



**OPERATION AND MAINTENANCE MANUAL FOR  
BOSS™ FIG. 20 TYPE 2C FIRE HYDRANT**

# **CONTENTS**

**Purpose, Features & Scope of Application**

**Standards Met**

**Performance**

**Specifications**

**Dimensions**

**Materials of Construction**

**Transportation and Storage**

**Handling**

**Maintenance**

**Installation and Use**

**Warranty**

## PURPOSE, FEATURES AND SCOPE OF APPLICATION

The Fig. 20 fire hydrant is suitable for use with clean water and neutral liquids, to a maximum temperature of 80 °C. Minimum liquid temperature must be above freezing. Insulation is essential for external temperatures below 0 °C. It is rated for a maximum working pressure of 16 bar unless otherwise agreed and deliver a maximum of 2094 litres per minute at 2.0 bar.

They are supplied clockwise to close as denoted by a direction arrow on the stem cap. The number of turns from fully closed to fully open is 6.5.

Opening and closing is normally done by a standard tee key or ring key and bar located on the stem cap.

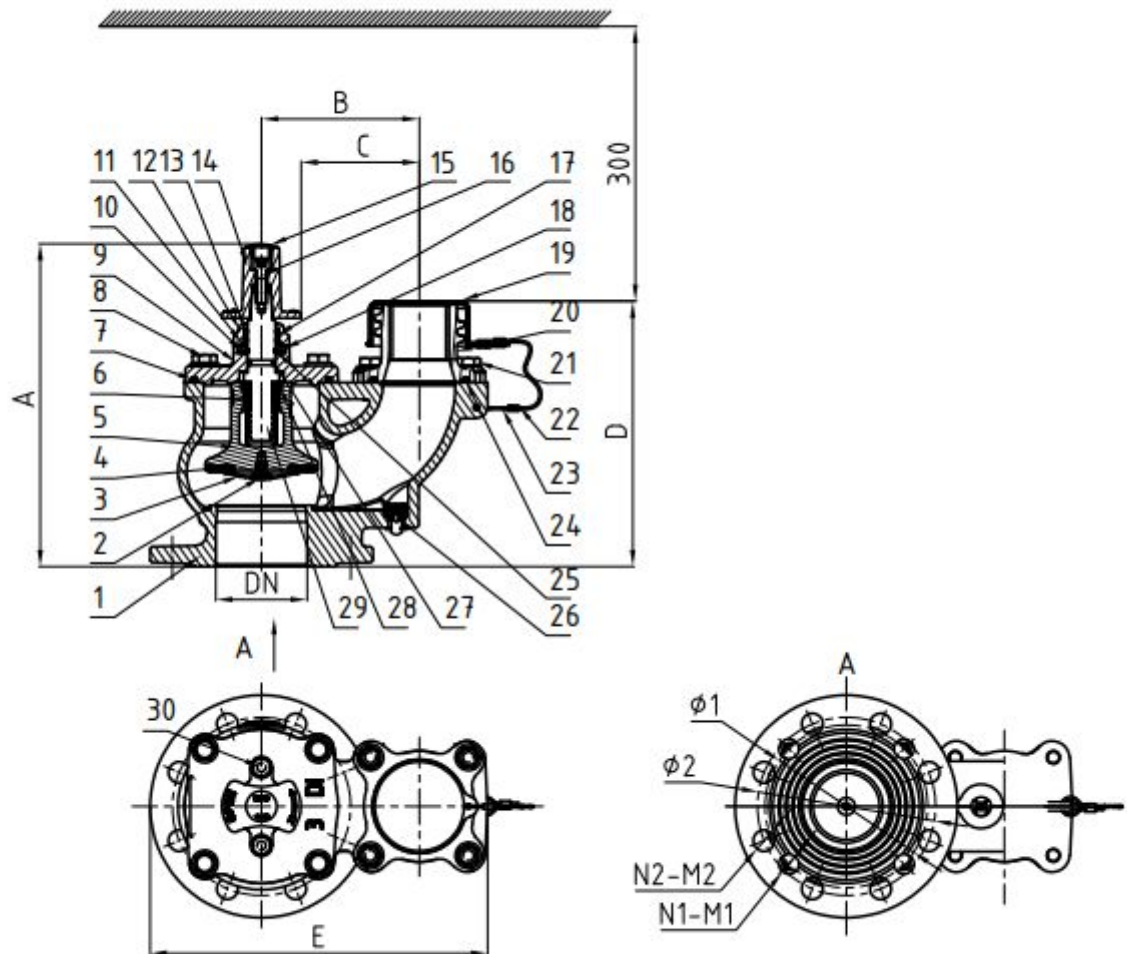
## STANDARDS MET

BS750  
EN1074-6  
BS EN14339  
WRAS

## PERFORMANCE

Flange Type	Actual Flow Rate	Kv	Operating Temperature Range
80mm Multi Flanged PN16	2094 l/min @ 2 bar	116	0 to +80°C

# SPECIFICATION



## DIMENSIONS

DN		Dimensions (mm)										Weight
Inch	mm	PN	A	B	C	D	E	ø1	ø2	N1-M1	N2-M2	kg
3	80	10/16	289.5	141.5	106	235	303	146	160	4 @ 18	8 @ 19	16.5

## MATERIALS OF CONSTRUCTION

No.	Part	Material	BSEN	No.	Part	Material
1	Body	Cast Iron	EN-JS 1040	16	M8 x 30mm Bolt	Stainless Steel
2	M8 x 16mm Screw	Stainless Steel		17	Axle Sleeve	Nylon
3	Plate	Stainless Steel		18	Positioning Ring	Stainless Steel
4	Sealing Pad	EPDM		19	Outlet Cap	Stainless Steel
5	Clapper	Cast Iron	EN-JS1040	20	Round Thread Outlet	Stainless Steel
6	Stem Nut	Brass	CW602N-H070	21	M12 x 30mm Bolt	Stainless Steel
7	O Ring	NBR		22	Wire Rope	Stainless Steel
8	M12 x 35mm Bolt	Stainless Steel		23	Aluminium Sleeve	Aluminum Alloy
9	Bonnet	Cast Iron	EN-JS1040	24	O Ring	NBR
10	35 x1mm Flat Washer	Stainless Steel		25	Retainer	Stainless Steel
11	O Ring	NBR		26	Auto Frost Valve	Nylon
