



CONCEALED HINGE SYSTEMS

TECHNICAL MANUAL · 2026

Drilling, overlay, installation & adjustment.

The engineering reference for designers, cabinet makers and installers working with the ten TERQ hinge models: CQ105 · GS105 · GSA105 · GSM105 · SD100 · GS155 · CQT105 · CQS100 · FFS105 · FFL105.

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01 · GEOMETRY REFERENCE

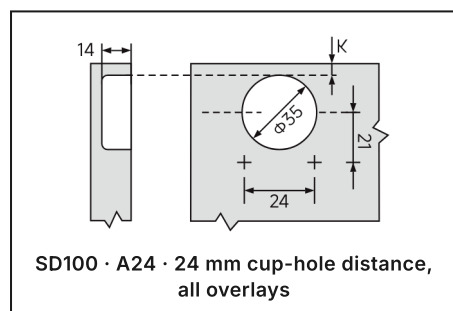
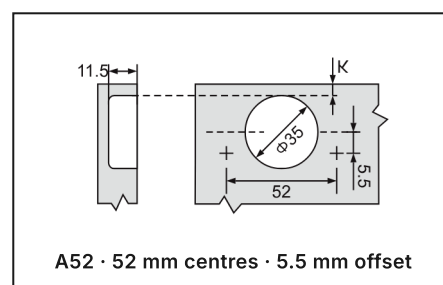
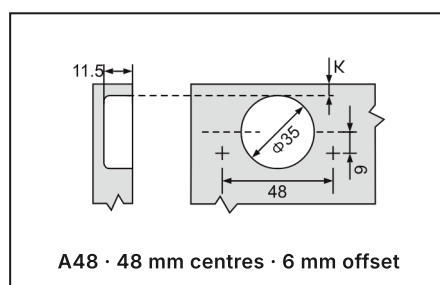
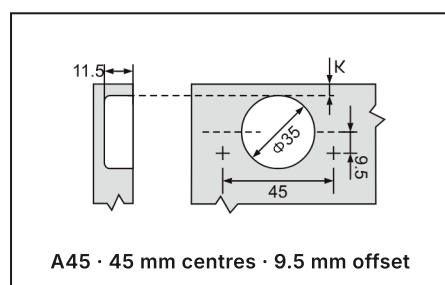
Parameter key & cup drilling

Confirm the machining pattern first, then read every application relationship with one shared parameter language. The cup-drilling code describes door preparation only; it is not an overlay type.

PARAMETER KEY

S	Cabinet side-panel thickness	D	Required door overlay	T	Door thickness	K	Cup distance (door edge to cup)
A	Door reveal / application gap	L	Door-to-side-panel / internal clearance	H	Mounting-plate height	G	Hinge overlay position

CUP DRILLING PATTERNS · Ø35 MM CUP



Order number logic. Selection No. (overlay position) + drilling code = hinge body order no., e.g. 105QF + A45 → **105QF45**. GS155 uses the same spacings under the codes Z45 / Z48 / Z52 (155GF45). SD100 has one fixed A24 specification (100SDF24). Face-frame hinges use A45 fixed and the overlay size is the order no. (105FS127).

Drilling template KA02. Cup drilling 45 / 48 / 52 mm, plate positioning 20 / 32 / 37 mm, including in-line positioning. Not for SD100 A24.

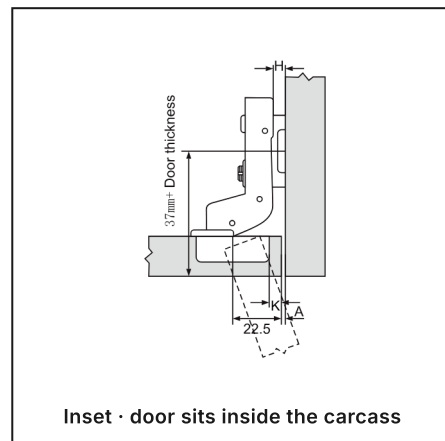
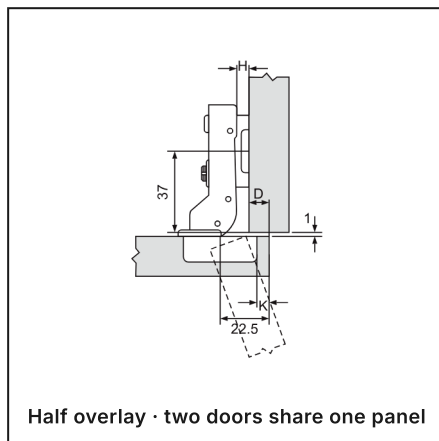
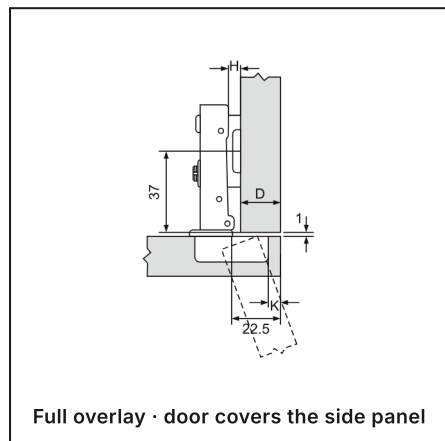
CUP DATA BY MODEL

