



AMM 704

SERIE 7



**AMM
704**

VALVOLA A FARFALLA PER FUMI E ALTE TEMPERATURE

BUTTERFLY DAMPER VALVE FOR FUMES AND HIGH TEMPERATURES

Caratteristiche principali

- Corpo interamente di fusione in CF8M (AISI 316) o Ghisa sferoidale (GGG40)
- Dimensioni ridotte
- Design robusto
- Bassi costi di manutenzione
- Disponibile dal DN50 al DN300

Campi di applicazione

- Fluidi: aria, gas e fumi
- Termovalorizzatori ed Impianti d'Incenerimento
- Cogenerazione
- Biomassa e Biogas
- Industria siderurgica
- Vetriere
- Cementifici
- Impianti di filtrazione e abbattimento polveri
- Centrali Elettriche
- Sistemi di recupero calore
- Caldaie e bruciatori
- Industria Chimica e Petrochimica
- Impianti di Ventilazione e Condizionamento
- Impianti di Ossidazione termica e Rigenerativa

Condizioni d'esercizio

- **Massima temperatura d'esercizio: 700°C**
- **Pressione massima d'esercizio fino a 3 bar**

Caratteristiche generali

- Servizio ON-OFF o modulante
- Diametro da DN 50 a DN 300
- Connessioni: WAFER o FLANGIATA PN6, PN10, PN16, ANSI 150 o a disegno

Main features

- Body in cast CF8M (316 SS) or Ductile Iron (GGG40)
- Reduced dimensions
- Robust design
- Low maintenance cost
- From DN50 to DN300

Applications

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

Working Conditions

- **Maximum working temperature up to 700°C**
- **Maximum working pressure up to 3 bar**

General Characteristics

- ON/OFF or MODULATING Service
- Diameter range from DN 50 to DN 300
- End connections: WAFER or FLANGED PN6, PN10, ANSI 150 or to customer drawing

- Classe di tenuta: I, II e III secondo FCI 70-2
- Manuali e motorizzate con attuazione pneumatica o elettrica
- Predisposta per coibentazione esterna fino a 200 mm con kit alta temperatura

Materiali

- Corpo e disco in CF8M (AISI316) o Ghisa sferoidale (GGG40)
- Corpo in CF8M (AISI316) e disco in AISI321 per applicazioni fino a 700°C
- Corpo in Ghisa sferoidale (GGG40) con lente in Corten disponibile solo su DN250 e DN300

Standard applicabili

- Secondo EN 12516-1, EN 736-1/2/3, EN 1349, EN 593, ASMEB16.34
- Connessioni secondo EN 1092-1, ASME B16.5
- Marcatura secondo EN 19
- Certificazione Processi di saldatura UNI EN ISO 9606

Direttive applicabili

- Dichiarazione di conformità alla direttiva macchine 2006/42/CE
- Dichiarazione di conformità alla direttiva PED 2014/68/UE
- Dichiarazione di conformità alla direttiva ATEX 2014/34/UE

Gruppo II Categoria 2 per Zona 1-2 Gas e 21-22 Polveri (II 2 GD)

Verniciatura

- Ghisa-Corten A: RAL 9005 in accordo a PSP00

Test

- In accordo a AMMtech Quality Control Plan QCP02
- 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

- Tightness Class I, II and III according to FCI 70-2
- Operated by Handlever, Pneumatic or Electric Actuators
- Designed for insulation 200mm with high temperature kit

Materials

- Body and disc in CF8M (316 SS) or Ductile Iron (GGG40)
- Body and shaft in CF8M (316 SS) disc in 321 SS for 700°C
- Body in Ductile Iron (GGG40) and disc in Corten available on DN250 and DN300

Applicable Standards

- According to EN 12516-1, EN 736-1/2/3, EN 1349, EN 593, ASMEB16.34
- Connections according to EN 1092-1, ASME B16.5
- Marking according to EN 19
- Certified welding procedures according to UNI EN ISO 9606

Applicable Directives

- Declaration of Conformity in Compliance with Machinery Directive 2006/42/CE
 - Declaration of Conformity in Compliance with European Directive PED 2014/68/UE
 - Declaration of Conformity in Compliance with European Directive ATEX 2014/34/UE
- #### Group II Category 2 for Zone 1-2 Gas and 21-22 Dust (II 2 GD)

