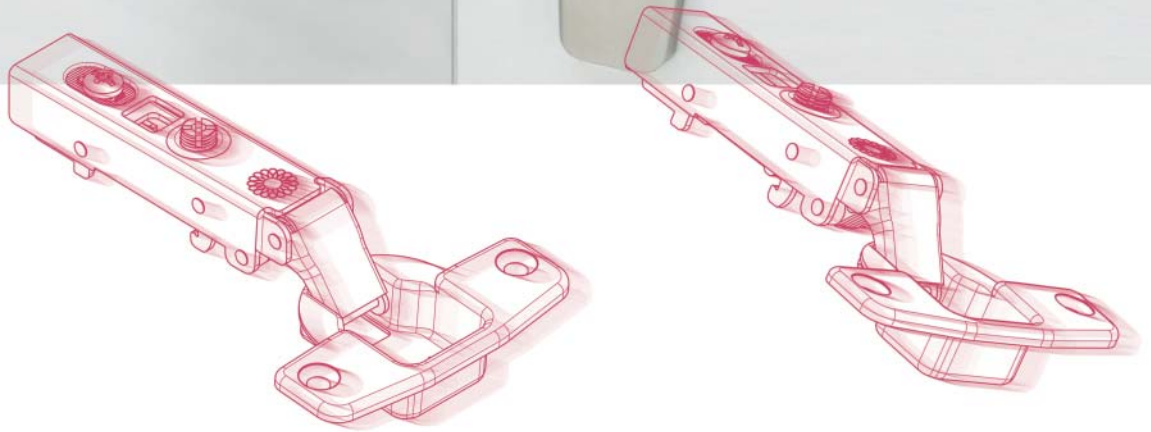


# Ferrari

Harmony soft-closing hinges





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## Technical details

Harmony, the soft-closing hinge

Harmony is Ferrari's new soft-closing hinge.

This product combines an elegant and simple design, a smooth functioning and a very convenient price and is therefore one of the smartest solutions available on the market for soft-closing needs.

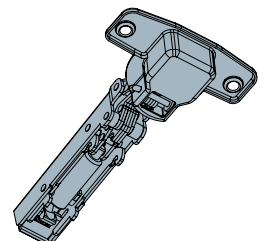
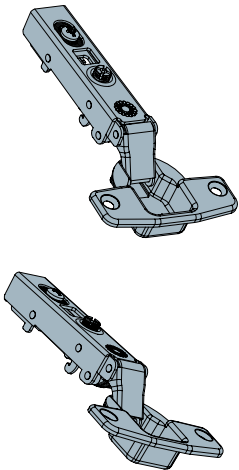
The damper is concealed in the hinge arm, ensuring a silent and smooth closing of doors.

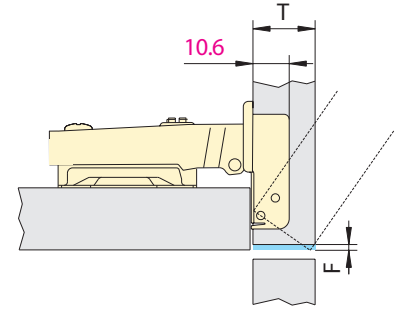
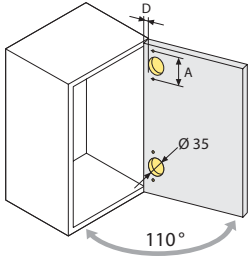
This hinge is tested by the Ferrari labs and it's guaranteed up to 50,000 cycles.

Several details make this product comfortable and easy to use, such as the quick cup fastening, and the front and lateral cam adjustment plates.

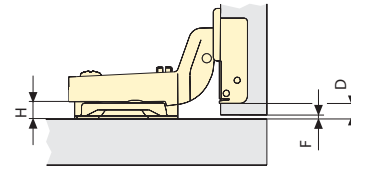
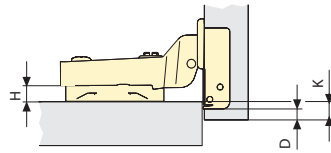
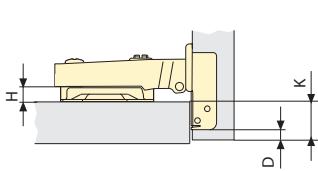
Harmony is a very smart and convenient solution for soft-closing needs, great in its simplicity.

