



CA-BA



CA-PA



TALA



VR-SE



MAHE



MARE / MARI



PCU



ES-DR / ES-DA2



AB-TA / AB-TA B
/ AB-TA A2



AB-TG



PF-ZN / PF-A4



RV-ZN / RV-A2



AB-TR



AB-FP



AB-FC



AB-PM7



TM-VR



MAMH



UN-CO



CO-AR

CHARACTERISTICS

- Versatility of metrics and components
- Hanging plate with double hole for easier installation.
- Connecting Sleeves of rods for large applications (malls, shops, etc.).
- Different ceiling fixing solutions: brackets, brass studs, tilting heads.
- Finished in galvanized or stainless (according to each element).

BASE MATERIAL

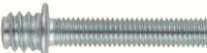


EXAMPLES



1.RANGE

ITEM	DENOMINATION	PHOTO	MATERIAL	COATING
1	CA-BA		Steel EN10130-DC01+A-m	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
2	CA-PA		Steel SAE 1010	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
3	TALA		Brass T-0T58 Pb UNI 5705	 Brass
4	VR-SE		Steel class 4.8 ISO 898-1	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
5	MAHE		Steel SAE J403 1008	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
6	MARE		Steel SAE J403 1008	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
7	MARI		Steel A2-70 UNE-EN ISO 3506-1	 Steel A2-70
8	PCU		Steel EN10142-DX51D+Z140-M-B-O	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
9	ES-DR		Steel SAE J403 1008	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
10	ES-DA2		Steel A2-70 UNE-EN ISO 3506-1	 Steel A2-70
11	AB-TA		Steel class 5.6 ISO 898-1	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
12	AB-TA B		Steel class 5.6 ISO 898-1	 Yellow zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
13	AB-TA A2		Steel A2-70 UNE-EN ISO 3506-1	 Steel A2-70

ITEM	DENOMINATION	PHOTO	MATERIAL	COATING
14	AB-TG		Stel SAE J403 1023	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
15	PF-ZN		Steel S235R	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
16	PF-A4		Steel A4-70 UNE-EN ISO 3506-1	 Steel A4-70
17	RV-ZN		Steel class 4.8 ISO 898-1	 Zinc plated $\geq 5\mu\text{m}$ ISO 4042 A2J
18	RV-A2		Steel A2-70 UNE-EN ISO 3506-1	 Steel A2-70
19	AB-TR		Steel C1008	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
20	AB-FP		Steel C1008	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
21	AB-FC		Steel C1008	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
22	AB-PM7		Steel Q195	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
23	TM-VR		Acero C1008	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
24	MAMH		Steel Q195	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J
25	UN-CO		Steel S235R	 Zingué $\geq 5\mu\text{m}$ ISO 4042 A2J
26	CO-AR		Steel Q195	 Zinc-plated $\geq 5\mu\text{m}$ ISO 4042 A2J

2. INSTALLATION DATA

2.1 CA-BA

Toggle head



Properties



Steel

Zinc Plated
Coating

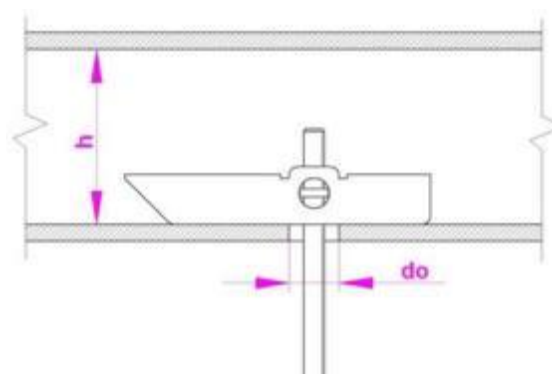
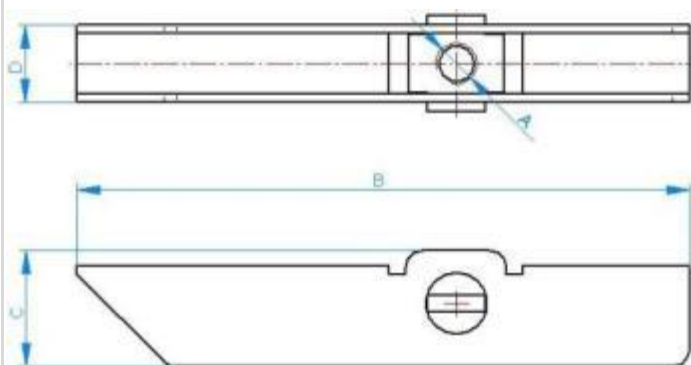
Patent

Sizes

Installation Data

CODE		CABA004	CABA005	CABA006	CABA008	CODE		CABA004	CABA005	CABA006	CABA008
A: Ø thread	[mm]	M4	M5	M6	M8	d0: drill diameter	[mm]	14	14	16	20
B: total length	[mm]	65	65	70	80	h: hole depth ≥	[mm]	70	70	75	85
C: High	[mm]	10.7	10.7	12.0	16.8	Recommended tension	[N]	250	300	350	450
D: Width	[mm]	7.7	7.7	9.0	12.2	load (N _{recom})					
Threaded rod		975ZM04	975ZM05	975ZM06	975ZM08						

