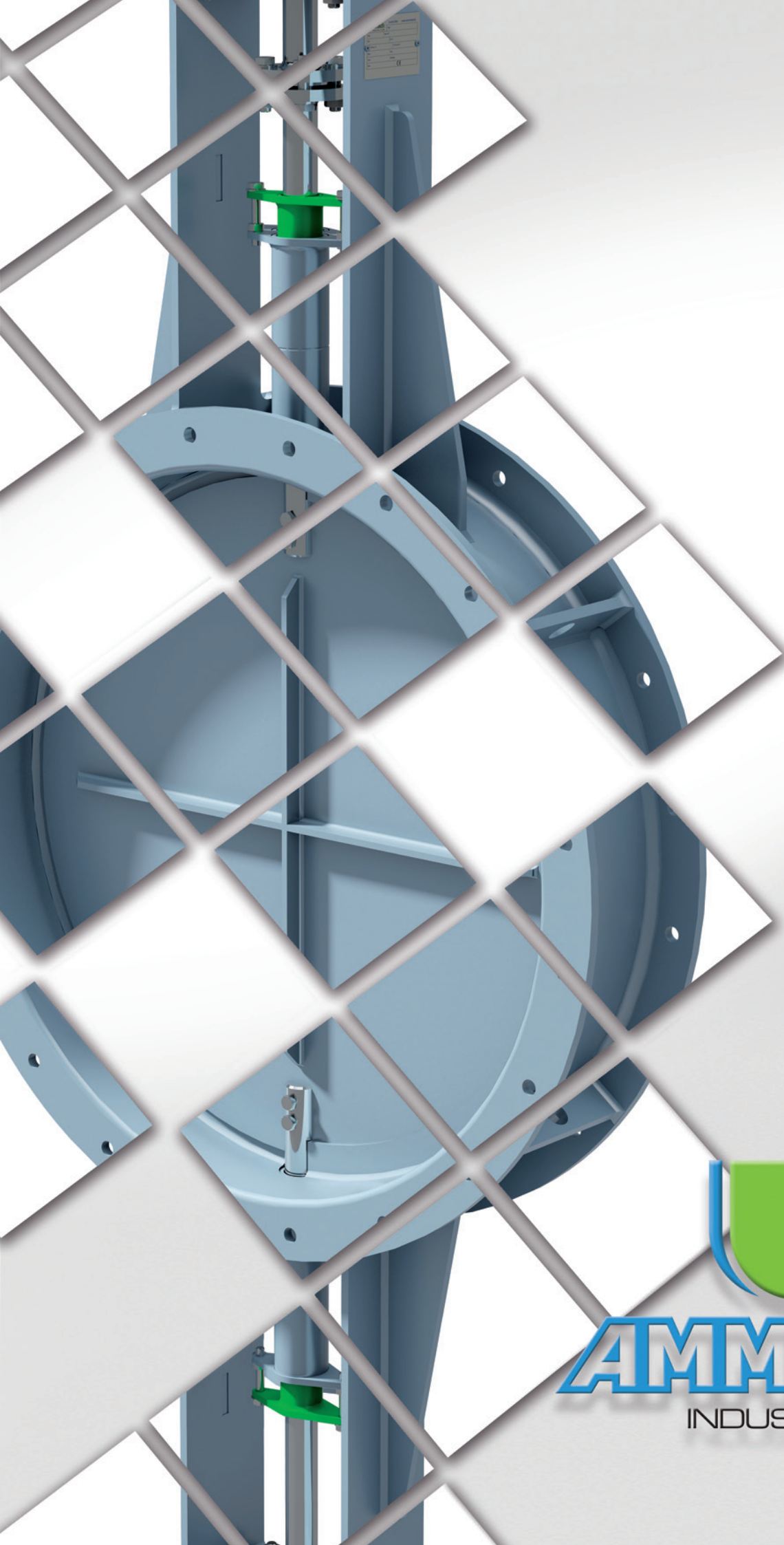




AMM 780 SERIES 7



AMMtech
INDUSTRIAL VALVES



BUTTERFLY DAMPER VALVE

AMM 780



780

SERIES 7

AMM 780

VALVOLA A FARFALLA PER FUMI E ALTE TEMPERATURE

■ Campi di applicazione

- Fluidi: Aria, Gas e Fumi
- Termovalorizzatori ed Impianti d'Incenerimento
- Cogenerazione
- Biomassa e Biogas
- Industria siderurgica
- Vetriere
- Impianti di filtrazione e abbattimento polveri
- Centrali Elettriche
- Sistemi di recupero calore
- Caldaie e bruciatori
- Industria Chimica e Petrochimica
- Impianti di Ossidazione termica e Rigenerativa

■ Condizioni d'esercizio

- **Massima temperatura d'esercizio: 1000°C**

- **Pressione massima d'esercizio: 3 bar**

La pressione massima varia al variare del diametro e della temperatura

■ Caratteristiche generali

- Servizio ON-OFF o modulante
- Diametro da DN 50 a DN 1000 (diametri superiori a DN 1000 su richiesta)
- Connessioni: WAFER o FLANGIATA PN6, PN10, ANSI 150, a saldare o a disegno
- Supporti esterni
- Classe di tenuta: I, II e III secondo FCI 70-2 (ex ANSI B16.104)
- Manuali e motorizzate con attuazione pneumatica o elettrica
- Predisposta per coibentazione esterna 250 mm

■ Materiali

- AISI 310
- AISI 321
- Inconel
- Altri su richiesta

■ Standard applicabili

- Secondo EN 12516-1, EN 736-1, EN 736-2, EN 736-3, EN 1349, EN 593, ASMEB16.34
- Materiali secondo EN 1503-1, EN 1503-2
- Connessioni secondo EN 1092-1, ASME B16.5
- Marcatura secondo EN 19
- Certificazione Processi di saldatura UNI EN 287-1

■ Direttive applicabili

- Dichiarazione di conformità alla direttiva macchine 2006/42/CE
- Dichiarazione di conformità alla direttiva PED 97/23/CE
