



MULTIDIRECTIONAL DIFFUSERS WITH EXTRACTABLE CONES

CR-KN
SERIES

OVERVIEW AND TECHNICAL DATA

OVERVIEW :

The new CR-KN four way diffusers represent an ideal solution for a fast completion of plants and HVAC projects using countersealing environments.

The units are available both in standard diffuser version or on a 595x595 panel for use on supporting structure.

The standard diffusers are sold with gaskets in sponge material on the reverse side for a perfect adhesion to the countersealing structure.

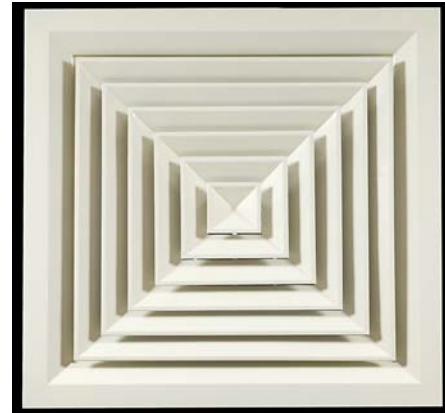
With respect to the high quality of the product, the automated production technique and the large and dynamic stock volumes allow for reduced almost immediate delivery times, with considerable reduced prices.

FITTING :

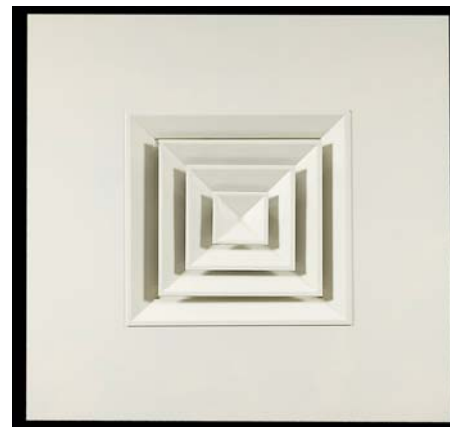
Either by placing the unit on the countersealing frame or by fixing to a plenum or to the flexible duct by means of screws fixed on the sides of the neck size of the diffuser. The central cones can be removed using a spring type mechanism and can be left hanging thanks to a nylon loop fixed to the external frame, ensuring an easy and simple way of installing and fixing the unit into place.

MATERIALS AND FINISHING:

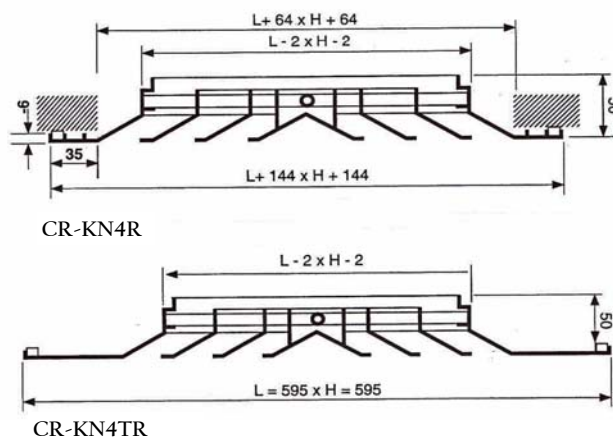
The CR-KN diffusers are made in aluminium and the panels for the CR-KN4TR model are made in pressed steel. All diffusers are varnished with an epoxy finish RAL 9010. This is carried out after assembly to remove any small aesthetic irregularities in the joints and to ensure a perfect union between diffuser and panel.



STANDARD VERSION



VERSION WITH PANEL



CODES

Model	Nominal size	Version
CR-KN4R150	150x150	standard
CR-KN4R225	225x225	standard
CR-KN4R300	300x300	standard
CR-KN4R375	375x375	standard
CR-KN4R450	450x450	standard

Model	Nominal size	Version
CR-KN4TR150	150x150	panel
CR-KN4TR225	225x225	panel
CR-KN4TR300	300x300	panel
CR-KN4TR375	375x375	panel



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PERFORMANCE

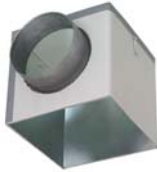
PORTATA	LxH mm	150x150	225x225	300x300	375x375	450x450
	Ak m ²	0,01	0,02	0,036	0,058	0,079
100	m ³ /h	Vk m/sec	2,8			
		T m	0,7			
		Lp dBa	17,0			
		ΔP Pa	4,6			
150	m ³ /h	Vk m/sec	4,2	2,1		
		T m	1,0	0,8		
		Lp dBa	26,0	14,0		
		ΔP Pa	10,0	2,6		
200	m ³ /h	Vk m/sec	5,6	2,8		
		T m	1,4	1,0		
		Lp dBa	31,0	20,0		
		ΔP Pa	19,0	4,6		
250	m ³ /h	Vk m/sec		3,5	1,9	
		T m		1,2	0,9	
		Lp dBa		25,0	15,0	
		ΔP Pa		7,2	2,2	
300	m ³ /h	Vk m/sec		4,2	1,3	
		T m		1,5	1,1	
		Lp dBa		29,0	19,0	
		ΔP Pa		10,0	3,2	
400	m ³ /h	Vk m/sec		5,6	28,0	21,0
		T m		2,0	1,5	1,2
		Lp dBa		34,0	25,0	18,0
		ΔP Pa		19,0	5,7	2,4
500	m ³ /h	Vk m/sec			3,9	2,5
		T m			1,8	1,5
		Lp dBa			29,0	22,0
		ΔP Pa			9,0	3,7
600	m ³ /h	Vk m/sec			4,6	2,9
		T m			2,3	1,8
		Lp dBa			33,0	26,0
		ΔP Pa			13,0	5,3
800	m ³ /h	Vk m/sec				3,9
		T m				2,4
		Lp dBa				32,0
		ΔP Pa				9,4
1000	m ³ /h	Vk m/sec				5,0
		T m				3,0
		Lp dBa				37,0
		ΔP Pa				15,0
1200	m ³ /h	Vk m/sec				4,2
		T m				3,9
		Lp dBa				34,0
		ΔP Pa				11,0
1500	m ³ /h	Vk m/sec				5,2
		T m				4,8
		Lp dBa				39,0
		ΔP Pa				18,0