DRAWING



2.2 CA-PA

Spring toggle



Properties



Steel

Zin Plated coating

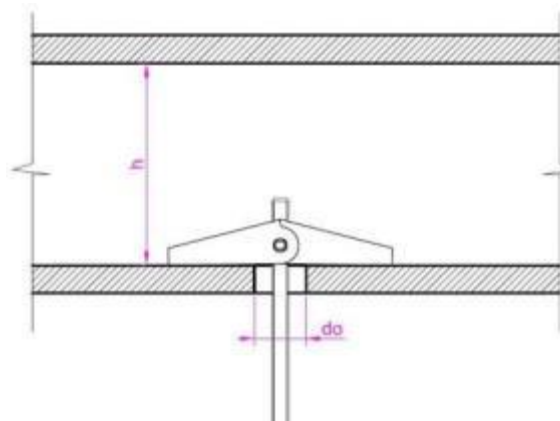
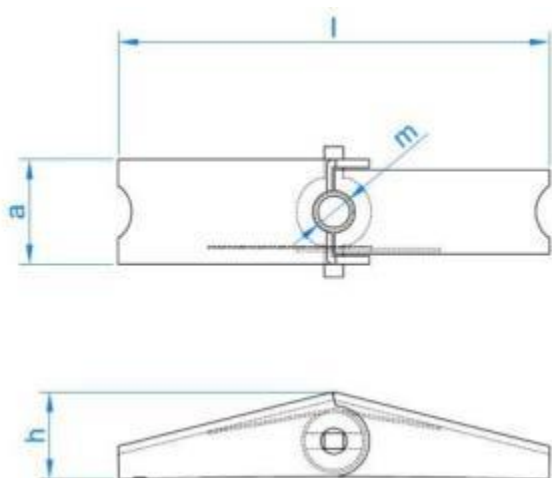
Patent

Sizes

Installation Data

CODE		CAPA004	CAPA005	CAPA006	CAPA008	CODE		CAPA004	CAPA005	CAPA006	CAPA008
A: Ø thread	[mm]	M4	M5	M6	M8	d0: drill diameter	[mm]	12	15	18	22
B: Total length	[mm]	39	50	55	76	h: hole depth ≥	[mm]	26	33	37	54
C: High	[mm]	10	12	14	16	Recommended tension load (N _{recom})	[N]	95	115	130	140
D: Width	[mm]	9	12	15	17						
Threaded rod		975ZM04	975ZM05	975ZM06	975ZM08						

DRAWING



2.3 TALA

Brass expansion anchor



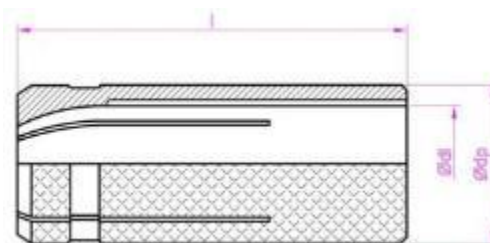
Properties



Brass

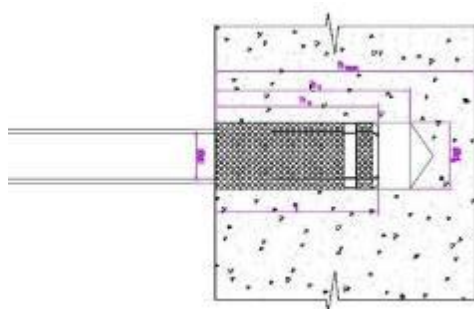
Sizes

CODE		TALA532	TALAM04	TALAM05	TALAM06	TALAM08	TALAM10	TALAM12
di: Inside thread diameter	[mm]	W5/32	M4	M5	M6	M8	M10	M12
dp: Outside diameter	[mm]	5	5	6	8	10	12	15
l: anchor length	[mm]	16	16	18	23	28	34	38

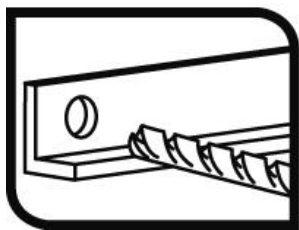


Installation Data

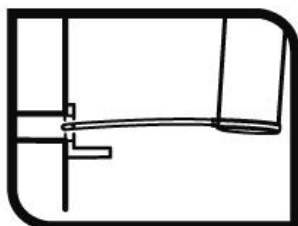
CODE		TALA532	TALAM04	TALAM05	TALAM06	TALAM08	TALAM10	TALAM12
Ø Threaded rod	[mm]	W5/32	M4	M5	M6	M8	M10	M12
Ø Drill diameter	[mm]	5	5	6	8	10	12	15
Drill depth ≥	[mm]	20	20	22	28	33	40	45
Anchor depth ≥	[mm]	16	16	18	23	28	34	38
Thread depth	[mm]	14	14	16	21	26	32	36
Base material Thickness ≥	[mm]	25	25	30	35	40	45	50
Recommended tension load	[N]	600	600	700	1000	1500	2100	3200



