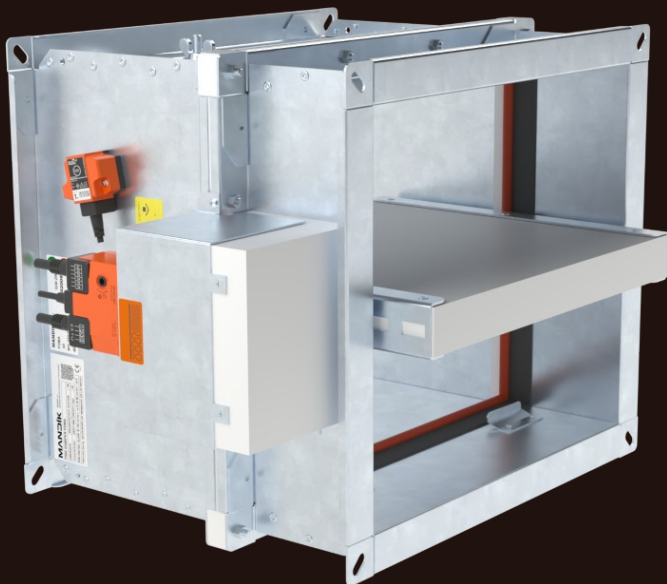


FDMA

Fire damper

Technical Documentation

Installation, Commissioning, Operation, Maintenance and Service Manual



These technical specifications state a row of manufactured sizes and models of fire dampers FDMA.
It is valid for production, designing, ordering, delivery, maintenance and operation.

CONTENT

| | |
|--|----|
| I. GENERAL..... | 3 |
| Description..... | 3 |
| II. DESIGN..... | 4 |
| Design with manual control..... | 4 |
| Design with spring return actuator..... | 9 |
| III. DIMENSIONS..... | 16 |
| Technical parameters..... | 18 |
| IV. INSTALLATION..... | 24 |
| Placement and installation..... | 24 |
| Statement of installations..... | 26 |
| In solid wall construction..... | 27 |
| Installation outside solid wall construction..... | 30 |
| In gypsum wall construction..... | 32 |
| Installation outside gypsum wall construction..... | 35 |
| In solid ceiling construction..... | 37 |
| Outside solid ceiling construction..... | 40 |
| V. SUSPENSION SYSTEMS..... | 41 |
| Example of duct connection..... | 44 |
| VI. TECHNICAL DATA..... | 45 |
| Pressure loss..... | 45 |
| Noise data..... | 47 |
| VII. MATERIAL, FINISHING..... | 48 |
| VIII. TRANSPORTATION, STORAGE AND WARRANTY..... | 49 |
| Logistic terms..... | 49 |
| Warranty..... | 49 |
| IX. ASSEMBLY, ATTENDANCE AND MAINTENANCE..... | 50 |
| Commissioning and revisions..... | 53 |
| X. ORDERING INFORMATIONS..... | 55 |
| Ordering key..... | 55 |
| Accessories..... | 56 |
| Data label..... | 57 |

I. GENERAL

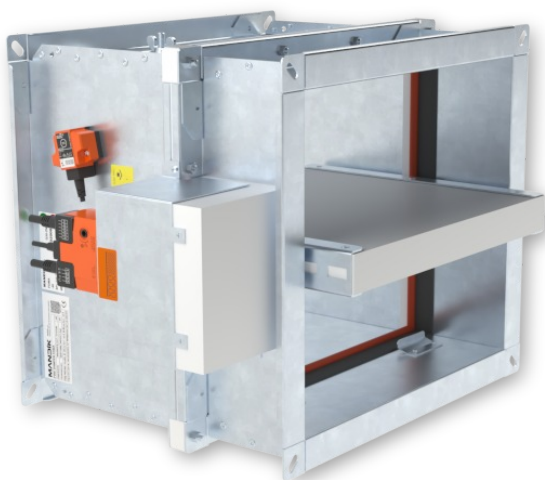
Description

Fire dampers are shutters in ducts of air-conditioning devices that prevent the spread of fire and combustion products from one fire segment to the other one by means of closing the duct in the points of fire separating constructions.

Damper blade automatically closes air duct using a closing spring or a spring return actuator. The closing spring is actuated by pressing a button on the manual control or by melting a thermal fuse.

The return spring of the actuator is actuated when a thermoelectric activation device BAT is activated, when a test button on BAT is pressed or when power supply of the actuator is interrupted.

After closing the blade, the damper is sealed with silicon against smoke penetration. On request by customer, the damper can be supplied silicon-free. In the closed position, the damper is also sealed with material which increases its volume due to increasing temperature and air proofs the air duct.



FDMA with spring return actuator



FDMA with manual control

Damper characteristics

- CE certified acc. to EN 15650
- Tested in accordance with EN 1366-2
- Classified acc. to EN 13501-3+A1
- External casing leakage for size: A<160 or B<160 class ATC 4 (old marking "B"), A≥160 a B≥160 class ATC 3 (old marking "C"), Internal leakage class 2 acc. to EN 1751
- Cycling test in class C₁₀₀₀₀ acc. to EN 15650
- Corrosion resistant acc. to EN 15650
- Certificate of constancy of performance No. 1391-CPR-XXXX/XXXX
- Declaration of Performance No. PM/FDMA/01/XX/X
- Hygienic assessment of fire dampers - Report No. 1.6/pos/19/19b

Working conditions

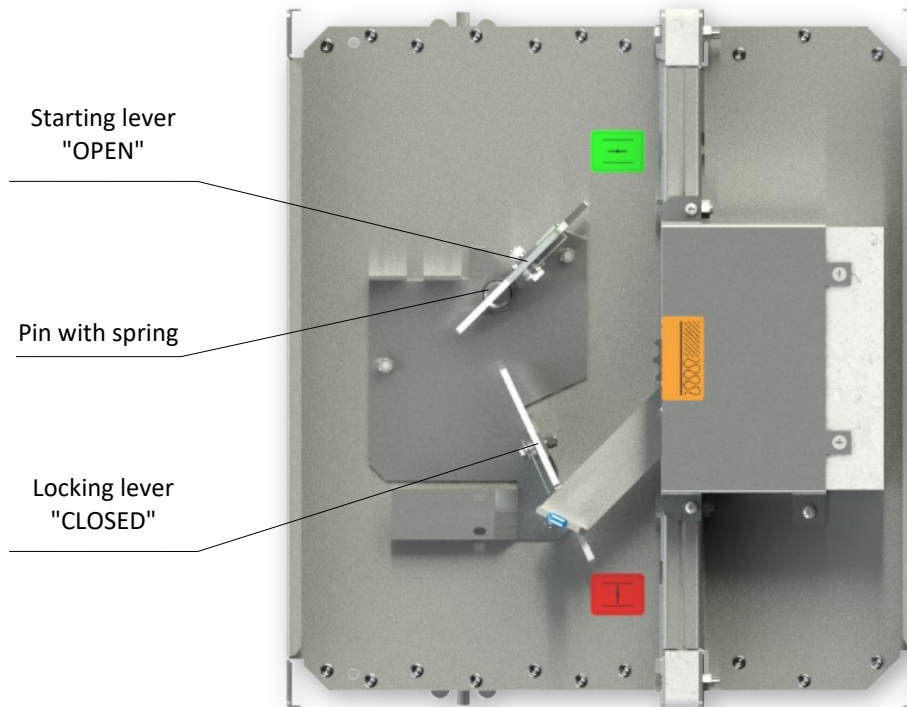
- Exact damper function is provided under the following conditions:
 - maximum air velocity 12 m/s
 - maximum pressure difference 1200 Pa
 - the air circulation in the whole damper section must be secured steady over the entire surface.
- Dampers can be installed in any position
- Dampers are suitable for systems without abrasive, chemical and adhesive particles.
- Dampers are designed for macroclimatic areas with mild climate according to EN IEC 60 721-3-3 ed.2., class 3K22. (Environment 3K22 is typically protected place with regulated temperature)
- Temperature in the place of installation is permitted to range from -30°C to +50°C.

II. DESIGN

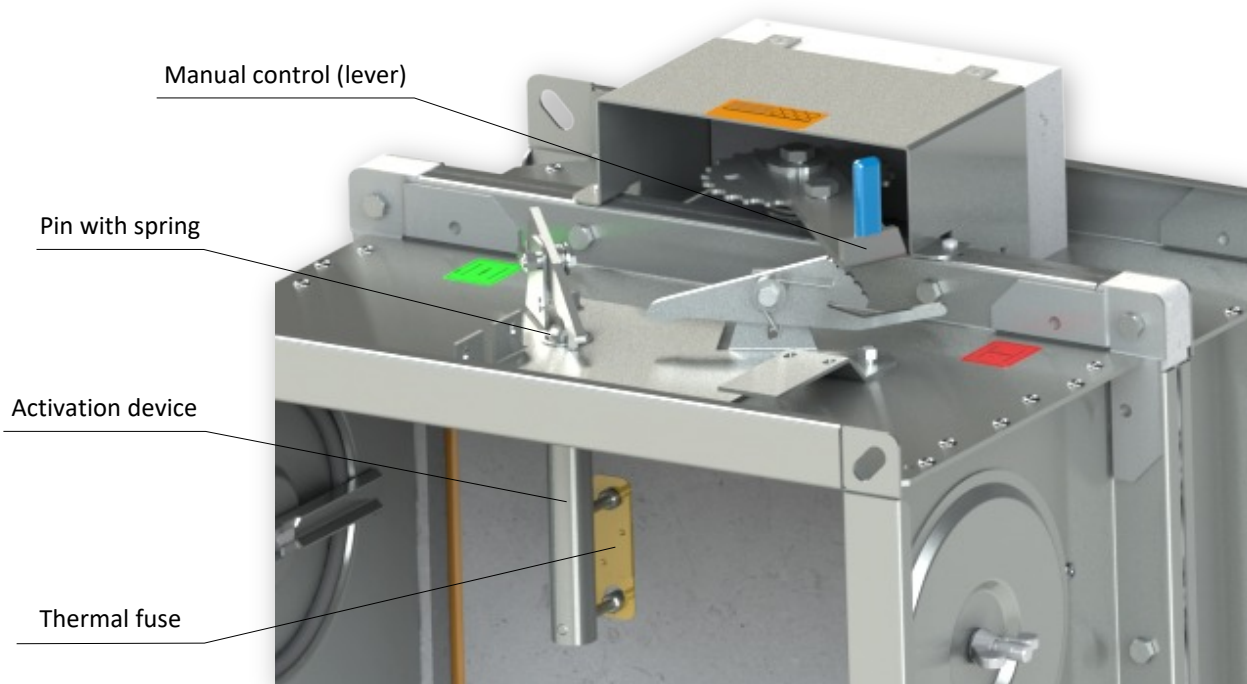
Design with manual control

Design .01

- Design with manual control with a thermal fuse which actuates the shutting device, after the nominal activation temperature 72°C has been reached.
- Automatic initiation of the manual control is not activated if the temperature does not exceed 70°C.
- In case that other activation temperatures are required, thermal fuses with nominal activation temperature +104°C or +147°C can be supplied (this requirement must be specified in the order).



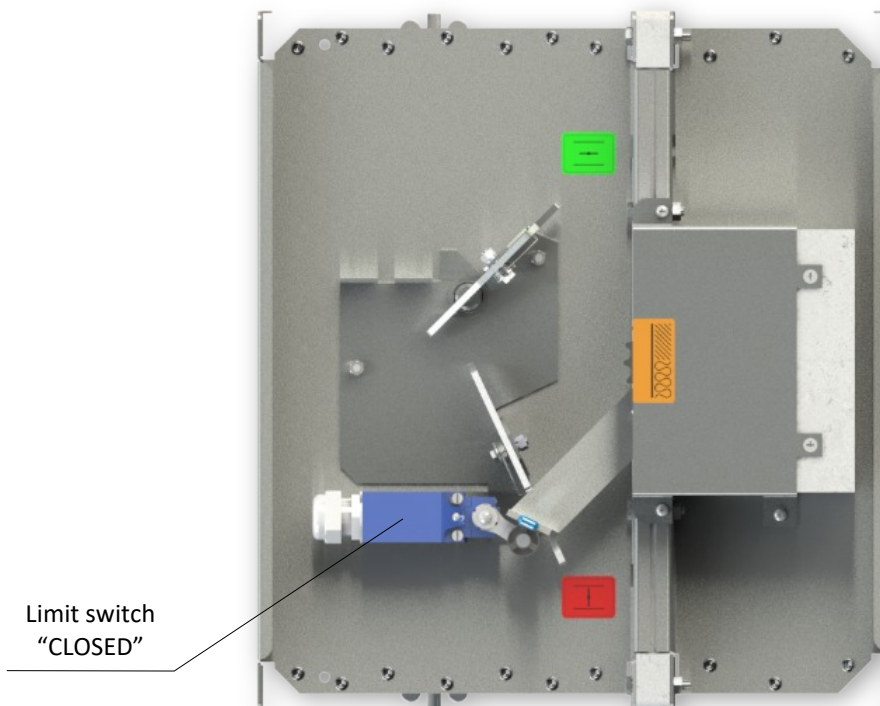
Design .01



Detail of the manual control, thermal fuse and activation device

Design .11

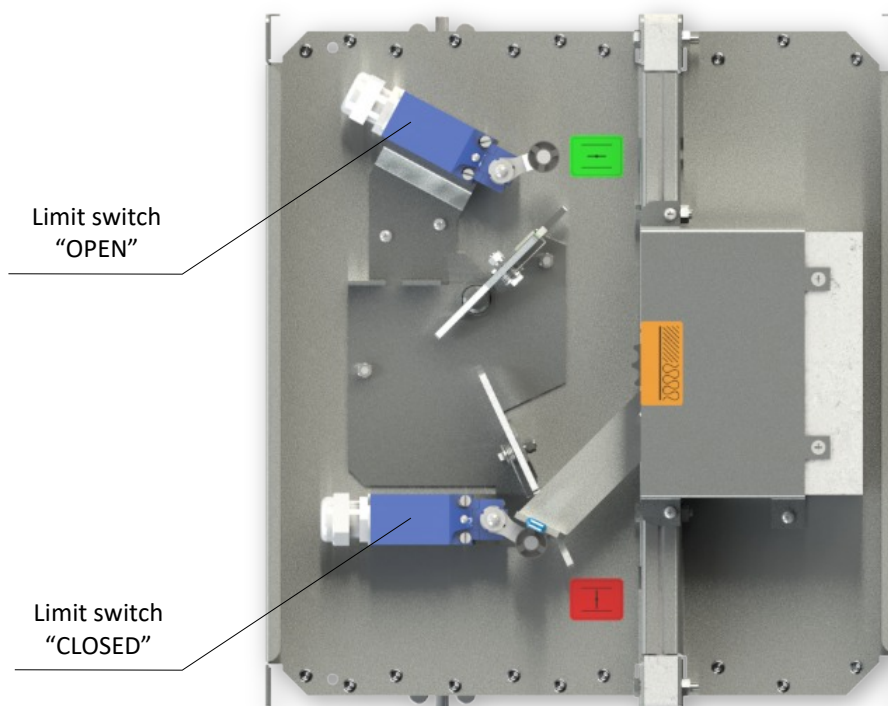
- Design .01 with manual control can be complemented with a limit switch signaling of the damper blade position "CLOSED".
- Description of electrical components → see page 8



Design .11

Design .80

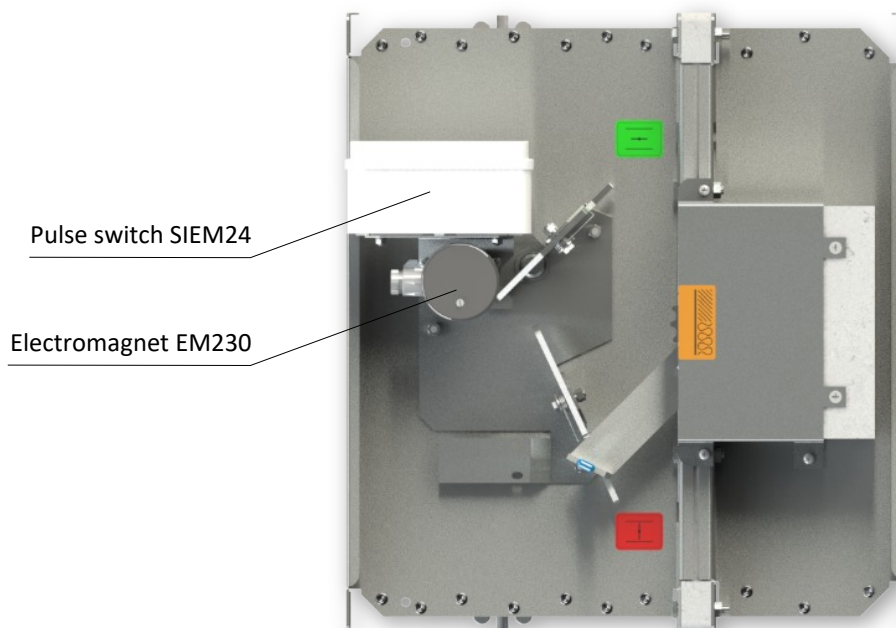
- Design .01 with manual control can be complemented with two limit switches signaling of the damper blade position "CLOSED" and "OPEN".
- Description of electrical components → see page 8



Design .80

Design .20 and .21 - ON REQUEST ONLY

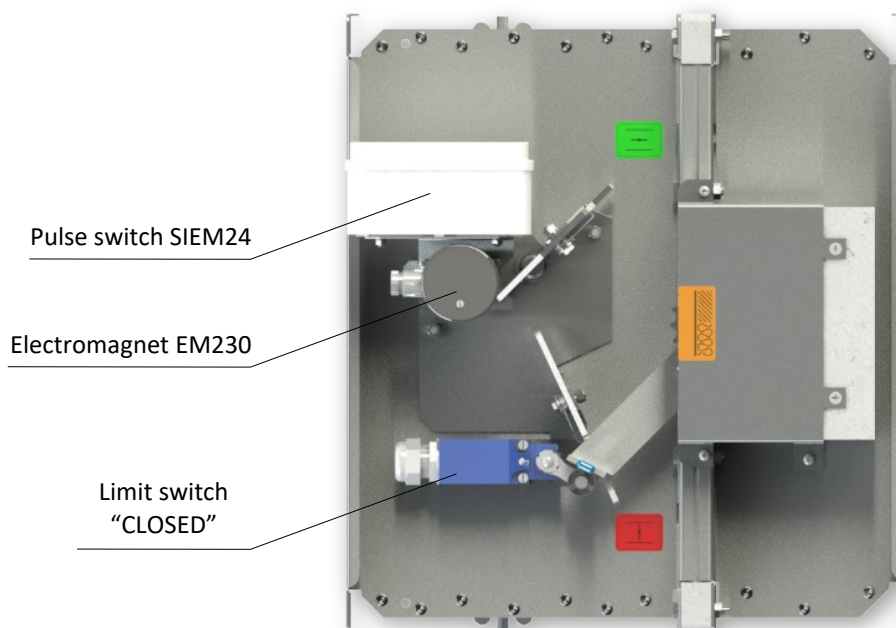
- Design .01 with mechanical control can be complemented with initiation by means of an electromagnet (solenoid). The voltage of the electromagnet (solenoid) can be AC 230V, AC/DC 24V.
- By voltage AC 230 V is damper equipped by electromagnet EM230. By voltage AC/DC 24 V is damper equipped by electromagnet EM230 with pre-pulse switch SIEM24. SEIM24 activates the electromagnet after capacitor charge witch is placed inside of SIEM24. It takes about 10 sec. Charging time depends on the current supply.
- For reliable operation is necessary connect to electromagnet or pre-pulse switch appropriate supply for 20 to 30 sec.
- **Notice:** After activation of electromagnet is released initiation lever and damper is closed. After activation is initiation lever released. If is damper set up in position "OPEN" is necessary unlock initiation lever by pulling of electromagnet core.
- Description of electrical components → see page 8



Design .20 and .21

Design .23 and .24 - ON REQUEST ONLY

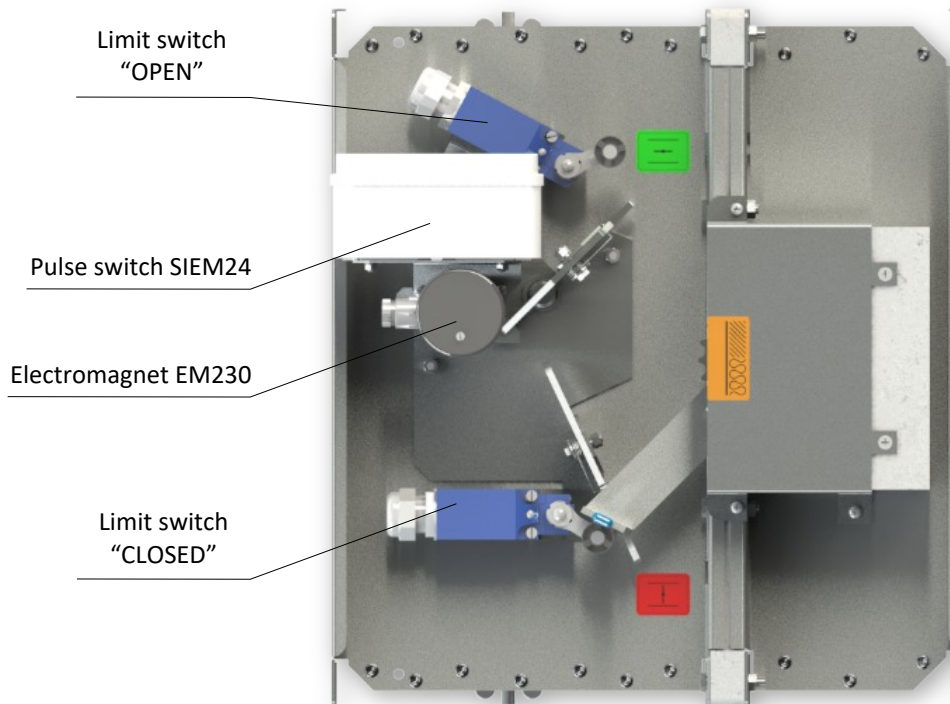
- Design .20 and .21 with manual control can be complemented with a limit switch signaling of the damper blade position "CLOSED".
- Description of electrical components → see page 8



Design .23 and .24

Design .82 and .83 - ON REQUEST ONLY

- Design .20 and .21 with manual control can be complemented with two limit switches signaling of the damper blade position "CLOSED" and "OPEN".
- Description of electrical components → see page 8

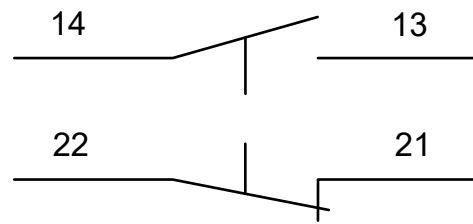


Design .82 and .83

Design .30, .33 and .85 - Product designed into the ZONE 2 - ON REQUEST ONLY

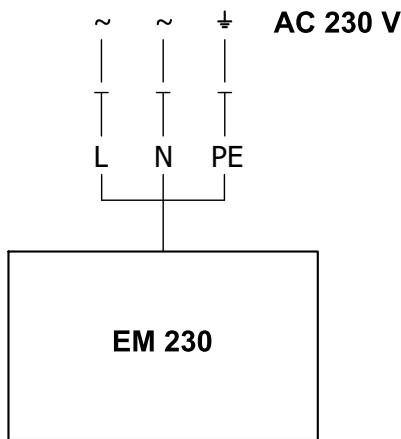
- Such designs are the same as the designs .23, .24 and .83 and they are adapted to fulfill the requirements of the usage in the Non- explosive environment.
- Description of electrical components → see page 8

Limit switch XCKN2118G11



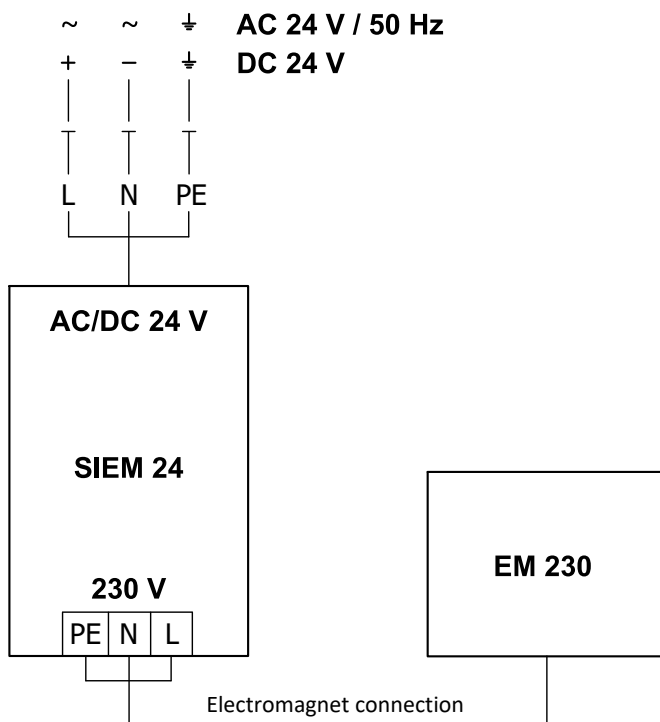
| | |
|----------------------------------|----------------------------------|
| Nominal voltage and max. current | AC 240 V; 3 A DC 250 V; 0,1 A |
| Degree of protection | IP 65 |
| Ambient temperature | -25°C ... +70°C |

Electromagnet EM 230



| | |
|----------------------|----------------------------------|
| Nominal voltage | AC 230 V / 50 Hz |
| Attraction current | 1,2 A |
| Degree of protection | IP 40 |
| Ambient temperature | -10°C ... +40°C |
| Connection | cable 1m, 3x0,75 mm ² |

Electromagnet EM 230 with pulse switch SIEM 24



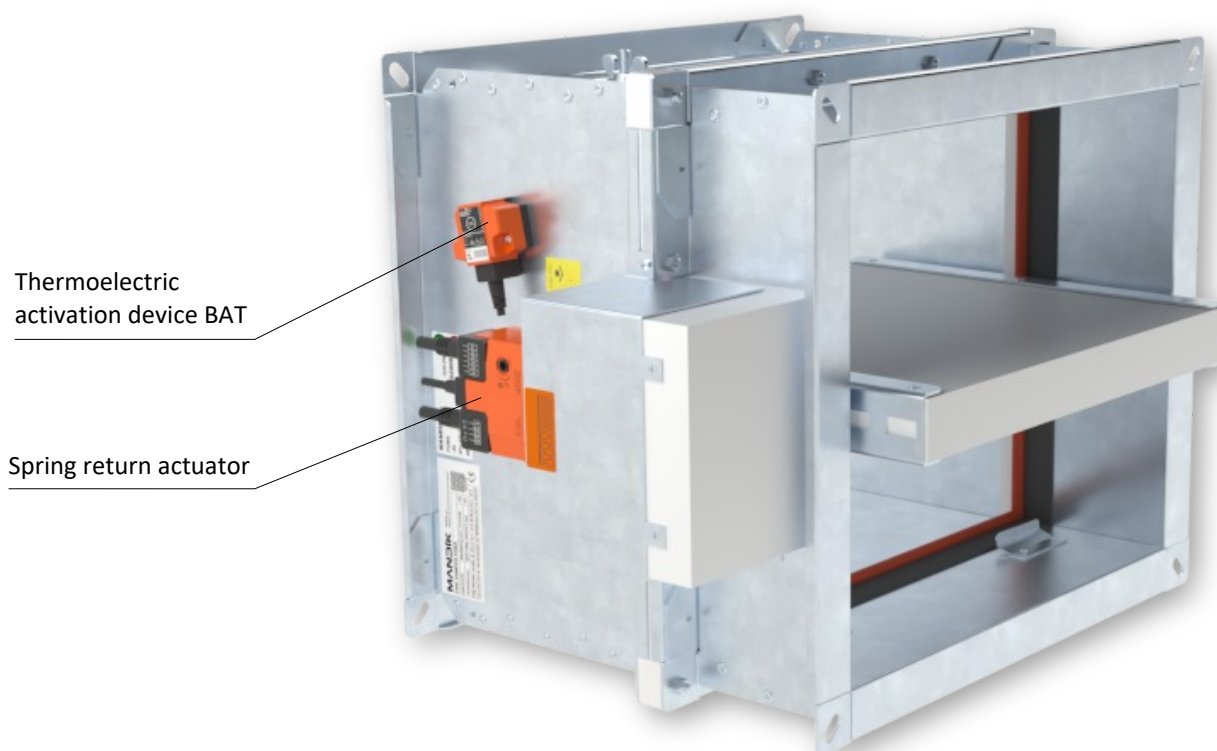
| | |
|----------------------|----------------------------------|
| Nominal voltage | AC 24 V / 50 Hz DC 24 V |
| Attraction current | min. 2A* |
| Degree of protection | IP 40 |
| Ambient temperature | -10°C ... +40°C |
| Switching frequency | max. 1x per minute |
| Connection | cable 1m, 3x0,75 mm ² |

* It is necessary to use a sufficiently robust switched-mode power supply (allow for a current of 2 A per magnet), or to use a transformer with a rectifier, where the voltage drop is minimal and the output will not be briefly disconnected under overload.

Design with spring return actuator

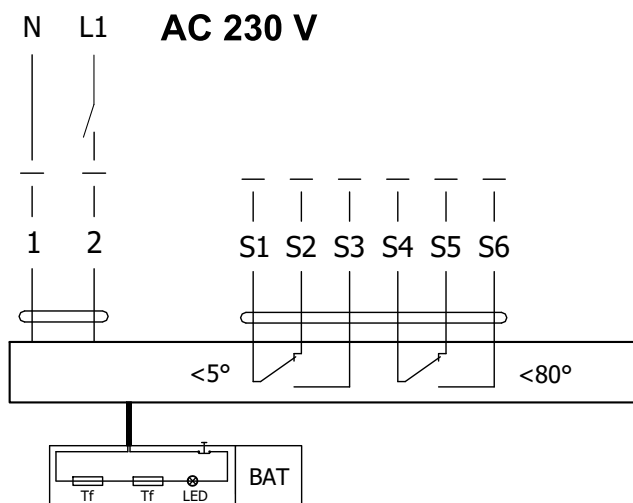
Design .40 and .50

- The fire dampers are equipped with Belimo spring return actuators with thermoelectric activation device BAT. The spring return actuator types are BFL, BFN or BF depending on the damper size. (Further mentioned as „actuator“).
- After being connected to power supply 230V or AC/DC 24V, the actuator rotates the damper blade to the operating position "OPEN" and at the same time pre-stretches its return spring.
- When the actuator is power supplied, the damper blade is in the position "OPEN" and the return spring is pre-stretched.
- Time needed for full opening of the damper blade from the position "CLOSED" to the position "OPEN" is maximum 120 sec. If the actuator power supply is interrupted (due to loss of supply voltage, or pressing a test button on the thermoelectric activation device BAT), the actuator rotates the damper blade to the breakdown position "CLOSED".
- The time of closing the damper blade from the position "OPEN" to the position "CLOSED" takes maximum 20 sec.
- In case that the power supply is restored again (the blade can be in any position), the actuator starts to rotate the damper blade back to the position "OPEN".
- A thermoelectric activation device BAT, which contains two thermal fuses Tf1 and Tf2, is an integral part of the actuator.
- These fuses are activated when temperature +72°C has been reached (the fuse Tf1 due to temperature outside the duct and the fuse Tf2 due to temperature inside the duct). The thermoelectric activation device can also be equipped with a Tf2 thermal fuse type ZBAT 95/120/140 (must be specified in the order). In this case, the activation temperature inside the duct is +95°C, +120°C or +140°C (depending on the type).
- After the thermal fuse Tf1 or Tf2 has been activated, the power supply is permanently and irreversibly interrupted and the actuator, by means of the pre-stretched spring, rotates the damper blade into the breakdown position "CLOSED".
- Signalisation of damper blade position "OPEN" and "CLOSE" is provided by two microswitches.

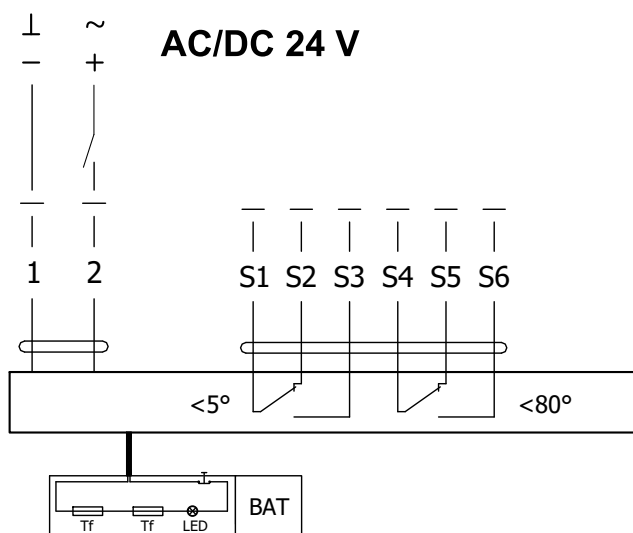


Design.40 and .50

Actuator BELIMO BFL 230-T



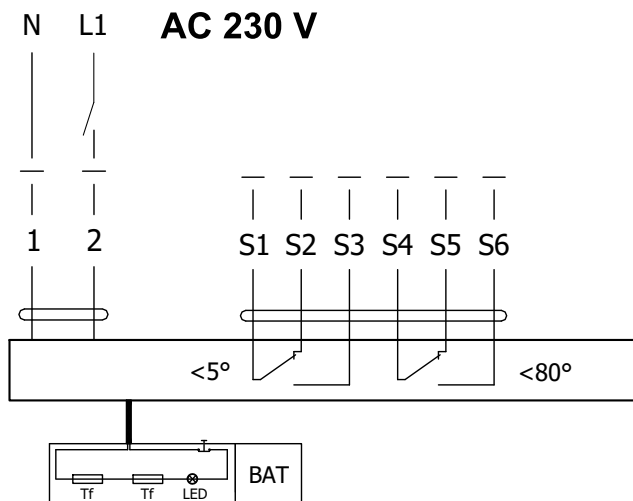
Actuator BELIMO BFL 24-T(-ST)



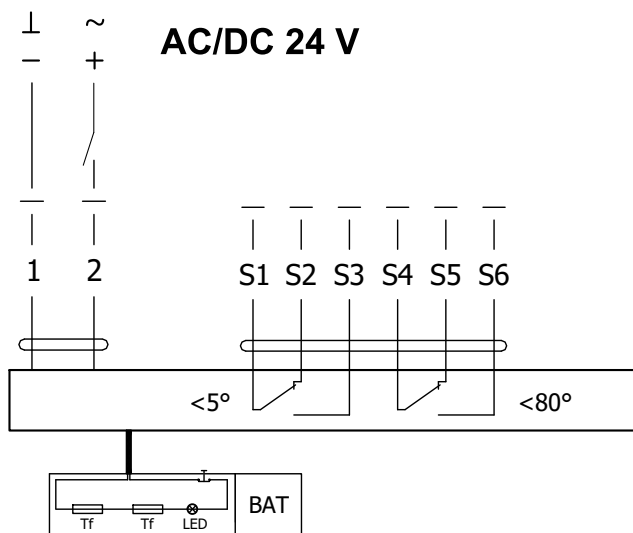
Actuator BELIMO BFL 230-T(-ST), BFL 24-T(-ST)

| Actuator BELIMO - 4 Nm/ 3 Nm Spring | BFL 230-T(-ST) | BFL 24-T(-ST) |
|--|--|--|
| Power voltage | AC 230 V 50/60Hz | AC/DC 24 V 50/60Hz |
| Power consumption - in operation - in rest position | 2,6 W 0,7 W | 2,0 W 0,7 W |
| Dimensioning | 4 VA (I _{max} 4 A @ 5 ms) | 2,8 VA (I _{max} 2,9 A @ 5 ms) |
| Protection class | II | III |
| Degree of protection | IP 54 | |
| Running time - motor - spring return | < 60 s ~ 20 s | |
| Ambient temperature - normal duty - safety duty - non-operating temperature | -30°C ... +55°C The safe position will be attained up to max. +75°C -40°C ... +55°C | |
| Connection - supply/control - auxiliary switch | cable 1 m, 2 x 0,75 mm ² (BFL 2xx-T-ST) with 3-pin plug-in connectors cable 1 m, 6 x 0,75 mm ² (BFL 2xx-T-ST) with 6-pin plug-in connectors | |
| Response temperature thermal fuse | duct outside temperature +72°C duct inside temperature +72°C | |

Actuator BELIMO BFN 230-T



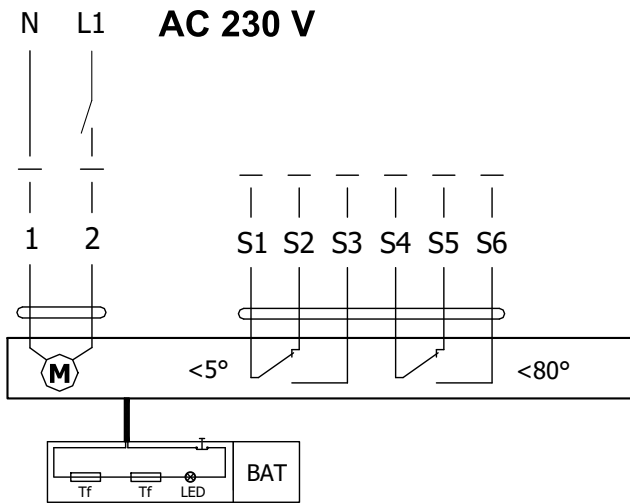
Actuator BELIMO BFN 24-T(-ST)



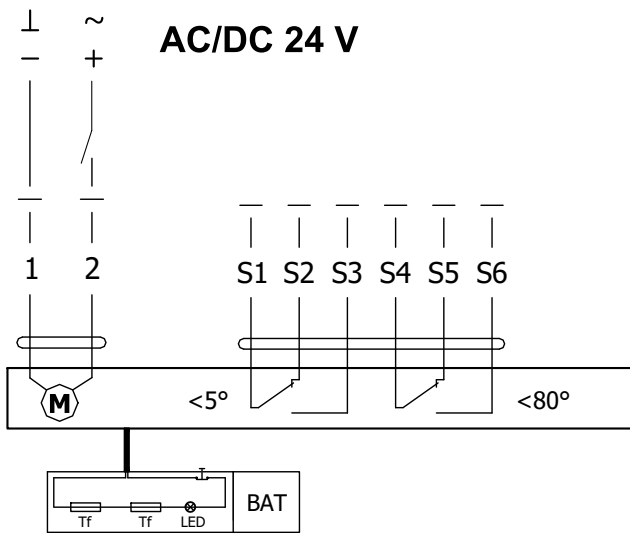
Actuator BELIMO BFN 230-T(-ST), BFN 24-T(-ST)

| Actuator BELIMO - 9 Nm/ 7 Nm Spring | BFN 230-T(-ST) | BFN 24-T(-ST) |
|--|--|----------------------------|
| Power voltage | AC 230 V 50/60Hz | AC/DC 24 V 50/60Hz |
| Power consumption - in operation - in rest position | 3,5 W 1,3 W | 3,2 W 1,2 W |
| Dimensioning | 6,5 VA (Imax 4 A @ 5 ms) | 4,3 VA (Imax 2,9 A @ 5 ms) |
| Protection class | II | III |
| Degree of protection | IP 54 | |
| Running time - motor - spring return | < 60 s ~ 20 s | |
| Ambient temperature - normal duty - safety duty - non-operating temperature | -30°C ... +55°C The safe position will be attained up to max. +75°C -40°C ... +55°C | |
| Connection - supply/control - auxiliary switch | cable 1 m, 2 x 0,75 mm ² (BFN 2xx-T-ST) with 3-pin plug-in connectors cable 1 m, 6 x 0,75 mm ² (BFN 2xx-T-ST) with 6-pin plug-in connectors | |
| Response temperature thermal fuse | duct outside temperature +72°C duct inside temperature +72°C | |

Actuator BELIMO BF 230-TN



Actuator BELIMO BF 24-TN (-ST)



Actuator BELIMO BF 230-TN(-ST), BF 24-TN(-ST)

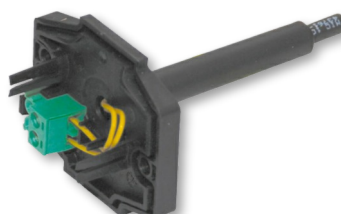
| Actuator BELIMO - 18 Nm/ 12 Nm Spring | BF 230-TN(-ST) | BF 24-TN(-ST) |
|--|--|---------------------------------------|
| Power voltage | AC 230 V 50/60Hz | AC/DC 24 V 50/60Hz |
| Power consumption - in operation - in rest position | 8,5 W 3 W | 7 W 2 W |
| Dimensioning | 11 VA (I _{max} 8,3 A @ 5 ms) | 10 VA (I _{max} 8,3 A @ 5 ms) |
| Protection class | II | III |
| Degree of protection | IP 54 | |
| Running time - motor - spring return | 120 s ~ 16 s | |
| Ambient temperature - normal duty - safety duty - non-operating temperature | -30°C ... +50°C The safe position will be attained up to max. +75°C -40°C ... +50°C | |
| Connection - supply/control - auxiliary switch | cable 1 m, 2 x 0,75 mm ² (BF 2xx-TN-ST) with 3-pin plug-in connectors cable 1 m, 6 x 0,75 mm ² (BF 2xx-TN-ST) with 6-pin plug-in connectors | |
| Response temperature thermal fuse | duct outside temperature +72°C duct inside temperature +72°C | |

Thermoelectric activation device BAT

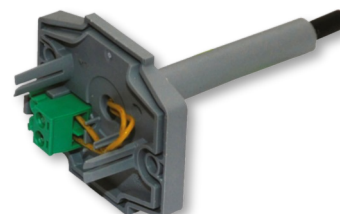
- If the thermal fuse Tf1 is interrupted (due to temperature outside the duct), it is necessary to replace the spring return actuator. Thermoelectric activation device BAT is integral part of the actuator.
- If the thermal fuse Tf2 is interrupted (due to temperature inside the duct), only the spare part ZBAT 72 (95/120/140) needs to be replaced (acc.to the activation temperature).
- When one of the thermal fuses responds, the supply voltage is interrupted permanently and irreversibly.
- The function (interruption of the supply voltage) can be checked by pressing the test button.
- Installation is carried out with the pre-assembled, self-tapping screws.



