

KWP-P-E



- ▶ **VDI 6022 HYGIENIC STANDARD**
- ▶ **STABILISER BAR**

Description

EI 120 S smoke control damper according to UNI EN 1366-2 (classifications) and UNI EN 1366-10 (tests for smoke control), UNI EN 13501-4 and UNI EN 12101-8 classification, certificate no. 1488-CPR-0437/W CE marking - VDI 6022 hygienic certificate

- Special stabiliser bar to prevent vibrations and increase damper rigidity
- Construction: Z275 galvanised steel frame th. 15/10- 20/10 with flanges for connection to the ducting, intermediate thermal break, offset blade in calcium silicate mounted on steel shafts and brass bearings, intumescent gasket and perimeter gasket for tightness against cold
- Vertical and horizontal installation in multiple compartments
- Leakage class C of the frame according to EN 1751

Fitted with:

- with on-off actuator, dual microswitches both 24V and 230V

- Installation in walls with fire-resistance classes EI 120
- Ceilings th. 150 mm
- Masonry walls th. 115 mm
- Vertical installation on ducts

EI 120 (V_{ew} - h_{ow} i ↔ o) S 1500 C₁₀₀₀₀ AA MULTI
Construction in a single piece up to 1500x1000

EI 120 (V_{ed} - i ↔ o) S 1000 C₁₀₀₀₀ AA MULTI

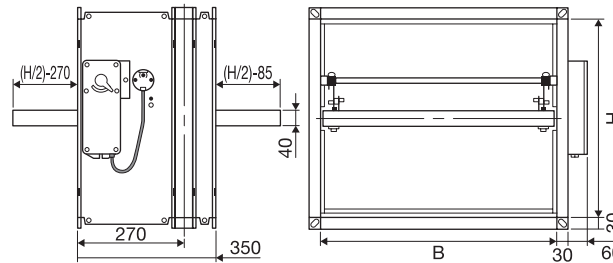
KWP-P-E24: smoke control damper with 24V on-off actuator and two micro limit switches

KWP-P-E230: smoke control damper with 230V on-off actuator and two micro limit switches

Special executions

- Execution in AISI 304 stainless steel
- Execution in galvanised steel coated according to the RAL table
- Blade treated with solvent-free, silicate-based impregnating agent, for acidic or very humid environments
- Additional communication systems (see page 10)

KWP-P-E dimensions



KWP-P-E24 price list

All prices are list prices for local market, for a quotation please contact us.

| H/L | 200 | 300 | 400 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 200 | 462 | 477 | 492 | 507 | 514 | 521 | 529 | 536 | 543 | 551 | 559 | 566 | 573 | 581 | 588 | 596 | 603 | 610 | 631 | 638 | 646 | 654 | 662 | 670 |
| 300 | 476 | 493 | 511 | 528 | 537 | 545 | 554 | 563 | 571 | 581 | 589 | 598 | 607 | 616 | 624 | 633 | 642 | 650 | 673 | 682 | 692 | 701 | 710 | 719 |
| 400 | 490 | 510 | 530 | 550 | 560 | 570 | 580 | 590 | 600 | 611 | 621 | 631 | 641 | 651 | 661 | 671 | 681 | 691 | 716 | 727 | 737 | 748 | 758 | 769 |
| 500 | - | 526 | 549 | 572 | 583 | 595 | 606 | 617 | 629 | 641 | 652 | 663 | 675 | 687 | 698 | 709 | 721 | 732 | 759 | 771 | 783 | 795 | 807 | 819 |
| 600 | - | 543 | 568 | 593 | 606 | 619 | 631 | 644 | 657 | 670 | 683 | 696 | 708 | 721 | 734 | 747 | 759 | 772 | 802 | 815 | 828 | 842 | 855 | 868 |
| 700 | - | 559 | 587 | 615 | 629 | 643 | 657 | 671 | 685 | 700 | 714 | 728 | 742 | 756 | 770 | 784 | 798 | 812 | 845 | 859 | 874 | 888 | 903 | 917 |
| 800 | - | 575 | 606 | 636 | 652 | 667 | 682 | 698 | 713 | 729 | 745 | 760 | 775 | 791 | 807 | 822 | 837 | 853 | 887 | 903 | 919 | 935 | 951 | 967 |
| 900 | - | 591 | 625 | 658 | 674 | 691 | 708 | 725 | 741 | 759 | 776 | 792 | 809 | 826 | 843 | 859 | 876 | 893 | 930 | 947 | 1046 | 1063 | 1080 | 1097 |
| 1000 | - | - | 644 | 680 | 698 | 716 | 734 | 752 | 770 | 789 | 807 | 825 | 843 | 861 | 879 | 898 | 916 | 934 | 1054 | 1073 | 1092 | 1110 | 1129 | 1147 |