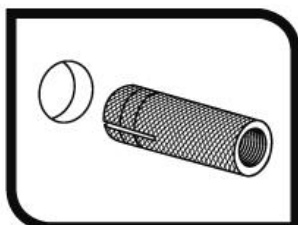
Installation procedure



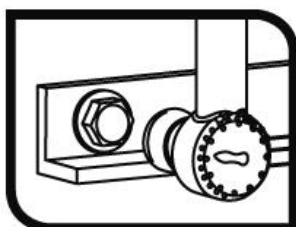
Drill to the minimum depth and diameter specified, maintaining perpendicular to the surface of the base material.



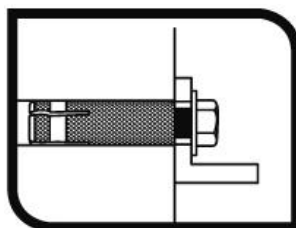
Thoroughly clean hole from dust and drilling fragments.



To introduce completely the capsule in the base material. Use a hammer if necessary.



Thread the rod in the anchor to the depth shown in the table. A shall depth could cause a lower resistance of the brass anchor; an excessive depth can break the anchor, even without any load applied to it.



2.4 VR-SE

Small threaded bolt



Properties



Steel



Zin Plated coating

Sizes

DRAWING

CODE		VRSE06020	VRSE06030	VRSE08020	VRSE08030	VRSE10030	VRSE12030
M: $\varnothing$ thread	[mm]	M6	M6	M8	M8	M10	M12
L: Total length	[mm]	20	30	20	30	30	30



2.5 MAHE

Coupling nut hexagonal*



Properties



Steel

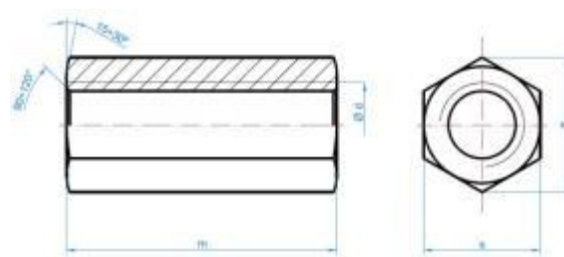


Zin Plated coating

Sizes

DRAWING

CODE	MAE0620	MAE0630	MAE0830	MAE1030	MAE1235	MAE1650	MAE2060
$\varnothing d$: thread	M6	M6	M8	M10	M12	M16	M20
m: total length	20	30	25	30	35	50	60
s: installation key	10	10	11	13	17	24	30
Threaded rod	975ZM06	975ZM06	975ZM08	975ZM10	975ZM12	975ZM16	975ZM20



*resistencia equivalente a un tornillo 6.8

2.6 MARE

Cylindrical coupling nut*



Properties



Steel

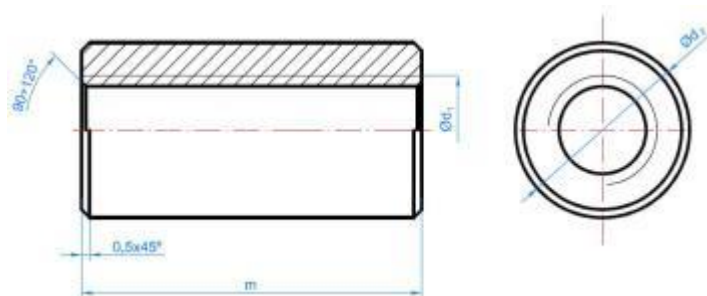


Zin Plated coating

Sizes

CODE		MAR5322	MAR0420	MAR0620	MAR0630	MAR0825	MAR0830	MAR1030	MAR1235	MAR1650
Ød1: thread	[mm]	M4	M6	M6	M6	M8	M8	M10	M12	M16
m: total length	[mm]	20	20	20	30	25	30	30	35	50
Ød2: outside diameter	[mm]	7	7	10	10	11	11	13	15	22
Threaded rod		-	975ZM04	975ZM06	975ZM06	975ZM08	975ZM08	975ZM10	975ZM12	975ZM16

DRAWING



*resistencia equivalente a un tornillo 6.8

2.7 MARI

Stainless cylindrical coupling nut*



Properties

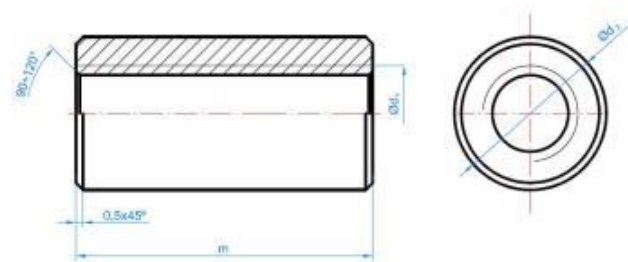


Stainless steel A2

Sizes

DRAWING

CODE		MARI0830	MARI1030
dØ: thread	[mm]	M8	M10
m: total length	[mm]	30	30
Ød2: outside diameter	[mm]	11	13
Threaded rod		975A2M10	975A2M10



