

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. 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									
		WAFER	3 PIECES	2 PIECES SCREWED BODY	FLANGED	3 WAY WAFER	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	STAIN LESS 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																											

MAIN FEATURES

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							INDUSTRY										CODE	PRODUCT		
PED (DN > 25)	T PED	TA LUFT (fugitive emission)	MOCA	API 6D	FIRE TESTED	SIL	ATEX	POWER	OIL AND GAS UPSTREAM	REFINING AND PETROCHEMICAL	CHEMICAL	LNG AND CRYOGENIC	MARINE AND NAVY	HVAC	WATER AND WASTEWATER	PHARMACEUTICAL	RAIL AND ROAD. TRANSPORTATION	FOOD INDUSTRY		
																			A1N	A10N - NF
																			A1H	A10 HP
																			A1J	A11N - NF
																			A1C/D	A10 CALL
																			A1V	A10 VAG
																			A2T/R	A20R/T
																			A2D	A22 EV
																			K2T	K20 T
																			A24	A24K
																			A6P	A60P/A64P
																			A50	A50
																			A54	A54
																			A5S	A506
																			A60	A60
																			A64	A64
																			A68	A68
																			A6S	A606
																			A6Q	A609/615
																			A6V	A625
																			A30	A30
																			A32	A32
																			M34	M34
																			AC3	A103
																			AC4	A104
																			ACT	A103/4
																			AT2	T2 FB
																			AT4	T2 RB
																			AT3	T3 FB
																			AT6	T3 RB

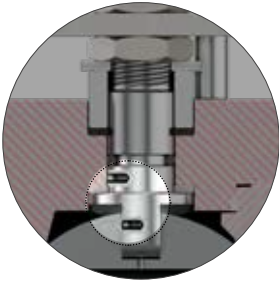
STANDARD FEATURES

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: ½" ≤ DN ≤ 6" / 15 ≤ DN ≤ 150**
- **Standard pressure range / Range di pressioni standard: PN 10-40, ANSI 150 (optional ANSI 300 e 600)**
- **Temperature range / Temperatura: -40°C ≤ T ≤ +220°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



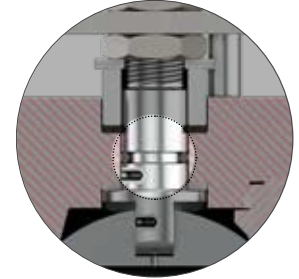
**ANTISTATIC DEVICE ACCORDING /
DISPOSITIVO ANTISTATICO IN ACCORDO
A: API6D - ATEX 2014/34/UE**

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



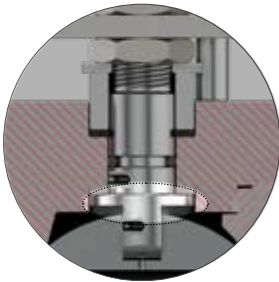
ISO 5211 TOP MOUNTING

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

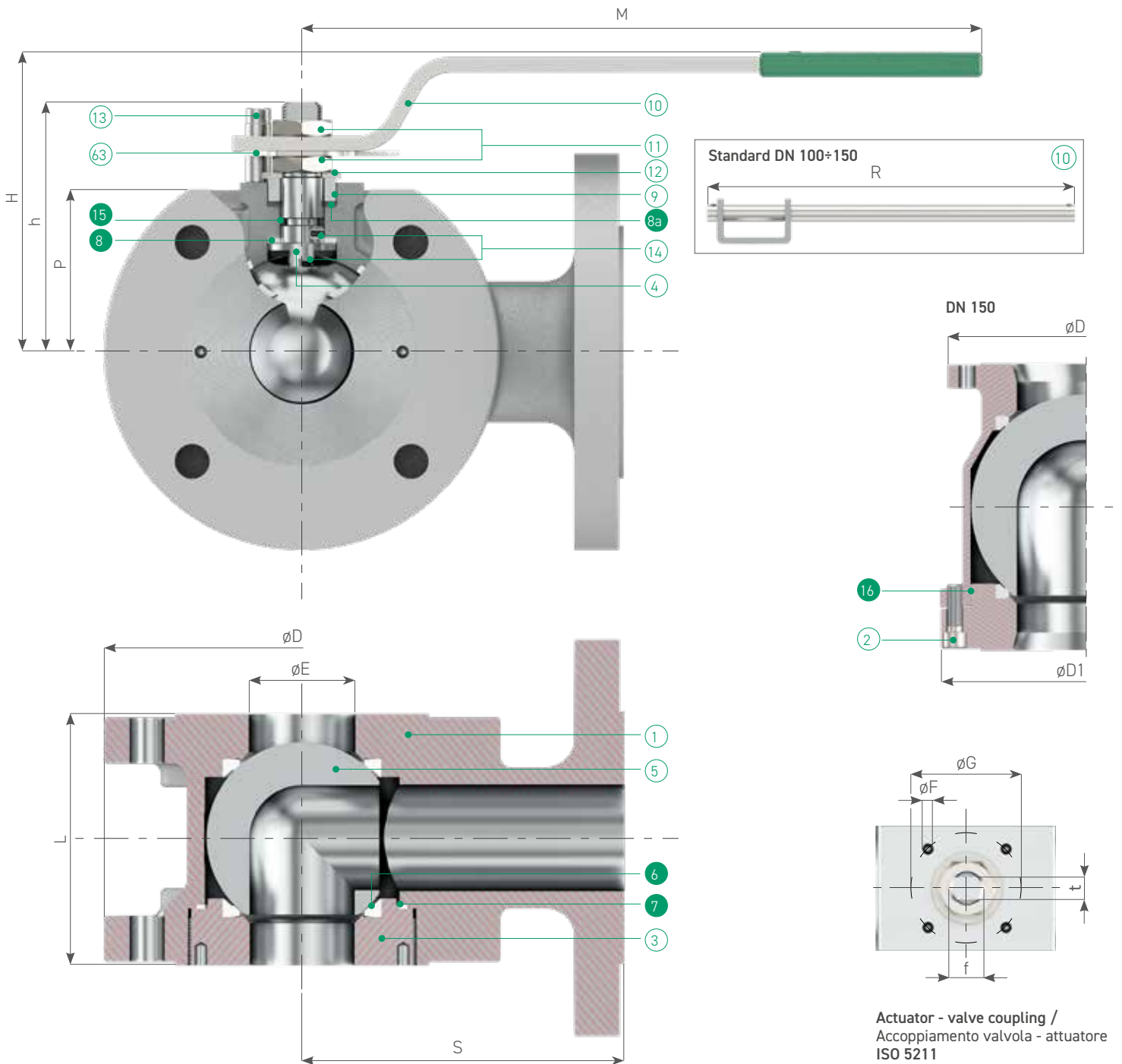
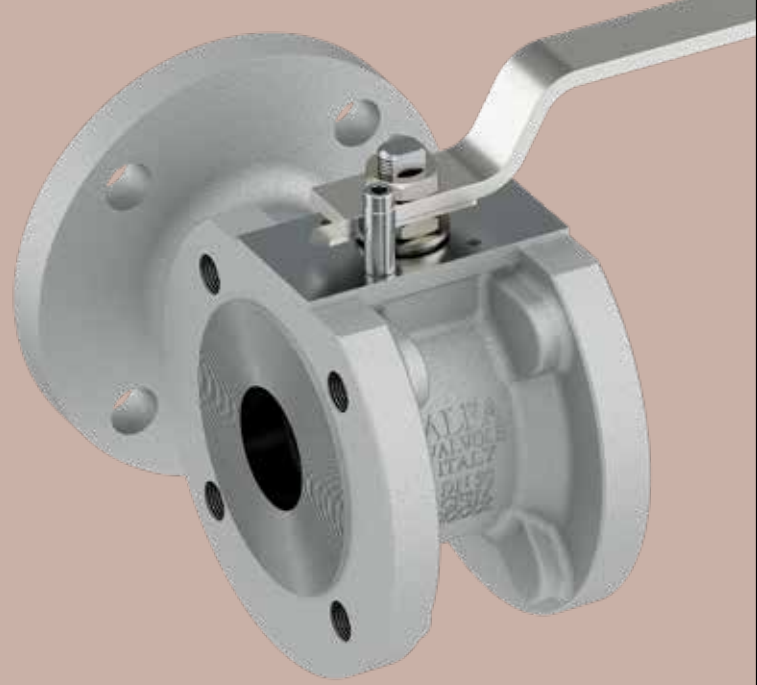


**ANTI BLOW-OUT STEM DESIGN / STELO
ANTIESPULSIONE**

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



ALFA 103 PN 10-40 | ANSI 150

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 sedi	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