The wide product range includes different crank hinges, 170° opening angles, mini hinges, cup and arm covers, etc..





- D = Cup drilling distance**
- K = Overlay**
- F = Min. Reveal**
- H = Plate Height**



**$H = 13 + D - K$        $H = 4 + D - K$        $H = -3 + D + F$**

Cup Ø [mm]	Drilling pattern (A)	Front adj.	Crank A (0) Cup fastenings			Crank B (9) Cup fastenings			Crank C (18) Cup fastenings		
			woodscrews	dowels	quick fastening	woodscrews	dowels	quick fastening	woodscrews	dowels	quick fastening
Ø35		Screw	E20079AGG	E20081AGG	E20619AGG	E20079BGG	E20081BGG	E20619BGG	E20079CGG	E20081CGG	E20619CGG
		Cam	E21079AGG	E21081AGG	E21619AGG	E21079BGG	E21081BGG	E21619BGG	E21079CGG	E21081CGG	E21619CGG
		Screw	E20087AGG	E20091AGG	E20407AGG	E20087BGG	E20091BGG	E20407BGG	E20087CGG	E20091CGG	E20407CGG
		Cam	E21087AGG	E21091AGG	E21407AGG	E21087BGG	E21091BGG	E21407BGG	E21087CGG	E21091CGG	E21407CGG
		Screw	E20095AGG	E20099AGG	E20551AGG	E20095BGG	E20099BGG	E20551BGG	E20095CGG	E20099CGG	E20551CGG
		Cam	E21095AGG	E21099AGG	E21551AGG	E21095BGG	E21099BGG	E21551BGG	E21095CGG	E21099CGG	E21551CGG

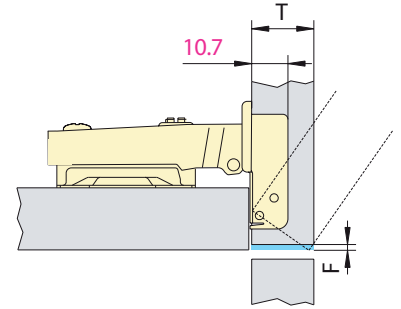
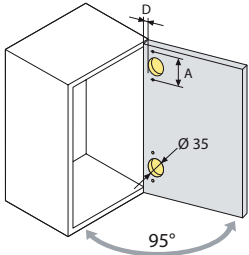
Crank A (0) Adjustment -0.5/+3.0 Minimum reveal 2.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
H (plate height)	3	4	5	6
0	16	17	18	19
2	14	15	16	17
4	12	13	14	15

Crank B (9) Adjustment -0.5/+3.0 Minimum reveal 2.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
H (plate height)	3	4	5	6
0	7,5	8,5	9,5	10,5
2	5,5	6,5	7,5	8,5
4	3,5	4,5	5,5	6,5

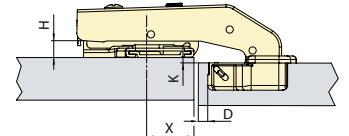
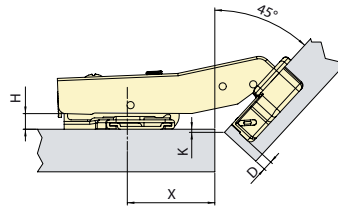
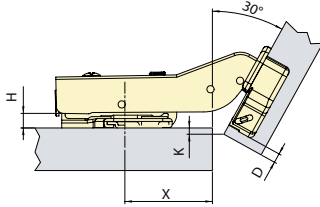
Crank C (18) Gap Chart "F" (mm) Adjustment -0.5/+3.0 Minimum reveal 2.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
H (plate height)	3	4	5	6
0	-2,5	-1,5	-0,5	0,5
2	-4,5	-3,5	-2,5	-1,5
4	-6,5	-5,5	-4,5	-3,5

This data was observed on a 20 mm thick cabinet door with a drilling distance D mm 4. We reserve the right to change the technical specifications.