- Dichiarazione di conformità alla direttiva ATEX 94/9/CE
- Gruppo II Categoria 3 per Zona 2 Gas e 22 Polveri (II 3 GD)**

■ Test

- In accordo a AMMtech Quality Control Plan QCP00
- In accordo a ANSI/FCI70-2, EN 12266-1, EN 12266-2, EN 60534

■ Attuazione

- Attuatori pneumatici e elettrici secondo EN 15714-1, EN 15714-2, EN 15714-3
- Connessioni e Attuatori secondo EN ISO 5210, EN ISO 5211

AMM 780

BUTTERFLY DAMPER VALVE

■ Applications

- Fluids: Air, Gas and Fumes
- CHP and Incineration Plants
- Biomass and Biogas and Renewable Energy Plants
- Steel Industry and Furnaces
- Glass Industry
- Air Pollution and Filtration
- Power Plants
- Heat recovery systems
- Boilers and Burners
- Chemical Industry
- Oil and Gas
- Thermal Oxidizers

■ Working Conditions

- **Maximum Working Temperature up to 1000°C**

- **Maximum Working Pressure up to 3 bar**

Maximum Working pressure varies with diameter and temperature

■ General Characteristics

- ON/OFF or MODULATING Service
- Diameter Range from DN 50 to DN 1000 (DN above 1000 upon request)
- End Connections: WAFER or FLANGED PN6, PN10, ANSI 150, Butt Weld or according to Customer Drawing
- Outside Bushing
- Tightness Class I, II and III according to FCI 70-2 (ex ANSI B16.104)
- Operated by Handlever, Pneumatic or Electric Actuators
- Designed for Insulation 250 mm

■ Materials

- 310 SS
- 321 SS
- Inconel
- Others upon request

■ Applicable Standards

- Designed according to EN 12516-1, EN 736-1, EN 736-2, EN 736-3, EN 1349, EN 593, ASMEB16.34
- Materials according to EN 1503-1, EN 1503-2
- End Connections as per EN 1092-1, ASME B16.5
- Marking according to EN 19
- Certified Welding Procedures according to UNI EN 287-1

