

# HALFEN CAST-IN CHANNELS - CURVED SOLUTION

## PRODUCT INFORMATION



HTA-CS 10-E



**HALFEN**  
YOUR BEST CONNECTIONS

# Cast-in Channels – Curved Solution

The advantages at a glance

**B**esides the excellent adjustability **HALFEN cast-in channels** offer enormous time advantages during application. The result: fast construction progress and therefore economisation.



Cast-in channels HTA-CS

 cold formed


## Save and reliable

- No damage of the reinforcement
- Approved for building components with fire protection requirement
- Suitable for the application in the concrete compressive and concrete tension zone
- High corrosion resistant steels available
- Fatigue load capacity
- Building authority approved



Cast-in channels HTA-CS

 hot rolled

 suitable for fatigue loads

## Fast and economical

- Adjustable anchorage
- Screwing instead of welding
- Maximum efficiency with for mountings in rows
- Installation with basic tools – cost savings
- Construction time reduction through pre-planning
- Wide range for most different requirements
- Health beneficial application without noise, dust and vibration



Cast-in channels HZA-CS

 hot rolled

 dynamically resistant

 toothed

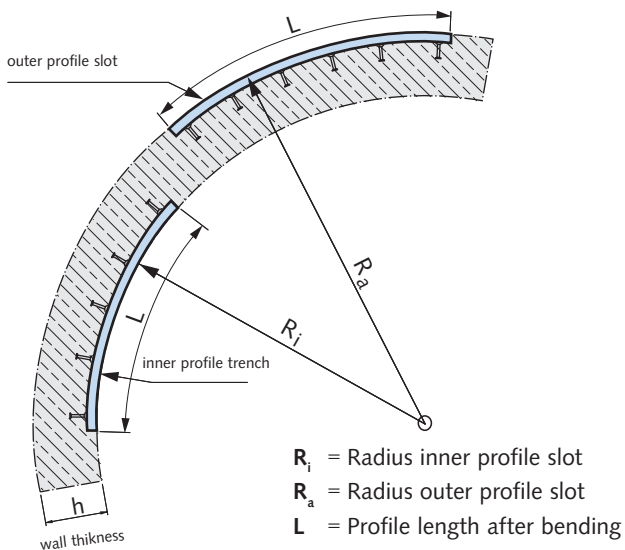
# HALFEN CAST-IN CHANNELS – CURVED SOLUTION

## General information

Curved cast-in channels are applied in many different areas. At the same time they are planned and produced on an object-specific basis. Whether for tunnelling, supply tubes, sewage

disposal plants or other curved buildings, the HALFEN cast-in channels HTA-CS and HZA-CS are always a save and reliable solution in all anchoring challenges.

### Minimum bending radii HALFEN cast-in channels



Application sample: curved cast-in channel in supply tubing

#### Smalles bending radius - all material ①

Profile HTA-CS-	72/48	72/49	52/34	54/33	50/30	49/30	40/22	40/25	HZA-CS 41/22	HZA-CS 29/20 38/23	38/17	28/15
inner slot: min. $R_i$	1,0 m	on request	0,5 m	on request	0,5 m	0,5 m	0,5 m	0,5 m	on request	0,5 m	0,5 m	0,5 m
outer slot: min. $R_a$	4,0 m	on request	4,0 m	on request	4,0 m	8,0 m	2,0 m	4,0 m	on request	2,0 m	1,5 m	1,0 m

① For profiles 72/48 only minimum bending radii apply with mild steel (specification **WB, FV**)

#### Special cut lengths

HTA-CS special cut lengths include a cut length surcharge due to the increased production-related effort. For large quantities, which allow a special profiling, the cut length surcharge is reduced. Prices are on request.