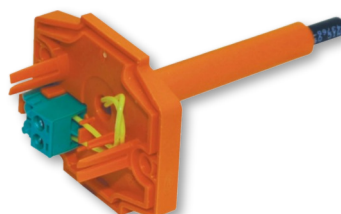
BELIMO ZBAT 72
Black (BK) = 72°C (standard)



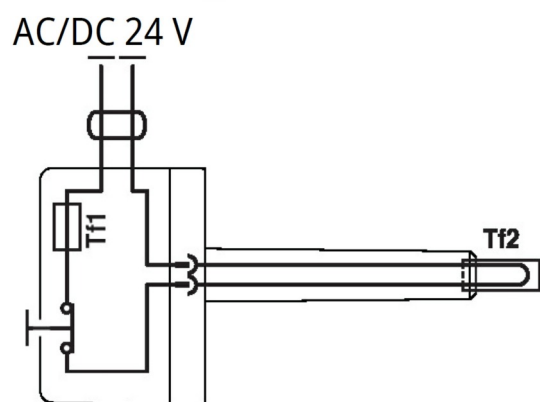
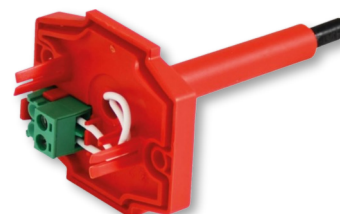
BELIMO ZBAT 95
Grey (GY) = 95°C



BELIMO ZBAT 120
Orange (OG) = 120°C



BELIMO ZBAT 140
Red (RD) = 140°C



Thermoelectric activation device BAT 72 (95/120/140)

| | |
|-----------------------------------|---|
| Power voltage | AC/DC 24 V 50/60Hz |
| Rated current | 1 A |
| AC/DC throughput resistance | <1 Ω |
| Protection class | III |
| Degree of protection | IP 54 |
| Probe length | 65 mm |
| Ambient temperature | -30°C ... +50°C |
| Storage temperature | -40°C ... +50°C |
| Ambient humidity | Max. 95% RH, non-condensing |
| Connection supply | Cable 1 m, 2 x 0.5 mm ² , Betaflam cable heatresistant up to 145°C |
| Response temperature thermal fuse | Duct inside temperature +72 (95/120/140)°C Duct outside temperature +72 (95/120/140)°C |

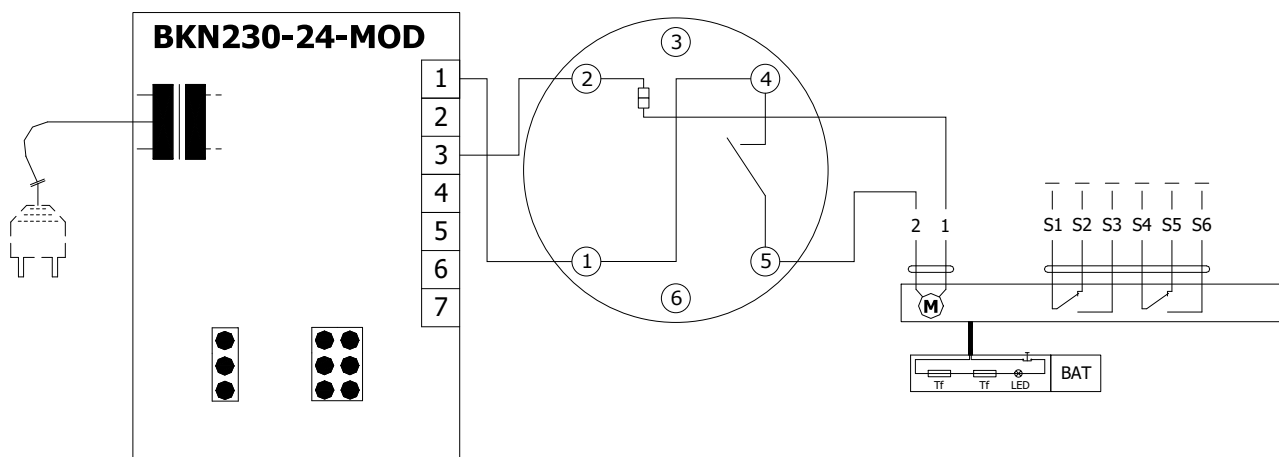
Design .41 and .51

- Design .41 or .51 with actuator and smoke detector ORS 142 K. The voltage can be AC 230 V or 24 V DC. Design .41 with voltage AC 230 V is equipped with communication and supply device BKN 230-24-MOD and with actuator BF 24-TN (BFL 24-T, BFN 24-T).
- The smoke detector is activated when smoke spreads in air duct system. Deactivation of the smoke detector alarm

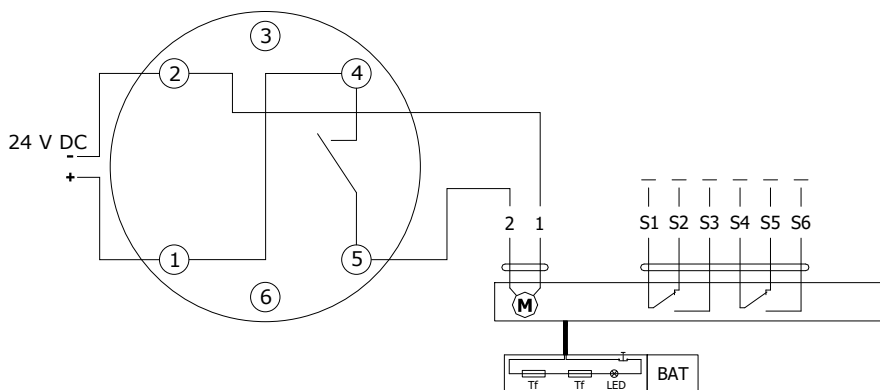
status is provided by interruption of supply voltage for min. 2s.

- Signalisation of damper blade position "OPEN" and "CLOSE" is provided by two microswitches.
- For sizes A<180 mm or B<180 mm, the optical smoke detector ORS 142 K is not part of the fire damper and is supplied separately.

Design .41 with actuator BF 24-TN (BFL, BFN 24-T), with smoke detector ORS 142 K and with supply device BKN 230-24-MOD (voltage AC 230 V)



Design .51 with actuator BF 24-TN (BFL, BFN 24-T), with smoke detector ORS 142 K (voltage 24 V DC)



Communication and supply device BKN 230-24-MOD

| | |
|---------------------------|---|
| Nominal voltage | AC 230 V 50/60Hz |
| Power consumption | 3 W (operating position) |
| Dimensioning | 14 VA (including actuator) |
| Protection Class | II |
| Degree of protection | IP 40 |
| Ambient temperature | -20°C ... +50°C |
| Non-operating temperature | -40°C ... +80°C |
| Connection - net | cable 0,9 m with EURO plug type 26 |
| - motor | 6-pole connector, 3-pole connector |
| - terminal board | screw terminals for cable 2x1,5 mm ² |

Optical smoke detector ORS 142 K with the socket 143A

- The smoke detector ORS 142 K is used for early smoke detection in rooms or inside the ventilation system.
- The sensor operates on the light scatter principle. Inside the scanning chamber is a light source and a light sensor, in the normal state the light from the source does not fall on the sensor. Only when smoke enters the scanning chamber the light is scattered and falls on the sensor.
- The smoke detector can be connected directly to the actuator (design .41 and .51) which, in case of smoke detection, passes to the safety position, or to the BKN communication and supply device (design .63).
- By early detection of smoke, it can be effectively prevented from spreading of smoke through the ventilation system. In addition

to smoke detection, the sensor can distinguish and signal slight and heavy contamination, e.g. the presence of large amounts of dust.

- The ORS 142 K smoke detector has an alarm memory, i.e. if the alarm is triggered, the safety relay opens and stays in this state even if the smoke disappears from the scanning chamber. The sensor remains in the alarm state until the power supply is briefly reset.
- On the pin 3, an external device can be connected via RS-Bus communication to report the status of the sensor.
- Pin 6 has no connection to the detector and is designed as a load-bearing structure in the base.

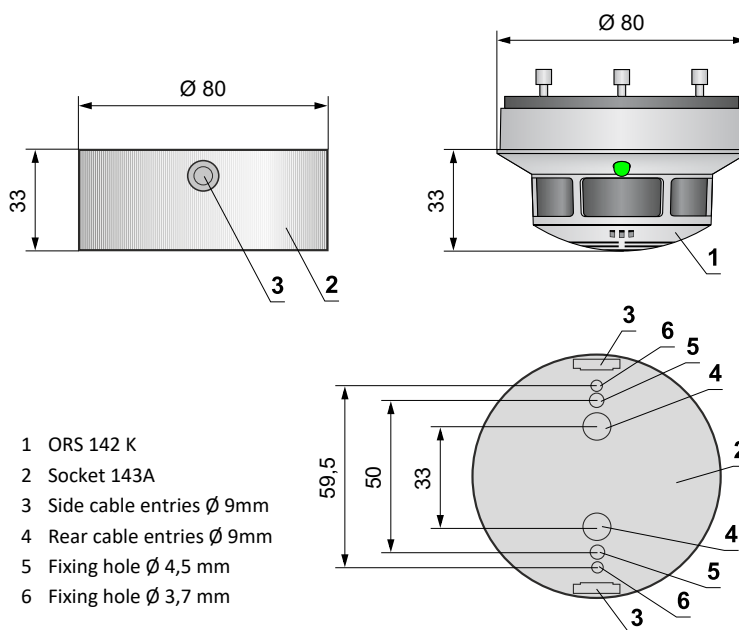
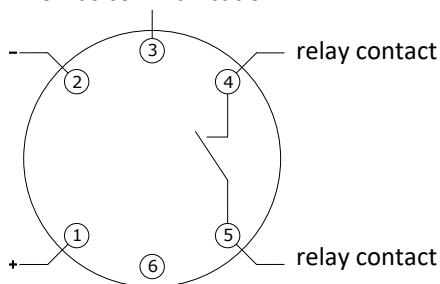
ORS 142 K



Socket 143A



RS-Bus communication



| Relay contact | | LED | |
|----------------------|--|----------------|---------|
| In operation | | Green | Shines |
| Slight contamination | | Green / Yellow | Flashes |
| Heavy contamination | | Green / Yellow | Flashes |
| Fault | | Yellow | Shines |
| Alarm | | Red | Shines |
| Power Off | | Off | - |

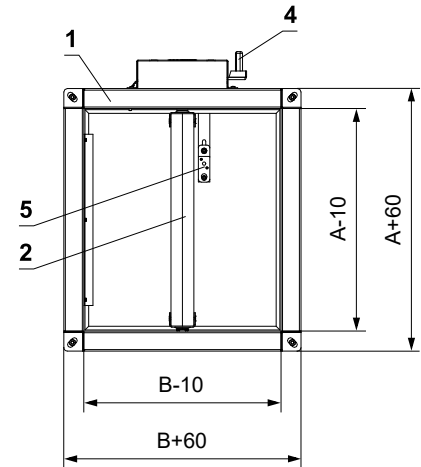
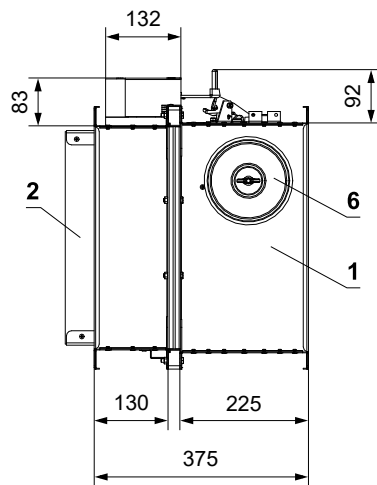
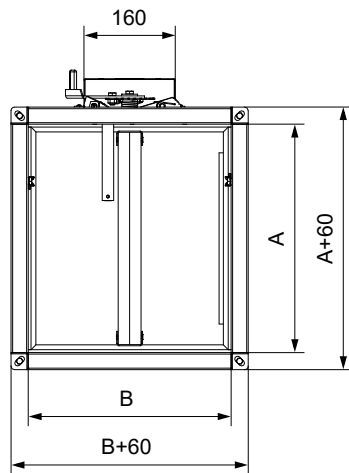
- 1 ORS 142 K
- 2 Socket 143A
- 3 Side cable entries Ø 9mm
- 4 Rear cable entries Ø 9mm
- 5 Fixing hole Ø 4,5 mm
- 6 Fixing hole Ø 3,7 mm

Optical smoke detector ORS 142 K with the socket 143A

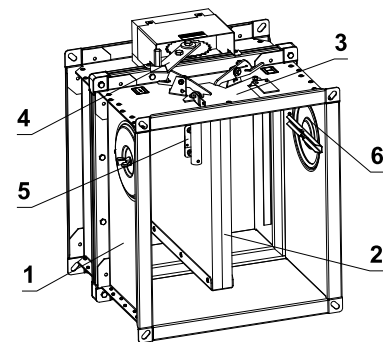
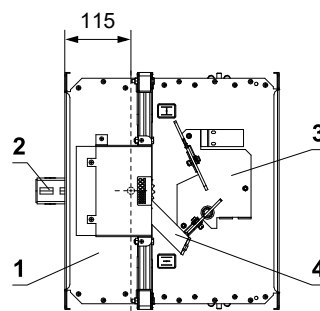
| | |
|---|--|
| Operating voltage | 18 ... 28 V DC |
| Residual ripple | ≤ 200 mV |
| Power Consumption Socket (without actuator) | max. 22 mA |
| Degree of protection | IP 42 |
| Ambient temperature | -20°C ... +75°C |
| Additional temperature sensor | +70°C |
| Connection - net | Cable 1m, connected to terminals 1, 2 and 4 |
| - motor | Actuator connected on the terminals 2 and 5 |
| - communication and supply device BKN | Cable 1m, connected to terminals 1, 2, 4 and 5 |

III. DIMENSIONS

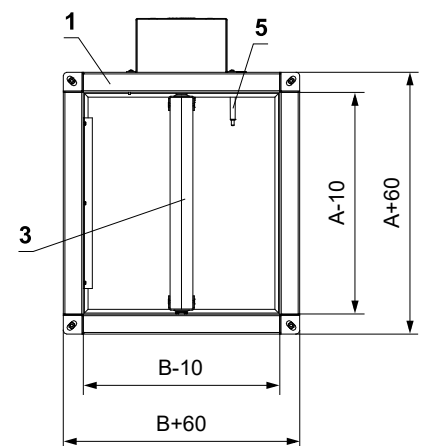
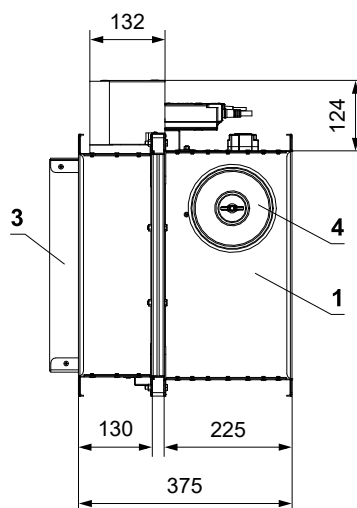
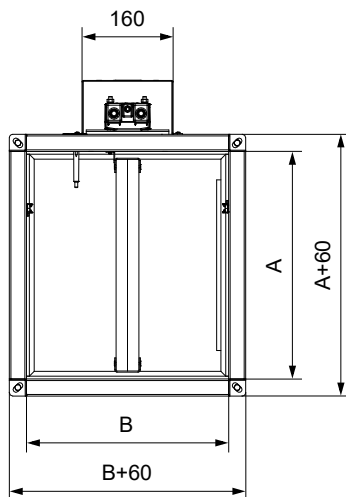
FDMA with manual control



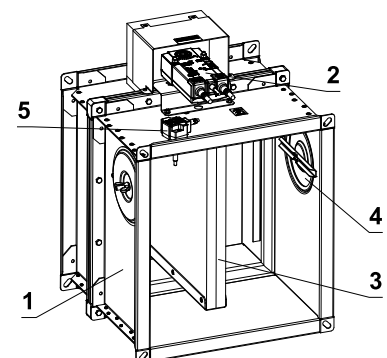
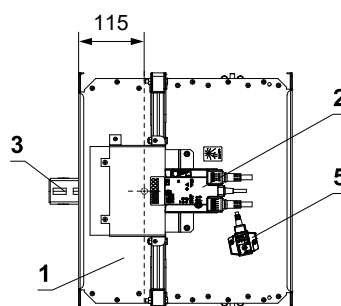
- 1 Damper casing
- 2 Damper blade
- 3 Base plate
- 4 Control lever
- 5 Thermal protective fuse
- 6 Inspection opening cover



FDMA with spring return actuator

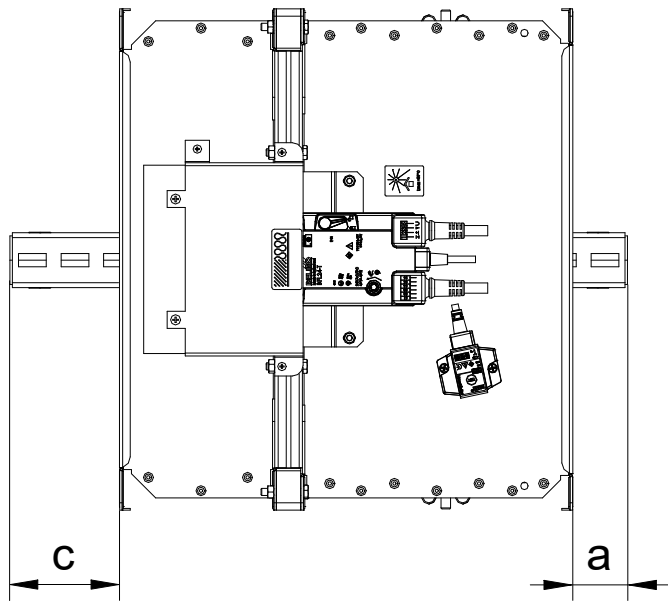


- 1 Damper casing
- 2 Spring return actuator
- 3 Damper blade
- 4 Inspection opening cover
- 5 Thermoelectric activation device



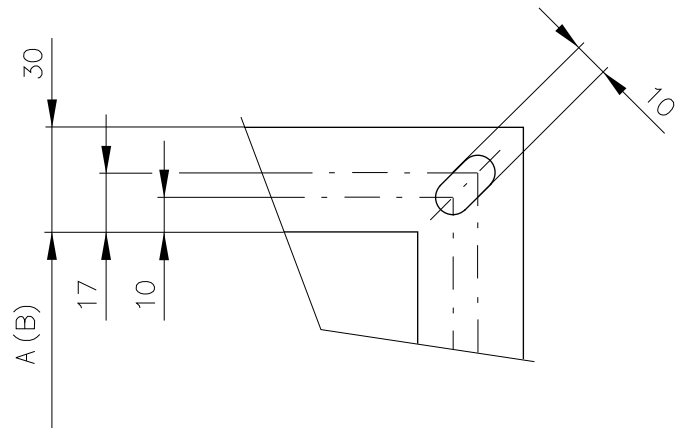
Damper blade overlaps

- Open damper blade overlaps the damper casing by the value "a" or "c". These values are specified in chapter Technical parameters → see pages 18 to 23

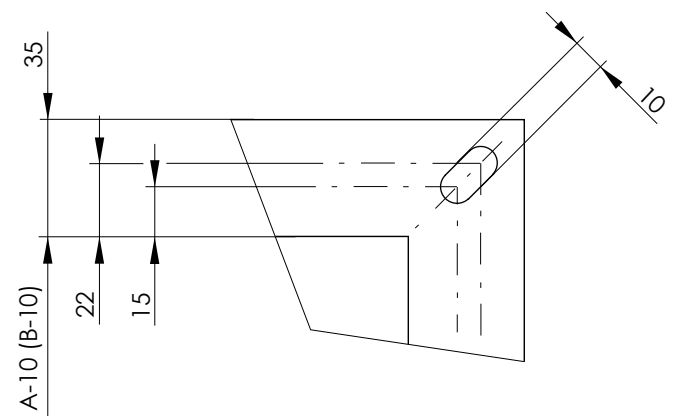


Values "a" and "c" has to be respected when projecting following air-conditioning duct.