■ Applicable Directives

- Declaration of Conformity in Compliance with Machinery Directive 2006/42/CE
- Declaration of Conformity in Compliance with Directive PED 97/23/CE
- Declaration of Conformity in Compliance with Directive ATEX 94/9/CE
- Group II Category 3 for Zone 2 Gas and 22 Dust (II 3 GD)**

■ Test

- According to AMMtech Quality Control Plan QCP00
- According to ANSI/FCI70-2, EN 12266-1, EN 12266-2, EN 60534

■ Driving Systems

- Pneumatic and Electric Actuators according to EN 15714-1, EN 15714-2, EN 15714-3
- Actuators End Connections as per EN ISO 5210, EN ISO 5211



Flow Coefficient Kv										
DN	NPS	90°	80°	70°	60°	50°	40°	30°	20°	10°
50	2"	122	91	70	51	37	23	13	6	1
65	2 1/2"	235	186	136	84	54	34	20	10	1
80	3"	387	301	222	130	76	48	29	12	1
100	4"	690	568	420	239	146	97	54	24	3
125	5"	1145	970	642	363	232	141	84	34	5
150	6"	1532	1271	840	487	306	189	100	44	5
200	8"	2777	2387	1544	848	574	356	212	91	10
250	10"	4467	3871	2444	1415	898	521	286	120	18
300	12"	6916	5748	3744	2196	1421	919	516	203	26
350	14"	8874	7419	5031	2866	1765	1081	644	246	30
400	16"	11845	9807	6652	3726	2307	1494	832	346	35
450	18"	14566	12204	8605	5026	2975	1782	1121	445	50
500	20"	19185	15490	10900	6229	3991	2384	1361	524	63
600	24"	28075	23354	15105	9116	5521	3580	2118	809	153
700	28"	38810	32334	20678	12149	7702	4933	2899	1096	261
800	32"	50604	43325	27153	16848	11232	6174	3645	1587	328
900	36"	64551	56130	34871	20742	13765	7735	4561	1961	416
1000	40"	87698	73298	45161	27068	17563	10871	5870	2400	570

$$K_v = Q_v / 519 * [(p_g * T_1) / (\Delta p * p_2)]^{0.5} \quad (C_v = K_v / 0.8565)$$

where:

