

AIRFOIL



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SINGLE DEFLECTION REGISTER (1AR)

Airfoil's Single Deflection Register with Fixed Core is manufactured with a single set of fully adjustable blades to give a high level of control of the air pattern across two directions. The blades may be ordered in either horizontal or vertical as required.

Made from high-grade extruded aluminium sections to ensure functional strength and performance, Airfoil's Single Deflection Register provides a contemporary attractive feel and modern look. It comes in standard powder coated white with optional colours and finishes available on request.

Single Deflection Register Options

- > Flange size: 32mm standard with optional 25mm or 38mm
- > Blade spacing: 19mm or 25mm
- > Custom-made to any size dimensions
- > Specific colours and finishes available on request
- > Horizontal blades at front or vertical blades at front

Product specification codes:

1ARH Fixed core single deflection register with horizontal blades at front.

1ARV Fixed core single deflection register with vertical blades at front.

Specification: Product code + size.

Example:

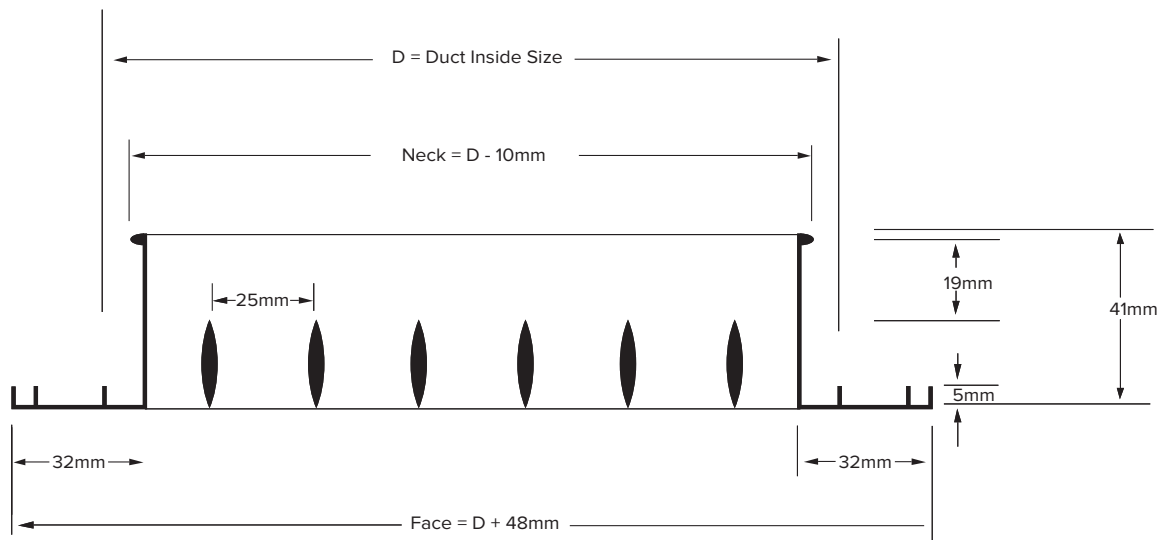
1ARH200x150 Fixed Core Single Deflection Register with front horizontal blades width 200mm x height 150mm



