbonio S235 JR (Valvole acciaio al carbonio)
Pickled stainless steel AISI 316 (Stainless steel body valves) / Acciaio inossidabile AISI 316 decappato (Valvole acciaio inox)
- **100% hydraulic tested - welding process ASME qualified /** Test idraulico al 100% - processo di saldatura qualificato ASME.
- **For valve technical features, please refer to standard valve family /** Per le caratteristiche costruttive delle valvole fare riferimento alle famiglie base.
- **For different configuration type, number and position of jacket connection please contact our engineering dept /** Per varianti su tipo, numero e posizione attacchi contattare l'ufficio tecnico.

DIMENSIONS / DIMENSIONI

DN	15	20	25	32	40	50	65	80	100	150
ø"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"
A	75	80	95	105	115	125	135	150	170	210
ø D	115	125	134	154	164	178	204	221	244	324
ø F	DN 15								DN 25	
ø m	ø ½"								ø 1"	
Kg. Threaded/ Filettate	4,5	5,5	6	8,3	11,5	20	27	35	54	122
Kg. Flanged/ Flangiate	6,5	7,5	8	10,5	14	23	31	40	64	134

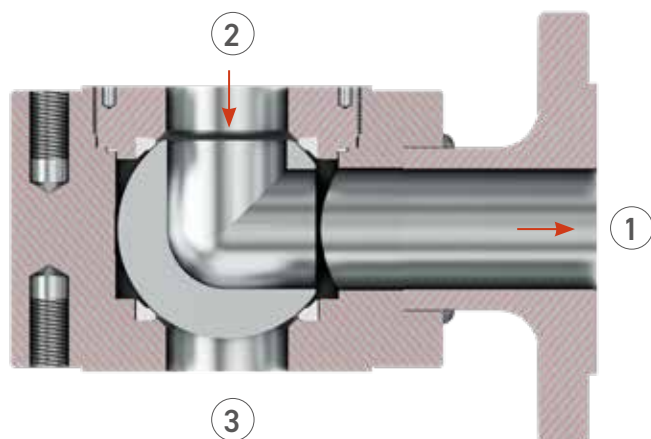
For valve construction and dimensions see ALFA 103 and 103/4 / Per costruzione e dimensioni valvola vedere ALFA 103 e 103/4
For ALFA 104/4 jacket dimensions contact Alfa Valvole / Per dimensioni camicia ALFA 104/4 contattare Alfa Valvole
Weight for bar body valves / Peso per valvola ricavate da barra



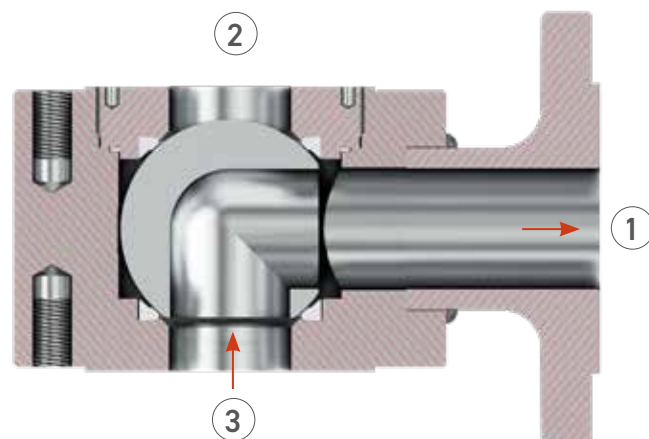
OPERATING DRAFT

Schema di funzionamento

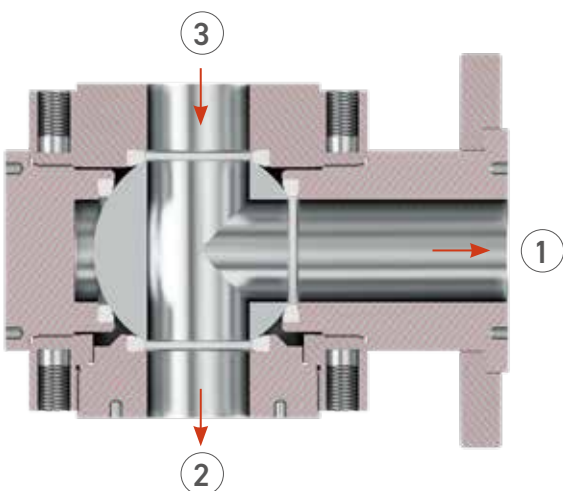
A103 POS 1-2



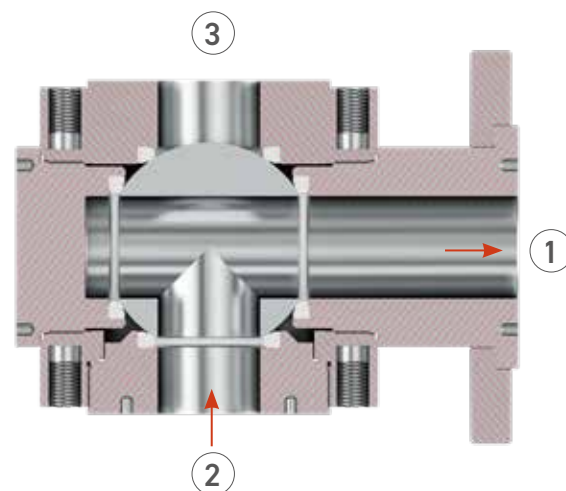
A103 POS 1-3



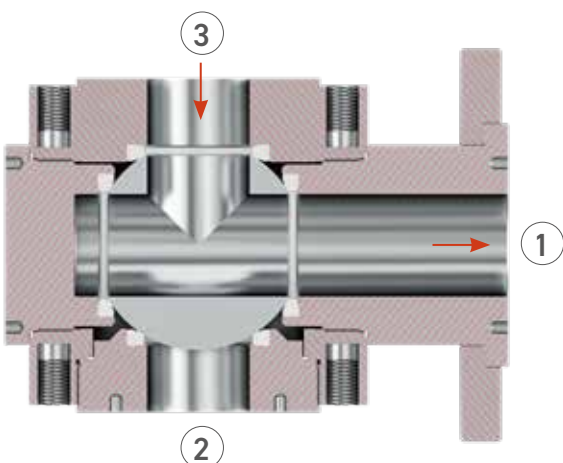
A103 /4 POS 1-2-3



A103 /4 POS 1-2



A103 /4 POS 1-3



ALFA 30/32

PN 10-40 | ANSI 150-300



STANDARD FEATURES

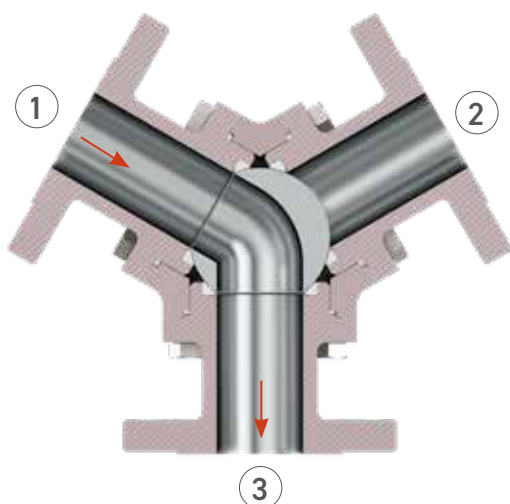
Caratteristiche standard

- **Valve Design three-way ball valve, flanged connections, split body type** / Valvola a 3 vie, corpo split body, connessioni flangiate.
- **Ball rotation** / Rotazione sfera: **120°**
- **Mounting standard of L ball** / Montaggio standard sfera a L
- **Flange connection layout** / Disposizione attacchi di linea:
ALFA 30 inlet/outlet 120°
ALFA 32 inlet/outlet 90°
- **Size Range** / Range di dimensioni: $\frac{1}{2}'' \leq DN \leq 12''$ / $15 \leq DN \leq 300$
- **Pressure range** / Range di pressioni: **PN 10-40, ANSI 150-300**
- **Temperature range** / Temperatura: $-40^{\circ}\text{C} \leq T \leq +160^{\circ}\text{C}$
- **Flange Facing and drillig according to** / Finitura e foratura flange secondo: **ASME B.16.5, ANSI 150/300 or EN 1092-1**
- **Face to face** / Scartamento: **Manufacturer standard**
- **Design according to** / Progettazione secondo: **ASME B16.34, EN 12516-1, PED 2014/68/UE**
- **Piggable valve as a standard feature for DN ≥ 150** / Valvola piggabile come caratteristica standard per $DN \geq 150$