Construction site storage of HTA-CS 52/34

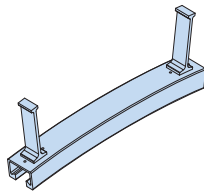
# HALFEN CAST-IN CHANNELS – CURVED SOLUTION

HTA-CS, hot rolled



## HTA-CS 72/48

Cast-in channel,  
officially approved  
Z - 21.4 - 34

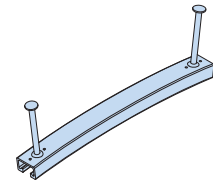


Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanized		
HTA-CS 72/48 - FV - 550 - Kf		3
HTA-CS 72/48 - FV - 1050 - Kf		5
HTA-CS 72/48 - FV - 5400 - Kf		23
Item no. 1001.129-00001		

Specification: A4 = stainless steel W 1.4571/1.4401 (A4)		
HTA-CS 72/48 - A4 - 550 - Kf		3
HTA-CS 72/48 - A4 - 1050 - Kf		5
HTA-CS 72/48 - A4 - 5400 - Kf		23
Item no. 1001.129-00002		

## HTA-CS 52/34

Cast-in channel,  
officially approved  
Z - 21.4 - 34



**Note:**  
Supplied with bolt anchor or welded anchor,  
Delivery subject to confirmation, unless otherwise specified

Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanized		
HTA-CS 52/34 - FV - 550 - Kf		3
HTA-CS 52/34 - FV - 1050 - Kf		5
HTA-CS 52/34 - FV - 5400 - Kf		23
Item no. 1001.099-00001		

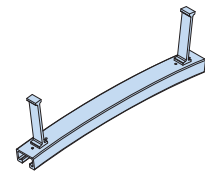
Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)		
HTA-CS 52/34 - A4 - 550 - Kf -Ank.A4		3
HTA-CS 52/34 - A4 - 1050 - Kf -Ank.A4		5
HTA-CS 52/34 - A4 - 5400 - Kf -Ank.A4		23
Item no. 1001.099-00002		



Application sample of HTA-CS 38/17 in HCR quality: highway tunnel

## HTA-CS 52/34-Q

Cast-in channel, with welded anchor Q  
officially approved  
Z - 21.4 - 34  
also for fatigue loads



Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanized		
HTA-CS 52/34-Q- FV - 550 - Kf		3
HTA-CS 52/34-Q- FV - 1050 - Kf		5
HTA-CS 52/34-Q- FV - 5400 - Kf		23
Item no. 1001.149-00001		

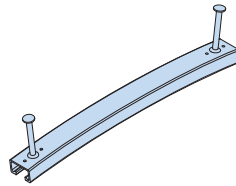
# HALFEN CAST-IN CHANNELS – CURVED SOLUTION

HTA-CS, hot rolled



## HTA-CS 50/30

Cast-in channel,  
officially approved  
Z - 21.4 - 34

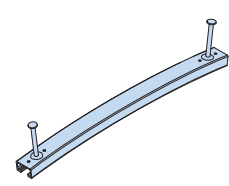


Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HTA-CS 50/30 - FV - 550 - Kf		3
HTA-CS 50/30 - FV - 800 - Kf		4
HTA-CS 50/30 - FV - 1050 - Kf		5
HTA-CS 50/30 - FV - 3050 - Kf		13
HTA-CS 50/30 - FV - 5400 - Kf		23
Item no. 1001.089-00001		

Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)		
HTA-CS 50/30 - A4 - 550 - Kf - Ank.A4		3
HTA-CS 50/30 - A4 - 1050 - Kf - Ank.A4		5
HTA-CS 50/30 - A4 - 5400 - Kf - Ank.A4		23
Item no. 1001.089-00002		

## HTA-CS 40/22

Cast-in channel,  
officially approved  
Z - 21.4 - 34



Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HTA-CS 40/22 - FV - 550 - Kf		3
HTA-CS 40/22 - FV - 800 - Kf		4
HTA-CS 40/22 - FV - 1050 - Kf		5
HTA-CS 40/22 - FV - 1300 - Kf		6
HTA-CS 40/22 - FV - 1550 - Kf		7
HTA-CS 40/22 - FV - 1800 - Kf		8
HTA-CS 40/22 - FV - 2050 - Kf		9
HTA-CS 40/22 - FV - 2300 - Kf		10
HTA-CS 40/22 - FV - 2550 - Kf		11
HTA-CS 40/22 - FV - 3050 - Kf		13
HTA-CS 40/22 - FV - 5400 - Kf		23
Item no. 1001.049-00001		

Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)		
HTA-CS 40/22 - A4 - 550 - Kf - Ank.A4		3
HTA-CS 40/22 - A4 - 1050 - Kf - Ank.A4		5
HTA-CS 40/22 - A4 - 5400 - Kf - Ank.A4		23
Item no. 1001.049-00002		