2.8 PCU

Angular iron strap



Properties



Steel

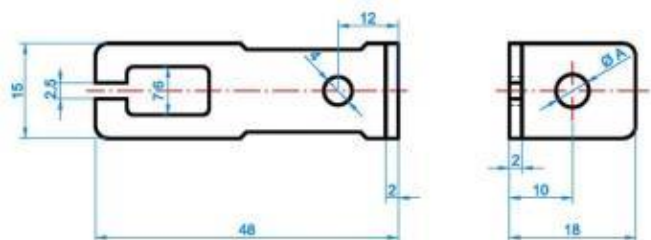


Zin Plated coating

Sizes

DRAWING

CODE		PCU0005	PCU0006
dØ: thread	[mm]	M8	M10
Threaded rod		975ZM06	975ZM10



2.9 ES-DR

Zinc plated Double threaded screw



Properties



Steel

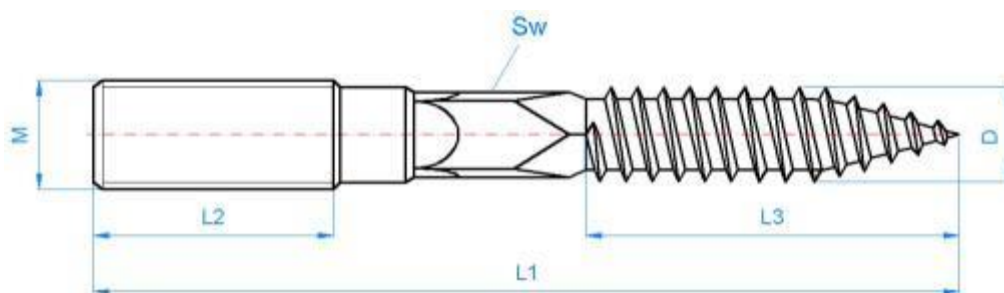


Zin Plated coating

Sizes

CODE	ØM	L1	ØD	L2	L3	SW	Recess
ESDR06040	M6	38,5 ÷ 40,5	5,75 ÷ 6,05	11 ÷ 13	23 ÷ 25	--	Flat
ESDR06050		48,5 ÷ 50,5		15 ÷ 17	27 ÷ 30		
ESDR06060		58 ÷ 61		17 ÷ 19	33 ÷ 36		
ESDR06070		68 ÷ 71		25 ÷ 27			
ESDR06080		78 ÷ 81		33 ÷ 35			
ESDR08050	M8	48,5 ÷ 51	6,85 ÷ 7,15	12 ÷ 14	28 ÷ 31	--	Hexalobular Tx25
ESDR08060		58,5 ÷ 61		14 ÷ 16	36 ÷ 39		
ESDR08070		68,5 ÷ 71		24 ÷ 26			
ESDR08080		78 ÷ 81		27 ÷ 30	46 ÷ 49	5,85 ÷ 6,00	
ESDR08090		88 ÷ 91		32 ÷ 35			
ESDR08100		98 ÷ 101		40 ÷ 45			
ESDR08110		108 ÷ 111		48 ÷ 52			
ESDR08120		118 ÷ 121					
ESDR08130		128 ÷ 131					
ESDR10080	M10	78 ÷ 81	8,75 ÷ 9,15	16 ÷ 20	45 ÷ 48	7,85 ÷ 8,00	
ESDR10100		98 ÷ 101		22 ÷ 26	55 ÷ 59		
ESDR10110		108 ÷ 111		36 ÷ 40			
ESDR10120		118 ÷ 121		43 ÷ 47			
ESDR10130		128 ÷ 131		48 ÷ 52			
ESDR10140		138 ÷ 141					
ESDR10150		148 ÷ 151					
ESDR10180		178 ÷ 181					
ESDR10200		198 ÷ 201					

DRAWING



2.10 ES-DA2

Stainless double threaded screw



Properties

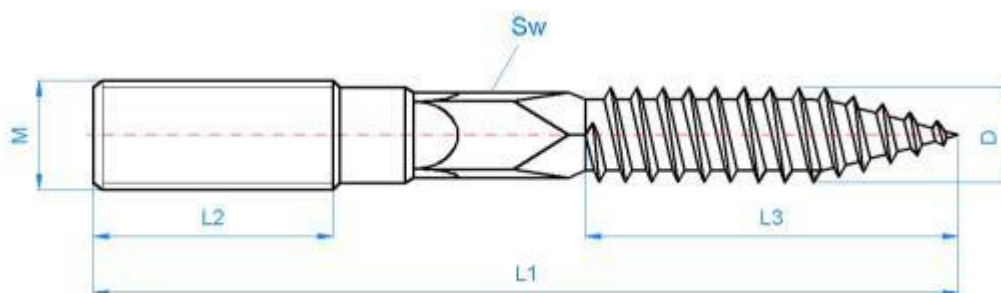


Stainless Steel A2

Sizes

CODE	ØM	L1	ØD	L2	L3	SW	Recess
ESDA208060	M8	58,5 ÷ 61,5	6,85 ÷ 7,30	17,5 ÷ 22,5	28,95 ÷ 31,05	5,85 ÷ 6,00	--
ESDA210060	M10		8,75 ÷ 9,15			7,85 ÷ 8,00	

