TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

- Material: $\text{AL}_2\text{O}_3$
- Surface roughness Ra: 0.3 µm
- Contact surface area: 50-80%

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

- Opening angle: 22°
- Mixing angle: 100°
- Max temperature: 90°C/194°F
- Recommended tightening torque: 8 Nm / 70 lb•in

Pressure test:
- Pneumatic: 6 bar / 87 psi
- Hydraulic: 35 bar / 500 psi

Flow rate:
- (3 bar / 45 psi, test faucet, EN 817)
  - 18.6 l/min / 4.9 gpm without resistance
  - 15.5 l/min / 4.1 gpm with resistance „C“

Endurance test:
- EN 817: 70 000 cycles
- ASME A 112.18.1M: 500 000 cycles

Saves water because user must override “resistance bump” to obtain high flow - acts as deterrent to unconsciously turning handle onto full flow position regardless of water requirement. Economical flow rate is maximum 6 l/min / 1.6 gpm at 3 bar / 45 psi.

FLOW RATE CURVES

Flow rate curves show the relationship between flow rate and pressure, with and without resistance. The curves indicate that the cartridge consumes water efficiently, especially at lower pressures.

FLOW RATE & HYSTERESIS CURVES

Test faucet, with resistance „C“
Water pressure: 3 bar

The hysteresis curves illustrate the flow rate changes with temperature, showing how the system performs under varying conditions. The curves indicate that the cartridge maintains a consistent flow rate across different temperatures, ensuring reliable performance.

Rotational range within comfort zone

- Cold -> Hot
- Hot -> Cold

Hot water
Cold water
8.9°

Rotational range within comfort zone

Flow rate curves for different temperatures and pressures demonstrate the cartridge’s performance in various scenarios, providing insights into its efficiency and reliability.