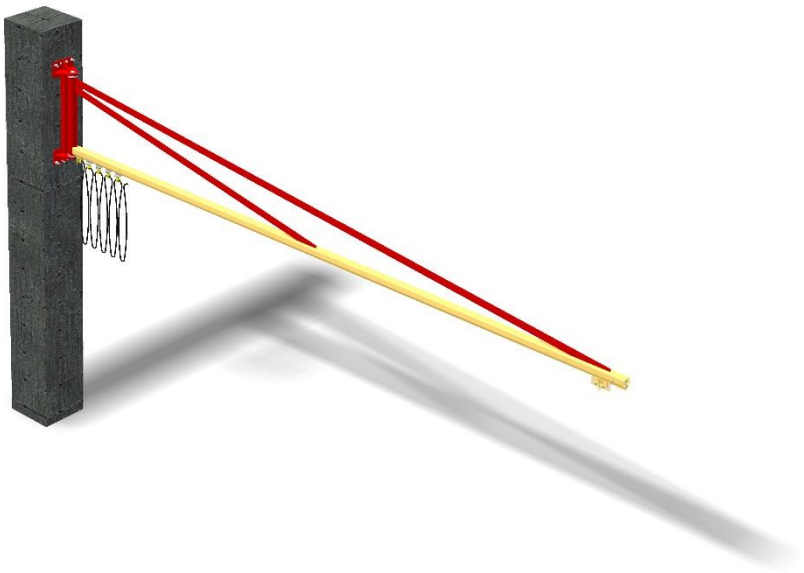
Assembly instruction
Wall mounted jib crane



1. Measure the mounting position.
   Care should be taken to ensure that the crane arm covers all the required working area and that no jamming edges are present.

2. Mount the console to the wall:
   Drill the holes at the desired position:

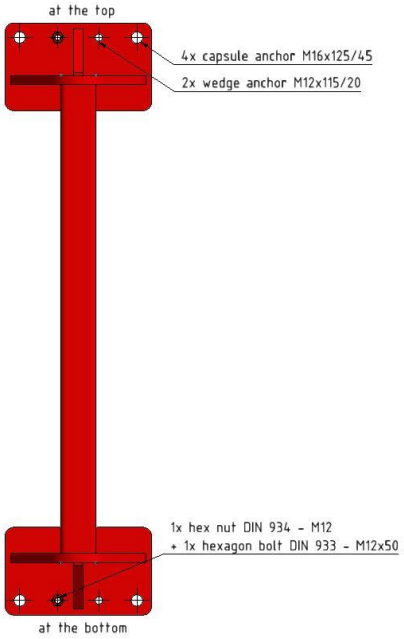


Fig. 1.1

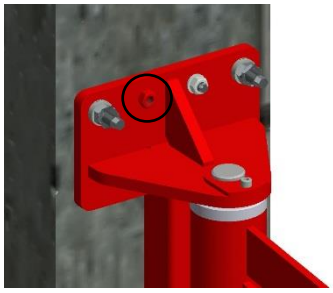


Fig. 1.2

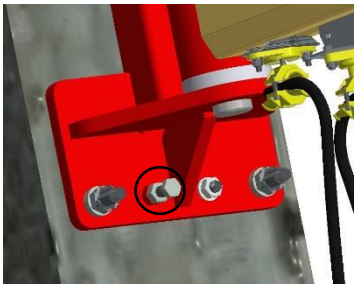


Fig. 1.3

The console will be fixed with 2 anchor bolts (Fig. 1.1).
With the adjusting screws (Fig. 1.2 und 1.3) the console can be adjusted. After that the console can be mounted with the 4 pc. Capsule anchors.

3. Fix the label:

Fig. 2

Fix the labels which are included in the barbaric scope of delivery.

