

Installation & Maintenance

Desiccant Dryer Instructions W74D - ★★★

Port 3 3/8" 4....1/2 Thread Form

A....PTF B....ISO Rc taper

G....ISO G parallel

Moisture Indicator N....No indicator

D....With indicator (used only with dryers equipped with metal bowls) Drain N....Closed bottom (no drain)

Bowl M...1 litre (1 quart) Metal

P....0,2 litre (7 fluid ounce) Transparent with guard

Flow

N....Not applicable

TECHNICAL DATA

Fluid: Compressed air Maximum pressure:

Transparent bowl: 10 bar (150 psig) Metal bowl: 17 bar (250 psig)

Operating temperature*:

Transparent bowl: -20° to 50°C (0° to 125°F) Metal bowl: -20° to 80°C (0° to 175°F)

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Nominal bowl capacity:

Transparent: 0,11 kg (0.25 pounds) desiccant Metal: 0,57 kg (1.25 pounds) desiccant

Maximum allowable air flow:

Transparent bowl: 4,72 dm³/s (10 scfm) Metal bowl: 9,44 dm³/s (20 scfm)

Nominal air drying capacity at 6,9 bar (100 psig) inlet pressure and 25°C (77°F):

Transparent bowl: 21 cu meters (750 cu feet) Metal bowl: 170 cu meters (6000 cu feet)

Required prefilters: General purpose filter with 5micron element and an oil removal filter with equivalent pipe size and flow capacity equal to or greater than the desiccant dryer.

Desiccant regeneration: Desiccant can be dried and reused by removing from dryer and heating to 135°C (275°F). Regeneration is complete when desiccant returns to original blue color.

Moisture indicator leakage on models with metal bowl: Air continuously passes thru the moisture indicator and escapes to atmosphere. This is normal and does not indicate a faulty indicator.

Materials:

Body: Aluminum

Bowl:

Transparent: Polycarbonate with steel bowl guard Metal: Aluminum

Supply tube assembly: Aluminum/stainless steel screen Desiccant drying agent: Silica gel

Filter element: Sintered polypropylene Elastomers: Neoprene and Nitrile

Moisture indicator materials: Body: Transparent nylon Test paper: Cobalt chloride Elastomers: Nitrile

REPLACEMENT ITEMS

Service kit (includes items circled on4385-710 exploded view) .. Desiccant (5 packets)4385-700

INSTALLATION

- 1. Shut-off air pressure. Install filter in air line -
- · vertically (bowl down),
- with air flow in direction of arrow on body,
- upstream of regulators, lubricators, and cycling valves,
- as close as possible to the device being protected,
- away from any heat source.
- · immediately downstream of a general purpose filter and an oil removal filter. The desiccant dryer will rapidly become contaminated and fail if proper prefilters are not installed. Install a Norgren general purpose filter with a 5µm element, and an oil removal filter with a 0.01 micron coalescing element immediately upstream of the desiccant dryer.
- 2. Connect piping to proper ports using pipe thread sealant on male threads only. Do not allow sealant to enter interior of unit.
- 3. Push bowl into body and turn fully clockwise before pressurizing.

SERVICING

- 1. Check color of desiccant (models with plastic bowl) or color of test paper in moisture indicator on top of body (models with metal bowl). Replace desiccant when desiccant or test paper turns from blue to pink.
- 2. Desiccant may be replaced with kit 4385-700. Shut-off air pressure and remove bowl (7 or 16). Fill metal bowl (7) with the 5 packets of desiccant included with 4385-700 kit; fill transparent bowl (16) with 1 packet.
- 3. If desired, desiccant may be dried and reused. To dry and reuse, pour desiccant on tray and heat in oven at 135°C (275°F) until desiccant returns to original blue

DISASSEMBLY

- 1. Dryer can be disassembled without removal from air line.
- 2. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
- 3. Remove plastic bowl with guard (16) or metal bowl with adapter (7) - push into body and turn counterclockwise.
- 4. Disassemble in general accordance with the item numbers on exploded view.

CLEANING

- 1. Test paper (6) and element (22) cannot be cleaned. Clean other parts with warm water and soap.
- 2. Rinse and dry parts. Blow out internal passages in body (22) and tube (13) with clean, dry compressed air.
- 3. Inspect parts. Replace those found to be damaged. Replace plastic bowl with a metal bowl if plastic bowl shows signs of cracking or cloudiness.

ASSEMBLY

- 1. Prior to assembly make sure all parts and the interior of the body (22), bowl (7, 16), and tube (13) are completely
- 2. Lubricate o-rings with o-ring grease.
- 3. Assemble filter as shown on the exploded view.
- 4. Push bowl into body and turn fully clockwise.

Torque in N-m (Inch-Pounds) 5. Torque Table 2 (Screw) 2,8 to 3,9 (25 to 35) 14 (Nut) 2,3 to 2,8 (20 to 25) 20 (Adapter) 2,0 to 2,7 (18 to 24)

WARNING

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under *Technical Data*.

Polycarbonate plastic bowls can be damaged and possibly burst if exposed to such substances as certain solvents, strong alkalies, compressor oils containing esterbased additives or synthetic oils. Fumes of these substances in contact with the polycarbonate bowl, externally or internally, can also result in damage. Clean with warm water only.

Do not substitute a plastic bowl for a metal bowl in applications where a plastic bowl might be exposed to substances that are incompatible with polycarbonate.

Before using these products with fluids other than air, for nonindustrial applications, or for life-support systems consult Norgren.

