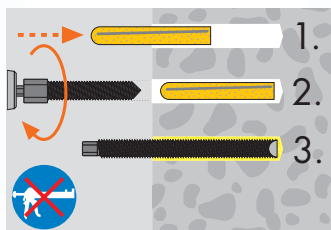


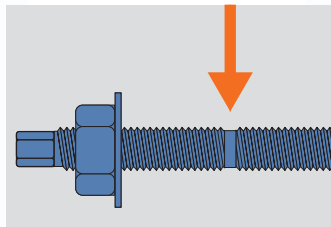
MVA Resin Capsule



European Technical Approval
European Technical Approval
Option 8 for non-cracked concrete



Quick and simple installation



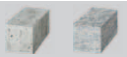
MVA-S / MVA-Sr
Setting depth mark for correct
installation



Temperature resistance
from -40°C up to +80°C.



MVA Resin Capsule, Epoxy-Acrylate



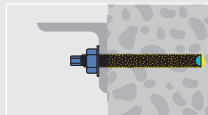
Features

- European Technical Approval Option 8 for non-cracked concrete
- Small edge and spacing distances
- Temperature range short term: -40°C - +80°C
- Temperature range long term: -40°C - +50°C
- Anchor rod with 45° end
- Indoor (zinc plated) and outdoor (stainless steel) applications



Applications

steel constructions, cable trays, guard rails, substructures, machines



Technical Data

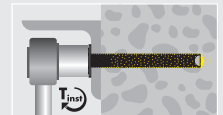
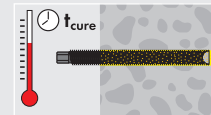
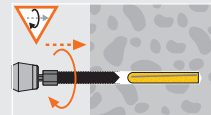
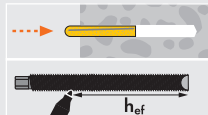
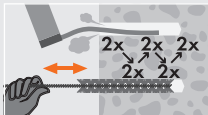
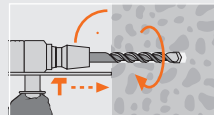
	Concrete C20/25 tension load (kN) galv. 5.8	Concrete C20/25 tension load (kN) A4-70	Concrete C20/25 shear load (kN) galv. 5.8	Concrete C20/25 shear load (kN) A4-70	Bending moment (Nm) galv. 5.8	Bending moment (Nm) A4-70	Distance betw. anchors mm s	Edge distance mm c	Min. distance betw. anchors mm s _{min}	Min. edge distance mm c _{min}	Minimum thickness of concrete member mm h _{min}	Installation torque (Nm) T _{inst}	Wrench size SW
M8	8	8	5	6	10.8	11.9	240	120	40	40	110	10	13
M10	12	12	8	9	21.1	23.8	180	90	45	45	120	20	17
M12	16	16	12	13	37.1	42.1	220	110	55	55	140	40	19
M14	18	18	16	18	51.8	58.1	240	120	60	60	150	60	22
M16	20	20	22	25	94.9	106.7	250	125	65	65	160	80	24
M20/135	24	24	35	39	185.7	207.9	280	140	85	85	220	120	30
M20/175	30	30	35	39	185.7	207.9	340	170	85	85	220	120	30
M24	36	36	50	57	320.6	359.4	420	210	105	105	260	180	36
M30	60	60	80	80	642	720	560	280	140	140	340	300	46

The partial safety factors of the resistances as well as a partial safety factor of the load of $\gamma_F = 1.4$ are considered / M14 + M20/135 + M30; Not part of the approval / The technical data is only valid for single fixings without consideration of edge and anchor distances / 1 kN $\approx$ 100 kg

Temperatures

	$\geq -5^\circ\text{C}$	$\geq +0^\circ\text{C}$	$\geq +5^\circ\text{C}$	$\geq +10^\circ\text{C}$	$\geq +20^\circ\text{C}$	$\geq +30^\circ\text{C}$	$\geq +35^\circ\text{C}$
Curing time, dry in minutes (t_{cure})	5 h	5 h	1 h	1 h	20	10	10
Curing time, wet in minutes (t_{cure})	10 h	10 h	2 h	2 h	40	20	20

