

Talbot Modular Manifold Systems

Modular Manifolds for Water Distribution Systems

Benefits

- *Modular components means any number of outlets may be used.*
- *2" female inlet and 3/4" female or PE Talbot Pushfit outlets allow most types of pipe material to be connected.*
- *Can be adapted to provide metered outlets using both concentric and in-line meters.*
- *Design and selection of materials gives light weight for easy handling, high strength for installation and operation as well as corrosion resistance for long life.*
- *A complete system that can be tailor made to exact customer requirements providing the type and number of outlets needed.*
- *Each outlet has its own shut-off valve and in its 6-outlet version will fit a standard 18" x 24" chamber.*



Technical help

For further technical data, product specifications and general information please contact our Customer Service Department at the telephone number shown below.

The cost effective Talbot Stopvalve Manifold System is used to divide a water service pipe into virtually any number of outlets, each outlet having its own shut-off device and the option for individual metering facilities.

The system can be used in crowded areas for multi-dwelling developments and its modular construction provides a wide range of installation options.

The Talbot Stopvalve Manifold System is a purpose designed unit which gives maximum benefit to both the installer and operator.



Technical data

- | Pressures | Working | Test |
|-----------|---------|--------|
| Water: | 16 bar | 24 bar |
- **Temperature: Up to 40°C**
Temperature increases may affect the installed life of the product. For further information relating to operating temperatures/pressure please contact the Talbot customer service department at the telephone number shown below.
 - **Material: (Manifold)**

Body:	Acetal
End Cap:	Acetal
Stopvalve Rotor/Plunger:	Polypropylene
Stopvalve Cap	Acetal
Stopvalve Key	Polypropylene
'O' Ring Seals	EPDM Rubber
Stopvalve Seat Washer	EP Rubber to BS 3457
 - **Material: (Meter Mount)**

Meter Mount Body:	Acetal
Meter Locking Ring:	Acetal
Blanking Plugs:	Acetal
Meter Mounting Thread:	Acetal
Connecting Bushes:	Acetal
Seals in contact with water:	EPDM Rubber
Other Seals:	EPDM, Nitrile Rubber or Thermoplastic Elastomer

Please note that meters are not supplied with the Talbot Manifold System

General application

The Talbot Modular Manifold system divides a single inlet of either 50 or 63mm Talbot Pushfit for PE or female thread connection into virtually any number of outlets required depending on site conditions and water pressure.

The shut off device is a multi-turn stopvalve and has a removable key with torque overload protection.

The outlets are of either 20 or 25mm Talbot Pushfit or 3/4" female threaded connections. The Talbot Pushfit connection uses a common body and only two sets of interchangeable components to connect to metric PE pipes and their imperial equivalents.

Safety

As with all industrial products it is important to take adequate safety precautions such as the use of adequate protective clothing like gloves, overalls, eye protection and safety footwear during installation, use and maintenance with this product.

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How to order

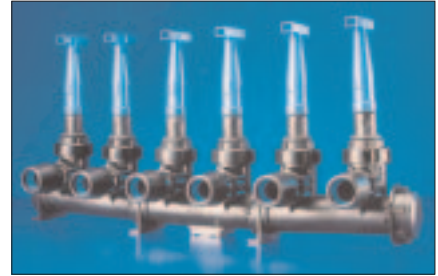
The Talbot Stopvalve Manifold System can be supplied in almost any configuration so when ordering the following should be considered:

- The size and type of inlet required (2"/63mm Talbot Pushfit or 2" Female)
- The number of outlets required
- The size and type of outlet required (3/4"/25mm Talbot Pushfit or 3/4" Female)
- Whether meters are to be used and if so what type (Concentric or In-line)
- If Concentric meters are to be used which meter unit blanking plug is needed (Full, Trickle or No Flow.)