SINGLE DEFLECTION REGISTER



MODEL 1ARH



SUPPLY REGISTER SELECTION DATA FOR MODELS 1AR-H, 1AR-V, 2AR-H, 2AR-V at 25mm CENTERS

AREA FACTOR		0.17			0.33			0.5			0.66			1.0			1.25		
NECK AREA — M ²		0.023			0.045			0.068			0.090			0.135			0.169		
		150 X 150			225 X 200			300 X 225			300 X 300			450 X 300			450 X 375		
TYPICAL SIZES		225 X 100			300 X 150			450 X 150			400 X 225			600 X 225			675 X 250		
		450 X 100			675 X 100			600 X 150			900 X 150			750 X 225					
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
47	Throw Metres — min	3.2	2.2	2.0	2.2	1.7	1.4												
	Throw Metres — max	5.1	3.4	2.2	3.4	2.5	2.0												
	Static Pressure — (Pa)	2.5	5.0	7.5	—	—	—												
94	Throw Metres — min	6.2	4.8	3.7	4.3	3.2	2.5	3.4	2.5	2.0	3.2	2.2	1.4						
	Throw Metres — max	9.3	7.1	5.4	6.8	4.8	3.7	5.4	4.0	2.8	4.8	3.4	2.8						
	Static Pressure — (Pa)	10	22.5	32.5	2.5	5	10	—	—	2.5	—	—	—						
141	Throw Metres — min				6.5	4.5	3.7	5.4	3.7	2.8	4.5	3.4	2.2	4.0	2.5	2.0			
	Throw Metres — max				10.3	7.3	5.7	8.2	5.9	4.5	7.3	5.1	4.0	5.7	4.3	3.2			
	Static Pressure — (Pa)				7.5	12.5	20	2.5	5	7.5	—	2.5	5	—	—	—			
189	Throw Metres — min				8.4	6.2	5.1	7.1	5.1	3.7	6.2	4.8	3.4	5.1	3.7	2.5	4.5	3.4	2.4
	Throw Metres — max				13.5	9.8	7.3	10.2	7.9	5.9	9.8	7.1	5.1	7.6	5.7	4.0	7.3	5.3	3.9
	Static Pressure — (Pa)				10	22.5	32.5	5	7.5	12.5	2.5	5	10	—	—	2.5	—	—	—
236	Throw Metres — min							8.1	6.2	5.2	7.6	5.7	4.3	6.2	4.5	3.4	5.7	4.3	3.3
	Throw Metres — max							13.5	9.8	7.3	12.4	9.0	6.5	9.6	7.1	5.4	8.7	6.8	5.1
	Static Pressure — (Pa)							7.5	12.5	20	5	10	12.5	—	2.5	5	—	—	3.5
283	Throw Metres — min							10.4	7.6	5.7	9.3	6.8	4.8	7.6	5.4	4.0	7.1	4.9	3.9
	Throw Metres — max							16.3	11.9	8.7	14.7	10.1	7.9	11.5	7.9	6.2	10.9	7.5	6.0
	Static Pressure — (Pa)							10	17.5	25	7.5	12.5	20	2.5	5	7.5	1.5	4	6
330	Throw Metres — min										11.3	7.9	5.9	8.4	6.2	4.8	8.2	5.9	4.5
	Throw Metres — max										16.9	12.4	9.3	14.1	9.8	7.2	12.7	9.0	6.8
	Static Pressure — (Pa)										10	17.5	25	5	7.5	10	3.5	6.0	9
375	Throw Metres — min										12.4	9.3	6.8	9.6	7.1	5.1	9.3	6.8	4.8
	Throw Metres — max										19.7	14.1	10.3	15.2	10.4	8.2	14.4	10.1	7.7
	Static Pressure — (Pa)										12.5	22.5	32.5	5	7.5	12.5	3.5	6	11
425	Throw Metres — min										14.1	10.1	7.6	10.4	7.6	5.9	10.1	7.3	5.7
	Throw Metres — max										22.3	15.2	11.9	16.9	12.4	9.3	15.8	11.3	8.7
	Static Pressure — (Pa)										15	27.5	40	5	10	15	5	8.5	12.5
472	Throw Metres — min													12.4	8.7	6.5	11.3	8.2	6.2
	Throw Metres — max													18.5	14.1	10.4	17.6	13.1	9.8
	Static Pressure — (Pa)													7.5	12.5	20	6.5	11	15
566	Throw Metres — min													15.8	10.4	7.9	13.9	9.8	7.5
	Throw Metres — max													22.6	16.9	12.2	20.8	15.8	11.9
	Static Pressure — (Pa)													10	17.5	25	8.5	14	22.5
660	Throw Metres — min													16.9	12.2	9.3	16.6	11.6	8.7
	Throw Metres — max													27.3	19.7	14.1	25.2	18.2	13.6
	Static Pressure — (Pa)													12.5	25	35	11	20	30
755	Throw Metres — min																17.8	13.4	10.1
	Throw Metres — max																29.8	21.8	15.9
	Static Pressure — (Pa)																14	25	37.5
850	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
944	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1180	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		
1416	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

