

“Servo Performance at Electroproportional Pricing”



Rotary Servo Throttling Valves

- Ultra-compact sizes: mass < 50g for smallest models
- Controlled pressure to 2,650 psi standard
- Typical power consumption < 1 watt
- Competitive pricing

Valve Technology Overview

Adaract's Rotary Servo Throttling Valves can be utilized to provide **responsive, precise, hysteresis-free damping with very low power consumption in a compact package.**

The novel rotary design allows for the valves to be provided at an **incredibly attractive price point** - similar to or even lower than the prices for comparable solenoid-driven electro proportional valves.

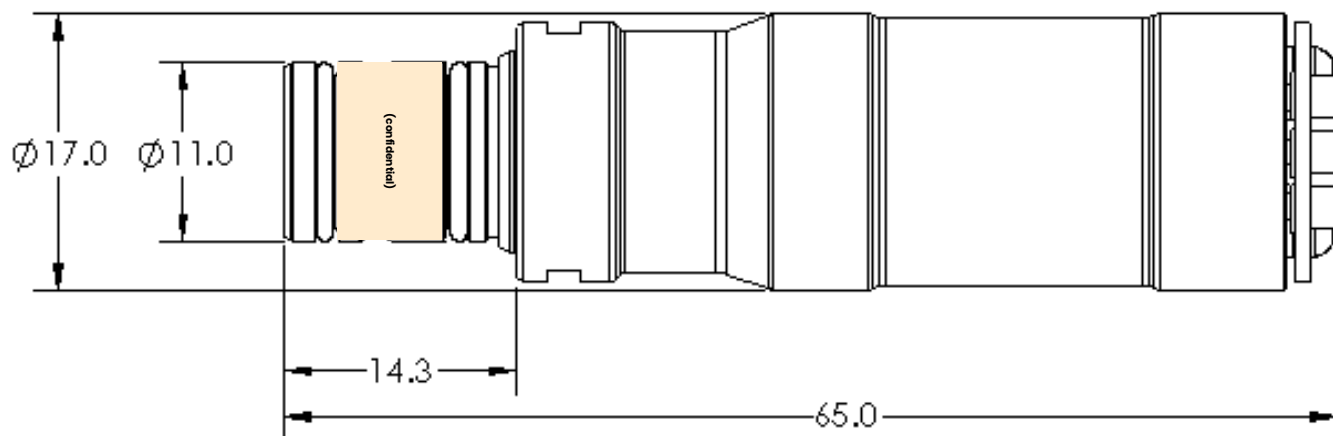
We would be happy to provide additional information on *how* we provide servo valve performance at electroproportional valve pricing upon request.

Custom Solutions

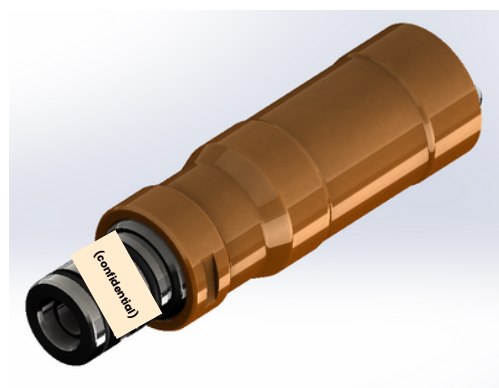
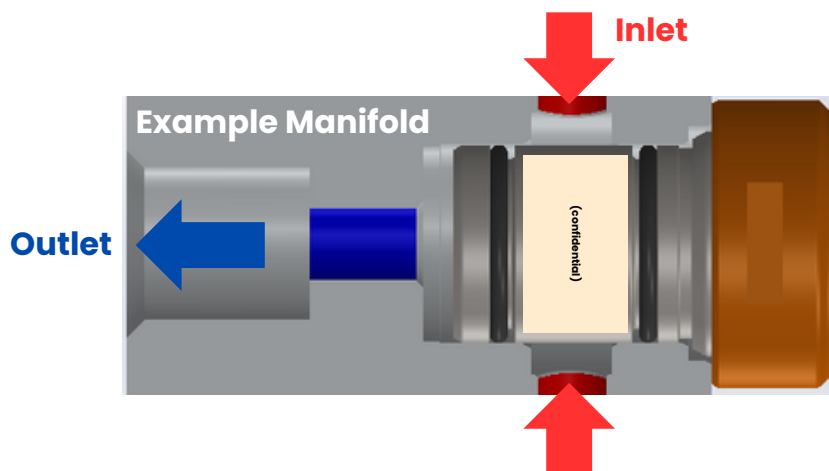
While the valves developed by Adaract for prosthetic applications may be suitable for a direct integration into some systems, we expect significantly larger peak flowrates in many applications, requiring moderately larger valves.