KWP-P-E230 price list

| H/L | 200 | 300 | 400 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 200 | 507 | 522 | 537 | 551 | 558 | 566 | 573 | 580 | 588 | 596 | 603 | 610 | 618 | 625 | 633 | 640 | 647 | 655 | 675 | 683 | 691 | 699 | 706 | 714 |
| 300 | 520 | 538 | 555 | 573 | 581 | 590 | 599 | 607 | 616 | 625 | 634 | 643 | 651 | 660 | 669 | 678 | 686 | 695 | 718 | 727 | 736 | 745 | 754 | 764 |
| 400 | 534 | 554 | 575 | 595 | 605 | 615 | 625 | 635 | 645 | 655 | 665 | 675 | 685 | 696 | 706 | 716 | 726 | 736 | 761 | 771 | 782 | 792 | 803 | 814 |
| 500 | - | 571 | 594 | 616 | 628 | 639 | 651 | 662 | 673 | 685 | 697 | 708 | 719 | 731 | 742 | 754 | 765 | 777 | 804 | 816 | 828 | 840 | 851 | 863 |
| 600 | - | 587 | 613 | 638 | 651 | 663 | 676 | 689 | 701 | 715 | 728 | 740 | 753 | 766 | 779 | 791 | 804 | 817 | 847 | 860 | 873 | 886 | 899 | 913 |
| 700 | - | 603 | 632 | 659 | 673 | 687 | 701 | 716 | 730 | 744 | 758 | 772 | 786 | 801 | 815 | 829 | 843 | 857 | 889 | 904 | 918 | 933 | 947 | 962 |
| 800 | - | 619 | 650 | 681 | 696 | 712 | 727 | 742 | 758 | 774 | 789 | 805 | 820 | 836 | 851 | 866 | 882 | 897 | 932 | 948 | 964 | 980 | 995 | 1011 |
| 900 | - | 635 | 669 | 702 | 719 | 736 | 752 | 769 | 786 | 803 | 820 | 837 | 853 | 871 | 887 | 904 | 921 | 937 | 974 | 992 | 1267 | 1284 | 1301 | 1318 |
| 1000 | - | - | 688 | 724 | 742 | 760 | 778 | 796 | 815 | 833 | 851 | 869 | 887 | 906 | 924 | 942 | 960 | 978 | 1275 | 1294 | 1313 | 1331 | 1350 | 1368 |

