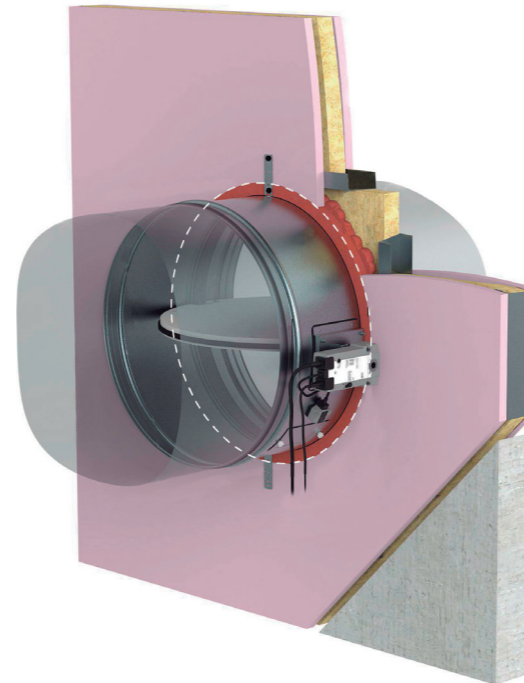


# FDR-3G



FDR-3G



## Circular fire damper

### Product description

**KOOLAIR** model **FDR-3G** circular fire damper. Standard fire dampers are designed and certified in accordance with EN 15650 and tested according to EIS criteria in accordance with EN 1366-2. They provide passive fire protection designed to aid compartmentation, which prevents the spread of toxic gases, smoke and fire. All fire dampers are supplied with either a manual or motor-driven mechanism by default. Operating mechanisms are detachable and interchangeable, e.g. an actuator-driven mechanism can be changed for a manual mechanism. The dampers also have air-tightness class **C3** as standard.

### Other models

**FDR-3G-KS:** Fire damper with square kit up to size 630 mm.

**FDR-3G-KR:** Fire damper with round kit up to size 630 mm.

(The installation kit cannot be supplied separately! It is delivered pre-assembled on the damper).

### Types of operating mechanisms

**Manually operated fire dampers:** The operating mechanism is activated when the air temperature in the duct reaches 74 °C (Available with 100 °C fusible link under request) and the damper closes within 10 seconds after the fusible link melts.

**H0** (Manual lever, no switches).

**H2** (Manual lever, 2 switches start and end of stroke contact).

**H5-2** (Manual lever, 24V AC/DC electromagnet-operated mechanism, 2 switches start and end of stroke contact).

**H6-2** (Manual lever, 230V AC electromagnet-operated mechanism, 2 switches start and end of stroke contact).

**Actuator-operated fire dampers:** These dampers are equipped with a thermoelectric fusible link as standard, which triggers the closing of the damper after the ambient temperature reaches or exceeds 72 °C. The actuator's power supply circuit is interrupted and its spring closes the damper within 20 seconds. Belimo actuator available with 95 °C or 120 °C fusible link under request.

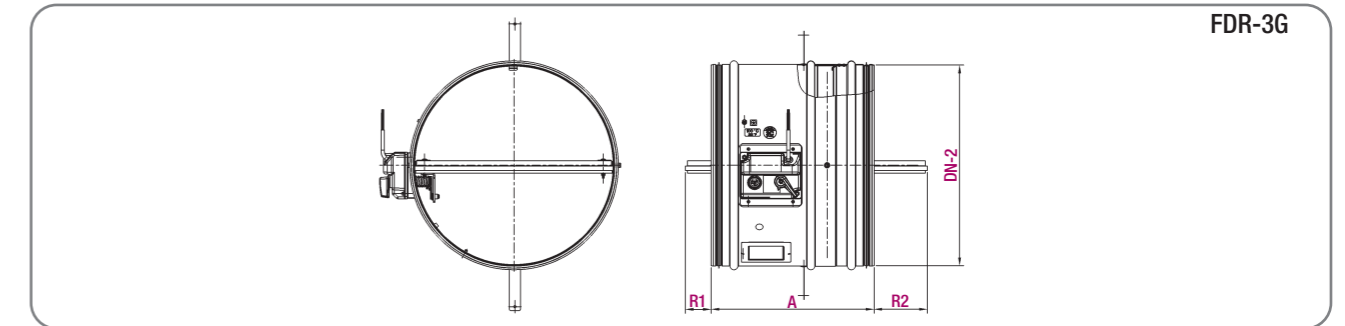
**B230T** (Belimo 230V AC Actuator).

**B24T** (Belimo 24V AC/DC Actuator).

**B24T-W** (Belimo 24V AC/DC Actuator and cable connector for communication unit).

**Monitoring:** Our motor-driven fire damper monitoring system, **KOOLCOM**, is available (see catalogue).

### General dimensions



DN (mm)	100	125	140	150	160	180	200	225	250	280	315	350	400	450	500	560	630	710	800	900	1000
DN-2	98	123	138	148	158	178	198	223	248	278	313	353	398	448	498	558	628	708	798	898	998
A	450	450	150	450	450	450	450	450	450	450	450	450	450	450	450	450	450	500	500	500	500
R1	-	-	-	-	-	-	-	-	8	23	40,5	60,5	83	108	133	163	198	191	236	286	336
R2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Unit in mm.

### Selection table: (FDR-3G)

Size	Q (m³/h)	L <sub>WA</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	V <sub>p</sub> (m/s)
100	88	25	16	3,1
	113	30	27	4,0
	140	35	41	5,0
125	125	25	14	2,8
	160	30	23	3,6
	200	35	35	4,5
140	215	30	21	3,9
	265	35	33	4,8
	325	40	50	5,9
150	215	30	22	3,4
	265	35	33	4,2
	325	40	50	5,1
160	310	30	17	4,3
	380	35	26	5,3
	465	40	38	6,4
180	445	30	13	4,8
	545	35	20	5,9
	655	40	29	7,1
200	905	40	21	8,0
	1070	45	29	9,5
	1250	50	40	11,1
225	1060	40	17	7,4
	1260	45	24	8,8
	1480	50	34	10,3
250	1250	40	14	7,1
	1490	45	20	8,4
	1760	50	29	10,0
280	1415	40	13	6,4
	1680	45	19	7,6
	1980	50	26	8,9
315	1650	40	12	5,9
	1950	45	18	7,0
	2300	50	24	8,2

Size	Q (m³/h)	L <sub>WA</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	V <sub>p</sub> (m/s)
355	2005	40	11	5,6
	2350	45	15	6,6
	2775	50	21	7,8
400	2600	40	9	5,8
	3090	45	13	6,8
	3610	50	17	8,0
450	3600	40	8	6,3
	4200	45	10	7,3
	4900	50	14	8,6
500	3915	40	7	5,5
	4550	45	9	6,4
	5330	50	12	7,5
560	4450	50	6	5,0
	5190	45	8	5,9
	6050	50	11	6,8
630	5340	40	5	4,8
	6220	45	7	5,5
	7290	50	9	6,5
710	6125	40	4	4,3
	7150	45	6	5,0
	8340	50	8	5,8
800	8475	40	3	4,7
	10000	45	5	5,5
	11720	50	6	6,5
900	11100	40	3	4,8
	13000	45	4	5,7
	15275	50	5	6,7
1000	15800	40	2	5,6
	18900	45	3	6,7
	22500	50	4	8,0

#### LEGEND

Q (m³/h): Air flow.

ΔP<sub>t</sub> (Pa): Pressure drop.

L<sub>WA</sub> [dB(A)]: Sound power level.

V<sub>p</sub> (m/s): Effective velocity.