4. Attach the crane arm using the mounting bolts:

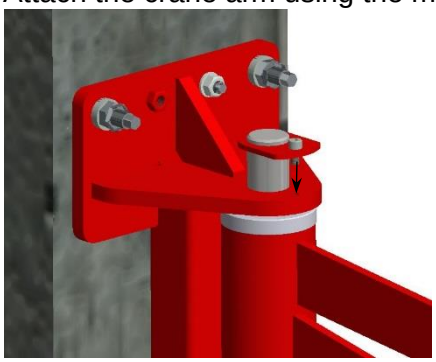


Fig. 3.1

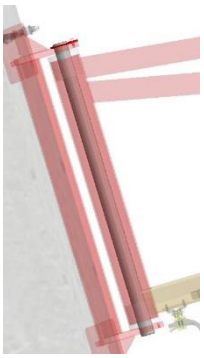


Fig. 3.2

5. Secure the mounting bolt with the screw:

Fig. 4

Once again check the alignment, balance and mounting bolts of the pillar crane.

6. Mount the energy supply and secure them via safety screw:

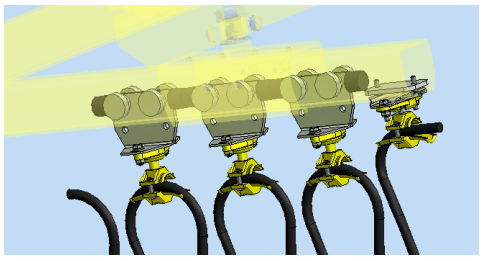


Fig. 5.1

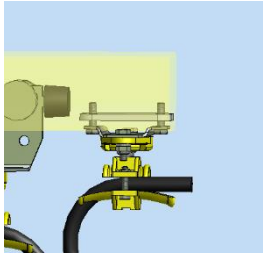


Fig. 5.2

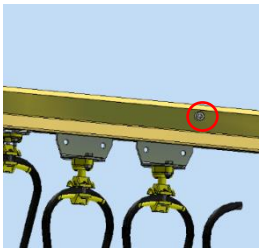


Fig. 5.3

Mount the energy supply (Fig. 5.1) and fix them via clamping plates at the end of the rail (Fig. 5.2). Afterwards a safety screw has to be assembled in front of the energy supply (Fig. 5.3). This prevents the power supply from being damaged by the transport trolley.

7. Mount the transport trolley and the vacuum lifter on the bridge:

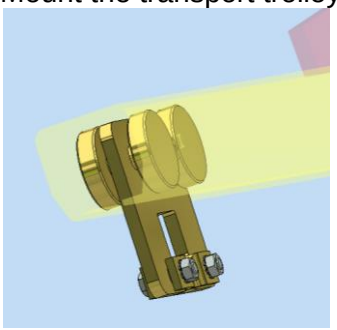


Fig. 6.1

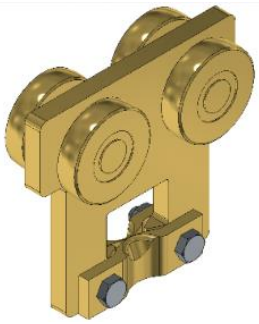


Fig. 6.2

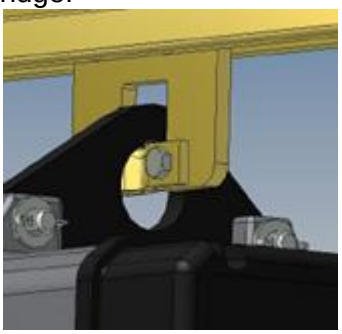


Fig. 6.3

Open the two screws on the transport trolley and hang up the chain hoist. Before attaching the chain hoist, make sure that the mounting eyes are mounted as shown in Fig. 7.3.