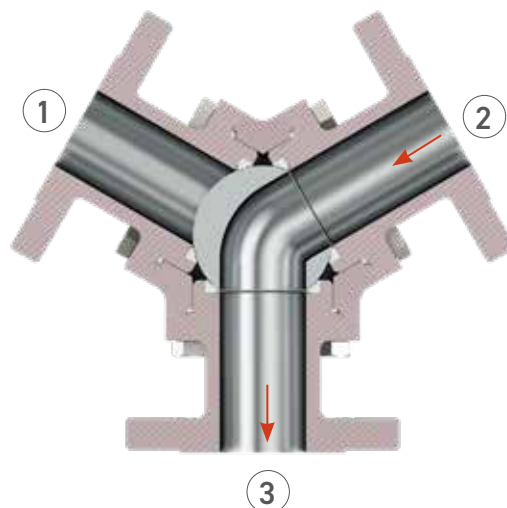
OPERATING DRAFT

Schema di funzionamento

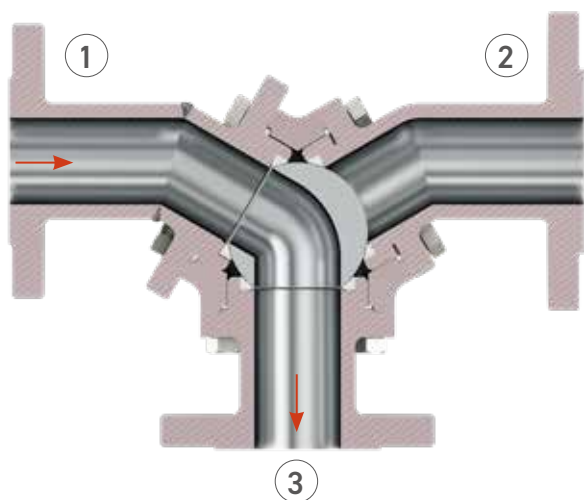
A30 POS 1-3



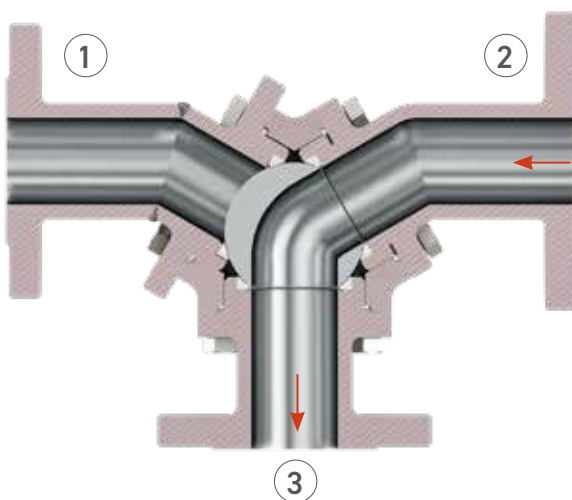
A30 POS 2-3



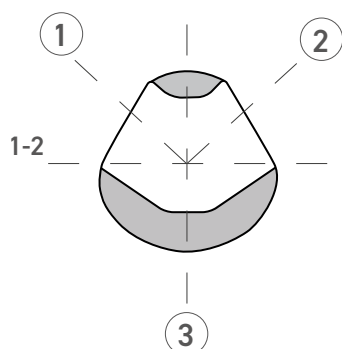
A32 POS 1-3



A32 POS 2-3

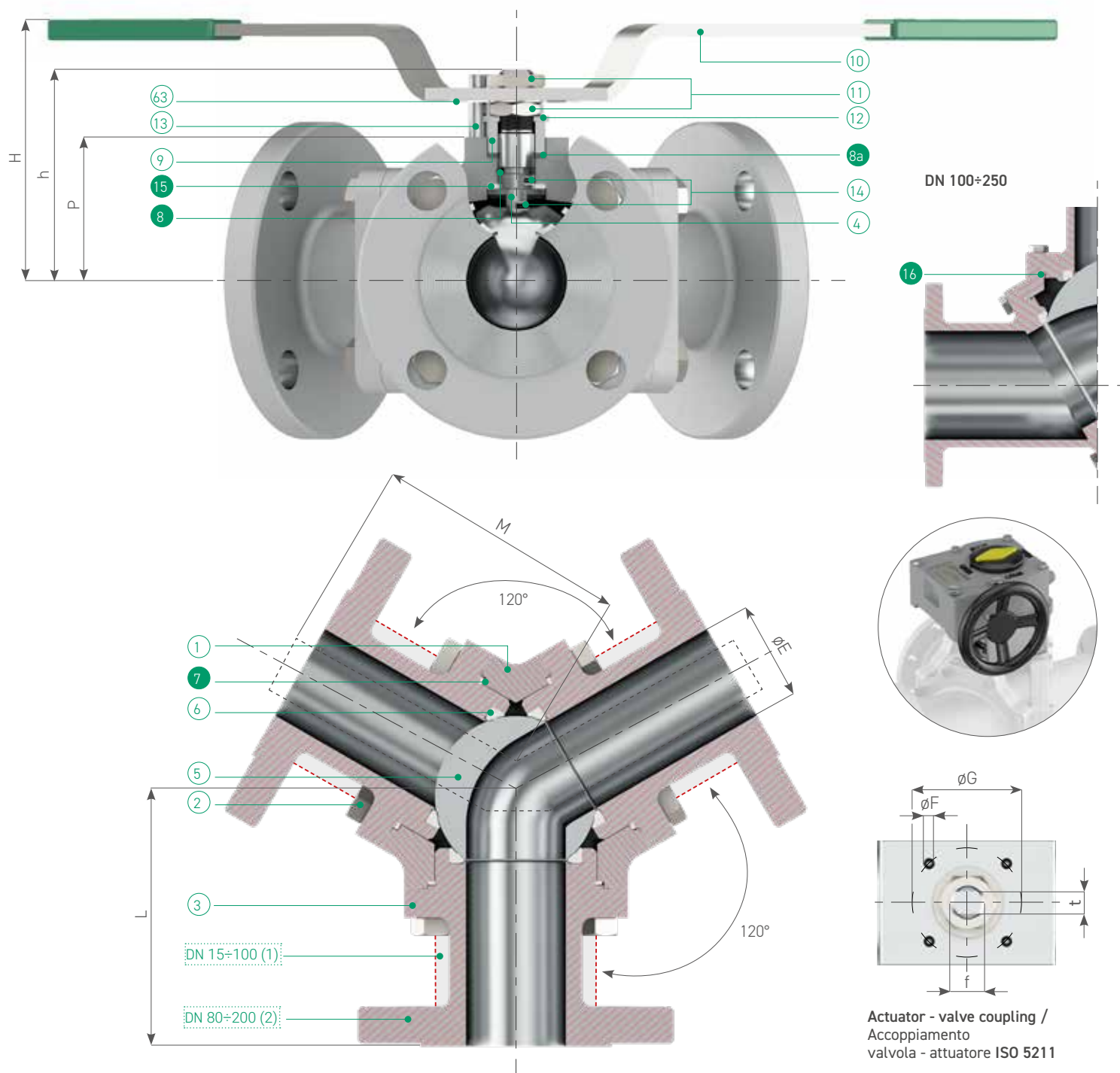
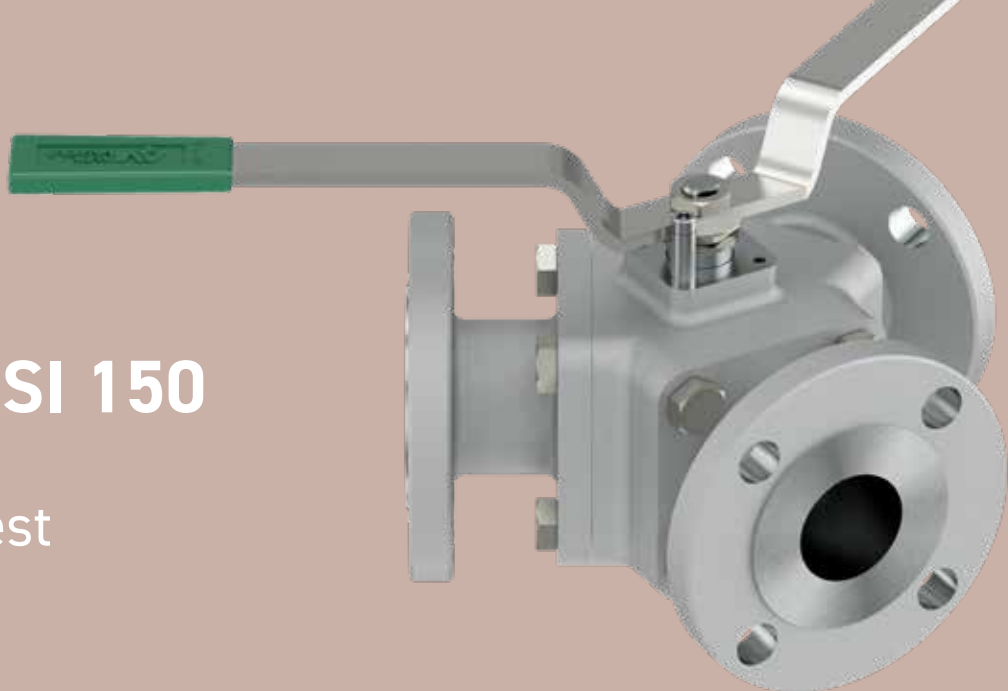