Flange of a damper - CONTROL SIDE



Flange of a damper - INSTALLATION SIDE



flanges are fitted with oval holes in the corners

Technical parameters

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 180 x | - | - | 9 | 10,7 | 0,0192 | BFL | 550 | 10 | 155 | 18,2 | 21,2 | 0,1005 | BFL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | - | 9,4 | 11,1 | 0,0224 | | - | - | 9,9 | 11,6 | 0,0264 | - | | 5 | 10,5 | 12,2 | 0,0304 | - | 20 | 11,1 | 12,8 | 0,0352 | - | 30 | 11,5 | 13,2 | 0,0384 | - | 37 | 11,8 | 13,5 | 0,0408 | - | 57 | 12,7 | 14,4 | 0,0472 | - | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | 0,1024 | BFL | 180 | - | - | 10,3 | 12 | 0,0276 | BFL | 80 | 280 | 22 | 25 | 0,1184 | 90 | 235 | 20,1 | 23,1 | 0,1040 | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | - | - | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | - | 10,8 | 12,5 | 0,0338 | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | - | 9,9 | 11,6 | 0,0264 | | - | 5 | 10,5 | 12,2 | 0,0304 | - | | 20 | 11,1 | 12,8 | 0,0352 | - | 30 | 11,5 | 13,2 | 0,0384 | - | 37 | 11,8 | 13,5 | 0,0408 | - | 57 | 12,7 | 14,4 | 0,0472 | - | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | - | | 10,3 | 12 | 0,0276 | BFL | 80 | 280 | | 22 | 25 | 0,1184 | 90 | 235 | 20,1 | 23,1 | 0,1040 | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | 10,9 | 12,6 | 0,0396 | BFL | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | | 0,1170 | 250 x | 110 | 255 | 21,7 | | 24,7 | 0,1242 | BFL | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | - | 10,8 | 12,5 | 0,0338 | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | - | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 5 | 10,5 | 12,2 | 0,0304 | | - | 20 | 11,1 | 12,8 | 0,0352 | - | | 30 | 11,5 | 13,2 | 0,0384 | - | 37 | 11,8 | 13,5 | 0,0408 | - | 57 | 12,7 | 14,4 | 0,0472 | - | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | 0,0276 | | BFL | 80 | 280 | | 22 | 25 | | 0,1184 | 90 | 235 | 20,1 | 23,1 | 0,1040 | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | 12,6 | 0,0396 | BFL | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | | 23,8 | | 0,1170 | 250 x | 110 | | 255 | 21,7 | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | - | 10,8 | 12,5 | 0,0338 | 225 | - | - | 11,4 | | 13,1 | 0,0390 | 250 | - | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 20 | 11,1 | 12,8 | 0,0352 | | - | 30 | 11,5 | 13,2 | 0,0384 | - | | 37 | 11,8 | 13,5 | 0,0408 | - | 57 | 12,7 | 14,4 | 0,0472 | - | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | 280 | | | 22 | 25 | | 0,1184 | 90 | | 235 | 20,1 | 23,1 | 0,1040 | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | | 12,6 | 0,0396 | BFL | | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | 20,8 | | 23,8 | | 0,1170 | | 250 x | 110 | | 255 | 21,7 | | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | - | 10,8 | 12,5 | 0,0338 | | 225 | - | - | 11,4 | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 30 | 11,5 | 13,2 | 0,0384 | | - | 37 | 11,8 | 13,5 | 0,0408 | - | | 57 | 12,7 | 14,4 | 0,0472 | - | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | 25 | | | 0,1184 | 90 | | 235 | 20,1 | | 23,1 | 0,1040 | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | | 12,6 | | 0,0396 | BFL | | | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | | 235 | | 20,8 | | 23,8 | | | 0,1170 | | 250 x | 110 | | | 255 | 21,7 | | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | | - | 10,8 | 12,5 | 0,0338 | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | |
| | - | 37 | 11,8 | 13,5 | 0,0408 | | - | 57 | 12,7 | 14,4 | 0,0472 | - | | 80 | 13,6 | 15,3 | 0,0544 | - | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | 90 | | | 235 | 20,1 | | 23,1 | 0,1040 | | 110 | 255 | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | | 12,6 | | 0,0396 | | BFL | | | | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | | 90 | | 235 | | 20,8 | | | 23,8 | | | 0,1170 | | | 250 x | 110 | | | 255 | 21,7 | | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | | 12 | 0,0287 | 200 | - | | | - | 10,8 | 12,5 | 0,0338 | | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | |
| | - | 57 | 12,7 | 14,4 | 0,0472 | | - | 80 | 13,6 | 15,3 | 0,0544 | - | | 105 | 14,6 | 17,6 | 0,0624 | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | 20,1 | | | 23,1 | 0,1040 | | 110 | 255 | | 20,9 | 23,9 | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | | 12,6 | | 0,0396 | | BFL | | | | | | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | | | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | | 0,1152 | | 90 | | 235 | | | 20,8 | | | 23,8 | | | | 0,1170 | | | 250 x | 110 | | | 255 | 21,7 | | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,3 | | | 12 | 0,0287 | 200 | - | | | | - | 10,8 | 12,5 | 0,0338 | | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | |
| | - | 80 | 13,6 | 15,3 | 0,0544 | | - | 105 | 14,6 | 17,6 | 0,0624 | - | | 130 | 15,7 | 18,7 | 0,0704 | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | | | 110 | 255 | | 20,9 | 23,9 | | 0,1104 | 135 | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | | 5 | | 10,9 | | 12,6 | | 0,0396 | | BFL | | | | | | | | | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | | | | | | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | | 23,6 | | 0,1152 | | 90 | | | 235 | | | 20,8 | | | | 23,8 | | | | 0,1170 | | | 250 x | 110 | | | 255 | 21,7 | | | 24,7 | 0,1242 | BFL | | 180 | - | - | | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | | | 180 | - | - | 10,3 | | | | 12 | 0,0287 | 200 | - | | | | - | 10,8 | 12,5 | 0,0338 | | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 |
| | - | 105 | 14,6 | 17,6 | 0,0624 | | - | 130 | 15,7 | 18,7 | 0,0704 | 10 | | 155 | 16,7 | 19,7 | 0,0784 | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | | 0,1104 | 135 | | 280 | 22 | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | | BFL | | 250 | | 10 | | 155 | | | | | | | | | | | | 18,9 | 21,9 | 0,1127 | BFL | - | 20 | | | | | | | | | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | 20,8 | | 23,8 | 0,1170 | | 250 x | | | 110 | | 255 | | 21,7 | | | | 24,7 | | | | 0,1242 | | | BFL | 180 | | | - | - | | | 10,8 | 12,5 | 0,0312 | | BFL | 135 | 280 | | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | | | - | 10,3 | 12 | 0,0287 | | | | 200 | - | - | 10,8 | | | | 12,5 | 0,0338 | 225 | - | | | | - | 11,4 | 13,1 | 0,0390 | | | | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | | | | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 |
| | - | 130 | 15,7 | 18,7 | 0,0704 | | 10 | 155 | 16,7 | 19,7 | 0,0784 | 15 | | 160 | 16,9 | 19,9 | 0,0800 | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | | 25 | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | | | 18,9 | | 21,9 | | 0,1127 | | | | | | | | | | | | BFL | - | 20 | | 11,5 | 13,2 | | | | | | | | | 0,0342 | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | | 110 | 255 | | | 21,7 | | 24,7 | | 0,1242 | | BFL | | 180 | | - | | | | - | | | | 10,8 | | | 12,5 | 0,0312 | | | BFL | 135 | 280 | | | 22,8 | 25,8 | | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,3 | | | 12 | 0,0287 | 200 | - | | | | - | 10,8 | 12,5 | 0,0338 | | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | | | | 280 x | - | | 20 | | | | 12,1 | 13,8 | 0,0451 | BFL | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 |
| | 10 | 155 | 16,7 | 19,7 | 0,0784 | | 15 | 160 | 16,9 | 19,9 | 0,0800 | 35 | | 180 | 17,8 | 20,8 | 0,0864 | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | 18,9 | 21,9 | | 0,1127 | | | | BFL | | - | | 20 | | | | | | | | | | | | | 11,5 | 13,2 | | 0,0342 | - | | | | | | | | | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | 21,7 | 24,7 | | | 0,1242 | | BFL | 180 | - | | | | - | | 10,8 | | 12,5 | | 0,0312 | | | | BFL | | | 135 | 280 | | | | 22,8 | 25,8 | | | 0,1332 | 185 | | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | | - | 10,3 | 12 | 0,0287 | | | 200 | - | - | 10,8 | | | | 12,5 | 0,0338 | 225 | - | | | | - | 11,4 | 13,1 | 0,0390 | | | | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | | | | | 20 | | 12,1 | | | | 13,8 | 0,0451 | BFL | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 |
| | 15 | 160 | 16,9 | 19,9 | 0,0800 | | 35 | 180 | 17,8 | 20,8 | 0,0864 | 50 | | 195 | 18,4 | 21,4 | 0,0912 | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | 18,9 | 21,9 | | 0,1127 | | BFL | - | | 20 | | | | | | 11,5 | | 13,2 | | | | | | | | | | | | | 0,0342 | - | | 30 | 12 | | | | | | | | | 13,7 | 0,0432 | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | | 21,7 | 24,7 | 0,1242 | BFL | | 180 | | | - | - | | | 10,8 | 12,5 | | 0,0312 | | BFL | | 135 | | 280 | | | | | 22,8 | 25,8 | | | | 0,1332 | 185 | | | 330 | 24,9 | | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | | 12 | 0,0287 | 200 | - | | | - | 10,8 | 12,5 | 0,0338 | | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | | | | 280 x | - | | 20 | | | | | 12,1 | | 13,8 | | | | 0,0451 | BFL | | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 |
| | 35 | 180 | 17,8 | 20,8 | 0,0864 | | 50 | 195 | 18,4 | 21,4 | 0,0912 | 60 | | 205 | 18,8 | 21,8 | 0,0944 | 200 x | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | 18,9 | 21,9 | | 0,1127 | | BFL | - | | 20 | | | 11,5 | | 13,2 | | | | | | 0,0342 | | - | | | | | | | | | | | | | 30 | 12 | | 13,7 | 0,0432 | | | | | | | | | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | | 21,7 | | 24,7 | 0,1242 | BFL | | | 180 | - | | - | 10,8 | | | 12,5 | 0,0312 | | BFL | 135 | | | 280 | | 22,8 | | | | 25,8 | 0,1332 | 185 | | | | 330 | 24,9 | | | 27,9 | 0,1512 | | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | | 200 | - | - | 10,8 | | | 12,5 | 0,0338 | 225 | - | | | | - | 11,4 | 13,1 | 0,0390 | | | | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | | | | | 20 | | 12,1 | | | | | 13,8 | | 0,0451 | | | | BFL | | | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 |
| | 50 | 195 | 18,4 | 21,4 | 0,0912 | | 60 | 205 | 18,8 | 21,8 | 0,0944 | 200 x | | 70 | 230 | 19,9 | 22,9 | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | 18,9 | 21,9 | | 0,1127 | | BFL | - | | 20 | | | 11,5 | | 13,2 | | | 0,0342 | | - | | | | | | 30 | | 12 | | | | | | | | | | | | | 13,7 | 0,0432 | | - | 37 | | | | | | | | | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | | 21,7 | | 24,7 | | 0,1242 | BFL | | | | 180 | - | | - | 10,8 | 12,5 | | 0,0312 | BFL | | | 135 | | | 280 | 22,8 | 25,8 | | | | 0,1332 | 185 | 330 | | 24,9 | | 27,9 | 0,1512 | | | 235 | 380 | | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | | - | 10,8 | 12,5 | 0,0338 | | | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | | | | 5 | 11,4 | 13,1 | 0,0390 | | | | 280 x | - | | 20 | | | | | 12,1 | | 13,8 | | | | | 0,0451 | | BFL | | | | | | | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | | | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 |
| | 60 | 205 | 18,8 | 21,8 | 0,0944 | | 200 x | 70 | 230 | 19,9 | 22,9 | | | 0,1024 | BFL | 180 | - | | - | | 10,3 | 12 | | 0,0276 | | BFL | 80 | | 280 | | | 22 | | 25 | | | 0,1184 | | 90 | | | 235 | | 20,1 | | | 23,1 | 0,1040 | 110 | | | 255 | 20,9 | 23,9 | 0,1104 | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | - | - | 9,4 | 11,1 | 0,0216 | 200 | - | - | 9,8 | 11,5 | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | 250 | 10 | | 155 | | 18,9 | 21,9 | | 0,1127 | | BFL | - | | 20 | | | 11,5 | | 13,2 | | | 0,0342 | | - | | | 30 | | 12 | | | | | | 13,7 | | 0,0432 | | | | | | | | | | | | | - | 37 | | 12,3 | 14 | | | | | | | | | 0,0459 | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | | 21,7 | | 24,7 | | 0,1242 | | BFL | | | | | 180 | - | | - | 10,8 | 12,5 | | 0,0312 | | BFL | | 135 | | | 280 | 22,8 | 25,8 | | | 0,1332 | 185 | 330 | 24,9 | | 27,9 | | 0,1512 | 235 | 380 | | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | - | 10,8 | | 12,5 | 0,0338 | 225 | - | | | - | 11,4 | 13,1 | 0,0390 | | | | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | | | | | 20 | | 12,1 | | | | | 13,8 | | 0,0451 | | | | | BFL | | | | | | | | | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | | | | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 |
| 200 x | 70 | 230 | 19,9 | 22,9 | 0,1024 | BFL | | 180 | - | - | 10,3 | | 12 | 0,0276 | | BFL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 80 | 280 | 22 | 25 | 0,1184 | | | 90 | 235 | 20,1 | 23,1 | | 0,1040 | 110 | | | 255 | | 20,9 | | 23,9 | 0,1104 | | 135 | | | 280 | | 22 | | | 25 | | 0,1184 | | | 180 | - | - | | | 9,4 | 11,1 | 0,0216 | 200 | | - | - | 9,8 | 11,5 | | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | - | 30 | 12 | | 13,7 | 0,0432 | - | 37 | | 12,3 | | 14 | 0,0459 | | - | | 57 | 13,1 | | 14,8 | | | 0,0531 | | - | | | 80 | | 14,1 | | | 15,8 | | 0,0612 | | | - | | 105 | | | | | | 15,2 | | 18,2 | | | | | 0,0702 | | | | | | - | | 130 | 16,3 | | 19,3 | 0,0792 | 10 | | | | | | | | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | - | - | 10,8 | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | | 27,9 | | 0,1512 | | 235 | | 380 | | 27,1 | | | | | | 30,1 | 0,1692 | 180 | | - | - | 10,3 | | 12 | | | | 0,0287 | | 200 | - | - | 10,8 | 12,5 | | 0,0338 | 225 | - | - | 11,4 | 13,1 | | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | | 12,5 | 14,2 | 0,0492 | - | 37 | | | 12,9 | 14,6 | 0,0523 | - | 57 | | | | 13,8 | 15,5 | | 0,0605 | | | | | - | | 80 | | | | | 14,8 | | 16,5 | | | | | | | | | | | | | | | | | | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | | | | | | | | | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | |
| | 90 | 235 | 20,1 | 23,1 | 0,1040 | | | 110 | 255 | 20,9 | 23,9 | | 0,1104 | 135 | | | 280 | | 22 | | 25 | 0,1184 | | 180 | | | - | | - | | | 9,4 | 11,1 | 0,0216 | | | 200 | - | - | 9,8 | | 11,5 | 0,0252 | 225 | - | | - | 10,3 | 12 | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | - | 20 | 11,5 | 13,2 | 0,0342 | | - | 30 | 12 | 13,7 | 0,0432 | - | 37 | 12,3 | | 14 | 0,0459 | - | 57 | | 13,1 | | 14,8 | 0,0531 | | - | | 80 | 14,1 | | 15,8 | | | 0,0612 | | - | | | 105 | | 15,2 | | | 18,2 | | 0,0702 | | | - | | 130 | | | | | | 16,3 | | 19,3 | | | 0,0792 | | 10 | | | | | 155 | 17,4 | | 20,4 | 0,0882 | | 15 | 160 | 17,6 | 20,6 | | | | | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | | 0,1692 | | 180 | | - | | - | 10,3 | | | | | 12 | 0,0287 | 200 | | - | - | 10,8 | 12,5 | 0,0338 | | | | 225 | | - | - | 11,4 | 13,1 | 0,0390 | | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | | | 0,0697 | - | 105 | | 15,9 | | | | | 18,9 | | 0,0800 | | | | | - | | 130 | | | | | | | | | | | | | | | | | | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | | | | | | | | | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 110 | 255 | 20,9 | 23,9 | 0,1104 | | | 135 | 280 | 22 | 25 | | 0,1184 | 180 | | | - | | - | | 9,4 | 11,1 | | 0,0216 | | | 200 | - | - | | | 9,8 | 11,5 | 0,0252 | 225 | | - | - | 10,3 | 12 | | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | | - | 20 | 11,5 | 13,2 | 0,0342 | | | - | 30 | 12 | 13,7 | 0,0432 | | - | 37 | 12,3 | 14 | 0,0459 | - | 57 | 13,1 | | 14,8 | 0,0531 | - | 80 | | 14,1 | | 15,8 | 0,0612 | | - | | 105 | 15,2 | | 18,2 | | | 0,0702 | | - | | | 130 | | 16,3 | | | 19,3 | | 0,0792 | | | 10 | | 155 | | | | | | 17,4 | | 20,4 | 0,0882 | | 15 | | 160 | | | | 17,6 | 20,6 | 0,0900 | | 35 | 180 | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | BFL | | 135 | 280 | 22,8 | 25,8 | 0,1332 | | | 185 | 330 | 24,9 | 27,9 | 0,1512 | | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | | 10,3 | | 12 | | 0,0287 | | 200 | - | - | 10,8 | | | | | 12,5 | 0,0338 | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | | | | - | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | - | 37 | 12,9 | 14,6 | 0,0523 | | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | | - | 130 | 17 | 20 | | 0,0902 | | | 10 | | 155 | | 17,4 | | | | | 20,4 | | 0,0882 | | | | | | | | | | | | | | | | | | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | | | | | | | | | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 135 | 280 | 22 | 25 | 0,1184 | | | 180 | - | - | 9,4 | | 11,1 | 0,0216 | | | 200 | | - | | - | 9,8 | 11,5 | 0,0252 | | | 225 | - | - | 10,3 | | 12 | 0,0297 | 225 x | - | | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | | - | 20 | 11,5 | 13,2 | 0,0342 | | | | - | 30 | 12 | 13,7 | 0,0432 | | | - | 37 | 12,3 | 14 | 0,0459 | | - | 57 | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | | 15,8 | 0,0612 | - | 105 | | 15,2 | | 18,2 | 0,0702 | | - | | 130 | 16,3 | | 19,3 | | | 0,0792 | | 10 | | | 155 | | 17,4 | | | 20,4 | | 0,0882 | | | 15 | | 160 | | | | | | 17,6 | 20,6 | 0,0900 | 35 | | 180 | | 18,4 | | | 21,4 | 0,0972 | 50 | 195 | | 19,1 | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | | | | | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | BFL | | 135 | 280 | 22,8 | 25,8 | 0,1332 | | | | 185 | 330 | 24,9 | 27,9 | 0,1512 | | | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,3 | 12 | 0,0287 | 200 | - | | - | | 10,8 | | 12,5 | 0,0338 | 225 | - | - | 11,4 | | | | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | | | | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | | | - | 57 | 13,8 | 15,5 | 0,0605 | | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | | 15 | | 160 | 17,6 | | 20,6 | | 0,0900 | | | 35 | | 180 | | 18,4 | | | | | | | | | | | | | | | | | | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | | | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 180 | - | - | 9,4 | 11,1 | | | 0,0216 | 200 | - | - | | 9,8 | 11,5 | | | 0,0252 | 225 | - | | - | 10,3 | 12 | 0,0297 | 225 x | | - | 5 | 10,9 | 12,6 | | 0,0396 | BFL | | 250 | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | | - | 20 | 11,5 | 13,2 | 0,0342 | | | | - | 30 | 12 | 13,7 | 0,0432 | | | | - | 37 | 12,3 | 14 | 0,0459 | | | - | 57 | 13,1 | 14,8 | 0,0531 | | - | 80 | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | | 18,2 | 0,0702 | - | 130 | | 16,3 | | 19,3 | 0,0792 | | 10 | | 155 | 17,4 | | 20,4 | | | 0,0882 | | 15 | | | 160 | | 17,6 | | | 20,6 | | 0,0900 | | | 35 | | 180 | | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | 19,1 | | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | 0,1062 | 85 | | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | | | | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | BFL | | 135 | 280 | 22,8 | 25,8 | 0,1332 | | | | 185 | 330 | 24,9 | 27,9 | 0,1512 | | | | 235 | 380 | 27,1 | 30,1 | 0,1692 | | | 180 | - | - | 10,3 | 12 | | 0,0287 | 200 | - | - | 10,8 | 12,5 | 0,0338 | 225 | | - | | - | 11,4 | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | | | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | | | | - | 57 | 13,8 | 15,5 | 0,0605 | | | - | 80 | 14,8 | 16,5 | 0,0697 | | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | | 35 | 180 | 18,4 | 21,4 | | 0,0972 | | 50 | | 195 | 19,1 | | 22,1 | | 0,1026 | | | 60 | | | | | | | | | | | | | | | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | | | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 200 | - | - | 9,8 | 11,5 | | | 0,0252 | 225 | - | - | 10,3 | 12 | 0,0297 | | | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | | 10 | 155 | 18,9 | 21,9 | 0,1127 | BFL | | | - | 20 | 11,5 | 13,2 | 0,0342 | - | | | | 30 | 12 | 13,7 | 0,0432 | - | | | | 37 | 12,3 | 14 | 0,0459 | - | | | | 57 | 13,1 | 14,8 | 0,0531 | - | | | 80 | 14,1 | 15,8 | 0,0612 | - | | 105 | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | | 0,0792 | 10 | 155 | 17,4 | | 20,4 | | 0,0882 | 15 | | 160 | | 17,6 | 20,6 | | 0,0900 | | | 35 | | 180 | | | 18,4 | | 21,4 | | | 0,0972 | | 50 | | | 195 | | 19,1 | | | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | 0,1062 | | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | 20,8 | 23,8 | | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | 0,1242 | BFL | | | 180 | - | | - | 10,8 | 12,5 | 0,0312 | BFL | | 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | | | 330 | 24,9 | 27,9 | 0,1512 | 235 | | | | 380 | 27,1 | 30,1 | 0,1692 | 180 | | | | - | - | 10,3 | 12 | 0,0287 | | | 200 | - | - | 10,8 | 12,5 | | 0,0338 | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | | BFL | - | | 30 | 12,5 | 14,2 | 0,0492 | - | | | | 37 | 12,9 | 14,6 | 0,0523 | - | | | | 57 | 13,8 | 15,5 | 0,0605 | - | | | | 80 | 14,8 | 16,5 | 0,0697 | - | | | 105 | 15,9 | 18,9 | 0,0800 | - | | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | | 195 | 19,1 | 22,1 | 0,1026 | | 60 | | 205 | 19,5 | 22,5 | 0,1062 | | 85 | | 230 | | 20,6 | 23,6 | | | | | | | 0,1152 | | | | | | | | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | | | | | | | | | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 225 | - | - | 10,3 | 12 | | 0,0297 | 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | | - | 20 | 11,5 | 13,2 | 0,0342 | - | | | | 30 | 12 | 13,7 | 0,0432 | - | 37 | | | | 12,3 | 14 | 0,0459 | - | 57 | | | | 13,1 | 14,8 | 0,0531 | - | 80 | | | | 14,1 | 15,8 | 0,0612 | - | 105 | | | 15,2 | 18,2 | 0,0702 | - | 130 | | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | 0,0882 | | 15 | 160 | 17,6 | 20,6 | | 0,0900 | | 35 | 180 | | 18,4 | | 21,4 | 0,0972 | | 50 | | | 195 | | 19,1 | | | 22,1 | | 0,1026 | | | 60 | | 205 | | | 19,5 | | 22,5 | 0,1062 | | 85 | | 230 | 20,6 | 23,6 | 0,1152 | 90 | | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | | 0,1242 | BFL | | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | BFL | | 135 | 280 | | 22,8 | 25,8 | 0,1332 | 185 | | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | | | | 27,1 | 30,1 | 0,1692 | 180 | - | | | | - | 10,3 | 12 | 0,0287 | 200 | | | | - | - | 10,8 | 12,5 | 0,0338 | | | 225 | - | - | 11,4 | 13,1 | | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | | | | 13,8 | 15,5 | 0,0605 | - | 80 | | | | 14,8 | 16,5 | 0,0697 | - | 105 | | | | 15,9 | 18,9 | 0,0800 | - | 130 | | | 17 | 20 | 0,0902 | 10 | 155 | | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | | 19,5 | 22,5 | 0,1062 | 85 | | 230 | | 20,6 | 23,6 | 0,1152 | 90 | | 235 | | 20,8 | 23,8 | 0,1170 | 110 | | | | | | 255 | 21,7 | | | | | | | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | | | | | | | | | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 225 x | - | 5 | 10,9 | 12,6 | 0,0396 | BFL | 250 | | 10 | 155 | 18,9 | 21,9 | 0,1127 | | BFL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 20 | 11,5 | 13,2 | 0,0342 | | - | | 30 | 12 | 13,7 | 0,0432 | - | | | 37 | | 12,3 | 14 | 0,0459 | - | 57 | | | | 13,1 | 14,8 | 0,0531 | - | 80 | 14,1 | | | | 15,8 | 0,0612 | - | 105 | 15,2 | 18,2 | | | | 0,0702 | - | 130 | 16,3 | 19,3 | | | | 0,0792 | 10 | 155 | 17,4 | 20,4 | | | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | | 19,5 | 22,5 | 0,1062 | 85 | | 230 | | 20,6 | 23,6 | | 0,1152 | | 90 | 235 | | 20,8 | | | 23,8 | | 0,1170 | | | 250 x | | 110 | | | 255 | 21,7 | 24,7 | | | 0,1242 | BFL | 180 | - | - | 10,8 | | 12,5 | 0,0312 | BFL | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | | 24,9 | 27,9 | 0,1512 | 235 | | 380 | | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,3 | | | 12 | 0,0287 | 200 | | - | - | 10,8 | 12,5 | | | 0,0338 | | 225 | - | - | 11,4 | 13,1 | | | | 0,0390 | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | 20 | | | 12,1 | 13,8 | 0,0451 | BFL | 280 | - | 20 | | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | | 0,0523 | - | 57 | 13,8 | 15,5 | | | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | | | | - | 105 | 15,9 | 18,9 | 0,0800 | | | | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | 180 | | | - | | - | 10,8 | 12,5 | | | | | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | | | | | | | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 30 | 12 | 13,7 | 0,0432 | | - | | 37 | 12,3 | 14 | 0,0459 | - | | | 57 | | 13,1 | 14,8 | 0,0531 | - | 80 | | | | 14,1 | 15,8 | 0,0612 | - | 105 | 15,2 | | | | 18,2 | 0,0702 | - | 130 | 16,3 | 19,3 | | | | 0,0792 | 10 | 155 | 17,4 | 20,4 | | | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | | 20,6 | 23,6 | 0,1152 | 90 | | 235 | | 20,8 | 23,8 | | 0,1170 | | 250 x | 110 | | 255 | | | 21,7 | | 24,7 | | | | 0,1242 | BFL | | | 180 | - | - | 10,8 | | 12,5 | | 0,0312 | BFL | 135 | 280 | | 22,8 | 25,8 | | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | | - | 10,3 | | 12 | 0,0287 | 200 | - | - | | | 10,8 | 12,5 | 0,0338 | | 225 | - | - | 11,4 | | | 13,1 | | 0,0390 | 250 | - | 5 | 11,4 | | | | 13,1 | 0,0390 | 280 x | - | 20 | | | 12,1 | 13,8 | 0,0451 | | BFL | 280 | - | | 20 | 13,3 | 15 | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | | 0,0605 | - | 80 | 14,8 | 16,5 | | | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | | | | - | 130 | 17 | 20 | 0,0902 | | | | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | | 24,9 | 27,9 | 0,1512 | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | 180 | | - | | - | 10,8 | 12,5 | 0,0312 | 200 | | - | | - | 11,3 | 13 | | | | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | | | | | | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 37 | 12,3 | 14 | 0,0459 | | - | | 57 | 13,1 | 14,8 | 0,0531 | - | | | 80 | | 14,1 | 15,8 | 0,0612 | - | 105 | | | | 15,2 | 18,2 | 0,0702 | - | 130 | 16,3 | | | | 19,3 | 0,0792 | 10 | 155 | 17,4 | 20,4 | | | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | 20,8 | 23,8 | 0,1170 | 250 x | | 110 | | 255 | 21,7 | | 24,7 | | | 0,1242 | | BFL | | | 180 | - | - | | | | 10,8 | | 12,5 | | 0,0312 | BFL | 135 | 280 | | 22,8 | | 25,8 | | 0,1332 | 185 | 330 | 24,9 | 27,9 | | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | | - | - | 10,3 | 12 | 0,0287 | 200 | | - | - | | 10,8 | 12,5 | 0,0338 | 225 | - | | | - | 11,4 | 13,1 | | 0,0390 | 250 | - | 5 | | | 11,4 | | 13,1 | 0,0390 | 280 x | - | 20 | | | 12,1 | 13,8 | 0,0451 | | BFL | 280 | - | | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | 0,0492 | | - | 37 | 12,9 | 14,6 | 0,0523 | | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | | 0,0697 | - | 105 | 15,9 | 18,9 | | | 0,0800 | - | 130 | 17 | 20 | 0,0902 | | | | 10 | 155 | 17,4 | 20,4 | 0,0882 | | | | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | | 27,1 | 30,1 | 0,1692 | 180 | | - | | - | 10,8 | 12,5 | 0,0312 | | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | | - | | - | 11,9 | 13,6 | | | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | | | | | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 57 | 13,1 | 14,8 | 0,0531 | | - | | 80 | 14,1 | 15,8 | 0,0612 | - | | | 105 | | 15,2 | 18,2 | 0,0702 | - | 130 | | | | 16,3 | 19,3 | 0,0792 | 10 | 155 | 17,4 | | | | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | 255 | 21,7 | 24,7 | | | 0,1242 | | BFL | 180 | | - | | | - | 10,8 | | | | 12,5 | 0,0312 | BFL | 135 | | | 280 | | 22,8 | | 25,8 | | 0,1332 | 185 | 330 | 24,9 | | 27,9 | | 0,1512 | 235 | 380 | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,3 | 12 | 0,0287 | | 200 | - | - | 10,8 | 12,5 | 0,0338 | | 225 | - | | - | 11,4 | 13,1 | 0,0390 | 250 | | | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | - | | | 20 | 12,1 | 13,8 | 0,0451 | | BFL | 280 | - | | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | | 0,0492 | | - | 37 | 12,9 | 14,6 | | 0,0523 | | - | 57 | 13,8 | 15,5 | 0,0605 | | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | | 0,0800 | - | 130 | 17 | 20 | | | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | | | | 15 | 160 | 17,6 | 20,6 | 0,0900 | | | | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | 20,8 | 23,8 | 0,1170 | 110 | 255 | | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | | - | 10,8 | 12,5 | 0,0312 | | 200 | | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | | - | | 5 | 12,5 | 14,2 | | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | | | | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 80 | 14,1 | 15,8 | 0,0612 | | - | | 105 | 15,2 | 18,2 | 0,0702 | - | | | 130 | | 16,3 | 19,3 | 0,0792 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | | | | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | 0,1170 | 250 x | 110 | 255 | 21,7 | 24,7 | | 0,1242 | | BFL | 180 | - | | | - | | | 10,8 | 12,5 | 0,0312 | | | BFL | 135 | | 280 | | 22,8 | 25,8 | | 0,1332 | | | 185 | | 330 | 24,9 | 27,9 | | 0,1512 | 235 | 380 | 27,1 | | 30,1 | | 0,1692 | 180 | - | - | 10,3 | | 12 | 0,0287 | 200 | - | - | 10,8 | 12,5 | | 0,0338 | 225 | - | - | 11,4 | 13,1 | | 0,0390 | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | | | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | | BFL | | 280 | - | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | | 0,0492 | | - | 37 | 12,9 | 14,6 | | | 0,0523 | | - | 57 | 13,8 | 15,5 | | 0,0605 | | - | 80 | 14,8 | 16,5 | 0,0697 | | - | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | | 0,0902 | 10 | 155 | 17,4 | 20,4 | | | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | | | | 35 | 180 | 18,4 | 21,4 | 0,0972 | | | | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | | 20,8 | 23,8 | 0,1170 | 110 | 255 | | | 21,7 | 24,7 | 0,1242 | 135 | 280 | | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | | - | - | 11,3 | 13 | | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | | - | | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | | | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 105 | 15,2 | 18,2 | 0,0702 | | - | | 130 | 16,3 | 19,3 | 0,0792 | 10 | | | 155 | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | | | | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | 0,1170 | 250 x | 110 | 255 | 21,7 | | 24,7 | | 0,1242 | BFL | 180 | - | | - | | | 10,8 | 12,5 | | 0,0312 | BFL | | | 135 | 280 | 22,8 | 25,8 | | | 0,1332 | | 185 | | 330 | 24,9 | | 27,9 | 0,1512 | | 235 | | 380 | 27,1 | 30,1 | | 0,1692 | 180 | - | - | | 10,3 | | 12 | 0,0287 | 200 | - | - | | 10,8 | 12,5 | 0,0338 | 225 | - | - | 11,4 | | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | | 0,0492 | | - | 37 | 12,9 | 14,6 | | | 0,0523 | | - | 57 | 13,8 | 15,5 | | | 0,0605 | | - | 80 | 14,8 | 16,5 | | 0,0697 | | - | 105 | 15,9 | 18,9 | 0,0800 | | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | | | | 50 | 195 | 19,1 | 22,1 | 0,1026 | | | | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | | 20,8 | 23,8 | 0,1170 | 110 | 255 | | | | 21,7 | 24,7 | 0,1242 | 135 | 280 | | | 22,8 | 25,8 | 0,1332 | 185 | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 130 | 16,3 | 19,3 | 0,0792 | | 10 | | 155 | 17,4 | 20,4 | 0,0882 | 15 | | | 160 | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | | | | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 250 x | 110 | 255 | 21,7 | | | 24,7 | | 0,1242 | BFL | 180 | | - | | - | | 10,8 | 12,5 | | 0,0312 | BFL | | 135 | 280 | | 22,8 | | 25,8 | | 0,1332 | 185 | 330 | 24,9 | | | 27,9 | | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | | 180 | | - | - | 10,3 | | 12 | 0,0287 | 200 | - | | - | | 10,8 | 12,5 | 0,0338 | 225 | - | | - | 11,4 | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | | 0,0572 | | BFL | - | 30 | 12,5 | 14,2 | | | 0,0492 | | - | 37 | 12,9 | 14,6 | | | 0,0523 | | - | 57 | 13,8 | 15,5 | | | 0,0605 | | - | 80 | 14,8 | 16,5 | | | 0,0697 | | - | 105 | 15,9 | 18,9 | | 0,0800 | | - | 130 | 17 | 20 | 0,0902 | | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | | | | 60 | 205 | 19,5 | 22,5 | 0,1062 | | | | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | | 20,8 | 23,8 | 0,1170 | 110 | 255 | | | | 21,7 | 24,7 | 0,1242 | 135 | 280 | | | | 22,8 | 25,8 | 0,1332 | 185 | 330 | | | 24,9 | 27,9 | 0,1512 | 235 | 380 | | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 10 | 155 | 17,4 | 20,4 | 0,0882 | | 15 | | 160 | 17,6 | 20,6 | 0,0900 | 35 | | | 180 | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | | | | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 250 x | 110 | 255 | 21,7 | | | | 24,7 | | 0,1242 | BFL | 180 | | | - | | - | | 10,8 | | 12,5 | | 0,0312 | | BFL | 135 | | 280 | | | 22,8 | 25,8 | | 0,1332 | | 185 | | 330 | 24,9 | 27,9 | 0,1512 | | | 235 | | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | | - | | 10,3 | 12 | 0,0287 | | 200 | - | - | 10,8 | | 12,5 | | 0,0338 | 225 | - | - | 11,4 | | 13,1 | 0,0390 | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | | 0,0572 | | | BFL | - | 30 | 12,5 | | | 14,2 | | 0,0492 | - | 37 | 12,9 | | | 14,6 | | 0,0523 | - | 57 | 13,8 | | | 15,5 | | 0,0605 | - | 80 | 14,8 | | | 16,5 | | 0,0697 | - | 105 | 15,9 | | 18,9 | | 0,0800 | - | 130 | 17 | 20 | | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | | 20,6 | 0,0900 | 35 | 180 | 18,4 | | | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | | | | 235 | 20,8 | 23,8 | 0,1170 | 110 | | | | 255 | 21,7 | 24,7 | 0,1242 | 135 | | | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 | 160 | 17,6 | 20,6 | 0,0900 | | 35 | | 180 | 18,4 | 21,4 | 0,0972 | 50 | | | 195 | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | | | | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 250 x | 110 | 255 | 21,7 | | | | 24,7 | | 0,1242 | BFL | 180 | | | - | - | | 10,8 | | 12,5 | 0,0312 | | BFL | | 135 | | 280 | 22,8 | 25,8 | | 0,1332 | | | 185 | | 330 | | | 24,9 | 27,9 | | 0,1512 | | 235 | | 380 | 27,1 | 30,1 | 0,1692 | | | 180 | | - | - | 10,3 | 12 | | 0,0287 | 200 | - | - | | 10,8 | 12,5 | 0,0338 | | 225 | - | - | 11,4 | 13,1 | 0,0390 | | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | | 20 | 13,3 | 15 | 0,0572 | | | | BFL | - | 30 | 12,5 | 14,2 | | 0,0492 | | | | - | 37 | 12,9 | | | 14,6 | | 0,0523 | - | 57 | 13,8 | | | 15,5 | | 0,0605 | - | 80 | 14,8 | | | 16,5 | | 0,0697 | - | 105 | 15,9 | | | 18,9 | | 0,0800 | - | 130 | 17 | | 20 | | 0,0902 | 10 | 155 | 17,4 | 20,4 | | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | | 21,4 | 0,0972 | 50 | 195 | 19,1 | | | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | | | | 255 | 21,7 | 24,7 | 0,1242 | 135 | | | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 35 | 180 | 18,4 | 21,4 | 0,0972 | | 50 | | 195 | 19,1 | 22,1 | 0,1026 | 60 | | | 205 | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | | | | 23,8 | 0,1170 | 250 x | 110 | 255 | 21,7 | | | | 24,7 | | 0,1242 | BFL | 180 | | | - | - | | 10,8 | | 12,5 | 0,0312 | | BFL | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | | | 185 | | 330 | 24,9 | 27,9 | | 0,1512 | | | 235 | | 380 | | | 27,1 | 30,1 | | 0,1692 | | 180 | | - | - | 10,3 | 12 | 0,0287 | | 200 | | - | - | 10,8 | 12,5 | | 0,0338 | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | | 30 | 12,5 | 14,2 | 0,0492 | | | | | - | 37 | 12,9 | 14,6 | | 0,0523 | | | | - | 57 | 13,8 | | | 15,5 | | 0,0605 | - | 80 | 14,8 | | | 16,5 | | 0,0697 | - | 105 | 15,9 | | | 18,9 | | 0,0800 | - | 130 | 17 | | | 20 | | 0,0902 | 10 | 155 | 17,4 | | 20,4 | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | 0,0900 | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | | 22,1 | 0,1026 | 60 | 205 | 19,5 | | | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | | | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 50 | 195 | 19,1 | 22,1 | 0,1026 | | 60 | | 205 | 19,5 | 22,5 | 0,1062 | 85 | | | 230 | | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | | 20,8 | 23,8 | 0,1170 | 250 x | 110 | 255 | | | | 21,7 | 24,7 | | 0,1242 | BFL | 180 | | | - | - | | 10,8 | | 12,5 | 0,0312 | | BFL | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | | | 235 | | 380 | 27,1 | 30,1 | | 0,1692 | | | 180 | | - | | | - | 10,3 | 12 | 0,0287 | | 200 | | - | - | 10,8 | 12,5 | 0,0338 | | 225 | - | - | 11,4 | 13,1 | 0,0390 | | 250 | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | | 37 | 12,9 | 14,6 | 0,0523 | | | | | - | 57 | 13,8 | 15,5 | | 0,0605 | | | | - | 80 | 14,8 | | | 16,5 | | 0,0697 | - | 105 | 15,9 | | | 18,9 | | 0,0800 | - | 130 | 17 | | | 20 | | 0,0902 | 10 | 155 | 17,4 | | | 20,4 | | 0,0882 | 15 | 160 | 17,6 | | 20,6 | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | 0,0972 | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | | 22,5 | 0,1062 | 85 | 230 | 20,6 | | | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 110 | 255 | 21,7 | 24,7 | | | | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | | | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 60 | 205 | 19,5 | 22,5 | 0,1062 | | 85 | | 230 | 20,6 | 23,6 | 0,1152 | 90 | | | 235 | | 20,8 | 23,8 | 0,1170 | 250 x | 110 | | | | 255 | 21,7 | 24,7 | | 0,1242 | BFL | | | 180 | - | - | | 10,8 | | 12,5 | 0,0312 | | BFL | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | | | 180 | | - | - | 10,3 | | 12 | | | 0,0287 | 200 | - | | | - | 10,8 | 12,5 | 0,0338 | | 225 | - | - | 11,4 | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | | | | - | | 57 | 13,8 | 15,5 | 0,0605 | | | | | - | 80 | 14,8 | 16,5 | | 0,0697 | | | | - | 105 | 15,9 | | | 18,9 | | 0,0800 | - | 130 | 17 | | | 20 | | 0,0902 | 10 | 155 | 17,4 | | | 20,4 | | 0,0882 | 15 | 160 | 17,6 | | | 20,6 | | 0,0900 | 35 | 180 | 18,4 | | 21,4 | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | | 23,6 | 0,1152 | 90 | 235 | 20,8 | | | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | | | | 0,1242 | 135 | 280 | 22,8 | 25,8 | | 0,1332 | | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 85 | 230 | 20,6 | 23,6 | 0,1152 | | 90 | | 235 | 20,8 | 23,8 | 0,1170 | 250 x | | | 110 | | 255 | 21,7 | 24,7 | | 0,1242 | | | BFL | 180 | - | - | | 10,8 | | | 12,5 | 0,0312 | BFL | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | | 180 | | - | | - | 10,3 | 12 | | | 0,0287 | | 200 | - | - | 10,8 | 12,5 | | | 0,0338 | 225 | - | | - | 11,4 | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | | | | - | 57 | 13,8 | 15,5 | 0,0605 | | | | - | | 80 | 14,8 | 16,5 | 0,0697 | | | | | - | 105 | 15,9 | 18,9 | | 0,0800 | | | | - | 130 | 17 | | | 20 | | 0,0902 | 10 | 155 | 17,4 | | | 20,4 | | 0,0882 | 15 | 160 | 17,6 | | | 20,6 | | 0,0900 | 35 | 180 | 18,4 | | | 21,4 | | 0,0972 | 50 | 195 | 19,1 | | 22,1 | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | | 23,8 | 0,1170 | 110 | 255 | 21,7 | | | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | | | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 90 | 235 | 20,8 | 23,8 | 0,1170 | | 250 x | | 110 | 255 | 21,7 | 24,7 | | | | 0,1242 | BFL | 180 | - | - | | 10,8 | 12,5 | | | 0,0312 | BFL | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | | 180 | | - | | - | 10,3 | 12 | | 0,0287 | | 200 | | - | - | 10,8 | | 12,5 | 0,0338 | | 225 | - | - | 11,4 | 13,1 | 0,0390 | | 250 | - | 5 | | 11,4 | 13,1 | 0,0390 | 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | | | | - | 37 | 12,9 | 14,6 | 0,0523 | | | | - | 57 | 13,8 | 15,5 | 0,0605 | | | | - | 80 | 14,8 | 16,5 | 0,0697 | | | | - | | 105 | 15,9 | 18,9 | 0,0800 | | | | | - | 130 | 17 | 20 | | 0,0902 | | | | 10 | 155 | 17,4 | | | 20,4 | | 0,0882 | 15 | 160 | 17,6 | | | 20,6 | | 0,0900 | 35 | 180 | 18,4 | | | 21,4 | | 0,0972 | 50 | 195 | 19,1 | | | 22,1 | | 0,1026 | 60 | 205 | 19,5 | | 22,5 | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | | 24,7 | 0,1242 | 135 | 280 | 22,8 | | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 250 x | 110 | 255 | 21,7 | 24,7 | | | 0,1242 | BFL | 180 | - | - | | 10,8 | | 12,5 | | 0,0312 | BFL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | | 235 | 380 | 27,1 | | 30,1 | | 0,1692 | | 180 | - | - | | 10,3 | | 12 | | 0,0287 | | 200 | - | - | | 10,8 | | 12,5 | | 0,0338 | 225 | - | | - | | 11,4 | | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | - | 20 | 13,3 | 15 | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | 37 | 12,9 | 14,6 | 0,0523 | - | | 57 | 13,8 | 15,5 | 0,0605 | - | | 80 | | 14,8 | 16,5 | 0,0697 | - | 105 | | | | 15,9 | 18,9 | 0,0800 | - | 130 | | | | 17 | 20 | 0,0902 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | | 21,4 | 0,0972 | 50 | 195 | | | | | 19,1 | 22,1 | 0,1026 | 60 | | 205 | | | | 19,5 | 22,5 | 0,1062 | | | 85 | | 230 | 20,6 | 23,6 | 0,1152 | | | 90 | | 235 | 20,8 | 23,8 | 0,1170 | | | 110 | | 255 | 21,7 | 24,7 | 0,1242 | | | 135 | | 280 | 22,8 | 25,8 | 0,1332 | | 185 | | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 185 | | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | | 180 | - | - | | 10,3 | | 12 | | 0,0287 | 200 | - | | - | | 10,8 | | 12,5 | | 0,0338 | 225 | - | | - | | 11,4 | | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | | - | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | 13,8 | 15,5 | 0,0605 | - | | 80 | 14,8 | 16,5 | 0,0697 | - | | 105 | | 15,9 | 18,9 | 0,0800 | - | 130 | | | | 17 | 20 | 0,0902 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | | 22,1 | 0,1026 | 60 | 205 | | | | | 19,5 | 22,5 | 0,1062 | 85 | | 230 | | | | 20,6 | 23,6 | 0,1152 | | | 90 | | 235 | 20,8 | 23,8 | 0,1170 | | | 110 | | 255 | 21,7 | 24,7 | 0,1242 | | | 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | | - | | - | 10,3 | 12 | | 0,0287 | 200 | - | | - | | 10,8 | | 12,5 | 0,0338 | 225 | | - | | - | | 11,4 | | 13,1 | 0,0390 | 250 | | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | 0,0492 | | - | 37 | 12,9 | 14,6 | 0,0523 | | - | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | 14,8 | 16,5 | 0,0697 | - | | 105 | 15,9 | 18,9 | 0,0800 | - | | 130 | | 17 | 20 | 0,0902 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | | 22,5 | 0,1062 | 85 | 230 | | | | | 20,6 | 23,6 | 0,1152 | 90 | | 235 | | | | 20,8 | 23,8 | 0,1170 | | | 110 | | 255 | 21,7 | 24,7 | 0,1242 | | | 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 180 | | - | - | 10,3 | 12 | 0,0287 | | 200 | | - | - | 10,8 | | 12,5 | 0,0338 | 225 | | - | | - | | 11,4 | 13,1 | 0,0390 | | 250 | | - | 5 | 11,4 | | 13,1 | 0,0390 | 280 x | | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | | 280 | - | 20 | 13,3 | 15 | | | 0,0572 | BFL | - | 30 | 12,5 | 14,2 | | | 0,0492 | | - | 37 | 12,9 | 14,6 | | 0,0523 | | - | 57 | 13,8 | 15,5 | 0,0605 | | - | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | 18,9 | 0,0800 | - | | 130 | 17 | 20 | 0,0902 | 10 | | 155 | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | | 23,6 | 0,1152 | 90 | 235 | | | | | 20,8 | 23,8 | 0,1170 | 110 | | 255 | | | | 21,7 | 24,7 | 0,1242 | | | 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | | - | - | 10,8 | 12,5 | 0,0338 | | 225 | | - | - | 11,4 | | 13,1 | 0,0390 | 250 | | - | | 5 | 11,4 | 13,1 | 0,0390 | 280 x | | - | | 20 | 12,1 | 13,8 | 0,0451 | BFL | 280 | | | - | 20 | 13,3 | 15 | 0,0572 | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | | | - | | 37 | 12,9 | 14,6 | 0,0523 | | | - | | 57 | 13,8 | 15,5 | 0,0605 | | - | | 80 | 14,8 | 16,5 | 0,0697 | - | | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | 20 | 0,0902 | 10 | 155 | | 17,4 | 20,4 | 0,0882 | 15 | 160 | | 17,6 | | 20,6 | 0,0900 | 35 | 180 | 18,4 | | | | 21,4 | 0,0972 | 50 | 195 | 19,1 | | | | 22,1 | 0,1026 | 60 | 205 | 19,5 | | | | 22,5 | 0,1062 | 85 | 230 | 20,6 | | | | 23,6 | 0,1152 | 90 | 235 | 20,8 | | | | 23,8 | | 0,1170 | 110 | 255 | 21,7 | | | | | 24,7 | 0,1242 | 135 | 280 | | 22,8 | | | | 25,8 | 0,1332 | 185 | 330 | | 24,9 | | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 225 | | - | - | 11,4 | 13,1 | 0,0390 | | 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | | 20 | | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | | 20 | 13,3 | 15 | 0,0572 | | BFL | | - | 30 | 12,5 | 14,2 | 0,0492 | - | | | | 37 | 12,9 | 14,6 | 0,0523 | - | | | 57 | | 13,8 | 15,5 | 0,0605 | - | | | 80 | | 14,8 | 16,5 | 0,0697 | - | | 105 | | 15,9 | 18,9 | 0,0800 | - | 130 | | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | | 20,6 | 0,0900 | 35 | 180 | 18,4 | | 21,4 | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 110 | 255 | 21,7 | 24,7 | | | | 0,1242 | | 135 | 280 | 22,8 | 25,8 | | | | | 0,1332 | 185 | 330 | 24,9 | | 27,9 | 0,1512 | | | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250 | | - | 5 | 11,4 | 13,1 | 0,0390 | 280 x | - | | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | | 13,3 | 15 | 0,0572 | | | BFL | - | 30 | 12,5 | 14,2 | 0,0492 | - | | | | 37 | 12,9 | 14,6 | 0,0523 | - | 57 | | | | 13,8 | 15,5 | 0,0605 | - | 80 | | | 14,8 | | 16,5 | 0,0697 | - | 105 | | | 15,9 | | 18,9 | 0,0800 | - | 130 | | 17 | | 20 | 0,0902 | 10 | 155 | 17,4 | | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | 0,1026 | | 60 | 205 | 19,5 | 22,5 | 0,1062 | | | | 85 | 230 | 20,6 | 23,6 | 0,1152 | | | | 90 | 235 | 20,8 | 23,8 | 0,1170 | | | | 110 | 255 | 21,7 | 24,7 | 0,1242 | | | | 135 | 280 | 22,8 | 25,8 | 0,1332 | | | | 185 | | 330 | 24,9 | 27,9 | 0,1512 | | | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | | | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 280 x | - | 20 | 12,1 | 13,8 | 0,0451 | BFL | | 280 | - | 20 | 13,3 | 15 | 0,0572 | | | BFL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 30 | 12,5 | 14,2 | 0,0492 | | | - | 37 | 12,9 | 14,6 | 0,0523 | - | | | | 57 | 13,8 | 15,5 | 0,0605 | - | 80 | | | | 14,8 | 16,5 | 0,0697 | - | 105 | 15,9 | | | | 18,9 | 0,0800 | - | 130 | 17 | 20 | | | | 0,0902 | 10 | 155 | 17,4 | 20,4 | | | 0,0882 | | 15 | 160 | 17,6 | 20,6 | | | 0,0900 | | 35 | 180 | 18,4 | 21,4 | | 0,0972 | | 50 | 195 | 19,1 | 22,1 | 0,1026 | | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | | 235 | 20,8 | 23,8 | 0,1170 | 110 | | 255 | | 21,7 | 24,7 | 0,1242 | 135 | 280 | | | | 22,8 | 25,8 | 0,1332 | 185 | 330 | | | | 24,9 | 27,9 | 0,1512 | 235 | 380 | | | | 27,1 | 30,1 | 0,1692 | 180 | - | | | | - | 10,8 | 12,5 | 0,0312 | 200 | | | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 37 | 12,9 | 14,6 | 0,0523 | | | - | 57 | 13,8 | 15,5 | 0,0605 | - | | | | 80 | 14,8 | 16,5 | 0,0697 | - | 105 | | | | 15,9 | 18,9 | 0,0800 | - | 130 | 17 | | | | 20 | 0,0902 | 10 | 155 | 17,4 | 20,4 | | | | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | 0,0900 | | 35 | 180 | 18,4 | 21,4 | | | 0,0972 | | 50 | 195 | 19,1 | 22,1 | | 0,1026 | | 60 | 205 | 19,5 | 22,5 | 0,1062 | | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | | 255 | 21,7 | 24,7 | 0,1242 | 135 | | 280 | | 22,8 | 25,8 | 0,1332 | 185 | 330 | | | | 24,9 | 27,9 | 0,1512 | 235 | 380 | | | | 27,1 | 30,1 | 0,1692 | 180 | - | | | | - | 10,8 | 12,5 | 0,0312 | 200 | | | - | - | 11,3 | 13 | 0,0364 | 225 | - | | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 57 | 13,8 | 15,5 | 0,0605 | | | - | 80 | 14,8 | 16,5 | 0,0697 | - | | | | 105 | 15,9 | 18,9 | 0,0800 | - | 130 | | | | 17 | 20 | 0,0902 | 10 | 155 | 17,4 | | | | 20,4 | 0,0882 | 15 | 160 | 17,6 | 20,6 | | | | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | 0,0972 | | 50 | 195 | 19,1 | 22,1 | | | 0,1026 | | 60 | 205 | 19,5 | 22,5 | | 0,1062 | | 85 | 230 | 20,6 | 23,6 | 0,1152 | | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | | | | 27,1 | 30,1 | 0,1692 | 180 | - | | | | - | 10,8 | 12,5 | 0,0312 | 200 | | | - | - | 11,3 | 13 | 0,0364 | 225 | - | | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 80 | 14,8 | 16,5 | 0,0697 | | | - | 105 | 15,9 | 18,9 | 0,0800 | - | | | | 130 | 17 | 20 | 0,0902 | 10 | 155 | | | | 17,4 | 20,4 | 0,0882 | 15 | 160 | 17,6 | | | | 20,6 | 0,0900 | 35 | 180 | 18,4 | 21,4 | | | | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | 0,1026 | | 60 | 205 | 19,5 | 22,5 | | | 0,1062 | | 85 | 230 | 20,6 | 23,6 | | 0,1152 | | 90 | 235 | 20,8 | 23,8 | 0,1170 | | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | | 27,1 | 30,1 | 0,1692 | 180 | - | | | | - | 10,8 | 12,5 | 0,0312 | 200 | | | - | - | 11,3 | 13 | 0,0364 | 225 | - | | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 105 | 15,9 | 18,9 | 0,0800 | | | - | 130 | 17 | 20 | 0,0902 | 10 | | | | 155 | 17,4 | 20,4 | 0,0882 | 15 | 160 | | | | 17,6 | 20,6 | 0,0900 | 35 | 180 | 18,4 | | | | 21,4 | 0,0972 | 50 | 195 | 19,1 | 22,1 | | | | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | 0,1062 | | 85 | 230 | 20,6 | 23,6 | | | 0,1152 | | 90 | 235 | 20,8 | 23,8 | | 0,1170 | | 110 | 255 | 21,7 | 24,7 | 0,1242 | | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | | - | | - | 10,8 | 12,5 | 0,0312 | 200 | | | - | - | 11,3 | 13 | 0,0364 | 225 | - | | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - | 130 | 17 | 20 | 0,0902 | | | 10 | 155 | 17,4 | 20,4 | 0,0882 | 15 | | | | 160 | 17,6 | 20,6 | 0,0900 | 35 | 180 | | | | 18,4 | 21,4 | 0,0972 | 50 | 195 | 19,1 | | | | 22,1 | 0,1026 | 60 | 205 | 19,5 | 22,5 | | | | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | 0,1152 | | 90 | 235 | 20,8 | 23,8 | | | 0,1170 | | 110 | 255 | 21,7 | 24,7 | | 0,1242 | | 135 | 280 | 22,8 | 25,8 | 0,1332 | | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | | - | - | 10,8 | 12,5 | 0,0312 | | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 10 | 155 | 17,4 | 20,4 | 0,0882 | | | 15 | 160 | 17,6 | 20,6 | 0,0900 | 35 | | | | 180 | 18,4 | 21,4 | 0,0972 | 50 | 195 | | | | 19,1 | 22,1 | 0,1026 | 60 | 205 | 19,5 | | | | 22,5 | 0,1062 | 85 | 230 | 20,6 | 23,6 | | | | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | 0,1170 | | 110 | 255 | 21,7 | 24,7 | | | 0,1242 | | 135 | 280 | 22,8 | 25,8 | | 0,1332 | | 185 | 330 | 24,9 | 27,9 | 0,1512 | | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 | 160 | 17,6 | 20,6 | 0,0900 | | | 35 | 180 | 18,4 | 21,4 | 0,0972 | 50 | | | | 195 | 19,1 | 22,1 | 0,1026 | 60 | 205 | | | | 19,5 | 22,5 | 0,1062 | 85 | 230 | 20,6 | | | | 23,6 | 0,1152 | 90 | 235 | 20,8 | 23,8 | | | | 0,1170 | 110 | 255 | 21,7 | 24,7 | | | 0,1242 | | 135 | 280 | 22,8 | 25,8 | | | 0,1332 | | 185 | 330 | 24,9 | 27,9 | | 0,1512 | | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 35 | 180 | 18,4 | 21,4 | 0,0972 | | | 50 | 195 | 19,1 | 22,1 | 0,1026 | 60 | | | | 205 | 19,5 | 22,5 | 0,1062 | 85 | 230 | | | | 20,6 | 23,6 | 0,1152 | 90 | 235 | 20,8 | | | | 23,8 | 0,1170 | 110 | 255 | 21,7 | 24,7 | | | | 0,1242 | 135 | 280 | 22,8 | 25,8 | | | 0,1332 | | 185 | 330 | 24,9 | 27,9 | | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 50 | 195 | 19,1 | 22,1 | 0,1026 | | | 60 | 205 | 19,5 | 22,5 | 0,1062 | 85 | | | | 230 | 20,6 | 23,6 | 0,1152 | 90 | 235 | | | | 20,8 | 23,8 | 0,1170 | 110 | 255 | 21,7 | | | | 24,7 | 0,1242 | 135 | 280 | 22,8 | 25,8 | | | | 0,1332 | 185 | 330 | 24,9 | 27,9 | | 0,1512 | 235 | | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 60 | 205 | 19,5 | 22,5 | 0,1062 | | | 85 | 230 | 20,6 | 23,6 | 0,1152 | 90 | | | | 235 | 20,8 | 23,8 | 0,1170 | 110 | 255 | | | | 21,7 | 24,7 | 0,1242 | 135 | 280 | 22,8 | | | | 25,8 | 0,1332 | 185 | 330 | 24,9 | 27,9 | | 0,1512 | | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 85 | 230 | 20,6 | 23,6 | 0,1152 | | | 90 | 235 | 20,8 | 23,8 | 0,1170 | 110 | | | | 255 | 21,7 | 24,7 | 0,1242 | 135 | 280 | | | | 22,8 | 25,8 | 0,1332 | 185 | 330 | 24,9 | | | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 90 | 235 | 20,8 | 23,8 | 0,1170 | | | 110 | 255 | 21,7 | 24,7 | 0,1242 | 135 | | | | 280 | 22,8 | 25,8 | 0,1332 | 185 | 330 | | 24,9 | | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 110 | 255 | 21,7 | 24,7 | 0,1242 | | | 135 | 280 | 22,8 | 25,8 | 0,1332 | 185 | | 330 | | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 135 | 280 | 22,8 | 25,8 | 0,1332 | | 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 185 | 330 | 24,9 | 27,9 | 0,1512 | 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 235 | 380 | 27,1 | 30,1 | 0,1692 | 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 180 | - | - | 10,8 | 12,5 | 0,0312 | 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | - | - | 11,3 | 13 | 0,0364 | 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 225 | - | - | 11,9 | 13,6 | 0,0429 | 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250 | - | 5 | 12,5 | 14,2 | 0,0494 | 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 280 | - | 20 | 13,3 | 15 | 0,0572 | 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 | - | 30 | 13,8 | 15,5 | 0,0624 | 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 315 | - | 37 | 14,1 | 15,8 | 0,0663 | 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 355 | - | 57 | 15,1 | 16,8 | 0,0767 | 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 400 | - | 80 | 16,2 | 17,9 | 0,0884 | 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 450 | - | 105 | 17,4 | 20,4 | 0,1014 | 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 500 | - | 130 | 18,7 | 21,7 | 0,1144 | 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 550 | 10 | 155 | 19,9 | 22,9 | 0,1274 | 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 560 | 15 | 160 | 20,1 | 23,1 | 0,1300 | 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 600 | 35 | 180 | 21,1 | 24,1 | 0,1404 | 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 630 | 50 | 195 | 21,9 | 24,9 | 0,1482 | 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 650 | 60 | 205 | 22,4 | 25,4 | 0,1534 | 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 700 | 85 | 230 | 23,6 | 26,6 | 0,1664 | 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 710 | 90 | 235 | 23,8 | 26,8 | 0,1690 | 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 750 | 110 | 255 | 24,8 | 27,8 | 0,1794 | 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800 | 135 | 280 | 26 | 29 | 0,1924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | |
|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|-----|
| | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | |
| | | | | | | | | | | | | | | |
| 280 x | 900 | 185 | 330 | 28,5 | 31,5 | 0,2184 | BF | 450 | - | 105 | 19,6 | 22,6 | 0,1307 | BFL |
| | 1000 | 235 | 380 | 30,9 | 33,9 | 0,2444 | | 500 | - | 130 | 20,9 | 23,9 | 0,1474 | |
| | 180 | - | - | 11,2 | 12,9 | 0,0336 | | 550 | 10 | 155 | 22,3 | 25,3 | 0,1642 | |
| | 200 | - | - | 11,7 | 13,4 | 0,0392 | | 560 | 15 | 160 | 22,6 | 25,6 | 0,1675 | |
| | 225 | - | - | 12,3 | 14 | 0,0462 | | 600 | 35 | 180 | 23,6 | 26,6 | 0,1809 | |
| | 250 | - | 5 | 13 | 14,7 | 0,0532 | | 630 | 50 | 195 | 24,5 | 27,5 | 0,1910 | BFN |
| | 280 | - | 20 | 13,7 | 15,4 | 0,0616 | | 650 | 60 | 205 | 25 | 28 | 0,1977 | |
| | 300 | - | 30 | 14,2 | 15,9 | 0,0672 | | 700 | 85 | 230 | 26,4 | 29,4 | 0,2144 | |
| | 315 | - | 37 | 14,6 | 16,3 | 0,0714 | | 710 | 90 | 235 | 26,6 | 29,6 | 0,2178 | |
| | 355 | - | 57 | 15,6 | 17,3 | 0,0826 | | 750 | 110 | 255 | 27,7 | 30,7 | 0,2312 | |
| 300 x | 400 | - | 80 | 16,8 | 18,5 | 0,0952 | 800 | 135 | 280 | 29,1 | 32,1 | 0,2479 | | |
| | 450 | - | 105 | 18 | 21 | 0,1092 | 900 | 185 | 330 | 31,8 | 34,8 | 0,2814 | BF | |
| | 500 | - | 130 | 19,3 | 22,3 | 0,1232 | 1000 | 235 | 380 | 34,5 | 37,5 | 0,3149 | | |
| | 550 | 10 | 155 | 20,5 | 23,5 | 0,1372 | 180 | - | - | 13 | 14,7 | 0,0456 | | |
| | 560 | 15 | 160 | 20,8 | 23,8 | 0,1400 | 200 | - | - | 13,6 | 15,3 | 0,0532 | | |
| | 600 | 35 | 180 | 21,8 | 24,8 | 0,1512 | 225 | - | - | 14,3 | 16 | 0,0627 | | |
| | 630 | 50 | 195 | 22,6 | 25,6 | 0,1596 | 250 | - | 5 | 15,1 | 16,8 | 0,0722 | | |
| | 650 | 60 | 205 | 23,1 | 26,1 | 0,1652 | 280 | - | 20 | 15,9 | 17,6 | 0,0836 | BFL | |
| | 700 | 85 | 230 | 24,3 | 27,3 | 0,1792 | 300 | - | 30 | 16,5 | 18,2 | 0,0912 | | |
| | 710 | 90 | 235 | 24,6 | 27,6 | 0,1820 | 315 | - | 37 | 16,9 | 18,6 | 0,0969 | | |
| 315 x | 750 | 110 | 255 | 25,6 | 28,6 | 0,1932 | 355 | - | 57 | 18,1 | 19,8 | 0,1121 | | |
| | 800 | 135 | 280 | 26,8 | 29,8 | 0,2072 | 400 | - | 80 | 19,4 | 21,1 | 0,1292 | | |
| | 900 | 185 | 330 | 29,4 | 32,4 | 0,2352 | 450 | - | 105 | 20,8 | 23,8 | 0,1482 | | |
| | 1000 | 235 | 380 | 31,9 | 34,9 | 0,2632 | 500 | - | 130 | 22,3 | 25,3 | 0,1672 | | |
| | 180 | - | - | 11,5 | 13,2 | 0,0354 | 550 | 10 | 155 | 23,7 | 26,7 | 0,1862 | | |
| | 200 | - | - | 12 | 13,7 | 0,0413 | 560 | 15 | 160 | 24 | 27 | 0,1900 | | |
| | 225 | - | - | 12,6 | 14,3 | 0,0487 | 600 | 35 | 180 | 25,1 | 28,1 | 0,2052 | BFN | |
| | 250 | - | 5 | 13,3 | 15 | 0,0561 | 630 | 50 | 195 | 26 | 29 | 0,2166 | | |
| | 280 | - | 20 | 14,1 | 15,8 | 0,0649 | 650 | 60 | 205 | 26,6 | 29,6 | 0,2242 | | |
| | 300 | - | 30 | 14,6 | 16,3 | 0,0708 | 700 | 85 | 230 | 28 | 31 | 0,2432 | | |
| 355 x | 315 | - | 37 | 15 | 16,7 | 0,0752 | 710 | 90 | 235 | 28,3 | 31,3 | 0,2470 | | |
| | 355 | - | 57 | 16 | 17,7 | 0,0870 | 750 | 110 | 255 | 29,5 | 32,5 | 0,2622 | | |
| | 400 | - | 80 | 17,1 | 18,8 | 0,1003 | 800 | 135 | 280 | 30,9 | 33,9 | 0,2812 | BF | |
| | 450 | - | 105 | 18,4 | 21,4 | 0,1151 | 900 | 185 | 330 | 33,8 | 36,8 | 0,3192 | | |
| | 500 | - | 130 | 19,7 | 22,7 | 0,1298 | 1000 | 235 | 380 | 36,7 | 39,7 | 0,3572 | | |
| | 550 | 10 | 155 | 21 | 24 | 0,1446 | 180 | - | - | 14 | 15,7 | 0,0516 | | |
| | 560 | 15 | 160 | 21,3 | 24,3 | 0,1475 | 200 | - | - | 14,6 | 16,3 | 0,0602 | | |
| | 600 | 35 | 180 | 22,3 | 25,3 | 0,1593 | 225 | - | - | 15,3 | 17 | 0,0710 | | |
| | 630 | 50 | 195 | 23,1 | 26,1 | 0,1682 | 250 | - | 5 | 16,1 | 17,8 | 0,0817 | | |
| | 650 | 60 | 205 | 23,6 | 26,6 | 0,1741 | 280 | - | 20 | 17 | 18,7 | 0,0946 | BFL | |
| 355 x | 700 | 85 | 230 | 24,9 | 27,9 | 0,1888 | 300 | - | 30 | 17,6 | 19,3 | 0,1032 | | |
| | 710 | 90 | 235 | 25,1 | 28,1 | 0,1918 | 315 | - | 37 | 18,1 | 19,8 | 0,1097 | | |
| | 750 | 110 | 255 | 26,2 | 29,2 | 0,2036 | 355 | - | 57 | 19,3 | 21 | 0,1269 | | |
| | 800 | 135 | 280 | 27,5 | 30,5 | 0,2183 | 400 | - | 80 | 20,7 | 22,4 | 0,1462 | | |
| | 900 | 185 | 330 | 30 | 33 | 0,2478 | 450 | - | 105 | 22,2 | 25,2 | 0,1677 | | |
| | 1000 | 235 | 380 | 32,6 | 35,6 | 0,2773 | 500 | - | 130 | 23,8 | 26,8 | 0,1892 | | |
| | 180 | - | - | 12,2 | 13,9 | 0,0402 | 550 | 10 | 155 | 25,3 | 28,3 | 0,2107 | | |
| | 200 | - | - | 12,8 | 14,5 | 0,0469 | 560 | 15 | 160 | 25,6 | 28,6 | 0,2150 | BFN | |
| | 225 | - | - | 13,4 | 15,1 | 0,0553 | 600 | 35 | 180 | 26,8 | 29,8 | 0,2322 | | |
| | 250 | - | 5 | 14,1 | 15,8 | 0,0737 | 630 | 50 | 195 | 27,7 | 30,7 | 0,2451 | | |
| 355 x | 280 | - | 20 | 14,9 | 16,6 | 0,0637 | 650 | 60 | 205 | 28,4 | 31,4 | 0,2537 | | |
| | 300 | - | 30 | 15,5 | 17,2 | 0,0804 | 700 | 85 | 230 | 29,9 | 32,9 | 0,2752 | | |
| | 315 | - | 37 | 15,9 | 17,6 | 0,0854 | 710 | 90 | 235 | 30,2 | 33,2 | 0,2795 | BF | |
| | 355 | - | 57 | 17 | 18,7 | 0,0988 | 750 | 110 | 255 | 31,4 | 34,4 | 0,2967 | | |
| | 400 | - | 80 | 18,2 | 19,9 | 0,1139 | 800 | 135 | 280 | 33 | 36 | 0,3182 | | |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | |
|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|-----|
| | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | |
| | | | | | | | | | | | | | | |
| 450 x | 900 | 185 | 330 | 36 | 39 | 0,3612 | BF | 450 | - | 105 | 25,3 | 28,3 | 0,2106 | BFN |
| | 1000 | 235 | 380 | 39,1 | 42,1 | 0,4042 | | 500 | - | 130 | 27,1 | 30,1 | 0,2376 | |
| | 180 | - | - | 14,9 | 16,6 | 0,0576 | | 550 | 10 | 155 | 28,8 | 31,8 | 0,2646 | |
| | 200 | - | - | 15,5 | 17,2 | 0,0672 | | 560 | 15 | 160 | 29,1 | 32,1 | 0,2700 | |
| | 225 | - | - | 16,3 | 18 | 0,0792 | | 600 | 35 | 180 | 30,5 | 33,5 | 0,2916 | |
| | 250 | - | 5 | 17,1 | 18,8 | 0,0912 | | 630 | 50 | 195 | 31,6 | 34,6 | 0,3078 | |
| | 280 | - | 20 | 18,1 | 19,8 | 0,1056 | | 650 | 60 | 205 | 32,2 | 35,2 | 0,3186 | |
| | 300 | - | 30 | 18,8 | 20,5 | 0,1152 | | 700 | 85 | 230 | 34 | 37 | 0,3456 | |
| | 315 | - | 37 | 19,3 | 21 | 0,1224 | | 710 | 90 | 235 | 34,3 | 37,3 | 0,3510 | |
| | 355 | - | 57 | 20,6 | 22,3 | 0,1416 | | 750 | 110 | 255 | 35,7 | 38,7 | 0,3726 | |
| 500 x | 400 | - | 80 | 22 | 23,7 | 0,1632 | 800 | 135 | 280 | 37,4 | 40,4 | 0,3996 | | |
| | 450 | - | 105 | 23,6 | 26,6 | 0,1872 | 900 | 185 | 330 | 40,9 | 43,9 | 0,4536 | | |
| | 500 | - | 130 | 25,3 | 28,3 | 0,2112 | 1000 | 235 | 380 | 44,4 | 47,4 | 0,5076 | | |
| | 550 | 10 | 155 | 26,9 | 29,9 | 0,2352 | 180 | - | - | 16,7 | 19,7 | 0,0696 | | |
| | 560 | 15 | 160 | 27,2 | 30,2 | 0,2400 | 200 | - | - | 17,4 | 20,4 | 0,0812 | | |
| | 600 | 35 | 180 | 28,5 | 31,5 | 0,2592 | 225 | - | - | 18,3 | 21,3 | 0,0957 | | |
| | 630 | 50 | 195 | 29,5 | 32,5 | 0,2736 | 250 | - | 5 | 19,2 | 22,2 | 0,1102 | | |
| | 650 | 60 | 205 | 30,1 | 33,1 | 0,2832 | 280 | - | 20 | 20,3 | 23,3 | 0,1276 | | |
| | 700 | 85 | 230 | 31,7 | 34,7 | 0,3072 | 300 | - | 30 | 21 | 24 | 0,1392 | | |
| | 710 | 90 | 235 | 32,1 | 35,1 | 0,3120 | 315 | - | 37 | 21,6 | 24,6 | 0,1479 | | |
| 550 x | 750 | 110 | 255 | 33,4 | 36,4 | 0,3312 | 355 | - | 57 | 23 | 26 | 0,1711 | | |
| | 800 | 135 | 280 | 35 | 38 | 0,3552 | 400 | - | 80 | 24,6 | 27,6 | 0,1972 | | |
| | 900 | 185 | 330 | 38,2 | 41,2 | 0,4032 | 450 | - | 105 | 26,4 | 29,4 | 0,2262 | | |
| | 1000 | 235 | 380 | 41,5 | 44,5 | 0,4512 | 500 | - | 130 | 28,3 | 31,3 | 0,2552 | | |
| | 180 | - | - | 15,8 | 17,5 | 0,0636 | 550 | 10 | 155 | 30,1 | 33,1 | 0,2842 | | |
| | 200 | - | - | 16,5 | 18,2 | 0,0742 | 560 | 15 | 160 | 30,4 | 33,4 | 0,2900 | | |
| | 225 | - | - | 17,3 | 19 | 0,0875 | 600 | 35 | 180 | 31,9 | 34,9 | 0,3132 | | |
| | 250 | - | 5 | 18,2 | 19,9 | 0,1007 | 630 | 50 | 195 | 32,9 | 35,9 | 0,3306 | | |
| | 280 | - | 20 | 19,2 | 20,9 | 0,1166 | 650 | 60 | 205 | 33,7 | 36,7 | 0,3422 | | |
| | 300 | - | 30 | 19,9 | 21,6 | 0,1272 | 700 | 85 | 230 | 35,5 | 38,5 | 0,3712 | | |
| 600 x | 315 | - | 37 | 20,4 | 22,1 | 0,1352 | 710 | 90 | 235 | 35,8 | 38,8 | 0,3770 | | |
| | 355 | - | 57 | 21,8 | 23,5 | 0,1564 | 750 | 110 | 255 | 37,3 | 40,3 | 0,4002 | | |
| | 400 | - | 80 | 23,3 | 25 | 0,1802 | 800 | 135 | 280 | 39,1 | 42,1 | 0,4292 | | |
| | 450 | - | 105 | 25 | 28 | 0,2067 | 900 | 185 | 330 | 42,7 | 45,7 | 0,4872 | | |
| | 500 | - | 130 | 26,8 | 29,8 | 0,2332 | 1000 | 235 | 380 | 46,3 | 49,3 | 0,5452 | | |
| | 550 | 10 | 155 | 28,5 | 31,5 | 0,2597 | 180 | - | - | 17,3 | 20,3 | 0,0732 | | |
| | 560 | 15 | 160 | 28,8 | 31,8 | 0,2650 | 200 | - | - | 18 | 21 | 0,0854 | | |
| | 600 | 35 | 180 | 30,2 | 33,2 | 0,2862 | 225 | - | - | 18,9 | 21,9 | 0,1007 | | |
| | 630 | 50 | 195 | 31,2 | 34,2 | 0,3021 | 250 | - | 5 | 19,9 | 22,9 | 0,1159 | | |
| | 650 | 60 | 205 | 31,9 | 34,9 | 0,3127 | 280 | - | 20 | 21 | 24 | 0,1342 | | |
| 630 x | 700 | 85 | 230 | 33,6 | 36,6 | 0,3392 | 300 | - | 30 | 21,7 | 24,7 | 0,1464 | | |
| | 710 | 90 | 235 | 33,9 | 36,9 | 0,3445 | 315 | - | 37 | 22,3 | 25,3 | 0,1556 | | |
| | 750 | 110 | 255 | 35,3 | 38,3 | 0,3657 | 355 | - | 57 | 23,8 | 26,8 | 0,1800 | | |
| | 800 | 135 | 280 | 37 | 40 | 0,3922 | 400 | - | 80 | 25,4 | 28,4 | 0,2074 | | |
| | 900 | 185 | 330 | 40,4 | 43,4 | 0,4452 | 450 | - | 105 | 27,3 | 30,3 | 0,2379 | | |
| | 1000 | 235 | 380 | 43,9 | 46,9 | 0,4982 | 500 | - | 130 | 29,1 | 32,1 | 0,2684 | | |
| | 180 | - | - | 16 | 17,7 | 0,0648 | 550 | 10 | 155 | 31 | 34 | 0,2989 | | |
| | 200 | - | - | 16,7 | 18,4 | 0,0756 | 560 | 15 | 160 | 31,4 | 34,4 | 0,3050 | | |
| | 225 | - | - | 17,5 | 19,2 | 0,0891 | 600 | 35 | 180 | 32,9 | 35,9 | 0,3294 | | |
| | 250 | - | 5 | 18,4 | 20,1 | 0,1026 | 630 | 50 | 195 | 34 | 37 | 0,3477 | | |
| 560 x | 280 | - | 20 | 19,4 | 21,1 | 0,1188 | 650 | 60 | 205 | 34,7 | 37,7 | 0,3599 | | |
| | 300 | - | 30 | 20,1 | 21,8 | 0,1296 | 700 | 85 | 230 | 36,6 | 39,6 | 0,3904 | | |
| | 315 | - | 37 | 20,7 | 22,4 | 0,1377 | 710 | 90 | 235 | 36,9 | 39,9 | 0,3965 | | |
| | 355 | - | 57 | 22 | 23,7 | 0,1593 | 750 | 110 | 255 | 38,4 | 41,4 | 0,4209 | | |
| | 400 | - | 80 | 23,6 | 25,3 | 0,1836 | 800 | 135 | 280 | 40,3 | 43,3 | 0,4514 | | |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | | |
|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|--------|-----|
| | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | |
| | | | | | | | | | | | | | | 630 x | 900 |
| | 1000 | 235 | 380 | 47,7 | 50,7 | 0,5734 | | 500 | - | 130 | 31,5 | 34,5 | 0,3036 | | |
| | 180 | - | - | 17,6 | 20,6 | 0,0756 | | 550 | 10 | 155 | 33,5 | 36,5 | 0,3381 | | |
| | 200 | - | - | 18,4 | 21,4 | 0,0882 | | 560 | 15 | 160 | 33,9 | 36,9 | 0,3450 | | |
| | 225 | - | - | 19,3 | 22,3 | 0,1040 | | 600 | 35 | 180 | 35,5 | 38,5 | 0,3726 | | |
| | 250 | - | 5 | 20,3 | 23,3 | 0,1197 | BFL | 630 | 50 | 195 | 36,7 | 39,7 | 0,3933 | | |
| | 280 | - | 20 | 21,4 | 24,4 | 0,1386 | | 650 | 60 | 205 | 37,5 | 40,5 | 0,4071 | | |
| | 300 | - | 30 | 22,2 | 25,2 | 0,1512 | | 700 | 85 | 230 | 39,5 | 42,5 | 0,4416 | BF | |
| | 315 | - | 37 | 22,7 | 25,7 | 0,1607 | | 710 | 90 | 235 | 39,9 | 42,9 | 0,4485 | | |
| | 355 | - | 57 | 24,3 | 27,3 | 0,1859 | | 750 | 110 | 255 | 41,5 | 44,5 | 0,4761 | | |
| | 400 | - | 80 | 26 | 29 | 0,2142 | | 710 x | 800 | 135 | 280 | 43,5 | 46,5 | 0,5106 | |
| 650 x | 450 | - | 105 | 27,9 | 30,9 | 0,2457 | BFN | 900 | 185 | 330 | 47,5 | 50,5 | 0,5796 | | |
| | 500 | - | 130 | 29,7 | 32,7 | 0,2772 | | 1000 | 235 | 380 | 51,5 | 54,5 | 0,6486 | | |
| | 550 | 10 | 155 | 31,6 | 34,6 | 0,3087 | | 180 | - | - | 19,5 | 22,5 | 0,0876 | | |
| | 560 | 15 | 160 | 32 | 35 | 0,3150 | | 200 | - | - | 20,3 | 23,3 | 0,1022 | | |
| | 600 | 35 | 180 | 33,5 | 36,5 | 0,3402 | | 225 | - | - | 21,3 | 24,3 | 0,1205 | | |
| | 630 | 50 | 195 | 34,7 | 37,7 | 0,3591 | | 250 | - | 5 | 22,4 | 25,4 | 0,1387 | BFL | |
| | 650 | 60 | 205 | 35,4 | 38,4 | 0,3717 | | 280 | - | 20 | 23,6 | 26,6 | 0,1606 | | |
| | 700 | 85 | 230 | 37,3 | 40,3 | 0,4032 | BF | 300 | - | 30 | 24,5 | 27,5 | 0,1752 | | |
| | 710 | 90 | 235 | 37,7 | 40,7 | 0,4095 | | 315 | - | 37 | 25,1 | 28,1 | 0,1862 | | |
| | 750 | 110 | 255 | 39,2 | 42,2 | 0,4347 | | 355 | - | 57 | 26,7 | 29,7 | 0,2154 | | |
| | 800 | 135 | 280 | 41,1 | 44,1 | 0,4662 | | 400 | - | 80 | 28,6 | 31,6 | 0,2482 | BFN | |
| 650 x | 900 | 185 | 330 | 44,9 | 47,9 | 0,5292 | | 450 | - | 105 | 30,7 | 33,7 | 0,2847 | | |
| | 1000 | 235 | 380 | 48,7 | 51,7 | 0,5922 | | 500 | - | 130 | 32,7 | 35,7 | 0,3212 | | |
| | 180 | - | - | 18,6 | 21,6 | 0,0816 | | 550 | 10 | 155 | 34,8 | 37,8 | 0,3577 | | |
| | 200 | - | - | 19,4 | 22,4 | 0,0952 | | 560 | 15 | 160 | 35,2 | 38,2 | 0,3650 | | |
| | 225 | - | - | 20,3 | 23,3 | 0,1122 | | 600 | 35 | 180 | 36,9 | 39,9 | 0,3942 | | |
| | 250 | - | 5 | 21,3 | 24,3 | 0,1292 | BFL | 630 | 50 | 195 | 38,1 | 41,1 | 0,4161 | | |
| | 280 | - | 20 | 22,5 | 25,5 | 0,1496 | | 650 | 60 | 205 | 39 | 42 | 0,4307 | | |
| | 300 | - | 30 | 23,3 | 26,3 | 0,1632 | | 700 | 85 | 230 | 41 | 44 | 0,4672 | BF | |
| | 315 | - | 37 | 23,9 | 26,9 | 0,1734 | | 710 | 90 | 235 | 41,4 | 44,4 | 0,4745 | | |
| | 355 | - | 57 | 25,5 | 28,5 | 0,2006 | | 750 | 110 | 255 | 43,1 | 46,1 | 0,5037 | | |
| | 400 | - | 80 | 27,3 | 30,3 | 0,2312 | | 750 x | 800 | 135 | 280 | 45,2 | 48,2 | 0,5402 | |
| 700 x | 450 | - | 105 | 29,3 | 32,3 | 0,2652 | BFN | 900 | 185 | 330 | 49,3 | 52,3 | 0,6132 | | |
| | 500 | - | 130 | 31,2 | 34,2 | 0,2992 | | 1000 | 235 | 380 | 53,5 | 56,5 | 0,6862 | | |
| | 550 | 10 | 155 | 33,2 | 36,2 | 0,3332 | | 180 | - | - | 20,4 | 23,4 | 0,0936 | | |
| | 560 | 15 | 160 | 33,6 | 36,6 | 0,3400 | | 200 | - | - | 21,3 | 24,3 | 0,1092 | | |
| | 600 | 35 | 180 | 35,2 | 38,2 | 0,3672 | | 225 | - | - | 22,3 | 25,3 | 0,1287 | | |
| | 630 | 50 | 195 | 36,4 | 39,4 | 0,3876 | | 250 | - | 5 | 23,4 | 26,4 | 0,1482 | BFL | |
| | 650 | 60 | 205 | 37,2 | 40,2 | 0,4012 | | 280 | - | 20 | 24,7 | 27,7 | 0,1716 | | |
| | 700 | 85 | 230 | 39,2 | 42,2 | 0,4352 | BF | 300 | - | 30 | 25,6 | 28,6 | 0,1872 | | |
| | 710 | 90 | 235 | 39,6 | 42,6 | 0,4420 | | 315 | - | 37 | 26,2 | 29,2 | 0,1989 | | |
| | 750 | 110 | 255 | 41,2 | 44,2 | 0,4692 | | 355 | - | 57 | 28 | 31 | 0,2301 | | |
| 700 x | 800 | 135 | 280 | 43,1 | 46,1 | 0,5032 | | 400 | - | 80 | 29,9 | 32,9 | 0,2652 | BFN | |
| | 900 | 185 | 330 | 47,1 | 50,1 | 0,5712 | | 450 | - | 105 | 32,1 | 35,1 | 0,3042 | | |
| | 1000 | 235 | 380 | 51,1 | 54,1 | 0,6392 | | 500 | - | 130 | 34,2 | 37,2 | 0,3432 | | |
| | 180 | - | - | 18,7 | 21,7 | 0,0828 | | 550 | 10 | 155 | 36,4 | 39,4 | 0,3822 | | |
| | 200 | - | - | 19,5 | 22,5 | 0,0966 | | 560 | 15 | 160 | 36,8 | 39,8 | 0,3900 | | |
| | 225 | - | - | 20,5 | 23,5 | 0,1139 | | 600 | 35 | 180 | 38,6 | 41,6 | 0,4212 | | |
| | 250 | - | 5 | 21,5 | 24,5 | 0,1311 | BFL | 630 | 50 | 195 | 39,9 | 42,9 | 0,4446 | | |
| 710 x | 280 | - | 20 | 22,7 | 25,7 | 0,1518 | | 650 | 60 | 205 | 40,7 | 43,7 | 0,4602 | BF | |
| | 300 | - | 30 | 23,5 | 26,5 | 0,1656 | | 700 | 85 | 230 | 42,9 | 45,9 | 0,4992 | | |
| | 315 | - | 37 | 24,1 | 27,1 | 0,1760 | | 710 | 90 | 235 | 43,3 | 46,3 | 0,5070 | | |
| | 355 | - | 57 | 25,7 | 28,7 | 0,2036 | BFN | 750 | 110 | 255 | 45 | 48 | 0,5382 | | |
| | 400 | - | 80 | 27,5 | 30,5 | 0,2346 | | 800 | 135 | 280 | 47,2 | 50,2 | 0,5772 | | |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator |
|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|---------------|-----------------------|-----------|--------------|----------------|---|------------------------------|
| | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | | | a [mm] | c [mm] | Man. [kg] | Actu. [kg]* | | |
| | | | | | | | | | | | | | |
| 800 x | 900 | 185 | 330 | 51,5 | 54,5 | 0,6552 | BF | 450 | - | 105 | 40,5 | 43,5 | 0,4212 |
| | 1000 | 235 | 380 | 55,9 | 58,9 | 0,7332 | | 500 | - | 130 | 43,2 | 46,2 | 0,4752 |
| 900 x | 180 | - | - | 22,2 | 25,2 | 0,1056 | BFL | 550 | 10 | 155 | 45,9 | 48,9 | 0,5292 |
| | 200 | - | - | 23,2 | 26,2 | 0,1232 | | 560 | 15 | 160 | 46,5 | 49,5 | 0,5400 |
| | 225 | - | - | 24,3 | 27,3 | 0,1452 | | 600 | 35 | 180 | 48,6 | 51,6 | 0,5832 |
| | 250 | - | 5 | 25,5 | 28,5 | 0,1672 | | 630 | 50 | 195 | 50,2 | 53,2 | 0,6156 |
| | 280 | - | 20 | 26,9 | 29,9 | 0,1936 | | 650 | 60 | 205 | 51,3 | 54,3 | 0,6372 |
| | 300 | - | 30 | 27,9 | 30,9 | 0,2112 | | 700 | 85 | 230 | 54 | 57 | 0,6912 |
| | 315 | - | 37 | 28,6 | 31,6 | 0,2244 | | 710 | 90 | 235 | 54,6 | 57,6 | 0,7020 |
| | 355 | - | 57 | 30,4 | 33,4 | 0,2596 | | 750 | 110 | 255 | 56,7 | 59,7 | 0,7452 |
| | 400 | - | 80 | 32,5 | 35,5 | 0,2992 | | 800 | 135 | 280 | 59,4 | 62,4 | 0,7992 |
| | 450 | - | 105 | 34,9 | 37,9 | 0,3432 | | 900 | 185 | 330 | 64,8 | 67,8 | 0,9072 |
| 900 x | 500 | - | 130 | 37,2 | 40,2 | 0,3872 | BF | 1000 | 235 | 380 | 70,2 | 73,2 | 1,0152 |
| | 550 | 10 | 155 | 39,6 | 42,6 | 0,4312 | | 180 | - | - | 28,7 | 31,7 | 0,1476 |
| | 560 | 15 | 160 | 40 | 43 | 0,4400 | | 200 | - | - | 29,9 | 32,9 | 0,1722 |
| | 600 | 35 | 180 | 41,9 | 44,9 | 0,4752 | | 225 | - | - | 31,4 | 34,4 | 0,2030 |
| | 630 | 50 | 195 | 43,3 | 46,3 | 0,5016 | | 250 | - | 5 | 32,8 | 35,8 | 0,2337 |
| | 650 | 60 | 205 | 44,3 | 47,3 | 0,5192 | | 280 | - | 20 | 34,6 | 37,6 | 0,2706 |
| | 700 | 85 | 230 | 46,6 | 49,6 | 0,5632 | | 300 | - | 30 | 35,8 | 38,8 | 0,2952 |
| | 710 | 90 | 235 | 47,1 | 50,1 | 0,5720 | | 315 | - | 37 | 36,7 | 39,7 | 0,3137 |
| | 750 | 110 | 255 | 48,9 | 51,9 | 0,6072 | | 355 | - | 57 | 39,1 | 42,1 | 0,3629 |
| | 800 | 135 | 280 | 51,3 | 54,3 | 0,6512 | | 400 | - | 80 | 41,8 | 44,8 | 0,4182 |
| 1000 x | 900 | 185 | 330 | 56 | 59 | 0,7392 | BFL | 450 | - | 105 | 44,7 | 47,7 | 0,4797 |
| | 1000 | 235 | 380 | 60,6 | 63,6 | 0,8272 | | 500 | - | 130 | 47,7 | 50,7 | 0,5412 |
| | 180 | - | - | 24,1 | 27,1 | 0,1176 | | 550 | 10 | 155 | 50,7 | 53,7 | 0,6027 |
| | 200 | - | - | 25,1 | 28,1 | 0,1372 | | 560 | 15 | 160 | 51,3 | 54,3 | 0,6150 |
| | 225 | - | - | 26,4 | 29,4 | 0,1617 | | 600 | 35 | 180 | 53,6 | 56,6 | 0,6642 |
| | 250 | - | 5 | 27,6 | 30,6 | 0,1862 | | 630 | 50 | 195 | 55,4 | 58,4 | 0,7011 |
| | 280 | - | 20 | 29,1 | 32,1 | 0,2156 | | 650 | 60 | 205 | 56,6 | 59,6 | 0,7257 |
| | 300 | - | 30 | 30,1 | 33,1 | 0,2352 | | 700 | 85 | 230 | 59,6 | 62,6 | 0,7872 |
| | 315 | - | 37 | 30,9 | 33,9 | 0,2499 | | 710 | 90 | 235 | 60,2 | 63,2 | 0,7995 |
| | 355 | - | 57 | 32,9 | 35,9 | 0,2891 | | 750 | 110 | 255 | 62,6 | 65,6 | 0,8487 |
| 1000 x | 400 | - | 80 | 35,2 | 38,2 | 0,3332 | BFN | 800 | 135 | 280 | 65,5 | 68,5 | 0,9102 |
| | 450 | - | 105 | 37,7 | 40,7 | 0,3822 | | 900** | 185 | 330 | 71,5 | 74,5 | 1,0332 |
| | 500 | - | 130 | 40,2 | 43,2 | 0,4312 | | 1000** | 235 | 380 | 77,4 | 80,4 | 1,1562 |
| | 550 | 10 | 155 | 42,7 | 45,7 | 0,4802 | | 180 | - | - | 31,4 | 34,4 | 0,1656 |
| | 560 | 15 | 160 | 43,2 | 46,2 | 0,4900 | | 200 | - | - | 32,7 | 35,7 | 0,1932 |
| | 600 | 35 | 180 | 45,3 | 48,3 | 0,5292 | | 225 | - | - | 34,4 | 37,4 | 0,2277 |
| | 630 | 50 | 195 | 46,8 | 49,8 | 0,5586 | | 250 | - | 5 | 36 | 39 | 0,2622 |
| | 650 | 60 | 205 | 47,8 | 50,8 | 0,5782 | | 280 | - | 20 | 37,9 | 40,9 | 0,3036 |
| | 700 | 85 | 230 | 50,3 | 53,3 | 0,6272 | | 300 | - | 30 | 39,2 | 42,2 | 0,3312 |
| | 710 | 90 | 235 | 50,8 | 53,8 | 0,6370 | | 315 | - | 37 | 40,2 | 43,2 | 0,3519 |
| 1000 x | 750 | 110 | 255 | 52,8 | 55,8 | 0,6762 | BFN | 355 | - | 57 | 42,8 | 45,8 | 0,4071 |
| | 800 | 135 | 280 | 55,3 | 58,3 | 0,7252 | | 400 | - | 80 | 45,7 | 48,7 | 0,4692 |
| | 900 | 185 | 330 | 60,4 | 63,4 | 0,8232 | | 450 | - | 105 | 48,9 | 51,9 | 0,5382 |
| | 1000 | 235 | 380 | 65,4 | 68,4 | 0,9212 | | 500 | - | 130 | 52,2 | 55,2 | 0,6072 |
| | 180 | - | - | 25,9 | 28,9 | 0,1296 | | 550 | 10 | 155 | 55,4 | 58,4 | 0,6762 |
| | 200 | - | - | 27 | 30 | 0,1512 | | 560 | 15 | 160 | 56,1 | 59,1 | 0,6900 |
| | 225 | - | - | 28,4 | 31,4 | 0,1782 | | 600 | 35 | 180 | 58,7 | 61,7 | 0,7452 |
| | 250 | - | 5 | 29,7 | 32,7 | 0,2052 | | 630** | 50 | 195 | 60,6 | 63,6 | 0,7866 |
| | 280 | - | 20 | 31,3 | 34,3 | 0,2376 | | 650** | 60 | 205 | 61,9 | 64,9 | 0,8142 |
| | 300 | - | 30 | 32,4 | 35,4 | 0,2592 | | 700** | 85 | 230 | 65,2 | 68,2 | 0,8832 |
| 1100 x | 315 | - | 37 | 33,2 | 36,2 | 0,2754 | BFN | 710** | 90 | 235 | 65,8 | 68,8 | 0,8970 |
| | 355 | - | 57 | 35,4 | 38,4 | 0,3186 | | 750** | 110 | 255 | 68,4 | 71,4 | 0,9522 |
| | 400 | - | 80 | 37,8 | 40,8 | 0,3672 | | 800** | 135 | 280 | 71,6 | 74,6 | 1,0212 |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

