



DYNACO S-559 Cat.2 Atex All Weather



# DYNACO S-559 Cat.2 Atex All Weather

The Dynaco S-559 Cat.2 Atex All Weather is specifically designed for outside applications in explosion sensitive environments of category 2 and harsh conditions.

Officially approved by Apragaz notified body for use in potentially explosive atmospheres.

All metal parts are stainless steel, non-metallic parts are composed of antistatic or electrical conductive materials, thus avoiding the build up of static electricity that could generate sparks.

Operating speed and perfect sealing properties improve your traffic flows and provide employee comfort, environmental control and savings on energy costs. Fully self-reinserting, the Dynaco S-559 Cat.2 Atex All Weather will automatically reinsert itself in its side guides when the curtain is accidentally hit.

- HIGH SPEED OPERATION:
  Maximum speed 1 m/s.
- PATENTED "PUSH PULL" TECHNOLOGY: Unique door drive system.
- SUPERIOR SEAL, WIND RESISTANT: Patented side frame assembly. Up to wind load class 5.
- CRASH FORGIVING AND SELF-REINSERTING WITHOUT INTERVENTION:

The curtain automatically reinserts itself when dislodged. No repair costs, no production downtime.

- USER SAFETY: Flexible curtain without rigid elements.
- ADVANCED DRIVE:
  Frequency driven motor and encoder for smooth operation. Wearable elements are reduced to a minimum.
- DYNALOGIC CONTROL BOX:

  User-friendly control box with self-diagnosis.
- CONFORM TO EN13241-1
  - CONFORM TO DIRECTIVE 2014/34/EU

    II 2 G/D

    Ex h T4 135°C

    Ex db ia e IIC T4 EPL Gb

    Ex tb ia IIIB 135°C EPL Db

    CE 0029 APRAGAZ 17 ATEX 0157 X Apragaz

    T ambiant -10°C to 55°C







#### outside door

| EN13241-1 STANDARDS   |          |           |                         |  |  |
|-----------------------|----------|-----------|-------------------------|--|--|
| Standard              | Ref.     | Test acc. | Results                 |  |  |
| Water permeability    | EN 12425 | EN 12489  | Class 3                 |  |  |
| Wind load             | EN 12424 | EN 12444  | Class 4*                |  |  |
| Windpermeability      | EN 12426 | EN 12427  | Class 1**               |  |  |
| Safe openings         | EN 12453 | EN 12445  | Pass                    |  |  |
| Mechanical resistance | EN 12604 | EN 12605  | Pass                    |  |  |
| Unintended movements  | EN 12604 | EN 12605  | Pass                    |  |  |
| Thermal transmittance | EN 12428 | EN 12428  | 6,02 W/m <sup>2</sup> K |  |  |
| Performance (cycles)  | EN 12604 | EN 12605  | NPD                     |  |  |

The indicated class for wind resistance applies for maximum dimensions.

- \* For doors up to W 5.000mm x H 5.500mm: Class 5
  \*\* Valid for a door of 3500 x 3500mm

| Explosion groups   | Temperature class   |   |  |                |        |                           |  |
|--|---|---|--|----------------|--------|---------------------------|--|
|  | T1  | T2  | T3   | T4             | T5     | T6                        |  |
| Min. ignitiontemperature<br>or max. surface tem-<br>perature | 450 °C  | 300 °C  | 200 °C   | 135 °C         | 100 °C | 85 °C                     |  |
| I (Mining)   | Methane   |   |  |                |        |                           |  |
| IIA  | Acetone<br>Ammonia<br>Benzene<br>Acetic acid<br>Ethane<br>Ethyl acet.<br>Methane<br>Methanol<br>Naphtalene<br>Phenol<br>Propane | i-Amylac-<br>etate<br>n-Butane<br>n-Butane<br>alcohol | Benzines<br>Diesel<br>fuels<br>Fuel oils<br>n-Hexane | Acetalaldehyde |        |                           |  |
| IIB  | Town gas  | Ethylene<br>Ethylene<br>oxide                         | Hydrogen<br>sulphide                                 | Ethyl ether    |        |                           |  |
| IIC  | Hydrogen  |   |  |                |        | Carbon<br>disul-<br>phide |  |