DRAWING



2.11 AB-TA

Threaded screws for clamps



Properties



Steel



Zin Plated coating

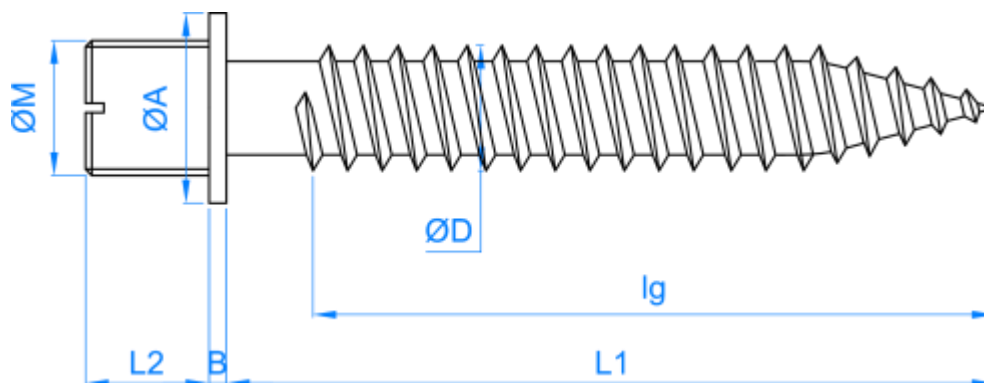


Flat recess

Sizes

CODE	ØM	L1	ØD	L2	B	ØA	lg
ABTA0630	M6	28,95 ÷ 31,05	4,85 ÷ 5,15	5,8 ÷ 6,2	0,9 ÷ 1,1	8,0 ÷ 8,2	Full threaded
ABTA0640		38,75 ÷ 41,25					
ABTA0650		48,75 ÷ 51,25					
ABTA0730	M7	21÷23	5,5÷6,1	5,8 ÷ 6,2	0,8÷1,2	9,0÷10,0	Full threaded
ABTA0740		31÷33					
ABTA0750		41÷43					
ABTA0760		51÷53					45
ABTA0770		61÷63					
ABTA0780		71÷73					
ABTA0840	M8	38,75 ÷ 41,25	5,85 ÷ 6,15	7,3 ÷ 7,7	1,3 ÷ 1,5	8,0 ÷ 8,3	Full threaded
ABTA0860		58,50 ÷ 61,50					45
ABTA0880		78,50 ÷ 81,50					45
ABTA1050	M10	48,50 ÷ 51,50	6,85 ÷ 7,15	8,8 ÷ 9,2	1,6 ÷ 1,8	12,0 ÷ 12,2	Full threaded
ABTA1070		68,50 ÷ 71,50					45
ABTA1090		88,25 ÷ 91,75					45

DRAWING



2.12 AB-TA B

Yellow zinc-plated threaded screws for clamps



Properties



Steel



Yellow zinc plated
coating

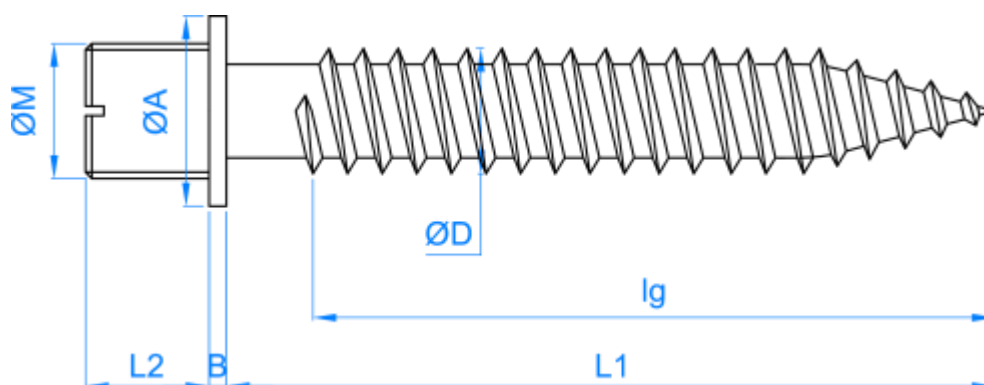


Flat recess

Sizes

CODE	ØM	L1	ØD	L2	B	ØA	lg
ABTA0630	M6	28,95 ÷ 31,05	4,85 ÷ 5,15	5,8 ÷ 6,2	0,9 ÷ 1,1	8,0 ÷ 8,2	Full threaded
ABTA0640		38,75 ÷ 41,25					
ABTA0650		48,75 ÷ 51,25					