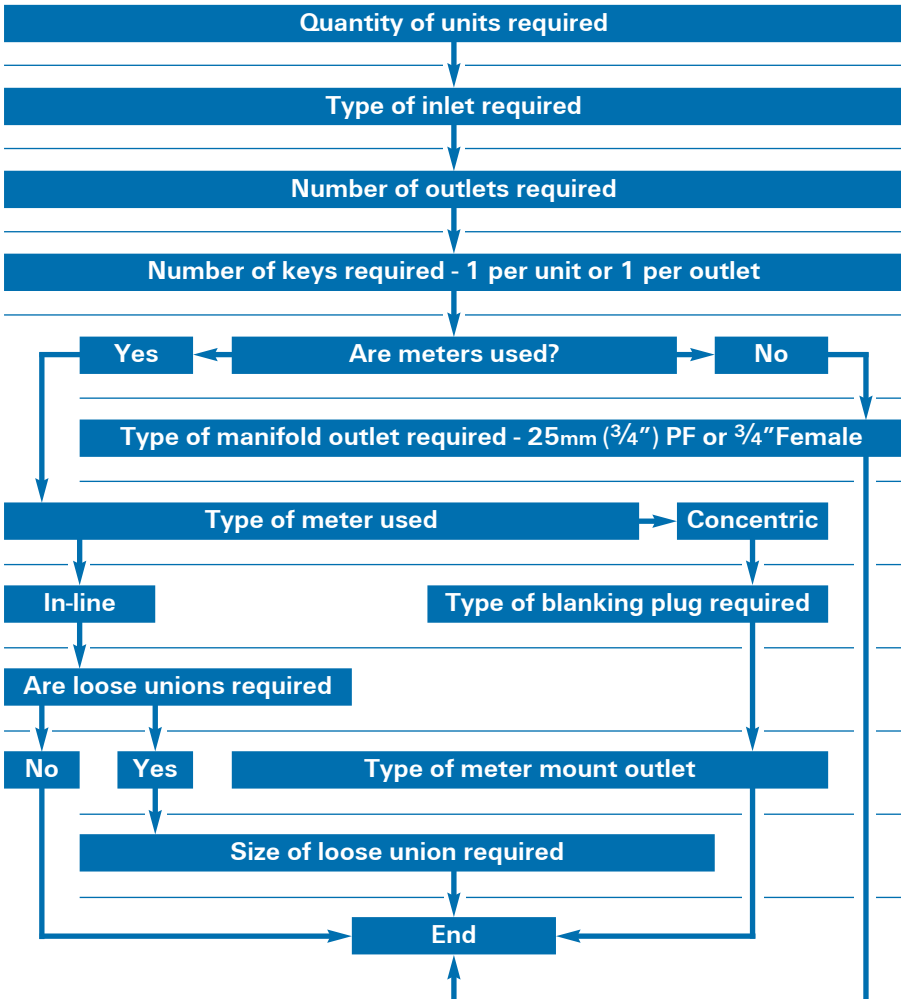
The Talbot Stopvalve Manifold System can be broken down into 6 main sections:

- 1 Twin 3/4" Female outlet unit with a 2" Female inlet
- 2 Twin 3/4" Female outlet extension unit (no inlet)
- 3 Single 3/4" Female outlet extension unit (no inlet)
- 4 Male End Plug
- 5 Female End Plug
- 6 Stopvalve Key

These items can be combined in virtually any combination to give a product that is suited exactly to the customers needs. Under normal circumstances the arrangement would consist of one twin outlet unit with a single inlet, (item 1 above) and a combination of the remaining units to provide up to 18 outlets with one male and one female blanking plug, (items 4 and 5 above) at each end. Should more than 18 outlets be needed a second inlet connection may be required. Modules can also be supplied separately to allow users to build their own configuration of product.



Example



Quantity of units required	100			
Type of inlet required	2" FI			
Number of outlets required	6			
Number of keys required	1 per outlet			
Are meters used	Yes			
Size and type of manifold outlet required	3/4" FI			
Type of meter to be used	In-line			
Type of blanking plug required	N/A			
Are loose unions required	Yes			
Type of meter pod outlet required	N/A			
Size of loose union required	3/4" x 25mm			
End				

Modular Manifold Systems

Additional Items

In addition to the six basic units listed to the left there are several additional items that can be used to further increase the Talbot Modular Manifold's versatility.

7 63mm Talbot Pushfit Male Connector

These can be screwed into the inlet to provide connections onto PE pipe

8 25mm Talbot Pushfit Male Connector

These can be screwed into the outlets to provide connections onto PE pipe

9 Long and Short spacing bushes

These are used to connect the MSM meter mounts to the manifold. The long and short spacers are used alternately in order to stagger the mounts, so making the unit compact.

10 MSM meter mounts

These are used to allow the use of MSM (Concentric) meters. These meter mounts are available with either 3/4" female or 25mm (3/4") Talbot Pushfit for PE pipe outlets.