Net air passage surface KWP-P-E

| H/L | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Air passage area (m ²) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200 | 0,027 | 0,035 | 0,042 | 0,049 | 0,056 | 0,064 | 0,071 | 0,078 | 0,085 | 0,093 | 0,100 | 0,107 | 0,114 | 0,122 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 250 | 0,037 | 0,046 | 0,056 | 0,066 | 0,076 | 0,085 | 0,095 | 0,105 | 0,115 | 0,124 | 0,134 | 0,144 | 0,154 | 0,163 | 0,173 | 0,183 | 0,193 | 0,202 | - | - | - | - | - | - | - | - | - |
| 300 | 0,046 | 0,058 | 0,070 | 0,083 | 0,095 | 0,107 | 0,119 | 0,132 | 0,144 | 0,156 | 0,168 | 0,181 | 0,193 | 0,205 | 0,217 | 0,230 | 0,242 | 0,254 | 0,266 | 0,279 | 0,291 | 0,303 | - | - | - | - | - |
| 350 | 0,055 | 0,070 | 0,085 | 0,099 | 0,114 | 0,129 | 0,144 | 0,158 | 0,173 | 0,188 | 0,203 | 0,217 | 0,232 | 0,247 | 0,262 | 0,276 | 0,291 | 0,306 | 0,321 | 0,335 | 0,350 | 0,365 | 0,380 | 0,394 | 0,409 | 0,424 | - |
| 400 | 0,064 | 0,082 | 0,099 | 0,116 | 0,133 | 0,151 | 0,168 | 0,185 | 0,202 | 0,220 | 0,237 | 0,254 | 0,271 | 0,289 | 0,306 | 0,323 | 0,340 | 0,358 | 0,375 | 0,392 | 0,409 | 0,427 | 0,444 | 0,461 | 0,478 | 0,496 | 0,513 |
| 450 | 0,074 | 0,093 | 0,113 | 0,133 | 0,153 | 0,172 | 0,192 | 0,212 | 0,232 | 0,251 | 0,271 | 0,291 | 0,311 | 0,330 | 0,350 | 0,370 | 0,390 | 0,409 | 0,429 | 0,449 | 0,469 | 0,488 | 0,508 | 0,528 | 0,548 | 0,567 | 0,587 |
| 500 | 0,083 | 0,105 | 0,127 | 0,150 | 0,172 | 0,194 | 0,216 | 0,239 | 0,261 | 0,283 | 0,305 | 0,328 | 0,350 | 0,372 | 0,394 | 0,417 | 0,439 | 0,461 | 0,483 | 0,506 | 0,528 | 0,550 | 0,572 | 0,595 | 0,617 | 0,639 | 0,661 |
| 550 | 0,092 | 0,117 | 0,142 | 0,166 | 0,191 | 0,216 | 0,241 | 0,265 | 0,290 | 0,315 | 0,340 | 0,364 | 0,389 | 0,414 | 0,439 | 0,463 | 0,488 | 0,513 | 0,538 | 0,562 | 0,587 | 0,612 | 0,637 | 0,661 | 0,686 | 0,711 | 0,736 |
| 600 | 0,101 | 0,129 | 0,156 | 0,183 | 0,210 | 0,238 | 0,265 | 0,292 | 0,319 | 0,347 | 0,374 | 0,401 | 0,428 | 0,456 | 0,483 | 0,510 | 0,537 | 0,565 | 0,592 | 0,619 | 0,646 | 0,674 | 0,701 | 0,728 | 0,755 | 0,783 | 0,810 |
| 650 | - | 0,140 | 0,170 | 0,200 | 0,230 | 0,259 | 0,289 | 0,319 | 0,349 | 0,378 | 0,408 | 0,438 | 0,468 | 0,497 | 0,527 | 0,557 | 0,587 | 0,616 | 0,646 | 0,676 | 0,706 | 0,735 | 0,765 | 0,795 | 0,825 | 0,854 | 0,884 |
| 700 | - | 0,152 | 0,184 | 0,217 | 0,249 | 0,281 | 0,313 | 0,346 | 0,378 | 0,410 | 0,442 | 0,475 | 0,507 | 0,539 | 0,571 | 0,604 | 0,636 | 0,668 | 0,700 | 0,733 | 0,765 | 0,797 | 0,829 | 0,862 | 0,894 | 0,926 | 0,958 |
| 750 | - | 0,164 | 0,199 | 0,233 | 0,268 | 0,303 | 0,338 | 0,372 | 0,407 | 0,442 | 0,477 | 0,511 | 0,546 | 0,581 | 0,616 | 0,650 | 0,685 | 0,720 | 0,755 | 0,789 | 0,824 | 0,859 | 0,894 | 0,928 | 0,963 | 0,998 | 1,033 |