** Two closing springs are used for these dimensions.

| A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | A x B [mm] | Damper blade overlaps | | Weight | | Free area S _f [m ²] | Spring return actuator | | |
|---------------|-----------------------|------|--------|-------|---|------------------------------|---------------|-----------------------|------|--------|--------|---|------------------------------|--------|-----|
| | a | c | Man. | Actu. | | | | a | c | Man. | Actu. | | | | |
| | [mm] | [mm] | [kg] | [kg]* | | | | [mm] | [mm] | [kg] | [kg]* | | | | |
| 1400 x | 900** | 185 | 330 | 78,1 | 81,1 | 1,1592 | BF | 1500 x 1000** | 235 | 380 | 89,4 | 92,4 | 1,3912 | BF | |
| | 1000** | 235 | 380 | 84,6 | 87,6 | 1,2972 | | 180 | - | - | 35,1 | 38,1 | 0,1896 | | |
| | 180 | - | - | 33,3 | 36,3 | 0,1776 | BFL | 200 | - | - | 36,6 | 39,6 | 0,2212 | BFL | |
| | 200 | - | - | 34,7 | 37,7 | 0,2072 | | 225 | - | - | 38,4 | 41,4 | 0,2607 | | |
| | 225 | - | - | 36,4 | 39,4 | 0,2442 | | 250 | - | 5 | 40,2 | 43,2 | 0,3002 | | |
| | 250 | - | 5 | 38,1 | 41,1 | 0,2812 | | 280 | - | 20 | 42,3 | 45,3 | 0,3476 | | |
| | 1500 x | 280 | - | 20 | 40,1 | 43,1 | 0,3256 | BFN | 300 | - | 30 | 43,8 | 46,8 | 0,3792 | BFN |
| | | 300 | - | 30 | 41,5 | 44,5 | 0,3552 | | 315 | - | 37 | 44,8 | 47,8 | 0,4029 | |
| | | 315 | - | 37 | 42,5 | 45,5 | 0,3774 | | 355 | - | 57 | 47,7 | 50,7 | 0,4661 | |
| | | 355 | - | 57 | 45,3 | 48,3 | 0,4366 | | 400 | - | 80 | 51 | 54 | 0,5372 | |
| 400 | | - | 80 | 48,3 | 51,3 | 0,5032 | 450 | | - | 105 | 54,6 | 57,6 | 0,6162 | | |
| 450 | | - | 105 | 51,8 | 54,8 | 0,5772 | 500 | | - | 130 | 58,2 | 61,2 | 0,6952 | | |
| 500 | | - | 130 | 55,2 | 58,2 | 0,6512 | 550 | | 10 | 155 | 61,8 | 64,8 | 0,7742 | | |
| 550 | | 10 | 155 | 58,6 | 61,6 | 0,7252 | 560 | | 15 | 160 | 62,5 | 65,5 | 0,7900 | | |
| 560 | | 15 | 160 | 59,3 | 62,3 | 0,7400 | 600 | | 35 | 180 | 65,4 | 68,4 | 0,8532 | | |
| 600 | | 35 | 180 | 62 | 65 | 0,7992 | 630** | | 50 | 195 | 67,5 | 70,5 | 0,9006 | BF | |
| 630** | 50 | 195 | 64,1 | 67,1 | 0,8436 | 650** | 60 | 205 | 69 | 72 | 0,9322 | | | | |
| 650** | 60 | 205 | 65,4 | 68,4 | 0,8732 | 700** | 85 | 230 | 72,6 | 75,6 | 1,0112 | | | | |
| 700** | 85 | 230 | 68,9 | 71,9 | 0,9472 | 710** | 90 | 235 | 73,3 | 76,3 | 1,0270 | | | | |
| 710** | 90 | 235 | 69,6 | 72,6 | 0,9620 | 750** | 110 | 255 | 76,2 | 79,2 | 1,0902 | | | | |
| 750** | 110 | 255 | 72,3 | 75,3 | 1,0212 | 800** | 135 | 280 | 79,8 | 82,8 | 1,1692 | | | | |
| 800** | 135 | 280 | 75,7 | 78,7 | 1,0952 | 900** | 185 | 330 | 87 | 90 | 1,3272 | | | | |
| 1500 x 900** | 185 | 330 | 82,6 | 85,6 | 1,2432 | 1000** | 235 | 380 | 94,2 | 97,2 | 1,4852 | | | | |

Sizes in increments of 5 mm can be manufactured on request.

