

MODEL

- R1DBR10 - Steel round diffuser with ring operated center downblow adjustment

FEATURES

- Outer cone is contoured to guard against ceiling smudging
- Designed for heating and cooling applications
- Adjustable horizontal and vertical discharge patterns
- 360° discharge air pattern
- Designed for exposed duct applications and high ceilings

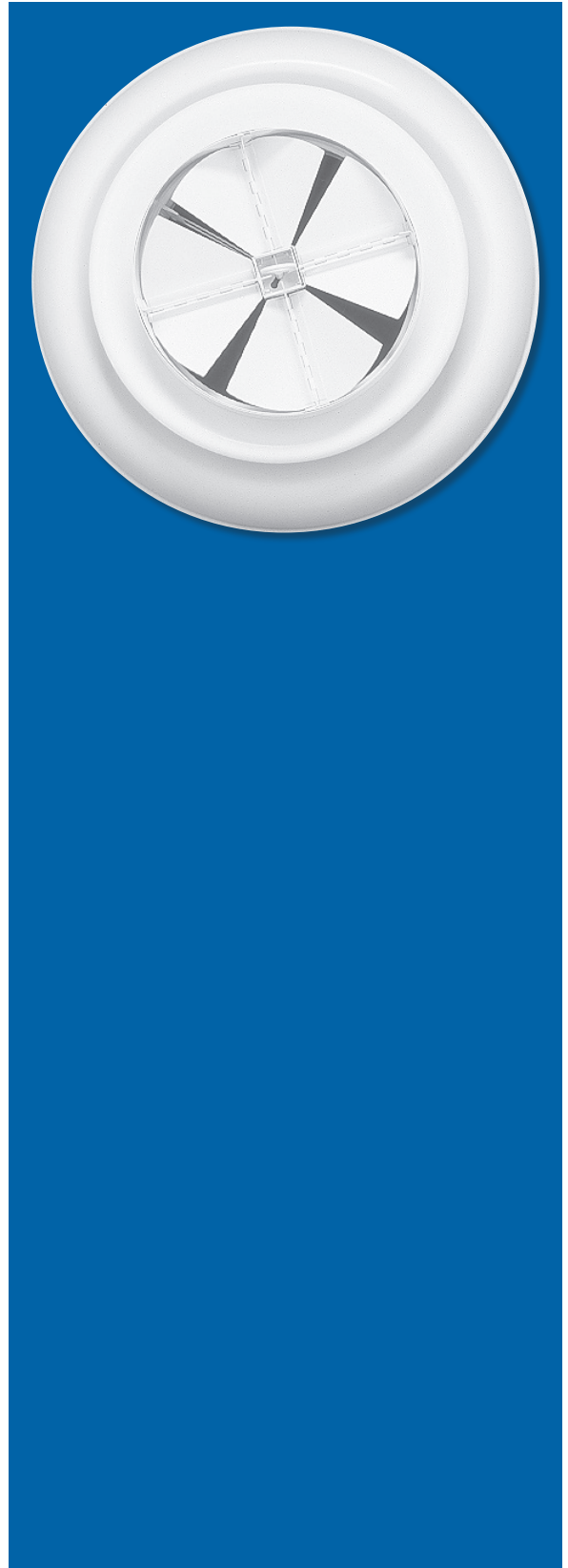
INLET SIZES

- Round: 10" - 20" (2" increments), 24", 30", 36"

COMPATIBLE OPTIONS AND ACCESSORIES

- PR10 - Steel, radial opposed blade damper, 12" max (neck mount)
- PRN100 - Steel, radial fan damper, 14" max (neck mount)
- PRD10 - Steel, radial opposed blade damper (duct mount)
- PRD100 - Steel, radial fan damper, 14" max (duct mount)
- PR12 - Steel, butterfly bladed damper, 24" max (duct mount)
- RSG15 - Steel, round straightening grid (duct mount)
- PRSG15 - Steel, round straightening grid
- OBDDM - Steel, square or rectangular damper (duct mount)
- EX8 - Steel duct extractor with 1" blade spacing (duct mount)
- EX88 - Steel duct extractor with 2" blade spacing (duct mount)

NOTES: Not all options available with all configurations or one another. Some options must be ordered separately. See website for complete compatibility.