A30/32 ON REQUEST / A30/32 SU RICHIESTA



ALFA 30 PN 10-40 | ANSI 150

ANSI 300 on request



Standard valve materials / Materiali costruzione valvola standard

	 PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI	
1	body corpo	1	ASTM A105	ASTM A479 316/316L
2	screw vite	DN ≤ 80 = 12 DN 100-150 = 24 DN ≥ 200 = 36	C.I. 8.8	A4-40 (AISI 316)
3	closure chiusura	1	ASTM A105	ASTM A479 316/316L
3a	closure 90° chiusura a 90°	2	ASTM A105	ASTM A479 316/316L
4	stem stelo	1	ASTM A479 F6a (AISI 410)	ASTM A182 316/316L
5	ball sfera	1	ASTM A182 316/316L	
6	seats sedi	3	TFM	
7	 body gasket guarnizione corpo	3	P.T.F.E.	
8	 washer bussola	1	P.T.F.E.	
8a	 stem gasket guarnizione stelo	1	P.T.F.E.	
9	gland premiguarnizione	1	Carbon Steel Zinc Coated	AISI 316
10	lever leva	1	Carbon Steel Zinc Coated	
11	stem nut dado stelo	2	Cl. 8	A4-40 (AISI 316)
12	spring washer molla a tazza	2	51CrV4 Zinc Coated	AISI 316
13	stop device dispositivo di arresto	1	Cl. 8.8 Zinc Coated	AISI 316
14	antistatic device dispositivo antistatico	2	AISI 316	
15	 stem o-ring o-ring stelo	1	VITON 75 Sh. A	
16	 body o-ring o-ring corpo	3	VITON 75 Sh. A (DN ≥ 100)	
63	position indicator indicatore di posizione	1	AISI 316	

 Spares parts / Parti di ricambio

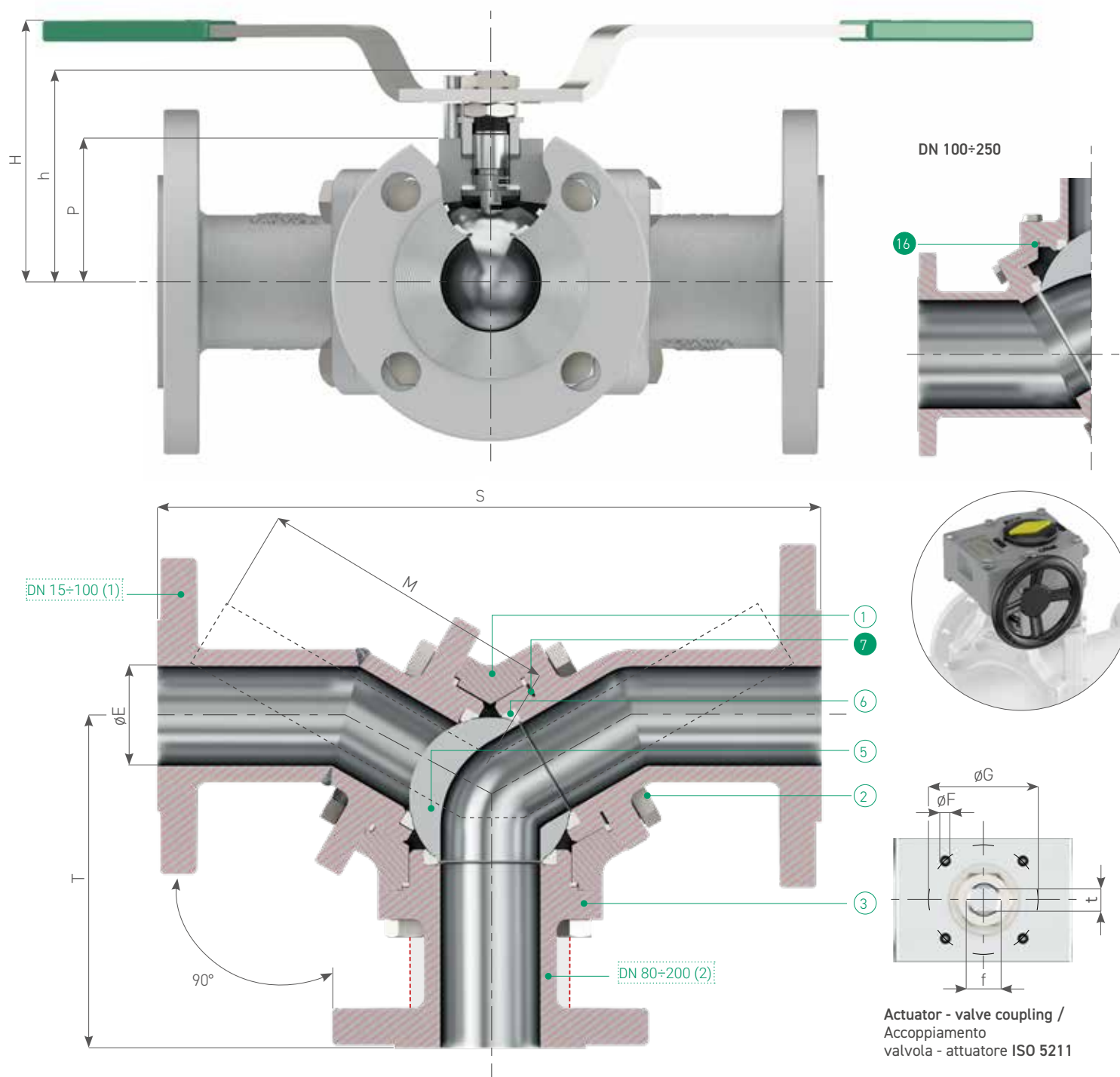
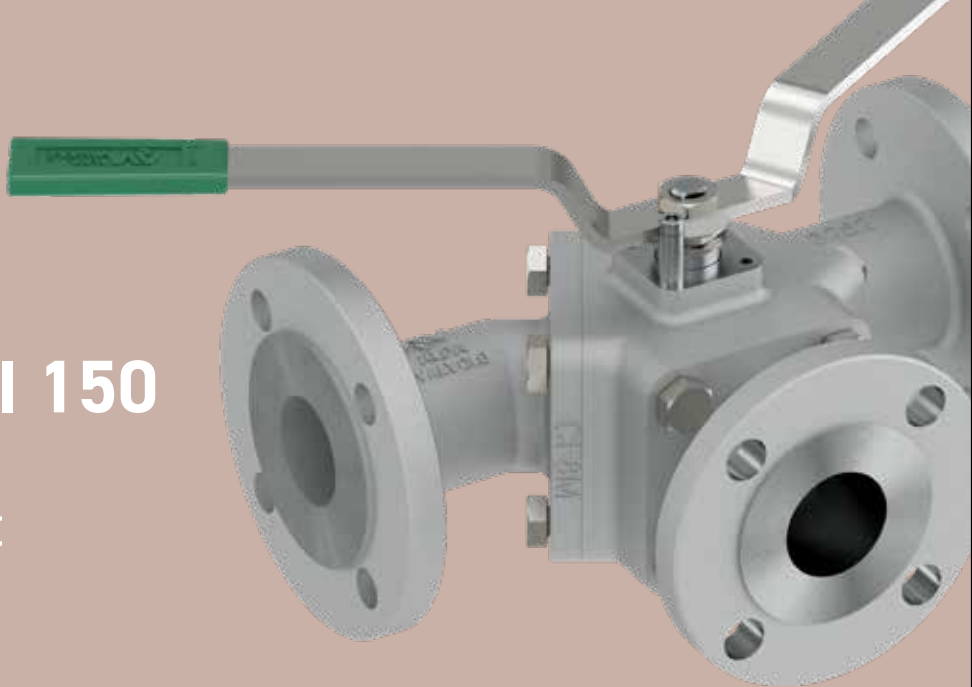
DIMENSIONS / DIMENSIONI

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
ø"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"	8"	10"
ø E	14	19	24	29	38	48	64	76	95	118	152	200	250
L	75	80	95	100	110	120	140	150	165	195	220	250	310
M	150	150	185	185	275	275	380	380	440	440	*	*	*
H	66	70	82	86	116	124	139	144	195	209	-	-	-
h	52	54	69	72	95	101	122	127	151	168	218	273	299
P	33	36	43	44	55	70	81	86	103	113,5	144	202	220
f/t	10/6	10/6	12/8	12/8	16/10	16/10	22/14	22/14	30/18	30/18	45/30	52/30	52/30
Kg. (1) / (2)	5/4,5	6/5,5	7/6,5	10/9	12/11	17/16	-/28	-/34	-/46	-/72	-/95	-/160	-/230
ISO 5211	F03	F03	F03	F03	F05	F05	F07	F07	F10	F10	F14	F14	F16
ø F	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M16	M16	M20
ø G	36	36	36	36	50	50	70	70	102	102	140	140	165