In any case, we are happy to provide fully custom solutions as necessary—scaling valves up or down based on flow and pressure requirements or repackaging the valves where beneficial.

Example Valve Dimensions – 5 LPM / 130 Bar Nominal



Mass: ~48 g



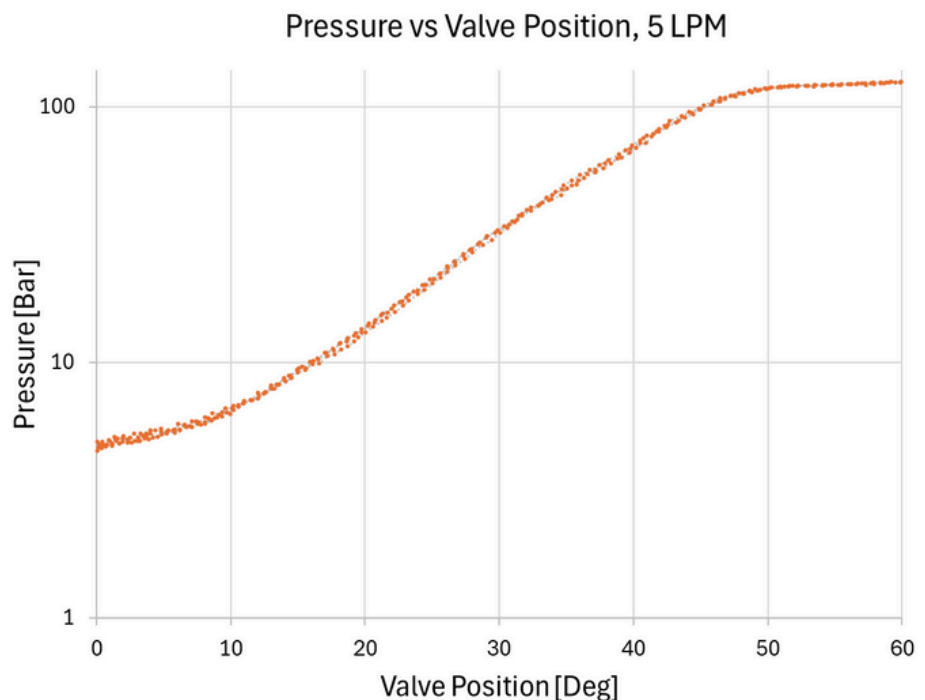
Example Valve Performance– 5 LPM / 130 Bar Nominal

Characteristic Curve

Standard valves utilize an novel control curve to provide maximum throttling precision across a wide variety of flow conditions

Test Notes:

- Relief valve set at 130 bar during testing
- Redline Medium 10wt Suspension Fluid as working fluid
- Fluid Temp of ~100 F



Key Performance Parameters

Response Time

< 10 ms

Peak Power Consumption
(5 LPM, 130 Bar Max)

~ 800 mW

Idle Power Consumption

< 100 mW*

*Lower on request

Feedback Resolution

18 bit

Please contact us for any technical or purchasing inquiries.

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