## Specialty applications



- D = Cup drilling distance**
- K = Overlay**
- F = Min. Reveal**
- H = Plate Height**



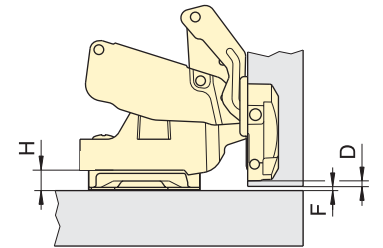
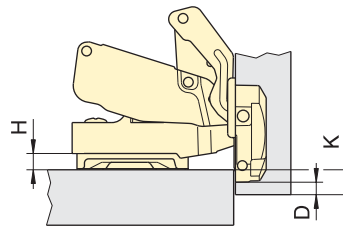
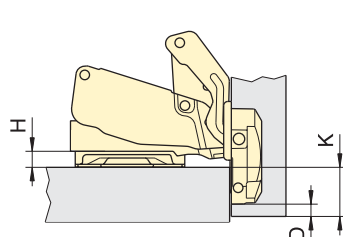
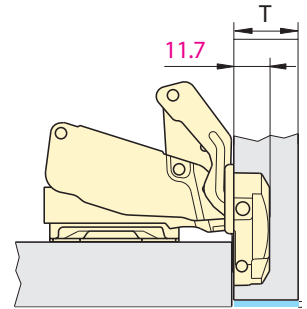
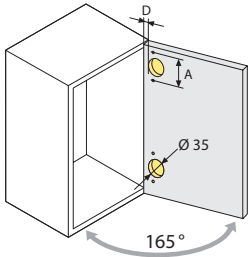
Cup Ø [mm]	Drilling pattern (A)	Front adj.	CRANK D (+30°) Cup fastenings		CRANK E (+45°) Cup fastenings		CRANK I (180°) Cup fastenings	
			woodscrews	dowels	woodscrews	dowels	woodscrews	dowels
Ø35		Screw	E20078DGG	E20080DGG	E20078EGG	E20080EGG	E20078IGG	E20080IGG
		Screw	E20086DGG	E20090DGG	E20086EGG	E20090EGG	E20086IGG	E20090IGG
		Screw	E20094DGG	E20098DGG	E20094EGG	E20098EGG	E20094IGG	E20098IGG

Crank D (+30°) Gap Chart "X-K" (mm)					
K (overlay)	Drilling distance "D" (mm)				
H (plate height)	3	4	5	6	
0	39	38	37	36	X
	3	4	5	6	K
2	39	38	37	36	X
	1	2	3	4	K
4	39	38	37	36	X
	-1	0	1	2	K

Crank E (+45°) Gap Chart "X-K" (mm)					
K (overlay)	Drilling distance "D" (mm)				
H (plate height)	3	4	5	6	
0	39	38	37	36	X
	1.5	2.5	3.5	4	K
2	39	38	37	36	X
	-0.5	0.5	1.5	2	K
4	39	38	37	36	X
	-2.5	-1.5	-0.5	0	K

Crank I (180°) Gap Chart "X-K" (mm)					
K (overlay)	Drilling distance "D" (mm)				
H (plate height)	3	4	5	6	
0	21	20	19	18	X
	0	0	0	0	K
2	21	20	19	18	X
	-2	-2	-2	-2	K
4	21	20	19	18	X
	-4	-4	-4	-4	K

# 165° opening hinges



D = Cup drilling distance

K = Overlay

F = Min. Reveal

H = Plate Height

$H = 13 + D - K$        $H = 4 + D - K$        $H = -5 + D + F$

Cup ø [mm]	Drilling pattern (A)	Front adj.	CRANK A (0) 165° opening Cup fastenings		CRANK B (9) 165° opening Cup fastenings		CRANK C (18) 165° opening Cup fastenings	
			woodscrews	dowels	woodscrews	dowels	woodscrews	dowels
Ø35		Cam	E21430AZGMG	E21431AZGMG	E21430BZGMG	E21431BZGMG	E21430CZGMG	E21431CZGMG
		Cam	E21433AZGMG	E21435AZGMG	E21433BZGMG	E21435BZGMG	E21433CZGMG	E21435CZGMG
		Cam	E21437AZGMG	E21439AZGMG	E21437BZGMG	E21439BZGMG	E21437CZGMG	E21439CZGMG