* Available with handwheel gearbox only / Disponibile solo con riduttore manuale

ALFA 32 PN 10-40 | ANSI 150

ANSI 300 on request



Standard valve materials / Materiali costruzione valvola standard

	 PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI	
1	body corpo	1	ASTM A105	ASTM A479 316/316L
2	screw vite	DN ≤ 80 = 12 DN 100-150 = 24 DN ≥ 200 = 36	C.I. 8.8	A4-40 (AISI 316)
3	closure chiusura	1	ASTM A105	ASTM A479 316/316L
3a	closure 90° chiusura a 90°	2	ASTM A105	ASTM A479 316/316L
4	stem stelo	1	ASTM A479 F6a (AISI 410)	ASTM A182 316/316L
5	ball sfera	1	ASTM A182 316/316L	
6	seats sedi	3	TFM	
7	 body gasket guarnizione corpo	3	P.T.F.E.	
8	 washer bussola	1	P.T.F.E.	
8a	 stem gasket guarnizione stelo	1	P.T.F.E.	
9	 gland premiguarnizione	1	Carbon Steel Zinc Coated	AISI 316
10	lever leva	1	Carbon Steel Zinc Coated	
11	stem nut dado stelo	2	Cl. 8	A4-40 (AISI 316)
12	spring washer molla a tazza	2	51CrV4 Zinc Coated	AISI 316
13	stop device dispositivo di arresto	1	Cl. 8.8 Zinc Coated	AISI 316
14	antistatic device dispositivo antistatico	2	AISI 316	
15	 stem o-ring o-ring stelo	1	VITON 75 Sh. A	
16	 body o-ring o-ring corpo	3	VITON 75 Sh. A (DN ≥ 100)	
63	position indicator indicatore di posizione	1	AISI 316	

 Spares parts / Parti di ricambio

DIMENSIONS / DIMENSIONI

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
ø"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"	8"	10"
ø E	14	19	24	29	38	48	64	76	95	118	152	200	250
L	75	80	95	100	110	120	140	150	165	195	220	250	310
S	210	220	260	280	300	320	350	390	430	390	570	670	810
T	105	110	130	140	150	160	175	195	215	260	285	335	405
M	150	150	185	185	275	275	380	380	440	440	*	*	*
H	66	70	82	86	116	124	139	144	195	209	-	-	-
h	52	54	69	72	95	101	122	127	151	168	218	273	299
P	33	36	43	44	55	70	81	86	103	113,5	144	202	220
f/t	10/6	10/6	12/8	12/8	16/10	16/10	22/14	22/14	30/18	30/18	45/30	52/30	52/30
Kg. (1) / (2)	6/5,5	7/6,5	9/8,5	13/12,5	15/14,5	19/18	-/33	-/48	-/53	-/78	-/95	-/160	-/230
ISO 5211	F03	F03	F03	F03	F05	F05	F07	F07	F10	F10	F14	F14	F16
ø F	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M16	M16	M20
ø G	36	36	36	36	50	50	70	70	102	102	140	140	165

* Available with handwheel gearbox only / Disponibile solo con riduttore manuale

(P,T) DIAGRAMS

Diagrammi (P,T)

ALFA 103/104 – ALFA 30/32

Pressure - temperature diagrams shows the standard working condition (pressure & temperature) for the specific valve. These conditions refer to a continuous use. For transitions for peak condition, an overload until 10% is accepted. In these cases we suggest anyway to contact engineering dept.

I diagrammi pressione - temperatura identificano le condizioni di uso contemporanee di pressione e temperatura a cui la valvola può operare. Tali condizioni sono da riferirsi ad un uso continuo. Per condizioni transitorie o di picco, scostamenti fino al 10% sono tollerati. In tali casistiche consultare comunque l'ufficio tecnico Alfa Valvole.

TFM SEATS / SEDI IN TFM



MAIN FEATURES / CARATTERISTICHE

- **PTFE reinforced at molecular stage / PTFE rinforzato a livello molecolare**
- **Chemical optimized structure guarantees a constant response in continuous service until 200°C / La struttura chimica ottimizzata garantisce performances stabili in servizio continuo fino a 200°C**
- **Lubricating properties, dimensional stability and chemical compatibility equal to virgin PTFE / Potere lubrificante, stabilità dimensionale e compatibilità chimica del PTFE**
- **Mechanical and wear resistance equal to reinforced PTFE / Resistenza meccanica e all'usura del PTFE**

PTFE SEATS + METAL CORE / SEDI IN PTFE + AM



MAIN FEATURES / CARATTERISTICHE

- **PTFE enclosure with metal core in AISI 316 / PTFE con inserto metallico in AISI 316**
- **Better performances at temperature until 210° C thanks to metal core / Il nucleo metallico garantisce ottime performances a temperature fino a 210° C e ad alte pressioni**
- **Chemical compatibility thanks to PTFE enclosure / La capsula in PTFE garantisce compatibilità chimica**
- **Increased dimensional stability thanks to an optimized production process / Incrementata stabilità dimensionale grazie al processo di produzione della sede**

ALFAGRAPH SEATS / SEDI IN ALFAGRAPH



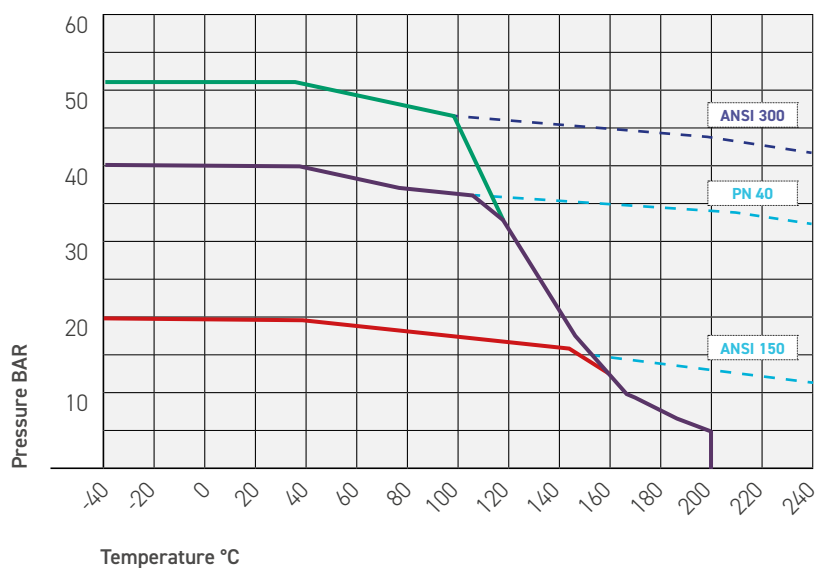
MAIN FEATURES / CARATTERISTICHE

- **Company owned compound: PTFE + CARBON + GRAPHITE** / Miscela proprietaria: PTFE + CARBONE + VETRO + GRAFITE
- **Increased pressure resistance at high temperature thanks to the carbon filling** / Incremento della resistenza alla pressione alle alte temperature grazie all'addizione di carbone
- **Less deformation under load thanks to the glass filling** / Minore deformazione sotto carico grazie all'addizione di vetro
- **Better operating torque control thanks to lubricating power of graphite filling** / Coppie sotto controllo grazie al potere lubrificante della grafite



VALVES / VALVOLE: ALFA 103/104 TFM SEATS /SEDI IN TFM (STANDARD EXECUTION)

