

## Body materials

Material	InterApp Code	Material designation	Material number	DIN/EN Standard	ASTM Standard*	Butterfly Valve	Characteristics
Cast iron GG25	1A	EN-GJL-250	EN-JL 1040	1561	ASTM A48	Desponia	General purpose material for lower pressures and liquids
Ductile iron GGG40	2A	EN-GJS-400-15	EN-JS 1030	1563	ASTM A536 60-42-10	Desponia/ Desponia plus	Good mechanical characteristics, good impact resistance and good elongation properties
Ductile iron GGG40.3	2B	EN-GJS-400-18-LT	EN-JS 1025	1563	ASTM A395 60-40-18	Bianca	Good mechanical characteristics, good impact resistance and good elongation properties. Recommended for low temperatures
Carbon steel	3H	GP240GH	1.0619	10213	ASTM A216 WCB	Bianca/ Desponia plus	Very good mechanical properties, very good ductility and tensile strength
Stainless steel	4B	GX2CrNiMo19-11-2	1.4409	10213	ASTM A351-CF-3M	Bianca	Very good chemical resistance and mechanical properties
Stainless steel	4C	GX5CrNiMo19-11-2	1.4408	10213	ASTM A351-CF-8M	Desponia plus	Very good chemical resistance and mechanical properties

\*Similar casting regulations are shown but it does not mean they are directly equivalent.

## Disc materials

Material	InterApp Code	Material designation	Material number	DIN/EN Standard	ASTM Standard*	Butterfly Valve	Characteristics
<b>Ductile iron GGG40</b>	2A	EN-GJS-400-15	EN-JS 1030	1563	ASTM A536 60-42-10	Desponia/ Desponia plus	Good mechanical characteristics, good impact resistance and good elongation properties
<b>Carbon steel</b>	3B	S355J2+N (St 52-3)	1.0577	10025-2	ASTM A572 Gr. 50	Bianca disc core DN350+	Very good mechanical properties, good ductility and tensile strength
<b>Carbon steel</b>	3H	GP240GH	1.0619	10213	ASTM A216 WCB	Desponia/ Desponia plus	Very good mechanical properties, good ductility and tensile strength
<b>Carbon steel</b>	3O	GS52	1.0552	10025-2	-	Desponia/ Desponia plus	Very good mechanical properties, good ductility and tensile strength
<b>Stainless steel</b>	4C 4G	GX5CrNiMo19-11-2	1.4408	10213	ASTM A351- CF-8M	Desponia/ Desponia plus/  Bianca DN 32 - 300	Very good chemical resistance and mechanical properties
<b>Stainless steel</b>	4G	X2CrNiMo17-12-2	1.4404	10088-2	AISI 316L	Bianca disc core DN 350+ (option)	Very good chemical resistance and mechanical properties. Reduced carbon content
<b>Stainless steel</b>	4GJ	X2CrNiMo18-14-3	1.4435	10088-2	AISI 316L	Bianca DN 50 - 250	Very good chemical resistance and mechanical properties. Reduced carbon content, Ferrite < 1%
<b>Stainless steel</b>	4L	X5CrNiCuNb16-4	1.4542-AT	10088-3	AISI 630- 17-4PH	Bianca special version	Excellent mechanical properties, strength and toughness
<b>Superduplex stainless steel</b>	4I	GX3CrNiMoCuN24-6-5	1.4573	SEW 410	UNS S31635	Desponia/ Desponia plus	Excellent chemical resistance

## Disc materials

Material	InterApp Code	Material designation	Material number	DIN/EN Standard	ASTM Standard*	Butterfly Valve	Characteristics
<b>Superaustenitic stainless steel</b>	4S	GX2NiCrMoCuN25-20-6	1.4588	10283	ASTM A743 CK-3MCuN	Desponia/ Desponia plus	Outstanding Resistance to Chloride Pitting, Crevice Corrosion and Stress-Corrosion Cracking
<b>Duplex stainless steel</b>	4W	GX2CrNiMoN26-7-4	1.4469	10213-4	ASTM A890-5A	Bianca DN 50 - 300	Very good chemical resistance. Resistance to low temperatures
<b>Nickel Aluminium bronze</b>	5C	G-Cu Al 10 Ni	2.0975.04	1714	ASTM B148-C95800 **	Desponia/ Desponia plus	Very good corrosion resistance. High strength and ductility
<b>Hastelloy C276</b>	7H	-	-	-	ASTM A494 CW-12MW**	Desponia/ Desponia plus	Outstanding corrosion and heat resistance
<b>Hastelloy C276</b>	7H	NiMo16Cr15W	2.4819	-	-	Bianca DN 50 - 300	Outstanding corrosion and heat resistance
<b>Titanium Grade 2</b>	7T	-	3.7035	17850	-	Bianca	Outstanding resistance to corrosion in a wide range of aggressive media

\*Similar casting standards are shown but it does not mean they are directly equivalent.

\*\*Materials casted according ASTM standards.

## Shaft materials

Material	InterApp Code	Material designation	Material number	DIN/EN Standard	ASTM Standard*	Butterfly Valve	Characteristics
Stainless steel	4G	GX5CrNiMo19-11-2	1.4408	10213	ASTM A351-CF-8M	Bianca DN 32 - 300	Very good chemical resistance and mechanical properties
Stainless steel	4G	X2CrNiMo17-12-2	1.4404	10088-2	AISI 316L	Bianca DN 350+	Very good chemical resistance and mechanical properties. Reduced carbon content
Stainless steel	4GJ	X2CrNiMo18-14-3	1.4435	10088-2	AISI 316L	Bianca DN 50 - 250	Very good chemical resistance and mechanical properties. Reduced carbon content, Ferrite < 1%
Duplex stainless steel	4W	GX2CrNiMoN26-7-4	1.4469	10213-4	ASTM A890-5A	Bianca	Very good chemical resistance. Resistance to low temperatures
Stainless steel	41 / 4A	X20Cr13	1.4021-QT800	10088-3	AISI 420A	Desponia/ Desponia plus	Very good mechanical properties and strength
Stainless steel	42 / 4L	X5CrNiCuNb16-4	1.4542-AT	10088-3	AISI 630-17-4PH	Desponia/ Desponia plus/ Bianca	Excellent mechanical properties, strength and toughness
Hastelloy C276	7H	NiMo16Cr15W	2.4819	-	-	Bianca DN 50 - 300	Outstanding corrosion and heat resistance
Titanium Grade 2	7T	-	3.7035	17850	-	Bianca	Outstanding resistance to corrosion in a wide range of aggressive media

\*Similar casting standards are shown but it does not mean they are directly equivalent.