Model	Cup Ø × depth	K (mm)	Door thickness T	Drilling codes
CQ105	Ø35 × 11.5 mm	3–7 mm	15–22 mm	A45 · A48 · A52
GS105	Ø35 × 12.5 mm	3–7 mm	16–25 mm	A45 · A48 · A52
GSA105	Ø35 × 12.5 mm	3–7 mm	16–25 mm	A45 · A48 · A52
GSM105	Ø35 × 12.5 mm	3–7 mm	16–25 mm	A45 · A48 · A52
SD100	Ø35 × 14 mm	3–7 mm	18–30 mm	A24 fixed
GS155	Ø35 × 11.5 mm	3–20 mm	15–25 mm	Z45 · Z48 · Z52
CQT105	Ø35 × 12.5 mm	3–9 mm	16–28 mm	A45 · A48 · A52
CQS100	Ø35 × 11.5 mm	3–7 mm	15–22 mm	A45 · A48 · A52
FFS105	Ø35 × 11.5 mm	2.5–3 mm	14–26 mm	A45 fixed
FFL105	Ø35 × 11.5 mm	2.5–3 mm	14–26 mm	A45 fixed

02 · APPLICATION RELATIONSHIP

Overlay geometry & model formulas

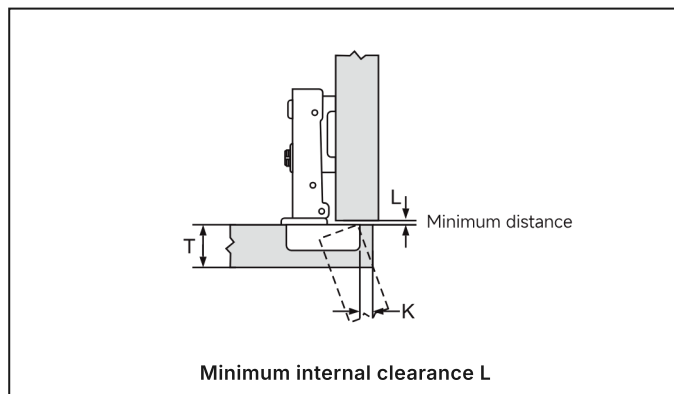
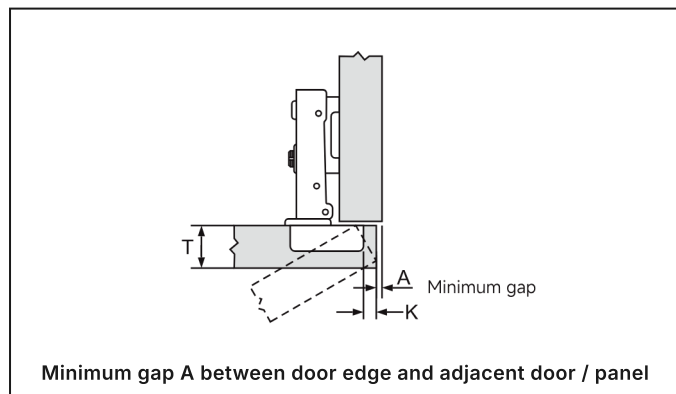
Each hinge body is selected for one door position. With the mounting-plate height H and cup distance K known, the model formula gives the required overlay D (full and half overlay) or reveal A (inset). Use only the K / T combinations tabulated on the model data sheet; values apply to doors with a 1 mm edge radius.