* For designs with BKN a weight of 0.5 kg must be added.

** Two closing springs are used for these dimensions.

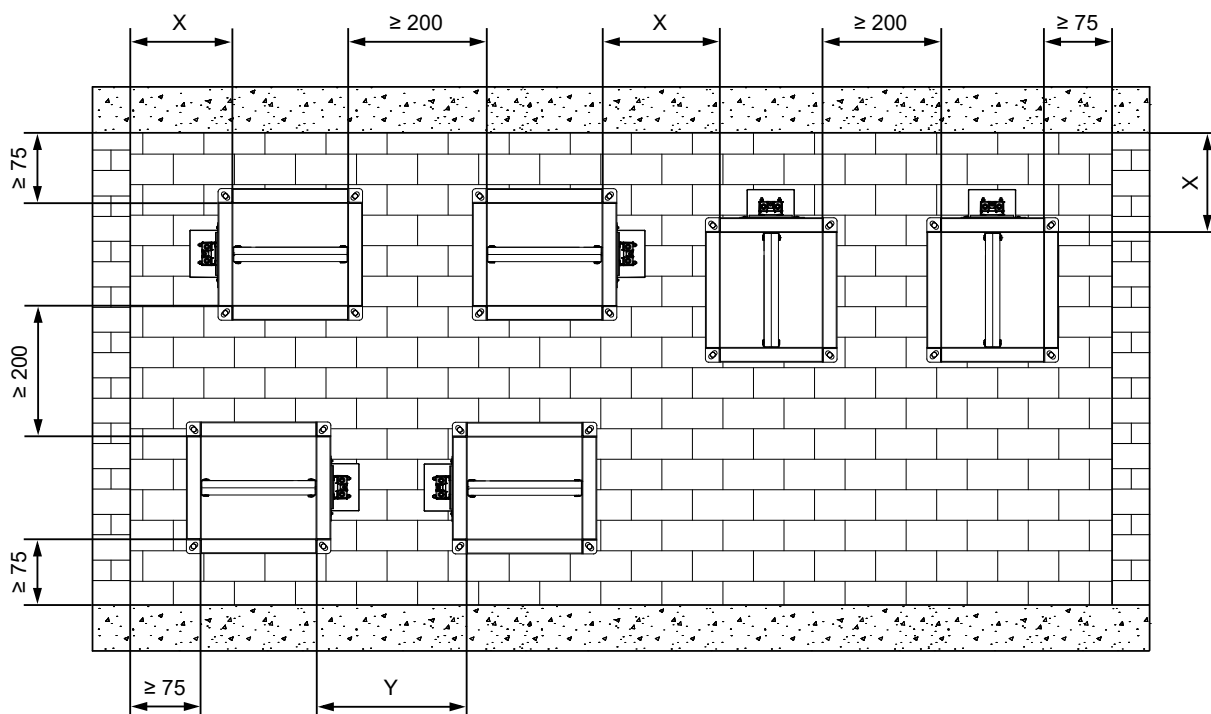
IV. INSTALLATION

Placement and installation

- The fire dampers are suitable for installation in arbitrary position in vertical and horizontal passages of fire separating constructions. The damper installation procedures must be done so that all load transfer from the fire separating constructions to the damper is absolutely excluded. Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. The gap between the installed damper and the fire separating construction must be perfectly filled with approved material.
- The damper must be installed so that the damper blade (in closed position) is situated in the fire separating construction - marked by the label BUILT-IN EDGE on the damper casing. If such solution is not possible, the duct between the fire separating construction and the damper blade must be protected according to the certified installation method → see pages 27 to 40
- During the installation and plastering process, the actuating mechanism must be protected (covered) against damage and pollution. The damper casing should not be deformed during bricking in. Once the damper is built in, the damper blade should not grind against the damper casing during opening or closing.
- The distance between the fire damper and the construction (wall, ceiling) must be 75 mm at the minimum, according to EN 1366-2. If two or more dampers are to be installed in one fire separating construction, the distance between adjacent dampers must be 200 mm at the minimum, according to EN 1366-2.

Minimum distance between the fire dampers and the construction

- minimum distance 200 mm between dampers, according to EN 1366-2
- minimum distance 75 mm between damper and construction (wall/ceiling), according to EN 1366-2
- recommended minimum distance 150 mm necessary for access to the actuator
- recommended minimum distance 250 mm necessary for access to the manual control and electrical components



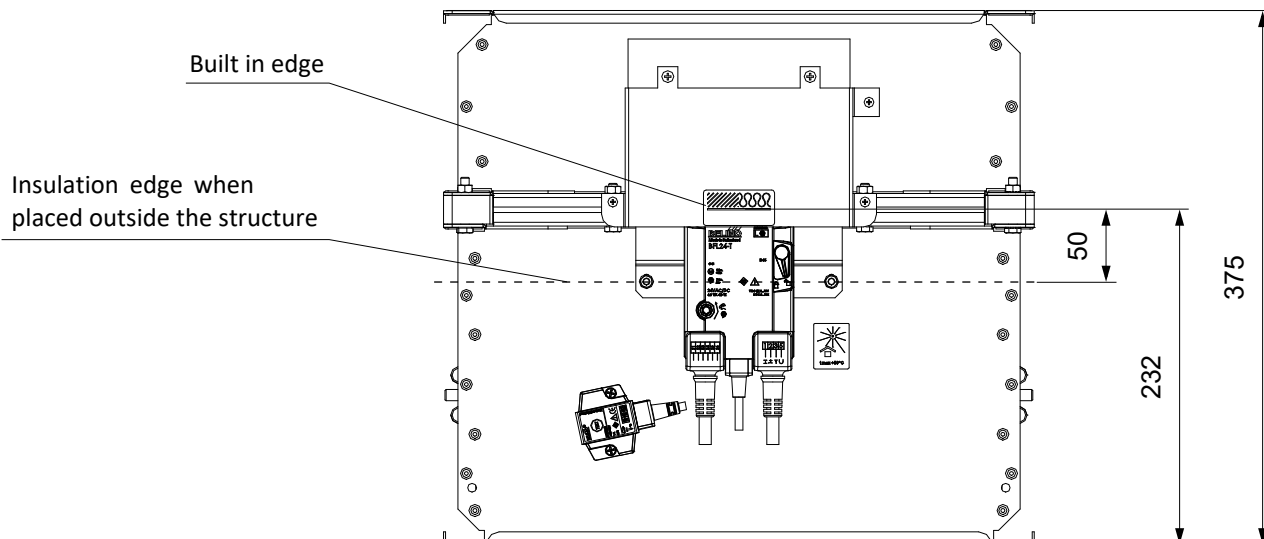
X = recommended min. distance for actuator ≥ 150 mm

X = recommended min. distance for manual control and electrical components ≥ 250 mm

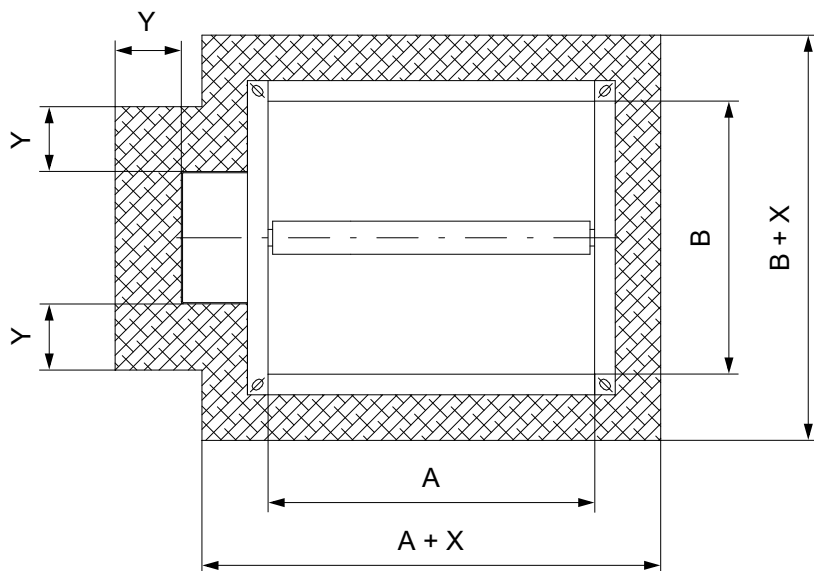
Y = min. distance for actuator ≥ 200 mm acc. to EN 1366-2

Y = recommended min. distance for manual control and electrical components ≥ 250 mm

Built in edge



Dimensions of an installation opening



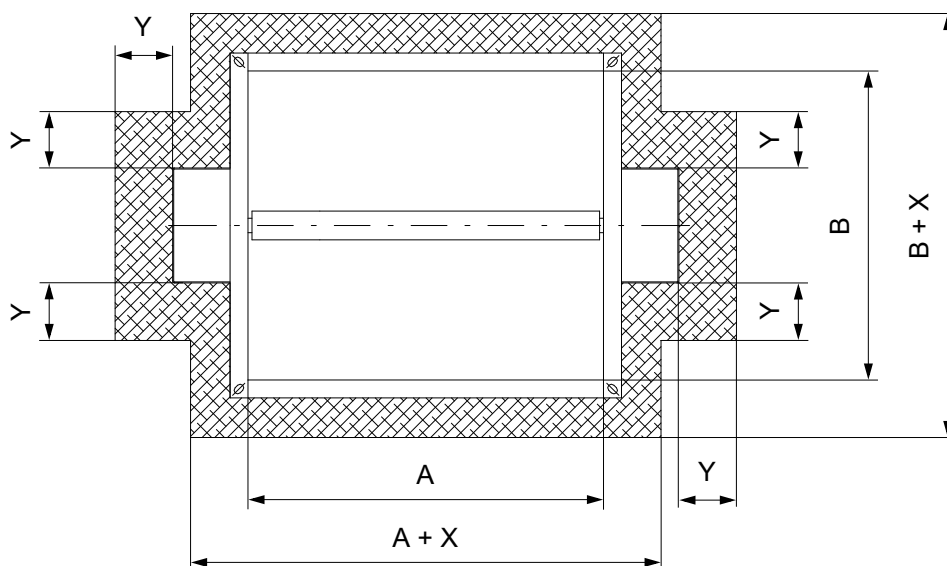
Mortar or gypsum

- X = min. A(B)+100
- X = max. A(B)+300
- Y = min. 50
- Y = max. 150

Ablative Coated Batt

- X = min. A(B)+80
- X = max. A(B)+400
- Y = min. 40
- Y = max. 200

Dimensions of an installation opening with two springs



Stuffing box with fire protective boards

- X = min. A(B)+80
- X = max. A(B)+150
- Y = min. 40
- Y = max. 75

Statement of installations

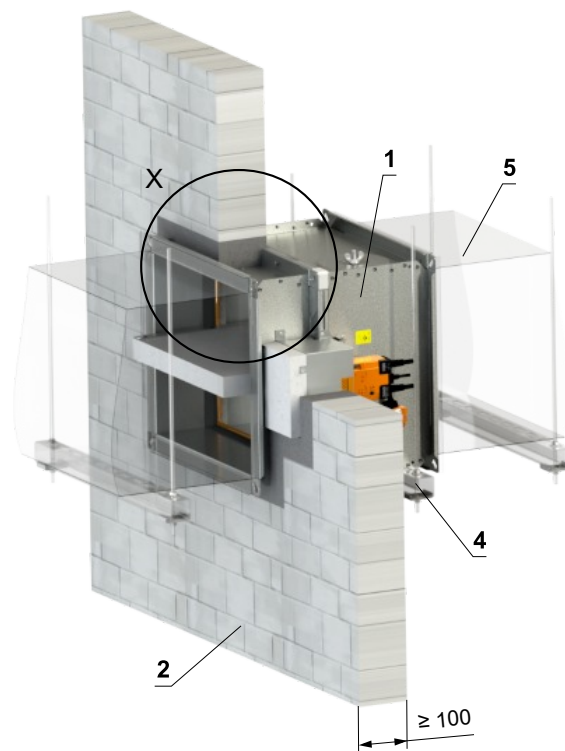
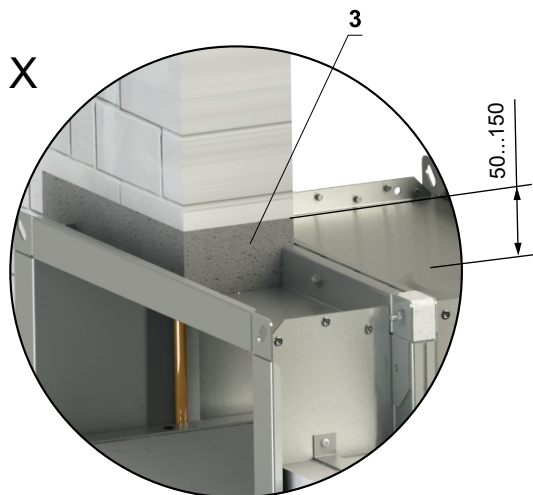
| Fire separating construction, location of the damper | Installation type, installation system | Gap width [mm] | Fire resistance | Page |
|--|---|----------------|------------------------------|------|
| Standard low- and high-density rigid wall construction according to EN 1363-1 <ul style="list-style-type: none"> • damper in the wall • 100 mm min. wall thickness | Mortar or gypsum | 50–150 | | 27 |
| | Ablative Coated Batt | 50–200 | EI 90 (v _e i↔o) S | 28 |
| | Stuffing box with fire protective boards | 40–75 | | 29 |
| Standard low- and high-density rigid wall construction according to EN 1363-1 <ul style="list-style-type: none"> • damper remote from the wall • 100 mm min. wall thickness | Insulation of the duct with ISOVER ULTIMATE PROTECT th. 80 mm – Ablative Coated Batt | 40–75 | EI 60 (v _e i↔o) S | 30 |
| | Insulation of the duct with Rockwool Conlit Ductrock EIS 90 th. 60mm – Stuffing box with fire protective boards | 40–75 | EI 90 (v _e i↔o) S | 31 |
| Standard flexible wall construction min. EI 90 according to EN 1363-1. <ul style="list-style-type: none"> • damper in the wall • 100 mm min. wall thickness | Mortar or gypsum | 50–150 | | 32 |
| | Ablative Coated Batt | 50–200 | EI 90 (v _e i↔o) S | 33 |
| | Stuffing box with fire protective boards | 40–75 | | 34 |
| Standard flexible wall construction min. EI 90 according to EN 1363-1 <ul style="list-style-type: none"> • damper remote from the wall • 100 mm min. wall thickness | Insulation of the duct with ISOVER ULTIMATE PROTECT th. 80 mm – Ablative Coated Batt | 40–75 | EI 60 (v _e i↔o) S | 35 |
| | Insulation of the duct with Rockwool Conlit Ductrock EIS 90 th. 60mm – Stuffing box with fire protective boards | 40–75 | EI 90 (v _e i↔o) S | 36 |
| Standard low- and high-density rigid floor construction according to EN 1366-2 <ul style="list-style-type: none"> • damper in the ceiling • 150 mm min. ceiling thickness | Mortar or gypsum | 50–150 | | 37 |
| | Ablative Coated Batt | 50–200 | EI 90 (h _o i↔o) S | 38 |
| | Stuffing box with fire protective boards | 40–75 | | 39 |
| Standard low- and high-density rigid floor construction according to EN 1366-2 <ul style="list-style-type: none"> • damper remote from the ceiling • 150 mm min. ceiling thickness | Insulation of the duct with Rockwool Conlit Ductrock EIS 90 th. 60 mm – Mortar or gypsum | 50–150 | EI 90 (h _o i↔o) S | 40 |

In solid wall construction

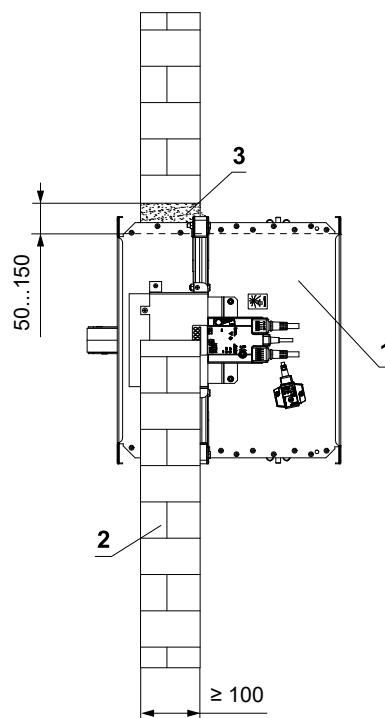
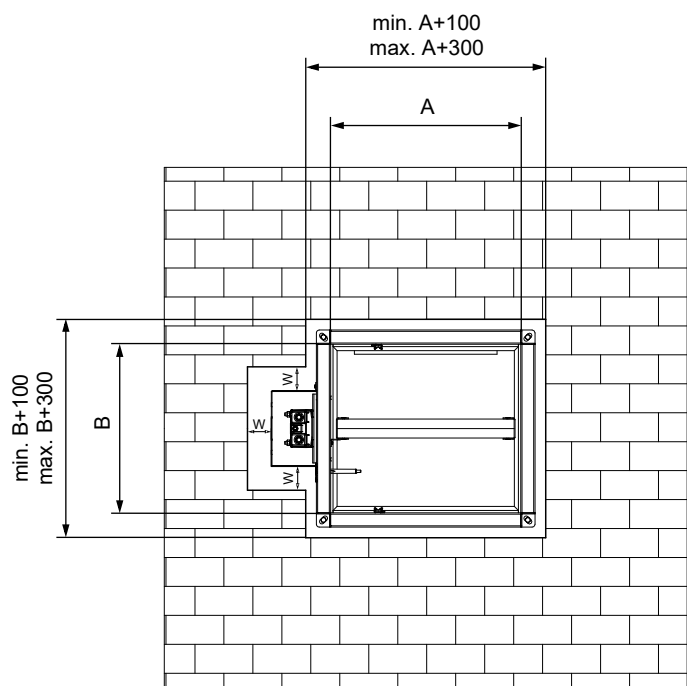
In solid wall construction - mortar or gypsum

EI 90 (v_e i↔o) S

- Standard low- and high-density rigid wall construction according to EN 1363-1
- For connection of following duct → see page 44



W = min. 50 mm
W = max. 150 mm

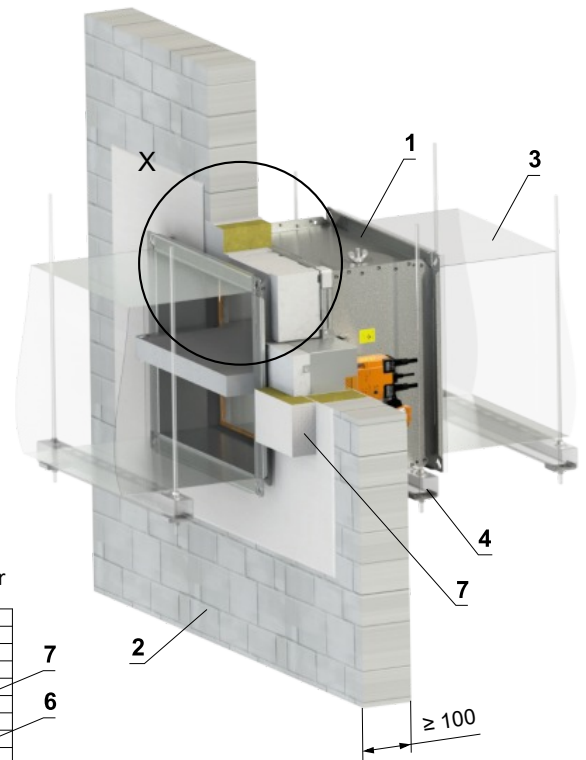
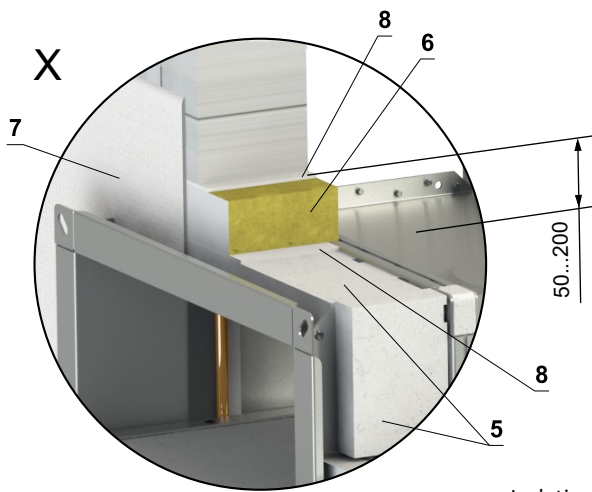


- 1 FDMA
- 2 Solid wall construction
- 3 Mortar or gypsum
- 4 Profile with threaded rod → see pages 41 to 43
- 5 Duct

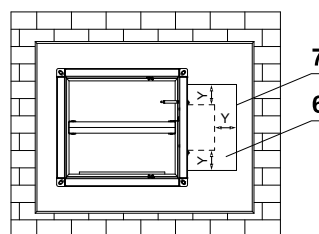
In solid wall construction - Ablative Coated Batt

EI 90 (v_e i↔o) S

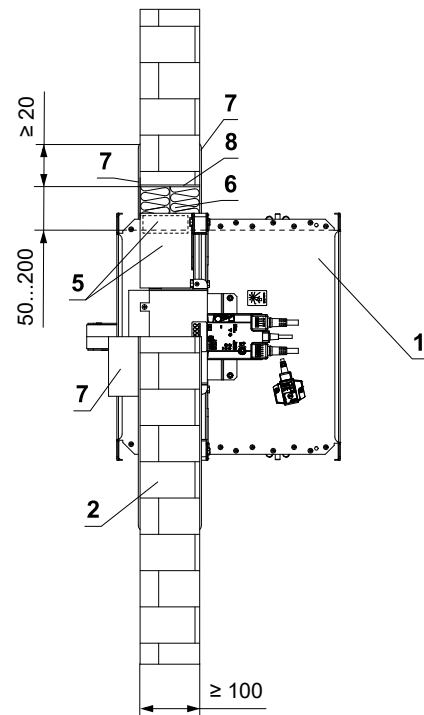
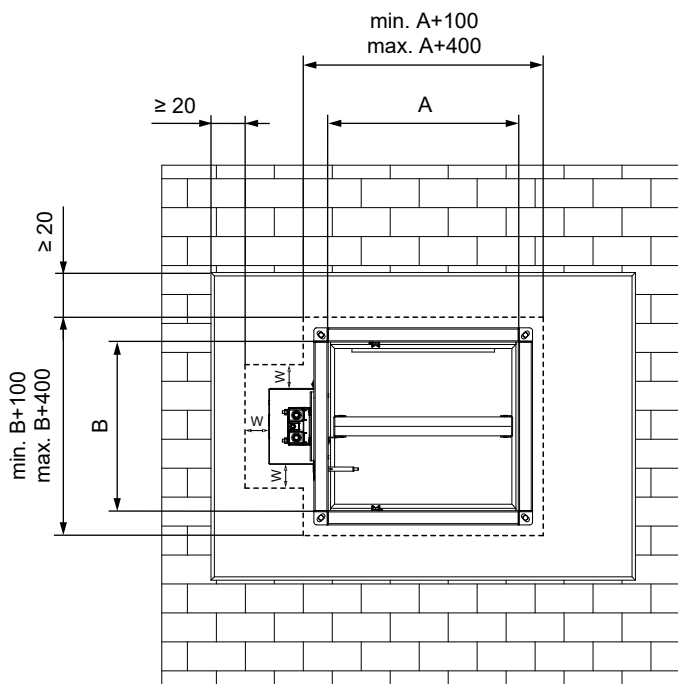
- Standard low- and high-density rigid wall construction according to EN 1363-1
- For connection of following duct → see page 44



Isolation cover of actuator



W = min. 50 mm
 W = max. 200 mm
 Y = min. 100 mm



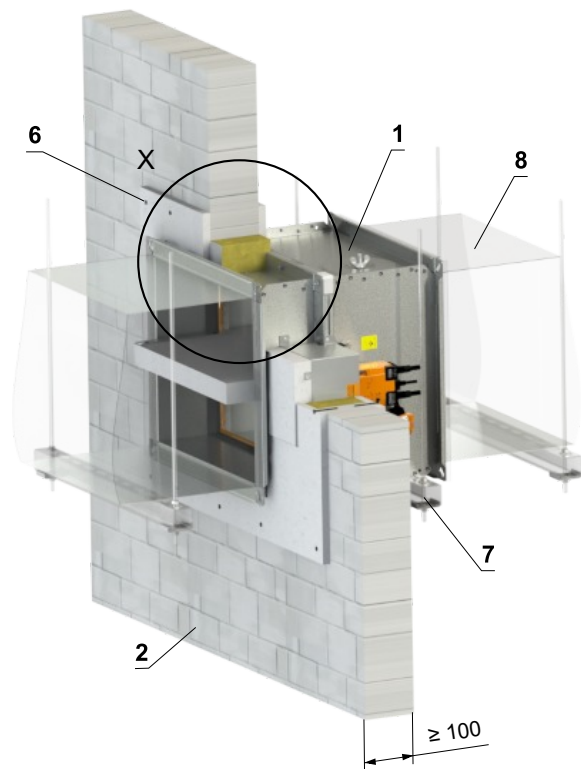
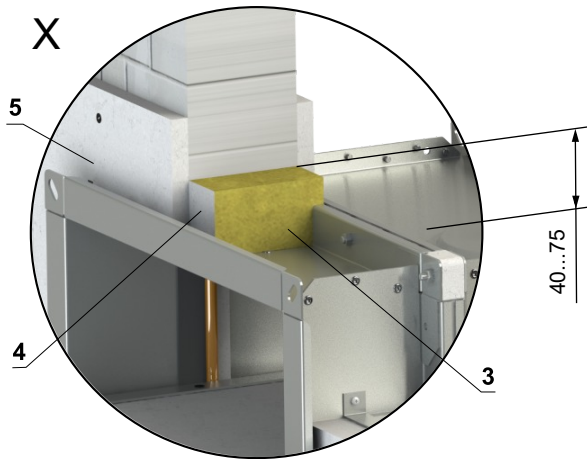
- 1 FDMA
 - 2 Solid wall construction
 - 3 Duct
 - 4 Profile with threaded rod → see pages 41 to 43
 - 5 Protective cladding board - min. th. 30 mm, min. density 750 kg/m³ (e.g. PROMATECT-MST) → see page 52
- Ablative Coated Batt System HILTI*
- 6 Mineral wool board - min. density 140 kg/m³ (HILTI CFS-CT B 1S 140/50...)
 - 7 Fire stop coating - th. 1 mm (HILTI CFS-CT...) - coating is overcoated on the support construction and on the damper casing/duct
 - 8 Fire-resistant mastic - (HILTI CFS-S ACR...) fill the gap from both sides of the fire separation construction and around the perimeter of penetration and damper casing

* HILTI system can be replaced by a similar system with the same or higher thickness, density, fire reaction class, tested according to EN 1366-3.

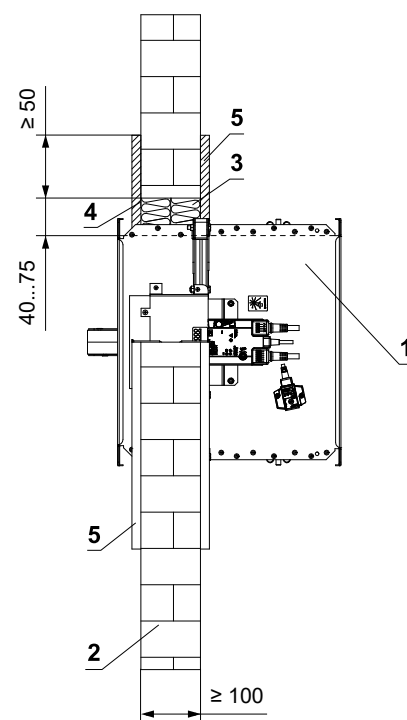
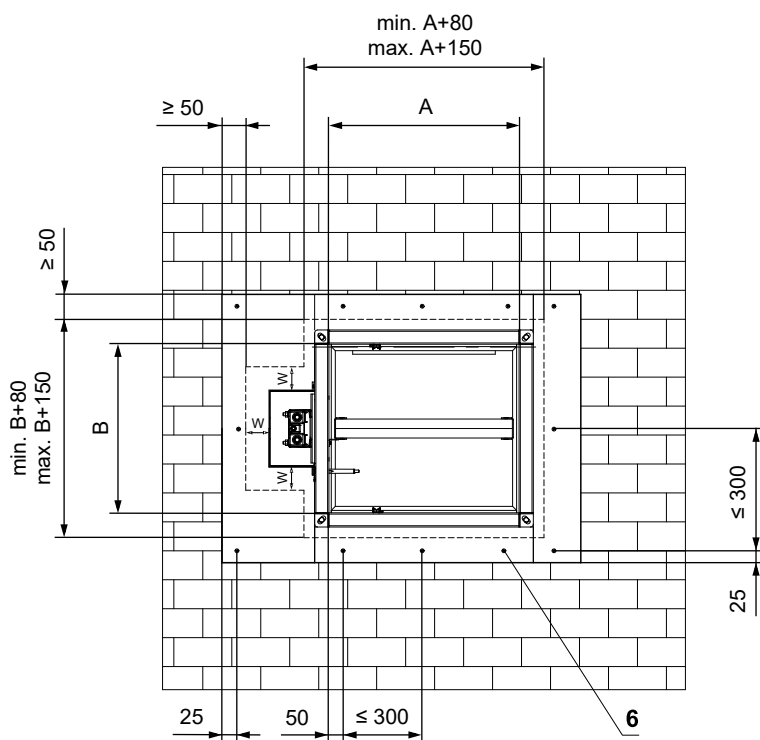
In solid wall construction - mineral wool with fire-resistant coating and fire-resistance boards

EI 90 (v_e i↔o) S

- Standard low- and high-density rigid wall construction according to EN 1363-1
- For connection of following duct → see page 44



W = min. 40 mm
W = max. 75 mm



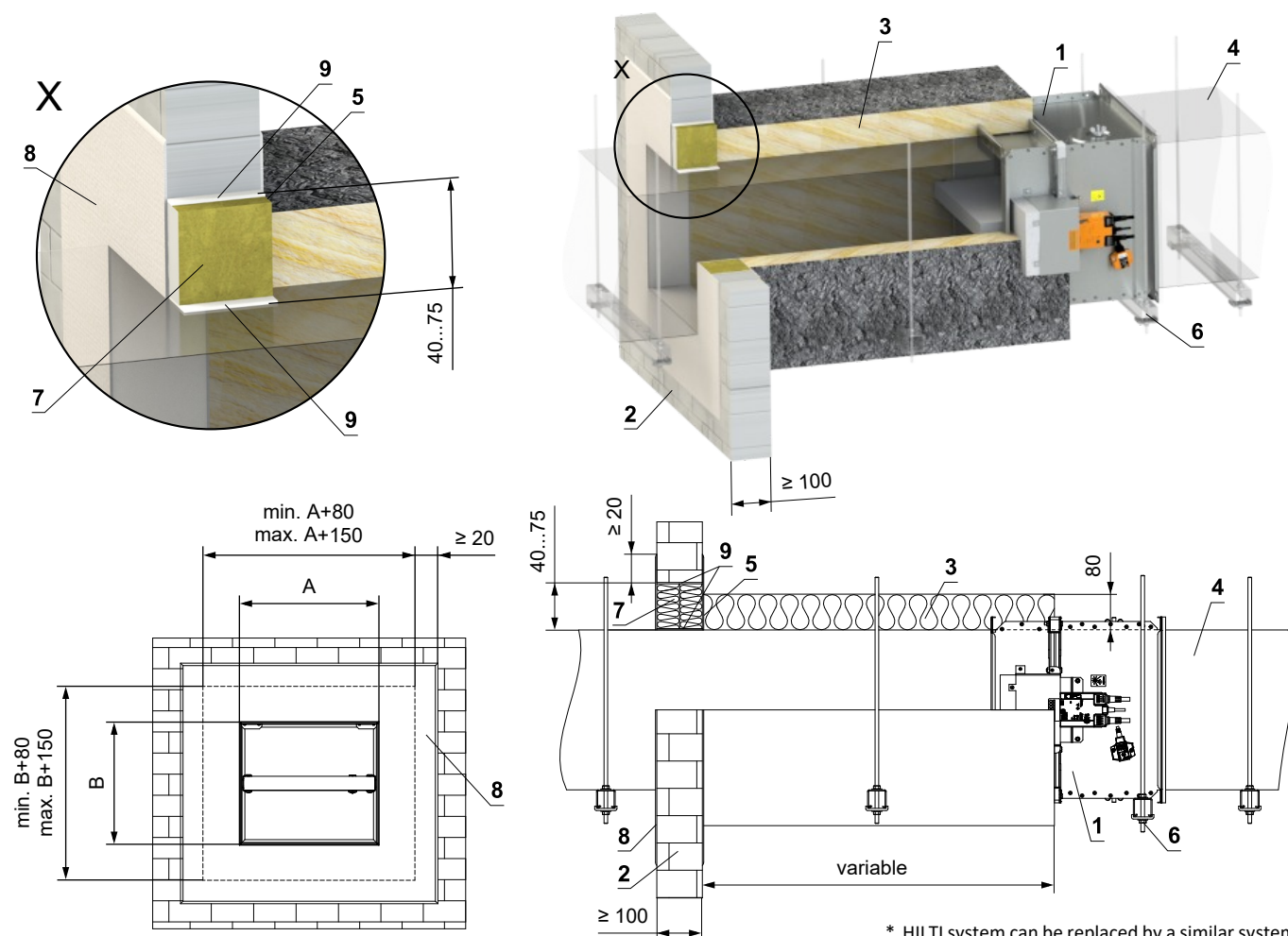
- 1 FDMA
- 2 Solid wall construction
- 3 Mineral wool board - min. density 140 kg/m³ (e.g. PROMAPYR-T150, ROCKWOOL HARDROCK / STEPROCK HD)
- 4 Fire-resistant coating - th. 1 mm (e.g. PROMASTOP-I)
- 5 Fire-resistant board - min. th. 15 mm, min. density 870 kg/m³ (e.g. PROMATECT-H)
- 6 Screw 4x50 mm - screws must be fixed in the wall construction, use steel anchors if necessary
- 7 Profile with threaded rod → see pages 41 to 43
- 8 Duct

Installation outside solid wall construction

Outside solid wall construction - ISOVER Ultimate Protect - Ablative Coated Batt

EI 60 (v_e i↔o) S

- Standard low- and high-density rigid wall construction according to EN 1363-1
- For connection of following duct → see page 44
- Minimum and maximum distance between the wall and fire damper is unlimited
- When installing the insulation, follow the ISOVER manufacturer's instructions
- The damper and the duct must be suspended separately
- The duct must be suspended on both sides of damper acc. to national rules
- Duct between fire damper and fire separating construction must be suspended by using threaded rods and mounting profiles, or another mounting system acc. to national standards
- Load of the suspension system depends on weight of the fire damper and duct system → see page 41
- Max. distance between two suspension systems is 1500 mm
- Duct at the point of penetration must be fixed to the fire separation structure
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers
- If the threaded rod is located inside the duct insulation, distance between threaded rod and duct is max 30 mm
- If the threaded rod is located outside the duct isolation, distance between threaded rod and isolation is max. 40 mm

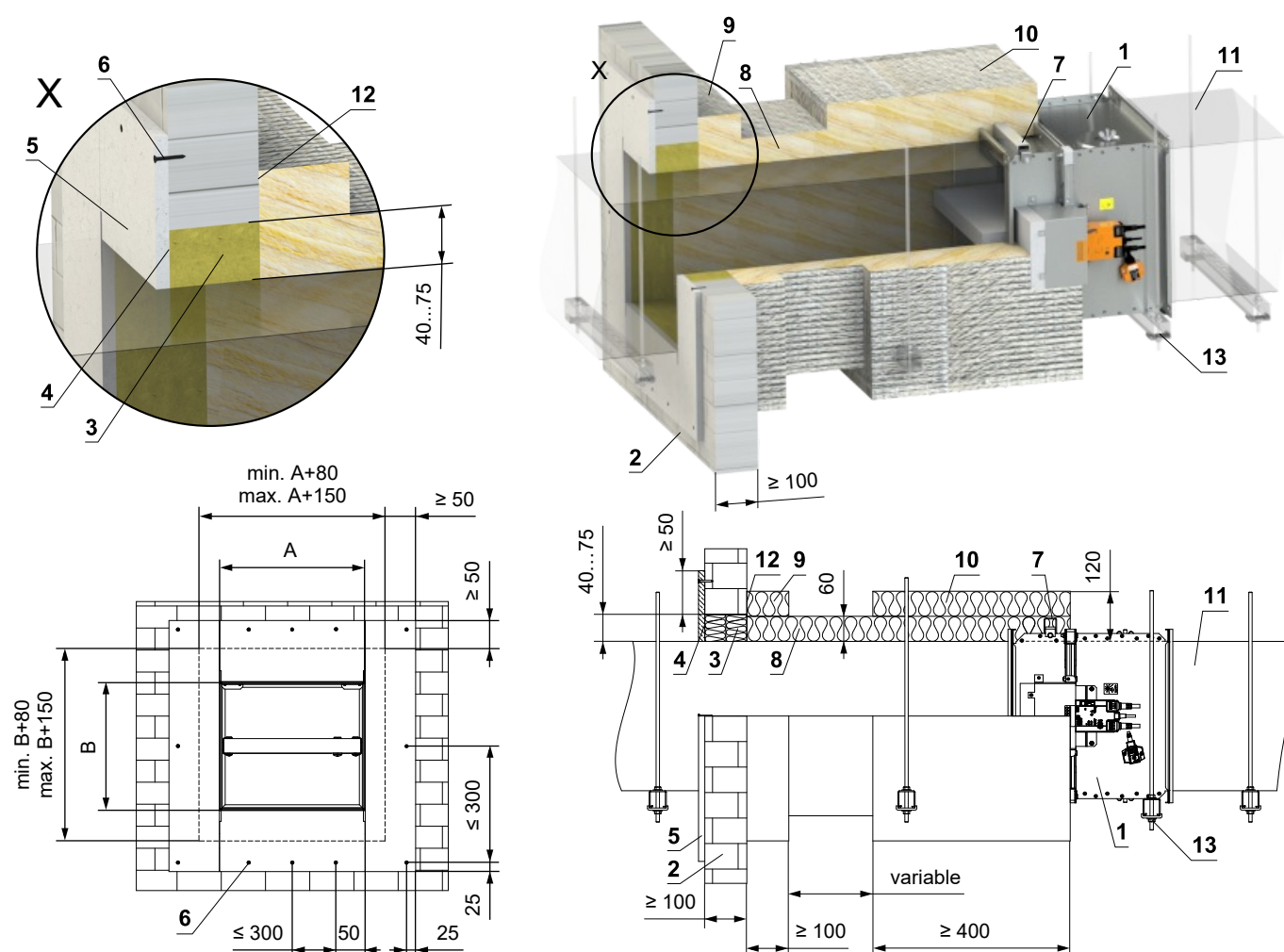


- 1 FDMA
 - 2 Solid wall construction
 - 3 Insulation board made of mineral wool, with a surface treatment of aluminum foil, min. thickness 80 mm, min. density 66 kg/m³ (System ISOVER Ultimate Protect Wired Mat 4.0 Alu1)
 - 4 Standard air duct, made of galvanized sheet metal, thickness according to damper size
 - 5 ISOVER Protect BSK glue - apply on the insulation and fix it to the fire separation construction
 - 6 Profile with threaded rod → see pages 41 to 43
- Ablative Coated Batt System HILTI*
- 7 Mineral wool board - min. density 140 kg/m³ (HILTI CFS-CT B 1S 140/50...)
 - 8 Fire stop coating - th. 1 mm (HILTI CFS-CT...) - coating is overcoated on the support construction and on the damper casing/duct
 - 9 Fire-resistant mastic - (HILTI CFS-S ACR...) fill the gap from both sides of the fire separation construction and around the perimeter of penetration and damper casing

* HILTI system can be replaced by a similar system with the same or higher thickness, density, fire reaction class, tested according to EN 1366-3.