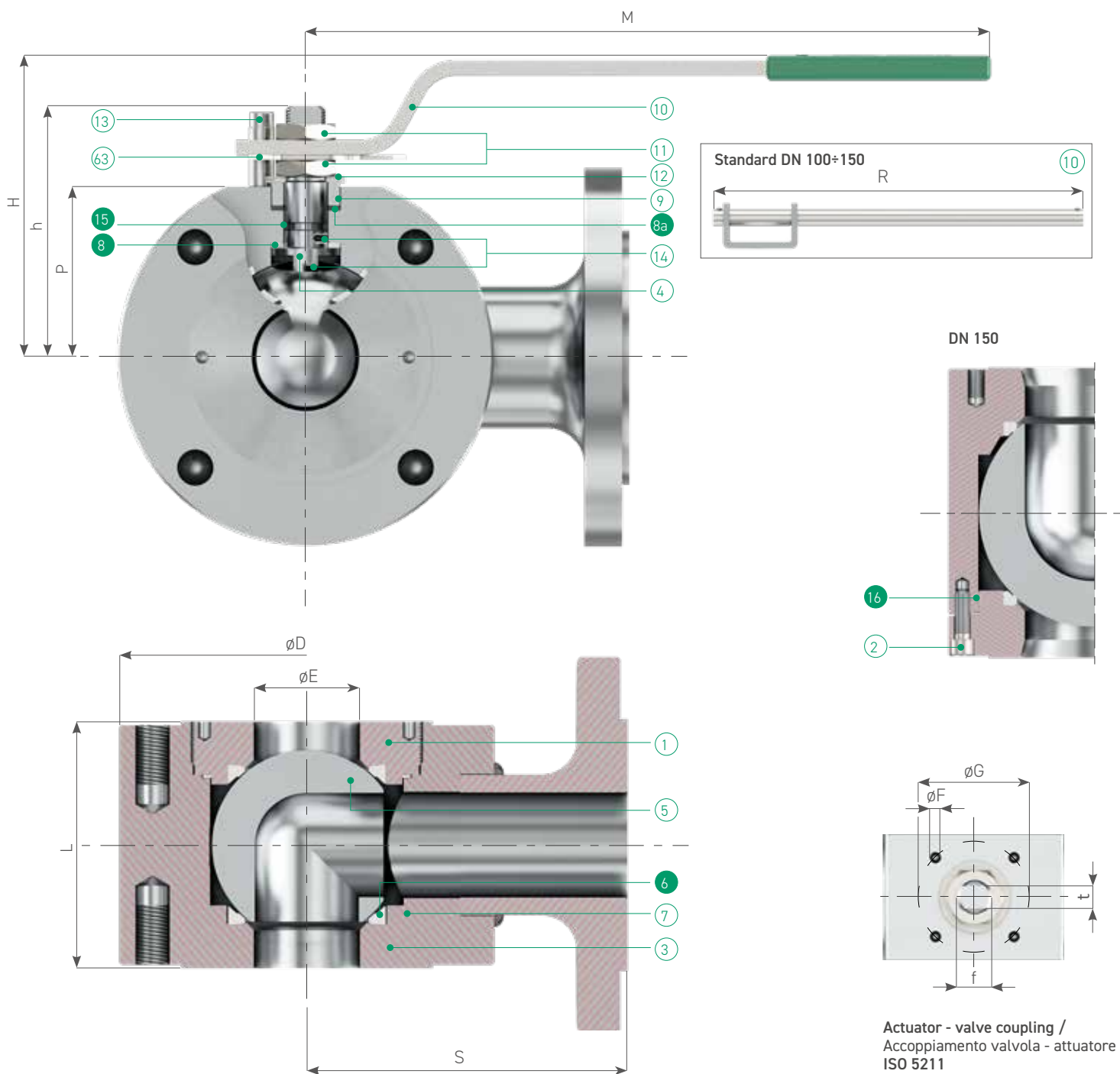
DN	15	20	25	32	40	50	65	80	100	150
ø"	½"	¾"	1"	1 ¼"	1 ½"	2"	2 ½"	3"	4"	6"
ø E	10	14	19	14	34	43	60	70	84	140
L	50	50	50	60	70	100	115	130	150	300
S ANSI 150	85	90	90	105	120	130	150	175	185	215
M/R	150/-	150/-	185/-	185/-	275/-	275/-	380/-	380/-	440/500	-/800
H	84	87	95	99	118	126	143	149	185	273
h	52	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



ALFA 103 PN 10-40 | ANSI 150

Bar stock body
Corpo da barra

ANSI 300-600 on request



ALFA 103

PN 10-40 | ANSI 150

Standard valve materials / Materiali costruzione valvola standard

QTY	PART NAME PARTICOLARE	MATERIALS MATERIALI	
		Q.TA'	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 sedi	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 premi-guarnizione	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

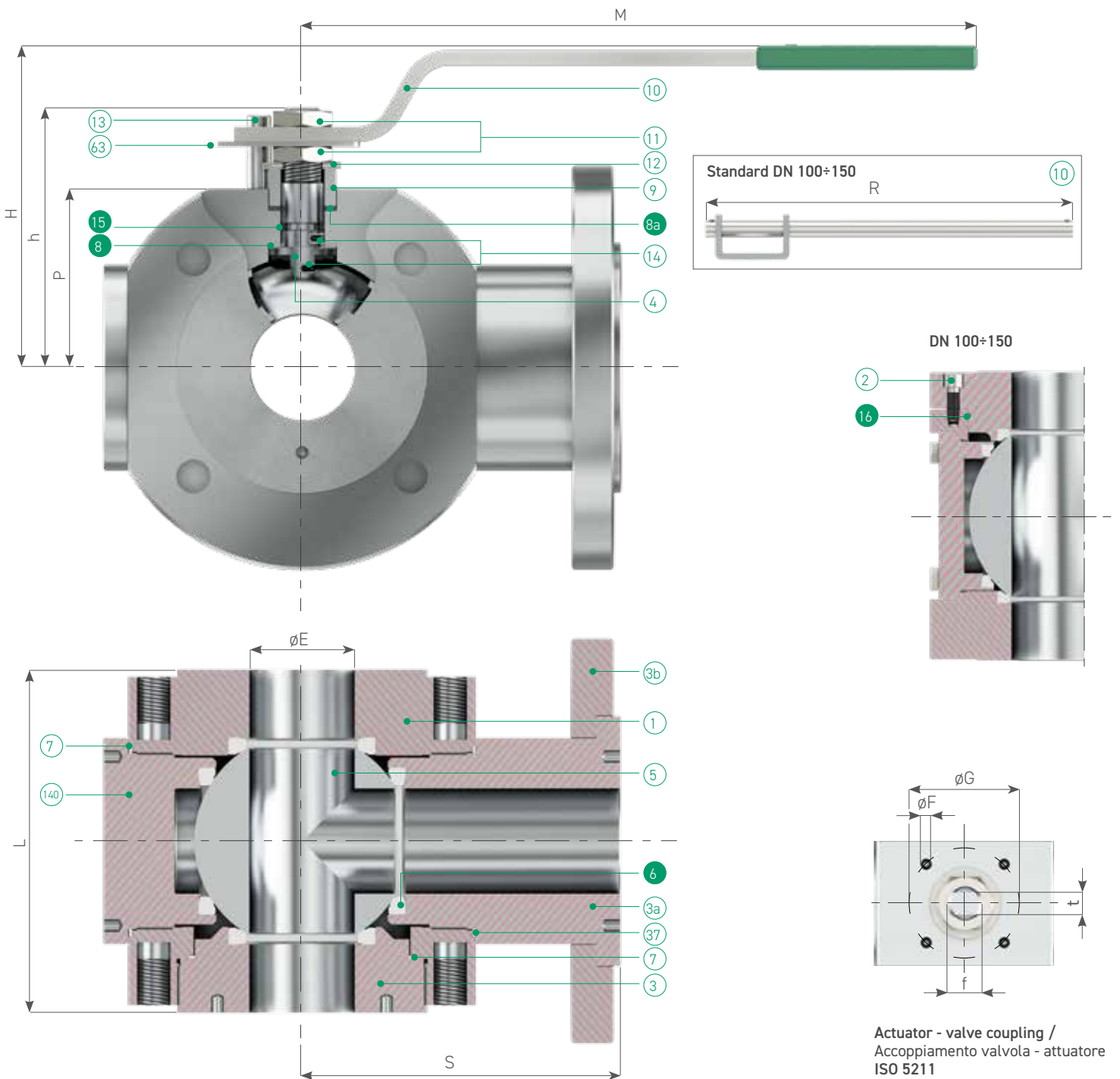
DIMENSIONS / DIMENSIONI

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



ALFA 103/4

PN 10-40 | ANSI 150

Standard valve materials / Materiali costruzione valvola standard

Q.TY	PART NAME PARTICOLARE	MATERIALS	
		Q.TA'	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 premi-guarnizione	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

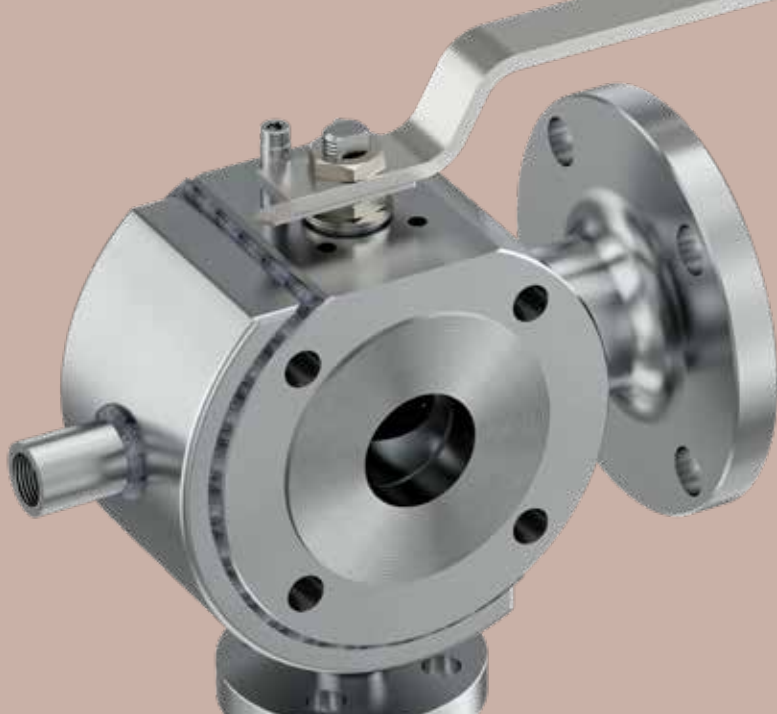
 Spares parts / Parti di ricambio

DIMENSIONS / DIMENSIONI

DN	20	25	32	40	50	65	80	100	150
ø"	¾"	1"	1½"	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