Vk = Speed on exit

T = Throw for Vt= 0,2m/sec in isothermic conditions

Lp = Acoustic pressure with room attenuation of -8dBa

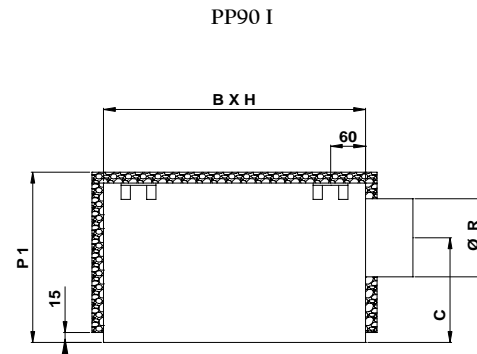
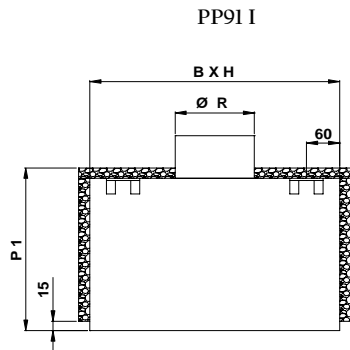
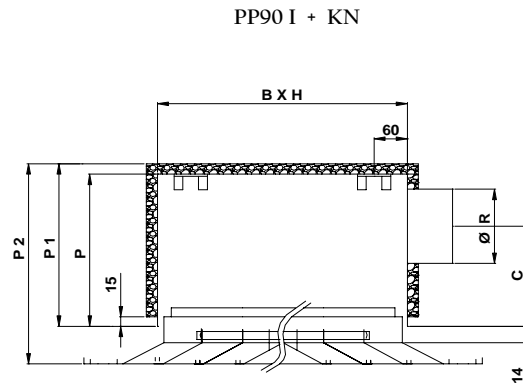
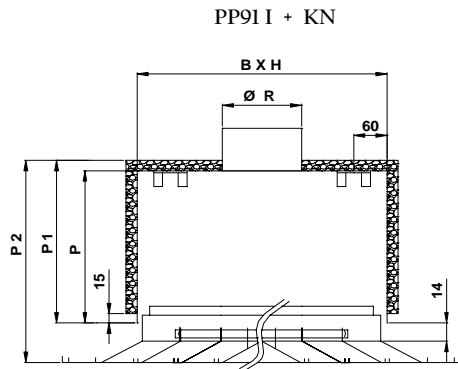
ΔP = Total pressure loss



PLENUM FOR MULTIDIRECTIONAL DIFFUSERS WITH EXTRACTABLE CONES

OVERVIEW AND TECHNICAL CHARACTERISTICS

PP 90
PP 91
SERIES



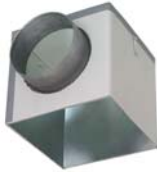
B	x	H	P2	P1	P	Ø R	C	N° Couplings
150	x	150	254	216	210	124	115	2
225	x	225	274	236	230	143	125	2
300	x	300	334	296	290	198	155	2
375	x	375	334	296	290	198	155	2
450	x	450	394	356	350	253	185	4
525	x	525	444	406	400	298	210	4
600	x	600	444	406	400	298	210	4

CONSTRUCTION CHARACTERISTICS:

MATERIALS : The plenum is manufactured from galvanized sheet steel, external insulation has fire reaction class I.

MOUNTING OF PLENUM : The plenums are fixed and adjusted to the ceiling by threaded bars, putted into suitable supports.

MOUNTING OF DIFFUSER: The diffusers have to be fixed on the plenum by screws directly on the plenum's assembly bar.



**PLENUM FOR MULTIDIRECTIONAL
DIFFUSERS WITH EXTRACTABLE CONES**

**PP 90
PP 91
SERIES**

CODES

Nominal sizes					
B x H		PP 90 I	PP 90	PP 91 I	PP 91
150	150	X	X	X	X
225	225	X	X	X	X
300	300	X	X	X	X
375	375	X	X	X	X
450	450	X	X	X	X
525	525	X	X	X	X
600	600	X	X	X	X

Nominal sizes					
B x H		PP 90 I	PP 90	PP 91 I	PP 91
225	150	X	X	X	X
300	150	X	X	X	X
375	150	X	X	X	X
300	225	X	X	X	X
375	225	X	X	X	X
450	225	X	X	X	X
525	225	X	X	X	X
375	300	X	X	X	X
450	300	X	X	X	X
525	300	X	X	X	X
600	300	X	X	X	X
450	375	X	X	X	X
600	375	X	X	X	X
600	450	X	X	X	X

PP Plenum
90 Side coupling
91 Upper coupling
I Insulation

Example : PP 90 I 375X375 - Plenum with side coupling, with insulation, dimensions 375x375