

# FYREXTRA - BLADDER TANKS



Knowsley SK Limited - Designer and Manufacturers of Fire Fighting Equipment & Systems

*Strategic fire protection - when and where its needed most*

an **Imtech** company

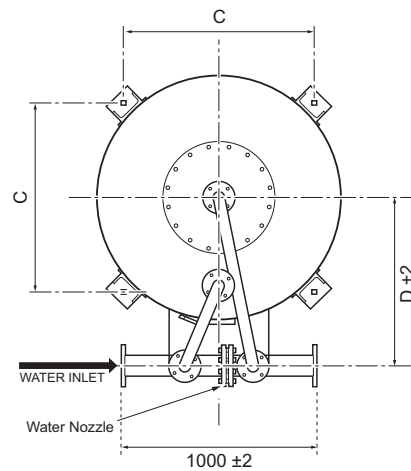


Established in 1896, Knowsley SK Ltd has an enviable reputation for manufacturing quality fire fighting equipment and systems for high-value asset protection that can be relied upon whenever danger strikes.

## 01 Product Overview

- Provides dependable, accurate and cost effective foam fire fighting capability
- Uses Firewater pressure - no external power source required
- Comprehensive range of sizes to suit many applications.
- Vertical, horizontal, and twin tank configurations available
- Suitable for any commercially available foam concentrate
- Can be incorporated into a wide range of foam systems
- Tanks designed and manufactured to PED or ASME Codes.

This data sheet features the vertical and horizontal bladder tanks. For information on other bladder tank designs, please contact us.



## 02 Overall Dimensions - Vertical Bladder Tanks

Overall dimensions are shown in table 1. See Figure 1. for corresponding annotations.

Table 1. Overall Dimensions - Vertical Bladder Tank

Model	Dimensions				Working weight (Kg)	Capacity (Lts)
	A	B	C	D		
Fyrextra BTV-6	800	2115	624	650	1160	600
Fyrextra BTV-10	1000	2195	790	750	1715	1000
Fyrextra BTV-15	1000	2785	790	750	2410	1500
Fyrextra BTV-20	1100	3045	864	800	3340	2000
Fyrextra BTV-25	1170	3265	914	800	4070	2500
Fyrextra BTV-30	1270	3330	984	860	4740	3000
Fyrextra BTV-35	1360	3365	1048	900	5605	3500
Fyrextra BTV-40	1450	3420	1112	950	6270	4000
Fyrextra BTV-50	1600	3495	1245	1050	7640	5000
Fyrextra BTV-60	1750	3575	1351	1150	9000	6000
Fyrextra BTV-80	1960	3705	1534	1200	11680	8000
Fyrextra BTV-90	2100	3795	1636	1300	13400	9000
Fyrextra BTV-100	2200	3845	1707	1350	14760	10,000

See figure 1 for corresponding drawing

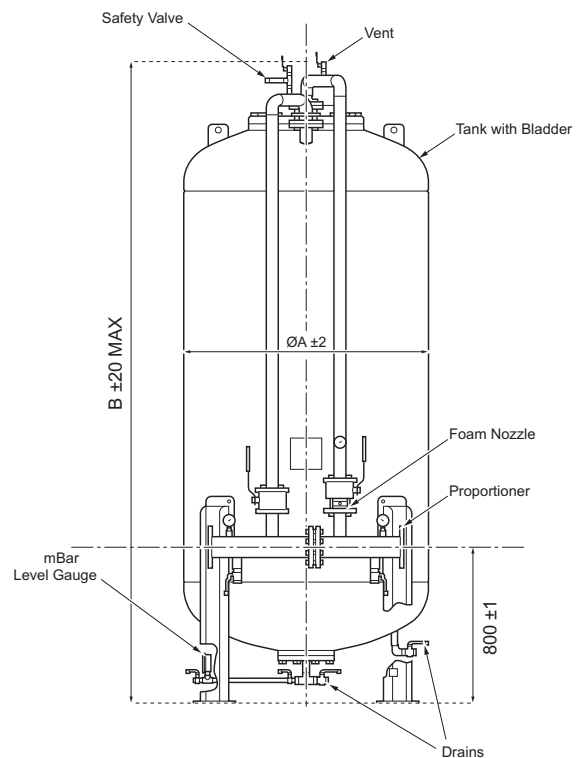


Figure 1. Vertical Bladder Tank



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Our Century of experience, continuous product development and world-wide support network provides the confidence for clients to select Knowsley SK as their first choice for asset protection whatever, whenever and wherever the risk



## 03 Product Details

The Knowsley Fyrextra range of bladder tanks is a major component of a balanced pressure foam proportioning system. The simple design ensures low running and maintenance costs.

The tank comprises an outer shell of carbon steel with a hypalon internal bladder. Foam concentrate is stored within the bladder and upon system actuation firewater pressure is applied to the outside of the bladder thus forcing the concentrate through the discharge pipework to mix with the firewater at the proportioning unit.

