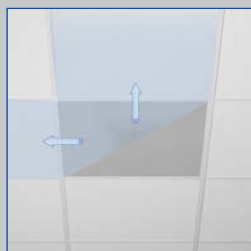


Ceiling diffusers

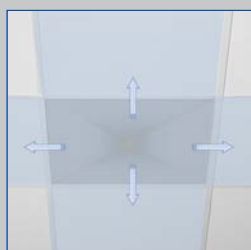
Type ADLQL



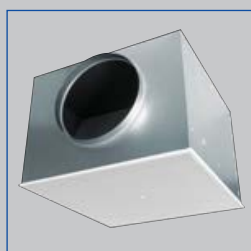
Horizontal one-way air discharge



Horizontal two-way air discharge



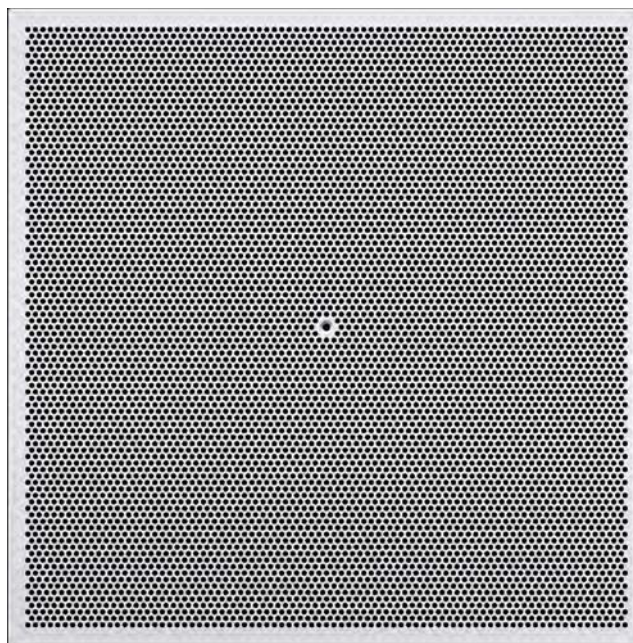
Horizontal four-way air discharge



Horizontal duct connection



Vertical duct connection



For horizontal one-way to four-way air discharge, for comfort zones, with fixed baffle element

Square ceiling diffusers

- Nominal sizes;
Diffuser face: 600
Active sizes: 250, 300, 400, 500, 600
- Volume flow rate range 20 – 265 l/s or 72 – 954 m³/h
- Square diffuser face
- Diffuser face made of galvanised sheet steel, powder-coated
- For supply and extract air
- For variable and constant volume flows
- For all types of ceiling systems
- Perforated diffuser face with special baffle element for horizontal air discharge and high induction levels

Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colours
- Horizontal or vertical duct connection
- Blanking plates for adjusting the discharge direction
- Side entry plenum box with optional damper blade

Type		Page
ADLQL	General information	ADLQL – 2
	Function	ADLQL – 4
	Technical data	ADLQL – 6
	Quick sizing	ADLQL – 7
	Specification text	ADLQL – 12
	Order code	ADLQL – 13
	Variants	ADLQL – 16
	Dimensions and weight	ADLQL – 17
	Product details	ADLQL – 19
	Installation examples	ADLQL – 20
	Installation details	ADLQL – 21
	Basic information and nomenclature	ADLQL – 22

Application

Application

- Type ADLQL ceiling diffusers are used as supply air or extract air diffusers for comfort zones
- Perfect integration with suspended perforated sheet metal ceilings
- Horizontal one-way to four-way supply air discharge for mixed flow ventilation
- High induction results in a rapid reduction of the temperature difference and airflow velocity (supply air variant)
- For variable and constant volume flows
- For supply air to room air temperature differences from –10 to +10 K
- For room heights up to 4 m (lower edge of suspended ceiling)
- For all types of ceiling systems

Special characteristics

- Horizontal one-way to four-way supply air discharge
- Perforated diffuser face made of galvanised sheet steel
- For all types of ceiling systems
- Horizontal or vertical duct connection

Nominal sizes

- Diffuser face
- 600
- Active size
- 250, 300, 400, 500, 600

Description

Variants

- ADLQL: Perforated face diffuser

Installation type

- Q: Face mounted
- QL: Lay-in flat 'T' bar
- QS15: Tegular 'T' bar 15x8
- QS26: Tegular 'T' bar 26x8
- QM15: Tegular 'T' bar 15x16
- QM26: Tegular 'T' bar 26x16
- QB: Push-in spring 'T' (Burgess)

Discharge direction

- ADLQL-*-4: 4 way discharge
- ADLQL-*-3: 3 way discharge
- ADLQL-*-2C: 2 way corner discharge
- ADLQL-*-2: 2 way discharge
- ADLQL-*-1: 1 way discharge

Connection

- ADLQL-*-ZH: Horizontal supply¹⁾
- ADLQL-*-ZV: Vertical supply
- ADLQL-*-AH: Horizontal extract¹⁾
- ADLQL-*-AV: Vertical extract
- RA: Return air baffle¹⁾

¹⁾In combination with AKV-ADLQL

Parts and characteristics

- Perforated square diffuser face with special baffle element
- Simple installation of the diffuser face due to central fixing screw with decorative cap

Accessories

- Plenum box with horizontal connection
- Return air baffle

Useful additions

- Blanking plates

Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180
- Perforated plate has a free area of approx. 46 %
- Hole diameter is 5 mm, the rows of holes are offset from each other