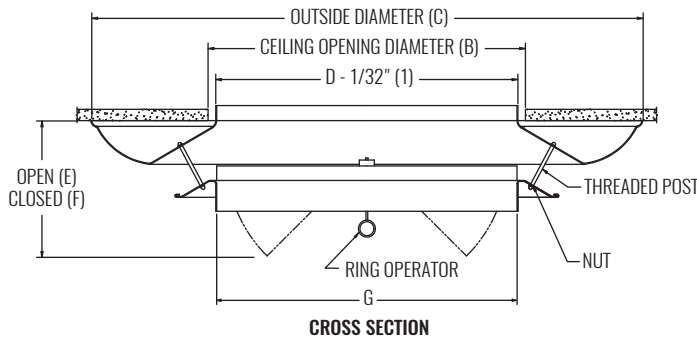


R1DBR10

Round Diffuser, Ring Operated Center Downblow



DIMENSIONAL DATA



NOTES: Dimensions in parentheses are millimeters (mm).

DIMENSIONS					
NOMINAL ROUND DUCT D	B	C	E	F	G
10"	10 1/2" (267)	18 1/4" (464)	7 1/2" (191)	3" (76)	10" (254)
12"	12 1/2" (318)	22" (559)	9 3/8" (238)	4" (102)	12" (305)
14"	14 1/2" (368)	26" (660)	6 3/4" (171)	4" (102)	14" (356)
16"	16 1/2" (419)	29" (737)	8 1/2" (216)	5" (127)	16" (406)
18"	18 1/2" (470)	32 1/2" (826)	9 1/8" (232)	5" (127)	18" (457)
20"	20 1/2" (521)	36" (914)	10 3/8" (264)	5 1/2" (140)	20" (508)
24"	24 1/2" (622)	43 1/4" (1099)	12 1/4" (308)	6 5/8" (168)	24" (610)
30"	30 1/2" (775)	53 5/8" (1362)	13 7/8" (352)	8 1/4" (210)	30" (762)
36"	36 1/2" (927)	64 3/8" (1635)	15 5/8" (397)	10" (254)	36" (914)

PERFORMANCE AND DESIGN DATA

SIZE		PERFORMANCE				DESIGN - BASED ON HORIZONTAL THROW		
PANEL	POSITION	NC (< 25)		NC (25 - 40)		CFM @ NC-30	SPACING @ 0.6 CFM/sf (ft)	MINIMUM CFM/sf
		CFM	THROW (ft)	CFM	THROW (ft)			
HZ = HORIZONTAL DISCHARGE AIR PATTERN / VT = VERTICAL DISCHARGE AIR PATTERN								
10"	HZ	232 - 350	4 - 6	374 - 586	7 - 10	400	26	0.50
10"	VT	232 - 374	17 - 27	410 - 625	30 - 45	450	N/A	N/A
16"	HZ	531 - 820	6 - 9	866 - 1368	10 - 15	920	39	0.50
16"	VT	531 - 866	12 - 30	950 - 1460	33 - 50	1050	N/A	N/A
18"	HZ	654 - 990	6 - 10	1078 - 1645	11 - 16	1200	45	0.52
18"	VT	654 - 1120	12 - 33	1175 - 1714	35 - 51	1300	N/A	N/A
20"	HZ	807 - 1230	7 - 11	1331 - 1995	12 - 18	1420	49	0.55
20"	VT	807 - 1331	12 - 33	1405 - 2116	37 - 56	1600	N/A	N/A
24"	HZ	1131 - 1715	8 - 13	1822 - 2859	13 - 21	2000	58	0.58
24"	VT	1131 - 1822	13 - 33	1955 - 3055	38 - 65	2200	N/A	N/A
30"	HZ	1669 - 2570	10 - 15	2670 - 4155	16 - 24	3000	71	0.59
30"	VT	1669 - 2749	14 - 37	2930 - 4369	42 - 73	3300	N/A	N/A

NOTES: Information shown is abbreviated. See website for complete information. Dimensions in parentheses are millimeters (mm). Throw value ranges are given for isothermal conditions, unless otherwise noted, and a terminal velocity of 50 FPM (0.25 m/s). Vertical throw provided is at 10° ΔT heating. NC ranges are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. Design spacing is recommended distance between diffusers in an open plan office based on ADPI > 80%, 9ft ceiling, and 55°F discharge at 30 NC and 0.6 CFM/sf. Minimum CFM/sf is based on recommended spacing at 80% ADPI. Design recommendations not applicable to vertical throw. "N/A" in design table denotes inapplicable situations or those which do not result in ADPI>80% and are therefore not recommended.

© Copyright Krueger 2018