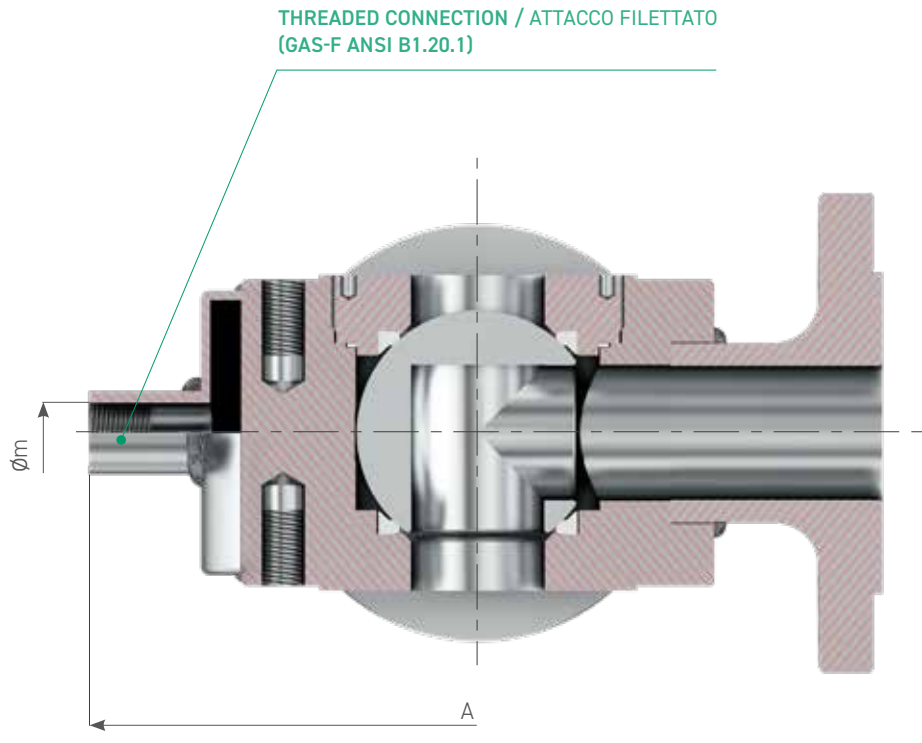
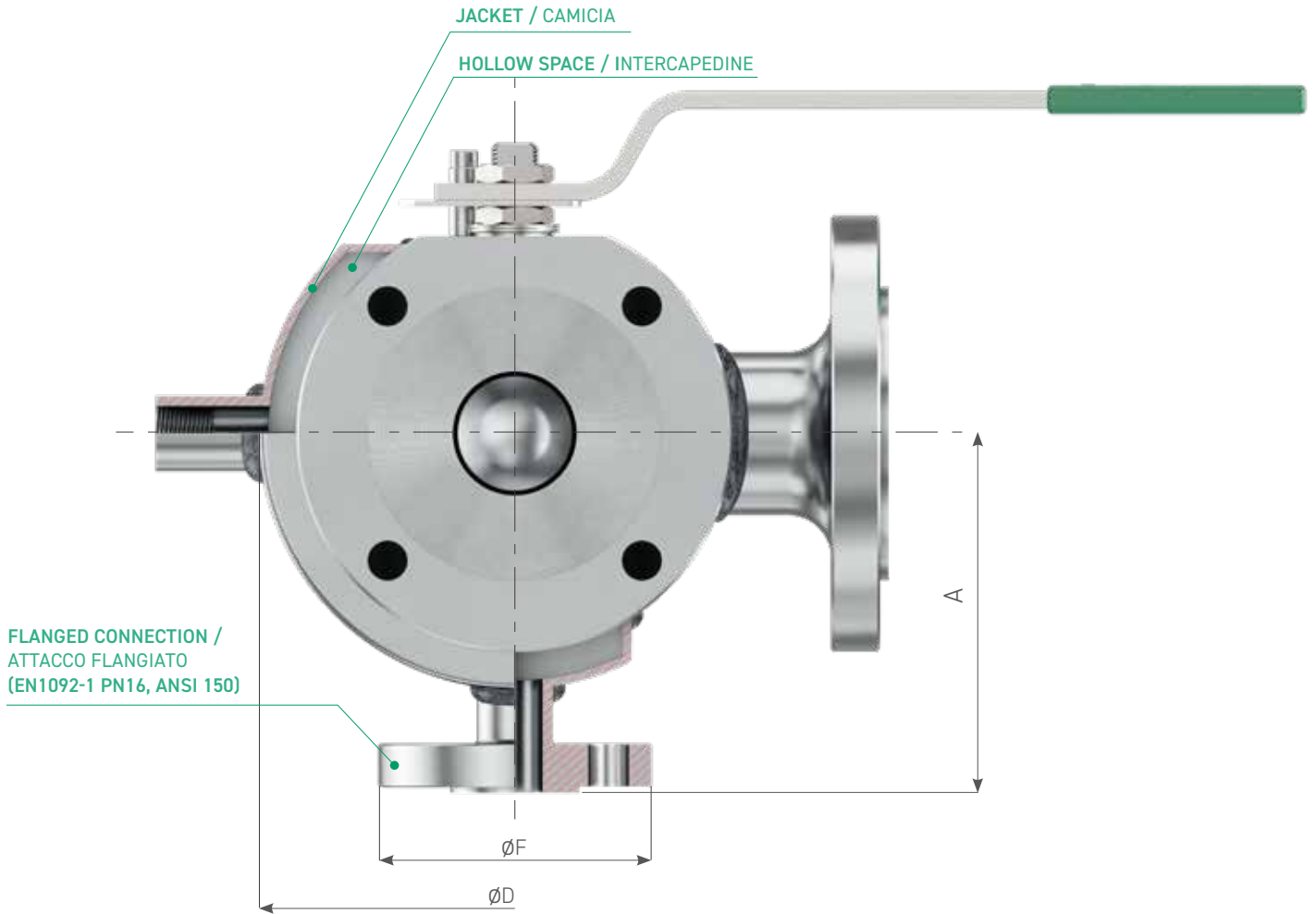
MAIN FEATURES / CARATTERISTICHE

- **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

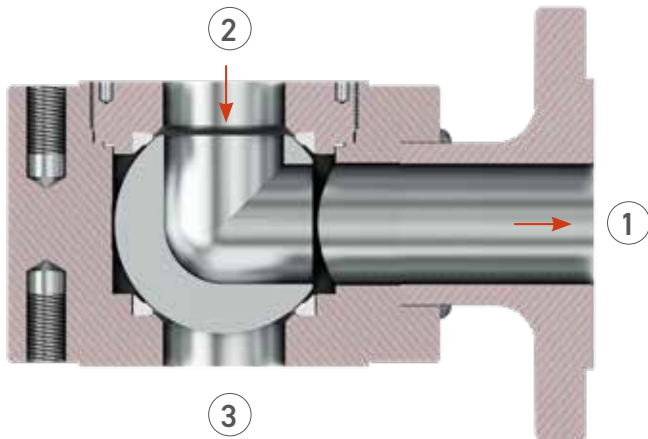
For valve construction and dimensions see ALFA 103 and 103/4 / Per costruzione e dimensioni valvola vedere ALFA 103 e 103/4
For ALFA 104/4 jacket dimensions contact Alfa Valvole / Per dimensioni camicia ALFA 104/4 contattare Alfa Valvole
Weight for bar body valves / Peso per valvola ricavate da barra