Materials and surfaces

- Diffuser face, and plenum box made of galvanised sheet steel
- Plenum box lining is Class 'O' acoustic foam
- Baffle element made of perforated steel
- Casing powder-coated RAL 9005, jet black
- P3: Perforated face powder-coated RAL 9010:20%
- P6: Perforated face powder-coated, RAL CLASSIC colour, 30% gloss

Standards and guidelines

- Sound power level of the air-regenerated noise measured according to EN ISO 5135

Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022

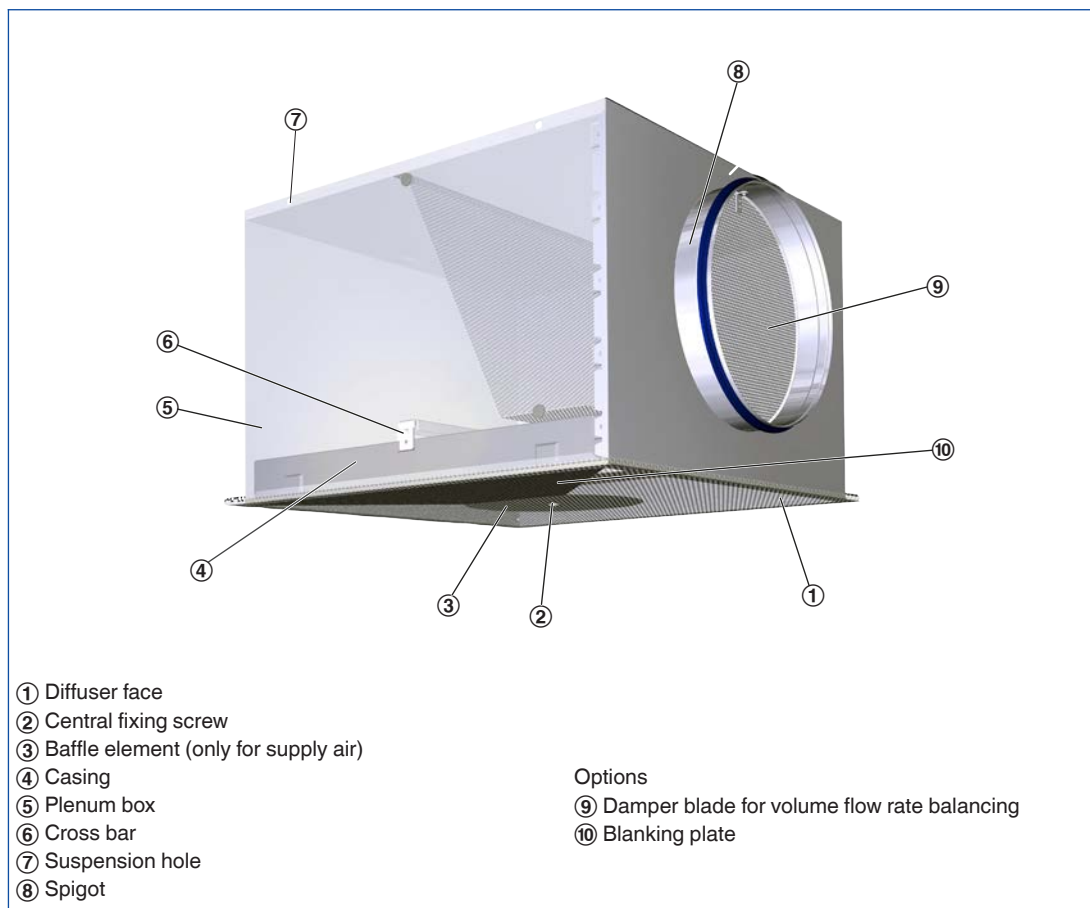
Functional description

Ceiling diffusers direct the air from air conditioning systems into the room. The resulting airflow induces high levels of room air, thereby rapidly reducing the airflow velocity and the temperature difference between supply air and room air. Ceiling diffusers allow for large volume flow rates. The result is a mixed flow ventilation in comfort zones, with good overall room ventilation, creating only very little turbulence in the occupied zone. Type ADLQL ceiling diffusers are fitted with a

special baffle element that creates a horizontal air discharge and high induction levels. Horizontal air discharge is one way to four way. The supply air to room air temperature difference may range from -10 to +10K.

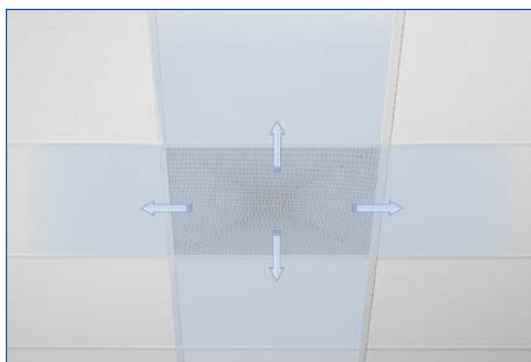
To give rooms an aesthetic, uniform look, Type ADLQL diffusers may also be used for extract air.