| 800 | - | - | 0,213 | 0,250 | 0,287 | 0,325 | 0,362 | 0,399 | 0,436 | 0,474 | 0,511 | 0,548 | 0,585 | 0,623 | 0,660 | 0,697 | 0,734 | 0,772 | 0,809 | 0,846 | 0,883 | 0,921 | 0,958 | 0,995 | 1,032 | 1,070 | 1,107 |
| 850 | - | - | 0,227 | 0,267 | 0,307 | 0,346 | 0,386 | 0,426 | 0,466 | 0,505 | 0,545 | 0,585 | 0,625 | 0,664 | 0,704 | 0,744 | 0,784 | 0,823 | 0,863 | 0,903 | 0,943 | 0,982 | 1,022 | 1,062 | 1,102 | 1,141 | 1,181 |
| 900 | - | - | 0,241 | 0,284 | 0,326 | 0,368 | 0,410 | 0,453 | 0,495 | 0,537 | 0,579 | 0,622 | 0,664 | 0,706 | 0,748 | 0,791 | 0,833 | 0,875 | 0,917 | 0,960 | 1,002 | 1,044 | 1,086 | 1,129 | 1,171 | 1,213 | 1,255 |
| 950 | - | - | - | 0,300 | 0,345 | 0,390 | 0,435 | 0,479 | 0,524 | 0,569 | 0,614 | 0,658 | 0,703 | 0,748 | 0,793 | 0,837 | 0,882 | 0,927 | 0,972 | 1,016 | 1,061 | 1,106 | 1,151 | 1,195 | 1,240 | 1,285 | 1,330 |
| 1000 | - | - | - | 0,317 | 0,364 | 0,412 | 0,459 | 0,506 | 0,553 | 0,601 | 0,648 | 0,695 | 0,742 | 0,790 | 0,837 | 0,884 | 0,931 | 0,979 | 1,026 | 1,073 | 1,120 | 1,168 | 1,215 | 1,262 | 1,309 | 1,357 | 1,404 |
| 1050 | - | - | - | 0,334 | 0,384 | 0,433 | 0,483 | 0,533 | 0,583 | 0,632 | 0,682 | 0,732 | 0,782 | 0,831 | 0,881 | 0,931 | 0,981 | 1,030 | 1,080 | 1,130 | 1,180 | 1,229 | 1,279 | 1,329 | 1,379 | - | - |
| 1100 | - | - | - | - | 0,403 | 0,455 | 0,507 | 0,560 | 0,612 | 0,664 | 0,716 | 0,769 | 0,821 | 0,873 | 0,925 | 0,978 | 1,030 | 1,082 | 1,134 | 1,187 | 1,239 | 1,291 | 1,343 | 1,396 | - | - | - |
| 1150 | - | - | - | - | 0,422 | 0,477 | 0,532 | 0,586 | 0,641 | 0,696 | 0,751 | 0,805 | 0,860 | 0,915 | 0,970 | 1,024 | 1,079 | 1,134 | 1,189 | 1,243 | 1,298 | 1,353 | 1,408 | - | - | - | - |
| 1200 | - | - | - | - | 0,441 | 0,499 | 0,556 | 0,613 | 0,670 | 0,728 | 0,785 | 0,842 | 0,899 | 0,957 | 1,014 | 1,071 | 1,128 | 1,186 | 1,243 | 1,300 | 1,357 | 1,415 | - | - | - | - | - |
| 1250 | - | - | - | - | - | 0,520 | 0,580 | 0,640 | 0,700 | 0,759 | 0,819 | 0,879 | 0,939 | 0,998 | 1,058 | 1,118 | 1,178 | 1,237 | 1,297 | 1,357 | 1,417 | - | - | - | - | - | - |
| 1300 | - | - | - | - | - | 0,542 | 0,604 | 0,667 | 0,729 | 0,791 | 0,853 | 0,916 | 0,978 | 1,040 | 1,102 | 1,165 | 1,227 | 1,289 | 1,351 | 1,414 | - | - | - | - | - | - | - |
| 1350 | - | - | - | - | - | 0,564 | 0,629 | 0,693 | 0,758 | 0,823 | 0,888 | 0,952 | 1,017 | 1,082 | 1,147 | 1,211 | 1,276 | 1,341 | 1,406 | - | - | - | - | - | - | - | - |
| 1400 | - | - | - | - | - | - | 0,653 | 0,720 | 0,787 | 0,855 | 0,922 | 0,989 | 1,056 | 1,124 | 1,191 | 1,258 | 1,325 | 1,393 | - | - | - | - | - | - | - | - | - |
| 1450 | - | - | - | - | - | - | 0,677 | 0,747 | 0,817 | 0,886 | 0,956 | 1,026 | 1,096 | 1,165 | 1,235 | 1,305 | 1,375 | - | - | - | - | - | - | - | - | - | - |
| 1500 | - | - | - | - | - | - | 0,701 | 0,774 | 0,846 | 0,918 | 0,990 | 1,063 | 1,135 | 1,207 | 1,279 | 1,352 | 1,424 | - | - | - | - | - | - | - | - | - | - |

