

Fast-Acting

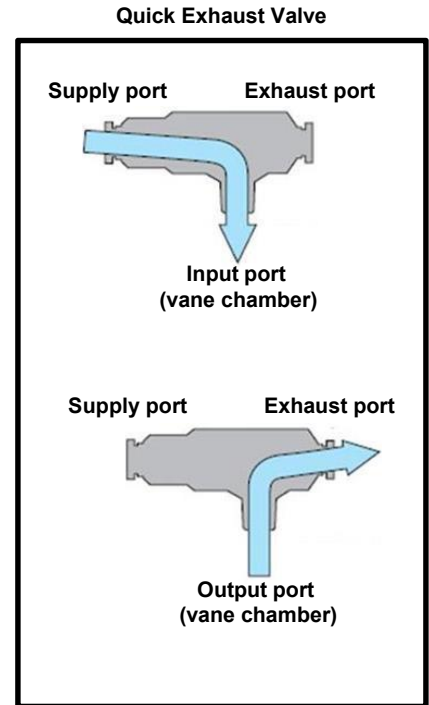
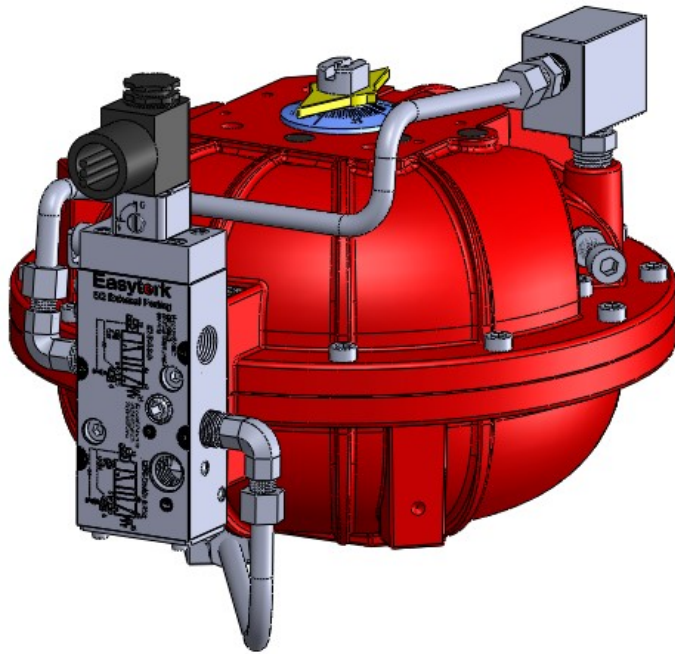
A fast-acting kit comprises of one external porting ESV or EPV with or without Quick Exhaust Valves (“QEV”). Together, they allow for quick open and close. The fast-acting kit redirects air to an external tubing’s larger orifice, and bypasses the EVA, ESV and EPV’s smaller orifice, before directly feeding the vane chamber.

Fast-acting maintains all the benefits of EVA and ESV combination, such as double-acting, fail-safe, manual override, and others.

For sizes EVA-0514 and larger.

Description

ESV or EPV with an external ported 2 and 4 is connected to the EVA’s external vane chamber port. Air is exhausted from QEV to achieve fast acting. This setup increases CV to vane chamber and allows the air exhaust through QEV instead of small orifice of ESV or EPV.



Stroke Time

| With QEV | | DA(Sec.) ⁽¹⁾⁽²⁾ | | FS(Sec.) ⁽¹⁾⁽²⁾ | |
|----------|-----------|----------------------------|-------|----------------------------|-------|
| Model | Port Size | Open | Close | Open | Close |
| EVA-0514 | 1/4" | 0.10 | 0.08 | 0.10 | 0.11 |
| EVA-0717 | 1/4" | 0.17 | 0.14 | 0.17 | 0.19 |
| EVA-1022 | 1/4" | 0.31 | 0.27 | 0.31 | 0.32 |
| EVA-1227 | 3/8" | 0.45 | 0.44 | 0.45 | 0.46 |
| EVA-1436 | 3/8" | 0.80 | 0.73 | 0.80 | 0.82 |
| EVA-1646 | 3/8" | 1.85 | 1.89 | 1.85 | 2.00 |

Note(1): With external porting ESV, EPV and QEV at 5.5 bar or 80psi, no load.

Note(2): Measured for actual stroke time without solenoid delay.

Stroke Time

| Without QEV | | DA(Sec.) ⁽¹⁾⁽²⁾ | | FS(Sec.) ⁽¹⁾⁽²⁾ | |
|-------------|-----------|----------------------------|-------|----------------------------|-------|
| Model | Port Size | Open | Close | Open | Close |
| EVA-0514 | 1/4" | 0.17 | 0.16 | 0.17 | 0.19 |
| EVA-0717 | 1/4" | 0.24 | 0.22 | 0.24 | 0.27 |
| EVA-1022 | 1/4" | 0.37 | 0.33 | 0.37 | 0.38 |
| EVA-1227 | 3/8" | 0.70 | 0.68 | 0.70 | 0.71 |
| EVA-1436 | 3/8" | 1.30 | 1.29 | 1.30 | 1.35 |
| EVA-1646 | 3/8" | 3.30 | 3.07 | 3.30 | 3.31 |

Note(1): With external porting ESV, EPV and Without QEV at 5.5 bar or 80psi, no load.

Note(2): Measured for actual stroke time without solenoid delay.