

No Return Valve EM-NRV

APPLICATIONS

The installation of an **Explosion Isolation Device** on all suction side ducts that transport material with a Kst value above zero is an **NFPA Requirement**.

Installing a **SAFETY SMART EcoMAXX® No Return Valve (EM-NRV)** will protect workers and facilities from the damaging effect of a baghouse or filter explosion.

EM-NRV Explosion Isolation Valves are designed for use with all **EcoMAXX® High Speed Abort Gates, Fire Break Shutters, Spark Detection & Extinguishing/Suppression Systems, and Energy Management Systems.**



CERTIFICATIONS & STANDARDS

EN 16447
NFPA 69



STANDARD FEATURES

- Heavy-duty welded steel construction
- Flanged inlet and outlet with co-flanges
- Inspection/access door
- Grounding lug
- Locking mechanism

OPTIONAL FEATURES

The EM-NRV is 100% NFPA 69 compliant with the following optional features :

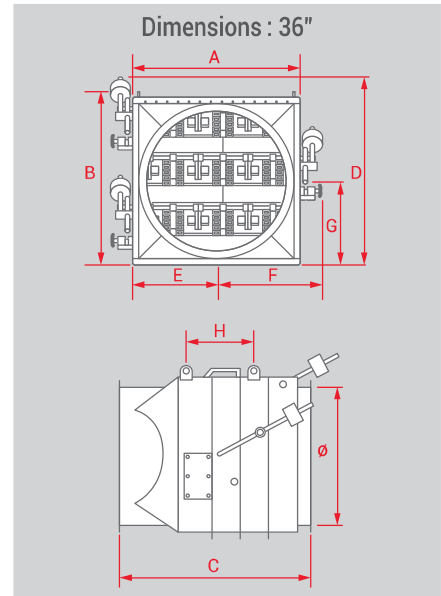
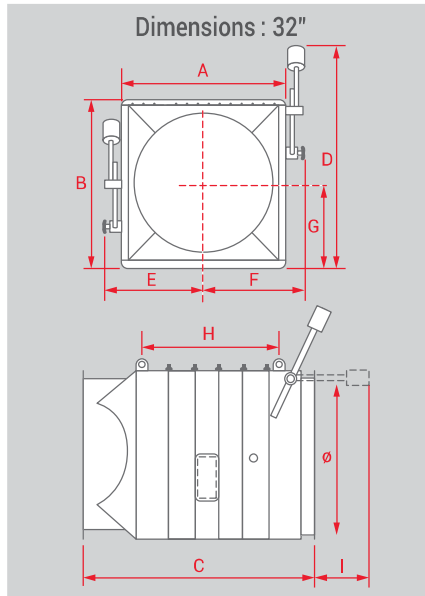
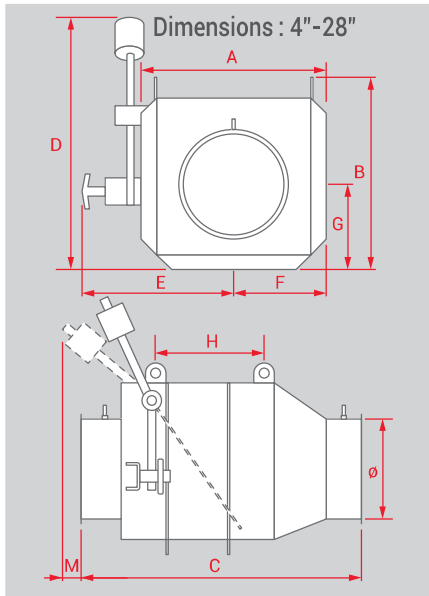
- **EM-NRV-MS** – Micro-switch for system shut down
- **EM-NRV-DLS** – Dust Level Sensor



- **EM-NRV-CP** – Intrinsically safe control panel for sensor power and integration with existing new or **EcoBOSS®** Control Panel