Coating

- Cast iron-Corten A: RAL 9005 according to PSP00

Test

- According to AMMtech Quality Control Plan QCP02
- 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

BUTTERFLY DAMPER VALVE





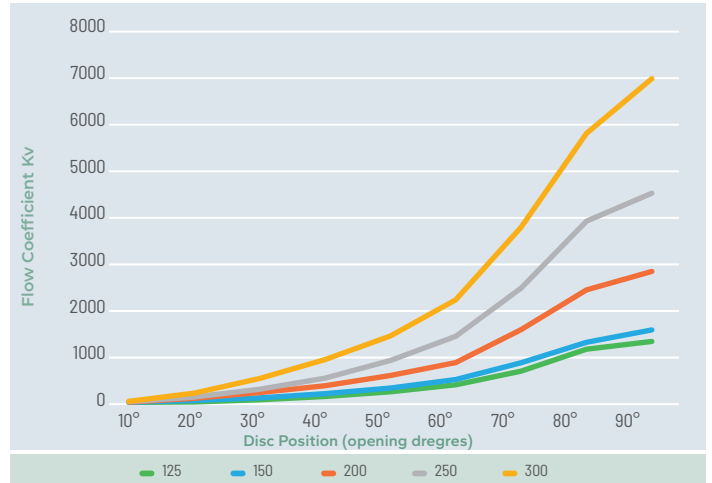
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BUTTERFLY DAMPER VALVE FLOW COEFFICIENT

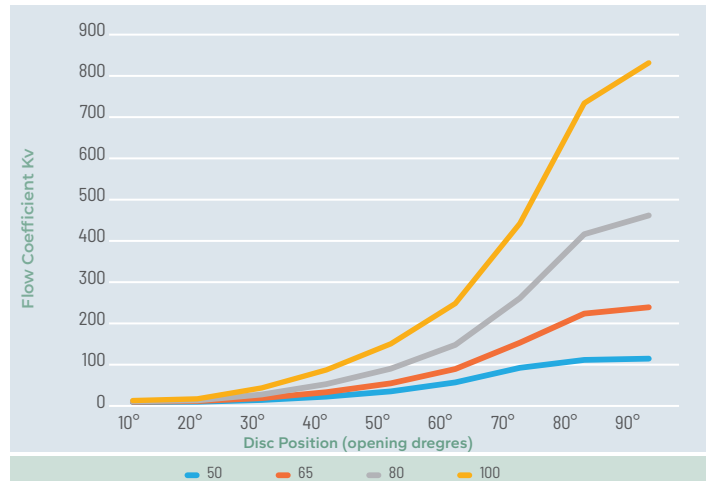
Flow Coefficient Kv

DN	NPS	90°	80°	70°	60°	50°	40°	30°	20°	10°
50	2"	105	102	83	48	26	14	5	1	0,5
65	2" 1/2	231	216	145	81	46	24	10	3	1
80	3"	457	411	255	140	82	44	19	5	2
100	4"	833	734	438	242	143	79	35	8	4
125	5"	1343	1173	691	391	236	133	62	14	5
150	6"	1593	1322	874	506	318	197	104	46	6
200	8"	2861	2458	1591	874	591	367	218	94	10
250	10"	4557	3948	2492	1443	916	532	291	122	18
300	12"	7040	5852	3811	2235	1447	935	525	206	27

Flow Coefficient Kv DN 150 - DN 400



Flow Coefficient Kv DN 150 - DN 400



$$Kv = Qn/519 \cdot [(\rho G \cdot T1)/(\Delta p \cdot p2)]^{0,5} \quad (Cv = Kv/0,8565)$$

where:

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

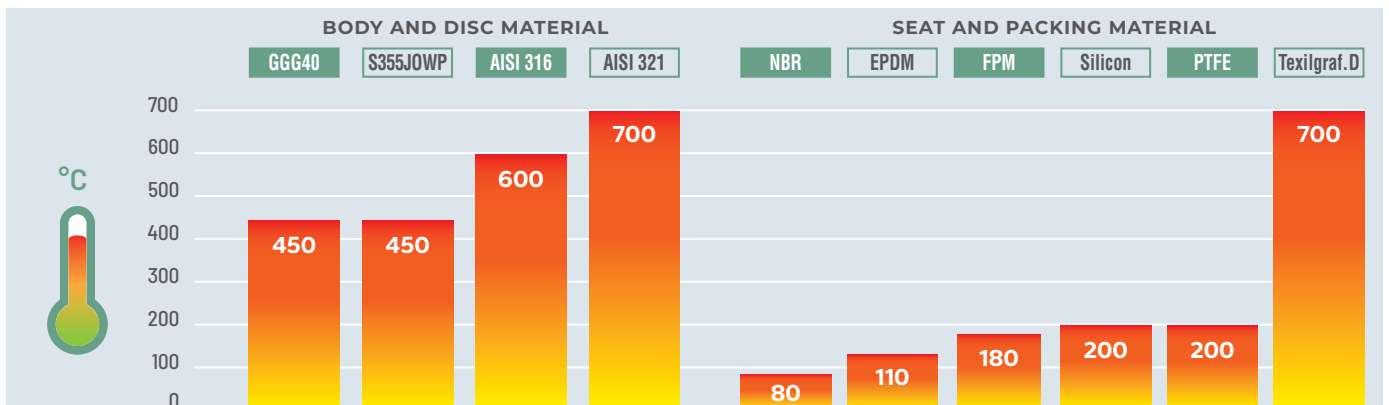
ρG [kg/m³] : density of gases at 0 °C and 1013 mbar

T1 [K] : absolute temperature at upstream side of the valve

Δp [bar] : pressure drop in the valve

p2 [bar] : absolute pressure at downstream side of the valve

VALVE MATERIAL



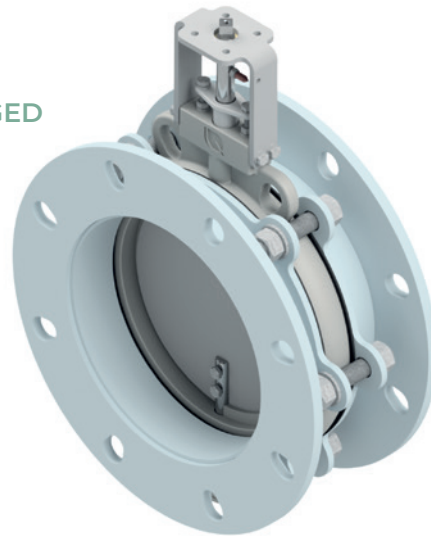
* Verificare compatibilità chimica dei materiali con fluido di processo / Chemical suitability of construction material to be verified according to process fluid