Schematic illustration of the ADLQL for supply air with one blanking plate

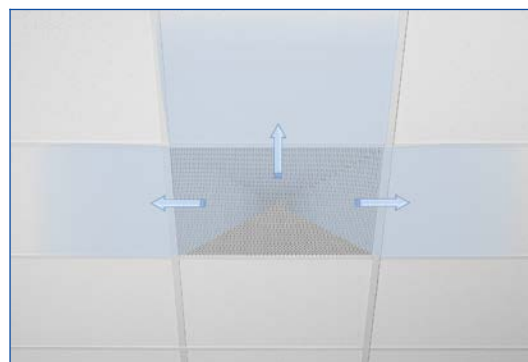


Air patterns

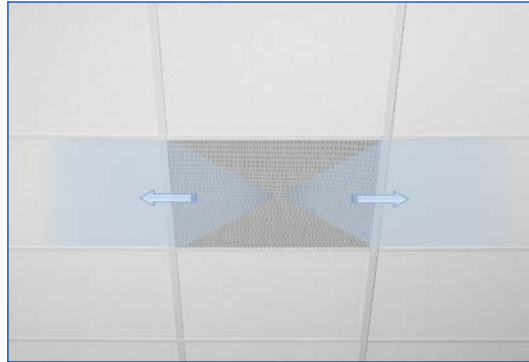
Four-way air discharge without blanking plate



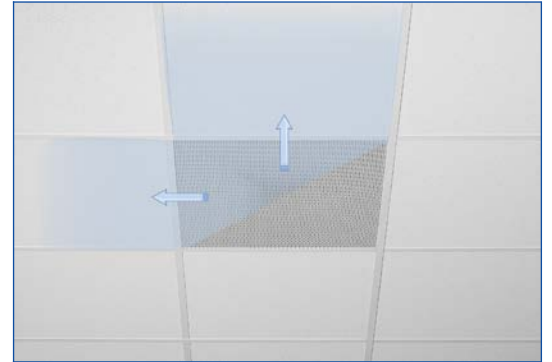
Three-way air discharge with one blanking plate



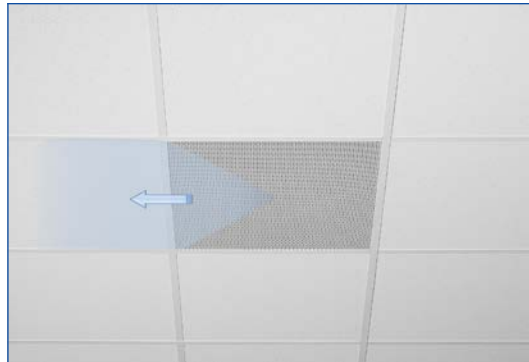
Two-way air discharge with two blanking plates



Two-way air discharge with two blanking plates



One-way air discharge with three blanking plates



Nominal sizes – ceiling tile	600 mm
Nominal sizes – diffuser	250, 300, 400, 500, 600 mm
Minimum volume flow rate	20 – 115 l/s or 72 – 414 m ³ /h
Maximum volume flow rate, with $L_{WA} \cong 50$ dB(A)	58 – 265 l/s or 208 – 954 m ³ /h
Supply air to room air temperature difference	-10 to +10 K

Nominal sizes
(Diffuser face)

Nominal size	Q	QL	QS15 QM15	QS26 QM26	QB
	□Q ₁				
	mm	mm	mm	mm	mm
250	598	595	584	573	599
300	598	595	584	573	599
400	598	595	584	573	599
500	598	595	584	573	599
600	598	595	-	-	-

Quick sizing tables provide a good overview of the volume flow rates and corresponding sound power levels and differential pressures.

The maximum volume flow rates apply to a sound power level of approx. 50 dB (A) (damper blade position 0°).

The minimum volume flow rates apply to a supply air to room air temperature difference of -6 K.

Exact values for all parameters can be determined with our Easy Product Finder design programme.

ADLQL*-1-ZH + AKV-...-ZH with one-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V} l/s	\dot{V} m ³ /h	Damper blade position					
			0°		45°		90°	
			Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)
250	5	18	3	<15	4	<15	6	<15
	13	45	19	20	23	22	38	24
	20	73	49	38	58	40	97	42
	28	100	92	50	111	52	185	54
300	7	26	3	<15	3	<15	6	<15
	17	63	17	26	20	28	33	30
	28	100	41	40	50	42	83	44
	38	136	78	50	93	52	155	54
400	13	46	4	<15	5	<15	8	<15
	25	88	15	28	18	30	29	32
	36	130	32	41	38	43	63	45
	48	172	55	50	67	52	111	54
500	20	73	4	<15	5	<15	8	<15
	38	139	14	26	17	28	28	30
	57	205	30	40	36	42	60	44
	75	271	52	50	63	52	105	54
600	29	104	4	<15	4	<15	7	<15
	56	202	14	26	17	28	28	30
	83	299	30	40	36	42	60	44
	110	396	53	50	64	52	106	54

ADLQL*-2-ZH + AKV-...-ZH with two-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V} l/s	\dot{V} m ³ /h	Damper blade position					
			0°		45°		90°	
			Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)
250	10	36	5	<15	6	<15	10	<15
	21	74	20	30	24	32	41	34
	31	112	47	42	56	44	93	46
	42	151	84	50	100	52	167	54
300	15	52	5	<15	6	<15	9	<15
	28	101	18	27	21	29	35	31
	42	150	39	40	47	42	78	44
	55	199	68	50	82	52	136	54
400	26	93	6	<15	8	15	13	17
	42	151	17	30	20	32	33	34
	58	209	32	41	38	43	64	45
	74	267	52	50	62	52	104	54
500	40	145	6	<15	7	<15	11	<15
	67	241	15	28	18	30	30	32
	94	338	30	41	36	43	60	45
	121	434	49	50	59	52	99	54
600	58	209	6	<15	7	<15	11	<15
	97	348	16	28	19	30	32	32
	135	487	31	40	37	42	62	44
	174	627	51	50	61	52	102	54