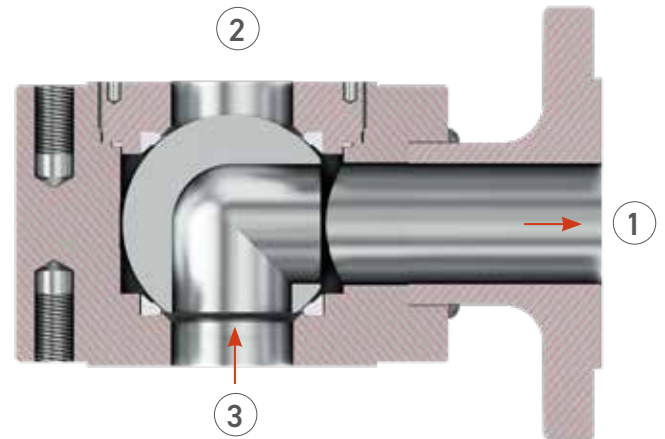
OPERATING DRAFT

Schema di funzionamento

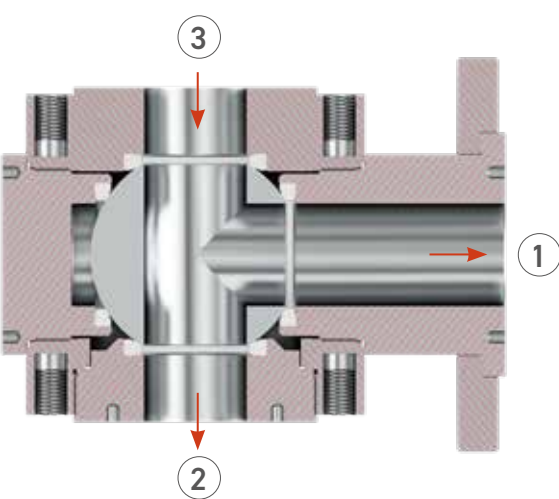
A103 POS 1-2



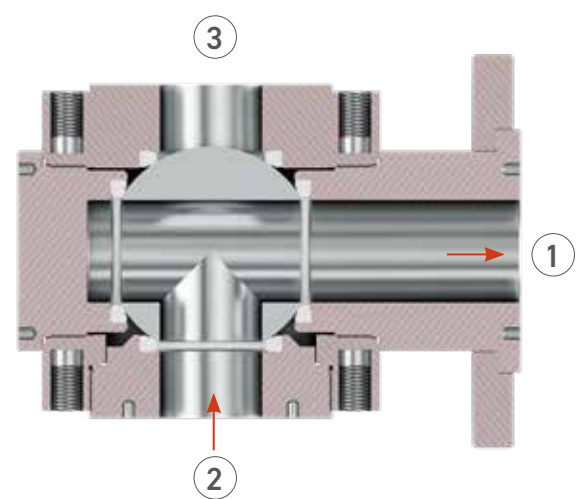
A103 POS 1-3



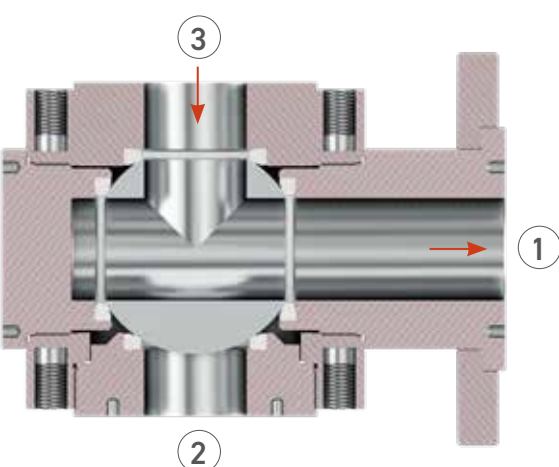
A103 /4 POS 1-2-3



A103 /4 POS 1-2



A103 /4 POS 1-3



ALFA 30/32

PN 10-40 | ANSI 150-300



STANDARD FEATURES

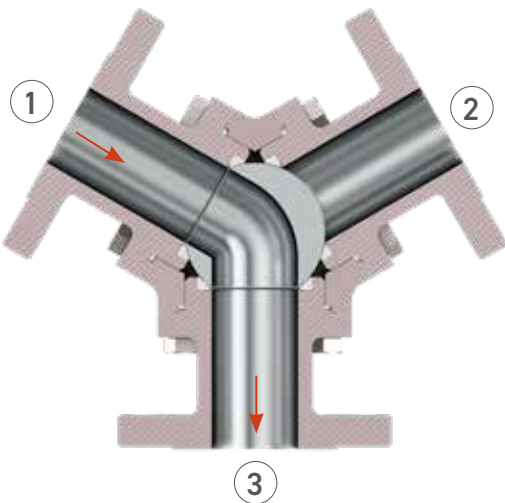
Caratteristiche standard

- **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: **½" ≤ DN ≤ 12" / 15 ≤ DN ≤ 300**
- **Pressure range** / Range di pressioni: **PN 10-40, ANSI 150-300**
- **Temperature range** / Temperatura: **-40°C ≤ T ≤ +160°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 ≥ 150

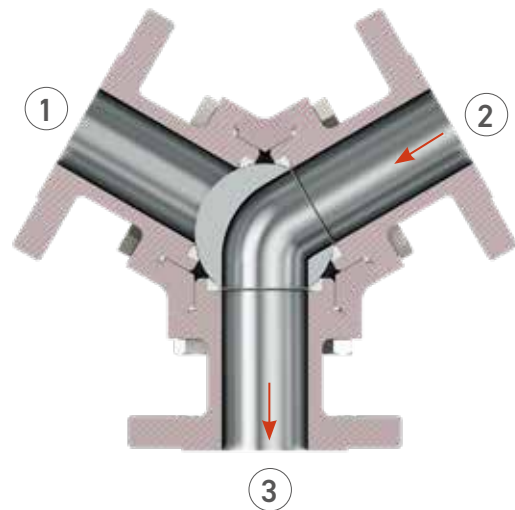
OPERATING DRAFT

Schema di funzionamento

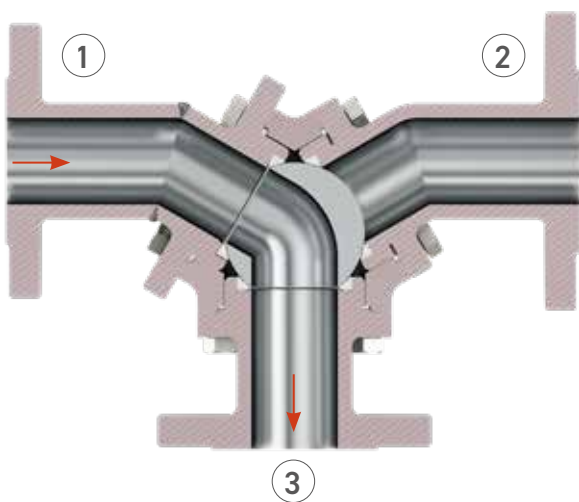
A30 POS 1-3



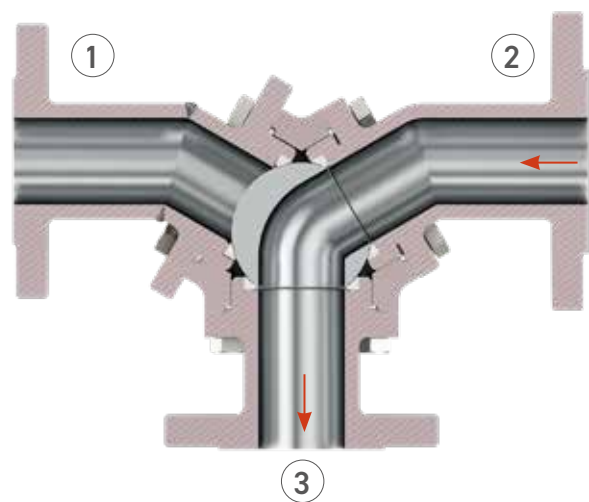
A30 POS 2-3



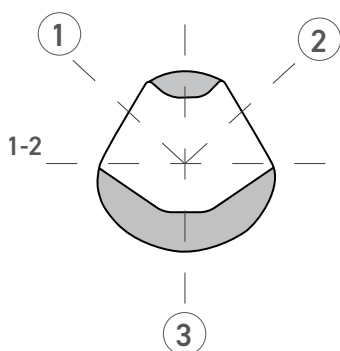
A32 POS 1-3



A32 POS 2-3

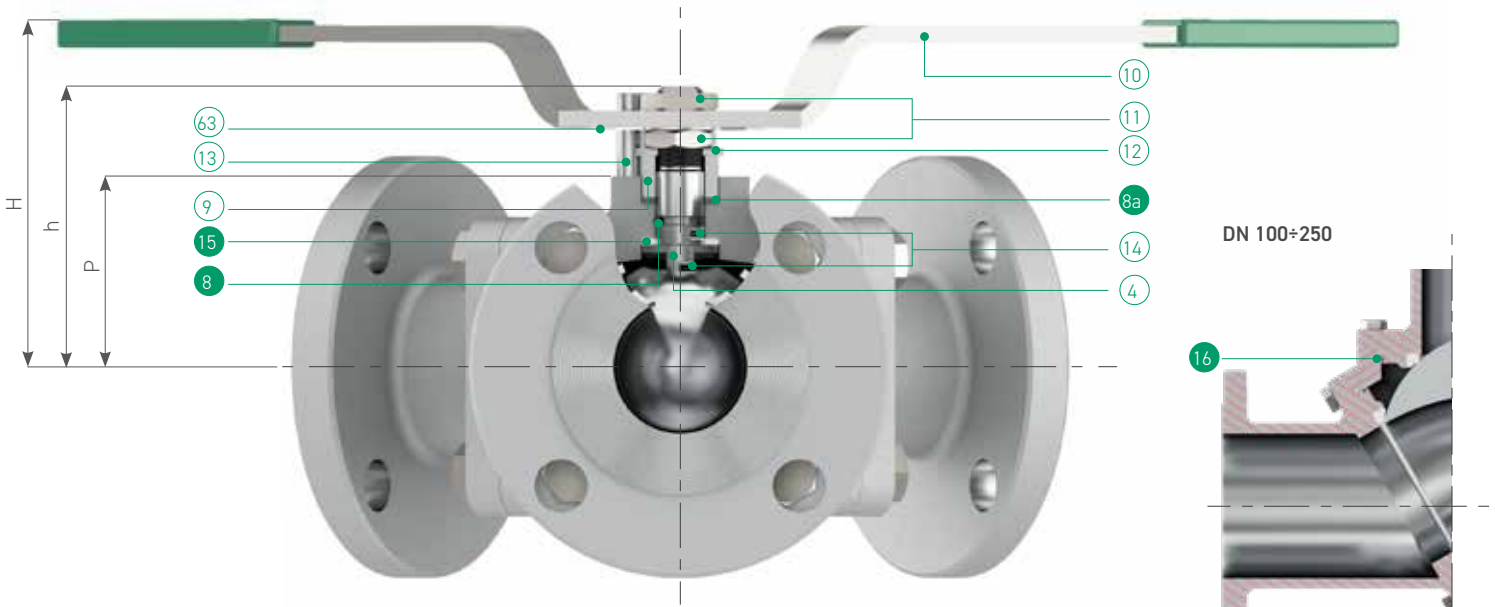
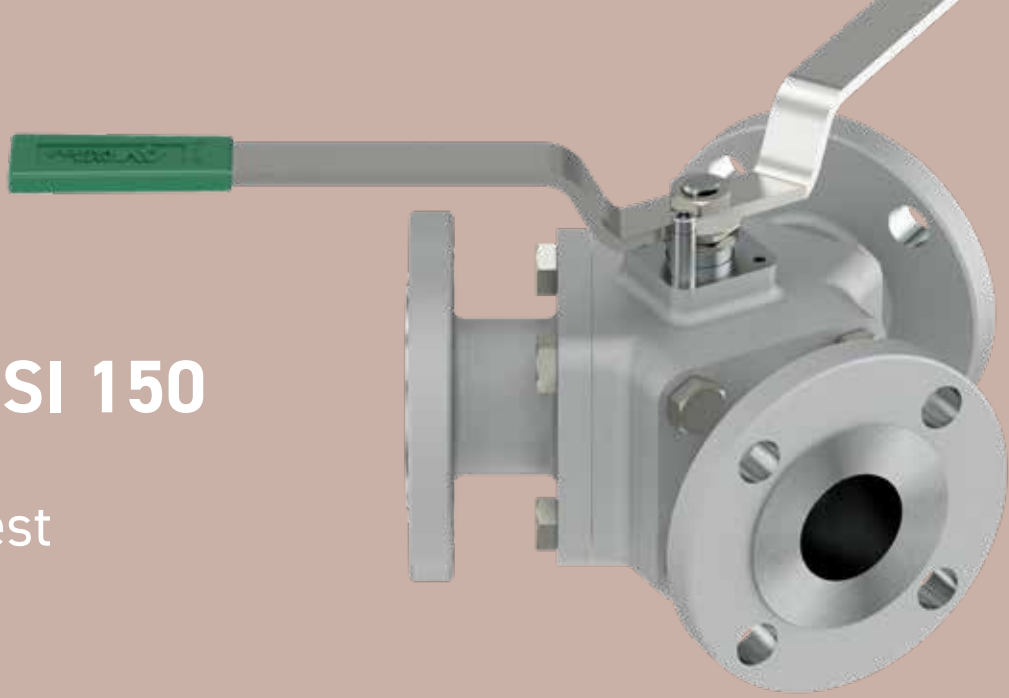


