### WINDOW/ WATER CURTAIN NOZZLE

Model No.: SD-WCB & SD-WCB20\* SD-WCS & SD-WCS20\*

#### **TECHNICAL DATA:**

MATERIAL SD-WCB & SD-WCB 20 in

Brass ASTM B16

SD-WCS & SD-WCS20 in

S.S. construction

MAXIMUM WORKING

**PRESSURE** 

12.3 Bar (175 PSI)

EFFECTIVE 1.4 to 3.5 Bar WORKING PRESSURE (20 - 50 PSI)

END CONNECTION SD-WCB & SD-WCS with

½" BSPT (NPT optional)

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SD-WCB 20 & SD-WCS 20 with

"BSPT (NPT optional)

K-FACTOR SD-WCB & SD-WCS

K20, K32, K42, K58 & K79

SD-WCB 20 & SD-WCS 20

K98, K120, K140

WEIGHT (Approx) SD-WGB & SD-WCS- 0.180Kg

SD-WCB 20 & SD-WCS 20 - 0.250 Kg

FINISH Natural Brass finish, chrome

plated brass or electroless brass finish (optional)

Natural finish for SD-WCB

& SD-WCB 20

ORDERING Specify Model, K factor and

INFORMATION Finish

# **DESCRIPTION**

Water Curtain Nozzle distributes water in a flat curtain extending all the way to the ground.

Water Curtain Nozzle when mounted in pendent position acts as a window spray nozzle to protect interior walls, windows and other openings of the building which are affected by fire.





When the nozzles mounted in horizontal position with flow towards ground, a flat water curtain is produced to segregate the area which is under fire.

Water Curtain Nozzles are available in Brass and Stainless Steel construction with different flow rate.

The main pipeline strainer as per NFPA-15 is required for system utilizing nozzle orifice diameter less than 9.5mm (3/8 inch).

### **MAINTENANCE**

The spray nozzle must be handled with due care. For best results, the storage as well as any further shipment be made in original packing only.

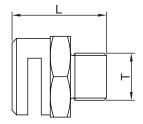
Nozzle which is visibly damaged should not be installed.

Use Teflon tape or soft thread sealant on male thread of the nozzle. The nozzles must be tightened in to the fitting. Excessive tightening torque may result into serious damage to nozzle arms and the deflector which may affect spray pattern of the nozzle and it's performance.

It is recommended that water spray system be inspected regularly by authorised technical personnel. The nozzle must be checked for atmospheric effects, external and internal obstruction, blockage if any. The nozzles should be cleaned or replaced if required. The system must be operated with optimum water flow at least twice in a year or as per the provisions of NFPA/TAC or local authority having jurisdiction.

The owner is solely responsible for maintaining the water spray system and the components therein so that it performs properly when required.

### **DIMENSION** in millimetre (Approximate)



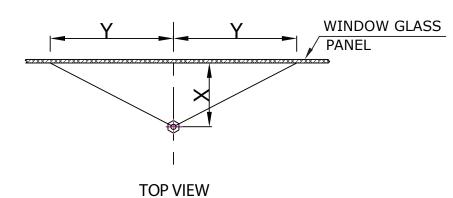
MODEL	Т	L
SD-WCB & SD-WCS	1/2" BSPT	44
SD-WCB 20 & SD-WCS 20	3/4" BSPT	46

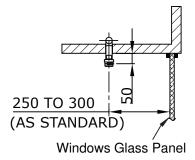
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### **SPRAY PATTERN**

# **SD-WCB & SD-WCS**

Windows curtain nozzle spray characteristics





**SIDE VIEW** 

K20						
X <b>—</b>	250	300	600	900	1200	1500
Pressure (PSI)		<b>↓</b> Y				
7	1050	1350	2400	3300	3900	3900
15	1800	2100	2700	4050	4050	3900
25	3000	3000	2850	4200	4350	3900
30	3000	3000	3000	4200	4350	4050
50	3000	3150	3300	4500	4500	4050
57	3000	3450	3300	4500	4500	4050

K42						
X <b>—</b>	250	300	600	900	1200	1500
Pressure (PSI)		<b>V</b> Y				
7	1650	2250	2550	2775	3750	2550
15	2400	2850	2850	3075	3900	4350
25	3600	3300	3300	3150	4350	4500
30	3600	3900	4200	3300	4350	4500
50	3750	4200	4650	3450	4500	4650
57	3900	4200	4800	3750	4500	4650

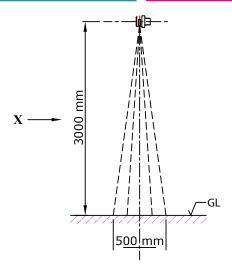
K32						
X —	250	300	600	900	1200	1500
Pressure (PSI)		<b>♦</b> Y				
7	1200	1800	2550	3750	3600	3600
15	2100	2400	3000	4200	4200	3600
25	3150	2700	3300	4500	4350	3750
30	3300	2850	3600	4650	4500	3750
50	3300	3300	3900	4800	4500	4050
57	3300	3300	3900	4800	4650	4050

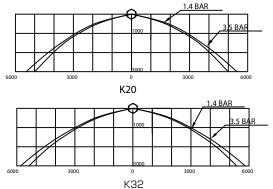
K58						
X —	250	300	600	900	1200	1500
Pressure (PSI)	Y <b>↓</b>					
7	2100	2250	3150	3450	4050	2700
15	2550	3000	3900	4500	4800	4350
25	3900	4200	4200	4800	5100	4500
30	3900	4650	4500	4800	5100	4650
50	4200	4650	4800	4950	5400	4650
57	4200	4650	4800	5175	5400	4800

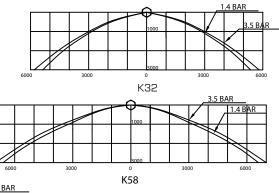
All Dimension in MM

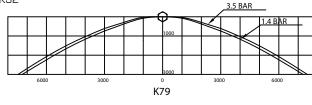
# **SHIELD**

K79						
X <b>—</b>	250	300	600	900	1200	1500
Pressure (PSI)		<b>♦</b> Y				
7	2550	2550	3450	3600	3450	2850
15	3600	3900	4350	4350	4800	4200
25	3900	4050	4350	4950	4950	4500
30	4200	4500	4650	5250	5250	4500
50	4200	4800	4800	5400	5400	4650
57	4200	4800	4800	5400	5400	4800



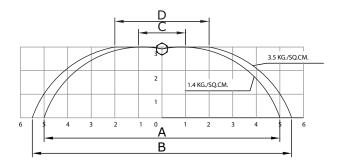




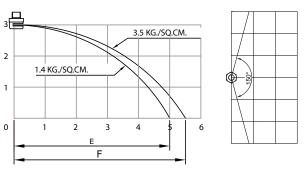


## SD-WCB20 & SD-WCS20\*

### HORIZONTAL MOUNTED FLOW DOWNWARD



# PENDENT MOUNTED



# The distance between two nozzles should be 2.5 meters (maximum) for better performance.

The distribution profile indicates approximate (maximum) trajectory and no specific density is implied through above patterns.

**Note:** The spray data is obtained from the tests carried out in still air.

### **DIMENSION** in metres (Approximate)

	K98	K120	K140
Α	14.0	14.4	14.6
В	14.4	15.0	15.1
С	4.2	4.4	4.5
D	5.2	5.4	5.5
E	6.2	6.4	6.6
F	6.3	6.5	6.8