8. Mount the stopper of the rail, fix and secure it:

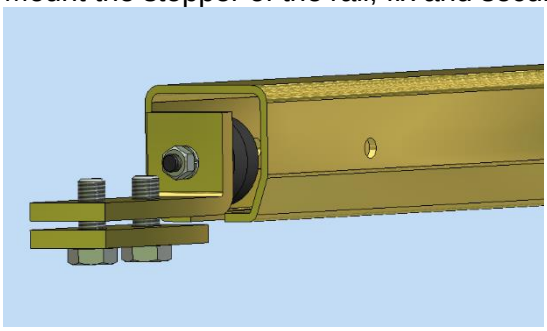


Fig. 8.1

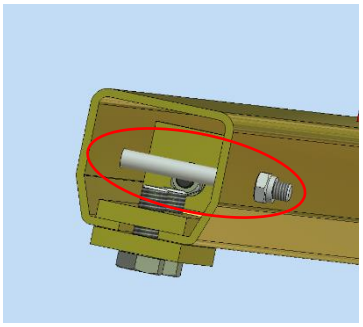


Fig 8.2

Assemble the stopper at the End of the rails (clamp) (Fig. 8.1) and afterwards secure the rail behind the stopper with a screw (Fig. 8.2). Limited the possible crane runway of the chain hoist, therefore a crash is not possible.

9. Connect vacuum lifter electrically and pneumatically:

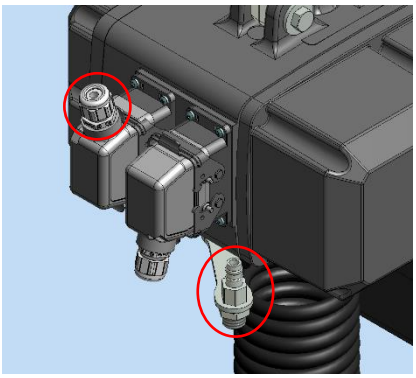


Fig. 9

Connect electrical according to circuit diagram (see documentation) and pneumatically by clutch on the power supply.

10. Connect Main lead by the electrician:

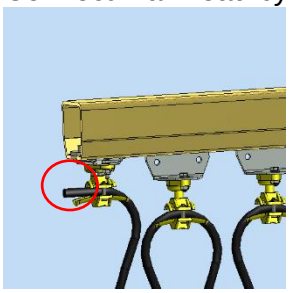


Fig. 10

The power supply can be mounted in such a way that the cable and the hose cannot be damaged when the boom is pivoted.

11. Fix the main switch unit on the column:

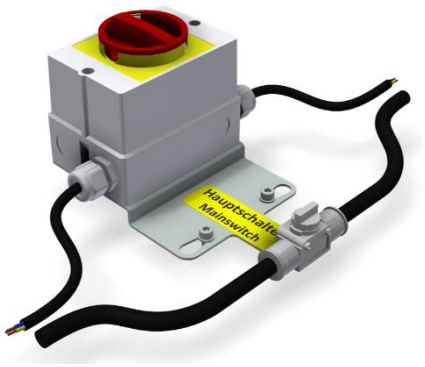


Fig. 11

The main switch unit is scope of delivery. This main switch unit enable the user to cut the energy – and compressed air of locally. Connect the main supply line by the electrician. Do not turn off the energy – and compressed air during lifting, risk of injury!

12. Start the performance check and keep the documentation in mind

$h_{ef,1}$ … minimum setting depth
$h_{ef,2}$ … average setting depth
$h_{ef,3}$ … maximum setting depth

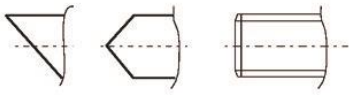
Table 2: Installation parameters for fischer threaded rods FIS A and RGM