FORMULAS BY MODEL

Model	Full overlay	Half overlay	Inset
CQ105	$105QF \cdot H = 13 + K - D$	$105QH \cdot H = 3 + K - D$	$105QI \cdot H = -5 + K + A$
GS105	$105GF \cdot H = 12 + K - D$	$105GH \cdot H = 3 + K - D$	$105GI \cdot H = -7 + K + A$
GSA105	$105GAF \cdot H = 12 + K - D$	$105GAH \cdot H = 3 + K - D$	$105GAI \cdot H = -7 + K + A$
GSM105	$105GMF \cdot H = 12 + K - D$	$105GMH \cdot H = 3 + K - D$	$105GMI \cdot H = -7 + K + A$
SD100	$100SDF \cdot H = 12 + K - D$	$100SDH \cdot H = 2 + K - D$	$100SDI \cdot H = -6.5 + K + A$
GS155	$155GF \cdot \Delta H = 13 + K - D \cdot H0$	$155GH \cdot \Delta H = 3 + K - D \cdot H9$	$155GI \cdot \Delta H = -5 + K + A \cdot H17$
CQT105	$105QTF \cdot H = 13 + K - D$	$105QTH \cdot H = 3 + K - D$	$105QTI \cdot H = -5 + K + A$
CQS100	$100QSSF/100QSNF \cdot H = 14 + K - D$	$100QSSH/100QSNH \cdot H = 5 + K - D$	$100QSSI/100QSNI \cdot H = -4 + K + A$

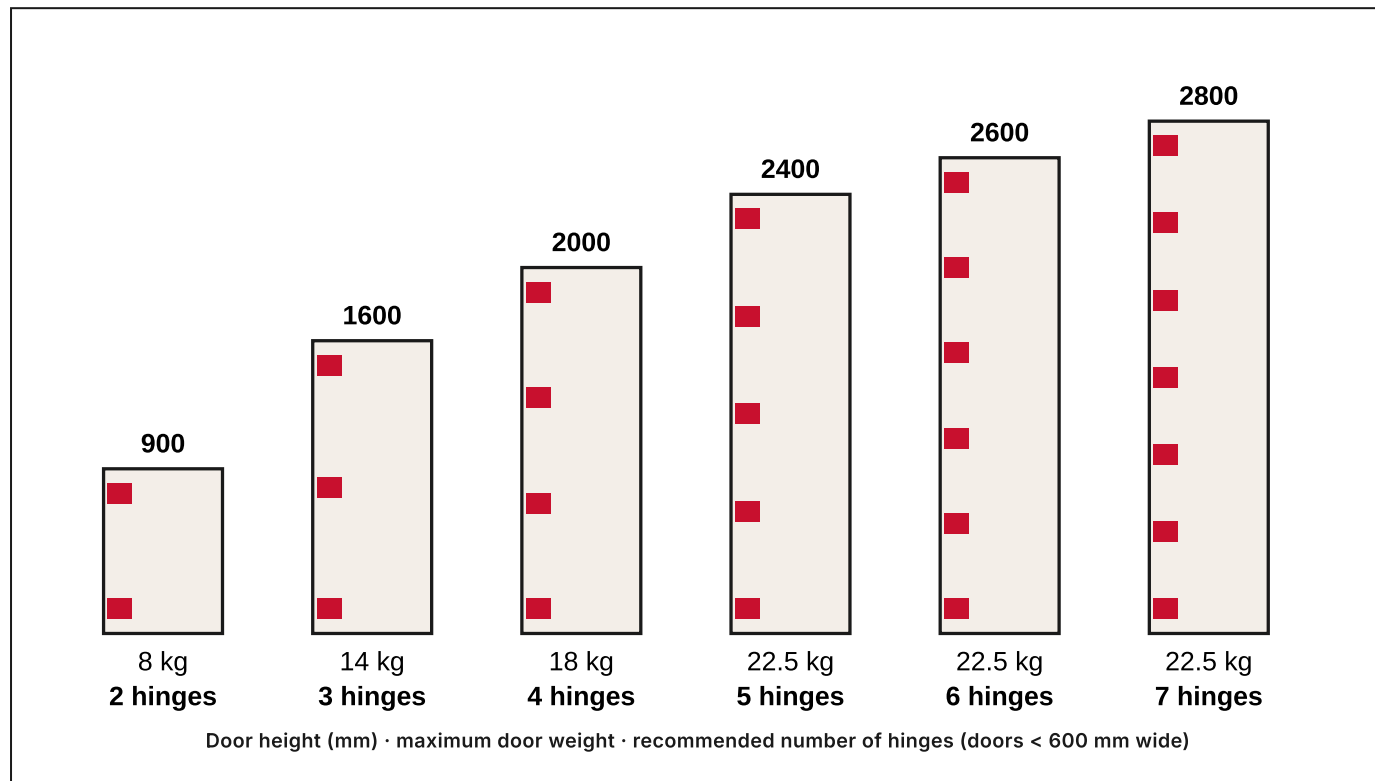
GS155: ΔH is the change from the nominal plate height paired with each application ($H0 / H9 / H17$). Full tables, minimum gap A and internal clearance L : page 2 of each TERQ_TDS. Face-frame overlay selection: section 08.