DRAWING



2.13 AB-TA A2

Stainless threaded screw for clamps



Properties



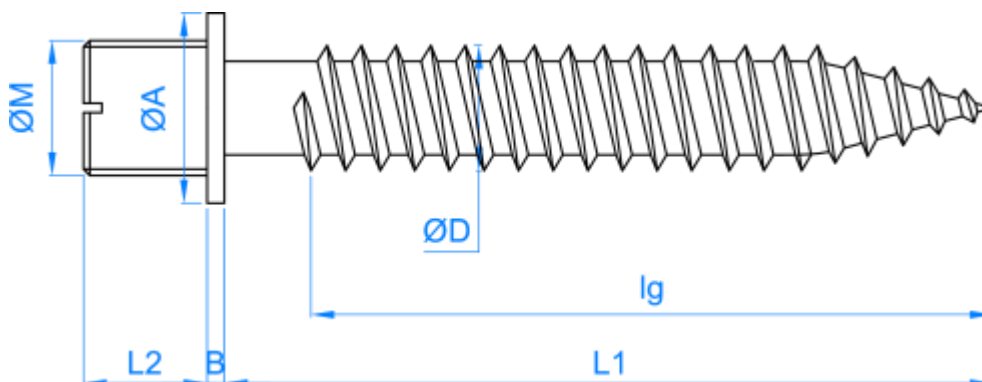
Stainless Steel A2

Flat recess

Sizes

CODE	ØM	L1	ØD	L2	B	ØA	lg
ABTA20630	M6	28,95 ÷ 31,05	4,70 ÷ 5,20	6,8 ÷ 7,2	1,2	7,8	Full threaded

DRAWING



2.14 AB-TG

Threaded screws for clips



Properties



Steel



Zinc plated
coating

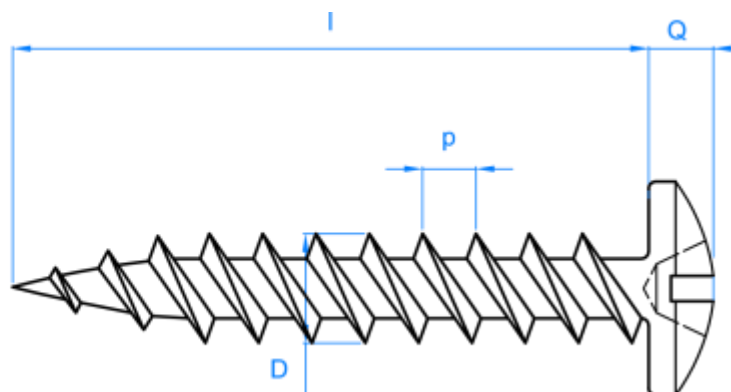
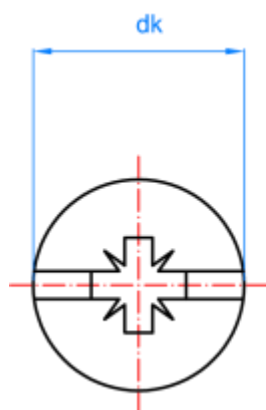


Pz + Flat recess

Sizes

CODE	$\varnothing dk$	L	$\varnothing D$	p	Q	SW
ABTG4530	9,8	30	4,3	2,0	2,5	2
ABTG4535	9,8	35	4,3	2,0	2,5	2
ABTG4540	9,8	40	4,3	2,0	2,5	2
ABTG5030	11,8	30	4,8	2,2	2,7	3
ABTG5040	11,8	40	4,8	2,2	2,7	3