Outside solid wall construction - mineral wool ROCKWOOL - mineral wool with fire-resistant coating EI 90 (v_e i↔o) S and fire-resistant board

- Standard low- and high-density rigid wall construction according to EN 1363-1
- For connection of following duct → see page 44
- Minimum and maximum distance between the wall and fire damper is unlimited
- When installing the insulation, follow the ROCKWOOL manufacturer's instructions
- The damper and the duct must be suspended separately
- The duct must be suspended on both sides of damper acc. to national rules
- Duct between fire damper and fire separating construction must be suspended by using threaded rods and mounting profiles, or another mounting system acc. to national standards
- Load of the suspension system depends on weight of the fire damper and duct system → see page 41
- Max. distance between two suspension systems is 1500 mm
- Duct at the point of penetration must be fixed to the fire separation structure
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers
- If the threaded rod is located inside the duct insulation, distance between threaded rod and duct is max 30 mm
- If the threaded rod is located outside the duct insulation, distance between threaded rod and isolation is max. 40 mm
- For this installation VRM-Q reinforcement frame must be used → see page 51



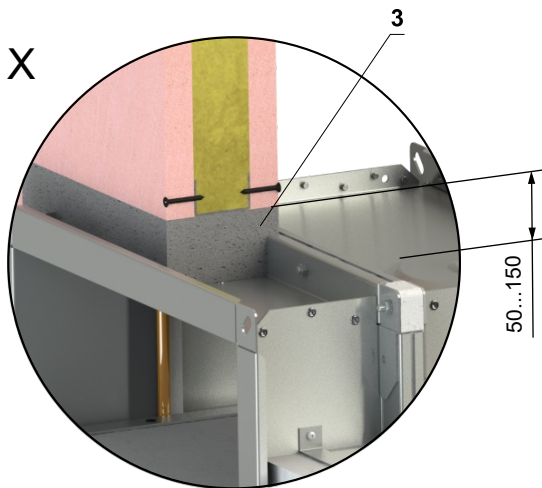
- | | |
|--|---|
| <ul style="list-style-type: none"> 1 FDMA 2 Solid wall construction 3 Mineral wool board - min. density 140 kg/m³ (e.g. PROMAPYR-T150, ROCKWOOL HARDROCK / STEPROCK HD) 4 Fire-resistant coating - th. 1 mm (e.g. PROMASTOP-I) 5 Fire-resistant board - min. th. 15 mm, min. density 870 kg/m³ (e.g. PROMATECT-H) 6 Screw 4x50 mm - screws must be fixed in the wall construction, use steel anchors if necessary 7 VRM-Q → see page 51 | <ul style="list-style-type: none"> 8 Insulation board made of mineral wool, with a surface treatment of aluminum foil - th. 60 mm, min. density 300 kg/m³ - (System ROCKWOOL Conlit Ductrock 90) 9 Duct penetration insulation collar - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) - glued (pos. 12) and fixed with screws to the wall construction 10 Insulation collar of the damper and duct connection - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) 11 Standard air duct, made of galvanized sheet metal, thickness according to damper size 12 ROCKWOOL Firepro glue - apply on the insulation and fix it to the fire separation construction 13 Profile with threaded rod → see pages 41 to 43 |
|--|---|

In gypsum wall construction

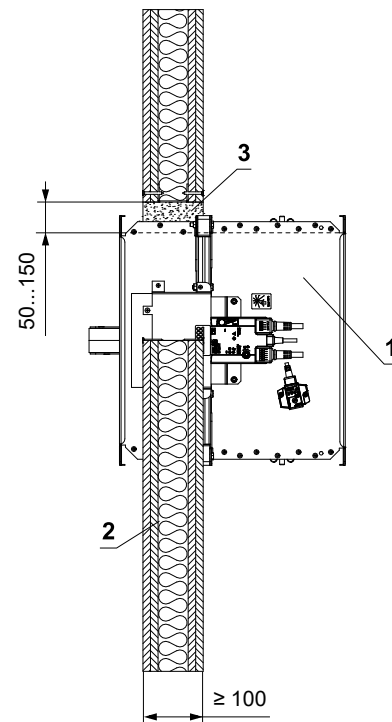
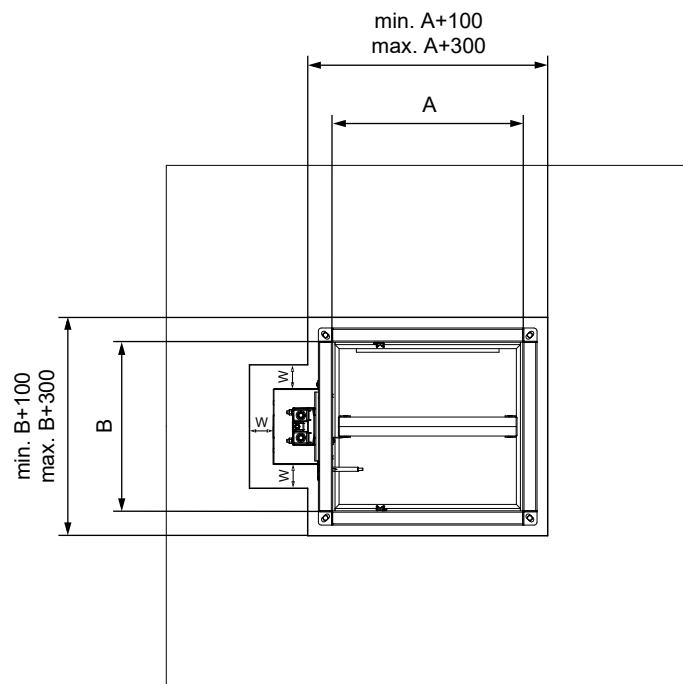
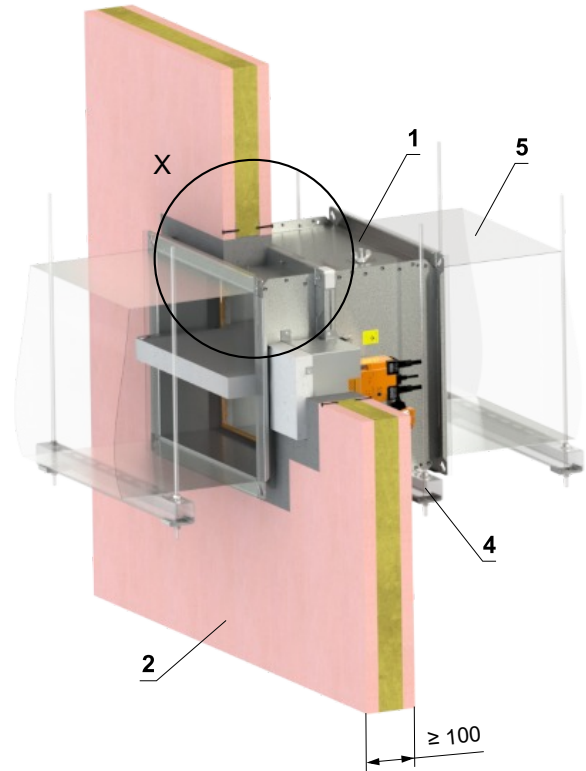
In gypsum wall construction min. EI 90 - mortar or gypsum

EI 90 (v_e i↔o) S

- Standard flexible wall construction min. EI 90 according to EN 1363-1.
- For connection of following duct → see page 44
- The installation opening is lined with a UW/CW profile.



W = min. 50 mm
W = max. 150 mm

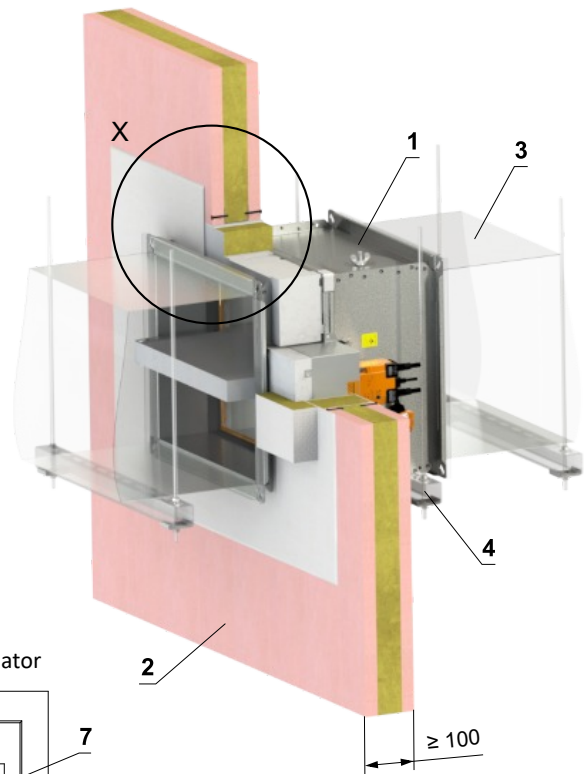
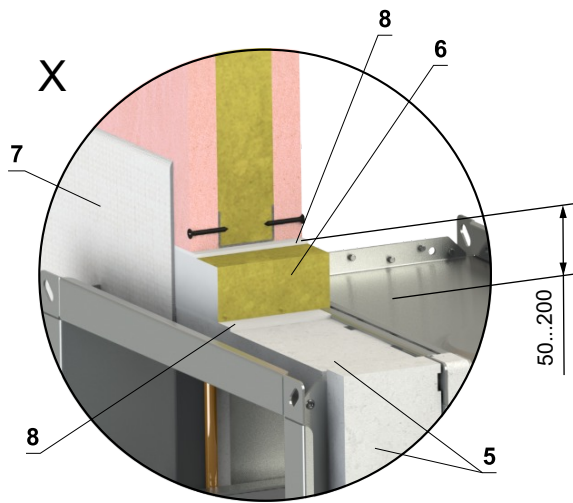


- 1 FDMA
- 2 Gypsum wall construction
- 3 Mortar or gypsum
- 4 Profile with threaded rod → see pages 41 to 43
- 5 Duct

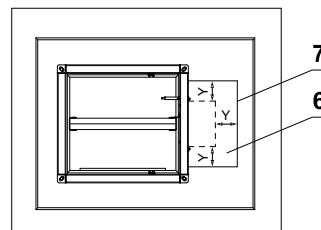
In gypsum wall construction min. EI 90 - Ablative Coated Batt

EI 90 (v_e i↔o) S

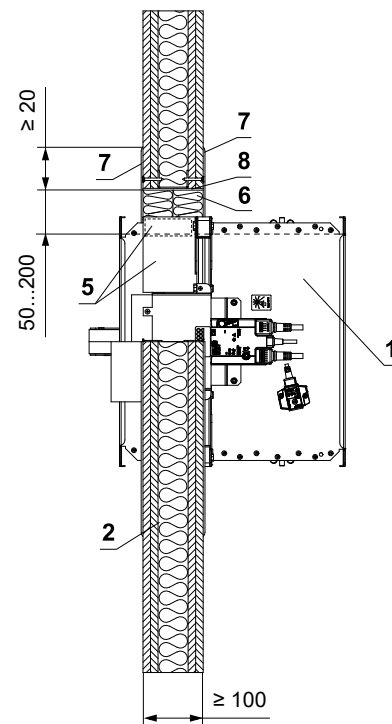
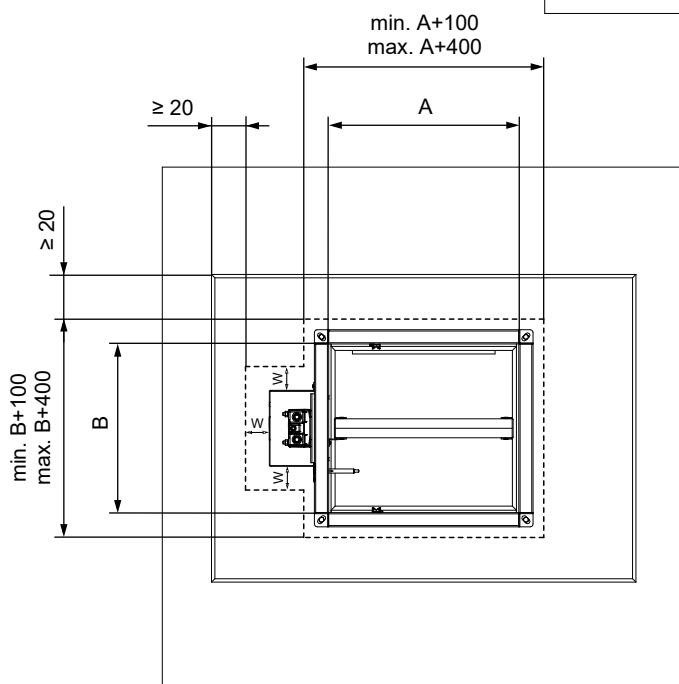
- Standard flexible wall construction min. EI 90 according to EN 1363-1.
- For connection of following duct → see page 44
- The installation opening is lined with a UW/CW profile.



Isolation cover of actuator



W = min. 50 mm
 W = max. 200 mm
 Y = min. 100 mm

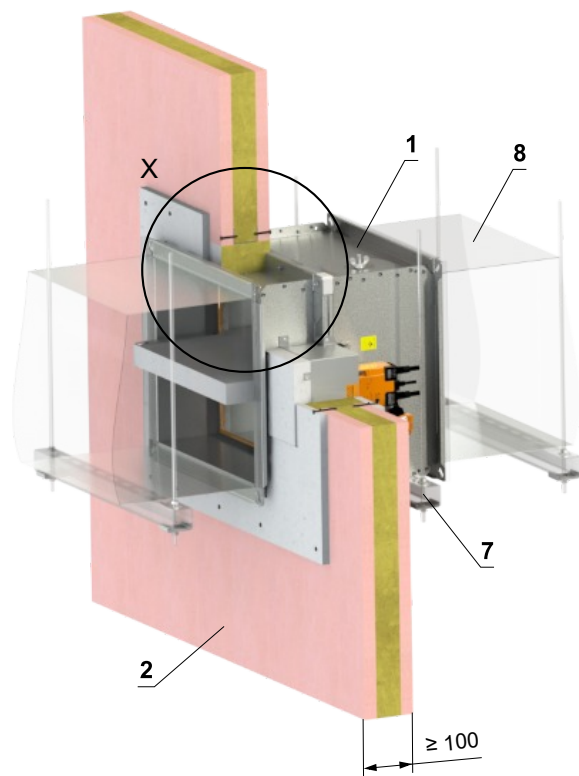
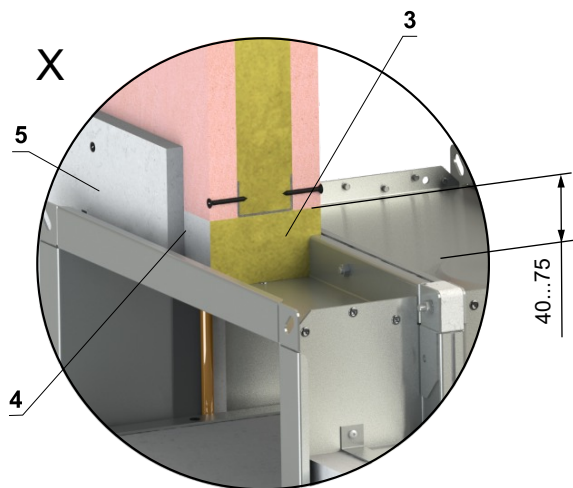


- 1 FDMA
- 2 Gypsum wall construction
- 3 Duct
- 4 Profile with threaded rod → see pages 41 to 43
- 5 Protective cladding board - min. th. 30 mm, min. density 750 kg/m³ (e.g. PROMATECT-MST) → see page 52
 Ablative Coated Batt System HILTI*
- 6 Mineral wool board - min. density 140 kg/m³ (HILTI CFS-CT B 1S 140/50...)
- 7 Fire stop coating - th. 1 mm (HILTI CFS-CT...) - coating is overcoated on the support construction and on the damper casing/duct
- 8 Fire-resistant mastic - (HILTI CFS-S ACR...) fill the gap from both sides of the fire separation construction and around the perimeter of penetration and damper casing

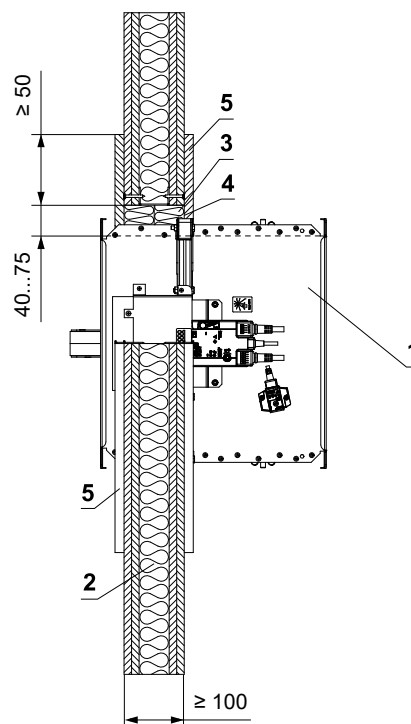
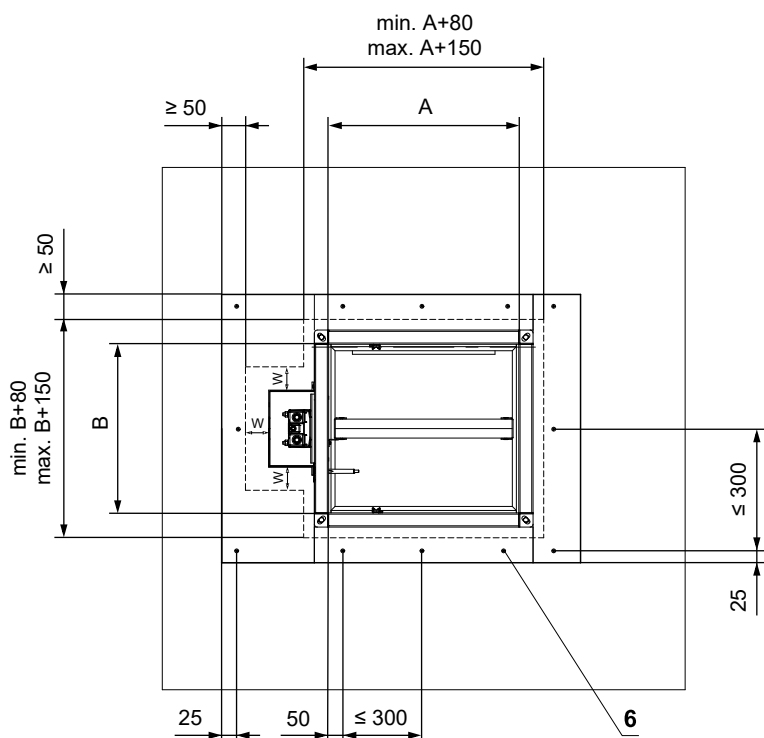
* HILTI system can be replaced by a similar system with the same or higher thickness, density, fire reaction class, tested according to EN 1366-3.

In gypsum wall construction min. EI 90 - mineral wool with fire-resistant coating and fire-resistance boards EI 90 (v_e i↔o) S

- Standard flexible wall construction min. EI 90 according to EN 1363-1.
- For connection of following duct → see page 44
- The installation opening is lined with a UW/CW profile.



W = min. 40 mm
W = max. 75 mm



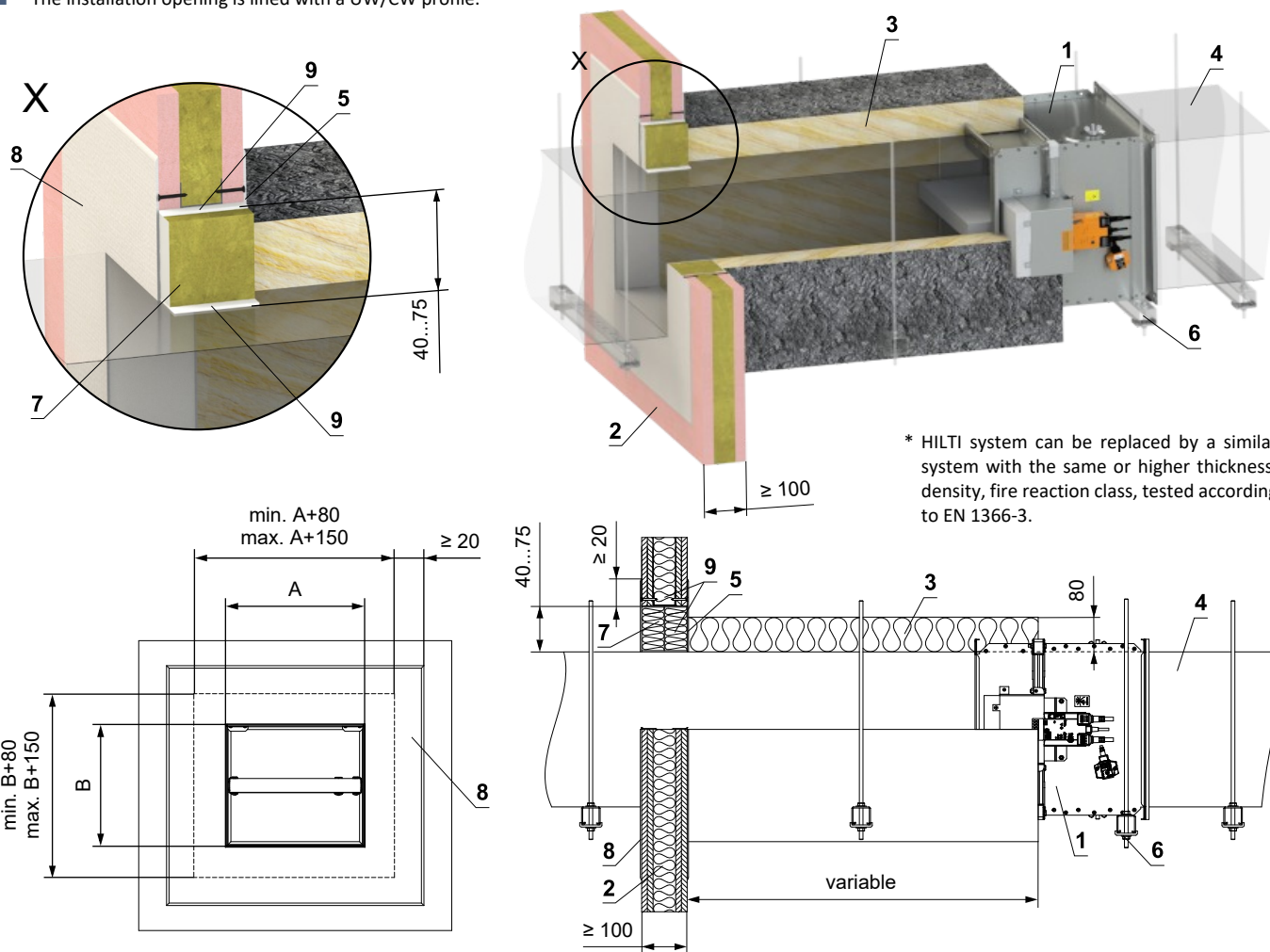
- 1 FDMA
- 2 Gypsum wall construction
- 3 Mineral wool board - min. density 140 kg/m³ (e.g. PROMAPYR-T150, ROCKWOOL HARDROCK / STEPROCK HD)
- 4 Fire-resistant coating - th. 1 mm (e.g. PROMASTOP-I)
- 5 Fire-resistant board - min. th. 15 mm, min. density 870 kg/m³ (e.g. PROMATECT-H)
- 6 Screw 4x50 mm - screws must be fixed in the wall construction, use steel anchors if necessary
- 7 Profile with threaded rod → see pages 41 to 43
- 8 Duct

Installation outside gypsum wall construction

Outside gypsum wall construction min. EI 90 - ISOVER Ultimate Protect - Ablative Coated Batt

EI 60 ($v_e i \leftrightarrow o$) S

- Standard flexible wall construction min. EI 90 according to EN 1363-1.
- For connection of following duct → see page 44
- Minimum and maximum distance between the wall and fire damper is unlimited
- When installing the insulation, follow the ISOVER manufacturer's instructions
- The damper and the duct must be suspended separately
- The duct must be suspended on both sides of damper acc. to national rules
- Duct between fire damper and fire separating construction must be suspended by using threaded rods and mounting profiles, or another mounting system acc. to national standards
- Load of the suspension system depends on weight of the fire damper and duct system → see page 41
- Max. distance between two suspension systems is 1500 mm
- Duct at the point of penetration must be fixed to the fire separation structure
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers
- If the threaded rod is located inside the duct insulation, distance between threaded rod and duct is max 30 mm
- If the threaded rod is located outside the duct isolation, distance between threaded rod and isolation is max. 40 mm
- The installation opening is lined with a UW/CW profile.

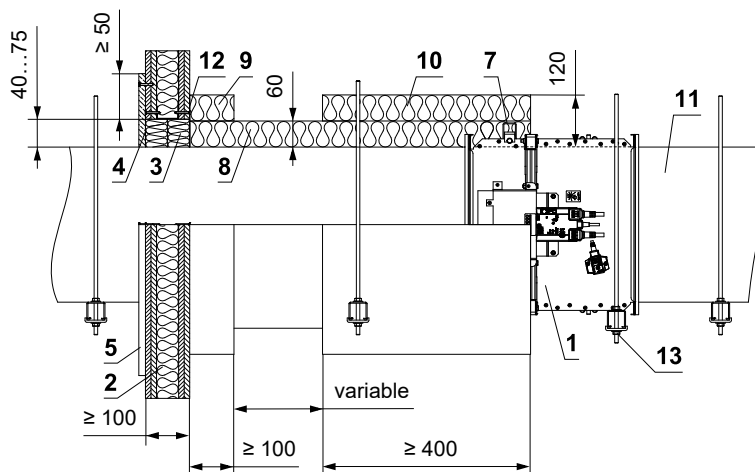
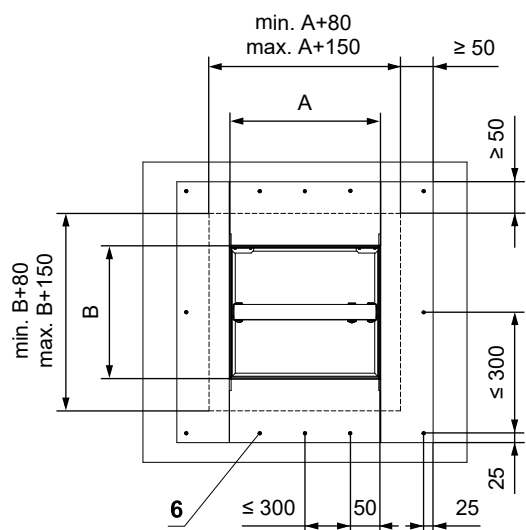
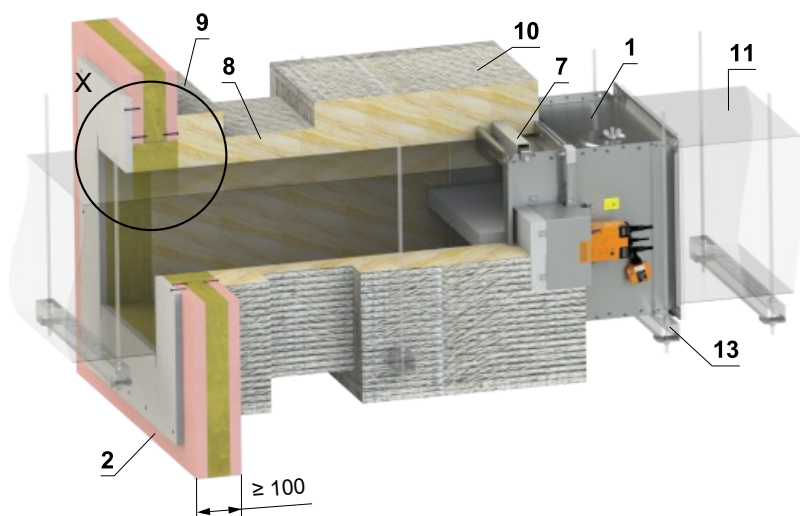
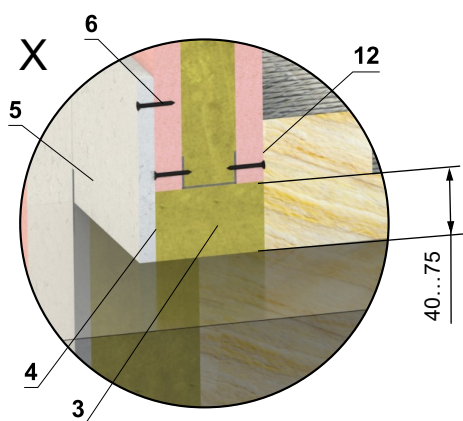


- 1 FDMA
- 2 Gypsum wall construction
- 3 Insulation board made of mineral wool, with a surface treatment of aluminum foil, min. thickness 80 mm, min. density 66 kg/m³ (System ISOVER Ultimate Protect Wired Mat 4.0 Alu1)
- 4 Standard air duct, made of galvanized sheet metal, thickness according to damper size
- 5 ISOVER Protect BSK glue - apply on the insulation and fix it to the fire separation construction
- 6 Profile with threaded rod → see pages 41 to 43
Ablative Coated Batt System HILTI*
- 7 Mineral wool board - min. density 140 kg/m³ (HILTI CFS-CT B 1S 140/50...)
- 8 Fire stop coating - th. 1 mm (HILTI CFS-CT...) - coating is overcoated on the support construction and on the damper casing/duct
- 9 Fire-resistant mastic - (HILTI CFS-S ACR...) fill the gap from both sides of the fire separation construction and around the perimeter of penetration and damper casing

Outside gypsum wall construction min. EI 90 - mineral wool ROCKWOOL - mineral wool with fire-resistant coating and fire-resistant board

EI 90 (v_e i↔o) S

- Standard flexible wall construction min. EI 90 according to EN 1363-1.
- For connection of following duct → see page 44
- Minimum and maximum distance between the wall and fire damper is unlimited
- When installing the insulation, follow the ROCKWOOL manufacturer's instructions
- The damper and the duct must be suspended separately
- The duct must be suspended on both sides of damper acc. to national rules
- Duct between fire damper and fire separating construction must be suspended by using threaded rods and mounting profiles, or another mounting system acc. to national standards
- Load of the suspension system depends on weight of the fire damper and duct system → see page 41
- Max. distance between two suspension systems is 1500 mm
- Duct at the point of penetration must be fixed to the fire separation structure
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers
- If the threaded rod is located inside the duct insulation, distance between threaded rod and duct is max 30 mm
- If the threaded rod is located outside the duct isolation, distance between threaded rod and isolation is max. 40 mm
- For this installation VRM-Q reinforcement frame must be used → see page 51
- The installation opening is lined with a UW/CW profile.



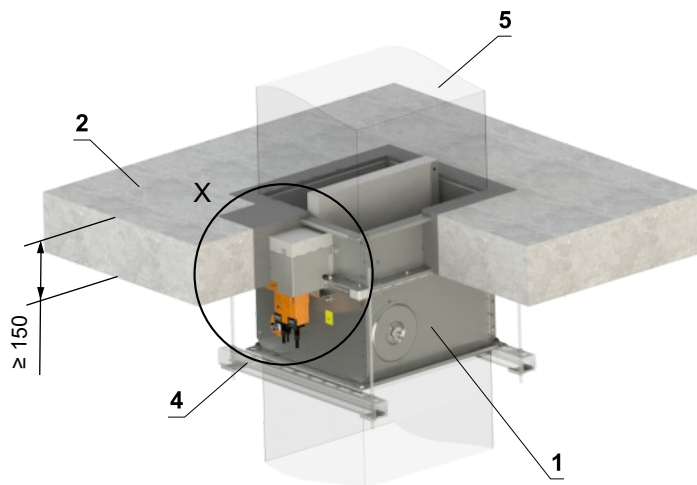
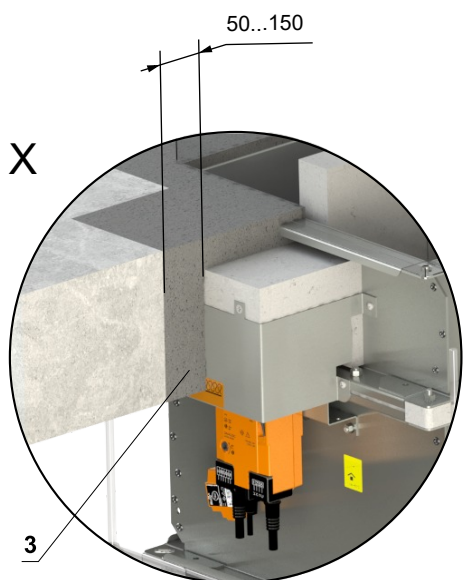
- | | |
|---|---|
| <ol style="list-style-type: none"> 1 FDMA 2 Gypsum wall construction 3 Mineral wool board - min. density 140 kg/m³ (e.g. PROMAPYR-T150, ROCKWOOL HARDROCK / STEPROCK HD) 4 Fire-resistant coating - th. 1 mm (e.g. PROMASTOP-I) 5 Fire-resistant board - min. th. 15 mm, min. density 870 kg/m³ (e.g. PROMATECT-H) 6 Screw 4x50 mm - screws must be fixed in the wall construction, use steel anchors if necessary 7 VRM-Q → see page 51 | <ol style="list-style-type: none"> 8 Insulation board made of mineral wool, with a surface treatment of aluminum foil - th. 60 mm, min. density 300 kg/m³ - (System ROCKWOOL Conlit Ductrock 90) 9 Duct penetration insulation collar - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) - glued (pos. 12) and fixed with screws to the wall construction 10 Insulation collar of the damper and duct connection - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) 11 Standard air duct, made of galvanized sheet metal, thickness according to damper size 12 ROCKWOOL Firepro glue - apply on the insulation and fix it to the fire separation construction 13 Profile with threaded rod → see pages 41 to 43 |
|---|---|

In solid ceiling construction

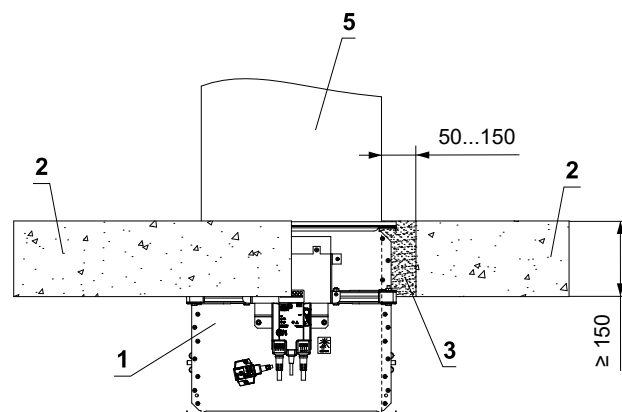
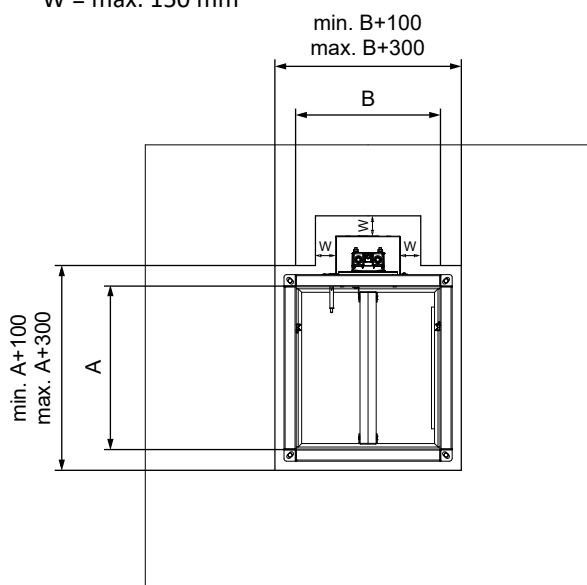
In solid ceiling construction - mortar or gypsum

EI 90 (h_o i↔o) S

- Standard low- and high-density rigid floor construction according to EN 1366-2
- For connection of following duct → see page 44
- The damper can be installed from both sides of the construction, i.e. from the top or the bottom side of the ceiling.