03 · PLANNING REFERENCE

Hinge quantity & placement

Use door height and maximum door weight together as the starting point, then verify the complete application.
Reference guidance for doors under 600 mm wide.



REFERENCE TABLE

Door height up to (mm)	900	1600	2000	2400	2600	2800
Max. door weight	8 kg	14 kg	18 kg	22.5 kg	22.5 kg	22.5 kg
Hinges per door	2	3	4	5	6	7

01 · Read height and weight together

Select the hinge quantity from the nearest applicable height and maximum door-weight reference.

02 · Maximise distance L

Place the upper and lower hinges as far apart as practical; top hinge centre 60–100 mm from the top edge of the door.

03 · Verify exceptional conditions

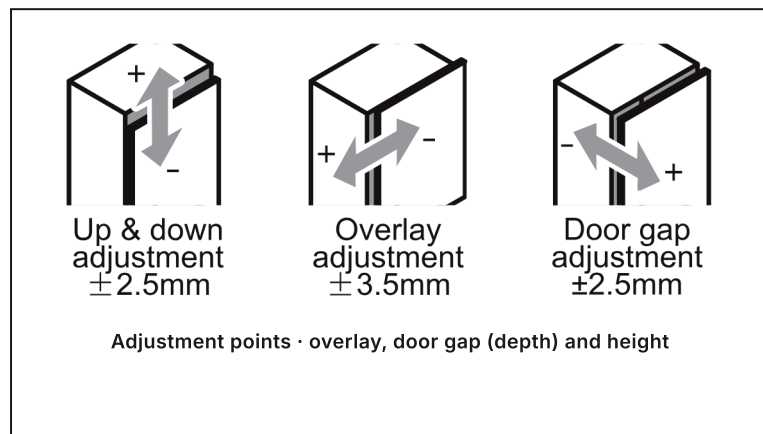
Door material, centre of gravity, handle position, installation accuracy and dynamic use can change the required quantity.

If the door exceeds the stated range or the application is uncertain, verify the design or trial-assemble before production. Source: TERQ catalogue p. 32.

04 · FINAL ALIGNMENT

Three-axis adjustment

Identify the adjustment screw, make one controlled change at a time, and verify the finished door alignment against adjacent doors.



01 · Overlay adjustment

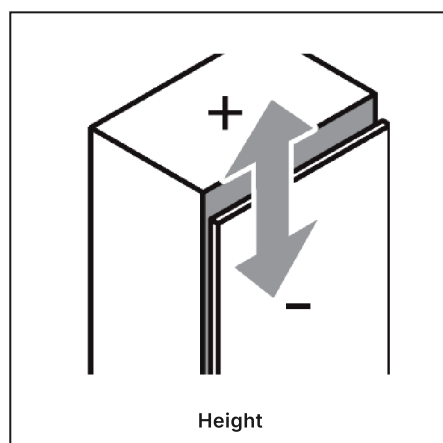
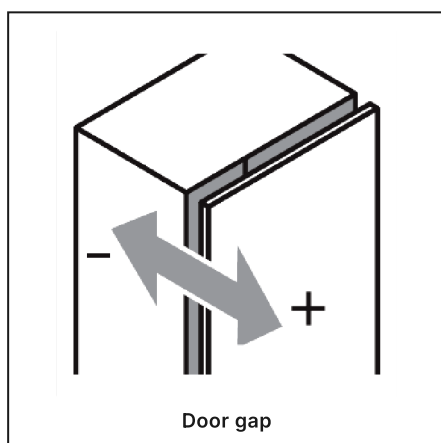
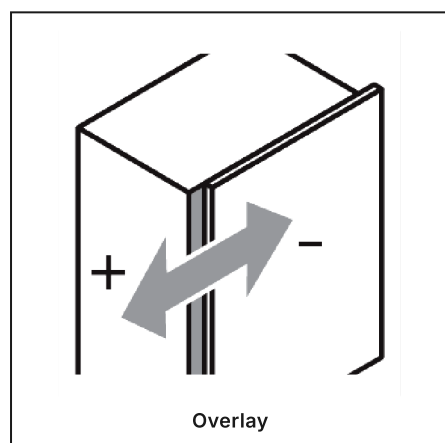
Turn the overlay-adjustment screw on the arm and verify the final door position. Moves the door sideways.

02 · Door-gap (depth) adjustment

Turn the depth-adjustment screw and verify the door-to-cabinet gap.

03 · Height adjustment

Adjust the vertical position at the mounting plate (3D plates C3D / C2D / L2D: ±2 mm), then confirm alignment across adjacent doors.