Q_v [m³/h] : Flow Rate of gas, related to 0 °C and 1013 mbar

p_g [kg/m³] : density of gases at 0 °C and 1013 mbar

T_1 [K] : absolute temperature at upstream side of the valve

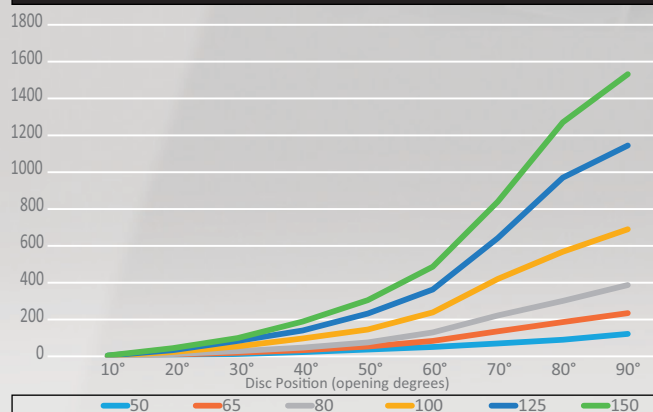
Δp [bar] : pressure drop in the valve

p_2 [bar] : absolute pressure at downstream side of the valve

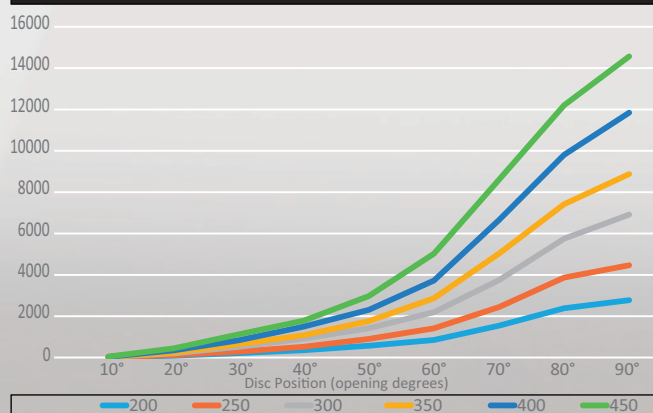
AMM 780

BUTTERFLY DAMPER VALVE

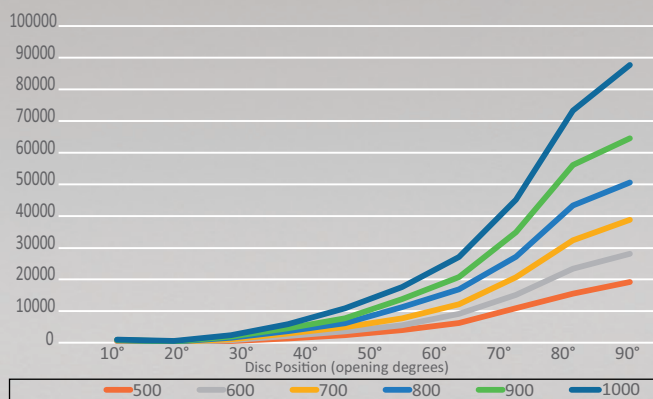
Flow Coefficient Kv DN 50 - DN 150



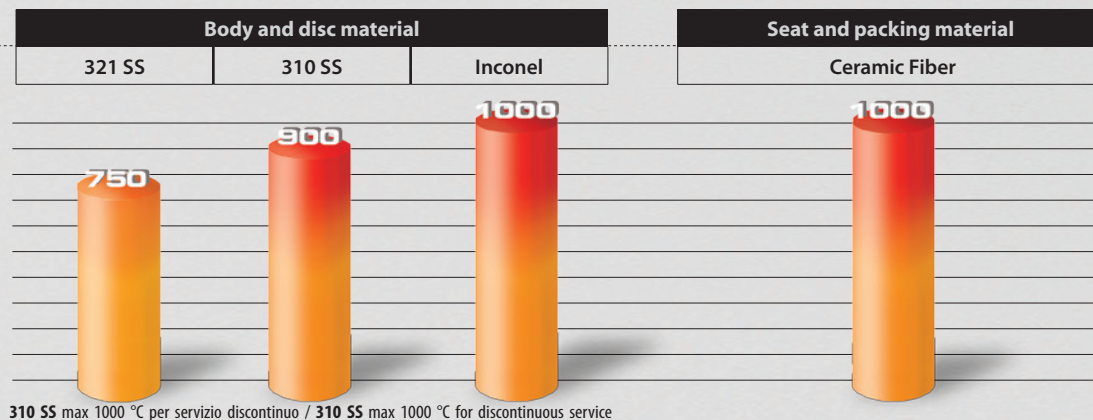
Flow Coefficient Kv DN 200 - DN 450



Flow Coefficient Kv DN 500 - DN 1000



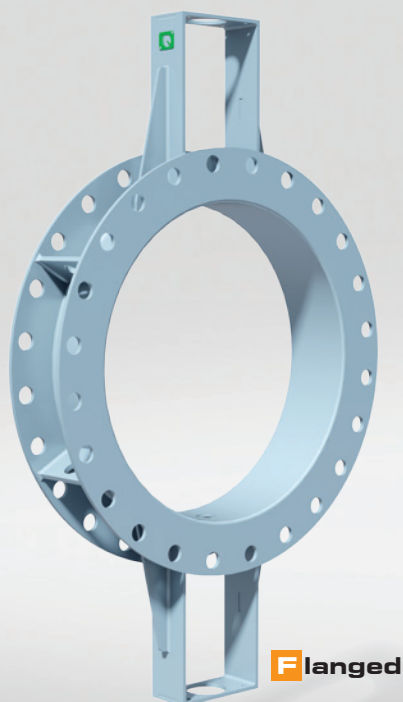
1000
900
800
700
600
500
400
300
200
100
0