A30/32 ON REQUEST / A30/32 SU RICHIESTA

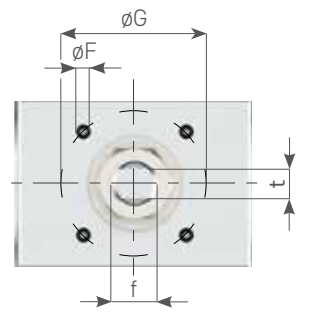
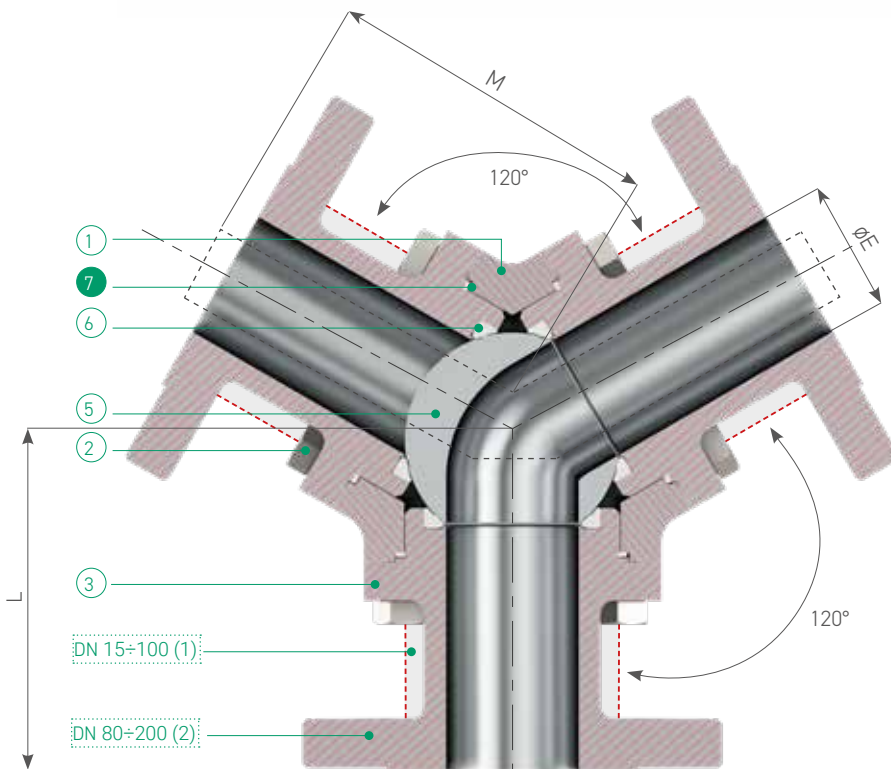


ALFA 30 PN 10-40 | ANSI 150

ANSI 300 on request









DN 100÷250



Actuator - valve coupling /
Accoppiamento
valvola - attuatore ISO 5211

ALFA 30 PN 10-40 | ANSI 150

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 premi-guarnizione	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

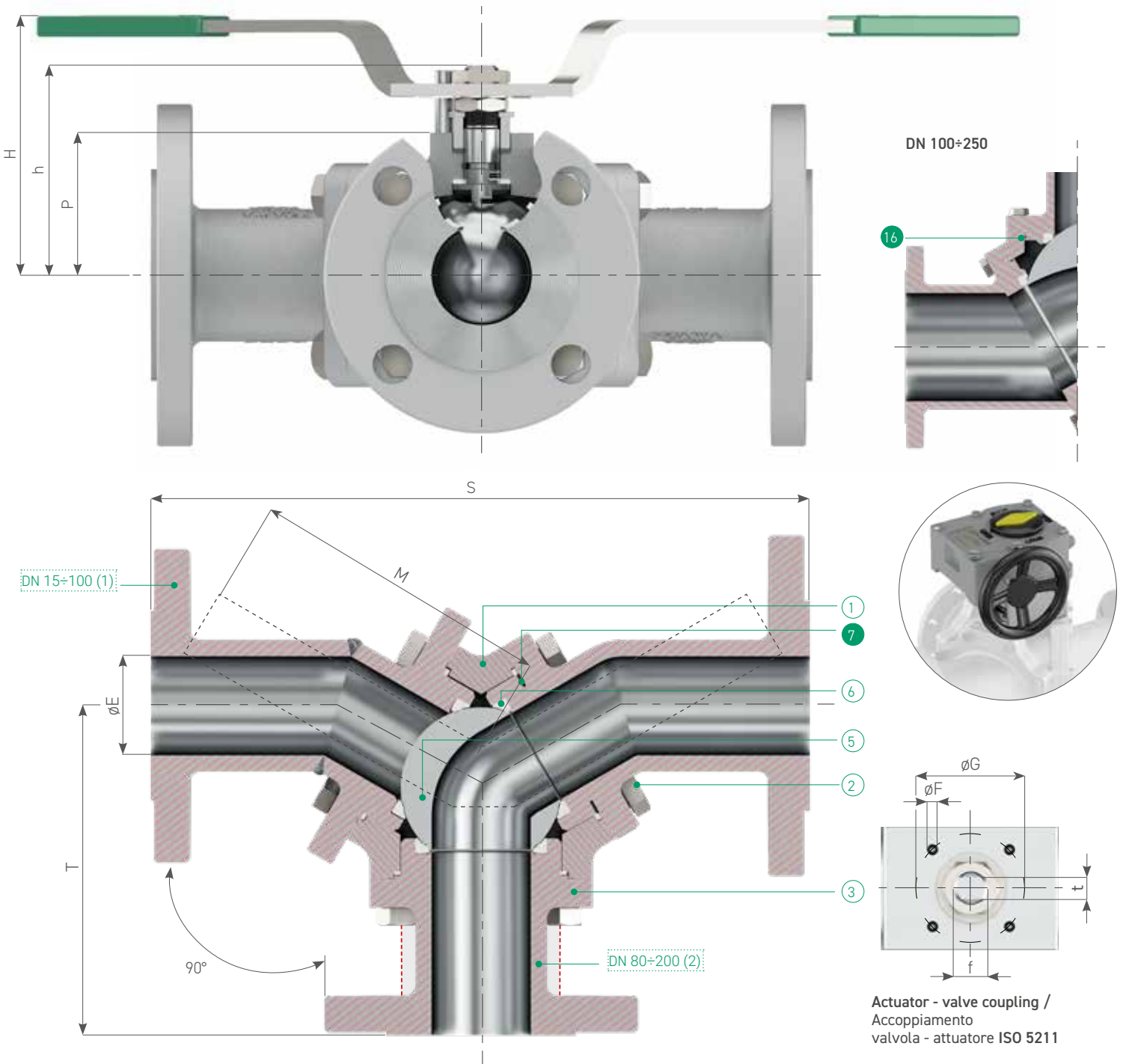
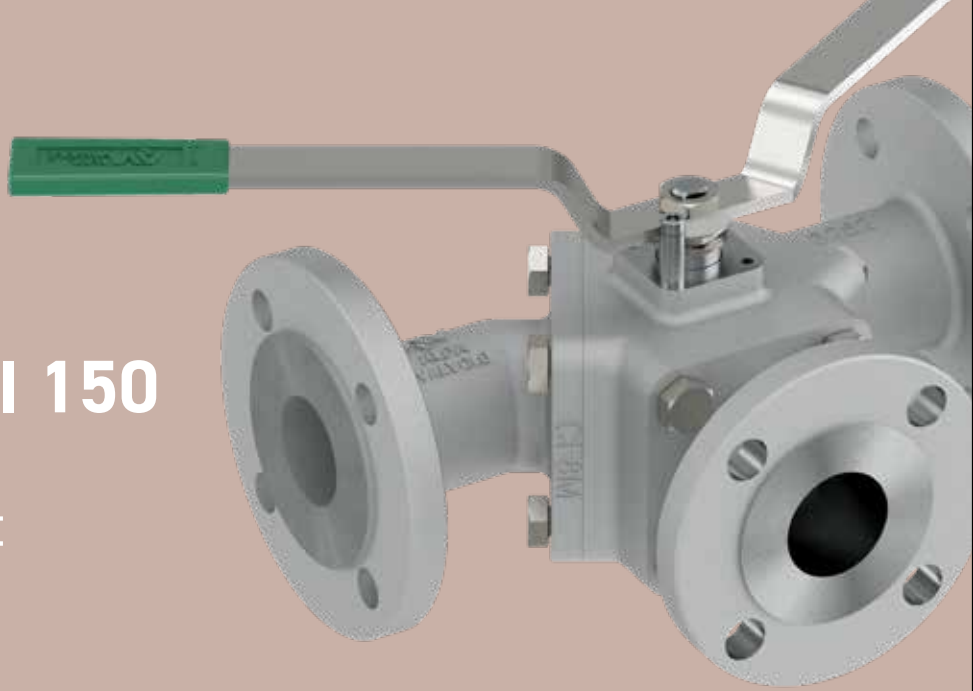
DN	15	20	25	32	40	50	65	80	100	125	150	200	250
∅"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"	8"	10"
∅ E	14	19	24	29	38	48	64	76	95	118	152	200	250
L	75	80	95	100	110	120	140	150	165	195	220	250	310
M	150	150	185	185	275	275	380	380	440	440	*	*	*
H	66	70	82	86	116	124	139	144	195	209	-	-	-
h	52	54	69	72	95	101	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
∅ F	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M16	M16	M20
∅ 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




ALFA 32

PN 10-40 | ANSI 150

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 premi-guarnizione	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