Crank A (0) - 165° Adj. -0.5/+3.0 Minimum reveal 0.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
	3	4	5	6
H (plate height)	0	2	4	6
0	16	17	18	19
2	16	15	16	17
4	16	13	14	15

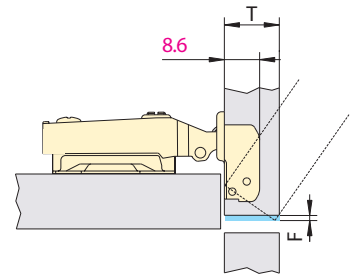
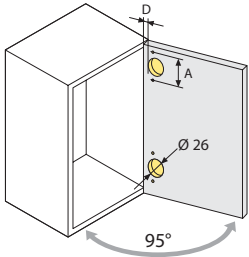
Crank B (9) - 165° Adj. -0.5/+3.0 Minimum reveal 0.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
	3	4	5	6
H (plate height)	0	2	4	6
0	7	8	9	10
2	5	6	7	8
4	3	4	5	6

Crank C (18) - 165° Adj. -0.5/+3.0 Minimum reveal 0.5 (F)				
K (overlay)	Drilling distance "D" (mm)			
	3	4	5	6
H (plate height)	0	2	4	6
0	-2.5	-1.5	-0.5	0.5
2	-4.5	-3.5	-2.5	-1.5
4	-6.5	-5.5	-4.5	-3.5

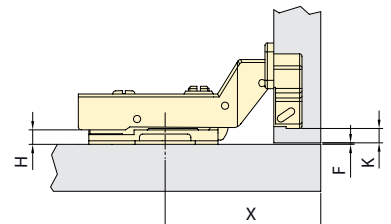
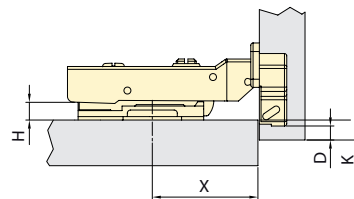
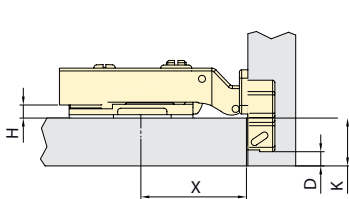
This data was observed on a 20 mm thick cabinet door with a drilling distance D mm 4. We reserve the right to change the technical specifications.



## Mini hinges



- D = Cup drilling distance**
- S = Overlay**
- F = Min. Reveal**
- H = Plate Height**



$$H = 10 + D - K$$

$$H = 1 + D - K$$

$$H = -6 + D + F$$

Cup Ø [mm]	Drilling pattern (A)	CRANK H (3) Cup fastenings			CRANK B (9) Cup fastenings			CRANK C (17) Cup fastenings		
		woodscrews	euro screws	dowels	woodscrews	euro screws	dowels	woodscrews	euro screws	dowels
Ø26		E20120HGG	E20064HGG	E20121HGG	E20120BGG	E20064BGG	E20121BGG	E20120CGG	E20064CGG	E20121CGG

Crank H Gap Chart "K" (mm) Adj. -0.5/+2.5 Minimum reveal 3.5 (F)					
K (overlay)	Drilling distance "D" (mm)				
	3	4	5	6	
H (plate height)	0	14	15	16	17
2	12	13	14	15	
4	10	11	12	13	






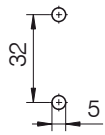
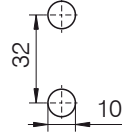
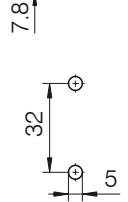




Crank B Gap Chart "K" (mm) Adj. -0.5/+2.5 Minimum reveal 3.5 (F)					
K (overlay)	Drilling distance "D" (mm)				
	3	4	5	6	
H (plate height)	0	4.5	5.5	6.5	7.5
2	2.5	3.5	4.5	5.5	
4	0.5	1.5	2.5	3.5	

