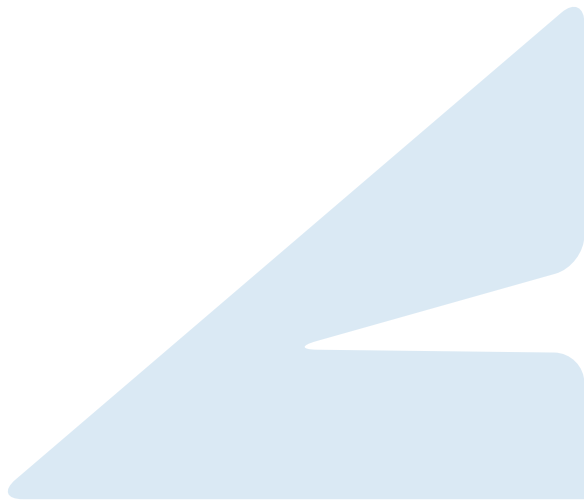




Landmark®



Landmark[®]

Aptar Pharma is the world-leading supplier of aerosol metering valves for pMDIs. Our Landmark[®] patented mechanical dose indicator for pMDIs is designed to be easy to use with all metering valves. Landmark[®] helps improve patient compliance while remaining cost effective.

Key Benefits

- Mechanical dose counting device with only 4 components
- Counts downward from label claim
- Compact, washable and integral part of pMDI actuator
- Displacement-driven, counting has no impact on actuation force of valve
- Versatile and suitable for inhalers dispensing up to 200 doses
- Compatible with all types of pMDI actuators including nasal pMDIs
- Robust design which complies with FDA guidance on dose-counting
- Color, shape and fit to actuator are all customizable

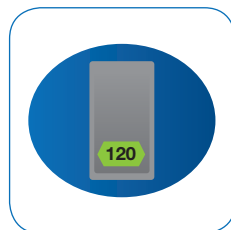
Key Differentiators

- Easy to read color-coded numeric display
- Mechanism does not interfere with airflow path
- Displacement counting mechanism is independent of actuation force
- Designed to eliminate risk of under-counting prior to fire point
- Designed, developed and commercialized using Quality-by-Design
- Designed for robust large scale manufacture
- Strong patent portfolio adds further protection to customers' Intellectual Property.
- Landmark Technology used within pMDIs marketed in Asia, U.S. and Europe

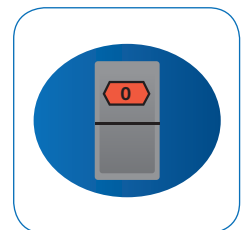
Available Fixtures

Stem valve diameters (in mm)			
3.18	3.16	3.0	2.8

Mechanical Counting Device



Full



Empty

Other proprietary dose counters which count and display each dose are also available from our range of drug delivery devices.