

# Compact cylinder ADN-S-20-45-A-P-A-F1A

Part number: 8142774

FESTO



 General operating condition

## Data sheet

| Feature  | Value  |
|--|--|
| Stroke   | 45 mm  |
| Piston diameter  | 20 mm  |
| Cushioning   | Elastic cushioning rings/plates at both ends   |
| Mounting position  | optional   |
| Mode of operation  | Double-acting  |
| Piston-rod end   | Male thread  |
| Design   | Piston<br>Piston rod   |
| Position detection   | Via proximity switch   |
| Symbol   | 00991217   |
| Variants   | Piston rod at one end  |
| Operating pressure   | 0.06 MPa ... 1 MPa   |
| Operating pressure   | 0.6 bar ... 10 bar   |
| Operating pressure   | 8.7 psi ... 145 psi  |
| Operating medium   | Compressed air to ISO 8573-1:2010 [7:4:4]  |
| Note on operating and pilot medium                           | Lubricated operation possible (in which case lubricated operation will always be required) |
| 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 end positions                               | 0.2 J  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke  | 141 N  |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke | 188 N  |
| Moving mass for 0 mm stroke                                  | 18 g   |
| Additional moving mass per 10 mm stroke                      | 6 g  |
| Basic weight for 0 mm stroke                                 | 65 g   |
| Additional weight per 10 mm stroke                           | 26 g   |
| Type of mounting   | With through-hole<br>Via female thread   |
| Pneumatic connection   | M5   |
| Note on materials  | RoHS-compliant   |
| Material cover   | Anodised wrought aluminium alloy   |
| Material dynamic seals                                       | NBR<br>TPE-U(PU)   |
| Material housing   | Anodised wrought aluminium alloy   |

| Feature             | Value                      |
|---------------------|----------------------------|
| Material piston rod | High-alloy stainless steel |