Application sample: HTA-CS in barrage with curved mass concrete dam

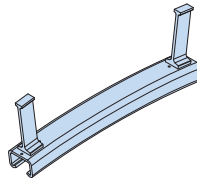
# HALFEN CAST-IN CHANNEL - CURVED SOLUTION

HTA-CS, cold rolled



## HTA-CS 72/49

Cast-in channel,  
officially approved  
Z - 21.4 - 34



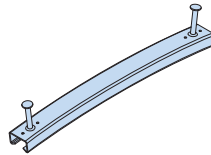
Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 72/49 - A4 - 550 - Kf -Ank.A4	3
HTA-CS 72/49 - A4 - 1050 - Kf -Ank.A4	5

Order-no. 1001.139-00002

## HTA-CS 54/33

Cast-in channel,  
officially approved  
Z - 21.4 - 34



Item name	Length [mm]	Number of anchors
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Specification: FV = hot-dip galvanised

HTA-CS 54/33 - FV - 550 - Kf	3
HTA-CS 54/33 - FV - 1050 - Kf	5
HTA-CS 54/33 - FV - 5400 - Kf	23

Item no. 1001.109-00001

Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

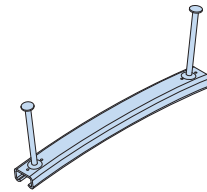
HTA-CS 54/33 - A4 - 550 - Kf -Ank.A4	3
HTA-CS 54/33 - A4 - 1050 - Kf -Ank.A4	5
HTA-CS 54/33 - A4 - 5400 - Kf -Ank.A4	23

Other lengths on request

Item no. 1001.109-00002

## HTA-CS 49/30

Cast-in channel,  
officially approved  
Z - 21.4 - 34



Item name	Length [mm]	Number of anchors
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Specification: FV = hot-dip galvanised

HTA-CS 49/30 - FV - 550 - Kf	3
HTA-CS 49/30 - FV - 1050 - Kf	5
HTA-CS 49/30 - FV - 3050 - Kf	13
HTA-CS 49/30 - FV - 5400 - Kf	23

Item no. 1001.079-00001

Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 49/30 - A4 - 550 - Kf -Ank.A4	3
HTA-CS 49/30 - A4 - 1050 - Kf -Ank.A4	5
HTA-CS 49/30 - A4 - 3050 - Kf -Ank.A4	13
HTA-CS 49/30 - A4 - 5400 - Kf -Ank.A4	23

Item no. 1001.079-00002

Specification: HCR = hannel + anchor stainless steel W 1.4547/1.4529

HTA-CS 49/30 - HCR - 6070- Kf -Ank.HCR	25
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Other lengths on request



Application sample: HTA-CS on carriage mobile formwork

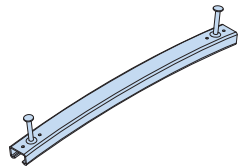
# HALFEN CAST-IN CHANNEL - CURVED SOLUTION

HTA-CS, cold rolled



## HTA-CS 40/25

Cast-in channel,  
officially approved  
Z - 21.4 - 34



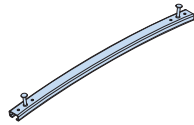
Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HTA-CS 40/25 - FV - 550 - Kf		3
HTA-CS 40/25 - FV - 1050 - Kf		5
HTA-CS 40/25 - FV - 3050 - Kf		13
HTA-CS 40/25 - FV - 5400 - Kf		23
Item no. 1001.069-00001		

### Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 40/25 - A4 - 550 - Kf-Ank.A4		3
HTA-CS 40/25 - A4 - 1050 - Kf-Ank.A4		5
HTA-CS 40/25 - A4 - 5400 - Kf-Ank.A4		23
Item no. 1001.069-00002		

## HTA-CS 38/17

Cast-in channel,  
officially approved  
Z - 21.4 - 34



Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HTA-CS 38/17 - FV - 550 - Kf -		3
HTA-CS 38/17 - FV - 1050 - Kf -		5
HTA-CS 38/17 - FV - 3050 - Kf -		13
HTA-CS 38/17 - FV - 5400 - Kf -		23
Item no. 1001.029-00001		

### Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 38/17 - A4 - 550 - Kf -Ank.A4		3
HTA-CS 38/17 - A4 - 1050 - Kf -Ank.A4		5
HTA-CS 38/17 - A4 - 3050 - Kf -Ank.A4		13
HTA-CS 38/17 - A4 - 5400 - Kf -Ank.A4		23
Item no. 1001.029-00002		

### Specification: HCR = channel + anchor stainless steel W 1.4547/1.4529

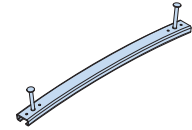
HTA-CS 38/17- HCR- 5400- Kf-Ank.HCR		25
Other lengths on request		

### Specification: K-A4-Ank.A4 = shortend anchor distance ≤ 200mm, channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 38/17 - K - A4 - 550 - Kf -Ank.A4		4
HTA-CS 38/17 - K - A4 - 1050 - Kf -Ank.A4		6
HTA-CS 38/17 - K - A4 - 5400 - Kf -Ank.A4		28
Item no. 1001.039-00002		

## HTA-CS 28/15

Cast-in channel,  
officially approved  
Z - 21.4 - 34



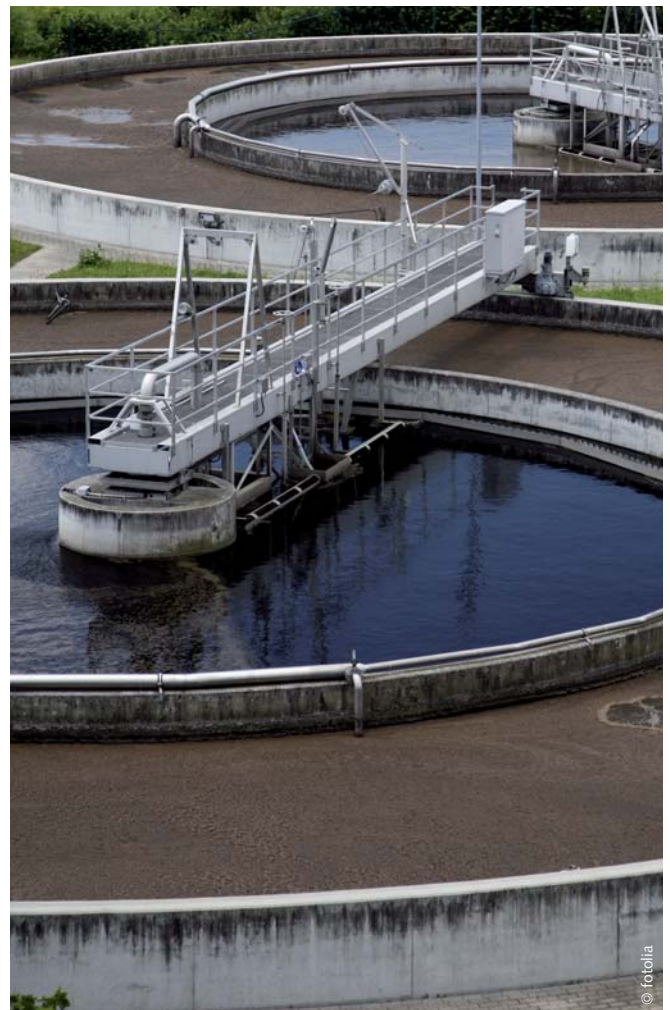
Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HTA-CS 28/15 - FV - 550 - Kf		3
HTA-CS 28/15 - FV - 1050 - Kf		5
HTA-CS 28/15 - FV - 3050 - Kf		13
HTA-CS 28/15 - FV - 5400 - Kf		23
Item no. 1001.019-00001		

### Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HTA-CS 28/15 - A4 - 550 - Kf -Ank.A4		3
HTA-CS 28/15 - A4 - 1050 - Kf -Ank.A4		5
HTA-CS 28/15 - A4 - 3050 - Kf -Ank.A4		13
HTA-CS 28/15 - A4 - 5400 - Kf -Ank.A4		23
Item no. 1001.019-00002		