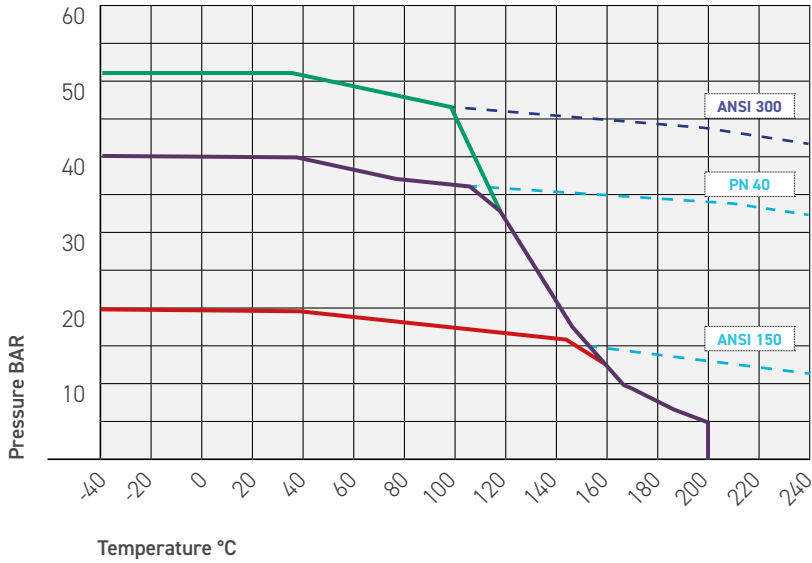
- **Company owned compound: PTFE + CARBON + GRAPHITE** / Miscela proprietaria: PTFE + CARBONE + VETRO + GRAFITE
- **Increased pressure resistance at high temperature thanks to the carbon filling** / Incremento della resistenza alla pressione alle alte temperature grazie all'aggiunta di carbone
- **Less deformation under load thanks to the glass filling** / Minore deformazione sotto carico grazie all'aggiunta 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)

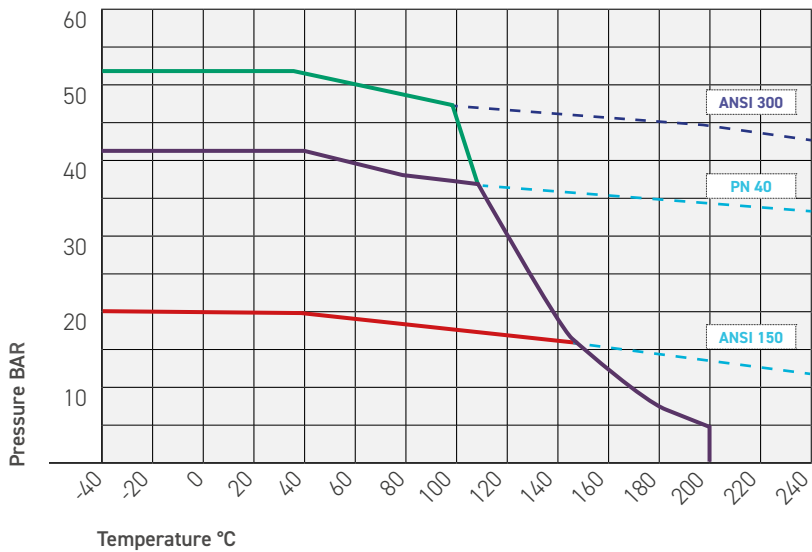
$\frac{1}{2}'' \leq DN \leq 2''$



- ANSI 150
- PN 10 - 40
- ANSI 300

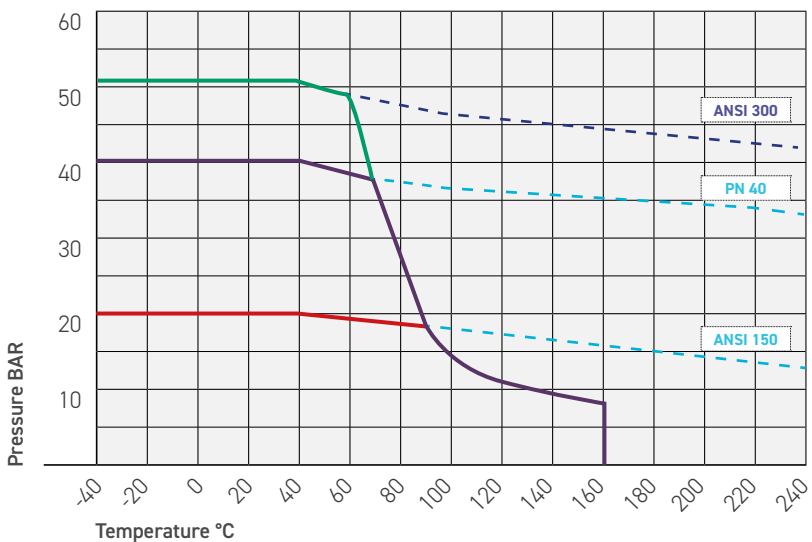
DN	$\frac{1}{2}'' \leq DN \leq 2''$ (15 ≤ DN ≤ 50)
P max @ Tmax	6,5 bar @ 200°C

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



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

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

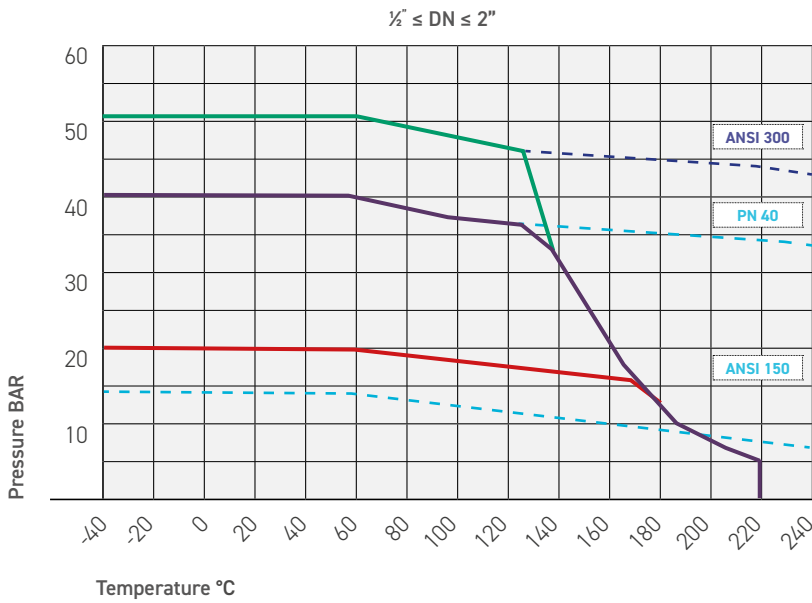


DN	$5'' \leq DN \leq 6''$ (125 ≤ DN ≤ 150)
P max @ Tmax	8 bar @ 160°C



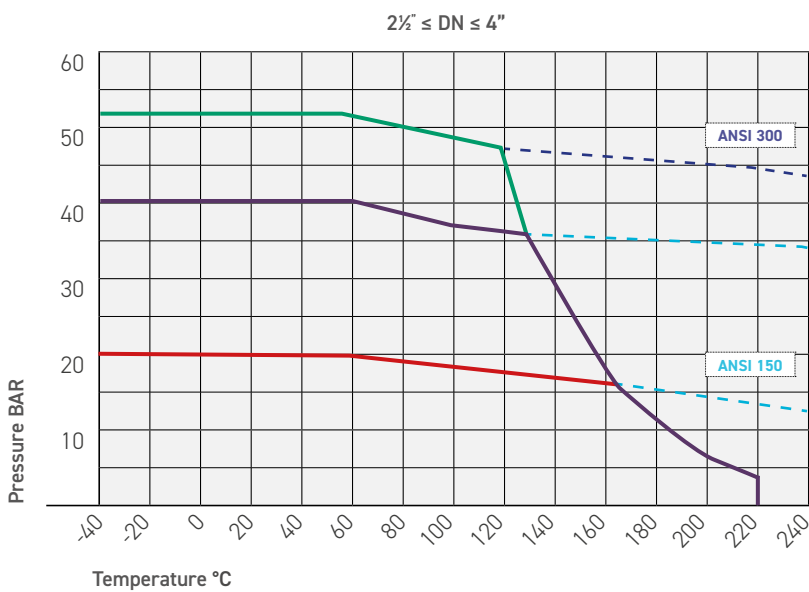
VALVES / VALVOLE: ALFA 103/104

ALFAGRAPH SEATS / SEDI IN ALFAGRAPH (ON REQUEST)