DRAWING



2.15 PF-ZN

Zinc plated flat bar for fixation



Properties



Steel

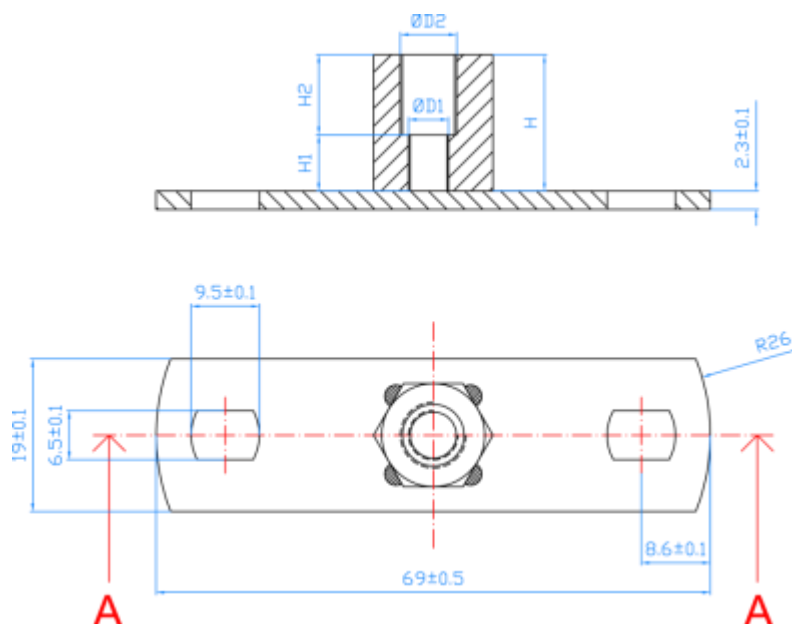


Zin Plated coating

Sizes

CODE	D1	D2	H	H1	H2
PFZNM0800	M8	--	7,5	7,5	--
PFZNM0810	M8	M10	17	7	10
PFZNM1000	--	M10	9	--	9

DRAWING



2.16

PF-A4

Stainless flat bar for fixation



Properties

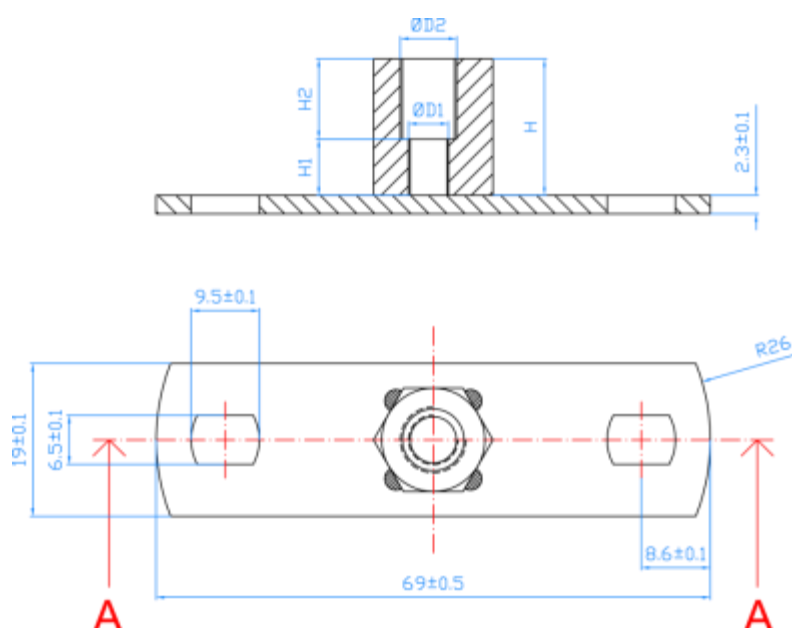


Stainless steel A2

Sizes

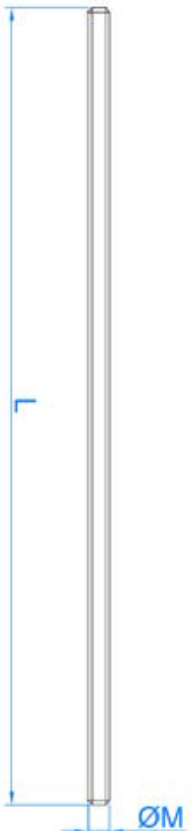
CODE	D1	D2	H	H1	H2
PFA4M0800	M8	--	7,5	7,5	--
PFA4M0810	M8	M10	17	7	10
PFA4M1000	--	M10	9	--	9

DRAWING



2.17 RV-ZN

Zinc plated threaded rod of one meter

				Properties
				 
				Steel Zin Plated coating
Sizes				
CODE	ØM	Effective section A _s [mm ²]	Characteristic tension resistance N _{k,s} [N]	DRAWING
975ZM04	M4	8.78	3.690	
975ZM05	M5	14.2	5.960	
975ZM06	M6	20.1	8.440	
975ZM08	M8	36.6	15.400	
975ZM10	M10	58	24.400	
975ZM12	M12	84.3	35.400	
975ZM14	M14	115	48.300	
975ZM16	M16	157	65.900	
975ZM18	M18	192	80.600	
975ZM20	M20	245	103.000	
975ZM22	M22	303	127.000	
975ZM24	M24	353	148.000	
975ZM27	M27	459	193.000	
975ZM30	M30	561	236.000	
975ZM33	M33	694	292.000	
975ZM36	M36	817	343.000	
975ZM2M06	M6	20.1	8.440	2 meters

2.18 RV-A2

Stainless threaded rod of one meter

Properties



Stainless Steel A2

Sizes

CODE	ØM	Effective section A _s [mm ²]	Characteristic tension resistance N _{k,s} [N]	DRAWING
975A2M04	M4	8.78	6.146	
975A2M05	M5	14.2	9.940	
975A2M06	M6	20.1	14.070	
975A2M08	M8	36.6	25.620	
975A2M10	M10	58	40.600	
975A2M12	M12	84.3	59.010	
975A2M14	M14	115	80.500	
975A2M16	M16	157	109.900	
975A2M18	M18	192	134.400	
975A2M20	M20	245	171.500	
975A2M22	M22	303	212.100	
975A2M24	M24	353	247.100	
975A2M27	M27	459	321.300	
975A2M30	M30	561	392.700	
975A2M33	M33	694	485.800	
975A2M36	M36	817	571.900	