Size					M8	M10	M12	M16	M20	M24	M27	M30
Injection mortar FIS SB	Nominal drill bit diameter		d_0	[mm]	10	12	14	18	24	28	30	35
	Depth of drill hole		h_0	[mm]	$h_0 = h_{ef}$							
	Effective anchorage depth		$h_{ef,min}$	[mm]	60	60	70	80	90	96	108	120
			$h_{ef,max}$	[mm]	160	200	240	320	400	480	540	600
	Diameter of clearance hole in the fixture[1)]	pre-positioned	$\leq d_f$	[mm]	9	12	14	18	22	26	30	33
		push through	$\leq d_f$	[mm]	11	14	16	20	26	30	33	40
Resin capsule RSB	Nominal drill bit diameter		d_0	[mm]	10	12	14	18	25	28	---	35
	Depth of drill hole		h_0	[mm]	$h_0 = h_{ef}$							
	Effective anchorage depth		$h_{ef,1}$	[mm]	---	75	75	95	---	---	---	---
			$h_{ef,2}$	[mm]	80	90	110	125	170	210	----	280
			$h_{ef,3}$	[mm]	---	150	150	190	210	---	---	---
	Diameter of clearance hole in the fixture[1)]	Only pre-positioned anchorage	$\leq d_f$	[mm]	9	12	14	18	22	26	---	33
Minimum spacing and minimum edge distance		$s_{min} = c_{min}$		[mm]	40	45	55	65	85	105	120	140
Minimum thickness of concrete member			h_{min}	[mm]	$h_{ef} + 30$ (≥100)			$h_{ef} + 2d_0$				
Maximum torque moment			$T_{inst,max}$	[Nm]	10	20	40	60	120	150	200	300
Thickness of fixture			$t_{fix,mim}$	[mm]	0							
			$t_{fix,max}$	[mm]	3000							

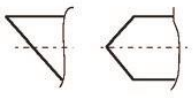
1) For bigger clearance holes in the fixture see chapter 1.1 of the TR 029

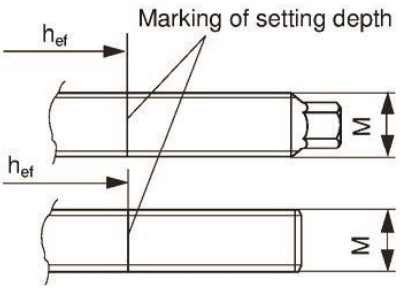
fischer threaded rods rod FIS A and RGM

Alternative point geometry threaded rods FIS A



Alternative point geometry threaded rods RGM



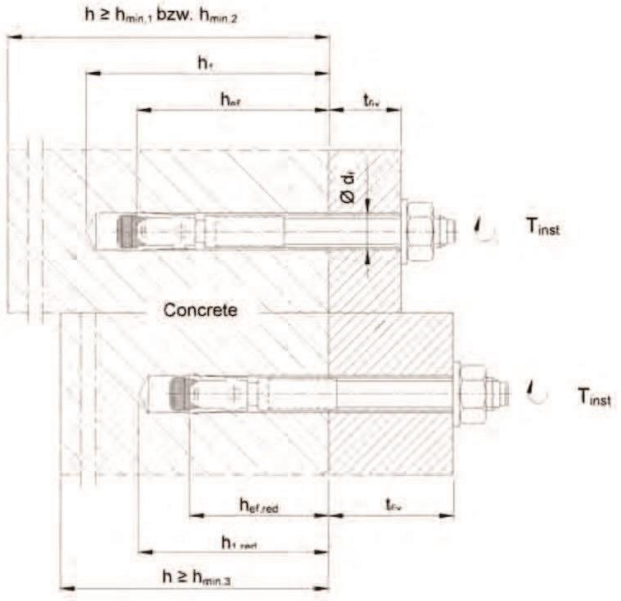


Marking (on random place):
Property class 8.8 or high corrosions-resistant steel C, property class 80: •
Stainless steel A4, property class 50 and high corrosion-resistant steel C, property class 50: ••

fischer Superbond	**Annex 5**
fischer threaded rods FIS A und RGM Installation parameters and dimensions	