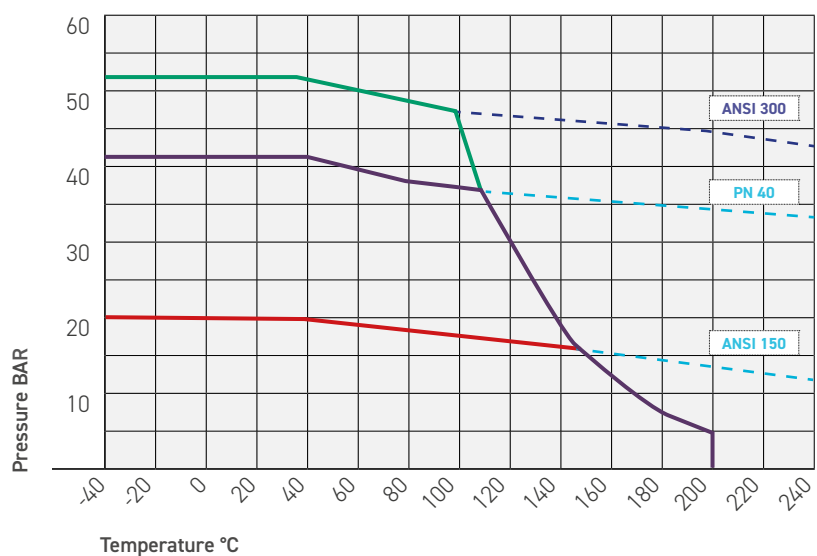
$\frac{1}{2}'' \leq DN \leq 2''$



- ANSI 150
- PN 10 - 40
- ANSI 300

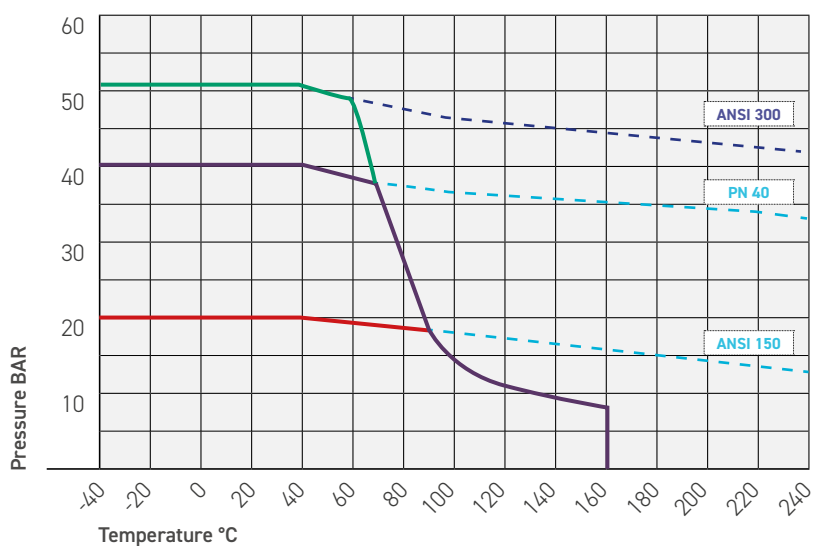
DN	$\frac{1}{2}'' \leq DN \leq 2''$ (15 ≤ DN ≤ 50)
P max @ Tmax	6,5 bar @ 200°C

$2\frac{1}{2}'' \leq DN \leq 4''$



DN	$2\frac{1}{2}'' \leq DN \leq 4''$ (65 ≤ DN ≤ 100)
P max @ Tmax	5,5 bar @ 200°C

$5'' \leq DN \leq 6''$



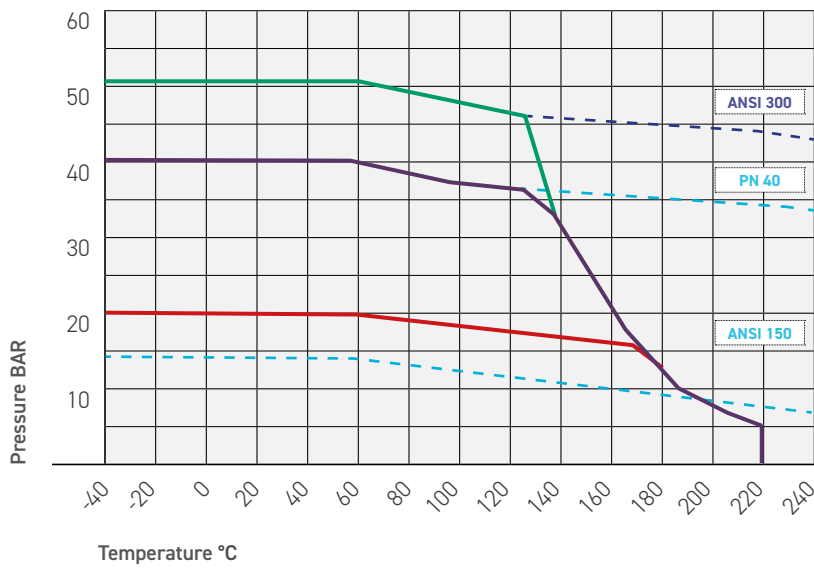
DN	$5'' \leq DN \leq 6''$ (125 ≤ DN ≤ 150)
P max @ Tmax	8 bar @ 160°C



VALVES / VALVOLE: ALFA 103/104

ALFAGRAPH SEATS / SEDI IN ALFAGRAPH (ON REQUEST)

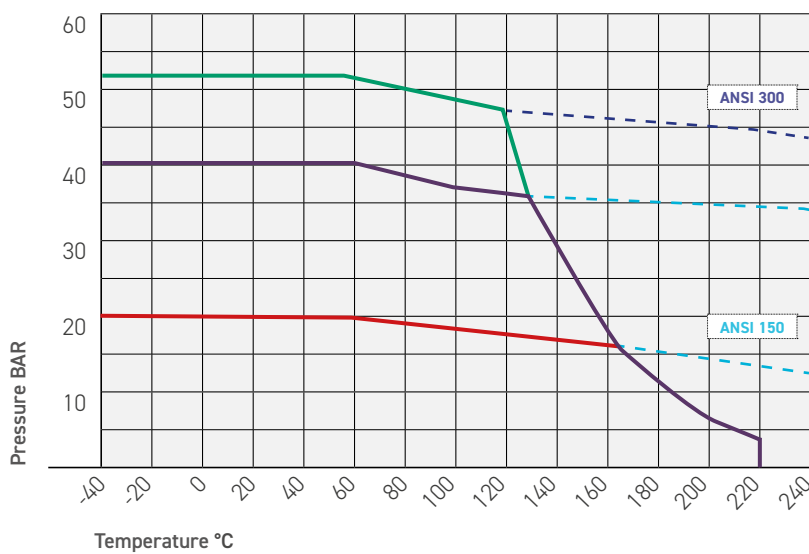
$\frac{1}{2}'' \leq DN \leq 2''$



- ANSI 150
- PN 10 - 40
- ANSI 300

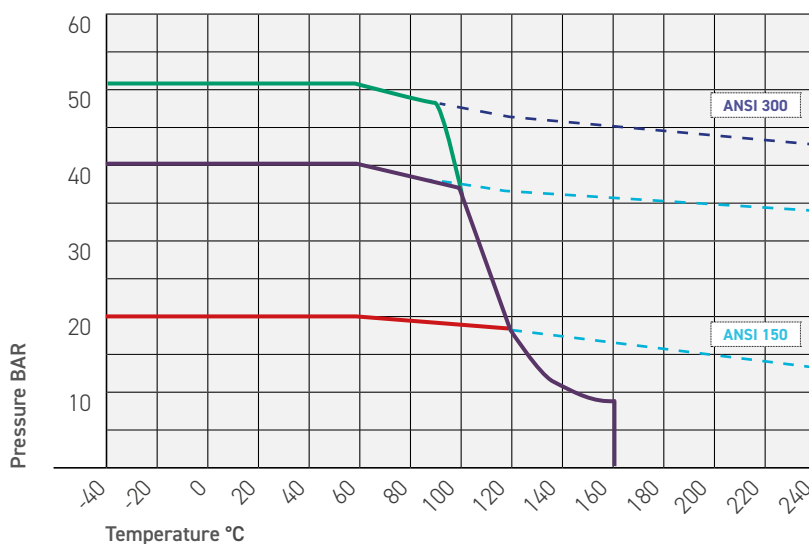
DN	$\frac{1}{2}'' \leq DN \leq 2''$ (15 ≤ DN ≤ 50)
P max @ Tmax	5 bar @ 220°C