ADJUSTMENT RANGES BY MODEL

Model	Height	Overlay	Door gap
CQ105	±2.5 mm	±3.5 mm	±2.5 mm
GS105	±2 mm	±3 mm	±3 mm
GSA105	±2 mm	±3 mm	±3 mm
GSM105	±2.5 mm	±3 mm	±3.5 mm
SD100	±2 mm	±3 mm	±2.8 mm
GS155	±2 mm	±3.5 mm	±3 mm
CQT105	±2.5 mm	±3.5 mm	±2 mm
CQS100	±2 mm	±2.5 mm	±2 mm
FFS105	±2 mm	per selection (p. 2)	±2 mm
FFL105	±2 mm	0 / +2.5 mm	±2 mm

Product-specific ranges differ; the model data sheet remains authoritative. Face-frame overlay adjustment depends on the selected overlay size (section 08). Source: catalogue p. 34.

05 · MOUNTING STRUCTURES

Mounting & removal

Follow only the sequence that matches the hinge structure identified on its data sheet. Confirm the compatible mounting plate and the required fixings before installation. Plate and release details vary by model.

01 · CLIP-ON HINGE · CQ105 · GS105 · GSA105 · SD100 · GS155 · CQT105 · CQS100

A · Align

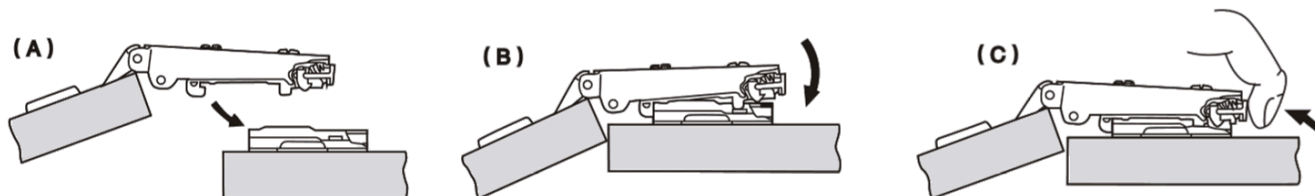
Fix the mounting plate to the side panel.
Align the hinge arm with the plate.

B · Press

Press down until the connection locks with
an audible click.

C · Release

Press the release lever to remove the door.
No tools.



Clip-Quick™ sequence · A align · B press & click · C release

02 · CLIP-ON WITH 3D ADJUSTMENT

The same clip-on sequence on a 3D mounting plate (C3D / C2D / L2D). "3D" describes the extra height-adjustment capability of the plate, not a separate mounting type.

03 · ONE-PIECE / MONOBLOC · GSM105

A · Position

Position the hinge with its integrated in-line
plate on the cabinet.

B · Secure

Secure the assembly with the pre-installed
cabinet-side fixing screw.

C · Remove

Loosen the fixing screw to remove the
complete hinge.

04 · FACE-FRAME HINGE · FFS105 · FFL105

A · Place

Place the one-piece cabinet-side structure
on the face frame.

B · Align

Align the hinge and press it into position.

C · Secure / remove

Secure or remove it with the cabinet-side
fixing screws.

05 · SPECIAL-ANGLE HINGE · GS155

Clip-on principle with an application-matched plate height: full overlay H0, half overlay H9, inset H17. Align the arm with the compatible plate, press until it locks, press the release lever to separate.

None of the ten TERQ models uses slide-on mounting. Source: catalogue pp. 35–36.

06 · HINGE TECHNOLOGIES

Clip-Quick™ & Glidex-Sys™

CLIP-QUICK™ · INSTANT SNAP-IN, TOOL-FREE PRECISION

A tool-free connection between hinge arm and mounting plate: align, press until it clicks, and release with one finger for fast mounting, removal and servicing. Doors can be hung and taken down without disturbing the adjustment.

Models	CQ105 · GS105 · GSA105 · SD100 (on its dedicated in-line plate) · GS155 · CQT105 · CQS100
Not applicable	GSM105 (monobloc, integrated plate) · FFS105 / FFL105 (one-piece face-frame)

01 · Align

Set the arm onto the front of the plate.