### Specification: HCR = channel + anchor stainless steel W 1.4547/1.4529

HTA-CS 28/15 - HCR - 5400 - Kf-Ank.HCR		25
Other lengths on request		



Application sample: HTA-CS in sewage disposal plant

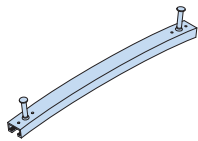
# HALFEN CAST-IN CHANNEL - CURVED SOLUTION

## HZA-CS, toothed



### HZA-CS 38/23

Cast-in channel  
officially approved  
Z - 21.4 - 1691



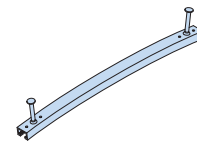
Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HZA-CS 38/23 - FV - 550 - Kf		3
HZA-CS 38/23 - FV - 800 - Kf		4
HZA-CS 38/23 - FV - 1050 - Kf		5
HZA-CS 38/23 - FV - 3030 - Kf		13
HZA-CS 38/23 - FV - 5400 - Kf		23
Item no. 1002.029-00001		

### Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HZA-CS 38/23 - A4 - 550 - Kf - Ank.A4		3
HZA-CS 38/23 - A4 - 800 - Kf - Ank.A4		4
HZA-CS 38/23 - A4 - 1050 - Kf - Ank.A4		5
HZA-CS 38/23 - A4 - 3030 - Kf - Ank.A4		13
HZA-CS 38/23 - A4 - 5400 - Kf - Ank.A4		23
Item no. 1002.029-00002		

### HZA-CS 29/20

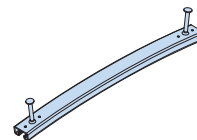
Cast-in channel  
officially approved  
Z - 21.4 - 1691



Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HZA-CS 29/20 - FV - 550 - Kf		4
HZA-CS 29/20 - FV - 1050 - Kf		6
HZA-CS 29/20 - FV - 3030 - Kf		16
HZA-CS 29/20 - FV - 5400 - Kf		28
Item no. 1002.019-00001		

### HZA-CS 41/22

Cast-in channel,  
officially approved  
Z - 21.4 - 145



Item name	Length [mm]	Number of anchors
Specification: FV = hot-dip galvanised		
HZA-CS 41/22 - FV - 550 - Kf		3
HZA-CS 41/22 - FV - 1050 - Kf		5
HZA-CS 41/22 - FV - 5400 - Kf		23
Item no. 1002.039-00001		

### Specification: A4-Ank.A4 = channel + anchor stainless steel W 1.4571/1.4401 (A4)

HZA-CS 41/22 - A4 - 550 - Kf - Ank.A4		3
HZA-CS 41/22 - A4 - 1050 - Kf - Ank.A4		5
HZA-CS 41/22 - A4 - 5400 - Kf - Ank.A4		23
Item no. 1002.039-00002		



Application sample: HTA-CS in curved concrete building elements



# HALFEN CAST-IN CHANNEL - CURVED SOLUTION

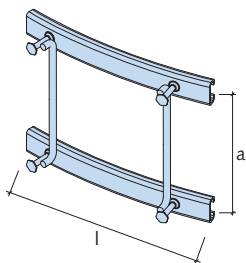
## Accessories

### Cast-in channel pairs

#### Material/specification:

Channel:

- FV** = hot-dip galvanised
- A4** = steel, stainless
- HCR** = steel, stainless
- W1.4547, W1.4529



We recommend spacers when ordered in stainless steel:

Spacer in BSt 500NR.

#### Order sample:

HALFEN Cast-in channel pair HTA-CS 38/17,  
 l = 1050 mm, a = 200 mm,  
 hot-dip galvanised, including filler

#### Spacer:

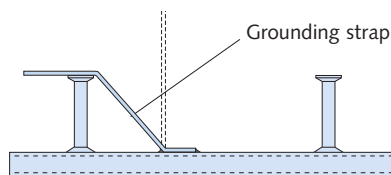
Reinforcing steel BSt 500S or  
 BSt 500NR (stainless steel)  
 Ø 10 - 16 mm

Prices for channel pairs include an additional surcharge. Prices and surcharges are on request.

### Grounding strap

Flat steel 40x5 welded factory-provided as grounding strap on back of channel

Item name	Material
Specification: S235	
welded grounding strap	flat steel 40x5 W1.0038



Special designs on request.



Application sample: HTA-CS in concrete supply tubes



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