ADLQL*-3-ZH + AKV-...-ZH with three-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V} l/s	\dot{V} m ³ /h	Damper blade position					
			0°		45°		90°	
			Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)
250	15	54	7	16	8	18	13	20
	27	96	21	32	26	34	43	36
	38	138	44	43	53	45	88	47
	50	181	75	50	90	52	150	54
300	22	78	7	<15	8	<15	14	<15
	37	132	19	29	23	31	39	33
	51	185	38	41	46	43	76	45
	66	239	63	50	76	52	127	54
400	39	139	8	17	10	19	16	21
	58	208	18	31	22	33	36	35
	77	276	32	42	39	44	64	46
	96	344	50	50	60	52	100	54
500	60	218	7	<15	9	16	14	18
	94	338	17	30	21	32	34	34
	127	458	32	41	38	43	63	45
	161	579	50	50	61	52	101	54
600	87	313	7	<15	9	<15	15	15
	136	489	18	29	21	31	35	33
	184	664	33	41	39	43	66	45
	233	840	52	50	63	52	105	54

ADLQL*-4-ZH + AKV-...-ZH with four-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V} l/s	\dot{V} m ³ /h	Damper blade position					
			0°		45°		90°	
			Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)	Δp_t Pa	L_{WA} dB(A)
250	20	72	8	22	9	20	15	21
	33	118	23	35	25	34	40	34
	46	164	44	44	48	43	77	43
	58	210	72	50	79	50	127	50
300	28	101	9	<15	10	16	18	16
	44	158	22	30	25	31	44	31
	60	216	41	42	46	42	81	42
	76	273	65	50	74	50	130	50
400	50	180	10	19	13	22	24	24
	71	257	21	33	26	34	49	36
	93	334	35	42	44	43	82	44
	114	412	53	50	66	51	124	51
500	78	281	9	16	10	15	19	16
	115	415	20	31	22	31	41	31
	153	550	35	42	39	42	72	42
	190	684	55	50	60	50	112	50
600	114	410	9	15	11	15	18	16
	168	605	20	30	23	31	40	31
	222	799	35	41	41	42	70	41
	276	994	54	50	63	50	108	49

ADLQL*-1-ZV with one-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V}		Δp_t	L_{WA}
	l/s	m ³ /h	Pa	dB(A)
250	5	18	5	<15
	10	38	22	29
	16	58	52	41
	21	77	94	50
300	7	26	3	<15
	16	58	16	27
	25	91	37	41
	34	123	69	50
400	13	46	4	<15
	23	84	14	30
	34	121	29	42
	44	158	49	50
500	20	73	3	<15
	39	141	12	28
	58	209	26	41
	77	277	46	50
600	29	104	4	<15
	53	191	12	29
	77	278	25	41
	101	365	43	50

ADLQL*-2-ZV with two-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V}		Δp_t Pa	L_{WA} dB(A)
	l/s	m ³ /h		
250	10	36	6	<15
	18	65	20	31
	26	95	43	42
	35	124	74	50
300	15	52	4	<15
	27	97	15	27
	40	143	32	41
	52	188	55	50
400	26	93	5	<15
	40	145	13	29
	55	197	24	41
	69	249	39	50
500	40	145	4	<15
	66	238	12	29
	92	332	23	41
	118	425	37	50
600	58	209	5	<15
	93	335	12	28
	128	461	23	41
	163	587	37	50

ADLQL*-3-ZV with three-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V}		Δp_t Pa	L_{WA} dB(A)
	l/s	m ³ /h		
250	15	54	7	15
	26	92	20	31
	36	130	39	42
	47	168	66	50
300	22	78	6	<15
	37	132	16	28
	52	186	31	41
	67	240	52	50
400	39	139	6	17
	57	205	13	31
	75	270	23	42
	93	336	35	50
500	60	218	5	<15
	93	334	12	30
	125	451	21	41
	158	567	34	50
600	87	313	5	<15
	134	481	12	28
	180	649	21	40
	227	816	34	50

ADLQL-*-4-ZV with four-way air discharge (supply air), sound power level and total differential pressure

Active Size	\dot{V}		Δp_t	L_{WA}
	l/s	m ³ /h	Pa	dB(A)
250	20	72	8	16
	32	115	19	31
	44	158	36	42
	56	200	58	50
300	28	101	5	<15
	46	167	15	27
	65	234	29	40
	83	300	48	50
400	50	180	6	15
	72	259	13	30
	94	337	22	41
	115	416	34	50
500	78	281	6	15
	113	405	12	30
	147	529	20	41
	182	654	31	50
600	114	410	5	<15
	172	618	12	29
	229	825	21	41
	287	1033	33	50

ADLQL-...-RA + AKV-...-RA return air plenum, sound power level and total differential pressure

Active Size	\dot{V}		Δp_t	L_{WA}
	l/s	m ³ /h	Pa	dB(A)
600	138	497	10	<15
	166	598	15	<15
	198	713	20	<15
	220	792	25	<15

ADLQL-...-RA + AKV-...-AH return air plenum, sound power level and total differential pressure

Active Size	\dot{V}		Δp_t	L_{WA}
	l/s	m ³ /h	Pa	dB(A)
600	138	497	11	20
	166	598	16	28
	198	713	23	35
	220	792	29	39

ADLQL*-4-ZH + AKV-...-ZH Quick sizing – Aerodynamic data

Performance data applies to 4-way diffuser only.

Table provides throw length to a maximum, mean air velocity of 0.5m/s & 0.25m/s.

Minimum installation centres for diffusers based on installation height of 2.7m - 2.9m should be > 2x throw length to V_L 0.5m/s

Active size	\dot{V}		Aerodynamic Data	
			V_L 0.5	V_L 0.25
	l/s	m ³ /h	m	m
250	20	72	>1.2	>1.2
	32	115	>1.2	1.3
	44	158	>1.2	1.8
	56	200	>1.2	2.2
300	28	101	>1.2	>1.2
	46	167	>1.2	1.6
	65	234	>1.2	2.2
	83	300	1.4	2.8
400	50	180	>1.2	1.2
	72	259	>1.2	1.8
	94	337	1.2	2.4
	115	416	1.5	2.9
500	78	281	>1.2	1.6
	113	405	1.2	2.3
	147	529	1.5	2.9
	182	654	1.9	3.6
600	90	410	>1.2	>1.7
	160	618	1.4	2.7
	220	825	1.9	3.6
	270	1033	2.3	4.5

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design programme.