SUPPLY REGISTER SELECTION DATA FOR MODELS 1AR-H, 1AR-V, 2AR-H, 2AR-V at 25mm CENTERS

AREA FACTOR		1.33			1.5			1.66			2.0			2.5			2.66		
NECK AREA — M ²		0.180			0.203			0.225			0.270			0.338			0.360		
TYPICAL SIZES		600 x 300			450 x 450			600 x 375			600 x 450			750 x 450			600 x 600		
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
141	Throw Metres — max Static Pressure — (Pa)																		
189	Throw Metres — min	4.3	3.2	2.2															
	Throw Metres — max	6.8	5.0	3.8															
	Static Pressure — (Pa)	—	—	—															
236	Throw Metres — min	5.4	4.0	3.2	4.3	3.2	2.5												
	Throw Metres — max	8.7	6.2	5.2	6.8	4.8	3.7												
	Static Pressure — (Pa)	—	—	2.5	—	—	—												
283	Throw Metres — min	6.5	4.5	3.7	5.9	4.3	3.2	5.3	3.8	3.0	4.8	3.7	2.8						
	Throw Metres — max	10.4	7.3	4.8	9.3	7.1	4.8	8.4	5.8	4.5	7.9	5.4	4.3						
	Static Pressure — (Pa)	—	2.5	5	—	—	2.5	—	—	—	—	—	—						
330	Throw Metres — min	7.6	5.7	4.3	6.8	4.8	3.7	6.2	4.5	3.4	5.9	4.3	3.2						
	Throw Metres — max	11.9	8.7	6.5	10.4	7.6	5.9	9.8	6.5	5.1	9.3	7.1	4.8						
	Static Pressure — (Pa)	2.5	5	7.5	—	2.5	5	—	—	2.5	—	—	2.5						
375	Throw Metres — min	9.0	6.5	4.5	8.2	5.7	4.3	7.3	5.4	4.0	6.8	4.8	3.7	6.2	4.3	3.3	5.9	4.0	3.2
	Throw Metres — max	13.5	9.8	7.4	12.9	9.0	6.8	11.2	7.9	6.4	10.4	6.6	5.7	9.4	6.6	5.1	8.7	6.2	4.8
	Static Pressure — (Pa)	2.5	5	10	1.5	4	6	—	2.5	5	—	—	2.5	—	—	—	—	—	—
425	Throw Metres — min	9.8	7.1	5.4	9.0	6.2	4.8	8.2	5.7	4.3	7.6	5.7	4.0	6.9	4.9	3.6	6.5	4.5	3.4
	Throw Metres — max	15.2	10.8	8.4	14.1	9.8	7.3	12.9	9.0	6.8	11.9	8.7	6.5	10.8	7.7	5.8	10.4	7.1	5.4
	Static Pressure — (Pa)	5	7.5	10	2.5	5	7.5	1.5	4	6	—	2.5	5	—	—	3	—	—	2.5
472	Throw Metres — min	10.8	7.9	5.9	9.8	7.1	5.4	9.0	6.5	4.9	8.4	6.2	4.5	8.0	6.2	4.5	7.6	5.1	3.7
	Throw Metres — max	17.1	12.4	9.3	15.2	11.3	8.4	14.4	10.4	7.9	13.5	9.6	7.1	13.5	9.6	7.1	11.9	8.2	6.5
	Static Pressure — (Pa)	5	10	12.5	1.5	5	10	2.5	5	7	—	2.5	5	—	2.5	5	—	—	2.5
566	Throw Metres — min	13.0	9.6	7.3	11.9	8.7	6.5	10.9	8.2	6.2	10.1	7.6	5.7	9.7	7.1	5.3	9.6	6.8	5.1
	Throw Metres — max	20.2	15.2	11.3	18.5	13.5	9.9	17.2	12.1	9.1	15.8	11.3	8.4	14.7	10.6	8.1	14.1	10.1	7.8
	Static Pressure — (Pa)	7.5	12.5	20	5	7.5	12.5	2.5	5	10	2.5	5	7.5	1.5	4	6	—	2.5	5
660	Throw Metres — min	16.3	11.3	8.4	14.1	9.8	7.3	13.8	9.6	7.1	13.5	9.6	6.9	11.7	8.4	6.6	10.6	7.9	6.2
	Throw Metres — max	23.7	17.4	13.0	21.3	15.2	11.9	20.8	15.0	11.6	20.2	14.8	11.3	18.0	13.2	10.1	16.9	12.1	9.3
	Static Pressure — (Pa)	10	17.5	25	5	10	15	5	7.5	12.5	5	7.5	10	3.5	6	9	2.5	5	7.5
755	Throw Metres — min	17.4	13.0	9.6	15.2	11.9	8.2	14.1	10.1	7.7	13.5	9.6	7.3	12.8	9.4	6.9	12.4	8.9	6.8
	Throw Metres — max	28.4	19.7	15.2	24.9	18.0	13.5	22.2	16.3	12.1	20.8	15.2	11.3	20.2	14.6	10.6	19.7	14.1	10.1
	Static Pressure — (Pa)	12.5	22.5	32.5	7.5	12.5	20	5	10	15	5	7.5	12.5	3.5	6	11	2.5	5	7.5
850	Throw Metres — min	19.7	14.7	10.6	17.4	13.0	9.6	16.0	12.1	8.7	15.2	10.8	8.2	14.7	10.4	7.7	14.1	10.1	7.4
	Throw Metres — max	30.4	22.6	16.9	28.9	19.7	14.7	25.5	17.7	13.8	23.7	16.9	13.0	23.1	16.1	12.4	22.6	15.6	11.7
	Static Pressure — (Pa)	15	27.5	40	10	17.5	25	7.5	12.5	20	7.5	10	15	5	8.5	12.5	5	7.5	10
944	Throw Metres — min				19.7	14.1	10.8	18.0	13.0	9.9	16.9	11.9	9.0	15.9	11.3	8.7	15.4	11.0	8.4
	Throw Metres — max				31.3	22.6	16.7	27.9	20.4	15.2	26.1	18.5	14.1	25.1	16.8	13.6	24.5	16.9	13.3
	Static Pressure — (Pa)				12.5	22.5	32.5	10	17.5	25	17.5	12.5	20	6.5	11	15	5	7.5	12.5
1180	Throw Metres — min							21.4	15.8	11.9	20.8	15.2	11.3	20.1	14.6	11.0	18.4	13.9	10.7
	Throw Metres — max							32.6	25.2	19.5	31.5	23.7	18.1	30.5	22.9	16.9	29.8	22.6	16.3
	Static Pressure — (Pa)							12.5	22.5	32.5	10	20	30	8.5	14	22.5	7.5	12.5	20
1416	Throw Metres — min										24.7	18.4	13.4	23.4	17.2	13.1	22.6	16.6	12.5
	Throw Metres — max										38.2	28.2	20.8	35.2	26.8	19.5	33.7	26.1	18.7
	Static Pressure — (Pa)										15	27.5	40	12.5	22.5	32.5	10	17.5	25
1888	Throw Metres — min																29.9	17.8	13.4
	Throw Metres — max																42.9	31.7	25.4
	Static Pressure — (Pa)																15	27.5	40
2360	Throw Metres — min																		
	Throw Metres — max																		
	Static Pressure — (Pa)																		