actuator BEN
(BxH ≤ 1,21 m² e H ≤ 1100 mm)

actuator BEE
(1,21 m² < BxH ≤ 1,30 m² e H ≤ 1200 mm)

actuator BE
(BxH > 1,30 m² o H > 1200 mm)

Damper for smoke control single compartment

| | |
|------------|---|
| Standards: | EN 13501-4; EN 1363-1,3; EN 1366-9,10; EN 12101-8 |
|------------|---|

Classification

| | | | | | | | | | |
|------|--|--|----|----|----|-----|--|--|--|
| E300 | | | 30 | 60 | 90 | 120 | | | |
| E600 | | | 30 | 60 | 90 | 120 | | | |

Notes:

The classification is completed with the word "single" to indicate suitability for use in a single compartment (single fire compartmentation). Temperature 400/30 (Maximum operating temperature) indicates that the damper can operate (open and close) for a period of 30 min. at temperatures below 400°C (caution: only for E600 classified dampers).

Symbols for installation:

- Ved: vertical installation in duct
- Vew: vertical installation on wall
- Vedw: vertical installation both in duct and on wall
- hod: horizontal installation in duct
- how: horizontal installation in wall
- hodw: horizontal installation both in duct and on wall

S: indicates the tightness, the leakage which must be less than 200 m³/h/m². For all dampers not classified "S", a leakage is allowed which must be less than 360 m³/h/m². The leakage is measured both at room temperature and high temperatures.

500 - 1000 - 1500: the value indicates the maximum pressure in Pa measured at room temperature.

AA: automatic activation.

AM: manual activation.

"i -> o" -"i<-o"- "i<->o": indicate the product performance, respectively, internal-external, external-internal or both internal-external sides.

C300: indicates that the damper can be used in smoke control only systems.

C10000: indicates that the damper can be used in combined smoke and room control systems.

Cmod: indicates that the modular dampers can be used in combined smoke and room control systems.

Damper for smoke control multiple compartment

| | |
|------------|---|
| Standards: | EN 13501-4; EN 1363-1,3; EN 1366-9,10; EN 12101-8 |
|------------|---|

Classification

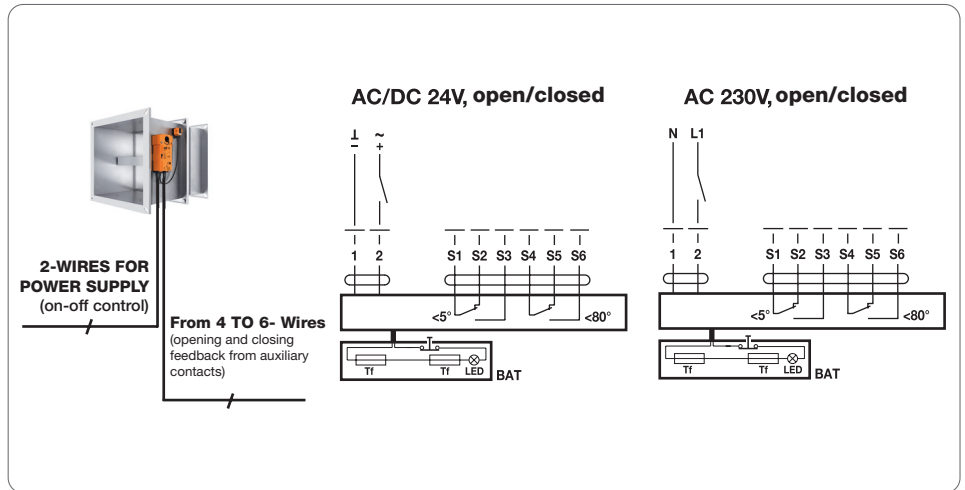
| | | | | | | | | | |
|----|--|--|----|----|----|-----|--|--|--|
| EI | | | 30 | 60 | 90 | 120 | | | |
| E | | | 30 | 60 | 90 | 120 | | | |

Notes:

The classification is completed by the word "Multi" to indicate suitability for use in a multiple compartment (where multiple compartments are combined in the same air duct).