BODY STYLES

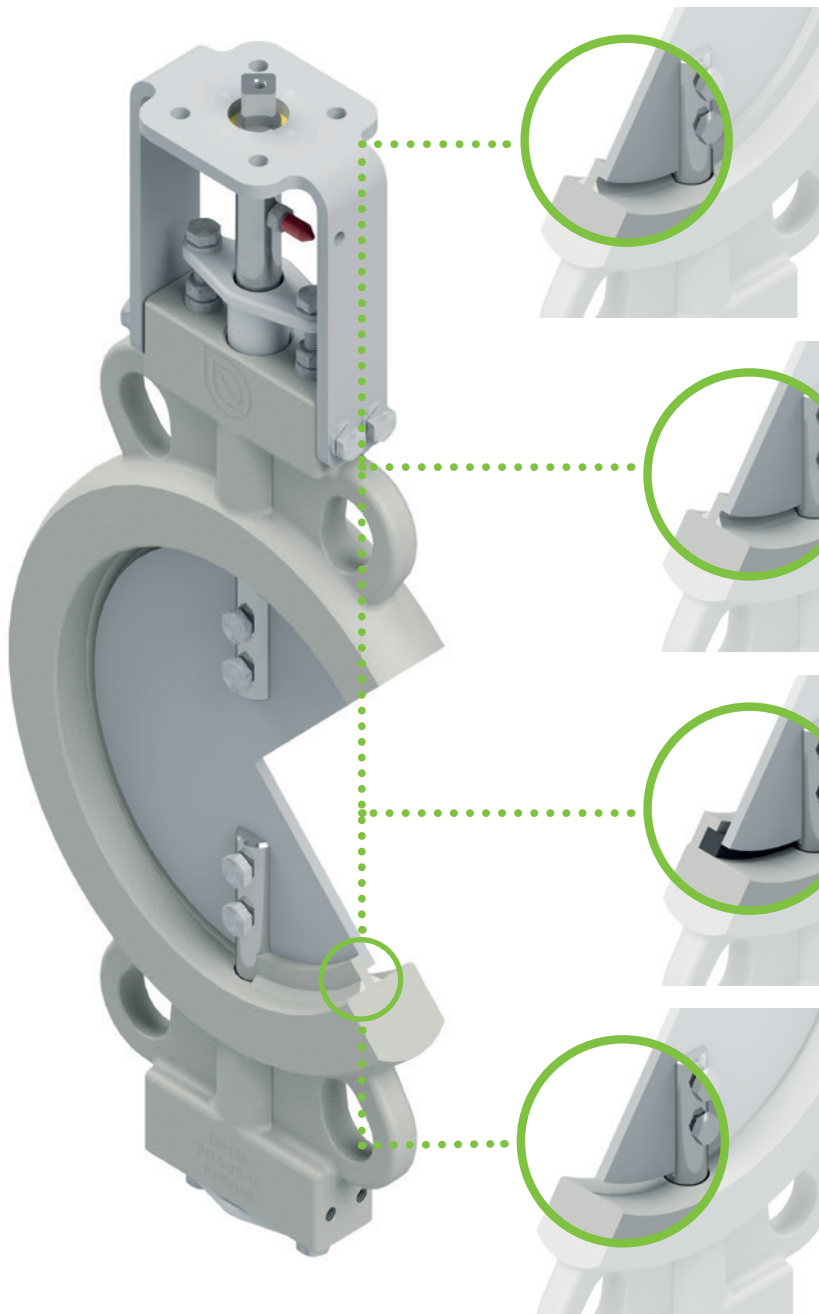
WAFER
standard version



FLANGED



SEAT STYLES



COD. 0

Tenuta met/met
Metal to metal seat

DN	CLASS	VALUE (FCI 70-2)
from DN 50 to DN 200	I	Relative Tightness
from DN 250 to DN 300	II	< 0,5% Kvs

COD. 2

Tenuta met/met lavorata meccanicamente
Metal to metal machined seat

DN	CLASS	VALUE (FCI 70-2)
from DN 50 to DN 150	II	< 0,5% Kvs
from DN 200 to DN 300	III	< 0,1% Kvs

COD. 5

Tenuta potenziata con Treccia o Elastomero
Soft Seat with Braid or Elastomer

DN	CLASS	VALUE (FCI 70-2)
from DN 50 to DN 150	II	< 0,5% Kvs
from DN 200 to DN 300	III	< 0,1% Kvs