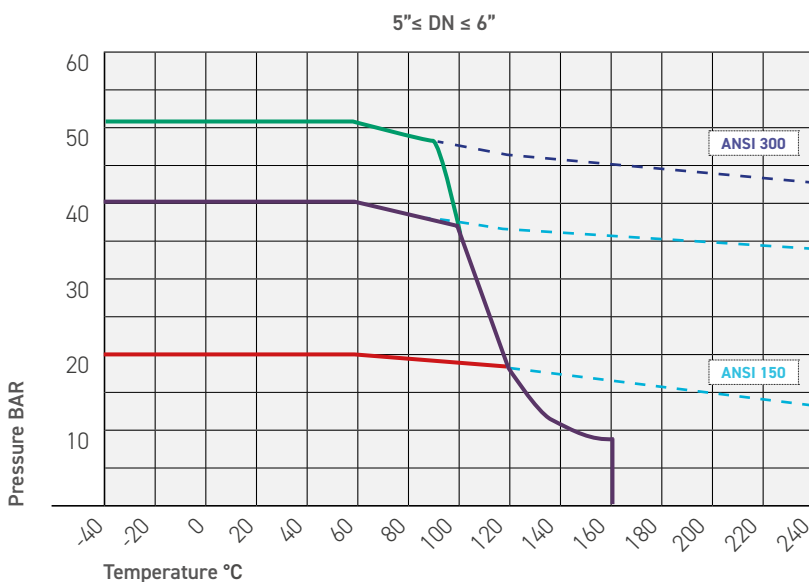


- ANSI 150
- PN 10 - 40
- ANSI 300

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



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



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

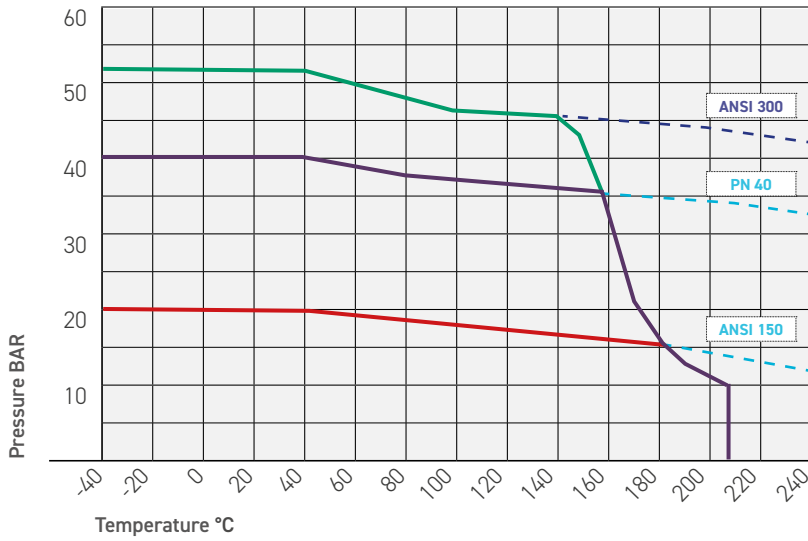




VALVES / VALVOLE: ALFA 103/104

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

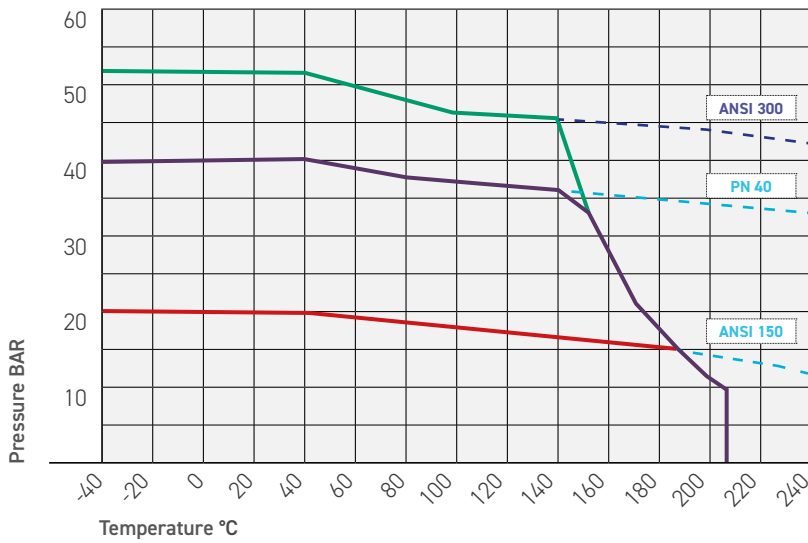
$\frac{1}{2}'' \leq DN \leq 2''$



- ANSI 150
- PN 10 - 40
- ANSI 300

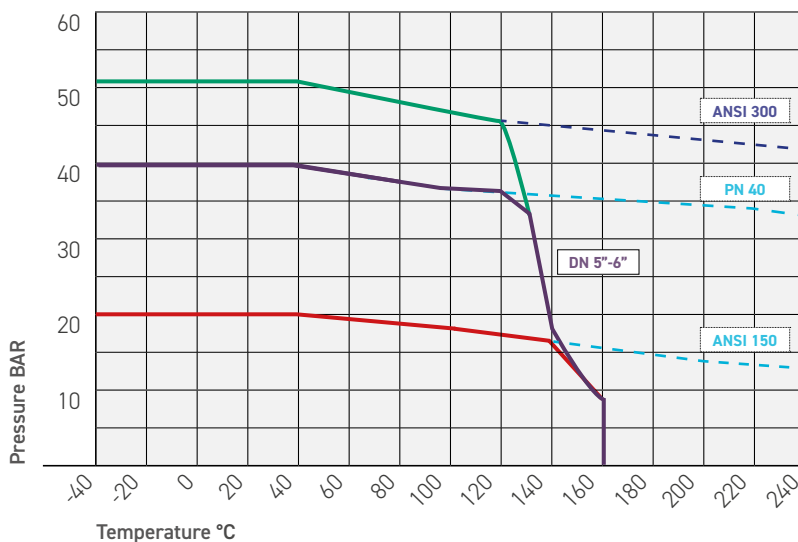
DN	$\frac{1}{2}'' \leq DN \leq 2''$ (15 ≤ DN ≤ 50)
P max @ Tmax	10 bar @ 210°C

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



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

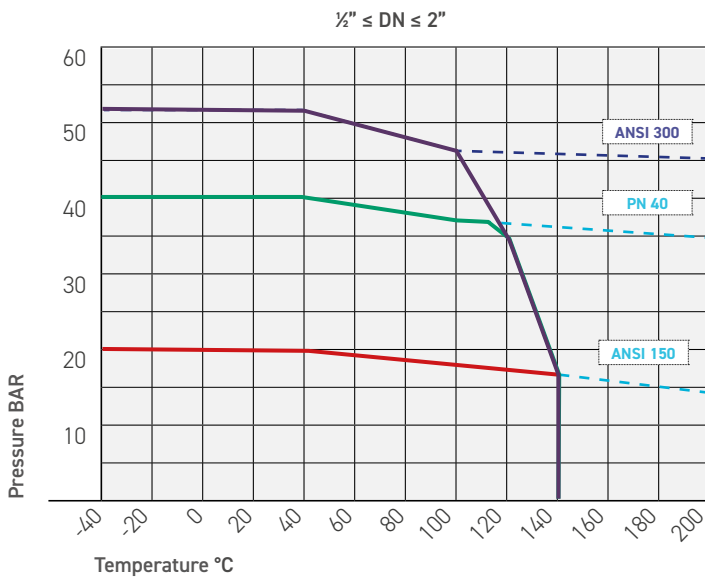
$5'' \leq DN \leq 6''$



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

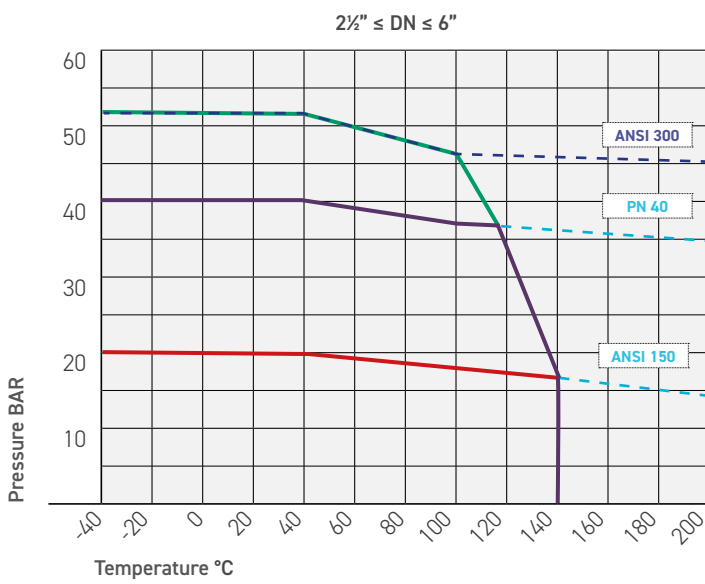
VALVES / VALVOLE: ALFA 30/32

TFM SEATS / SEDI IN TFM (STANDARD EXECUTION)

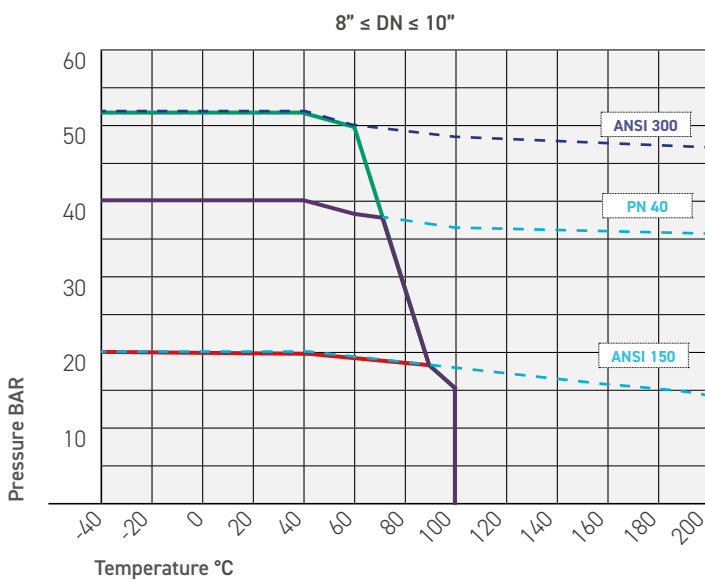


- ANSI 150
- PN 10 - 40
- ANSI 300

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



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



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



COUPLED VALVES

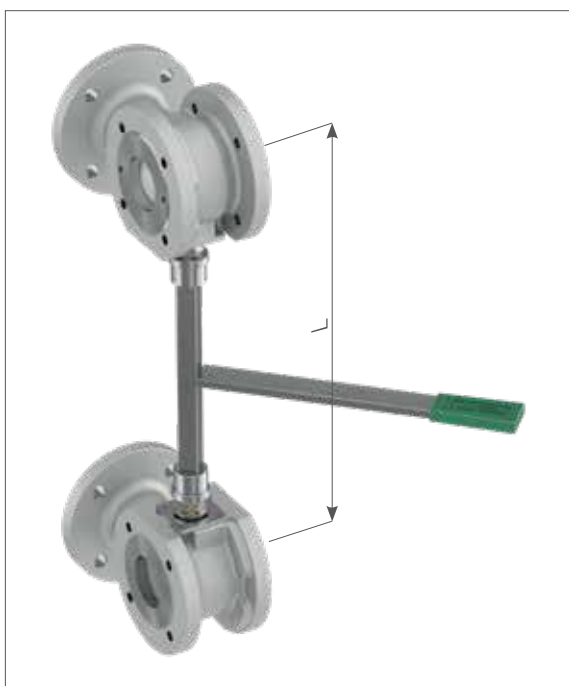
Valvole accoppiate

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

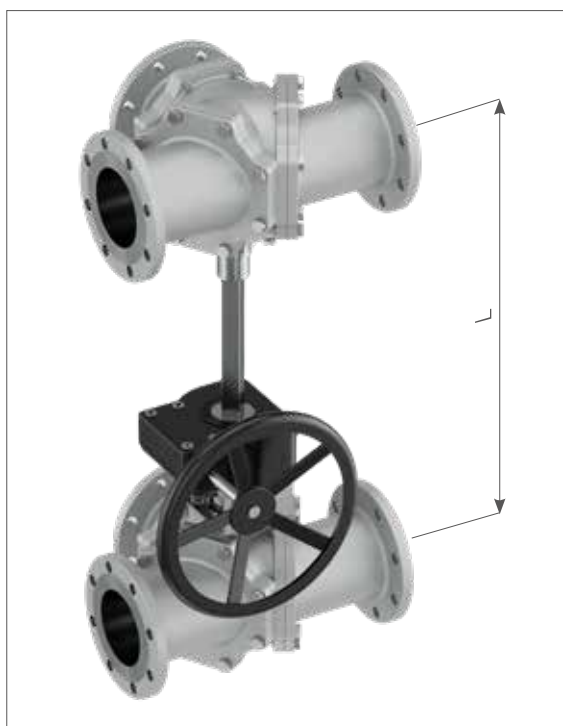
GROUP OF ALFA 103 OPERATED BY SINGLE MANUAL GEAR / ALFA 103 ACCOPPIATE CON UNICO RIDUTTORE MANUALE