7800

SERIES 7

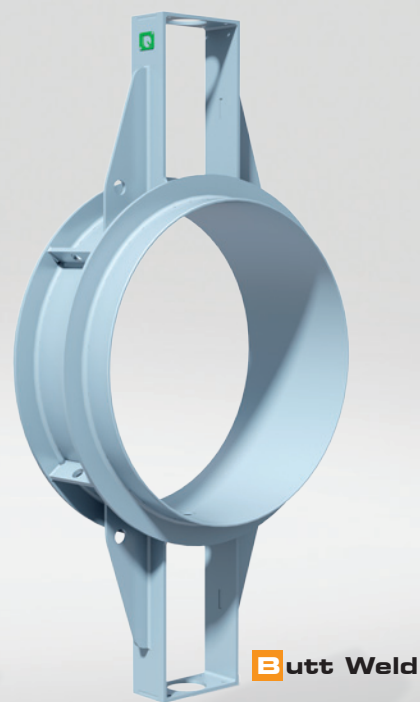
BODY STYLES



Flanged

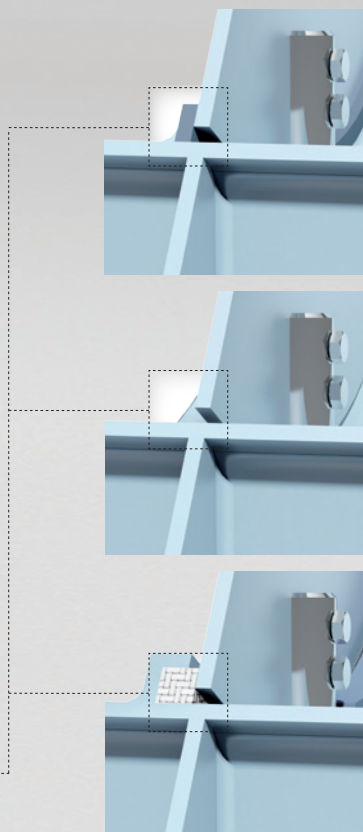
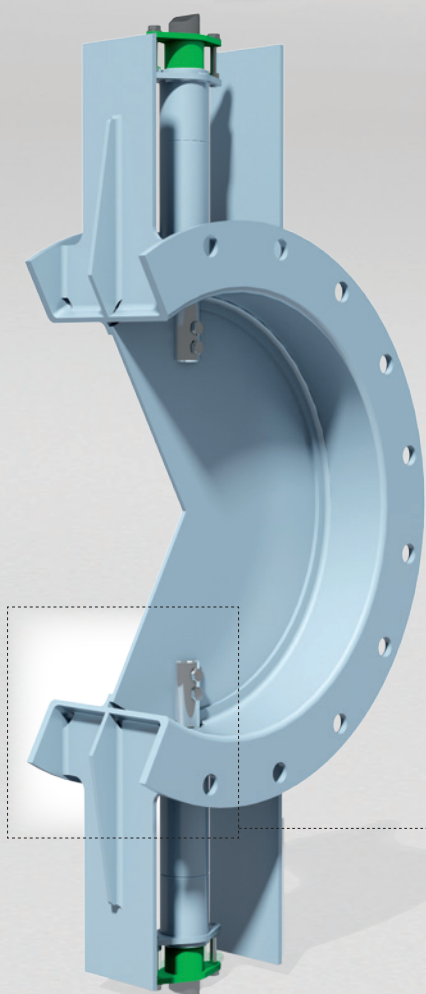


Wafer



Butt Weld

SEAT STYLES



COD. 0 standard

Tenuta Met / Met - Metal to Metal seat		
DN	CLASS	VALUE (FCI 70-2)
from 50 to 300	I	Relative tightness
from 350 to 1000	II	< 0,5%Kvs
-	-	-

