

# fischer Injection systems - Overview and application

Injection system	Kind of mortar	Profi Shuttle cartridge	Semi professional cartridge	Standard cartridge	Masonry	Concrete	Reinforcement	VBS FWS Renovation system	Content	Scale unit on cartridge
<b>FIS V 360 S</b> <b>FIS V 950 S</b> 	Vinyl ester Hybrid	✓			●	●	●	●	360 ml 950 ml	180 500
<b>FIS VS 300 T</b> 	Vinyl ester Hybrid			✓	●	●	●	○	300 ml	150
<b>FIS VW 360 S</b> 	Vinyl ester Hybrid	✓			●	●	○	○	360 ml	180
<b>FIS VT 380 C</b> 	Vinyl ester		✓		○	●	○	○	380 ml	190
<b>FIS VS 150 C</b> 	Vinyl ester Hybrid			✓	●	●	○	○	145 ml	70
<b>FIS VS 100 P</b> 	Vinyl ester Hybrid			✓	●	●	○	○	100 ml	50
<b>FIS EM 390 S</b> 	Epoxy resin	✓					○	○	390 ml 1100 ml	180 550
<b>FIS P 300 T</b> 	Polyester			✓	○				300 ml	150
<b>FIS P 380 C</b> 	Polyester		✓		○				380 ml	190

● = approved for

○ = suitable for

## INFORMATION

### ■ FIS = fischer Injection System

FIS V  
= Vinyl ester hybrid

FIS VW  
= Vinyl ester hybrid winter version  
(reduced curing time)

FIS VS  
= Vinyl ester hybrid summer version  
(extended curing time)

FIS EM  
= Epoxy resin

FIS VT  
= Vinyl ester semi hybrid

FIS P  
= Polyester for secondary  
application in masonry

### ■ Profi-shuttle-cartridge



For building professionals, requires little energy. Special press gun required (manual, battery-driven or pneumatic) – see accessories on page 114/115.

### ■ Semi professional coaxial cartridge



For application with FIS AC special dispenser (see page 115).

### ■ Standard-cartridge



For processing with stable standard press guns for sealants. No special accessories required.

### ■ What is hybrid mortar?

This is a combination of normal organic components and a mineral additive.

Hybrid systems combine the advantages of organic and mineral mortar. This improves properties such as temperature and chemical resistance and load level.

# Installation tips for fischer injection mortars

## DETERMINATION OF MORTAR QUANTITY

For the determination of the required mortar quantity for the corresponding application you need

- the net quantity per cartridge in scale units
- the data tables for threaded rods and anchor sleeves, which refer to the required mortar quantity in scale units



Threaded rod FIS A,  
zinc plated steel

E = • - ETA approval

Type	zinc-plated steel		E	d <sub>0</sub> drill diameter (mm)	Anchorage depth 1		
	Art-Nr.	stainless steel A4 Art-Nr.			h <sub>eff1</sub> = h <sub>01</sub> anchorage depth = drill depth (mm)	h <sub>fix1</sub> max. usable length (mm)	charge FIS V (scale units)
FIS A M 6 x 75	090243	090437	•	8	50	15	2
FIS A M 6 x 85	090272	090438	•	8	50	25	2
FIS A M 6 x 110	090273	090439	•	8	50	50	2
FIS A M 8 x 90	090274	090440	•	10	65	15	3
FIS A M 8 x 110	090275	090441	•	10	65	35	3
FIS A M 8 x 130	090276	090442	•	10	65	55	3
FIS A M 8 x 175	090277	090443	•	10	65	100	3

Example: 80 FIS A M 6 x 110 → 80 x 2 scale units = 160 net scale units → 1 cartridge FIS V 360 S is sufficient

## Cartridge systems



Product examples	No. of scale units	Net quantity (reduced by 1 pc static mixer)
<b>Highbond Anchor</b>		
FIS HB 345 S	180 scale units	170 scale units
FIS HB 150 C	70 scale units	60 scale units
<b>Injection mortar FIS V</b>		
FIS V 360 S	180 scale units	170 scale units
FIS VS 150 C	70 scale units	60 scale units
FIS VS 100 P	50 scale units	40 scale units
<b>Injection mortar FIS VT 380 C</b>		
FIS VT 380 C	190 scale units	180 scale units

## USE OF CARTRIDGES

- While pressing out the mortar the piston movement can be followed on the scale and thus the required mortar quantity can be put in.
- **Important:** Whenever using a new static mixer, the first few strokes have to be thrown away. The mortar cannot be injected into the hole until it is uniformly coloured and thus optimally mixed.
- After the work is finished, you can store the remaining mortar in the cartridge and re-use it with a new static mixer later. Each cartridge comes supplied with two static mixers.
- The above mentioned net data relate to the use of only one static mixer per cartridge and to optimal compliance with the specified hole depth and mortar requirement. You need to subtract ten scale parts units for each additional static mixer. The mortar requirement can be somewhat higher at the beginning with inexperienced users.