W = min. 50 mm
W = max. 150 mm

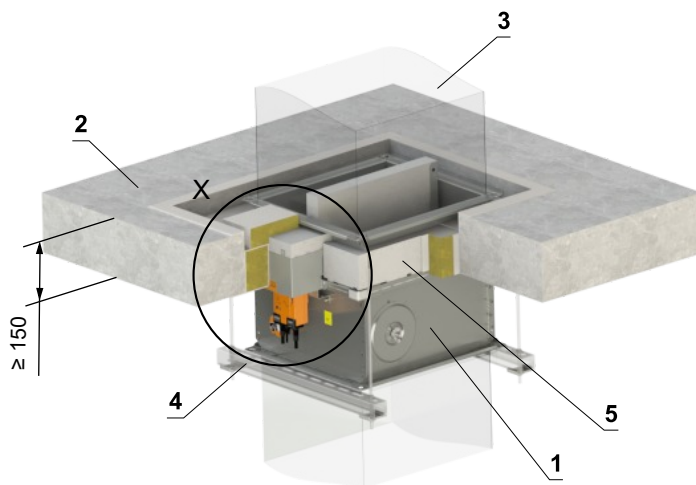
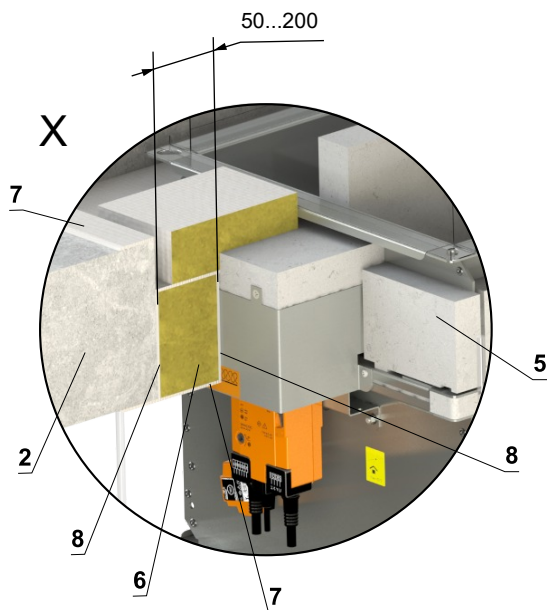


- 1 FDMA
- 2 Solid ceiling construction
- 3 Mortar or gypsum
- 4 Profile with threaded rod → see pages 41 to 43
- 5 Duct

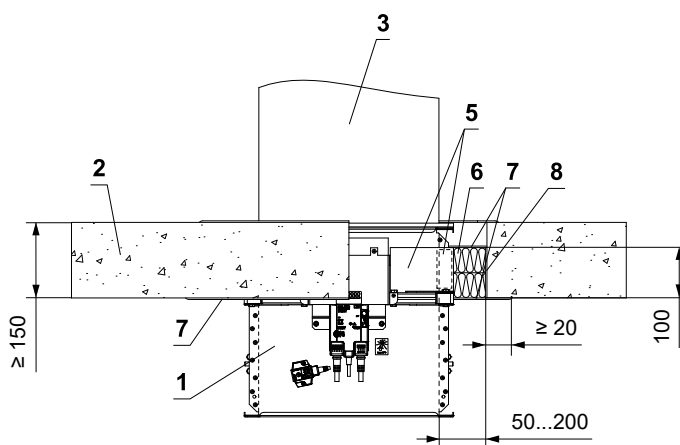
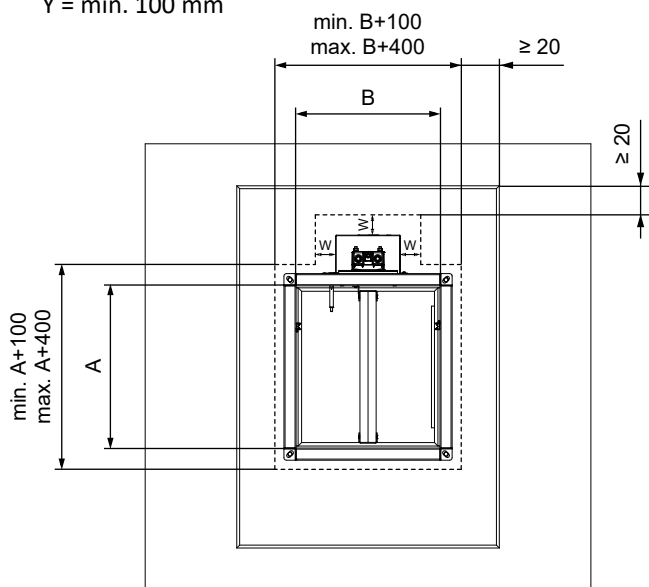
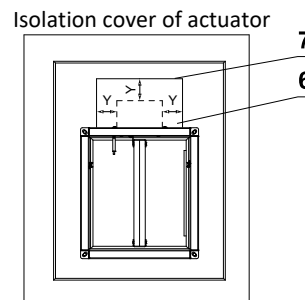
In solid ceiling construction - Ablative Coated Batt

EI 90 (h_o i↔o) S

- Standard low- and high-density rigid floor construction according to EN 1366-2
- For connection of following duct → see page 44
- The damper can be installed from both sides of the construction, i.e. from the top or the bottom side of the ceiling.



W = min. 50 mm
 W = max. 200 mm
 Y = min. 100 mm



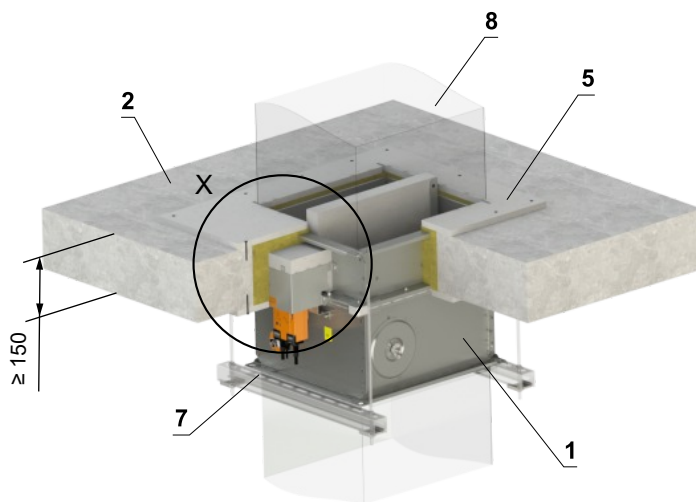
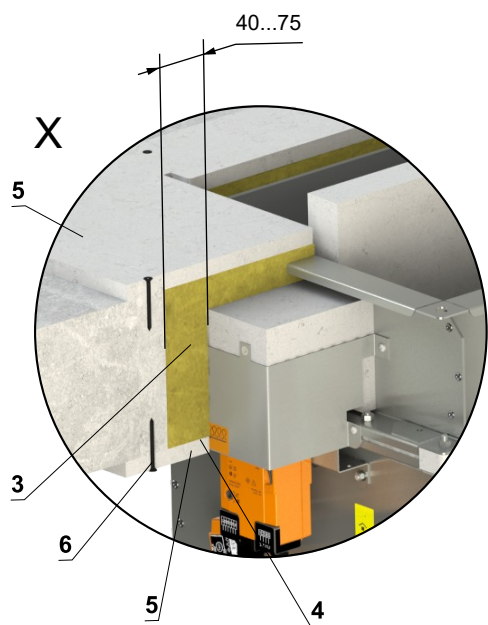
- 1 FDMA
- 2 Solid ceiling construction
- 3 Duct
- 4 Profile with threaded rod → see pages 41 to 43
- 5 Protective cladding board - min. th. 30 mm, min. density 750 kg/m³ (e.g. PROMATECT-MST) → see page 52
 Ablative Coated Batt System HILTI*
- 6 Mineral wool board - min. density 140 kg/m³ (HILTI CFS-CT B 1S 140/50...)
- 7 Fire stop coating - th. 1 mm (HILTI CFS-CT...) - coating is overcoated on the support construction and on the damper casing/duct
- 8 Fire-resistant mastic - (HILTI CFS-S ACR...) fill the gap from both sides of the fire separation construction and around the perimeter of penetration and damper casing

* HILTI system can be replaced by a similar system with the same or higher thickness, density, fire reaction class, tested according to EN 1366-3.

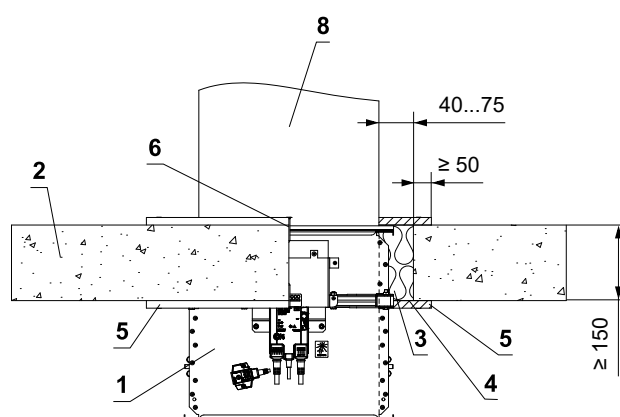
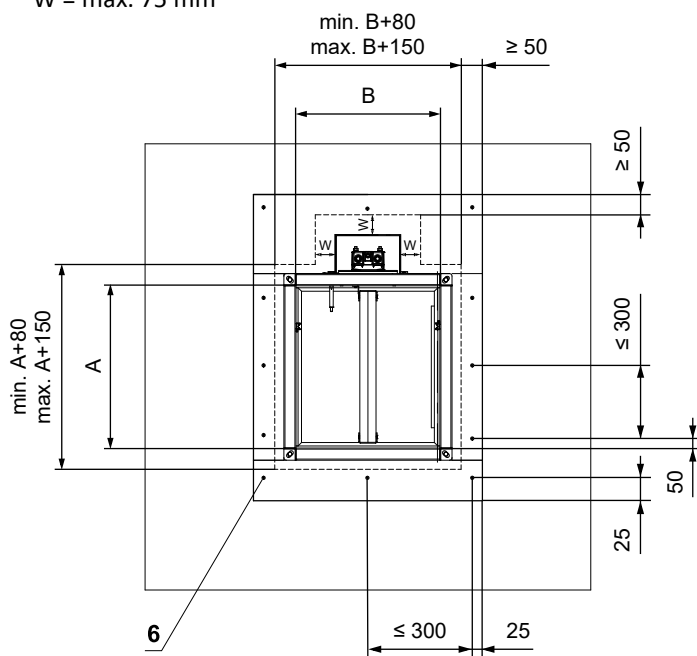
In solid ceiling construction - mineral wool with fire-resistant coating and fire-resistance boards

EI 90 (h_o i↔o) S

- Standard low- and high-density rigid floor construction according to EN 1366-2
- For connection of following duct → see page 44
- The damper can be installed from both sides of the construction, i.e. from the top or the bottom side of the ceiling.



W = min. 40 mm
W = max. 75 mm



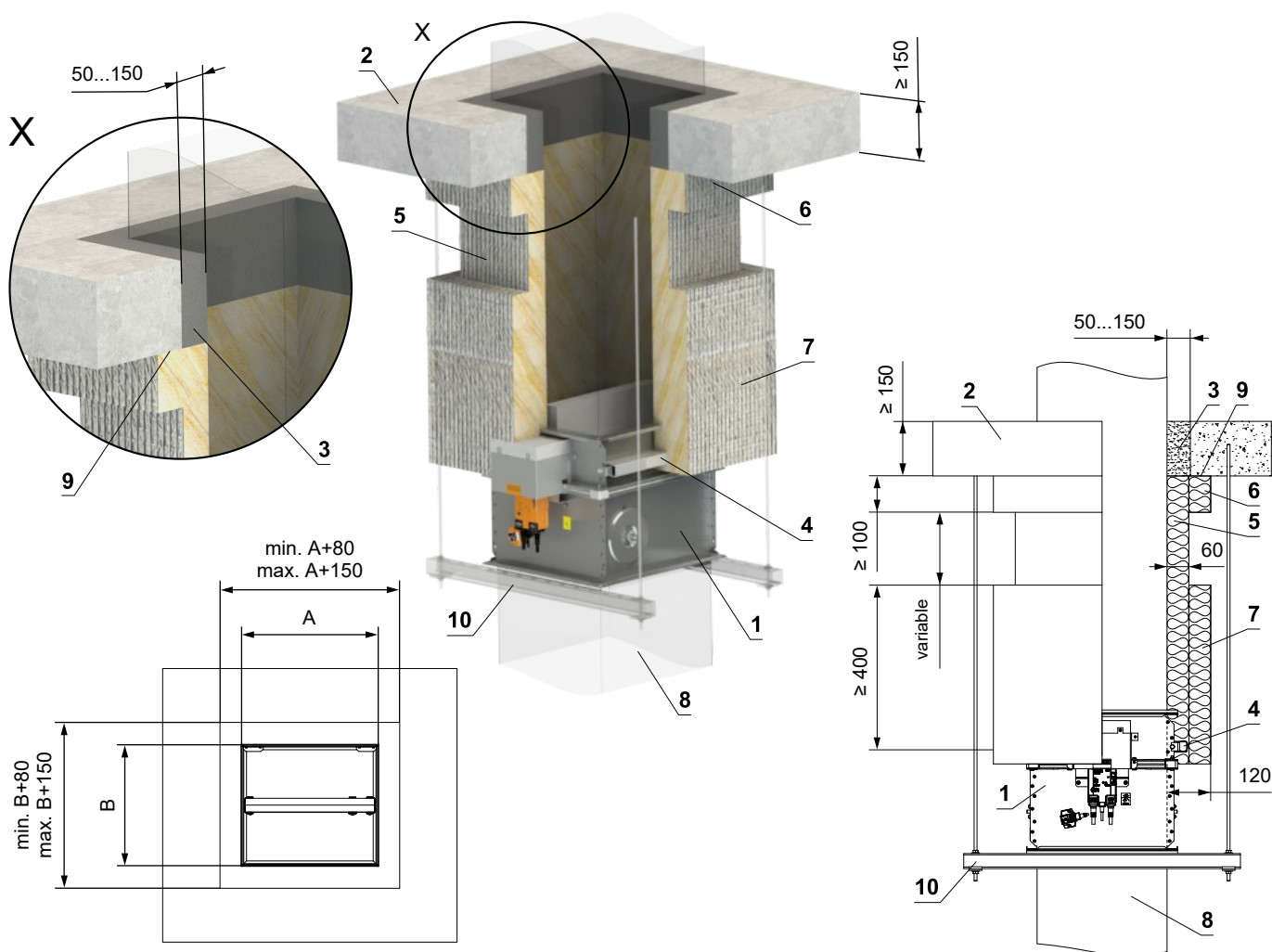
- 1 FDMA
- 2 Solid ceiling construction
- 3 Mineral wool board - min. density 140 kg/m³ (e.g. PROMAPYR-T150, ROCKWOOL HARDROCK / STEPROCK HD)
- 4 Fire-resistant coating - th. 1 mm (e.g. PROMASTOP-I)
- 5 Fire-resistant board - min. th. 15 mm, min. density 870 kg/m³ (e.g. PROMATECT-H)
- 6 Screw 4x50 mm - screws must be fixed in the wall construction, use steel anchors if necessary
- 7 Profile with threaded rod → see pages 41 to 43
- 8 Duct

Outside solid ceiling construction

Outside solid wall construction - mineral wool ROCKWOOL - mortar or gypsum

EI 90 (h_o i↔o) S

- Standard low- and high-density rigid floor construction according to EN 1366-2
- For connection of following duct → see page 44
- Minimum and maximum distance between the ceiling and fire damper is unlimited
- When installing the insulation, follow the ROCKWOOL manufacturer's instructions
- The damper and the duct must be suspended separately
- The duct must be suspended on both sides of damper acc. to national rules
- Duct between fire damper and fire separating construction must be suspended by using threaded rods and mounting profiles, or another mounting system acc. to national standards
- Load of the suspension system depends on weight of the fire damper and duct system → see page 41
- Max. distance between two suspension systems is 1500 mm
- Duct at the point of penetration must be fixed to the fire separation structure
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the fire damper is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers
- If the threaded rod is located inside the duct insulation, distance between threaded rod and duct is max 30 mm
- If the threaded rod is located outside the duct isolation, distance between threaded rod and isolation is max. 40 mm
- For this installation VRM-Q reinforcement frame must be used → see page 51
- The damper can be installed from both sides of the construction, i.e. from the top or the bottom side of the ceiling.



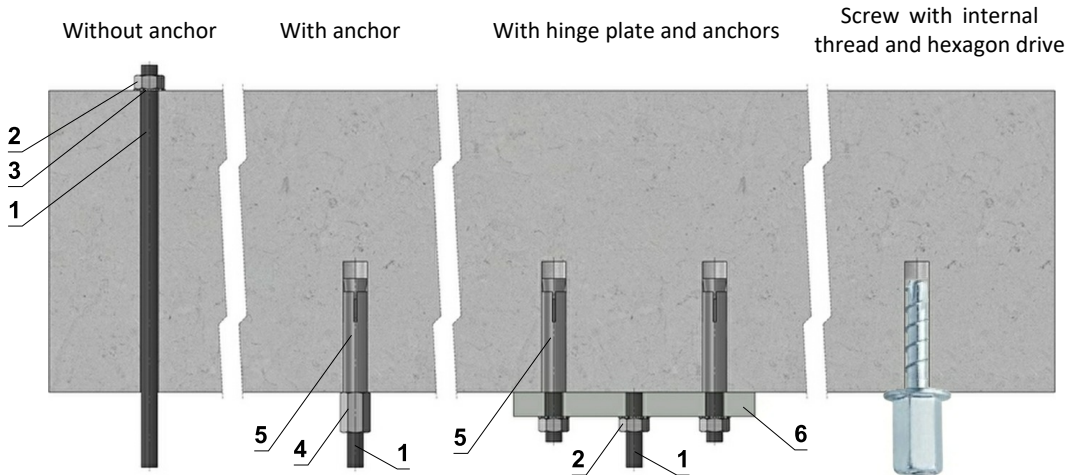
- | | |
|--|--|
| <ol style="list-style-type: none"> 1 FDMA 2 Solid ceiling construction 3 Mortar or gypsum 4 VRM-Q → see page 51 5 Insulation board made of mineral wool, with a surface treatment of aluminum foil - th. 60 mm, min. density 300 kg/m³ - (System ROCKWOOL Conlit Ductrock 90) 6 Duct penetration insulation collar - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) - glued (pos. 9) and fixed with screws to the wall construction | <ol style="list-style-type: none"> 7 Insulation collar of the damper and duct connection - th. 60 mm (System ROCKWOOL Conlit Ductrock 90) 8 Standard air duct, made of galvanized sheet metal, thickness according to damper size 9 ROCKWOOL Firepro glue - apply on the insulation and fix it to the fire separation construction 10 Profile with threaded rod → see pages 41 to 43 |
|--|--|

V. SUSPENSION SYSTEMS

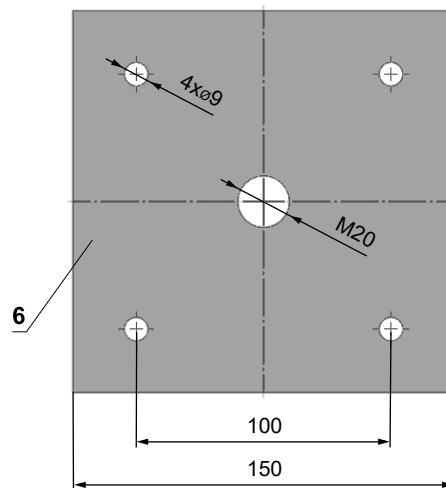
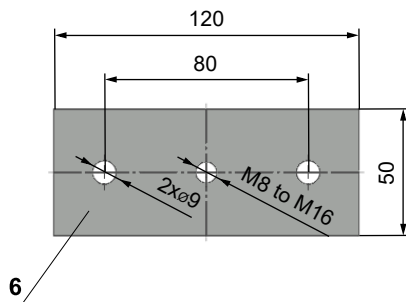
Mounting to the ceiling wall

- The dampers must be suspended using threaded rods and mounting profiles. Their dimensioning depend on the weight of the damper.
- The dampers and the duct must be suspended separately.
- Following air-conditioning duct must be suspended or supported so that all load transfer from the following duct to the damper flanges is absolutely excluded. Adjacent duct must be suspended or supported, as required by the duct suppliers.

Examples of anchoring to the ceiling construction Follow the instructions of fixing specialist or installation company



Hinge plates



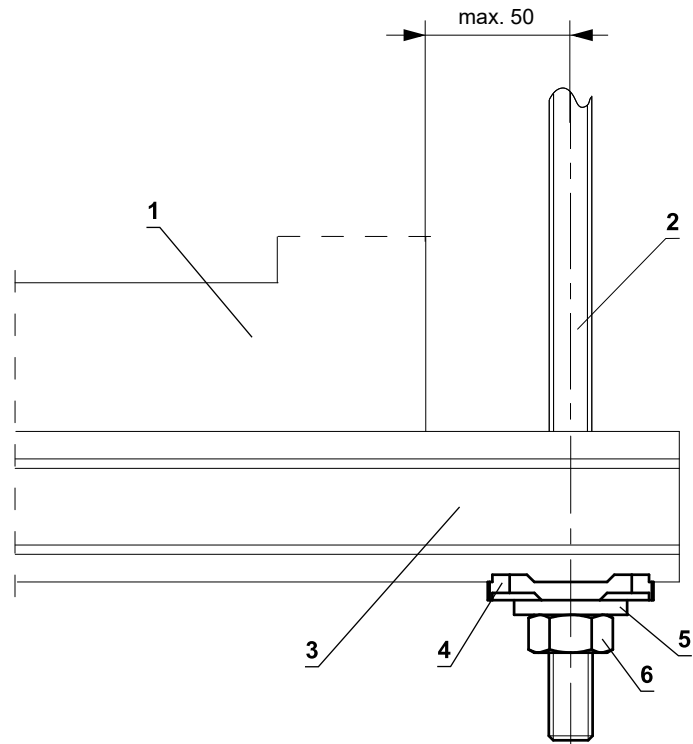
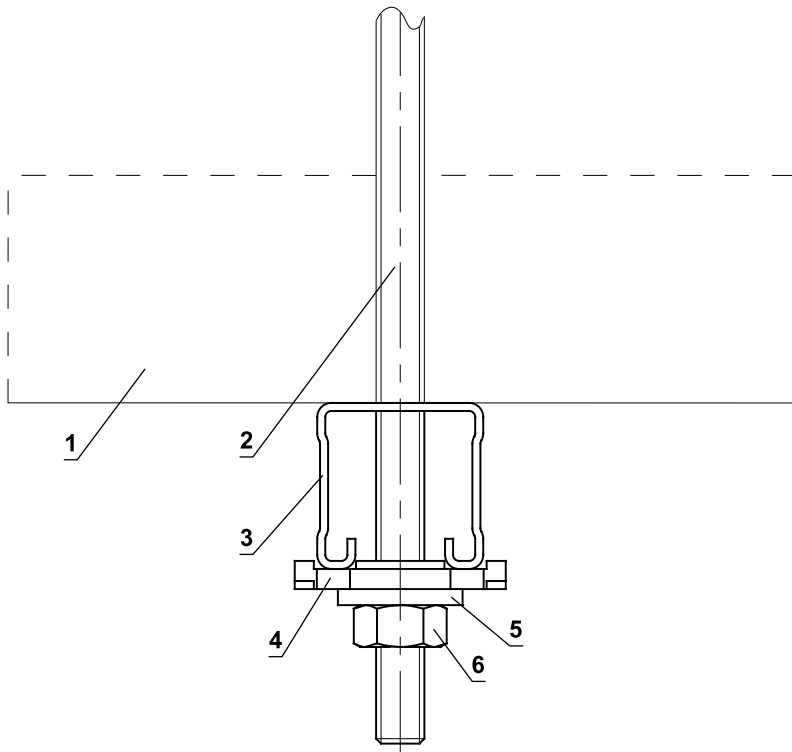
- If in doubt, always consult an anchor specialist engineer such as Halfen or Hilti.

Load capacities of threaded rods at the required fire resistance 60 min. $t \le 120 \text{ min.}$

| Size | As [mm ²] | Weight [kg] | |
|------|-----------------------|-------------|------------|
| | | for 1 rod | for 2 rods |
| M8 | 36,6 | 22 | 44 |
| M10 | 58 | 35 | 70 |
| M12 | 84,3 | 52 | 104 |
| M16 | 157 | 96 | 192 |
| M18 | 192 | 117 | 234 |
| M20 | 245 | 150 | 300 |

- 1 Threaded rod M8 - M20
- 2 Nut M8 - M20
- 3 Washer for M8 - M20
- 4 Coupling Nut M8 - M20
- 5 Anchor
- 6 Hinge plate - min. thickness 10 mm
- 7 Concrete screw tested for fire resistance R30-R90, max. Tension up to 0.75 KN (length 35 mm)

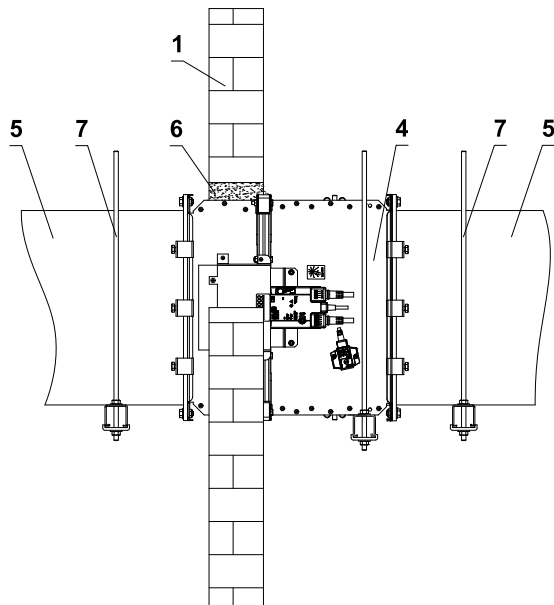
Example of placing of mounting profiles HILTI



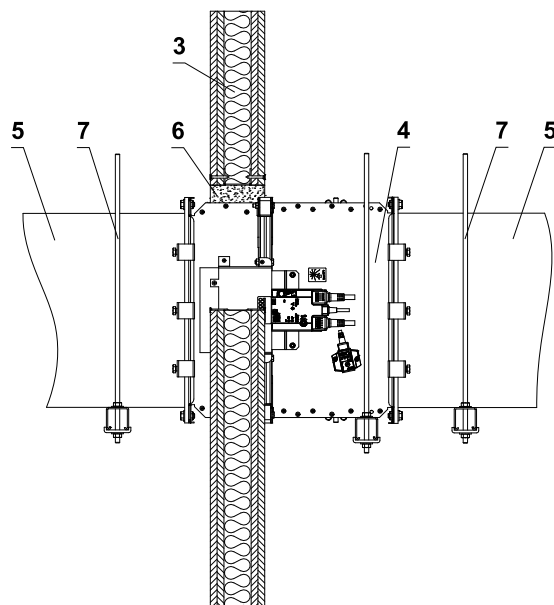
- 1 FDMA
- 2 Threaded rod M8 - M12
- 3 Support HILTI MQ-41 or MQ-41/3
- 4 Bored plate HILTI MQZ-L
- 5 Washer for M8 - M12
- 6 Nut M8 - M12

Example of fixing FDMA to the wall ceiling

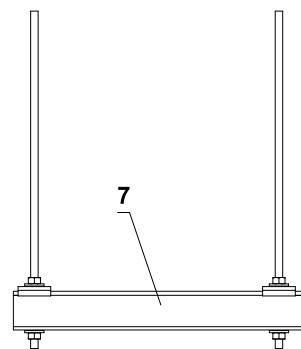
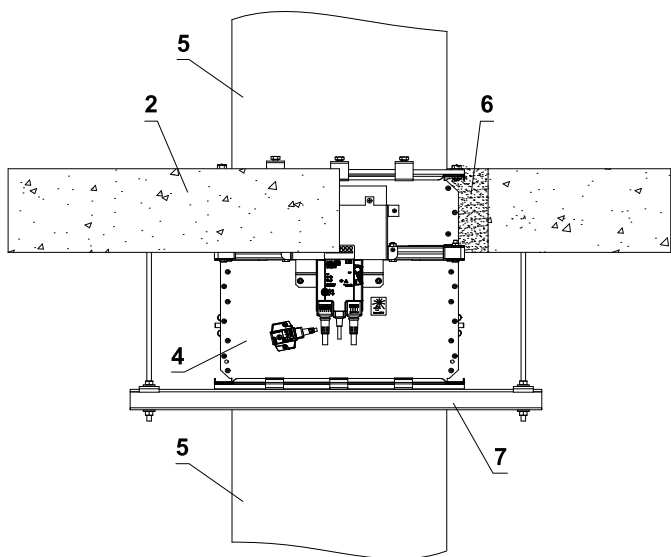
In solid wall construction



In gypsum wall construction



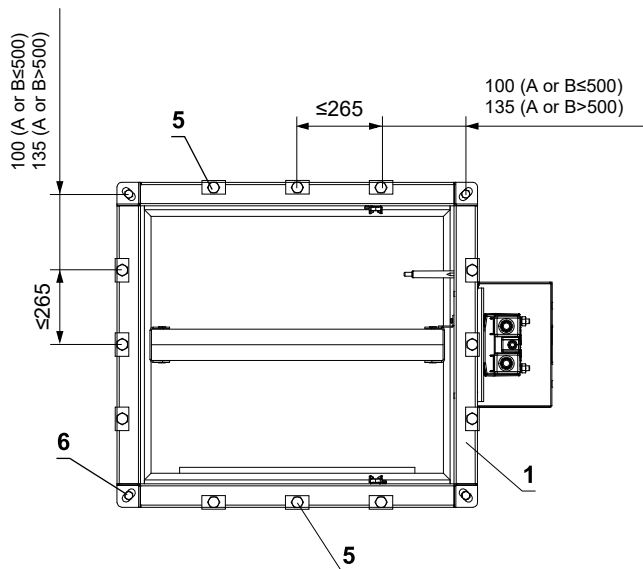
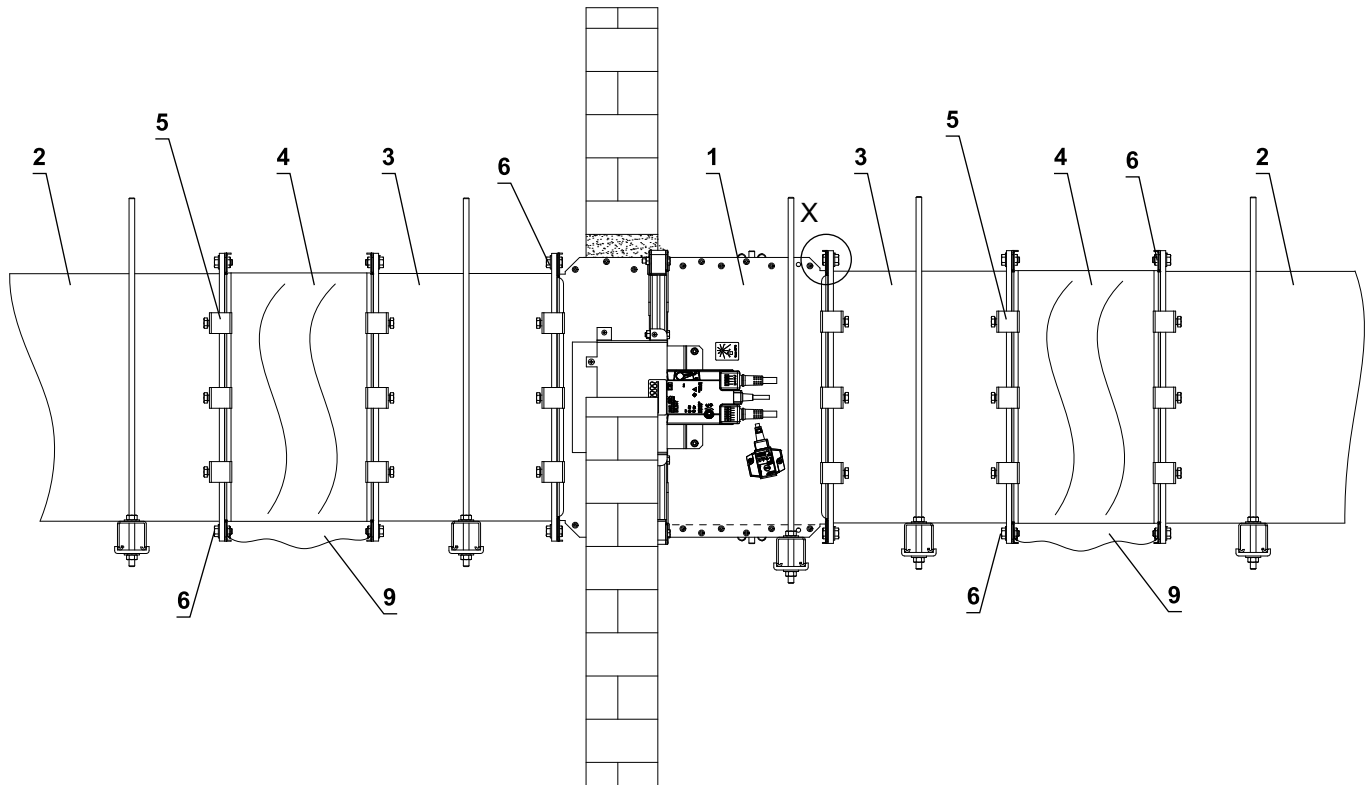
In solid ceiling construction



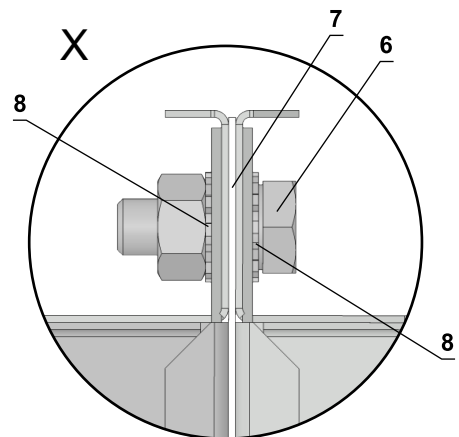
- 1 Solid wall construction
- 2 Solid ceiling construction
- 3 Gypsum wall construction
- 4 FDMA
- 5 Duct
- 6 Penetration
- 7 Profile with threaded rod → see page 42

- The method of attachment must follow the minimum requirements for attachment and connection of ductwork in accordance with national regulations. Also, the elements can be suspended from the top, or supported from bottom, or fastened from the side.

