

# Valves for sugar production

Sugar production -  
Maximum plant availability



# The right selection for your sugar production processes

| Stages          | Media  | Pressure range | Temperature range | Abrasion | Corrosion | Valve   |
|-----------------|--|----------------|-------------------|----------|-----------|---|
| Preparation     | Water, wastewater                                  | 1-6 bar        | 25-50°C           | Moderate | Low       | Desponia® with 4C0 disc and E liner   |
| Extraction      | Water  | 1-2 bar        | 70-80°C           | Low      | Low       | Desponia® with 4C0 disc and E or EC liner   |
|                 | Sugar-rich juice                                   | 1-2 bar        | 70-80°C           | Low      | Moderate  | Desponia® with 4C0 disc and E or EC liner   |
| Clarification   | Sugar-rich juice                                   | 1-2 bar        | 100-105°C         | Low      | Moderate  | Desponia® with 4C0 disc and EC liner  |
|                 | Lime milk  | 1-2 bar        | 100-105°C         | Low      | High      | Desponia® with 4C0 disc and FT liner  |
|                 | Sulfite solution                                   | 1-2 bar        | 70-80°C           | Low      | High      | Desponia® with 4C0 disc and EC liner  |
| Evaporation     | Clarified juice                                    | 600 mbarA      | 60-70°C           | Low      | Low       | Desponia® with 4C0 disc and E or EC liner   |
|                 | Steam  | 10-20 bar      | 120-200°C         | Low      | Moderate  | Desponia® with 4C0 disc and EC or ET liner, Elara with 4C0 disc and TG or IN liner seat |
|                 | Evaporated water                                   | 600 mbarA      | 60-70°C           | Low      | Low       | Desponia® with 4C0 disc and E or EC liner   |
| Crystallization | Syrup  | 1 bar          | 60-70°C           | Low      | Low       | Desponia® with 4C0 disc and E or EC liner   |
|                 | Steam  | 10-20 bar      | 120-200°C         | Low      | Moderate  | Desponia® with 4C0 disc and EC or ET liner, Elara with 4C0 disc and TG or IN liner seat |
|                 | Water  | 1-2 bar        | 20-25°C           | Low      | Low       | Desponia® with 4C0 disc and E liner   |
|                 | Sugar crystals                                     | 1 bar          | 40-70°C           | Moderate | Low       | Desponia® with 4C0 disc and FT or FW liner  |
| Drying          | Sugar crystals                                     | 1 bar          | 40-70°C           | Moderate | Low       | Desponia® with 4C0 disc and FT or FW liner  |
|                 | Hot air  | 1-2 bar        | 50-90°C           | Low      | Moderate  | Desponia® with 4C0 disc and E or EC liner   |
| Refining        | Raw sugar  | 1 bar          | Ambient           | Moderate | Low       | Desponia® with 4C0 disc and FT or FW liner  |
|                 | Hot water  | 1-2 bar        | 70-80°C           | Low      | Low       | Desponia® with 4C0 disc and E or EC liner   |
|                 | Phosphoric acid, calcium hydroxide, carbon dioxide | 1 bar          | Ambient           | Low      | Moderate  | Desponia® with 4C0 disc and E liner   |
| Packaging       | Raw sugar, white sugar                             | 1 bar          | Ambient           | Moderate | Low       | Desponia® with 4C0 disc and FW liner  |

Desponia®

## Elastomer-lined butterfly valve



|                       |  |
|-----------------------|--|
| Body construction     | Wafer, Lug, U-Section                              |
| Nominal diameter      | DN 25–1600 (1"–64")                                |
| Max. working pressure | Up to 16 bar                                       |
| Flange connection     | PN6, PN10, PN16, ANSI cl. 150, JIS, AS, AWWA, etc. |
| Temperature range     | –20°C to 200°C                                     |
| Body material         | Ductile iron                                       |
| Disc material         | Stainless steel, PEKK coating                      |
| Liner material        | EPDM, NBR, FPM                                     |
| Special executions    | Execution for explosive atmospheres                |

Elara

## Double eccentric butterfly valve



|                       |   |
|-----------------------|---|
| Body construction     | Wafer, Lug  |
| Nominal diameter      | DN 50–600 (2"–24")  |
| Max. working pressure | Up to 50 bar (725 psi)  |
| Flange connection     | PN10, PN16, PN25, PN40, PN50, ANSI: CI 150, CI 300  |
| Temperature range     | –50°C to 400°C (-58°F to 752°F)   |
| Body material         | Carbon steel, stainless steel   |
| Disc material         | Stainless steel   |
| Seat material         | MPTFE, Metal, Fire safe   |
| Special executions    | Grease free, ATEX certified according to directive ATEX 2014/34/EU, Fugitive emission according to ISO 15848-1, DIN3780, MSS-SP-143 |

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## Other products



### Knife gate valves

Uni-directional and bi-directional knife gate valves, available in various executions.



### PTFE-lined butterfly valve Bianca

DN 32 – 900, Wafer, Lug or U-section, stainless steel or ductile iron body, available in various executions.



### Ball valves

2- way valves in stainless steel, available with 2- or 3-piece body.



### Actuators and accessories

Actuators and a large range of accessories are available to complete the system.

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