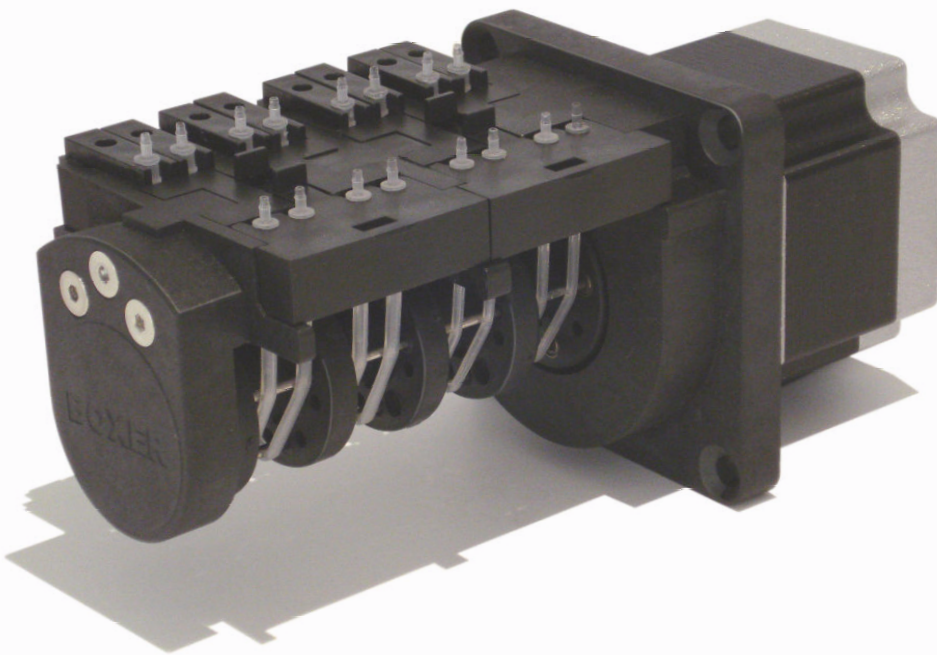


**uno.**

**BOXER<sup>®</sup>PUMPS**

**Unoverse 6500**  
Peristaltic Pump

Stepped motor  
multi channel  
peristaltic pumps  
for accurate dispense  
of liquids.



- Accurate stepper motor control
- From 4 to 12 channels
- Integrated home sensor
- Calibrated silicone tubing
- Choice of tube diameters
- Easy tube replacement
- Panel mounting
- No lubrication
- Self priming
- Stepper motor controller as extra

*Unoverse 6504 - four channel peristaltic pump*  
*Unoverse 6508 - eight channel peristaltic pump*  
*Unoverse 6512 - twelve channel peristaltic pump*

|                                     |                            |
|-------------------------------------|----------------------------|
| Stepper Motor:                      | 6V DC-30V DC 2.8A/Phase    |
| Full steps per rev                  | 200                        |
| Max speed                           | 4000 steps/sec or 1200rpm* |
| CV at 100µl dispense                | 3%CV                       |
| Max system pressure                 | 1 Bar                      |
| Resistance per phase                | 0.83                       |
| Inductance per phase                | mH 2.2                     |
| Motor wire gauge                    | UL1007 AWG22               |
| Built in home sensor                | Slotted Optical Switch     |
| Max ambient operational temperature | 50°C                       |
| Max media temperature               | 50°C                       |
| Material wetted parts               | Silicone                   |
| Port spigots                        | for ID1/16" hard tubing    |
| Weight (12 channels)                | 867g                       |

\*Subject to total motor load

| Tube ID mm | Volume per 90° rotation<br>50 steps @ 4000 steps/sec |
|------------|--|
| Ø0.5       | 2µl  |
| Ø0.8       | 5µl  |
| Ø1.5       | 10µl   |

| Lead No. | Colour | Function |
|----------|--------|----------|
| 1        | Black  | Phase A  |
| 2        | Green  | Phase A- |
| 3        | Red    | Phase B  |
| 4        | Blue   | Phase B- |

dispensed volume per rotation will vary with motor speed and acceleration.