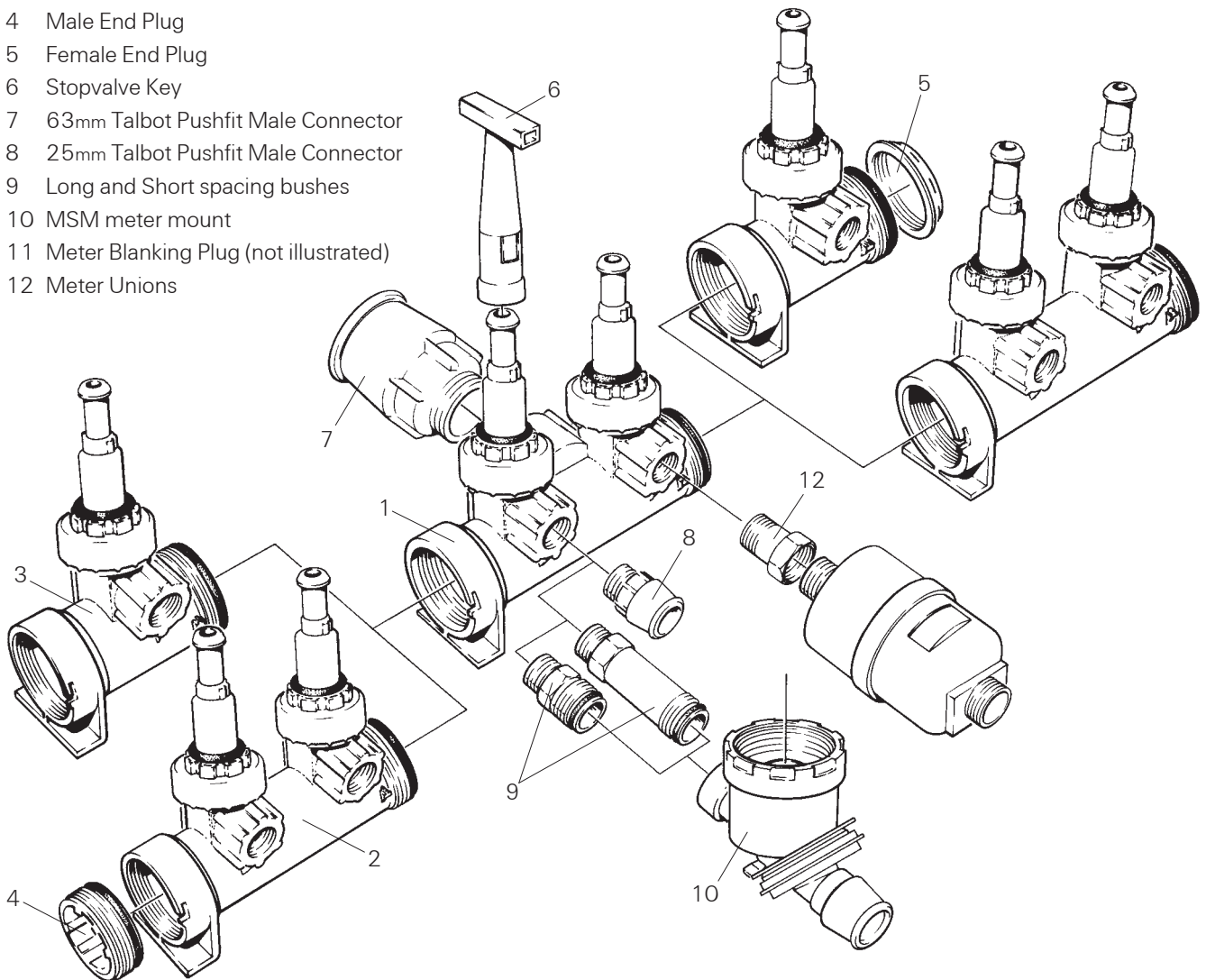
11 Meter Blanking Plugs

These are used if meter mounts are required for subsequent meter fitment but meters are not to be used immediately after installation. They take the form of no flow, trickle flow and full flow alternatives

12 Meter Unions

These are needed to connect in line meters to the unit. The distance between the outlets allows for PSM (In-line) meters to be used without the spacing bushes listed above. (Item 9)

- 1 Twin 3/4" Female outlet unit with a 2" Female inlet
- 2 Twin 3/4" Female outlet extension unit (no inlet)
- 3 Single 3/4" Female outlet extension unit (no inlet)
- 4 Male End Plug
- 5 Female End Plug
- 6 Stopvalve Key
- 7 63mm Talbot Pushfit Male Connector
- 8 25mm Talbot Pushfit Male Connector
- 9 Long and Short spacing bushes
- 10 MSM meter mount
- 11 Meter Blanking Plug (not illustrated)
- 12 Meter Unions



How it Works

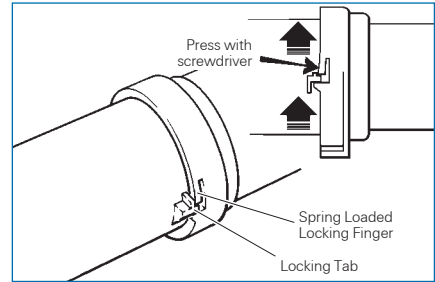
The Talbot Stopvalve Manifold System is very simple in its construction having only a few basic components. Set out below are some of the major features of the system.