DIMENSIONS



NO RETURN VALVE (NRV) DIMENSIONS (SIZES 4" - 28")

| Ø | A | B | C | D | E | F | G | H | I | LBS |
|--|------|------|------|------|------|------|------|------|------|-----|
| SIZES 4" - 16" RATED FOR : Class ST2 Applications – Kst max 270 bar m/s – Pred max 0.50 bar – Certification EN 16447 | | | | | | | | | | |
| 100mm/4" | 7.7 | 6.8 | 15.0 | 8.7 | 9.1 | 3.8 | 3.0 | 0.0 | 0.0 | 40 |
| 125mm/5" | 8.7 | 7.8 | 16.0 | 9.6 | 9.6 | 4.3 | 3.3 | 0.0 | 0.0 | 40 |
| 160mm/6" | 14.2 | 13.4 | 21.7 | 17.7 | 11.8 | 7.1 | 6.7 | 0.0 | 3.0 | 45 |
| 180mm/7" | 14.2 | 13.4 | 21.7 | 19.7 | 11.8 | 7.1 | 6.7 | 0.0 | 3.0 | 45 |
| 200mm/8" | 14.2 | 13.4 | 21.7 | 19.7 | 11.8 | 7.1 | 6.7 | 0.0 | 3.0 | 45 |
| 250mm/10" | 16.1 | 15.4 | 23.6 | 22.4 | 12.8 | 8.1 | 7.7 | 0.0 | 3.1 | 56 |
| 300mm/12" | 18.1 | 17.3 | 26.4 | 23.6 | 13.8 | 9.1 | 8.7 | 0.0 | 3.1 | 84 |
| 350mm/14" | 20.1 | 19.3 | 28.3 | 25.6 | 14.8 | 10.0 | 9.6 | 11.8 | 3.1 | 100 |
| 400mm/16" | 22.0 | 23.2 | 30.3 | 29.5 | 15.7 | 11.0 | 11.2 | 13.5 | 5.1 | 120 |
| SIZES 18" - 28" RATED FOR : Class ST2 Applications – Kst max 260 bar m/s – Pred max 0.50 bar – Certification EN 16447 | | | | | | | | | | |
| 450mm/18" | 24.0 | 25.2 | 33.1 | 33.3 | 16.7 | 12.0 | 11.6 | 15.7 | 7.1 | 150 |
| 500mm/20" | 26.0 | 27.2 | 34.3 | 38.8 | 17.7 | 13.0 | 12.6 | 18.1 | 10.6 | 177 |
| 550mm/22" | 28.0 | 29.1 | 36.2 | 37.4 | 18.7 | 14.0 | 13.6 | 19.7 | 7.1 | 221 |
| 600mm/24" | 29.9 | 31.1 | 38.2 | 41.1 | 19.7 | 15.0 | 14.6 | 21.7 | 11.4 | 254 |
| 650mm/26" | 31.9 | 33.1 | 40.2 | 45.1 | 20.7 | 15.9 | 15.6 | 23.8 | 13.4 | 276 |
| 700mm/28" | 33.9 | 35.0 | 42.1 | 47.0 | 21.7 | 16.9 | 16.5 | 25.6 | 11.0 | 298 |

NO RETURN VALVE (NRV) DIMENSIONS (SIZES 32" - 36")

| Ø | A | B | C | D | E | F | G | H | I | LBS |
|---|------|------|------|------|------|------|------|------|------|-----|
| SIZE 32" RATED FOR : Class ST2 Applications – Kst max 240 bar m/s – Pred max 0.25 bar – Certification EN 16447 | | | | | | | | | | |
| 800mm/32" | 38.6 | 40.4 | 52.5 | 56.5 | 26.0 | 26.0 | 18.9 | 28.1 | 14.2 | 728 |
| SIZE 36" RATED FOR : Class ST3 Applications – Kst max 330 bar m/s – Pred max 0.50 bar – Certification EN 16447 | | | | | | | | | | |
| 900mm/36" | 42.5 | 44.3 | 44.7 | 60.4 | 28.0 | 28.0 | 20.9 | 28.1 | 14.2 | 860 |

NO RETURN VALVE (NRV) DIMENSIONS (NOT RATED)

| | | | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|------|------|
| 1000mm/40" | 46.5 | 48.6 | 48.2 | 64.4 | 29.9 | 29.9 | 22.8 | 35.8 | 14.2 | 1000 |
| 1100mm/44" | 50.4 | 52.2 | 51.5 | 66.9 | 29.9 | 29.9 | 24.6 | 39.8 | 14.2 | 1135 |
| 1200mm/48" | 54.3 | 56.1 | 54.7 | 70.9 | 32.7 | 32.7 | 26.8 | 43.7 | 14.2 | 1275 |
| 1300mm/52" | 58.3 | 59.1 | 54.7 | 75.2 | 34.3 | 34.3 | 29.5 | 47.6 | 14.2 | 1425 |