| CHARACTERISTICS                    |  |  |  |  |
|------------------------------------|--|--|--|--|
| Max. dimensions                    | W 5.500 mm x H 5.500 mm  |  |  |  |
| Opening speed<br>Closing speed     | Maximum 1 m/s<br>1 m/s   |  |  |  |
| Structure                          | Stainless steel: 80 x 40 x 3 mm.   |  |  |  |
| Drum                               | Stainless steel - Ø 102 x 1.2 mm.  |  |  |  |
| Side guides                        | Reinforced antistatic polyethylene (PE-UHMW1000 carbon black) on springs. Side guides reinforced over the total height.  |  |  |  |
| Motor                              | 4 poles, without brake. Ex d<br>Power 1,5 kW - IP rating: IP 66  |  |  |  |
| Control box                        | DYNALOGIC 5 (500x500x250mm) provided with: circuit breaker, general divider, adjustable timer, push button for opening and reset, emergency stop and Ex i switching amplifier. IP rating: IP 65. Frequency inverter. Always to be installed outside the danger zone. |  |  |  |
| Standard detectors                 | Ex ia infrared barrier: 300 mm from the floor.<br>Bottom edge detection via intrinsic safety barrier   |  |  |  |
| Power supply<br>Frequency          | Single phase 230V - 16 A<br>Frequency: 50-60 Hz  |  |  |  |
| Available colours comparable with: | Black RAL9005 (Actual colour may deviate. Colour sample available upon request)  |  |  |  |
|                                    |  |  |  |  |

### Atex motor, gearbox and encoder



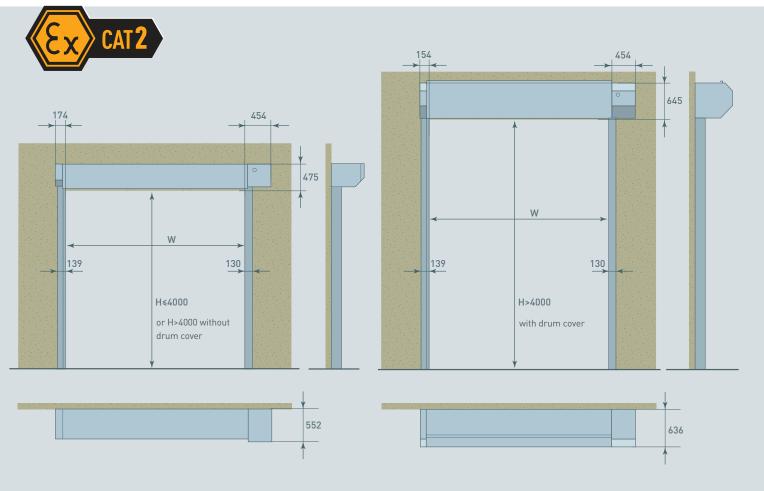
## Bottom edge detection via intrinsic safety barrier



## Standard earthing kit



## Dimensions and installation requirements DYNACO S-559 Cat.2 Atex



All indicated dimensions are net: the space necessary for mounting and maintenance has to be provided. Reduced dimensions: upon request.

REMARK: Based on the risk analysis of the environment, extra push buttons, detectors and covers might be required.



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#### About Dynaco

Founded in 1987, the Dynaco brand has a strong heritage and a wealth of expertise in high performance doors. Dynaco is committed to achieving excellence in quality and performance through a certified and dedicated network of partners, providing outstanding service to customers worldwide. Furthermore we trust our USA division and our licensed partners in Russia, Japan, China, Vietnam and Brazil to deliver on our customer promises.

Dynaco is part of Entrematic—the home to some of the world's most innovative and leading brands within the entrance automation industry. The comprehensive range of product brands includes Ditec, Normstahl and em/Entrematic.