COD. 3

Senza battuta
No seat

DN	CLASS	VALUE (FCI 70-2)
from DN 50 to DN 300	I	Relative Tightness
-	-	-

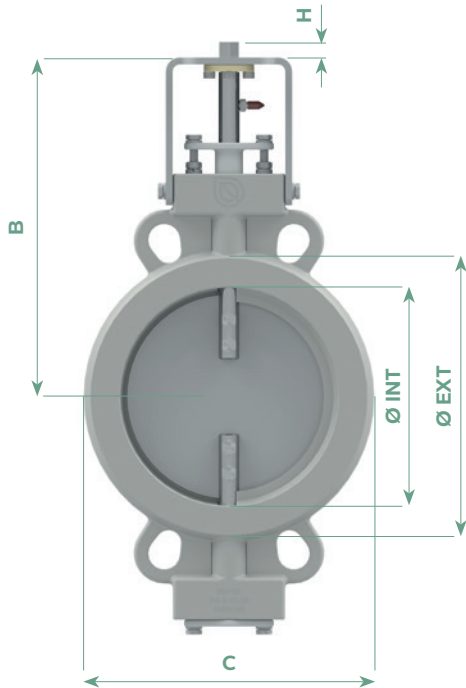


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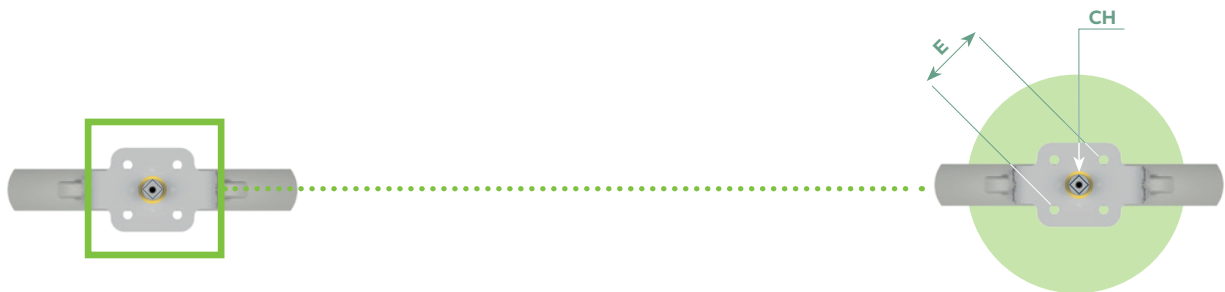
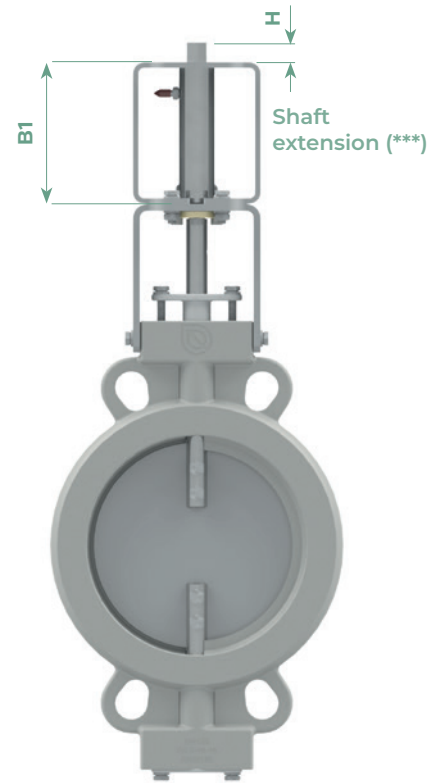
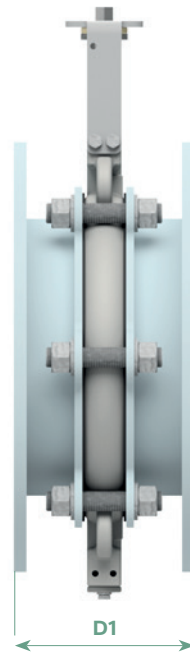
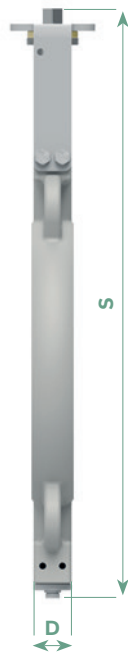
BUTTERFLY DAMPER VALVE

TECHNICAL DATA

WAFER



FLANGED



DN	INCH	PS (MAX)	C	S	B	B1	Ø INT	Ø EXT	D	D1	CH	H	E ISO5211	Torque (Nm)	Weight (Kg)	SUGGESTED ACTUATOR	
																Double Acting	Single Acting
50	2"	3	122,5	283	173	100	55	86	30	140	11	11	F05	4	3,2	AM15.0	AM17.4
65	2" 1/2	3	116	333	198	100	70	106	30	140	11	11	F05	6	3,8	AM15.0	AM17.4
80	3"	3	132	349	206	100	85	122	30	140	11	11	F05	8	4,2	AM15.0	AM17.4
100	4"	3	152	369	216	100	116	142	30	140	11	11	F05	10	4,4	AM15.0	AM17.4
125	5"	3	182	389	226	100	130	172	30	140	11	11	F05	12	5,6	AM15.0	AM17.4
150	6"	3	207	421	241	100	155	197	30	140	11	11	F05	16	6,4	AM17.0	AM20.4
200	8"	3	262	469	266	100	207	252	30	140	11	11	F05	20	8,4	AM17.0	AM20.4
250 (*)	10"	3	317	637	358	100	255	307	40	140	14	17	F07	24	20.1 (21.9**)	AM17.0	AM30.4
300 (*)	12"	3	373	687	383	100	305	363	45	140	14	17	F07	42	24.7 (26.2**)	AM17.0	AM30.4