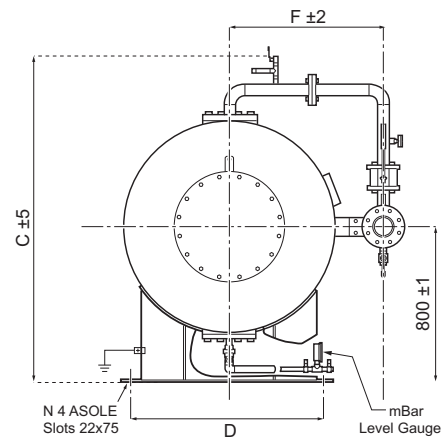
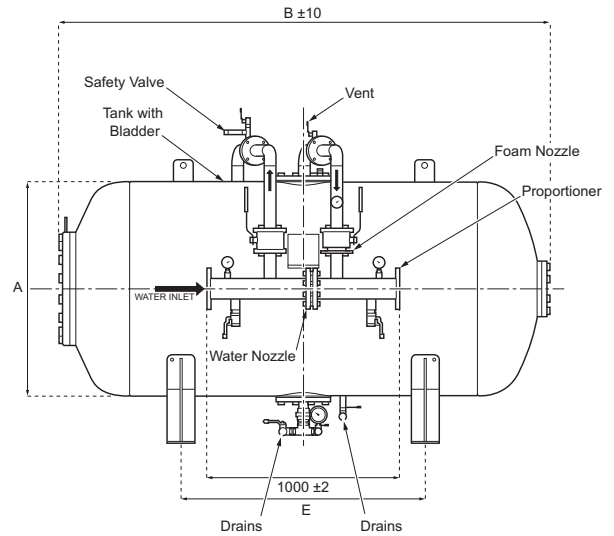
## 04 Overall Dimensions - Horizontal Bladder Tanks

Overall dimensions are shown in table 2. See Figure 2. for corresponding annotations.

**Table 2. Overall Dimensions - Horizontal Bladder Tank**

Model	Dimensions					F	Working weight (Kg)	Capacity (Lts)
	A	B	C	D	E			
Fyrextra BTH-10	1000	1670	1590	900	700	750	1810	1000
Fyrextra BTH-15	1000	2260	1590	900	1100	750	2510	1500
Fyrextra BTH-20	1100	2540	1690	1000	1250	800	3360	2000
Fyrextra BTH-25	1170	2785	1760	1000	1350	800	4095	2500
Fyrextra BTH-30	1270	2840	1865	1150	1400	860	4780	3000
Fyrextra BTH-35	1360	2900	1955	1200	1425	900	5700	3500
Fyrextra BTH-40	1450	2950	2045	1250	1450	950	6370	4000
Fyrextra BTH-50	1600	3025	2200	1400	1500	1050	7745	5000
Fyrextra BTH-60	1750	3110	2340	1500	1500	1150	9120	6000
Fyrextra BTH-80	1960	3225	2565	1700	1500	1250	11830	8000
Fyrextra BTH-90	2100	3305	2700	1850	1500	1300	13650	9000
Fyrextra BTH-100	2200	3365	2800	1950	1500	1350	15035	10,000

See figure 2 for corresponding drawing



**Figure 2. Horizontal Bladder Tank**

## 05 Spares Information

Please contact our dedicated spares department for the components listed below:  
[spares@knowsleysk.co.uk](mailto:spares@knowsleysk.co.uk)

1. Hypalon Bladder



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*Our experience spans the globe and covers all high risk applications from Oil refineries and LNG Processing Facilities through to Offshore Platforms, Petrochemical Installations, Storage Tank Farms and Loading/Offloading Wharves and Jetties.*

## 06 Product Materials

Bladder tanks are manufactured from the following high grade materials:

- Body & dished ends - P355NH steel plate
- Bladder - Hypalon
- Pipework - ASTM A106 Gr B
- Water and foam valves - ASTM A105 body with SS304 ball
- Drain Valves - Brass
- Water and foam nozzles - SS304
- Pressure gauges - SS304

Painting Cycle

- Surface priming: Brushing / Chemical washing  
One hand of Epoxyvinyllic Thk.50 Micron
- Finish: Polyurethanic Red Ral 3000 Thk.50 Micron
- Total thickness: =>100 Micron

## 07 Performance Data

A wide range of bladder tank capacities and flow rates are available to meet any practically conceivable application. Any commercially available foam concentrate can be used with proportioning ratios of 3% or 6%.



Figure 3. Horizontal bladder tank

## 08 Construction Parameters

- Design Code - PED 97/23 or ASME VIII Div 1
- Design Pressure - 12 Bar
- Test Pressure - 18Bar
- Design Temperature - -10 to + 50 C



Figure 4. Bladder tank construction at the KSK workshop



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