

# Compact cylinder ADN-S-50-5-I-P-A-F1A

Part number: 8142897

FESTO



 General operating condition

## Data sheet

| Feature                                                   | Value                                                              |
|-----------------------------------------------------------|--------------------------------------------------------------------|
| Stroke                                                    | 5 mm                                                               |
| Piston diameter                                           | 50 mm                                                              |
| Cushioning                                                | Elastic cushioning rings/pads at both ends                         |
| Mounting position                                         | Any                                                                |
| Mode of operation                                         | Double-acting                                                      |
| Piston rod end                                            | Internal thread                                                    |
| Structural design                                         | Piston<br>Piston rod                                               |
| Position sensing                                          | Via proximity switch                                               |
| Symbol                                                    | 00991217                                                           |
| Variants                                                  | Piston rod at one end                                              |
| Operating pressure                                        | 0.04 MPa ... 1 MPa                                                 |
| Operating pressure                                        | 0.4 bar ... 10 bar                                                 |
| Operating pressure                                        | 5.8 psi ... 145 psi                                                |
| Operating medium                                          | Compressed air as per ISO 8573-1:2010 [7:4:4]                      |
| Information on operating and pilot media                  | Operation with oil lubrication possible (required for further use) |
| Corrosion resistance class (CRC)                          | 2 - Moderate corrosion stress                                      |
| LABS (PWIS) conformity                                    | VDMA24364-B2-L                                                     |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 5 according to ISO 14644-1                                   |
| Ambient temperature                                       | 0 °C ... 80 °C                                                     |
| Impact energy in the end positions                        | 1 J                                                                |
| Theoretical force at 6 bar, retracting                    | 1057 N                                                             |
| Theoretical force at 6 bar, advancing                     | 1178 N                                                             |
| Moving mass at 0 mm stroke                                | 104 g                                                              |
| Additional moving mass per 10 mm stroke                   | 16 g                                                               |
| Basic weight with 0 mm stroke                             | 324 g                                                              |
| Additional weight per 10 mm stroke                        | 63 g                                                               |
| Type of mounting                                          | With through-hole<br>With internal thread                          |
| Pneumatic connection                                      | G1/8                                                               |
| Note on materials                                         | RoHS compliant                                                     |
| Cover material                                            | Wrought aluminum alloy, anodized                                   |
| Material of dynamic seals                                 | TPE-U(PU)                                                          |
| Housing material                                          | Wrought aluminum alloy, anodized                                   |
| Piston rod material                                       | high-alloy stainless steel                                         |