Stopvalve Assembly and Key

The stopvalve's screwdown action is familiar to installers and consumers, giving maximum security of shut off. The key used with the stopvalve assembly is designed to provide torque overload protection and enables the valve to be opened and closed easily. It is designed to 'slip' on the stopvalve rotor should too much force be used to tighten the stopvalve. It is also removable, so reducing the possibility of unauthorised operation.

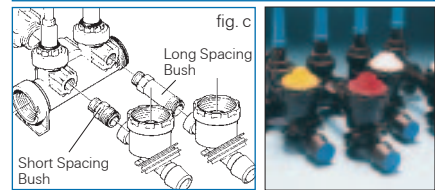
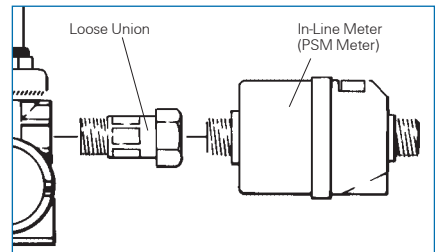
Body Alignment Lock

When modules are screwed together a spring loaded finger and locking tab engage ensuring the correct alignment of body modules every time. This integral locking feature also prevents overtightening or accidental loosening of inter module connections during installation and service



Meter Connection

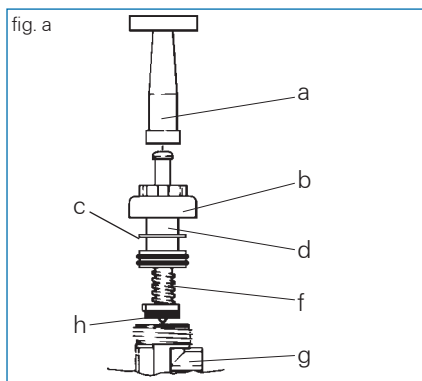
There are two types of meter that can be used with the Talbot Stopvalve Manifold System, concentric and in-line meters. In-line meters are simply secured to the Manifold System using standard straight meter couplings (loose unions) and do not need to be staggered. Concentric meters are connected via meter mounts which in turn connect to the manifold system via alternate long and short spacing bushes. (fig c) This enables the mounts to sit in close proximity to each other. Concentric meters are then screwed directly into these mounts. As an alternative to a meter one of the three available blanking plugs can be used, a no flow, a trickle flow or a full flow plug. Several benefits are designed into the meter block. An integral check valve prevents the drainage of water from the customers system into the inspection chamber, the female meter thread can be replaced should it become damaged and the concentric meter mount outlets are designed in such a way that they may be swivelled into almost any position, making connections in difficult or congested conditions easy.



Spares and on Site Repairs

Stopvalve Assembly

As with all the components of the Talbot Stopvalve Manifold System the valve parts are made of corrosion resistant plastics which will not seize, even after long periods of inactivity. However the valve may be dismantled to replace the seat washer should it become damaged. (fig. a)

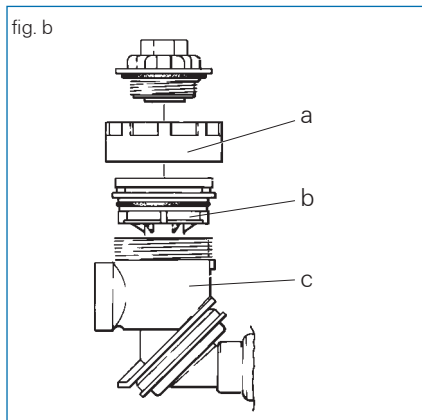


Stopvalve Assembly

- 1 Isolate the unit and remove the stopvalve key (a)
- 2 Unscrew the stopvalve cap ring (b) from the stopvalve housing (g) using the appropriate tool (available from Talbot) and lift it off the assembly
- 3 Pull the plunger housing (d) complete with plunger (f) out of the stopvalve housing
- 4 Prise the damaged seat washer (h) off its retaining pin and replace with a new one
- 5 Re-assembly is a reversal of the above procedure, however when replacing the stop valve cap ring (b) ensure that it has been securely tightened to a torque of 20lb/ft

Meter Mount Maintenance

Should the meter mounting thread or internal check valve become damaged or inoperable during service they may be removed and replaced. (fig. b)



Meter Mount Maintenance

- 1 Close the supply and remove the meter or blanking plug from the meter mount
- 2 Unscrew the check valve retaining ring (a) from the pod housing (c) using the appropriate tool (available from Talbot)
- 3 Pull the white meter mounting thread and check valve assembly (b) out of the meter housing (c) - the meter may be screwed back into the check valve assembly (b) and used as a tool to make removal easier.
- 4 Discard the damaged assembly (b) and replace with a new one.
- 5 Re-assembly is a reversal of the above procedure. Ensure the check valve retaining ring is securely tightened to a torque of 20lb/ft

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