

<u>NW 18 – 25 – 32 & 25 TE (-CTN) + NW 32TE + DUO (-CTN) + TIO</u>

Instructions for assembly, use and maintenance.

1. Possible applications

The range of water filters CINTROPUR[®] NW 18 -25 -32 is designed for filtering clear water with only low levels of substances in suspension, of the types town water, rainwater, borehole water, spring water.

Other types of non-aggressive liquid can also be filtered. The possible areas of use will be in domestic, industrial, public and agricultural situations.

The materials used for making the filter are suitable for filtering liquid foods. The use of the 25 TE-CTN + NW32 TE + DUO-CTN + TIO with activated carbon is well known for de-chlorination, removal of odours, improvement of taste, reduction of pesticides and herbicides.

2. Technical description

Installation and use of the filters NW 18 - 25 - 32 - 25 TE (-CTN) - 32 TE - DUO (-CTN) - TIO must comply with the technical requirements stated in the following table:

	NW18	NW 25	NW32	25TE-	32 TE	DUO –	TIO
				CTN		CTN	
Connector diameter	3/4"	3/4" &	5/4"	1"	5/4"	3/4" &	1"
		1"				1"	
Mean throughput (m 3 /h) with Δ	3.5	5.5	6.5	0.5*	0.5*	0.5*	0.5*
P=0.2 bar							
Operating pressure (bar)	10	10	10	10	10	10	10
Max. working pressure (bar)	16	16	16	16	16	16	16
Max. operating temperature	50°C	50°C	50°C	50°C	50°C	50°C	50°C
Weight (kg)	0.9	1.2	1.7	1.3	1.6	2.4	1.8
Filter screen	25μ	25μ	25μ			25μ	25μ
Bowl volume (litres)				0.57	1.7	0.57	0.57
Filter area (cm ²)	190	450	840			450	335

*Value with CINTOPUR activated carbon

Beta Valve Systems Ltd Park House Business Centre, Desborough Park Road, High Wycombe, Bucks, HP12 3DJ Tel: 01494 459 511

3. Assembly and handling

- The filters must be fitted using the correct procedures, by qualified personnel: they must be free of mechanical stress, with the piping upstream and downstream aligned. The distance between the couplings must be correct to avoid causing any tension or compression stress on them.
- The ideal location for the CINTROPUR[®] water filter is directly at the plant inlet (after the meter or the pump). Ensure that the direction of water flow corresponds to the direction of the arrow on the filter head.
- The pressure reducer will effectively reduce the supply pressure if it exceeds the operating pressure. An anti-water-hammer device is essential if they are known to occur in the installation.
- The filter is supplied complete and ready to install. The equipment supplied includes a set of 2 threaded connectors (except with the DUO where there are 2 connectors of size ¾" and 2 connectors of size 1"), a 25µ filter screen (except all TE models) and a spanner for disassembly.
- The only available options are wall mounting, the pressure gauges and the bleed valve (on all models that have the filter screen).
- The optionally supplied dry pressure gauges (0 10 bar) have a standard 1/8" thread; fitting
 is done using a spanner (the dial is not to be used as a handle for screwing it in) after
 through drilling and tapping the pressure-gauge holes in the head. In this case the wall
 mount cannot be installed. It is never permissible to use the pressure gauges as fixings for
 the wall mount!
- Fixing the wall mount to the head is done using the two bolts (M8 Allen head) provided for this purpose. Lightly tightening these is adequate for a good hold.
- The tightness of the threaded connections can be achieved with any of the usual trade products. However, the hemp and paste from Kolmat is to be preferred. Leave one thread turn free on the filter connector to provide a good start for the valve or connector of your installation.
- Using removable connections will enable the filter to be easily removed from the installation at a later date if necessary.
- The tightness between the connector and the filter head is ensured by a sealing ring; handtightening is sufficient. The tightness between the head and the bowl is ensured by a sealing ring: hand-tightening is sufficient. The spanner is for disassembly.
- If you choose the valve option, its nickel-plated brass adapter is factory-fitted with a Teflon seal. This assembly (adapter + ¼" valve) must be hand-fitted to the bottom of the bowl. The sealing between the male thread of the adapter and the bowl is ensured by an O-ring;

Tightening this assembly (adapter + $\frac{1}{2}$ valve) will be a maximum of $\frac{1}{4}$ turn of the O-ring blocked against the bowl.

- The cylindrical support of the filter screen is fitted at the 2 ends with a centrifugal spinner and a sealing cover. The purpose of the latter is to provide the sealing between the unfiltered water and the filtered water. The largest part of the support will be placed in centrifugal spinner.
- Fitting isolating valves upstream and downstream of the filter is advised for assisting maintenance of the filter.
- Filling the bowl of the models TE DUO TIO with the treatment material (activated carbon, polyphosphate etc.) is made easier by following the rules stated in the appendix.
- There is no model NW18TE.

4. Maintenance

Before disassembling the bowl, close the upstream and downstream valves and release the pressure. Maintenance and replacing the filter screen for drinking water is advised at least twice per year. The filters graded 5, 10, 25, 50 & 100μ are intended for a single use. Cleaning them would change the structure of the fibre, so degrading the fineness of the selected filtering and making the filter more fragile, which could lead to tearing.

The nylon filters graded 150 & 300 μ are designed to be cleaned and re-used.

Replacement of the activated carbon in the models TE - DUO - TIO for drinking water is necessary every 12 m^3 , and in other cases at least every 6 months.

The thread of the bowl must stay clean and greased for easy fitting and removal of the bowl during its life time. The sealing ring between the head and the bowl must also remain clean and greased for good sealing. Plan to replace it every 5 years. All slots and O-ring seating's must remain clean and without burrs.

Every component of the filter, even if only slightly damaged, must be replaced immediately to ensure good performance under pressure and water-tightness of the whole filter.

5. Warranty

The choice of high-quality raw materials for manufacturing each component of your filter is the best guarantee of giving you full satisfaction for many years of use. If, nevertheless, a component develops a fault related to a manufacturing defect, this would be covered by a replacement of that component under guarantee.

Beta Valve Systems Ltd Park House Business Centre, Desborough Park Road, High Wycombe, Bucks, HP12 3DJ Tel: 01494 459 511