

**BUFFERSTORE**

## Buffer Stores

Manufactured from mild steel  
for primary water



**McDonald**  
**Water Storage**

Hot Water Storage Solutions



## Commercial Mild Steel Buffer Stores For Domestic And Commercial Applications

The warmth of a home, office or commercial building can be delivered by combining and connecting many components to the heating system.

Our mild steel buffer stores, ranging from 500 litres up to 100,000 litres, provide an essential part of the system design and are a key component to ensuring the efficiency and longevity.

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### 500L to 5000L

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### 5000L to 100,000L

Product Features

Product Sizes and Codes

Technical Specification





# BUFFERSTORE

## Hot Water Buffer Store (<5000 litres)

The mild steel hot water buffer store is designed for the storage of primary water produced from continuous and intermittent heat sources.

The hot water contained in the cylinder is only designed to be circulated in a closed heating circuit (without oxygen), in order to avoid corrosion.

The cylinders are available from 500 litres to 5000 litres, with the option to incorporate a backup immersion heater (not supplied).

All the models shown are standard configurations, however bespoke specification is available to suit individual installation requirements. Please speak to the technical team if this is required.

## BUFFER VESSEL

- Material  
S 235 Jr Carbon steel
- External Protective Treatment  
Anti rust protection
- Screwed or Flanged Connections
- Rating  
Max 4/6 bar pressure  
Max 95°C temperature
- Warranty  
5 years

## FEATURES

- Soft insulation with polyester and PVC  
Fire retardant class B2 (DIN 4102)
- Hard insulation  
500 - 2000 litre models  
Polyurethane foam and PVC  
Fire retardant class B3 (DIN 4102)  
1250 - 5000 litre models  
Polyester (15mm) and  
Polystyrene (85mm) and PVC  
Fire retardant class B2 (DIN 4102)
- Compliance  
Pressure Equipment Directive (PED)  
Energy related Products (Erp) Directive

Available accessories at the time of order include;



Manhole and  
Insulation Jacket



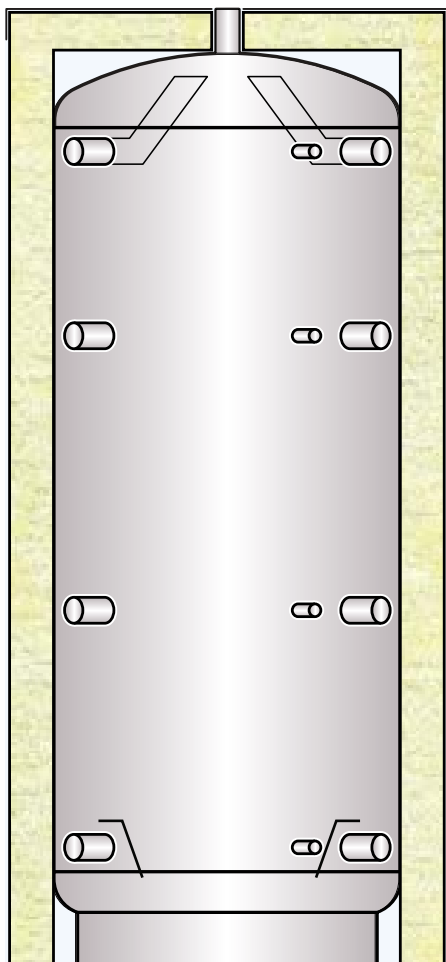
Safety  
Valve



Pressure and  
Temperature Gauges



Immersion  
Heater



# BUFFERSTORE

## Hot Water Buffer Store

With Hard Insulation and PVC Jacket

Working Pressure 4 bar Code	Working Pressure 6 bar Code	Insulation Thickness	Capacity (L)
PF 00500 R	PF 00506 R	50	500
PF 00600 R	PF 00606 R	50	585
PF 00800 R	PF 00806 R	100	749
PF 01000 R	PF 01006 R	100	931
PF 01250 R	PF 01256 R	100	1267
PF 01500 R	PF 01506 R	100	1472
PF 02000 R	PF 02006 R	100	1950
PF 02500 R	PF 02506 R	100	2494
PF 03000 R	PF 03006 R	100	2958
PF 04000 R	PF 04006 R	100	3894
PF 05000 R	PF 05006 R	100	5005