02 · Press & click

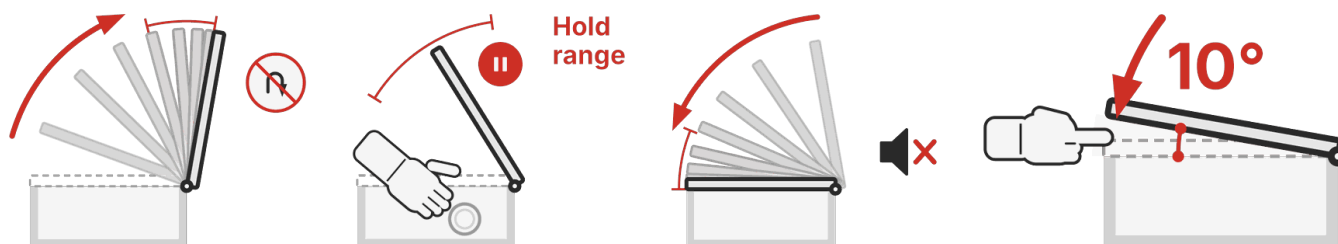
Press down until the arm locks with an audible click.

03 · Release

Press the finger lever; the arm lifts free.

GLIDEX-SYS™ · SILKY-SMOOTH MOTION, WHISPER-QUIET CLOSURE

Four stages of fluid control in one hinge: cushioned opening, free-stop hold, dual-valve damped closing, and small-angle soft-close that brings the door home gently even when it was opened less than 10°.



01 Open · 02 Hold · 03 Close · 04 Small-angle soft-close (below 10°)

Model	Hold range	Motion detail
GS105	45–105°	Four-stage fluid control · Clip-Quick™
GSA105	45–105°	Adjustable damping · soft-close deactivation switch · Clip-Quick™
GSM105	45–105°	Monobloc with integrated in-line plate
SD100	45–100°	Damper inside the 14 mm cup · deactivation switch · Clip-Quick™ on dedicated plate
GS155	45–155°	155° wide angle · Clip-Quick™

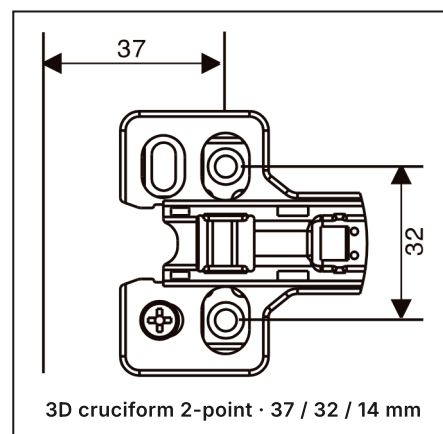
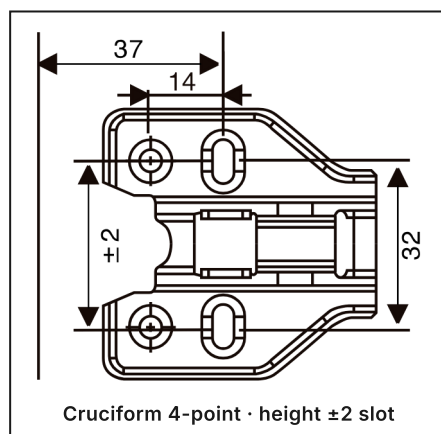
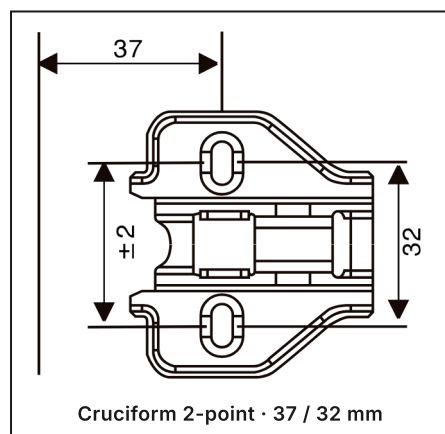
CQ105, CQT105 and CQS100 (S version) use controlled soft-close without the Glidex-Sys™ hold stage; FFS105 / FFL105 use an integrated mini damper with deactivation switch.

07 · COMPONENTS

Mounting plates, covers & fixings

Match the plate to the hinge, then select the height. H is the mounting-plate height in mm (the two digits after the plate type: C2N09-A1P = H9). Alternatives are choices, not a list to order together. GSM105 and the face-frame hinges need no separate plate; SD100 includes its dedicated 32 mm in-line plate.