COD. 3

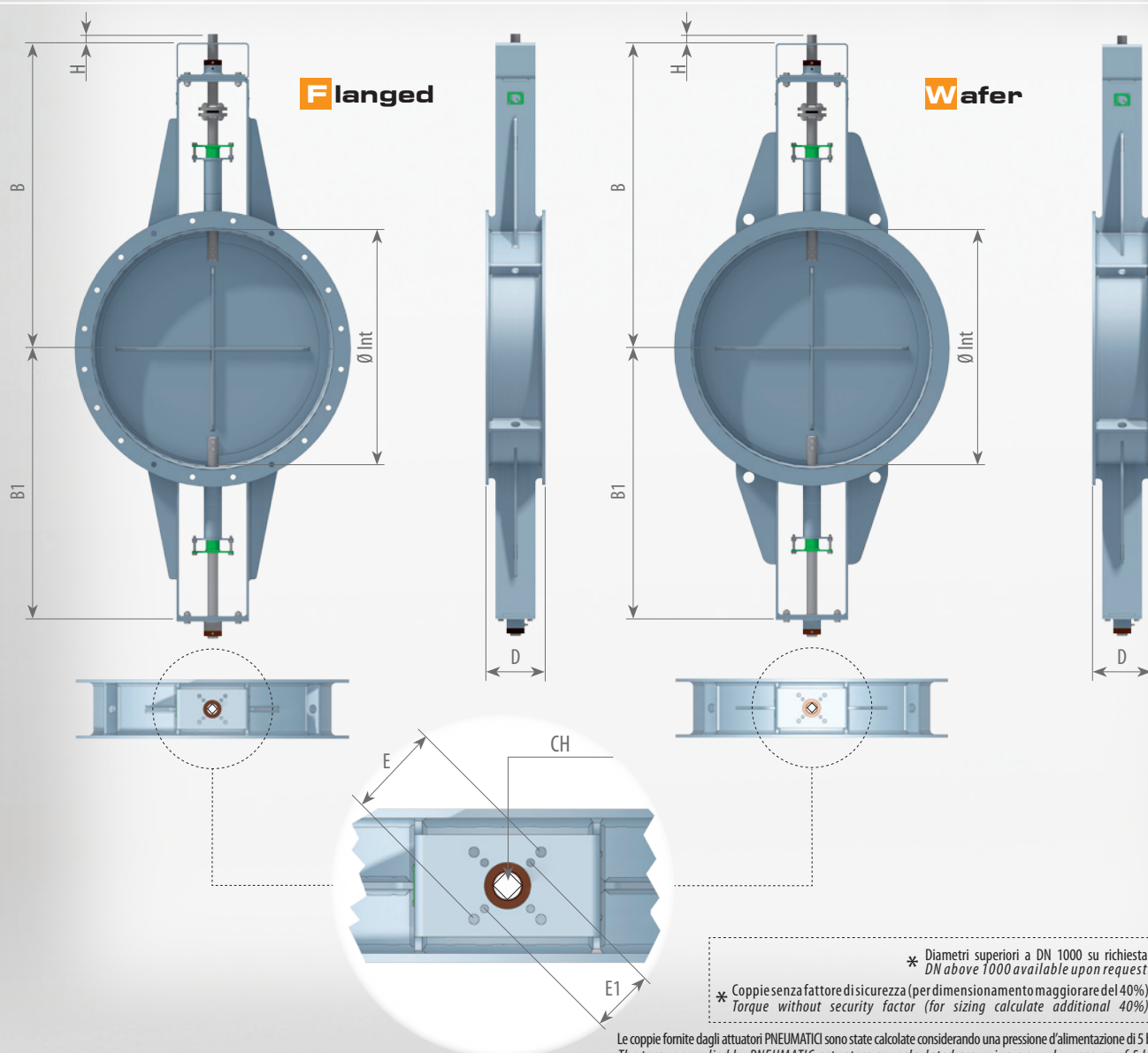
Senza battuta - No seat		
DN	CLASS	VALUE (FCI 70-2)
from 50 to 1000	I	Relative tightness
-	-	-
-	-	-