Installation



Article code	For	Capsule length mm L	Drilling hole $\varnothing$ mm d ₀	Drilling depth mm h ₀	Box content	Outer carton
^{a)} 1610008	M8	80	10	80	10	500
^{a)} 1610010	M10	80	12	90	10	500
^{a)} 1610012	M12	95	14	110	10	200
^{a)} 1610014	M14	95	16	120	10	200
^{a)} 1610016	M16	95	18	125	10	200
^{a)} 1602211	M20	135	24	140	6	60
^{a)} 1610020	M20	175	25	170	6	60
^{a)} 1610024	M24	210	28	210	6	60
^{a)} 1610030	M30	270	35	280	6	30

^{a)} European Technical Approval with MVA-S, MVA-Sr

MVA Resin Capsule, Epoxy-Acrylate



Article code	Thread d	Thread length mm l _g	Usable length mm l _{fu}	Hex-nut SW	Drive SW	Box content
1650008	M8	110	15	13	5	10
1651508	M8	150	55	13	5	10
1650010	M10	130	20	17	6	10
1651710	M10	170	65	17	6	10
1650012	M12	160	30	19	8	10
1652212	M12	220	90	19	8	10
1652612	M12	260	130	19	8	10
1653012	M12	300	170	19	8	10
1650014	M14	170	40	22	10	10
1650016	M16	190	40	24	10/12	10
1652316	M16	230	80	24	10/12	10
1652616	M16	260	110	24	10/12	10
1653016	M16	300	150	24	10/12	10
1652020	M20	230	40	30	-	6
1652026	M20	260	70	30	-	6
1652430	M24	300	65	36	-	6
1653038	M30	380	70	46	-	1

Each box of Anchor Rods incl. a setting tool (M8-M16)
M8 to M16 with external hexagon socket

MVA-S Anchor Rod, zinc plated, steel quality 5.8 with hex-nut and washer DIN 125A



MVA-Sr Anchor Rod, stainless steel A4-70/316 with hex-nut and washer DIN 125A



Article code	Thread	Thread length mm L _G	Usable length mm L _{fix}	Hex-nut SW	Drive SW	Box content
1660008	M8	110	15	13	5	10
1661508	M8	150	55	13	5	10
1660010	M10	130	20	17	6	10
1661710	M10	170	65	17	6	10
1660012	M12	160	30	19	8	10
1662212	M12	220	90	19	8	10
1662612	M12	260	130	19	8	10
1663012	M12	300	170	19	8	10
1660016	M16	190	40	24	10/12	10
1662316	M16	230	80	24	10/12	10
1662616	M16	260	110	24	10/12	10
1663016	M16	300	150	24	10/12	10
1662020	M20	230	40	30	-	6
1662026	M20	260	70	30	-	6
1662430	M24	300	65	36	-	6
1663038	M30	380	70	46	-	1

Each box of Anchor Rods incl. a setting tool (M8-M16)
M8 to M16 with external hexagon socket

MVA-WZ Setting Tool for rods without drive



Article code	For	Box content
1665008	M8	1
1665010	M10	1
1665012	M12	1
1665014	M14	1
1665016	M16	1
1665020	M20	1
1665024	M24	1
1665030	M30	1

MVA-I Anchor Sleeve with internal thread, steel quality 5.8



Article code	Internal thread	Capsule	Drilling hole Ø mm	Drilling depth mm	Min. screw in mm	Max. screw in mm	Installation torque (Nm)	Box content
	d		d ₀	h ₀	h _{s min}	h _{s max}	T _{inst} max	FS
1670008	M8	M12	15	90	12	30	6	10 01
1670010	M10	M16	18	90	15	35	12	10 01
1670012	M12	M16	22	90	18	40	20	10 21
1670016	M16	M20/135	28	125	24	40	45	10 21
1670020	M20	M24	35	180	40	60	100	10 51

MVA-Ir Anchor Sleeve with internal thread, stainless steel A4/316



Article code	Internal thread	Capsule	Drilling hole Ø mm	Drilling depth mm	Min. screw in mm	Max. screw in mm	Installation torque (Nm)	Box content
	d		d ₀	h ₀	h _{s min}	h _{s max}	T _{inst} max	FS
1670108	M8	M12	15	90	12	30	6	10 01
1670110	M10	M16	18	90	15	35	12	10 01
1670112	M12	M16	22	90	18	40	20	10 21
1670116	M16	M20/135	28	125	24	40	45	10 21
1670120	M20	M24	35	180	40	60	100	10 51