Crank C Gap Chart "K" (mm) Adj. -0.5/+2.5 Minimum reveal 3.5 (F)					
K (overlay)	Drilling distance "D" (mm)				
	3	4	5	6	
H (plate height)	0	-3	-2	-1	0
2	-5	-4	-3	-2	
4	-7	-6	-5	-4	

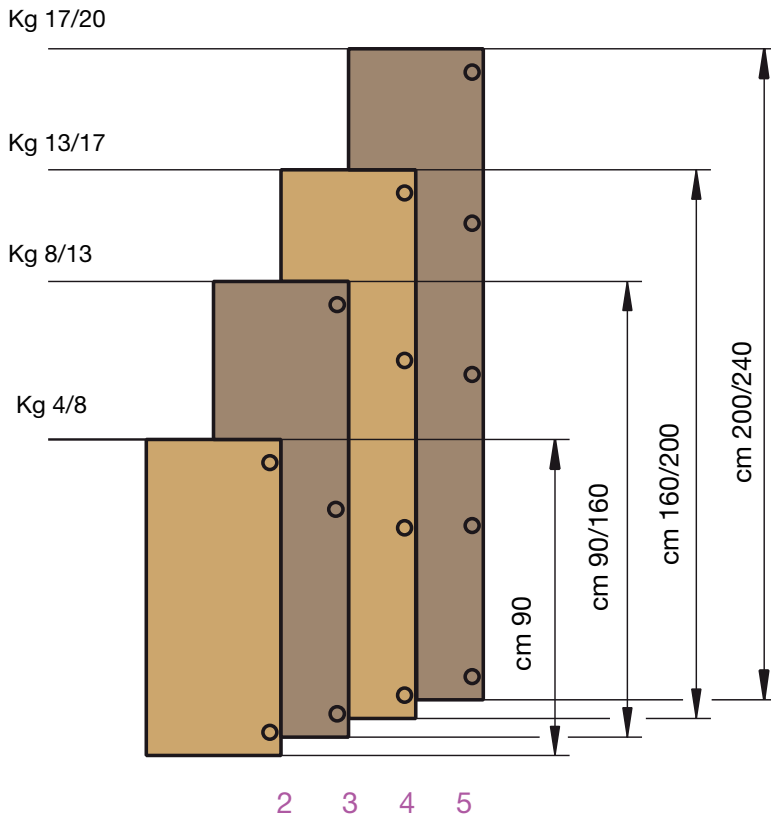
This data was observed on a 20 mm thick cabinet door with a drilling distance D mm 4. We reserve the right to change the technical specifications.





# Plates

Product codes					
Drilling Pattern	Plate Height (mm)		 Premounted D.6.3x14	 Premounted	 Premounted
					
mm 37 x 32 plate					
	h = 0	E20B1410MG00	E20B1002MG00	E20B1010MG00	E20B1282MG00
	h = 2	E20B1410MG20	E20B1002MG20	E20B1010MG20	E20B1282MG20
	h = 4	E20B1410MG40	E20B1002MG40	E20B1010MG40	E20B1282MG40
mm 37 x 32 plate with cam adjustment					
	h = 0	E20B2150MG00	E20B2172MG00	E20B2160MG00	E20B2182MG00
	h = 2	E20B2150MG20	E20B2172MG20	E20B2160MG20	E20B2182MG20
	h = 4	E20B2150MG40	E20B2172MG40	E20B2160MG40	E20B2182MG40
mm 10 x 32 plate					
	h = 0	E20B0780MG00	E20B0792MG00		
	h = 3	E20B0780MG30	E20B0792MG30		
mm 10 x 32 plate with cam adjustment					
	h = 0	E20B1780MG00			
	h = 3	E20B1780MG30			

## Number of hinges per door



This chart should be used as a general guide for 600 mm wide doors. The hinge capacity may vary with different factors such as door material, thickness, size, etc. so the best solution is to perform empirical tests.

Available accessories	
	
Cup cover rectangular shape (52 mm hinges)	Arm cover
E20CB03/GN	E20CC90G-M
Cup cover round shape (45-48 mm hinges)	
E20CB04/GN	
Parts per box: 1,000	





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