Example of duct connection



Electrically conductive connection



* at least one connection must be electrically conductive

- 1 FDMA
- 2 Duct
- 3 Extension piece (if required)
- 4 Damping pad
- 5 Steel clamp min. screw M8
- 6 Screw assembly M8 (screw M8x20 mm, 2 pcs toothed lock washer M8, nut M8) *
- 7 Sealing
- 8 Toothed lock washer M8
- 9 Protective bonding conductor

VI. TECHNICAL DATA

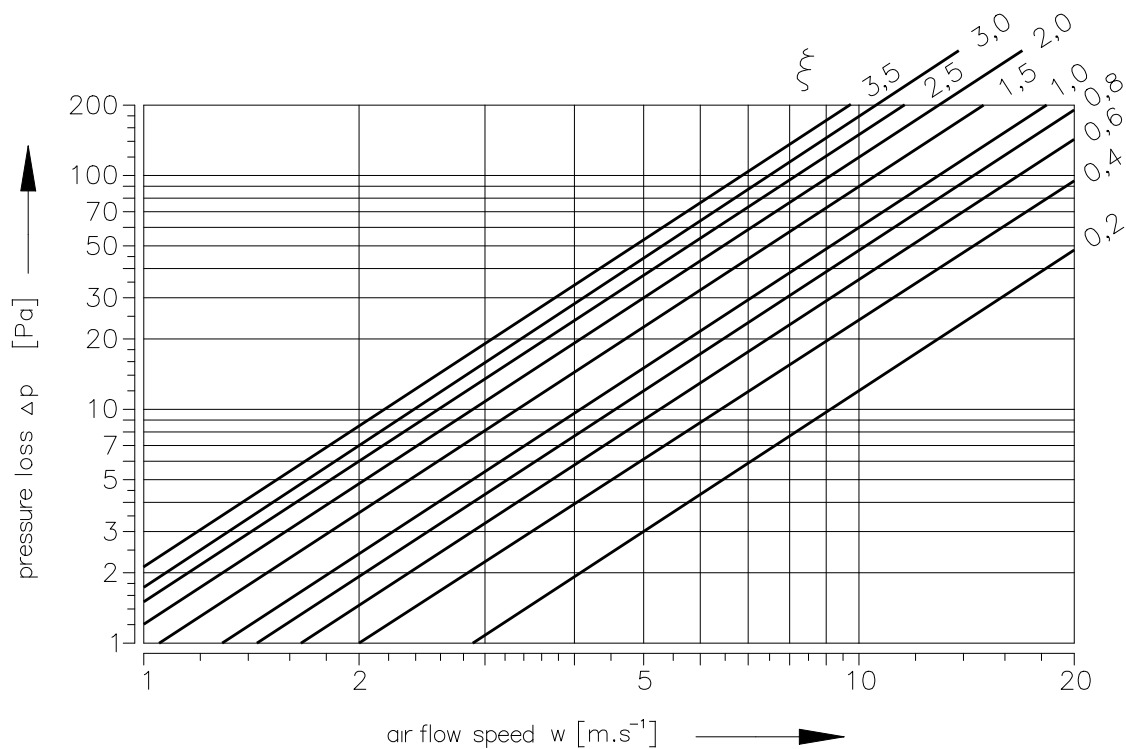
Pressure loss

Pressure loss calculation

$$\Delta p = \xi \cdot \rho \cdot \frac{w^2}{2}$$

| | | |
|------------|----------------------|---|
| Δp | [Pa] | pressure loss |
| w | [m/s] | air flow speed in nominal damper section |
| ρ | [kg/m ³] | air density |
| ξ | [-] | coefficient of local pressure loss for the nominal damper section → see page 46 |

Determination of pressure loss by using diagram $\rho = 1,2 \text{ kg/m}^3$



Coefficient of local pressure loss

| | B | | | | | | | | | | |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| A | 180 | 200 | 225 | 250 | 280 | 300 | 315 | 355 | 400 | 450 | 500 |
| 180 | 1,849 | 1,476 | 1,210 | 0,983 | 0,888 | 0,823 | 0,703 | 0,608 | 0,535 | 0,478 | 0,437 |
| 200 | 1,737 | 1,385 | 1,095 | 0,921 | 0,862 | 0,782 | 0,658 | 0,569 | 0,500 | 0,446 | 0,407 |
| 225 | 1,678 | 1,333 | 0,995 | 0,887 | 0,832 | 0,754 | 0,638 | 0,545 | 0,479 | 0,430 | 0,393 |
| 250 | 1,613 | 1,286 | 0,978 | 0,859 | 0,805 | 0,722 | 0,613 | 0,524 | 0,462 | 0,414 | 0,381 |
| 280 | 1,538 | 1,218 | 0,954 | 0,814 | 0,768 | 0,682 | 0,583 | 0,499 | 0,438 | 0,395 | 0,358 |
| 300 | 1,482 | 1,178 | 0,926 | 0,772 | 0,722 | 0,642 | 0,549 | 0,475 | 0,422 | 0,372 | 0,342 |
| 315 | 1,415 | 1,124 | 0,894 | 0,743 | 0,682 | 0,598 | 0,528 | 0,456 | 0,400 | 0,356 | 0,325 |
| 355 | 1,359 | 1,079 | 0,852 | 0,713 | 0,635 | 0,573 | 0,506 | 0,436 | 0,383 | 0,341 | 0,311 |
| 400 | 1,312 | 1,041 | 0,811 | 0,687 | 0,618 | 0,562 | 0,487 | 0,420 | 0,368 | 0,328 | 0,299 |
| 450 | 1,271 | 1,009 | 0,798 | 0,665 | 0,602 | 0,533 | 0,471 | 0,406 | 0,356 | 0,317 | 0,289 |
| 500 | 1,240 | 0,983 | 0,773 | 0,648 | 0,592 | 0,526 | 0,459 | 0,395 | 0,346 | 0,308 | 0,281 |
| 550 | 1,225 | 0,971 | 0,752 | 0,638 | 0,586 | 0,522 | 0,451 | 0,389 | 0,341 | 0,306 | 0,278 |
| 560 | 1,211 | 0,960 | 0,744 | 0,632 | 0,572 | 0,519 | 0,447 | 0,385 | 0,337 | 0,300 | 0,274 |
| 600 | 1,198 | 0,945 | 0,738 | 0,626 | 0,568 | 0,507 | 0,441 | 0,381 | 0,334 | 0,297 | 0,270 |
| 630 | 1,184 | 0,938 | 0,728 | 0,617 | 0,565 | 0,493 | 0,437 | 0,376 | 0,329 | 0,293 | 0,267 |
| 650 | 1,173 | 0,928 | 0,711 | 0,610 | 0,544 | 0,490 | 0,431 | 0,371 | 0,324 | 0,289 | 0,266 |
| 700 | 1,165 | 0,922 | 0,705 | 0,609 | 0,539 | 0,489 | 0,429 | 0,369 | 0,323 | 0,288 | 0,263 |
| 710 | 1,160 | 0,919 | 0,697 | 0,604 | 0,535 | 0,488 | 0,427 | 0,368 | 0,322 | 0,287 | 0,261 |
| 750 | 1,150 | 0,911 | 0,691 | 0,600 | 0,530 | 0,482 | 0,422 | 0,363 | 0,318 | 0,284 | 0,258 |
| 800 | 1,140 | 0,903 | 0,686 | 0,593 | 0,523 | 0,475 | 0,419 | 0,361 | 0,316 | 0,281 | 0,256 |
| 900 | 1,122 | 0,888 | 0,674 | 0,583 | 0,517 | 0,467 | 0,412 | 0,355 | 0,310 | 0,276 | 0,252 |
| 1000 | 1,108 | 0,877 | 0,666 | 0,576 | 0,509 | 0,453 | 0,407 | 0,350 | 0,306 | 0,273 | 0,248 |
| 1100 | 1,095 | 0,867 | 0,657 | 0,569 | 0,498 | 0,443 | 0,402 | 0,345 | 0,302 | 0,269 | 0,245 |
| 1250 | 1,084 | 0,857 | 0,643 | 0,562 | 0,486 | 0,438 | 0,397 | 0,342 | 0,299 | 0,266 | 0,242 |
| 1400 | 1,073 | 0,849 | 0,632 | 0,557 | 0,478 | 0,436 | 0,393 | 0,338 | 0,296 | 0,263 | 0,240 |
| 1500 | 1,067 | 0,844 | 0,628 | 0,554 | 0,469 | 0,429 | 0,391 | 0,336 | 0,294 | 0,262 | 0,238 |
| 1600 | 1,062 | 0,840 | 0,610 | 0,551 | 0,450 | 0,420 | 0,389 | 0,334 | 0,293 | 0,260 | 0,237 |

| | B | | | | | | | | | | |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| A | 550 | 560 | 600 | 630 | 650 | 700 | 710 | 750 | 800 | 900 | 1000 |
| 180 | 0,418 | 0,400 | 0,378 | 0,369 | 0,352 | 0,349 | 0,343 | 0,331 | 0,322 | 0,304 | 0,291 |
| 200 | 0,389 | 0,373 | 0,356 | 0,344 | 0,332 | 0,325 | 0,320 | 0,309 | 0,300 | 0,284 | 0,271 |
| 225 | 0,375 | 0,361 | 0,342 | 0,333 | 0,319 | 0,313 | 0,309 | 0,302 | 0,292 | 0,272 | 0,262 |
| 250 | 0,362 | 0,345 | 0,331 | 0,321 | 0,308 | 0,302 | 0,297 | 0,291 | 0,281 | 0,263 | 0,253 |
| 280 | 0,342 | 0,325 | 0,312 | 0,302 | 0,291 | 0,288 | 0,283 | 0,271 | 0,267 | 0,249 | 0,241 |
| 300 | 0,321 | 0,312 | 0,296 | 0,287 | 0,279 | 0,273 | 0,269 | 0,256 | 0,251 | 0,236 | 0,228 |
| 315 | 0,305 | 0,297 | 0,282 | 0,274 | 0,267 | 0,259 | 0,254 | 0,246 | 0,238 | 0,225 | 0,215 |
| 355 | 0,296 | 0,284 | 0,271 | 0,262 | 0,251 | 0,248 | 0,243 | 0,234 | 0,228 | 0,215 | 0,205 |
| 400 | 0,281 | 0,273 | 0,265 | 0,252 | 0,243 | 0,237 | 0,234 | 0,226 | 0,219 | 0,207 | 0,197 |
| 450 | 0,271 | 0,264 | 0,255 | 0,243 | 0,237 | 0,231 | 0,226 | 0,219 | 0,211 | 0,199 | 0,190 |
| 500 | 0,269 | 0,257 | 0,244 | 0,236 | 0,228 | 0,223 | 0,219 | 0,212 | 0,205 | 0,194 | 0,185 |
| 550 | 0,262 | 0,254 | 0,239 | 0,225 | 0,217 | 0,211 | 0,208 | 0,209 | 0,202 | 0,191 | 0,182 |
| 560 | 0,259 | 0,250 | 0,231 | 0,230 | 0,221 | 0,210 | 0,208 | 0,206 | 0,200 | 0,189 | 0,180 |
| 600 | 0,256 | 0,248 | 0,229 | 0,228 | 0,218 | 0,209 | 0,207 | 0,202 | 0,197 | 0,186 | 0,178 |
| 630 | 0,253 | 0,244 | 0,228 | 0,225 | 0,215 | 0,209 | 0,207 | 0,199 | 0,195 | 0,184 | 0,176 |
| 650 | 0,248 | 0,242 | 0,226 | 0,222 | 0,213 | 0,208 | 0,206 | 0,197 | 0,193 | 0,182 | 0,174 |
| 700 | 0,244 | 0,241 | 0,225 | 0,221 | 0,212 | 0,207 | 0,205 | 0,196 | 0,192 | 0,181 | 0,173 |
| 710 | 0,242 | 0,239 | 0,224 | 0,220 | 0,211 | 0,205 | 0,204 | 0,195 | 0,191 | 0,180 | 0,172 |
| 750 | 0,240 | 0,236 | 0,220 | 0,218 | 0,209 | 0,203 | 0,202 | 0,194 | 0,189 | 0,178 | 0,170 |
| 800 | 0,239 | 0,234 | 0,217 | 0,215 | 0,206 | 0,201 | 0,200 | 0,192 | 0,187 | 0,176 | 0,168 |
| 900 | 0,234 | 0,230 | 0,215 | 0,212 | 0,200 | 0,198 | 0,196 | 0,189 | 0,184 | 0,173 | 0,165 |
| 1000 | 0,231 | 0,227 | 0,211 | 0,209 | 0,198 | 0,195 | 0,193 | 0,185 | 0,181 | 0,171 | 0,163 |
| 1100 | 0,229 | 0,224 | 0,208 | 0,206 | 0,196 | 0,194 | 0,191 | 0,182 | 0,179 | 0,168 | 0,161 |
| 1250 | 0,224 | 0,221 | 0,205 | 0,203 | 0,192 | 0,191 | 0,189 | 0,180 | 0,176 | 0,166 | 0,159 |
| 1400 | 0,221 | 0,219 | 0,203 | 0,201 | 0,189 | 0,188 | 0,187 | 0,178 | 0,175 | 0,165 | 0,157 |
| 1500 | 0,220 | 0,218 | 0,201 | 0,200 | 0,187 | 0,186 | 0,185 | 0,176 | 0,174 | 0,164 | 0,156 |
| 1600 | 0,220 | 0,216 | 0,200 | 0,199 | 0,187 | 0,186 | 0,185 | 0,175 | 0,173 | 0,163 | 0,155 |

Noise data

Level of acoustic output corrected with filter A

$$L_{WA} = L_{W1} + 10 \log(S) + K_A$$

| | | |
|----------|-------------------|---|
| L_{WA} | [dB(A)] | level of acoustic output corrected with filter A |
| L_{W1} | [dB] | level of acoustic output L_{W1} related to the 1 m ² section |
| S | [m ²] | duct cross section |
| K_A | [dB] | correction to the weight filter A |

Level of acoustic output in octave ranges

$$L_{Woct} = L_{W1} + 10 \log(S) + L_{rel}$$

| | | |
|------------|-------------------|---|
| L_{Woct} | [dB] | spectrum of acoustic output in octave range |
| L_{W1} | [dB] | level of acoustic output L_{W1} related to the 1 m ² section |
| S | [m ²] | duct cross section |
| L_{rel} | [dB] | relative level expressing the shape of the spectrum |

Tables of acoustic values

| Level of acoustic output L_{W1} [dB] related to the 1 m ² section | | | | | | | | | | | | |
|--|-----------|------|------|------|------|------|------|------|------|------|------|------|
| w [m/s] | ξ [-] | | | | | | | | | | | |
| | 0,2 | 0,3 | 0,4 | 0,5 | 0,6 | 0,7 | 0,8 | 0,9 | 1 | 1,5 | 2 | 2,5 |
| 2 | 15,5 | 18,7 | 20,9 | 22,6 | 24 | 25,2 | 26,3 | 27,2 | 28 | 31,2 | 33,4 | 35,1 |
| 3 | 26,1 | 29,2 | 31,5 | 33,2 | 34,6 | 35,8 | 36,9 | 37,8 | 38,6 | 41,7 | 44 | 45,7 |
| 4 | 33,6 | 36,7 | 39 | 40,7 | 42,1 | 43,3 | 44,3 | 45,3 | 46,1 | 49,2 | 51,5 | 53,2 |
| 5 | 39,4 | 42,5 | 44,8 | 46,5 | 47,9 | 49,1 | 50,2 | 51,1 | 51,9 | 55 | 57,3 | 59 |
| 6 | 44,1 | 47,3 | 49,5 | 51,3 | 52,7 | 53,9 | 54,9 | 55,8 | 56,6 | 59,8 | 62 | 63,8 |
| 7 | 48,2 | 51,3 | 53,5 | 55,3 | 56,7 | 57,9 | 58,9 | 59,8 | 60,7 | 63,8 | 66,1 | 67,8 |
| 8 | 51,6 | 54,8 | 57 | 58,8 | 60,2 | 61,4 | 62,4 | 63,3 | 64,1 | 67,3 | 69,5 | 71,3 |
| 9 | 54,7 | 57,9 | 60,1 | 61,8 | 63,2 | 64,4 | 65,5 | 66,4 | 67,2 | 70,4 | 72,6 | 74,3 |
| 10 | 57,4 | 60,6 | 62,8 | 64,6 | 66 | 67,2 | 68,2 | 69,1 | 70 | 73,1 | 75,3 | 77,1 |
| 11 | 59,9 | 63,1 | 65,3 | 67,1 | 68,5 | 69,7 | 70,7 | 71,6 | 72,4 | 75,6 | 77,8 | 79,6 |
| 12 | 62,2 | 65,4 | 67,6 | 69,3 | 70,7 | 71,9 | 73 | 73,9 | 74,7 | 77,9 | 80,1 | 81,8 |

| Correction to the weight filter A | | | | | | | | | | | |
|-----------------------------------|-----|-------|------|------|------|------|------|----|------|----|------|
| w [m/s] | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| K_A [dB] | -15 | -11,8 | -9,8 | -8,4 | -7,3 | -6,4 | -5,7 | -5 | -4,5 | -4 | -3,6 |

| Relative level expressing the shape of the spectrum L_{rel} | | | | | | | | |
|---|----------|------|-------|-------|-------|-------|-------|-------|
| w [m/s] | f [Hz] | | | | | | | |
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 2 | -4,5 | -6,9 | -10,9 | -16,7 | -24,1 | -33,2 | -43,9 | -56,4 |
| 3 | -3,9 | -5,3 | -8,4 | -13,1 | -19,5 | -27,6 | -37,4 | -48,9 |
| 4 | -3,9 | -4,5 | -6,9 | -10,9 | -16,7 | -24,1 | -33,2 | -43,9 |
| 5 | -4 | -4,1 | -5,9 | -9,4 | -14,6 | -21,5 | -30,0 | -40,3 |
| 6 | -4,2 | -3,9 | -5,3 | -8,4 | -13,1 | -19,5 | -27,6 | -37,4 |
| 7 | -4,5 | -3,9 | -4,9 | -7,5 | -11,9 | -17,9 | -25,7 | -35,1 |
| 8 | -4,9 | -3,9 | -4,5 | -6,9 | -10,9 | -16,7 | -24,1 | -33,2 |
| 9 | -5,2 | -3,9 | -4,3 | -6,4 | -10,1 | -15,6 | -22,7 | -31,5 |
| 10 | -5,5 | -4 | -4,1 | -5,9 | -9,4 | -14,6 | -21,5 | -30 |
| 11 | -5,9 | -4,1 | -4 | -5,6 | -8,9 | -13,8 | -20,4 | -28,8 |
| 12 | -6,2 | -4,3 | -3,9 | -5,3 | -8,4 | -13,1 | -19,5 | -27,6 |

VII. MATERIAL, FINISHING

- Damper casings are made from galvanized sheet metal without further surface treatment.
- Damper blades are made from fire resistant asbestos free boards made of mineral fibres.
- Thermal fuses are made of sheet brass, thickness 0,5 mm.
- Fasteners are galvanized.
- According to the customer's requirements, dampers can be made of stainless steel material.

Specifications for stainless-steel design:

- Class A2 – Food-grade stainless steel (AISI 304 – EN 1.4301)
- Class A4 – Chemistry-grade stainless steel (AISI 316, 316L – EN 1.4401, EN 1.4404)

The respective stainless steel is the material for all components that are located or entering the damper inner space; components outside the damper casing are typically from galvanised sheet metal (fasteners for mounting the actuator or manual control), frame components.

The following components, including the fasteners, are made from stainless steel at all times:

- 1) Damper casing and all components permanently attached
- 2) Blade holders including pins, metal parts of blades
- 3) Parts of a manual control entering the inner space of a damper casing
- 4) Inspection opening cover including the stirrup and fasteners (if they are parts of the cover)

The damper blade is made of asbestos-free, fire-resistant mineral fibre boards joined with U-shaped drive staples, sealed on the outer side with K84 adhesive.

Thermal fuse is identical for all material variants of the dampers. Upon specification by customer, the thermal fuse can be made from A4 from stainless steel sheet metal.

Thermoelectric activation device BAT is modified for stainless-steel variant of the dampers; standard galvanised screws are replaced with stainless-steel M4 screws of corresponding class. Damper casing has stainless-steel riveting M4 nuts.

Plastic, rubber and silicon components, sealants, foaming tapes, glass-ceramic seals, housings, brass bearings of the blade, actuators, and end switches are identical for all material variants of the dampers.

Some fasteners and components are only available in one class of stainless steel; the type will be used in all stainless-steel variants.

The damper blade in the variant for chemical environments (Class A4) is always treated with a coating of chemically resistant Promat SR.

Any other requirements for the design will be considered atypical and will be addressed on an individual basis.

VIII. TRANSPORTATION, STORAGE AND WARRANTY

Logistic terms

- Dampers are delivered on pallets. As standard, the dampers are wrapped in plastic foil for protection during transport and must not be used for long-term storage. Temperature changes during transport can cause condensation of water inside the packaging and thereby cause corrosion of materials used in the dampers (e.g. white corrosion on zinc-coated items or mould on calcium silicate). Therefore, it is necessary to remove the transport packaging immediately after unloading to allow air to circulate around the product.
- The dampers must be stored in clean, dry, well ventilated and dust-free environment out of direct sunlight. Ensure protection against moisture and extreme temperatures (minimum temperature +5°C). The dampers must be protected against mechanical and accidental damage prior to installation.
- Another required packaging system should be approved and agreed by manufacturer. Packaging material is not returnable in case that another packaging system (material) is required and used and it is not included into final price of damper.
- Dampers are transported by box freight vehicles without direct weather impact, there must not occur any shocks and ambient temperature must not exceed +50°C. Dampers must be protected against impact when transported and manipulated. During transportation, the damper blade must be in the "CLOSED" position.
- Dampers must be stored indoor in environment without any aggressive vapours, gases or dust. Indoor temperature must be in the range from -30°C to +50°C and maximum relative humidity 95%.

Warranty

- The manufacturer provides a warranty of 24 months from the date of dispatch for the dampers.
- The warranty for fire dampers FDMA, provided by the manufacturer, is completely void if actuating, closing and control devices are unprofessionally handled by untrained workers or if electric components, i.e. limit switches, actuators, communication and supply devices and thermoelectric activation devices are dismantled.
- The warranty is void if dampers are used for other purposes, devices and working conditions than those allowed by these technical conditions or if the dampers are mechanically damaged during handling.
- If the dampers are damaged by transport, a record must be written down with the forwarder at reception for later complaint.

IX. ASSEMBLY, ATTENDANCE AND MAINTENANCE

- Assembly, maintenance and damper function check can be done only by qualified and trained person, i.e. "AUTHORIZED PERSON" according to the manufacturer documentation. All works done on the fire dampers must be done according international and local norms and laws.
- All effective safety standards and directives must be observed during damper assembly.
- To ensure reliable damper function it is necessary to avoid blocking the actuating mechanism and contact surfaces with collected dust, fibre and sticky materials and solvents.
- Flange and screw joints must be conductively connected to protect against dangerous contact. 2 galvanized lock washers that are placed under the head of one screw and a fastened nut are used for conductive connection.

Manual operation - actuator control without electric voltage

- A special wrench (part of the actuator) can be used to manually turn the damper blade to any position. When the wrench is turned in the direction of the arrow, the damper blade rotates to its open position. As the blade rotation is stopped, in every position, the actuator will be locked. Unlocking is possible even manually as per instructions on the actuator, or by the activation of the supply voltage.
- If the actuator is manually locked, the damper blade will not close in the event of a fire after the activation of the thermoelectric activation device BAT. To restore correct damper operation, the actuator must be unlocked (manually or by applying power supply).

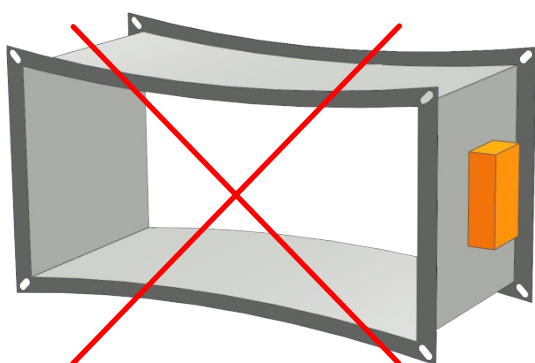
Limit switches

- If the damper is equipped with limit switches and these switches are not used during operation (e.g. because of a project change), they can be left on the damper and not connected (they need not be dismantled).
- On the other hand, if the limit switch is to be added to the damper design, the change can be implemented by change kit.
- These facts must be recorded in the respective operation documentation of the damper (record books of the damper, fire logs, etc.) and subsequently, adequate function checks must be carried out.

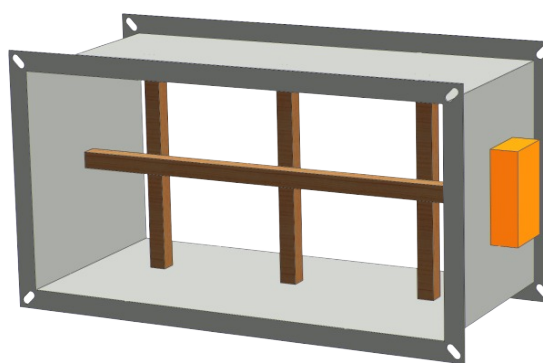
Installation / fixing the damper

- The damper casing shall not be deformed in the course of bricking in.
- Once the damper is built in, the damper blade shall not grind on the damper casing during opening or closing.

Protection of the damper casing against buckling during installation, especially for large sizes!



WRONG!

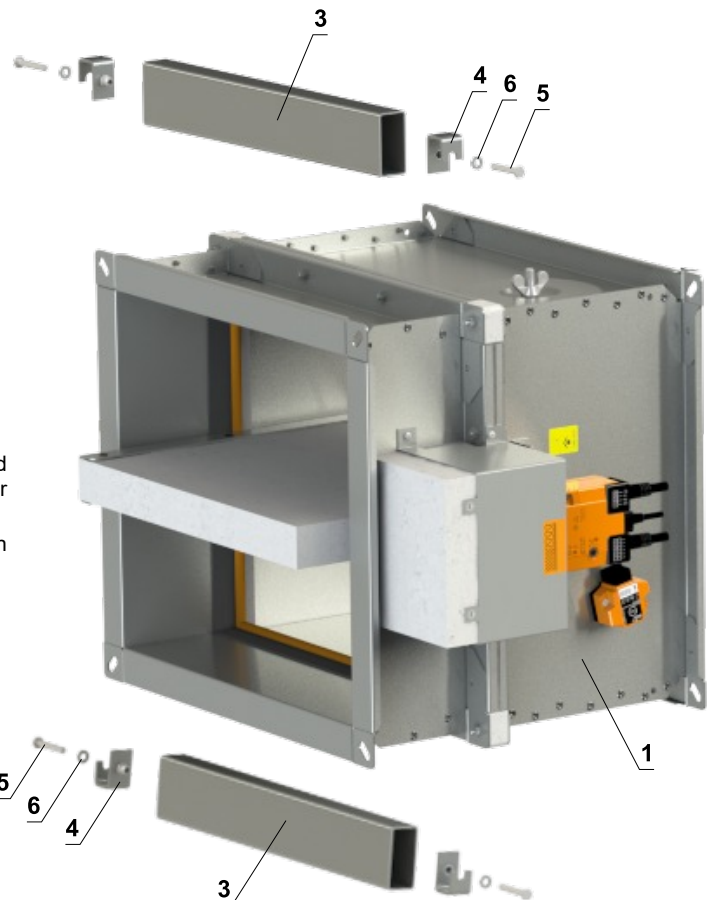
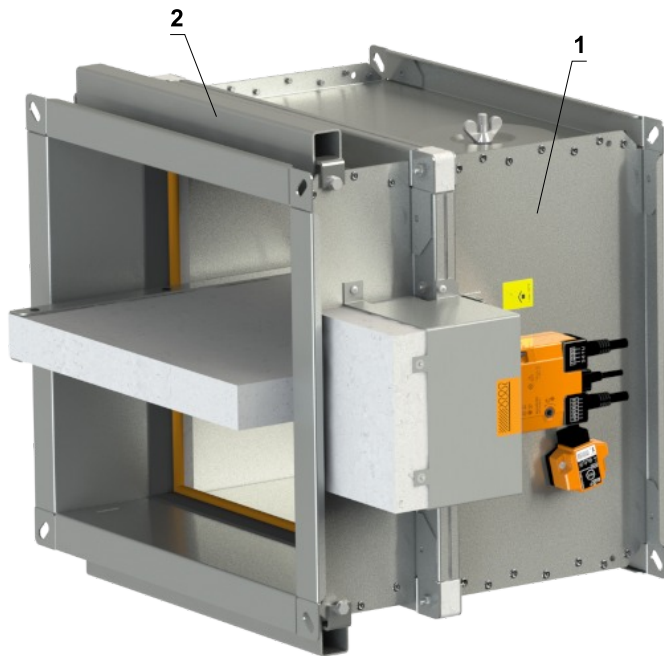


Reinforcement of the casing with wooden beams

Reinforcement frame VRM-Q

- If the damper is installed outside the fire separation construction, a damper side A \geq 800 mm and fire resistance is EI 90 S, VRM-Q reinforcement frame must be used.
- For lower fire resistance than EI 90 S, VRM-Q reinforcement frame is not necessary!
- VRM-Q is mounted only on "A" sides

Fixing of reinforcing frame VRM-Q to the damper casing



Installation procedure

- 1) Place part A on the damper casing
- 2) Insert part B to the part A
- 3) Adjust a nut of part B against a hole on the damper casing and fasten it with M6x40 mm hexagon head screw DIN 931 with washer M6/6,4 DIN 7349
- 4) Repeat the procedure on the other side of the VRM-Q and an opposite side "A" of the fire damper

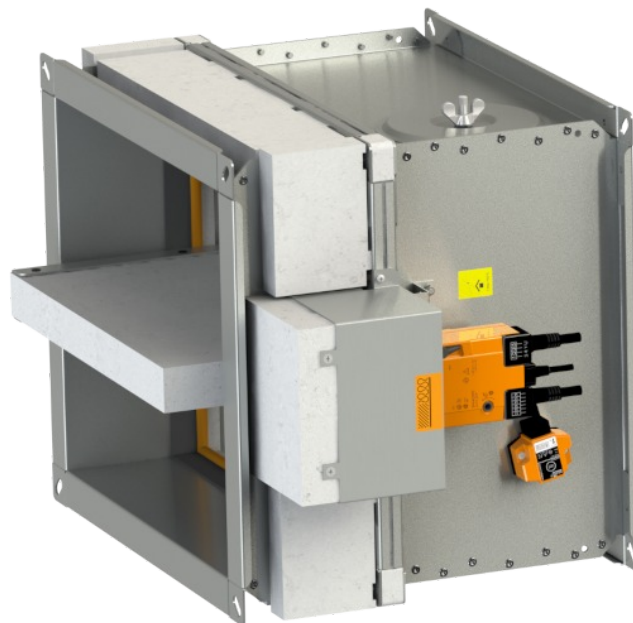
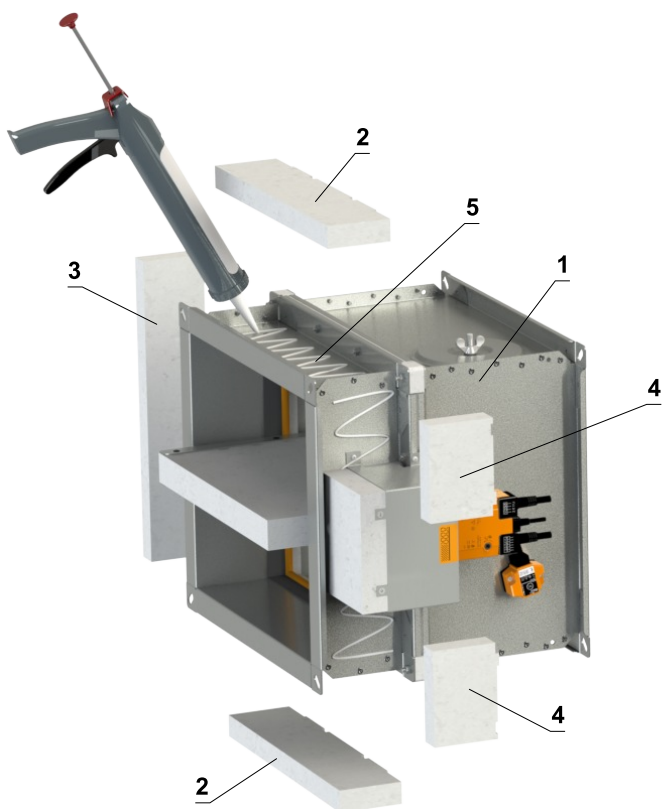
- 1 FDMA
- 2 VRM-Q
- 3 Part A of VRM-Q
- 4 Part B of VRM-Q
- 5 Hexagon head screw M6x40 mm DIN 931
- 6 Washer M6/6,4 DIN 7349

Protective cladding boards

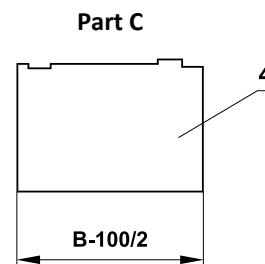
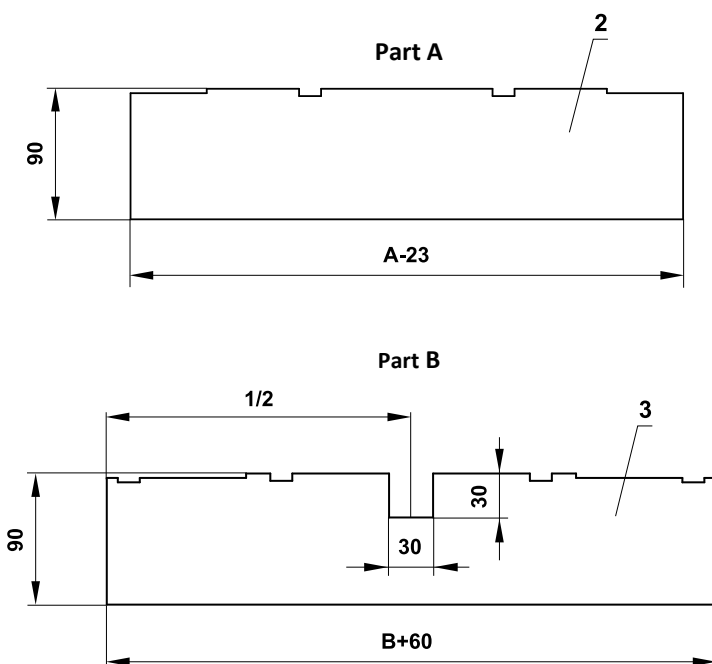
- Protective cladding boards must be used as part of the penetration filling of installation with Ablative Coated Batt.
- Can be ordered from MANDIK (installed on the damper or as an accessory) or can be sourced from local supplier
- If protective cladding boards are required, this must be specified in the ordering key
- Boards are made of PROMATECT-MST, thickness 30 mm.
- Glue K84 is not included in the package

Assembly procedure

- 1) Apply K84 glue over the entire surface
- 2) Attach protective cladding boards to the damper and glue them to the casing
- 3) Created gaps fill with K-84 PROMAT glue



- 1 FDMA
- 2 Part A
- 3 Part B
- 4 Part C
- 5 Glue K-84 PROMAT



Commissioning and revisions

- Before putting the damper into operation, serviceability checks and functional tests must be carried out including testing of functionality of all electrical elements. After putting into operation these serviceability checks must be carried at least twice a year. If no defect is found during two subsequent serviceability checks, these checks can be carried out once a year.
- In case that dampers are found unable to serve for their function for any cause, it must be clearly marked. The operator is obliged to ensure that the damper is put into condition in which it is ready for function and meanwhile he is obliged to provide the fire protection by another appropriate way.
- Results of regular checks, imperfections found and all-important facts connected with the damper function must be recorded in the "FIRE BOOK" and immediately reported to the operator.
- Before entering the dampers with actuator into operation after their assembly and by sequential checks. Check of blade rotation into the breakdown position "CLOSED" can be done after disconnecting the actuator supply (e.g. by pressing the test button at the thermoelectric activation device BAT or disconnecting the supply from ELECTRICAL FIRE SIGNALISATION). Check of blade rotation back into the "OPEN" position can be done after restoration of power supply (e.g. by releasing the test button or restoration of supply from ELECTRICAL FIRE SIGNALISATION). Without power supply, the damper can be operated manually and fixed in any required position. Release of the locking mechanism can be achieved manually or automatically by applying the supply voltage. It is recommended to provide periodical checks, maintenance and service actions on fire equipment by authorized persons. The authorized persons can be trained by producer, or by authorized distributor. All effective safety standards and directives must be observed during fire damper assembly.
- Visual inspection of proper damper installation, inner area of a damper, damper blade, contact surfaces and silicon seal.

Following checks must be carried out for dampers with manual control

Check of a manual control and thermal fuse

- **To check the function of the manual control proceed as follows:**
- Turn the damper blade to "CLOSED" position as follows:
 - The damper blade is in "OPEN" position.
 - By pressing the activation lever ("OPEN" position), release the control lever to turn the damper blade to the "CLOSED" position.
 - Check the damper blade rotation to "CLOSED" position.
 - The closing of the damper blade must be smooth and fast and the control lever shall be in „CLOSED“ position.(If the damper is not closing strongly enough and the control lever is not reliably locked by the latch in the "CLOSED" position, it is necessary to set a higher preload of the closing spring using the toothed rosette)
- Turn the damper blade to "OPEN" position as follows:
 - Release the latch in the "CLOSED" position by pressing and return the control lever to the second end position, where the lever is held by the trigger lever in the "OPEN" position.
 - Check the damper blade rotation to "OPEN" position.
 - In the case of a damper with an electromagnet, a test of moving the control lever to the "CLOSED" position is performed after connecting the electrical voltage.
- **Check of function and condition of the thermal fuse:**
 - By removing the thermal fuse from the pin of the triggering device, its correct function is checked.
 - The pin must be extended and the triggering lever must be flipped (position "OPEN").
 - If this does not happen, it is necessary to check the pin and spring of the triggering device, or replace the base plate. The base plate is attached to the damper body with three M5 screws with nuts.

Following checks must be carried out for dampers with actuator

- Check the rotation of the blade to "CLOSED" failure position after disconnection the power supply of the actuator (e.g. by pressing the test button on the thermoelectric activation device BAT or by disconnection the power supply from electrical fire signalization). Check the rotation of the blade back to "OPEN" position by restoring the power supply to the actuator (e.g. by releasing the test button or by restoring the power supply from electrical fire signalization).

Following checks must be carried out for dampers with optical smoke detector

- The function checks of the optical smoke detector are to be carried out by employees of an authorized organization who have corresponding electrotechnical qualification and have been properly trained by the manufacturer. The function checks are to be carried out as a part of function checks of the fire dampers, at least 1x a year.
- For the function checks, the damper blade should be in "CLOSED" position with the fan off or with closed air regulation situated between the fan and the fire damper.
- Inspection opening disassembly
 - Release the covering lid by turning the wing nut and while turning the lid right or left release it from the security belt. Then tilt the lid and remove it from its original position.



Inspection opening detail

- Ensure each damper is fully checked for operational capability, control should be initiated from the control system or by manual control. Damper blades should open and close correctly and operation should be visually inspected and documented prior to handover.

How to proceed after Tf1 or Tf2 fuses have been activated

- If the thermal fuse **Tf1** is interrupted (due to temperature outside the duct), it is necessary to replace the spring return actuator. → see page 13
- If the thermal fuse **Tf2** is interrupted (due to temperature inside the duct), only the spare part ZBAT 72 (95/120/140) needs to be replaced (acc.to the activation temperature). → see page 13

X. ORDERING INFORMATIONS

Ordering key



EXAMPLES:

FDMA EN 800x700/375 .40 Q30-ZN

Fire damper FDMA, dimension 800x700 mm, built length 375 mm, control design with spring return actuator AC 230 V, standard activation temperature 72 °C, flange dimension 30 mm, galvanized material variant, without installation kit/frame, standard silicon seal.

FDMA EN 800x700/375 .40 120 A Q30-ZN IW G

Fire damper FDMA, dimension 800x700 mm, built length 375 mm, control design with spring return actuator AC 230 V, activation temperature 120 °C, with protective cladding boards, flange dimension 30 mm, galvanized material variant, impregnation against humidity, Silicone-free rubber.

1| Fire damper type - FDMA

2| Country of destination

3| Damper dimensions A x B → see pages 18 to 23

"A" is the width of the damper

"B" is the height of the damper

4| Built length - 375 mm

5| Damper design

| | |
|-----|--|
| .01 | Manual control and thermal |
| .02 | Manual control and thermal (Zone 1,2) |
| .11 | Manual control and thermal with a terminal switch („CLOSED“) |
| .12 | Manual control and thermal with a terminal switch („CLOSED“) (Zone 1,2) |
| .20 | Manual, thermal and with an electromagnet AC 230 V |
| .21 | Manual, thermal and with an electromagnet AC/DC 24 V |
| .23 | Manual, thermal and with an electromagnet AC 230 V, with a terminal switch („CLOSED“) |
| .24 | Manual, thermal and with an electromagnet AC/DC 24 V, with a terminal switch („CLOSED“) |
| .30 | Manual, thermal and with an electromagnet AC 230 V (ZONE 2) |
| .33 | Manual, thermal and with an electromagnet AC 230 V, with a terminal switch („CLOSED“) (ZONE 2) |
| .40 | With actuating mechanism BF 230-TN (BFL, BFN 230-T) |
| .41 | With actuating mechanism BF 24-TN (BFL, BFN 24-T) , with smoke detector ORS 142 K and with supply device BKN 230-24-MOD (voltage AC 230 V |
| .42 | With actuating mechanism ExMax-15-BF (AC 230 V, AC/DC 24 V) with thermoelectrical starting mechanism (ZONE 1,2) |
| .50 | With actuating mechanism BF 24-TN (BFL, BFN 24-T) |
| .51 | With actuator BF 24-TN (BFL, BFN 24-T), with smoke detector ORS 142 K (voltage AC/DC 24 V) |
| .63 | With communication and supply device BKN 230-24-MOD, with actuating mechanism BF 24-TN-ST (BFL, BFN 24-T-ST) and with smoke detector ORS 142 K |
| .80 | Manual control and thermal with two terminal switches („OPEN“, „CLOSED“) |
| .81 | Manual and thermal with two terminal switches („OPEN“, „CLOSED“) (ZONE 1,2) |
| .82 | Manual, thermal and with an electromagnet AC 230 V, with two terminal switches („OPEN“, „CLOSED“) |
| .83 | Manual, thermal and with an electromagnet AC/DC 24 V., with two terminal switches („OPEN“, „CLOSED“) |
| .85 | Manual, thermal and with an electromagnet AC 230 V, with two terminal switches („OPEN“, „CLOSED“) (ZONE 2) |

6| Activation temperature

| Manual control | | Spring return actuator control | |
|----------------|---------|--------------------------------|---------|
| | 72 °C * | | 72 °C * |
| 104 | 104 °C | 95 | 95 °C |
| 147 | 147 °C | 120 | 120 °C |
| | | 140 | 140 °C |

* Standard activation temperature

7| Installation kit/frame

| | |
|-------|---|
| | Without installation kit/frame |
| A | With protective cladding boards (for Ablative Coated Batt installation) |
| VRM-Q | Reinforcing frame VRM-Q |

8| Flange dimension

| | |
|-----|--------------------|
| Q30 | Flange width 30 mm |
|-----|--------------------|

9| Material and other design options

| | |
|----|---|
| ZN | Galvanized |
| A2 | Stainless steel 1.4301 (AISI 304) |
| A4 | Stainless steel 1.4404 (AISI 316L) - included damper blade impregnation against chemical - type PROMAT SR |

10| Surface treatment

| | |
|----|---|
| | Without surface treatment |
| IW | Damper blade impregnation, impregnating agent PROMAT 2000 - impregnation against humidity |
| IA | Damper blade impregnation, impregnating agent PROMAT SR - impregnation against chemical |

11| Cold seal variant

| | |
|---|----------------------|
| | Silicone rubber * |
| G | Silicone-free rubber |

* Standard cold seal

Accessories

Protective cladding boards



1| Accessory type - cladding boards

2| Fire damper type - FDMA

3| Damper dimensions A x B → see pages 18 to 23

Reinforcing frame VRM-Q




1| Accessory type - reinforcing frame VRM-Q

2| Fire damper type - FDMA

3| Damper dimensions A x B → see pages 18 to 23

Data label

- Data label is placed on the damper casing (example)

| | | | |
|----------------------------|---|---|---------------|
| MANDÍK [®] | | MANDÍK, a.s. Dobříšská 550, 267 24 Hostomice, Czech Republic | |
| FIRE DAMPER - XXXX | |  MANUAL | |
| DIMENSION: | | | |
| SERIAL.NO.: | | WEIGHT (kg): | |
| CLASSIFICATION: | | | |
| TPM XXX/XX | Cert. No.: 1391-CPR-XXXX/XXXX, DoP: PM/XXXX/XX/XX/X | XX | EN 15650:2010 |

The producer reserves the right for innovations of the product.
For actual product information see www.mandik.com

MANDÍK[®]
www.mandik.com