Ceiling diffusers with perforated square diffuser face. Supply air and extract air variants for comfort zones. Diffuser face with baffle element for horizontal one-way to four-way supply air discharge. For flush installation into all kinds of suspended grid or continuous plasterboard ceilings. Ready-to-install component which consists of the diffuser face with baffle element (only for supply air), and either a casing with top entry spigot or a plenum box with side entry spigot. Perforated diffuser face suitable for central screw fixing. The perforated plate has a free area of approx. 46 %. The hole diameter is 5 mm and the rows of holes are offset from each other. Spigot suitable for ducts to EN 1506 or EN 13180. Sound power level of the air-regenerated noise measured according to EN ISO 5135.

Sizing data

- \dot{V} _____
[m³/h]
- Δp_t _____
[Pa]
- Air-regenerated noise
- L_{WA} _____
[dB(A)]

Special characteristics

- Horizontal one-way to four-way supply air discharge
- Perforated diffuser face made of galvanised sheet steel
- For all types of ceiling systems
- Horizontal or vertical duct connection

Materials and surfaces

- Diffuser face and plenum box made of galvanised sheet steel
- Plenum box lining is Class 'O' acoustic foam
- Baffle element made of perforated steel
- Casing powder-coated RAL 9005, jet black
- P3: Perforated face powder-coated RAL 9010:20%
- P6: Perforated face powder-coated, RAL CLASSIC colour, 30% gloss

Technical data

- Nominal sizes – Diffuser face: 600 mm
- Nominal sizes – Active diffuser: 250, 300, 400, 500, 600 mm
- Minimum volume flow rate: 20 – 115 l/s or 72 – 414 m³/h
- Maximum volume flow rate, with $L_{WA} \cong 50$ dB(A): 58 – 265 l/s or 208 – 954 m³/h
- Supply air to room air temperature difference: –10 to +10 K

ADLQL

ADLQL – Q – ZV – 4 / 600 x 600 x 313 / P3 – RAL ...							
1	2	3	4	5	6	7	8

1 Type

ADLQL Perforated diffuser face

6 Nominal face size

600

2 Installation type

Q Square flush face
QL Square lay in T bar
QM15 Square lay in threadline 15*16
QM26 Square lay in threadline 26*16
QS15 Square lay in threadline 15*8
QS26 Square lay in threadline 26*8
QB Burgess ceiling

7 Spigot diameter

ZV/AV only
123 (250 size)
158 (300 size)
198 (400 size)
248 (500 size)
313 (600 size)

3 Connection type

ZH Horizontal supply*
ZV Vertical supply
AH Horizontal extract*
AV Vertical extract
RA Return air baffle*

8 Finish

P3 RAL 9010 Gloss level: 20%
P4 RAL 9005 Gloss level: 20%
P6 Powder-coated RAL CLASSIC colour
 Gloss level: 30%

* In combination with AKV-ADLQL

4 Discharge direction

4 4 way discharge²⁾
3 3 way discharge
2c 2 way corner discharge
2 2 way discharge
1 1 way discharge

5 Active diffuser size

250
300
400
500
600¹⁾

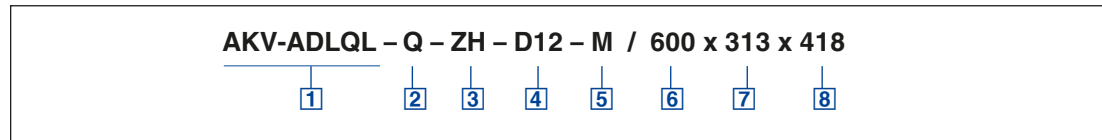
¹⁾ Q and QL only

²⁾ Only 4 way discharge available with RA

Order example: ADLQL-Q-ZV-4/600x600x313/P3-RAL9010:20%

Type	ADLQL
Installation type	Square flush face
Connection type	Vertical supply
Discharge direction	4
Active diffuser size	600
Nominal face size	600
Spigot diameter	313
Finish	RAL 9010, pure white, gloss level 20 %

AKV-ADLQL



1 Type

AKV-ADLQL

2 Installation type

- Q** Square flush face
- QL** Square lay in T bar
- QM15** Square lay in threadline 15*16
- QM26** Square lay in threadline 26*16
- QS15** Square lay in threadline 15*8
- QS26** Square lay in threadline 26*8
- QB** Burgess ceiling

3 Construction

- ZH** Horizontal supply
- AH** Horizontal extract

4 Lining

- Not lined
- D12** 12mm lining
- D25** 25mm lining

5 Rear assembly

- 0** No damper
- M** Spigot damper

6 Active size of diffuser

- ZH only**
- 250**
- 300**
- 400**
- 500**
- 600**

7 Spigot diameter

- 158** (250,300 size)
- 198** (400 size)
- 248** (500 size)
- 313** (600 size)

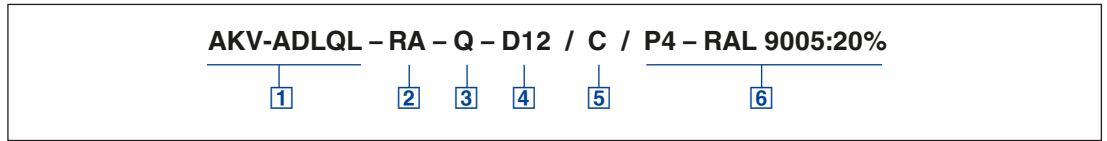
8 Assembled height

- 263** (250, 300 size)
- 303** (400 size)
- 353** (500 size)
- 418** (600 size)