$2\frac{1}{2}'' \leq DN \leq 4''$



DN	$2\frac{1}{2}'' \leq DN \leq 4''$ (65 ≤ DN ≤ 100)
P max @ Tmax	4 bar @ 220°C

$5'' \leq DN \leq 6''$

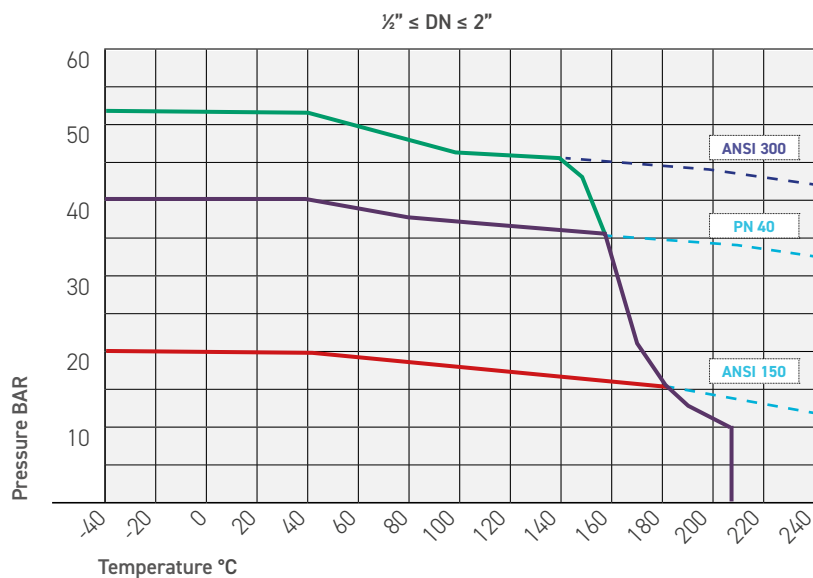


DN	$5'' \leq DN \leq 6''$ (125 ≤ DN ≤ 150)
P max @ Tmax	8 bar @ 200°C



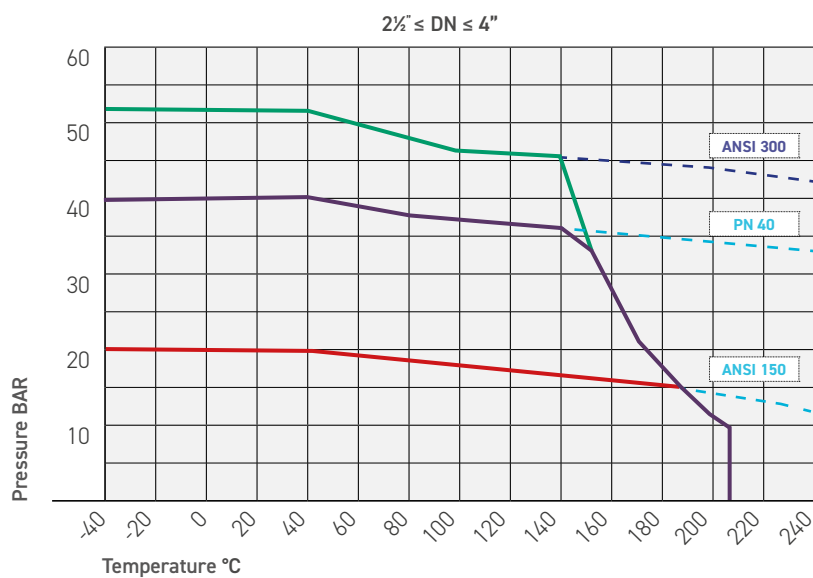
VALVES / VALVOLE: ALFA 103/104

PTFE SEATS + METAL CORE / SEDI IN PTFE + AM (ON REQUEST)

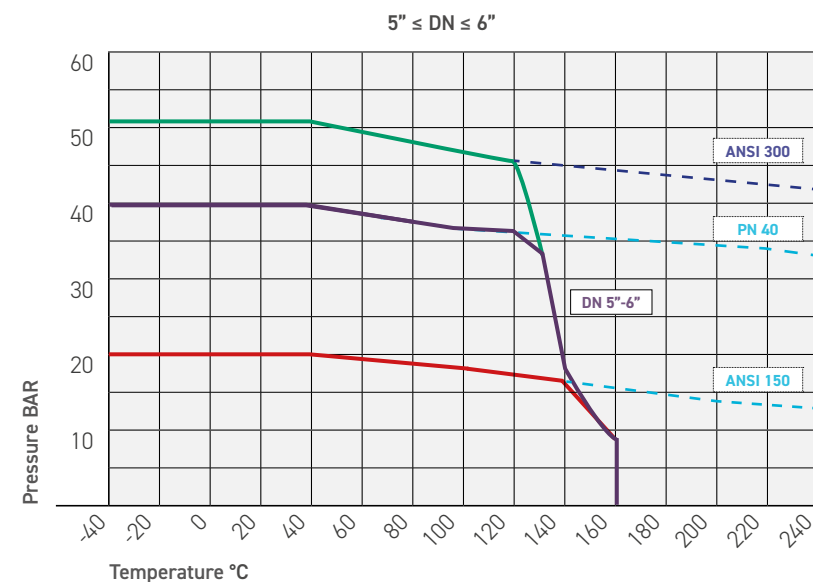


- ANSI 150
- PN 10 - 40
- ANSI 300

DN	$\frac{1}{2}" \leq DN \leq 2"$ (15 ≤ DN ≤ 50)
P max @ Tmax	10 bar @ 210°C



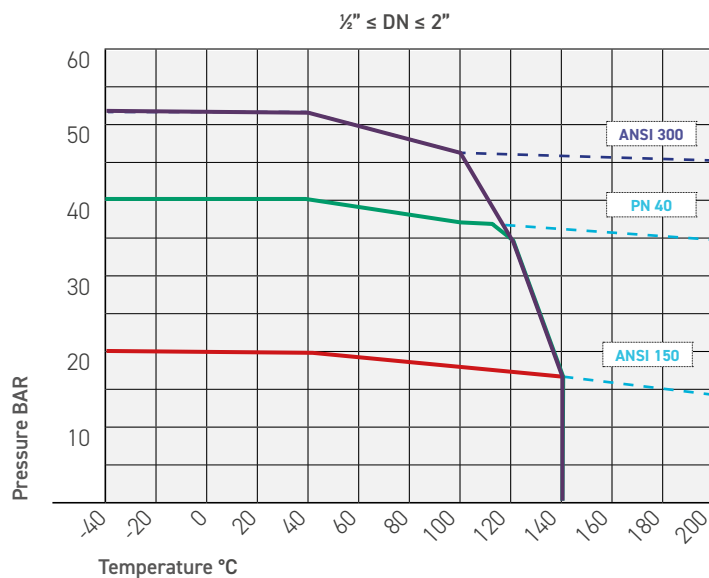
DN	$2\frac{1}{2}" \leq DN \leq 4"$ (65 ≤ DN ≤ 100)
P max @ Tmax	9 bar @ 210°C



DN	$5" \leq DN \leq 6"$ (125 ≤ DN ≤ 150)
P max @ Tmax	8 bar @ 160°C

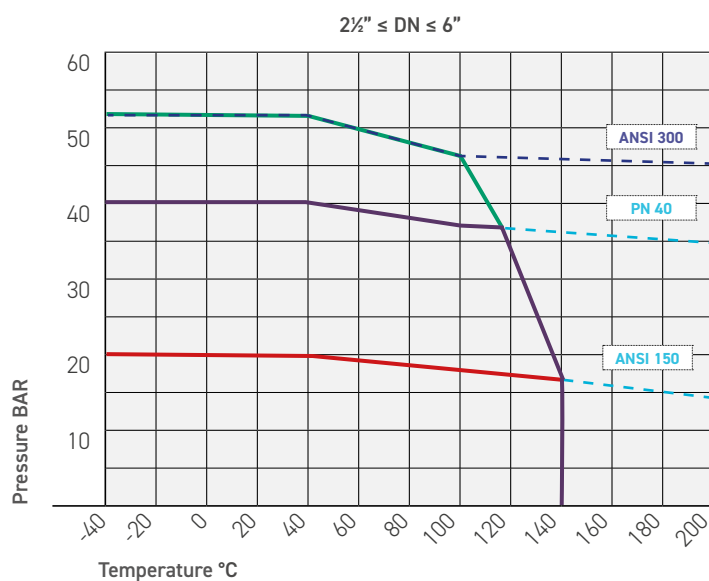
VALVES / VALVOLE: ALFA 30/32

TFM SEATS / SEDI IN TFM (STANDARD EXECUTION)