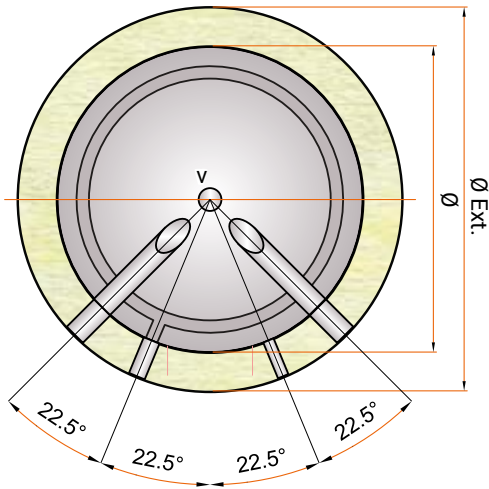
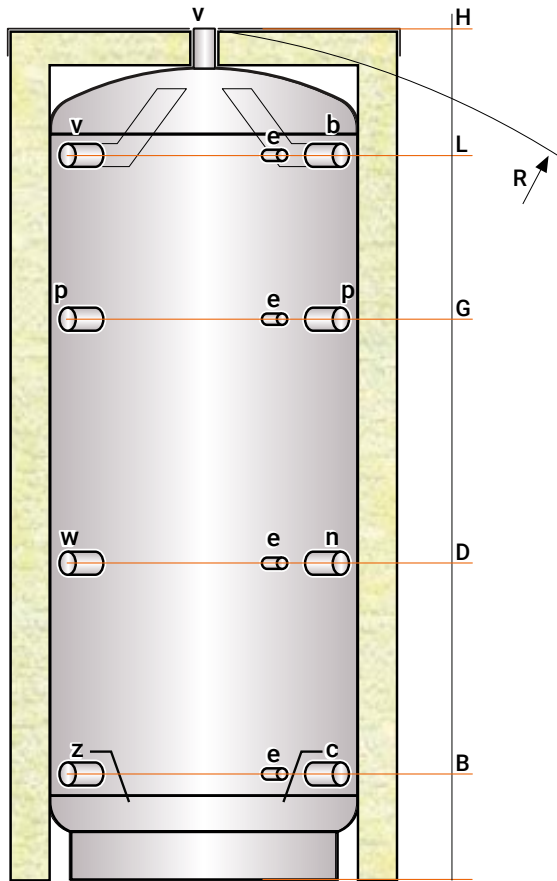
## Hot Water Buffer Store

With Soft Insulation With Polyester And PVC Jacket

Working Pressure 4 bar Code	Working Pressure 6 bar Code	Insulation Thickness	Capacity (L)
PF 00800 F	PF 00806 F	130	749
PF 01000 F	PF 01006 F	130	931
PF 01250 F	PF 01256 F	130	1267
PF 01500 F	PF 01506 F	130	1472
PF 02000 F	PF 02006 F	130	1950
PF 02500 F	PF 02506 F	100	2494
PF 03000 F	PF 03006 F	100	2958
PF 04000 F	PF 04006 F	100	3894
PF 05000 F	PF 05006 F	100	5005

# Technical

## Dimensions and Heights



Working Pressure 4/6 bar Model	Cylinder Diameter (mm)	Cylinder Height (mm)	External Diameter Hard/Soft Ins (mm)	Tilt Height (R)	Weight (kg)
PF 00500	650	1645	750	1820	110
PF 00600	650	1895	750	2050	120
PF 00800	790	1750	990/1050	1745	149
PF 01000	790	2110	990/1050	2095	183
PF 01250	950	2075	1150/1210	2090	215
PF 01500	1000	2115	1200/1260	2145	237
PF 02000	1100	2380	1300/1360	2385	301
PF 02500	1200	2495	1400	2550	354
PF 03000	1250	2710	1450	2760	423
PF 04000	1400	2820	1600	2905	492
PF 05000	1600	2850	1800	3005	572

