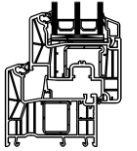
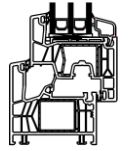
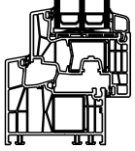
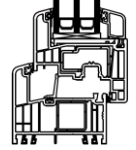
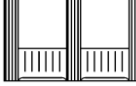



table of Uw-values according to GEG 2020 for pvc-windows in W/(m²K)

standards according to GEG (2020) $U_w = \max. 1.3 \text{ W/(m}^2\text{K)}$
standards according to KfW $U_w = \max. 0.95 \text{ W/(m}^2\text{K)}$

U_w -values over $1.0 \text{ W/(m}^2\text{K)}$ are indicated with one decimal place! e.g. $1.34 \rightarrow 1.3$
 U_w -values under $1.0 \text{ W/(m}^2\text{K)}$ are indicated with two decimal places! e.g. $0.78 \rightarrow 0.78$

| system → | | KF 700 | | KF 734 S | KF 424 S | KF 824 S | KF 594 |
|----------------------------------|--------------------------|--------------------|-----------------|---|---|---|---|
| cross-section → | | without Low-E-Foil | with Low-E-Foil |  |  |  |  |
| | building depth (in mm) → | | 80 | 80 | 80 | 76 | 88 |
| view width (all around; in mm) → | | 127 | 127 | 117 | 116 | 120 | 118 |
| Uf-value | W/(m²K) → | 1,0 | 0,82 | 1,0 | 1,1 | 0,98 | 1,1 |

| glazing | Ug-value W/(m²K) | Psi-value W/(mK) | KF 700 | | KF 734 S | KF 424 S | KF 824 S | KF 594 |
|---|------------------|------------------|--------------|--------------|----------|----------|--------------|--------|
|  | 0,5 | 0,030 | 0,74 | 0,68 | 0,73 | 0,76 | 0,73 | 0,77 |
| | 0,6 | 0,030 | 0,81 | 0,75 | 0,80 | 0,83 | 0,80 | 0,83 |
| | 0,7 | 0,030 | 0,88 | 0,81 | 0,87 | 0,90 | 0,86 | 0,90 |
| | 0,8 | 0,030 | 0,94 | 0,88 | 0,94 | 0,97 | 0,93 | 0,97 |
|  | 1,0 | 0,032 | not possible | not possible | 1,1 | 1,1 | not possible | 1,1 |
| | 1,1 | 0,032 | not possible | not possible | 1,1 | 1,2 | not possible | 1,2 |

values highlighted in green are suitable for passive houses

values highlighted in red exceeding the reference value of GEG 2020! (note approval in individual cases)

glass spacer:

-thermally insulated glass spacer (pvc) according to DIN EN ISO 10077-2 = 0.030 & 0.032 W/(mK)
-no arches possible

calculation basis and indication of source for:

Uf-value: thermal transmittance coefficient for frame parts in W/(m²K)
Ug-value: thermal transmittance coefficient for glazing according to DIN EN 673 in W/(m²K)
Uw-value: mathematical determination of the thermal transmittance coefficient of windows in W/(m²K) according to DIN EN ISO 10077-1 (reference size 1230x1480mm), proportion of the frame approx. 30%
calculation: calculation method according to DIN EN ISO 10077-2
reference size: size of the test specimen according to DIN EN ISO 14351-1
psi-value: fundamentals of EN ISO 10077-2
sash bars: according to DIN EN ISO 14351 amendment (DIN 4108) or DIN EN ISO 10077-1:2018-01 table G.4

limitations for sash bars (according to DIN EN ISO 14351-1):

+ 0.1 W/(m²K) single cross joint of sash bars between the glass panes
+ 0.2 W/(m²K) multiple cross joint of sash bars between the glass panes
+ 0.4 W/(m²K) glass dividing sash bars

As an alternative to flat-rate correction values, it can be taken into accounts as follows:

length-related heat transfer coefficient for pvc spacer bars (according to DIN EN ISO 10077-1:2018-01 table G.4):

with double glass: 0.040 W/(mK)
with triple glass, with rung in a cavity: 0.020 W/(mK)
with triple glass, with rung in both cavities: 0.030 W/(mK)