Throw measurements are at 1.5mls min and .65mls max terminal velocity.

SUPPLY REGISTER SELECTION DATA FOR MODELS 1AR-H, 1AR-V, 2AR-H, 2AR-V at 25mm CENTERS

AREA FACTOR		3.0			4.0			5.0			6.0			8.15		
NECK AREA — M ²		0.405			0.540			0.675			0.810			1.10		
TYPICAL SIZES		675 x 600			900 x 600			900 x 750			900 x 900			1050 x 1050		
		900 x 450			1200 x 450			1500 x 450			1350 x 600					
					1800 x 300						1800 x 450					
SPREAD ANGLE		0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°			0° 22½° 45°		
141	Throw Metres — max Static Pressure — (Pa)															
189	Throw Metres — min Throw Metres — max Static Pressure — (Pa)															
236	Throw Metres — min Throw Metres — max Static Pressure — (Pa)															
283	Throw Metres — min Throw Metres — max Static Pressure — (Pa)															
330	Throw Metres — min Throw Metres — max Static Pressure — (Pa)															
375	Throw Metres — min Throw Metres — max Static Pressure — (Pa)															
425	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	6.2	4.3	3.4												
472	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	7.1	4.8	3.4												
566	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	8.2	6.2	4.5	6.8	4.8	3.7									
660	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	9.8	7.1	5.1	7.6	5.7	4.3									
755	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	11.3	8.2	6.2	8.7	6.5	4.8									
850	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	13.0	9.0	6.8	10.1	7.3	5.7	8.9	6.8	5.1	8.4	6.2	4.0			
944	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	14.1	10.1	7.3	11.9	7.9	5.9	10.6	7.5	5.7	9.8	7.1	5.4			
1180	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	17.4	12.6	9.6	14.1	9.8	7.6	13.1	9.6	7.3	12.4	9.2	7.1	10.1	7.1	5.4
1416	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	20.2	15.5	13.3	16.9	11.9	9.0	15.9	11.2	8.4	14.7	10.6	8.2	11.9	8.4	6.5
1888	Throw Metres — min Throw Metres — max Static Pressure — (Pa)	28.2	17.4	12.7	23.0	15.8	11.9	20.2	14.9	11.0	18.5	14.1	10.6	15.6	11.3	8.4
2360	Throw Metres — min Throw Metres — max Static Pressure — (Pa)				28.2	17.8	15.2	27.0	17.4	14.6	26.1	16.8	14.1	19.7	14.1	10.6

Throw measurements are at 1.5mls min and .65mls max terminal velocity.