Standard actuator

- BFL24-T
- BFN24-T
- BF24-T
- BFL230-T
- BFN230-T
- BF230-T

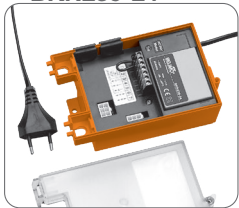


Control and warning

Actuators:

- All 24V actuators with T-ST extension
- BFL24-T-ST
- BFN24-T-ST
- BF24-T-ST

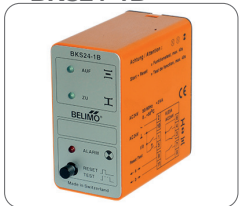
BKN230-24



Description

- Power supply and communication unit for actuators for 24V fire damper with ST socket
- Built-in status light
- Possible connection to a smoke detector, without additional power supply
- AC 230V power supply

BKS24-1B



Description

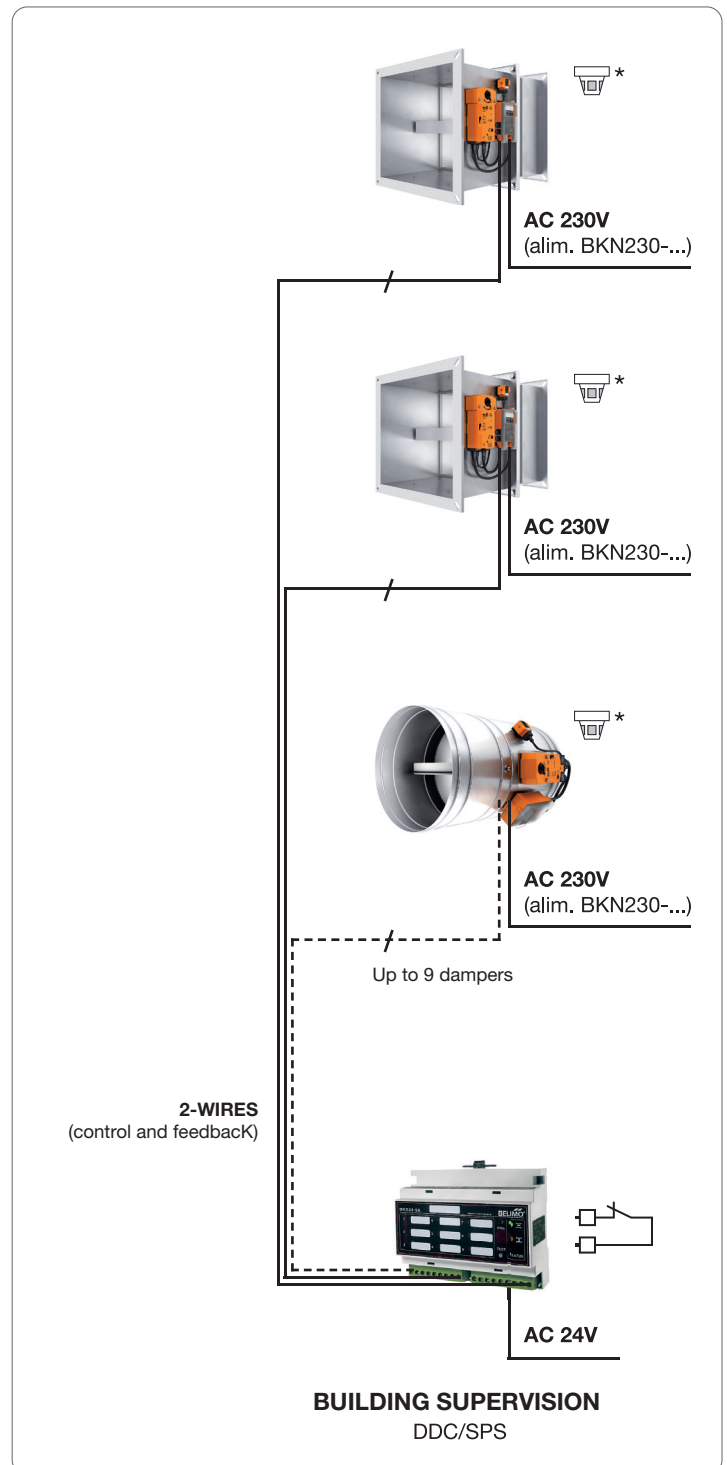
- Communication and control unit for fire damper
- Control and monitoring of 1 damper
- Built-in status light
- ZSO-11 connection base required
- AC 24V power supply