12	Gland	Cast Iron	EN-JS1040	27	O Ring	NBR
13	O Ring	NBR		28	M4 x 6mm Bolt	Stainless Steel
14	Stem Cap	Cast Iron	EN-JS1040	29	Stem	Stainless Steel
15	Indicator Cap	ABS		30	M10 x 25mm Bolt	Stainless Steel

## **TRANSPORTATION AND STORAGE**

**All valves should be inspected at the time of delivery for shipping damage, missing parts, and conformance with the specifications**

**The valves should be stored in a sheltered area, or covered to prevent contamination by the weather or dirt. The valves should be stored evenly supported on a flat surface. End cap protectors should be in place when the valves are in storage.**

## **HANDLING**

**If handled incorrectly the autofrost plug can be dislodged. Therefore they should be lifted and handled by placing a hand under the outlet flange rather than the bend/boss.**

**Hydrants are heavy so always use appropriate lifting devices to avoid injuries. It is essential that staff undertaking these operations are adequately trained to avoid accidents.**

## **MAINTENANCE**

**To prevent injury to the operator or damage to the hydrant and/or property the hydrant must be isolated and line pressure removed.**

**Frequency of maintenance inspections should be based upon the operational characteristics of the system. As a minimum an annual inspection is recommended.**

**During the inspection the following should be checked.**

- 1. All end joints, cover joints and packing for leaks.**
- 2. Tightness of the bolts.**

## **INSTALLATION AND USE**

**Before use, the hydrant needs to be cleaned so as to remove dirt.**

**The closing mechanism should be checked to ensure freedom of movement and proper operation. Prepare the pipe ends as per the manufacturer's instructions and install the hydrant as per appropriate instructions for the specified joint.**

**All pipework should be properly supported to the hydrant. Do not use the hydrant to force the pipework into position. Standard wrenches and/or sockets are to be used to tighten all nuts and bolts. All bolts are to be tightened in a star pattern.**

## **WARRANTY**

**12 months**