COD. 5

Tenuta potenziata con Fibra Ceramica Soft Sealing with Ceramic Fiber		
DN	CLASS	VALUE (FCI 70-2)
from 50 to 200	I	Relative tightness
from 250 to 450	II	< 0,5%Kvs
from 500 to 1000	III	< 0,1%Kvs



BUTTERFLY DAMPER VALVE



DN	P. MAX (bar)	Ø Int	D	B	B1	CH	H	E	E1	WEIGHT		Max Torque (Nm)	Suggested Actuator	
								ISO 5210	ISO 5210	FLANGED	WAFER		Double Acting	Single Acting
50	3	54	64	500	465	11	14	F05		6	5,5	8	AM15.0	AM17.4
65	3	70	64	508	473	11	14	F05		7	6,5	8	AM15.0	AM17.4
80	3	83	64	515	480	11	14	F05		10	9	8	AM15.0	AM17.4
100	3	108	64	527	492	11	14	F05		14	13	8	AM15.0	AM17.4
125	3	138	64	540	505	11	14	F05		20	18	10	AM15.0	AM17.4
150	3	160	140	584	554	14	17	F07	F05	27	24	10	AM17.0	AM20.4
200	3	211	140	610	580	14	17	F07	F05	31	27	15	AM17.0	AM20.4
250	2	265	140	637	607	14	17	F07	F05	34	29	18	AM17.0	AM30.4
300	2	316	140	662	632	14	17	F07	F05	38	33	22	AM17.0	AM30.4
350	2	350	140	741	691	22	20	F10	F07	59	53	26	AM35.0	AM40.4
400	2	400	140	766	716	22	20	F10	F07	63	56	30	AM35.0	AM40.4
450	1	450	190	791	741	22	20	F10	F07	67	59	35	AM35.0	AM40.4
500	1	500	190	816	766	22	20	F10	F07	80	71	42	AM35.0	AM40.4
600	1	600	190	866	816	22	20	F10	F07	92	82	55	AM35.0	AM40.4
700	1	700	190	916	866	22	20	F10	F07	112	98	68	AM40.0	AM45.4
800	0,5	800	190	1048	978	27	25	F14	F12	173	157	77	AM50.0	AM55.4
900	0,5	900	240	1098	1028	27	25	F14	F12	190	171	89	AM50.0	AM55.4
1000	0,5	1000	240	1148	1078	27	25	F14	F12	215	194	104	AM50.0	AM55.4

AMMtech si riserva il diritto di apportare modifiche ai propri prodotti in qualunque momento / AMMtech reserves the right to make changes to its products at any time.

780

SERIES 7

Bracket
- Carbon Steel

Premitreccia / Push Packing
- 304 SS

Treccia di Tenuta / Packing Braid
- Fibra Ceramica / Ceramic Fiber

Supporto / Support
- 321 SS
- 310 SS
- Inconel

Corpo / Body
- 321 SS
- 310 SS
- Inconel

Treccia di Tenuta / Packing Braid
- Fibra Ceramica / Ceramic Fiber

Premitreccia / Push Packing
- 304 SS

Targhetta / Name Plate



Bronzina / Bushing
- Bronzo
- Bronze

Viteria / Bolting
- N°4 Stainless Steel Grade A2

**Supporto Bronzina
Bushing Support**
- 304 SS

**Albero con taglio termico
Shaft with thermal cut**
- 321 SS
- 310 SS
- Inconel

Viteria / Bolting
- Stainless Steel Grade A2

Guarnizioni isolanti / Insulating Gasket

Albero Superiore / Upper Shaft
- 321 SS
- 310 SS
- Inconel

Lente / Disc
- 321 SS
- 310 SS
- Inconel

Albero Inferiore / Lower Shaft
- 321 SS
- 310 SS
- Inconel

Spina / Pin
- 310 SS
- Inconel

**Supporto Bronzina
Bushing Support**
- 304 SS

Viteria / Bolting
- N°4 Stainless Steel Grade A2

Bronzina / Bushing
- Bronzo
- Bronze



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