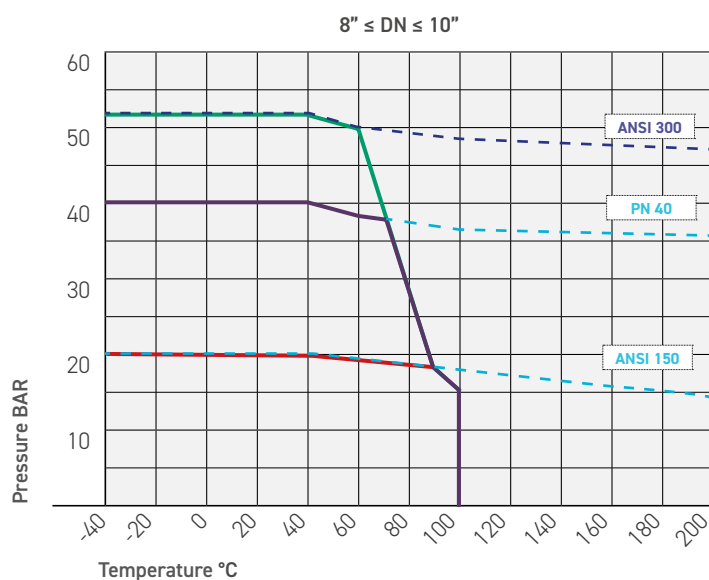


- ANSI 150
- PN 10 - 40
- ANSI 300

DN	$\frac{1}{2}" \leq DN \leq 2"$ (15 ≤ DN ≤ 50)
P max @ Tmax	15,8 bar @ 150°C



DN	$2\frac{1}{2}" \leq DN \leq 6"$ (65 ≤ DN ≤ 150)
P max @ Tmax	16,9 bar @ 120°C



DN	$8" \leq DN \leq 10"$ (200 ≤ DN ≤ 250)
P max @ Tmax	14,8 bar @ 100°C

COUPLED VALVES

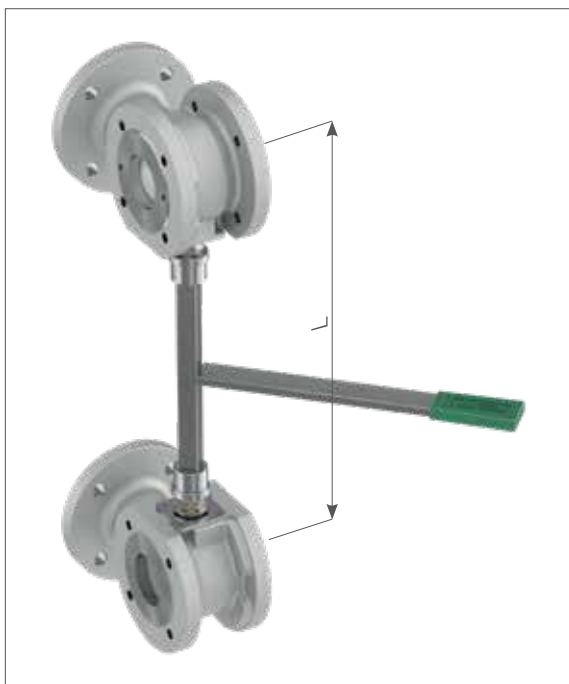
Valvole accoppiate

ALFA 103 - ALFA 30/32

The valves can be coupled together and operated by lever or manual gear.

Le valvole possono essere accoppiate ed azionate tramite leva o riduttore manuale.

GROUP OF ALFA 103 OPERATED BY LEVER / ALFA 103 ACCOPPIATE CON LEVA



COUPLING KIT 103 WITH LEVER KIT ACCOPPIAMENTO VALVOLE 103 A LEVA			
DN		MIN	MAX
15-20	1/2" - 3/4"	165	500
25-32	1" - 1 1/4"	165	500
40-50	1 1/2" - 2"	220	500
65-80	2 1/2" - 3"	290	800
100-125	4" - 5"	350	800

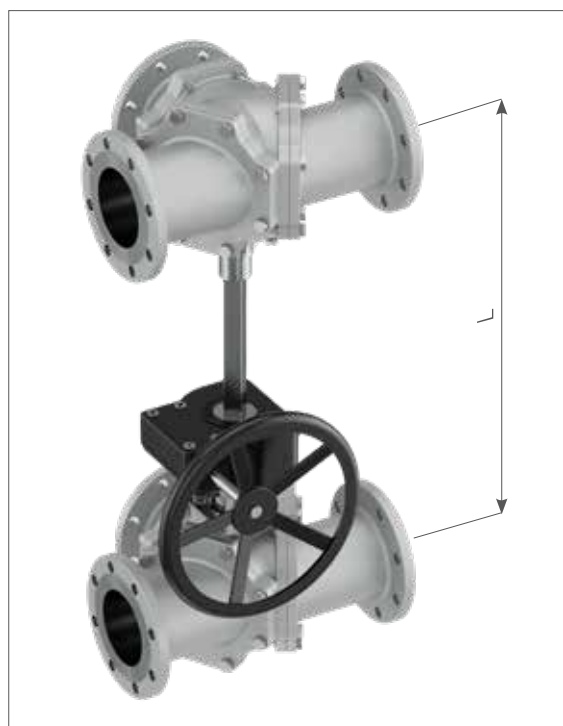
GROUP OF ALFA 103 OPERATED BY SINGLE MANUAL GEAR / ALFA 103 ACCOPPIATE CON UNICO RIDUTTORE MANUALE



COUPLING KIT 103 WITH GEARBOX KIT ACCOPPIAMENTO VALVOLE 103 CON RIDUTTORE			
DN		MIN	MAX
65-80	2 1/2" - 3"	290	800
100-125	4" - 5"	350	800
150	6"	600	1000

GEARBOX MODEL MODELLO RIDUTTORE
232-08 (ex AVM050)
232-13 (ex AVM120)
242-45L (ex AVM165)

GROUP OF ALFA 30/32 OPERATED BY SINGLE MANUAL GEAR / ALFA 30/32 ACCOPIATE CON UNICO RIDUTTORE MANUALE



COUPLING KIT 30/32 WITH GEARBOX KIT ACCOPPIAMENTO VALVOLE 30/32 CON RIDUTTORE			
DN		MIN	MAX
65-80	2½"-3"	290	800
100-125	4"-5"	350	800
150	6"	600	1000
200	8"	800	1000

GEARBOX MODEL MODELLO RIDUTTORE
RVFM010 120°
RVFM010 120°
RVFM015 120°
RVFM015 120°

- DIMENSION L: VARIABLE ON REQUEST following enclosed chart / QUOTA L: VARIABILE A RICHIESTA secondo tabella allegata
- Coupling connections can be supplied in Carbon Steel or Stainless Steel / Gli snodi di accoppiamento possono essere forniti sia in Acciaio al Carbonio che in Acciaio Inossidabile
- Maximum value in the chart is referred to standard product, in case of larger wheelbase please contact Alfa Valvole / Il valore massimo indicato in tabella si riferisce al prodotto standard, in caso di interesse maggiore contattare Alfa Valvole.

OPTIONAL EXECUTIONS

Esecuzioni optional



CHEVRON RING / PACCO A V

V-Shaped 3 pieces gasket: guarantees maximum tightness from stem area, suitable for every fluid and for vacuum conditions / Tripla guarnizione in PTFE sagomata che garantisce massima tenuta del premistoppa, adatta ad ogni fluido e a condizioni di vuoto



ALFA103
ONLY

LEVER EXTENSION / ESTENSIONE LEVA

Lever extension suitable to operate the valve with insulation coverage / Estensione leva che permette di manovrare la valvola in caso di coibentazione



ALFA103
ONLY

LOCKING DEVICE / DISPOSITIVO DI BLOCCAGGIO BASSO

Device suitable to safety lock the valve in open or closed position. Can be assembled also on field / Dispositivo, montabile anche in campo, atto a lucchettare la valvola in posizione di aperto/chiuso



ALFA103
ONLY

LOCKING DEVICE / DISPOSITIVO DI BLOCCAGGIO ALTO

Device suitable to safety lock the valve in open or closed position. Can be assembled also on field. FOR INSULATED VALVES / Dispositivo, montabile anche in campo, atto a lucchettare la valvola in posizione di aperto/chiuso. PER VALVOLE COIBENTATE

ALFA M34

1000 PSI / PN63



STANDARD FEATURES

Caratteristiche standard

- End connection / Conessioni: **NPT (ASME B1.20.1)**
- Size Range / Range di dimensioni: $\frac{1}{2}" \leq DN \leq 2"$ / $06 \leq DN \leq 50$
- Pressure range / Range di pressioni: **1000 p.s.i / PN63**
- Temperature range / Temperatura: $-40^{\circ}\text{C} \leq T \leq +200^{\circ}\text{C}$ (standard execution)
- Casting body / Corpo da fusione
- Face to face / Scartamento: **Manufacturer standard**
- Design according to / Progettazione secondo: **ASME B16.34, EN 12516-1, EN 17292, PED 2014/68/UE**
- Mounting both L and T ball / Montaggio sfera a L e sfera a T