Order example: AKV-ADLQL-Q-ZH-D12-M/600x313x418

Type	AKV-ADLQL
Installation type	Square flush face
Construction	Horizontal supply
Lining	12mm lining
Rear assembly	Spigot damper
Active diffuser size	600
Spigot diameter	313
Assembled height	418

AKV-ADLQL



1 Plenum type

AKV-ADLQL

2 Construction

RA Return air baffle

3 Diffuser type

- Q Square flush face
- QL Square lay in T bar
- QM15 Square lay in threadline 15*16
- QM26 Square lay in threadline 26*16
- QS15 Square lay in threadline 15*8
- QS26 Square lay in threadline 26*8
- QB Burgess ceiling

4 Internal lining

- 0 No lining
- D12 12mm Class 'O' internal foam lining

5 Exposed surface

- C Powder-coated

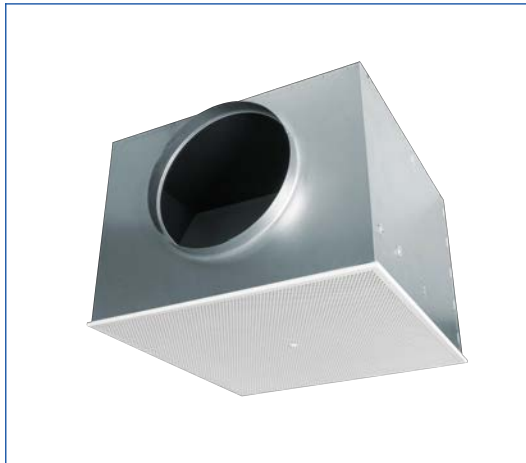
6 Paint colour

- P4 RAL 9005:20% (black)
- P6 RAL CLASSIC colour,
Gloss level 30%

Order example: AKV-ADLQL-RA-Q-D12/C/P4-RAL9005:20%

Diffuser type	Square flush face
Internal lining	12 mm lining
Exposed surface	Powder-coated
Paint colour	RAL 9005 gloss 20%

ADLQL-... + AKV-ADLQL-...



ADLQL-... + AKV-ADLQL-...

Designed for high comfort

Together with renowned designers and architects we have developed ceiling, wall, staircase and floor diffusers and grilles that are not only aesthetic design elements, but also meet demanding ventilation and acoustic requirements.

Variant

- Ceiling diffuser with square diffuser face
- With plenum box for horizontal duct connection

Nominal sizes

Diffuser face

- 600 mm

Active size

- 250, 300, 400, 500, 600 mm

ADLQL-...-*V



Parts and characteristics

- Perforated square diffuser face with special baffle element
- Simple installation of the diffuser face due to central fixing screw with decorative cap

Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180

ADLQL-...-V

Variant

- Ceiling diffuser with square diffuser face
- With plenum box for vertical duct connection

Nominal sizes

Diffuser face

- 600 mm

Active size

- 250, 300, 400, 500, 600 mm

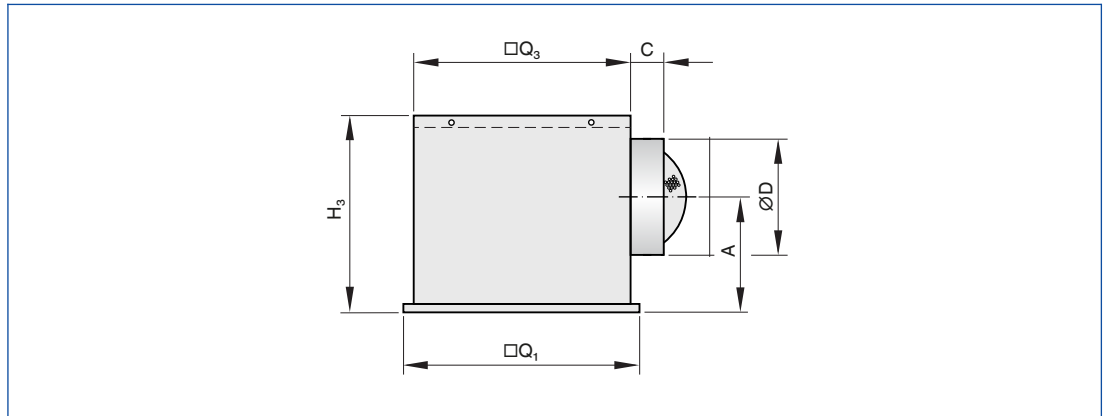
Parts and characteristics

- Square diffuser face
- Plenum box for vertical duct connection

Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180

Square diffuser face with plenum box for horizontal duct connection



ADLQL-...ZH + AKV-ADLQL-...ZH

Active Size	Q	QL	QS15 QM15	QS26 QM26	QB						
	□Q ₁					H ₃	□Q ₃	ØD	A	C	m
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
250	598	595	584	573	599	265	218	158	161	40/*75	4.3
300	598	595	584	573	599	265	288	158	161	40/*75	5.4
400	598	595	584	573	599	305	371	198	181	40/*75	6.0
500	598	595	584	573	599	355	475	248	206	40/*75	10.1
600	598	595	-	-	-	420	582	313	239	40/*75	13.3