Working Pressure 4/6 bar Model	Heights (mm)							
	B	C	D	E	F	G	I	L
PF 00500	240	315	615	835	955	1105	1315	1375
PF 00600	235	315	700	1000	1120	1270	1480	1630
PF 00800	275	355	655	875	1015	1145	1345	1410
PF 01000	275	350	810	1035	1195	1355	1675	1755
PF 01250	320	400	745	1060	1200	1380	1600	1705
PF 01500	340	420	765	1080	1220	1400	1620	1725
PF 02000	370	450	930	1090	1230	1435	1710	1945
PF 02500	385	480	940	1120	1300	1500	1700	2050
PF 03000	400	490	1015	1210	1430	1645	1830	2255
PF 04000	460	550	1085	1270	1490	1710	1930	2315
PF 05000	465	555	1080	1275	1495	1710	1895	2320

## CONNECTIONS

- b. 1½" Free connection
- c. 1½" Free connection
- d. 1" Boiler flow
- e. ½" Thermometer - Sensor
- g. 1" Boiler return
- n. 1½" Heating system return
- p. 1½" Free connection
- v. 1½" Heating system flow
- w. 1½" Opening for immersion heater
- z. 1½" Low temperature heating system return

Please note: All 1½" connections increased to 2" on all cylinders 2500 litres and above



# BUFFERSTORE

## Hot Water Buffer Store (>5000 litres)

The larger range of mild steel hot water buffer stores are designed for the storage of large volumes of primary water produced from continuous and intermittent heat sources.

The hot water contained in the cylinder is only designed to be circulated in a closed heating circuit (without oxygen), in order to avoid corrosion.

The cylinders are available from 5000 litres to 100,000 litres, with the option to incorporate a backup immersion heater (not supplied), ideally suited to work with renewable heating systems, district heat networks or industrial applications.

All the models shown are standard configurations, however bespoke specification is available to suit individual installation requirements. Please speak to the technical team if this is required.

### BUFFER VESSEL

- Material  
S 235 Jr Carbon steel
- External Protective Treatment  
Anti rust protection
- Screwed or Flanged Connections
- Rating  
Max 3/6 bar pressure  
Max 95°C temperature
- Warranty  
2 years

### FEATURES

- Soft insulation  
Soft polyurethane foam and  
PVC jacket  
Fire retardent class B2 (DIN 4102)
- Compliance  
Pressure Equipment Directive (PED)

Available accessories at the time of order include;