(*) Anche nella versione in ghisa - Available also in ductile cast iron version

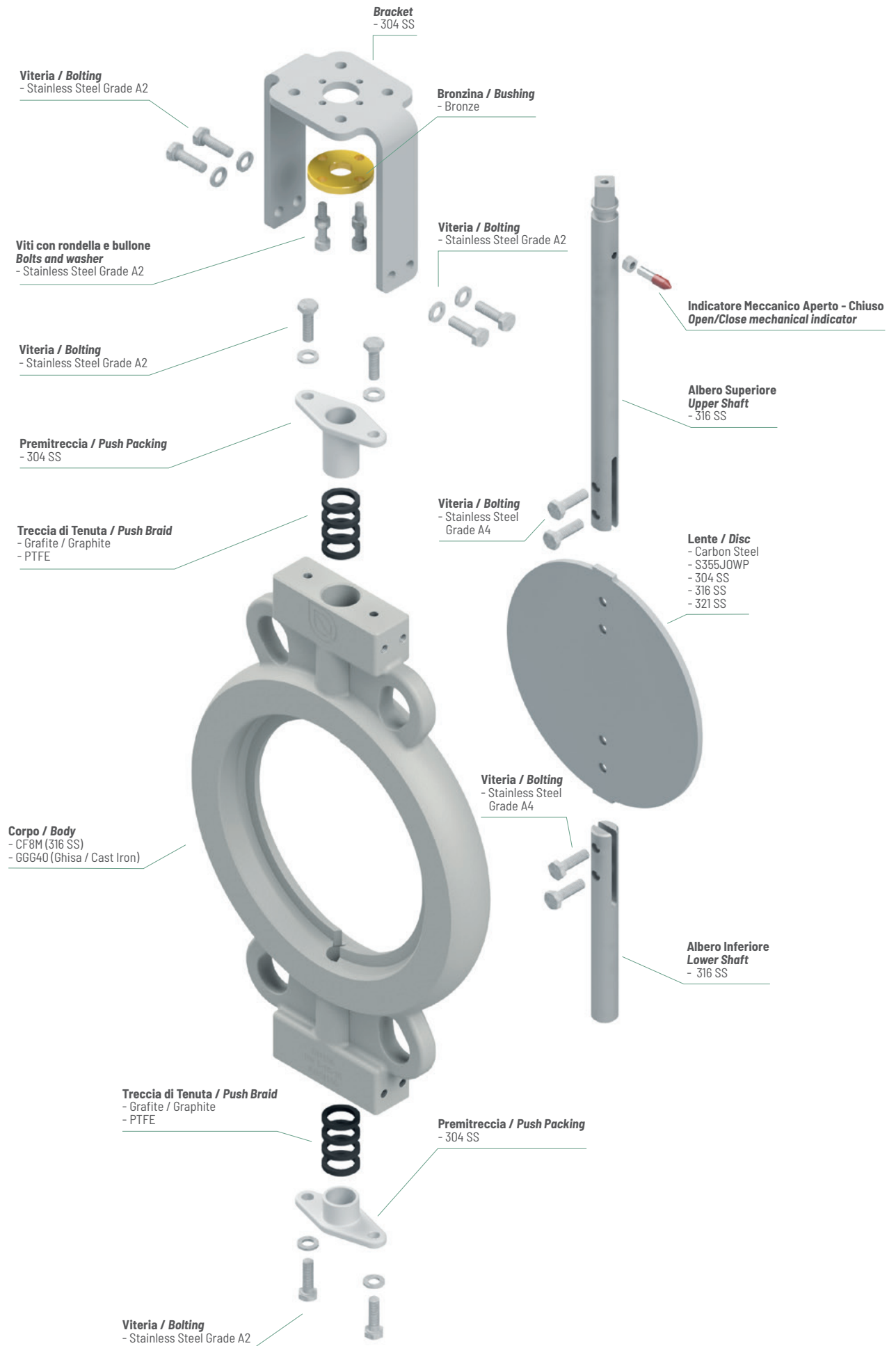
(**) Peso ghisa - Cast iron weight

(***) Consigliato per attuatore elettrico - Suggested for electric actuator

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.

BUTTERFLY DAMPER VALVE





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