*Increased dimension C when specified with ...-M spigot mounted damper

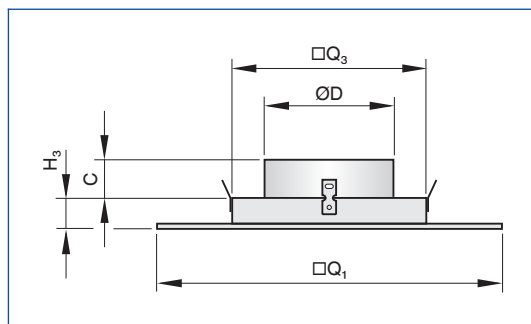
ADLQL-...AH + AKV-ADLQL-...AH

Active Size	Q	QL	QS15 QM15	QS26 QM26	QB					
	□Q ₁					H ₃	□Q ₃	ØD	A	C
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
600	598	595	584	573	599	355	567 / ¹⁾ 550	248	206	40/*75

¹⁾Adjusted dimension for ...-QB diffuser face type

*Increased dimension C when specified with ...-M spigot mounted damper

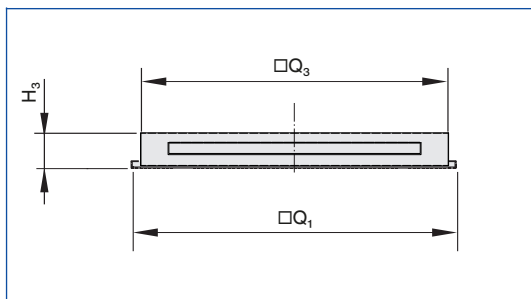
ADLQL...-ZV / AV



ADLQL...-ZV / AV

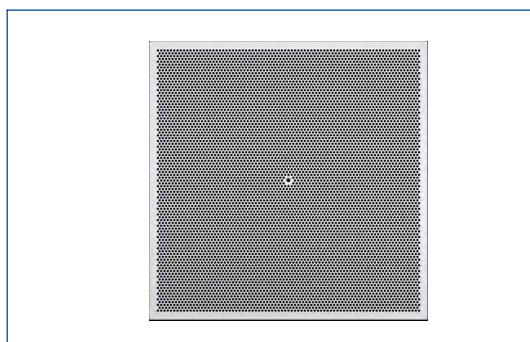
Nominal size	Q	QL	QS15 QM15	QS26 QM26	QB					
	Q_1					H_3	Q_3	$\varnothing D$	C	m
	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
250	598	595	584	573	599	28	198	123	40	0.9
300	598	595	584	573	599	34	267	158	40	1.2
400	598	595	584	573	599	44	350	198	40	2.0
500	598	595	584	573	599	55	454	248	40	3.1
600	598	595	-	-	-	64	559	313	40	4.4

AKV...-RA



Nominal size	Q	QL	QS15 QM15	QS26 QM26			QB			
	Q_1				H_3	Q_3	Q_1	H_3	Q_3	m
	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
... x 600	598	595	584	573	85	565	599	112	550	5.2

Diffuser face ADLQL

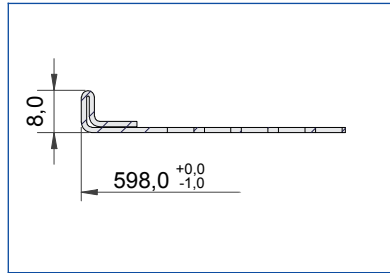


ADLQL

Nominal size	A_{eff} m ²
250	0.0100
300	0.0145
400	0.0258
500	0.0403
600	0.0580

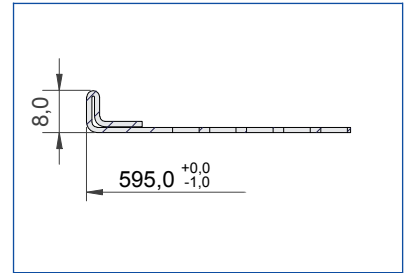
ADLQL installation types

ADLQL-...-Q



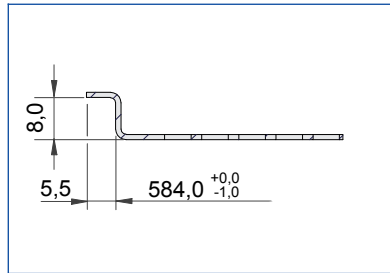
Face mounted

ADLQL-...-QL



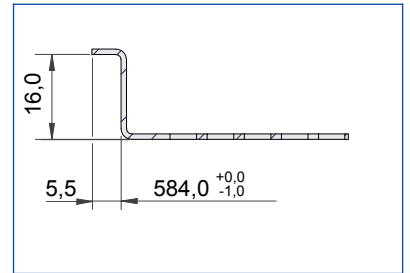
Lay-in flat 'T' bar

ADLQL-...-QS15



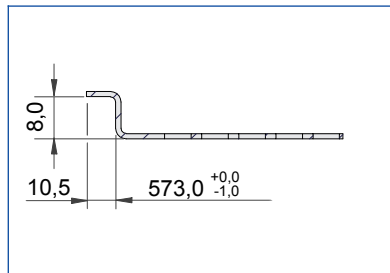
Regular 'T' bar [15x8]

ADLQL-...-QM15



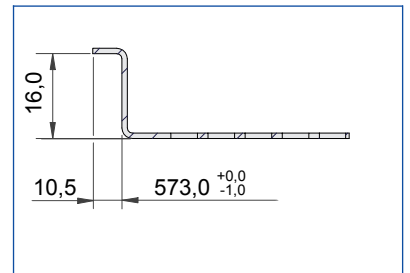
Regular 'T' bar [15x16]