OPERATING DRAFT

Schema di funzionamento

PORT TYPE	1	2	3	4
L				
T				

OPTIONAL EXECUTIONS

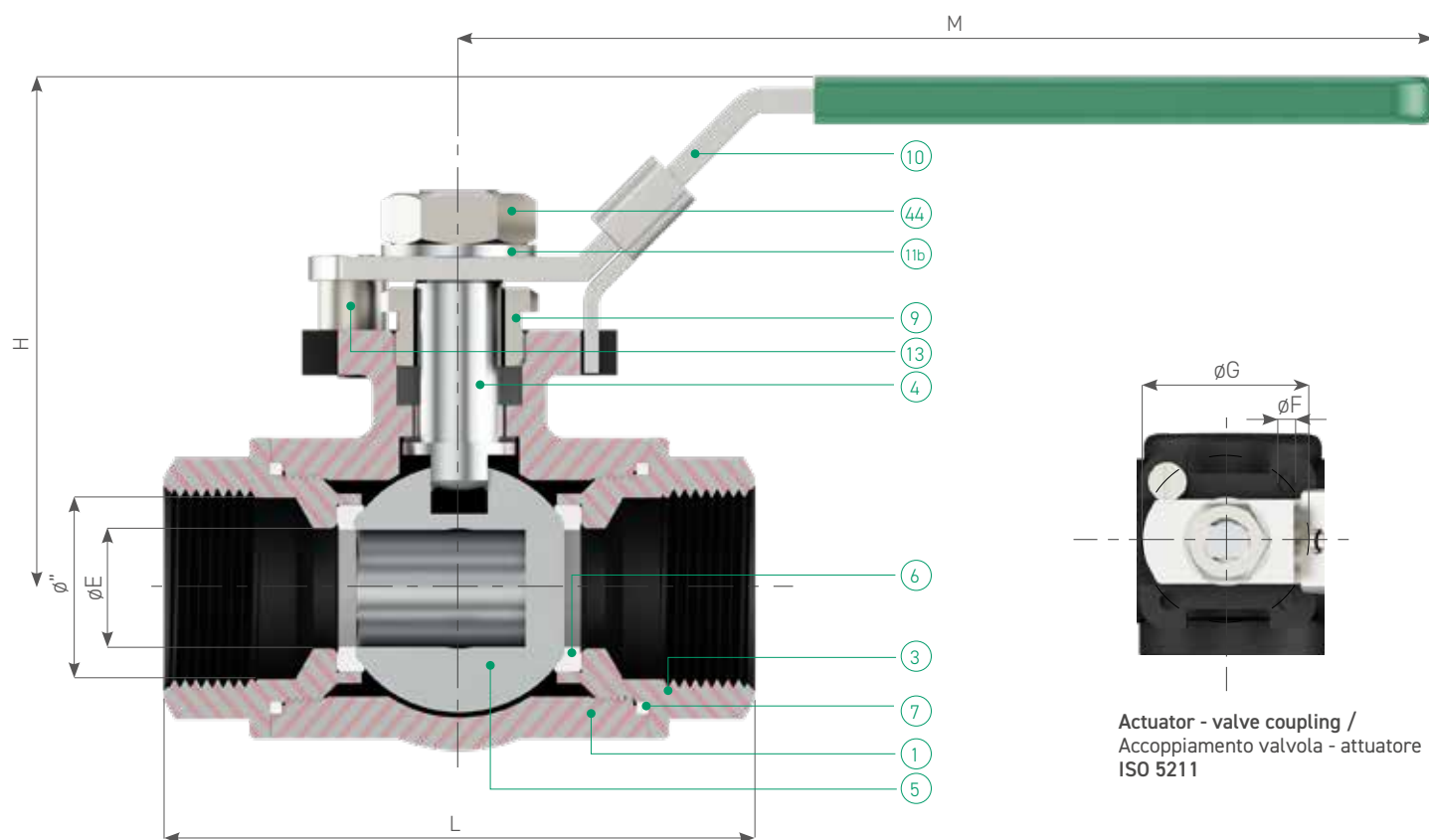
--- Esecuzioni optional



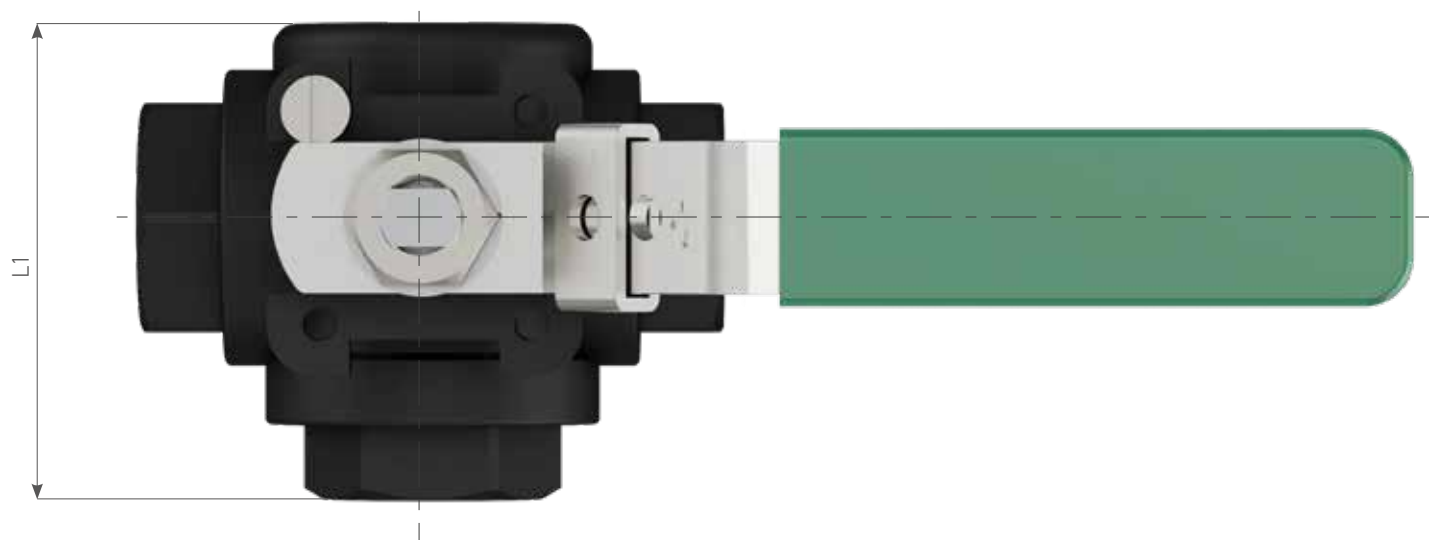
LOCKING DEVICE / DISPOSITIVO DI BLOCCAGGIO

**Device suitable to safety lock the valve in open
or closed position / Dispositivo atto a lucchettare
la valvola in posizione di aperto/chiuso**

ALFA M34 1000 PSI / PN63



Actuator - valve coupling /
Accoppiamento valvola - attuatore
ISO 5211



ALFA M34 1000 PSI / PN63

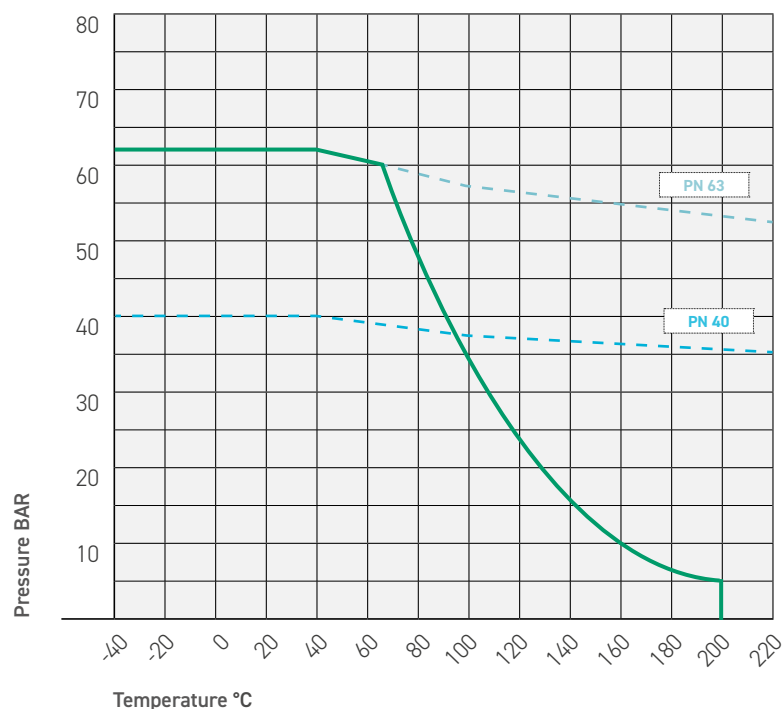
Standard valve materials / Materiali costruzione valvola standard

	PART NAME PARTICOLARE	Q.TY Q.TA'	MATERIALS MATERIALI
1	body corpo	1	ASTM A351 CF8M
3	closure chiusura	3	ASTM A351 CF8M
4	stem stelo	1	AISI 316
5	ball sfera	1	ASTM A351 CF8M
6	seats sedi	3	TFM
7	body gasket guarnizione corpo	3	P.T.F.E.
8	washer bussola	2	P.T.F.E.
9	gland premitguarnizione	1	AISI 304
10	lever leva	1	AISI 304
11	stem nut dado stelo	1	AISI 304
11b	thrust washer rondella reggispinga	1	AISI 304
13	stop device dispositivo d'arresto	1	AISI 304

DIMENSIONS / DIMENSIONI

DN	6	10	15	20	25	32	40	50
Ø"	¼"	¾"	½"	¾"	1	1½"	1½"	2"
ØE	9,5	12,5	12,5	16	20	25	32	38
L	79	76	76	86	99	117	124	148
L1	60	60	60	72	80,2	94,5	104	125
ØF	M5	M5	M5	M5	M6	M6	M8	M8
ØG	42	42	42	42	50	50	70	70
H	63	67	67	77	83	88	116	124
M	158	153	153	153	183	183	246	246
Kg	0,8	0,7	0,7	1,1	1,6	2,2	3,6	5,5
ISO 5211	F04	F04	F04	F04	F05	F05	F07	F07

(P,T) DIAGRAMS / DIAGRAMMA (P,T)



DN	¼" ≤ DN ≤ 2" (6 ≤ DN ≤ 50)
P max @ Tmax	5 bar @ 200°C