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 ACCOPPIATE 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				

ALFA M34
1000 PSI / PN63

OPTIONAL EXECUTIONS

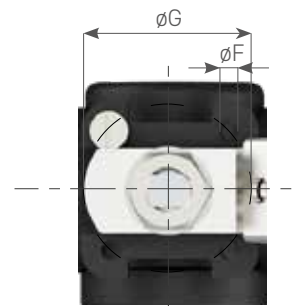
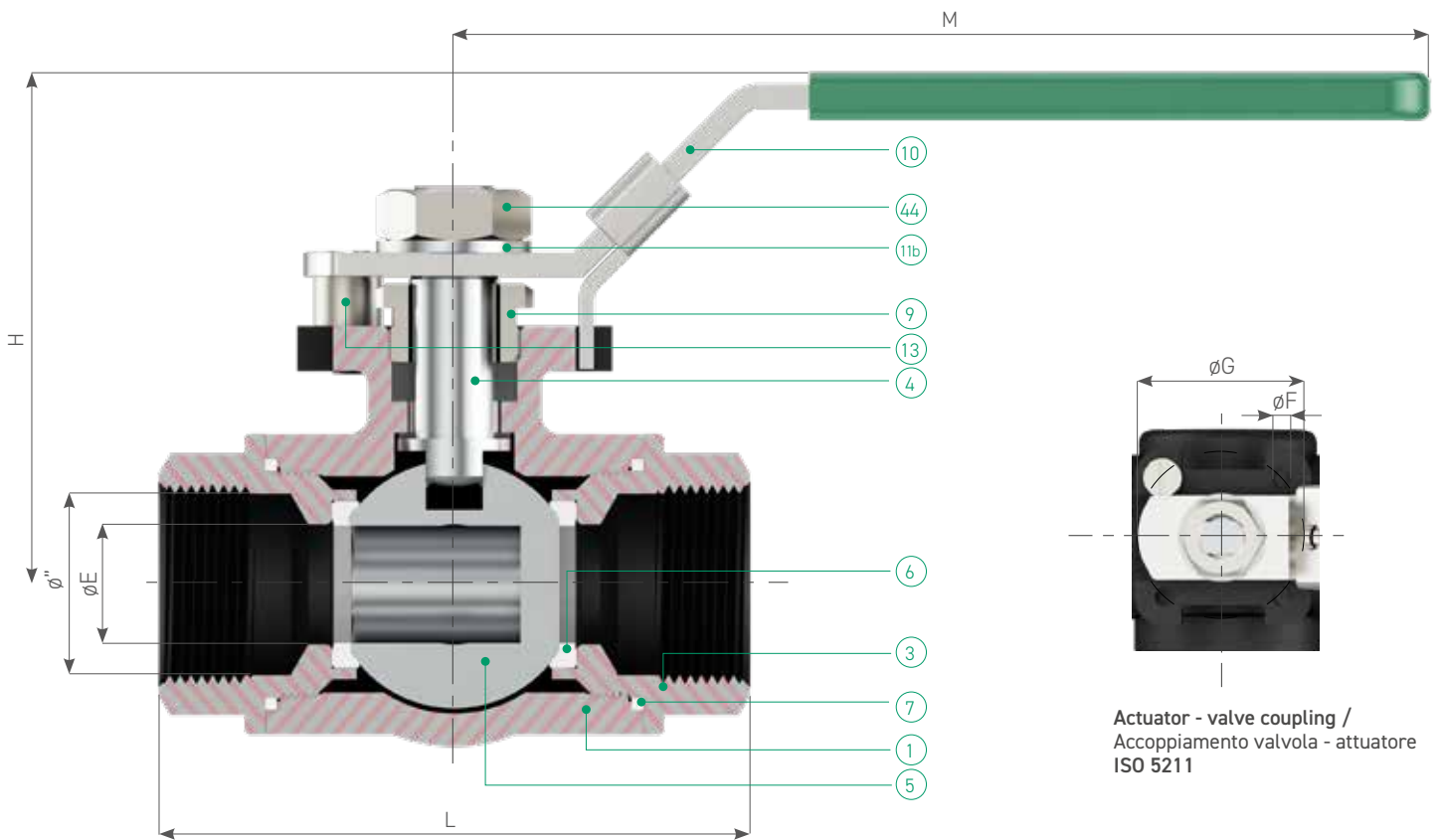
Esecuzioni optional



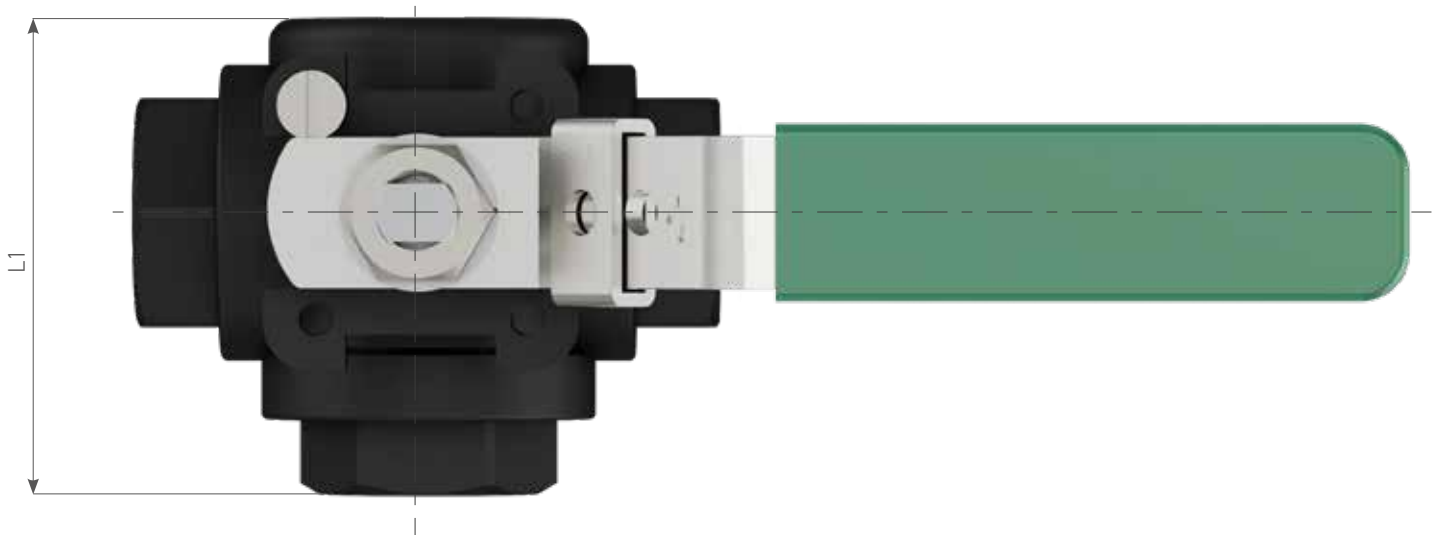
**LOCKING DEVICE / DISPOSITIVO DI
BLOCCAGGIO**

**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

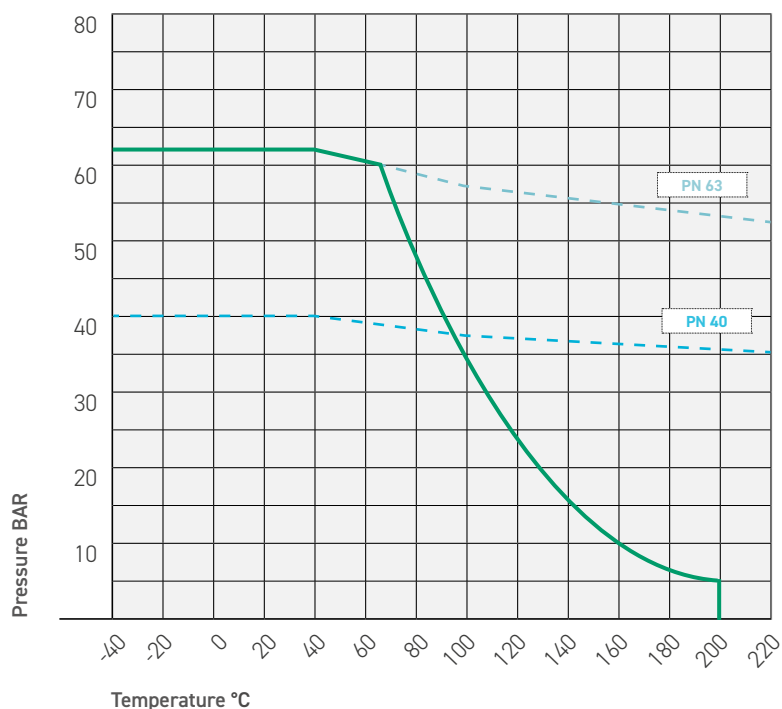
Standard valve materials / Materiali costruzione valvola standard

	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 premi-guarnizione	1	AISI 304
10	lever leva	1	AISI 304
11	stem nut dado stelo	1	AISI 304
11b	thrust washer rondella reggispinta	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	1¼"	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