ADLQL-...-QS26



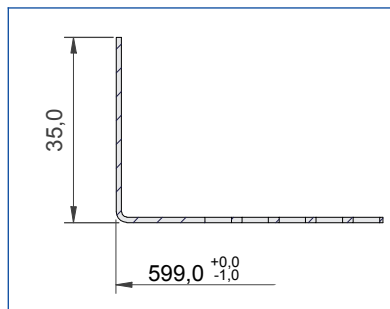
Regular 'T' bar [26x8]

ADLQL-...-QM26



Regular 'T' bar [26x16]

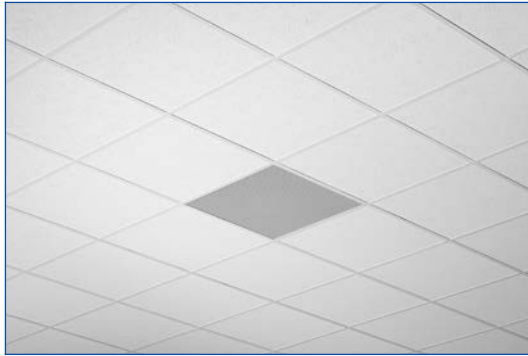
ADLQL-...-QB



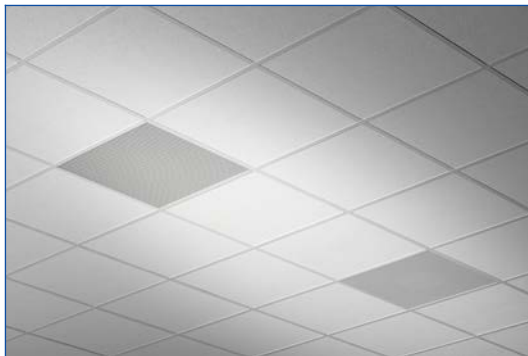
Push in, spring 'T' bar

ADLQL-...-QB
faceplate levelled via
centre screw (i.e no
location pip)

Installation in T-bar ceilings



Installation in T-bar ceilings, arrangement in a row

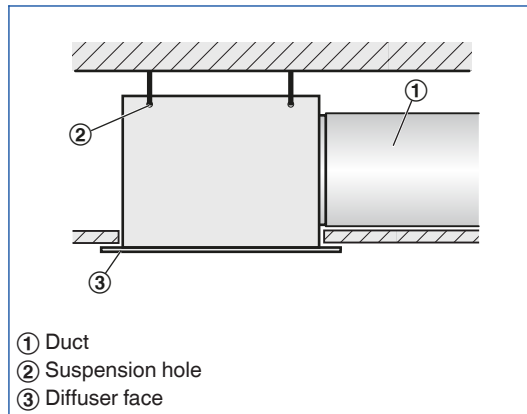


Installation and commissioning

- Preferably for rooms with a clear height up to 4.0 m
- Installation in plasterboard, grid and T-bar ceilings
- Horizontal or vertical duct connection
- If necessary, carry out volume flow rate balancing with the damper element

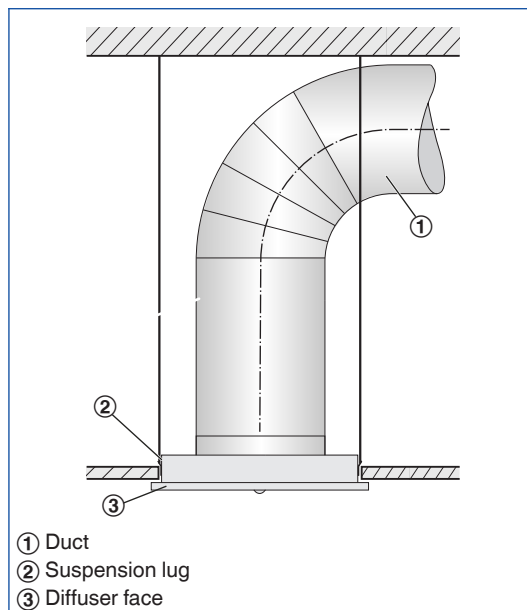
These are only schematic diagrams to illustrate installation details

Flush ceiling installation with square plenum box



- Horizontal duct connection
- Four suspension holes
- Suspension with cords, wires or hangers, to be provided by others

Flush ceiling installation with vertical connection



- Vertical duct connection
- Three suspension lugs
- Suspension with cords, wires or hangers, to be provided by others

Principal dimensions

$\varnothing D$ [mm]

Outer diameter of the spigot

$\varnothing D_1$ [mm]

Outer diameter of a circular diffuser face

$\varnothing D_2$ [mm]

Diameter of a circular diffuser face style

$\varnothing D_3$ [mm]

Diameter of a circular plenum box

$\square Q_1$ [mm]

Outer diameter of a square diffuser face

$\square Q_2$ [mm]

Dimensions of a square diffuser face style

$\square Q_3$ [mm]

Dimensions of a square plenum box

H_1 [mm]

Distance (height) from the lower edge of the suspended ceiling to the lower edge of the diffuser face

H_2 [mm]

Height of a ceiling diffuser, from the lower edge of the suspended ceiling to the upper edge of the spigot

H_3 [mm]

Height of a ceiling diffuser with plenum box, from the lower edge of the suspended ceiling to the upper edge of the plenum box or of the spigot

A [mm]

Position of the spigot, defined by the distance of the spigot centre line to the lower edge of the suspended ceiling

C [mm]

Length of the spigot

m [kg]

Weight

Nomenclature

L_{WA} [dB(A)]

A-weighted sound power level of air-regenerated noise

\dot{V} [m³/h] and [l/s]

Volume flow rate

Δt_z [K]

Supply air to room air temperature difference, i.e. supply air temperature minus room temperature

Δp_t [Pa]

Total differential pressure

A_{eff} [m²]

Effective air discharge area

All sound power levels are based on 1 pW.