BKS24-9A



Description

- Communication and control unit for fire damper
- Control and monitoring of 9 dampers
- Built-in status light
- Connection plug terminals
- AC 24V power supply



Modbus RTU and BACnet MS/TP

Actuators:

- All 24V motors with T-ST extension

BKN230-24-MOD



Description

- Power supply and communication unit for actuators for 24 V fire damper with ST socket
- BACnet MS/TP, Modbus RTU communication
- Built-in status light
- Possible connection to a smoke detector, without additional power supply
- AC 230V power supply

UK24MOD



Description

- MP Gateway for Modbus RTU
- AC/DC 24V
- MP interface – Modbus RTU (RS-485)
- Connection of max. 8 actuators
- MP/MPL/MFT(2) incl. VAV and fire protection

MP-Bus and DDC-Controller

Actuators:

- All 24V motors with T-ST extension

BKN230-24-C-MP



Description

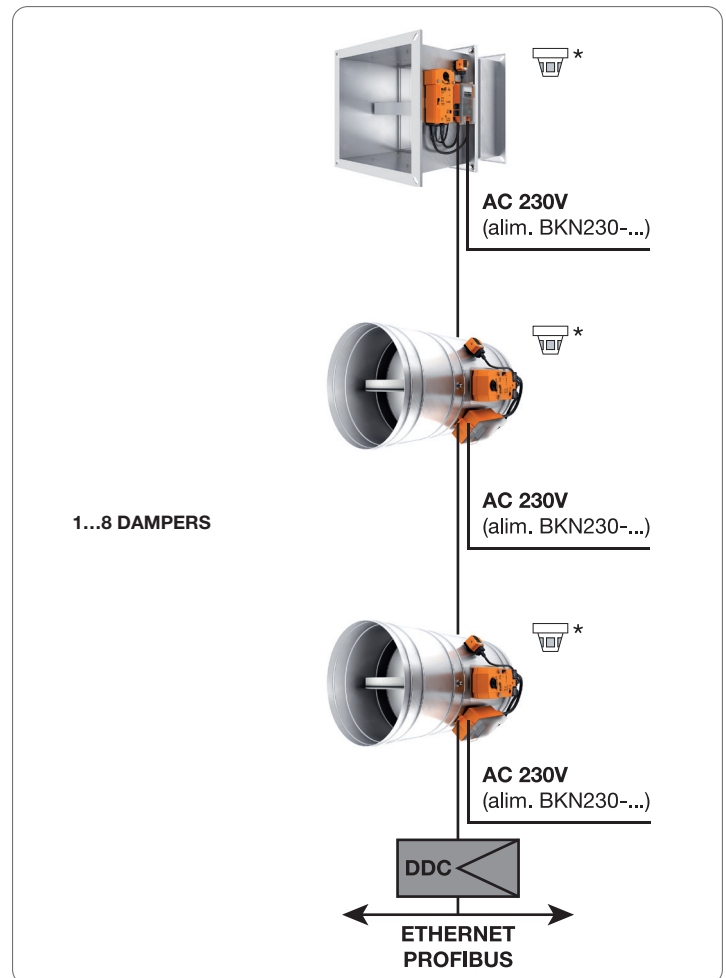
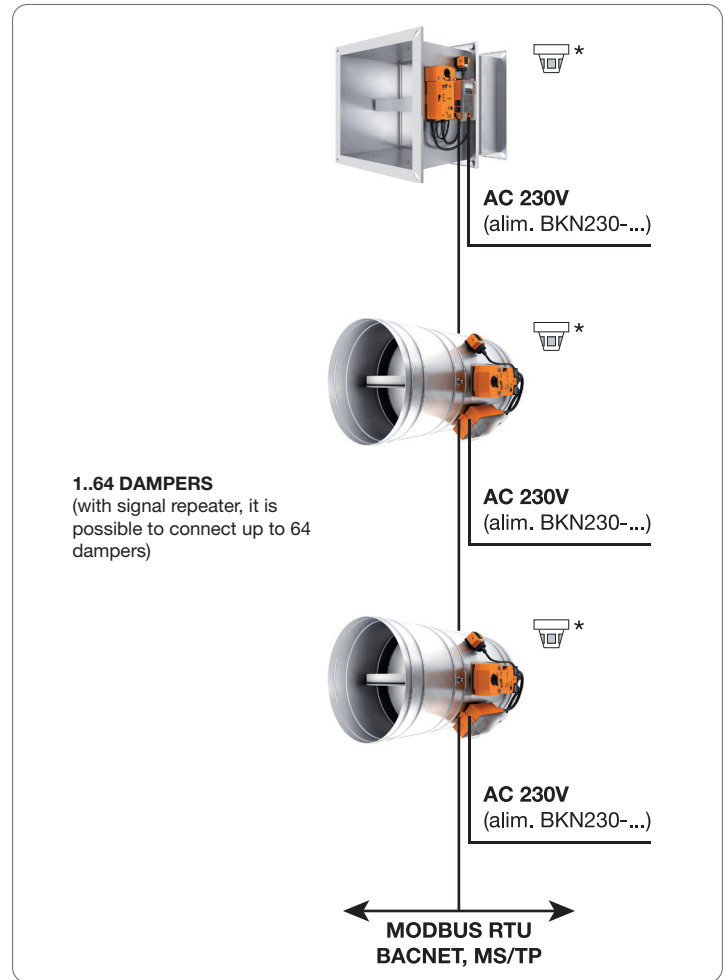
- Power supply and communication unit for actuators for 24 V fire damper with ST socket
- MP-Bus communication
- UK24MOD, UK24BAC and SBS control
- Built-in status light
- Possible connection to a smoke detector, without additional power supply
- AC 230V power supply