Table B1: Installation parameters, BZ plus

Anchor size				M8	M10	M12	M16	M20	M24	M27
Nominal drill hole diameter		d_0	[mm]	8	10	12	16	20	24	28
Cutting diameter of drill bit		$d_{cut} \leq$	[mm]	8,45	10,45	12,5	16,5	20,55	24,55	28,55
Installation torque	Steel, galvanised	T_{inst}	[Nm]	20	25	45	90	160	200	300
	Steel, sherardized	T_{inst}	[Nm]	-	22	40	90	160	-	-
	Stainless steel A4, HCR	T_{inst}	[Nm]	20	35	50	110	200	290	-
Diameter of clearance hole in the fixture		$d_f \leq$	[mm]	9	12	14	18	22	26	30
Standard anchorage depth										
Depth of drill hole	Steel, zinc plated	$h_1 \geq$	[mm]	60	75	90	110	125	145	160
	Stainless steel A4, HCR	$h_1 \geq$	[mm]	60	75	90	110	125	155	-
Effective anchorage depth	Steel, zinc plated	h_{ef}	[mm]	46	60	70	85	100	115	125
	Stainless steel A4, HCR	h_{ef}	[mm]	46	60	70	85	100	125	-
Reduced anchorage depth										
Depth of drill hole		$h_{1,red} \geq$	[mm]	49	55	70	90	-	-	-
Reduced effective anchorage depth		$h_{ef,red}$	[mm]	35	40	50	65			



Wedge Anchor BZ plus

Intended use
Installation parameters

Annex B3

Table B2: Minimum **spacings** and **edge distances, standard anchorage depth,** BZ plus

Anchor size			**M8**	**M10**	**M12**	**M16**	**M20**	**M24**	**M27**
Standard thickness of concrete member									
Steel zinc plated									
Standard thickness of member	$h_{min,1}$	[mm]	100	120	140	170	200	230	250
Cracked concrete									
Minimum spacing	s_{min}	[mm]	40	45	60	60	95	100	125
	for c ≥	[mm]	70	70	100	100	150	180	300
Minimum edge distance	c_{min}	[mm]	40	45	60	60	95	100	180
	for s ≥	[mm]	80	90	140	180	200	220	540
Non-cracked concrete									
Minimum spacing	s_{min}	[mm]	40	45	60	65	90	100	125
	for c ≥	[mm]	80	70	120	120	180	180	300
Minimum edge distance	c_{min}	[mm]	50	50	75	80	130	100	180
	for s ≥	[mm]	100	100	150	150	240	220	540
Stainless steel A4, HCR									
Standard thickness of member	$h_{min,1}$	[mm]	100	120	140	160	200	250	-
Cracked concrete									
Minimum spacing	s_{min}	[mm]	40	50	60	60	95	125	-
	for c ≥	[mm]	70	75	100	100	150	125	
Minimum edge distance	c_{min}	[mm]	40	55	60	60	95	125	
	for s ≥	[mm]	80	90	140	180	200	125	
Non-cracked concrete									
Minimum spacing	s_{min}	[mm]	40	50	60	65	90	125	-
	for c ≥	[mm]	80	75	120	120	180	125	
Minimum edge distance	c_{min}	[mm]	50	60	75	80	130	125	
	for s ≥	[mm]	100	120	150	150	240	125	
Minimum thickness of concrete member									
Steel zinc plated, stainless steel A4, HCR									
Minimum thickness of member	$h_{min,2}$	[mm]	80	100	120	140	-	-	-
Cracked concrete									
Minimum spacing	s_{min}	[mm]	40	45	60	70	-	-	-
	for c ≥	[mm]	70	90	100	160			
Minimum edge distance	c_{min}	[mm]	40	50	60	80			
	for s ≥	[mm]	80	115	140	180			
Non-cracked concrete									
Minimum spacing	s_{min}	[mm]	40	60	60	80	-	-	-
	for c ≥	[mm]	80	140	120	180			
Minimum edge distance	c_{min}	[mm]	50	90	75	90			
	for s ≥	[mm]	100	140	150	200			

Fire exposure from one side			
Minimum spacing	$s_{min,fi}$	[mm]	See normal ambient temperature
Minimum edge distance	$c_{min,fi}$	[mm]	See normal ambient temperature
Fire exposure from more than one side			
Minimum spacing	$s_{min,fi}$	[mm]	See normal ambient temperature
Minimum edge distance	$c_{min,fi}$	[mm]	≥ 300 mm

Intermediate values by linear interpolation.

Wedge Anchor BZ plus

Intended use
Minimum **spacings** and **edge distances** for **standard anchorage depth**

Annex B4