Inspection Hatch and  
Insulation Jacket



Safety  
Valve



Pressure and  
Temperature Gauges



Immersion  
Heater



# BUFFERSTORE

## Hot Water Buffer Store

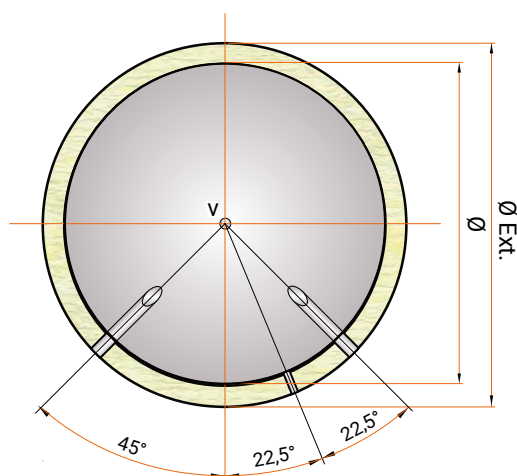
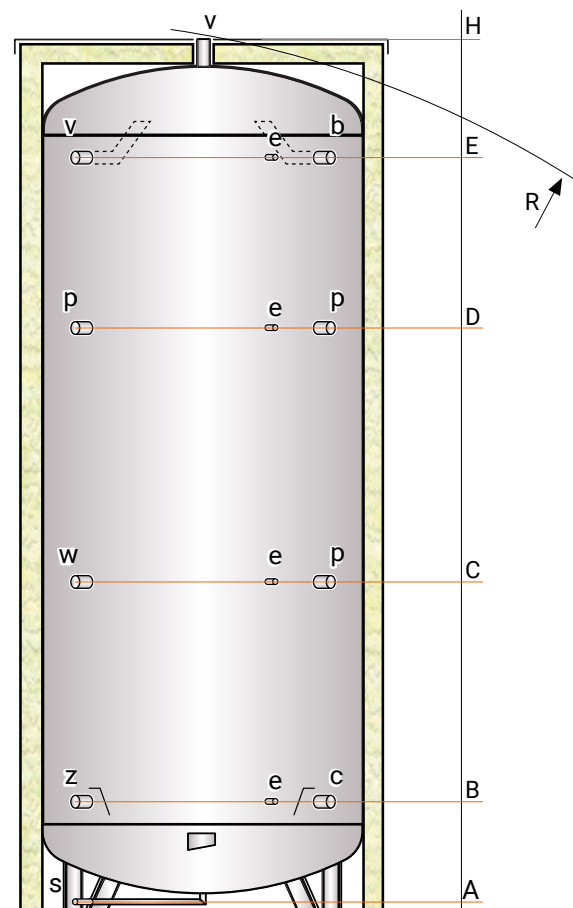
With Soft Insulation and PVC Jacket

Working Pressure 3 bar Code	Working Pressure 6 bar Code	Insulation Thickness	Capacity (L)
PFXXL 06003 F	PFXXL 06006 F	100	6038
PFXXL 08003 F	PFXXL 08006 F	100	8220
PFXXL 10003 F	PFXXL 10006 F	100	9790
PFXXL 15003 F	PFXXL 15006 F	100	15496
PFXXL 20003 F	PFXXL 20006 F	100	20712
PFXXL 30003 F	PFXXL 30006 F	100	30524

## Dimensions and Heights

Model	Cylinder Diameter (mm)	Cylinder Height (mm)	External Diameter (mm)	Tilt Height (R)	Weight (kg)
PFXXL 0600_ F	1600	3460	1800	3590	598
PFXXL 0800_ F	2000	3180	2200	3470	862
PFXXL 1000_ F	2000	3680	2200	3890	1056
PFXXL 1500_ F	2300	4250	2500	4500	1430
PFXXL 2000_ F	2500	4850	2700	5110	2052
PFXXL 3000_ F	2500	6850	2700	7000	2908

Model	Heights (mm)				
	A	B	C	D	E
PFXXL 0600_ F	60	570	1345	2135	2925
PFXXL 0800_ F	120	760	1325	1955	2520
PFXXL 1000_ F	120	760	1485	2275	3015
PFXXL 1500_ F	120	765	1700	2635	3550
PFXXL 2000_ F	120	845	1925	3025	4105
PFXXL 3000_ F	120	845	2595	4355	6100



## CONNECTIONS

- b. 2" or 3" Heat source flow
- c. 2" or 3" Heat source return
- e. 1/2" Thermometer - Sensor
- p. 2" or 3" Free connection
- v. 2" or 3" Heating system flow
- w. 2" or 3" Opening for immersion heater
- z. 2" or 3" Heating system return

Please note: All 2" connections increased to 3" on all cylinders 10,000 litres and above

# Discover Our Complete Range Of Hot Water Storage Solutions

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Thermal Stores

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**McDonald**  
**Water Storage**

Hot Water Storage Solutions

Pride in our  
service, quality  
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QUEENSWAY INDUSTRIAL ESTATE | GLENROTHES | FIFE | KY7 5QF

T: 01592 611123 | E: [sales@mcdonaldwaterstorage.com](mailto:sales@mcdonaldwaterstorage.com)

[www.mcdonaldwaterstorage.com](http://www.mcdonaldwaterstorage.com)