UK24BAC



Description

- MP Gateway for BACnet MS/TP
- AC/DC 24V
- MP interface – BACnet MS/TP (RS-485)
- Connection of max. 8 actuators
- MP/MPL/MFT(2) incl. VAV and fire protection



All prices are list prices for local market, for a quotation please contact us.

Price list - Fire damper systems

| Cable / Socket for systems | € |
|----------------------------|----|
| T-ST | 50 |

| Power supply and communication systems | € |
|--|-----|
| BKN 230-24 | 280 |
| BKN 230-24 C - MP | 400 |
| BKN 230-24 MOD | 400 |
| BKN 230-24 LON | 620 |

| Monitoring and control system | € |
|-------------------------------|-----|
| BKS 24-1 | 530 |
| 24-9A BKS | 710 |
| UK 24 MOD | 830 |
| UK 24 BAC | 940 |

Example:

Fire damper with 24V actuator and thermal fuse, take the list price for the motorised damper.
 We combine the power supply and communication unit **BKN230-24** and to do so, we need to use the **T-ST** cable.
T-ST + BKN 230-24 we will get: € 50.00 + € 280.00 = € 330.00 to be added to the price of the 24V motorised damper.

We will then combine the monitoring and control system **BKS 24-1** or **BKS24-9A**.

Combine the components according to the "MOD-LON" communication system.

Smoke control damper systems

All prices are list prices for local market, for a quotation please contact us.

Price list - Smoke control damper systems

| Cable / Socket for systems | € |
|----------------------------|----|
| T-ST | 50 |

| Power supply and communication systems | € |
|--|-----|
| BKNE 230-24 | 380 |

| Monitoring and control system | € |
|---|-----|
| BKSE 24-6 UP TO 6 DAMPERS | 530 |
| BSIA24-48 PULSE, 24-48 V, NORM. OPEN | 710 |
| BSIA24-48 R FAIL SAFE / CUT-OFF, NORM. CLOSED | 830 |