Part No.	Type	Material	For
C2N00-A1P · C2N09-A1P · C2N17-A1P	Cruciform · 2-point fixing	Steel	CQ105 · CQT105 · GS155
C4N00-A1P · C4N09-A1P · C4N17-A1P	Cruciform · 4-point fixing	Steel	CQ105 · CQT105 · GS155
C3D00-A1P · C3D09-A1P · C3D17-A1P	3D cruciform · 3-point fixing · height ± 2 mm	Steel	CQ105 · CQT105 · GS155
C2D00-B1P · C2D00-E1P · C2D00-F1P	3D cruciform · 2-point fixing · height ± 2 mm	Steel	GS105 · GSA105
C2N00-B1P · C2N00-C1P	Cruciform · 2-point fixing	Steel	GS105 · GSA105
C4N00-C1P	Cruciform · 4-point fixing	Steel	GS105 · GSA105
L2D00-B1P	3D in-line · 2-point fixing · height ± 2 mm	Steel	GS105 · GSA105
C2N00-SS1P · C2N02-SS1P	Cruciform · 2-point fixing	Stainless steel	CQS100
C4N00-SS1P · C4N02-SS1P · C4N04-SS1P	Cruciform · 4-point fixing	Stainless steel	CQS100
C2D00-SS1P	3D cruciform · 2-point fixing · height ± 2 mm	Stainless steel	CQS100



07 · COMPONENTS

Covers, fixings & accessories

COVERS & SIGNATURE FINISHES

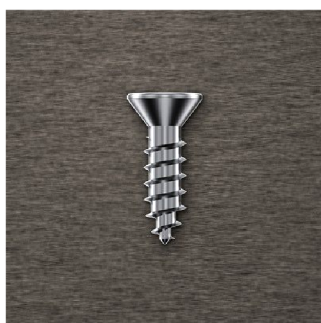
Model	Cup cover	Arm cover
CQ105 · CQT105	01C	03A
GS105 · GSA105	01C	Full / half overlay 05A (curved bevel) or 07A (flat bevel) · inset 06A or 08A
GSM105	01C	Full / half overlay 09A · inset 10A
CQS100	01C	02A
SD100	One same-colour Signature Finish set per hinge: Black 88S1 · White 88S2 · Gold 88S3 · Grey 88S4 · Brown 88S5	
GS155 · FFS105 · FFL105	No separate cover set	

FIXINGS & ACCESSORIES

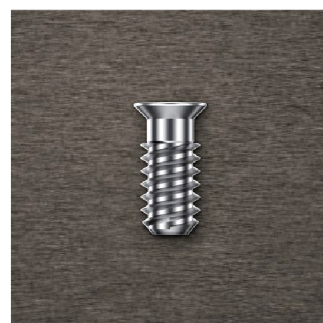
Standard clip-on / monobloc	Dowels M8-O · M8-D · M8-D-LY · M8-D-P-A · M8-D-P-B · M10-O · M10.4-O · ED-M8 · chipboard screw K4X16 · Euro screws ES-6.3×10 / ES-6.3×13 / ES-6.3×14 · bridge dowels S32-5-8-S · S32-5-8-L · S32-5-10-S · S32-10-10-L
SD100	M8 / M10 dowels · K4X16 · ES-6.3×14 (listed options, not a kit)
Face frame	M8-D · M10-O · K4X16 (Euro screws and S32 bridge dowels not listed)
General options	S5-10-F reverse-lock single-bridge dowel M5 · S5-10-P single-bridge expanding dowel M5 (no model-specific pairing; confirm application)
Restrictors	XW-90-A 90° restrictor: CQ105 · GS105 · GSA105 · GSM105 · CQS100 · XW-90-C US-style 90° restrictor: FFS105 · FFL105



M8-D square dowel



K4X16 chipboard screw



ES-6.3x14 Euro countersunk screw

Euro screws require a compatible mounting-plate fixing specification; do not assume every plate accepts them. Source: catalogue pp. 38–41.

08 · FACE-FRAME APPLICATIONS

Face-frame hinges · FFS105 · FFL105

One-piece face-frame hinges with an integrated mini damper and soft-close deactivation switch, for doors 14–26 mm thick. Cup Ø35 × 11.5 mm, K 2.5–3 mm, A45 fixed. Choose the overlay; the overlay size is the hinge body order no.

FFS105 · SMALL OVERLAY 9.5–25.4 MM

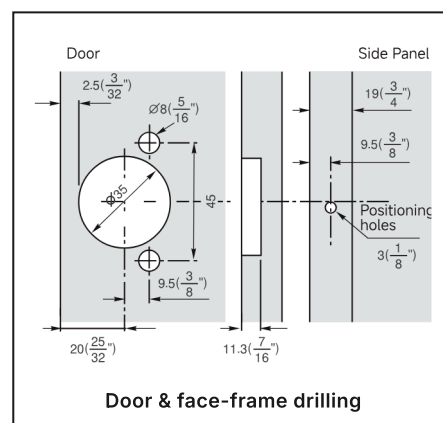
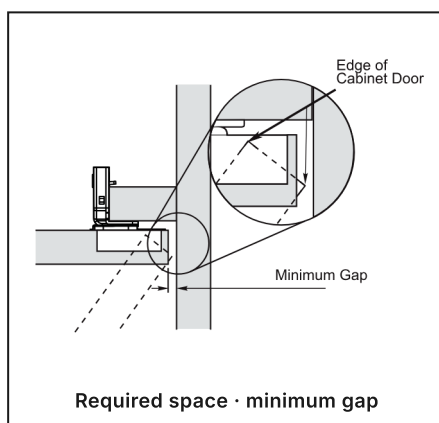
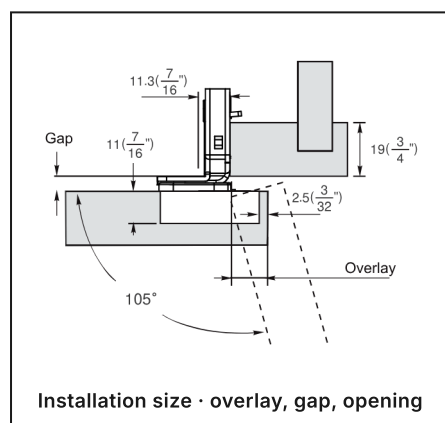
Overlay	3/8 in 9.5 mm	7/16 in 11.1 mm	1/2 in 12.7 mm	9/16 in 14.3 mm	5/8 in 15.8 mm	3/4 in 19 mm	7/8 in 22.2 mm	1 in 25.4 mm
Order no.	105FS095	105FS111	105FS127	105FS143	105FS158	105FS190	105FS222	105FS254

Overlay adjustment: 9.5 mm selection: 0 / +2.5 mm (achievable 9.5–12 mm). 11.1–25.4 mm selections: –0.7 / +1.8 mm from nominal.

FFL105 · LARGE OVERLAY 28.5–38.1 MM

Overlay	1-1/8 in 28.5 mm	1-1/4 in 31.8 mm	1-5/16 in 33.3 mm	1-3/8 in 34.9 mm	1-7/16 in 36.5 mm	1-1/2 in 38.1 mm
Order no.	105FL285	105FL318	105FL333	105FL349	105FL365	105FL381

Overlay adjustment: 28.5–38.1 mm selections: 0 / +2.5 mm from each nominal overlay.



Factory-set door gap	5 mm (3/16 in)	Minimum opening gap	7 mm (9/32 in) at 19 mm (3/4 in) door, right-angled edges
Adjustment	Height ±2 mm · door gap ±2 mm · overlay per selection	Accessories	XW-90-C restrictor · KA02 template · fixings M8-D / M10-O / K4X16

Face-frame cycle performance verified to ANSI/KCMA (see catalogue pp. 27–30).

09 · FINAL CHECK

A complete order, a clear combination

Start from the selected hinge. Confirm each required component and record its exact order no. or Part No.; do not order every alternative.

Hinge	Mounting plate	Cover / finish	Accessory
CQ105	C2N / C4N / C3D · A1	01C + 03A	XW-90-A · KA02
GS105	L2D · C2D · C2N · C4N (B1 / C1 / E1 / F1)	01C + 05A/07A (F/H) · 06A/08A (I)	XW-90-A · KA02
GSA105	as GS105	as GS105	XW-90-A · KA02
GSM105	Integral; no separate plate	01C + 09A (F/H) · 10A (I)	XW-90-A · KA02
SD100	Dedicated plate included	One set 88S1-88S5	No restrictor · KA02 n/a
GS155	C2N / C4N / C3D · A1 · H0 / H9 / H17 by application	Not applicable	KA02
CQT105	C2N / C4N / C3D · A1	01C + 03A	KA02
CQS100	C2N / C4N / C2D · SS1	01C + 02A	XW-90-A · KA02
FFS105	Integral; no separate plate	Not applicable	XW-90-C · KA02
FFL105	Integral; no separate plate	Not applicable	XW-90-C · KA02

Identity

Model, overlay and closing function match the application.

Body code

Selection No. + drilling / fixed specification resolve to one body order no.

Components

Plate height, fixing, cover / finish and accessories are recorded individually.

Verification

For values outside the tables, ask a technical advisor to verify the application.

DOCUMENTATION

Each model has a two-page technical data sheet (TERQ_TDS_<MODEL>_EN_v2026.1.pdf) and an installation drawings pack (TERQ_Installation_Drawings_<MODEL>_v2026.1.zip). Speak with a technical advisor: info@terqhw.com · +86 21 5135 6649.

Cycle performance of the European-standard hinges verified to EN 15570; face-frame hinges to ANSI/KCMA (see catalogue).