2.19 AB-TR

Threaded screw for clamps



Properties



Steel

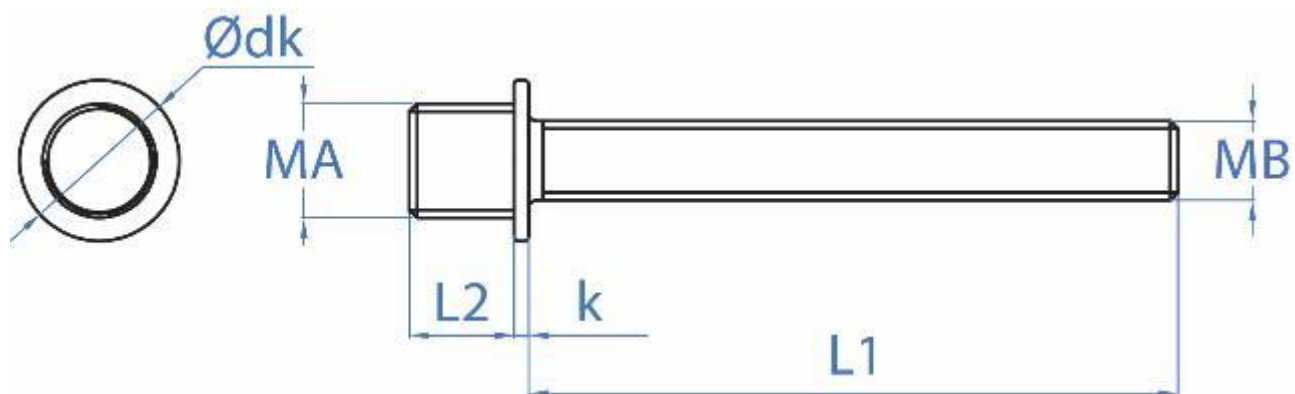


Zin Plated coating

Sizes

CODE	MA	MB	L1	L2	k	Ødk
ABTR05030	M7	M5	30	6	1	9
ABTR05040	M7	M5	40	6	1	9
ABTR05050	M7	M5	50	6	1	9
ABTR05060	M7	M5	60	6	1	9
ABTR06040	M7	M6	40	6	1	9
ABTR06050	M7	M6	50	6	1	9
ABTR06060	M7	M6	60	6	1	9

DRAWING



2.20 AB-FP

Flat washer for clamps



Properties



Steel

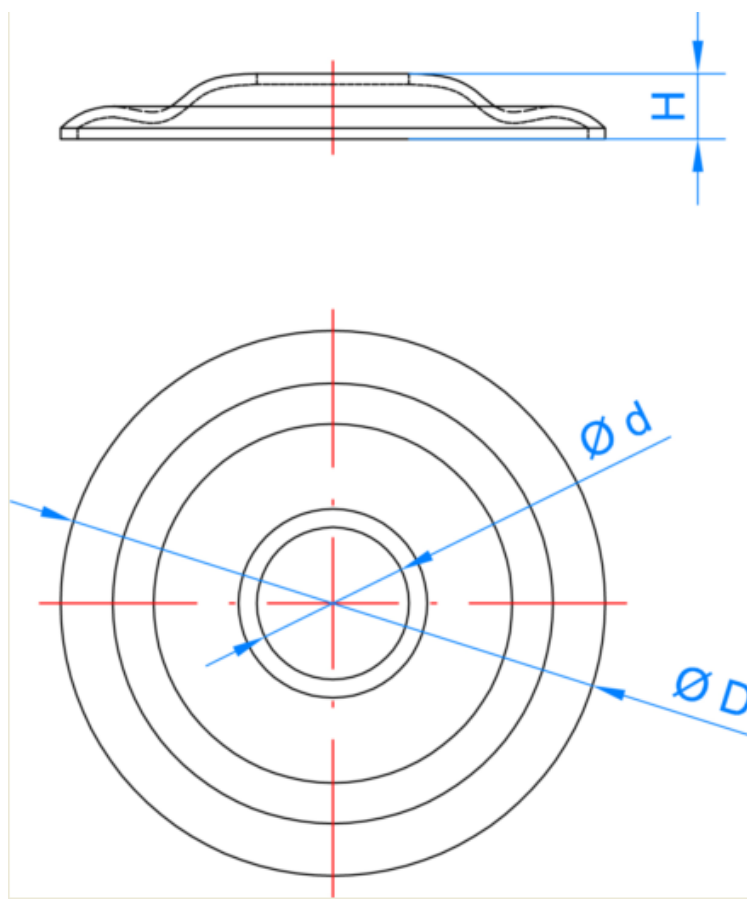


Zin Plated coating

Sizes

CODE	ØD	Ød	H
ABFP25	25	7	3
ABFP32	32	7	4

DRAWING



2.21 AB-FC

Conical washer for clamps



Properties



Steel

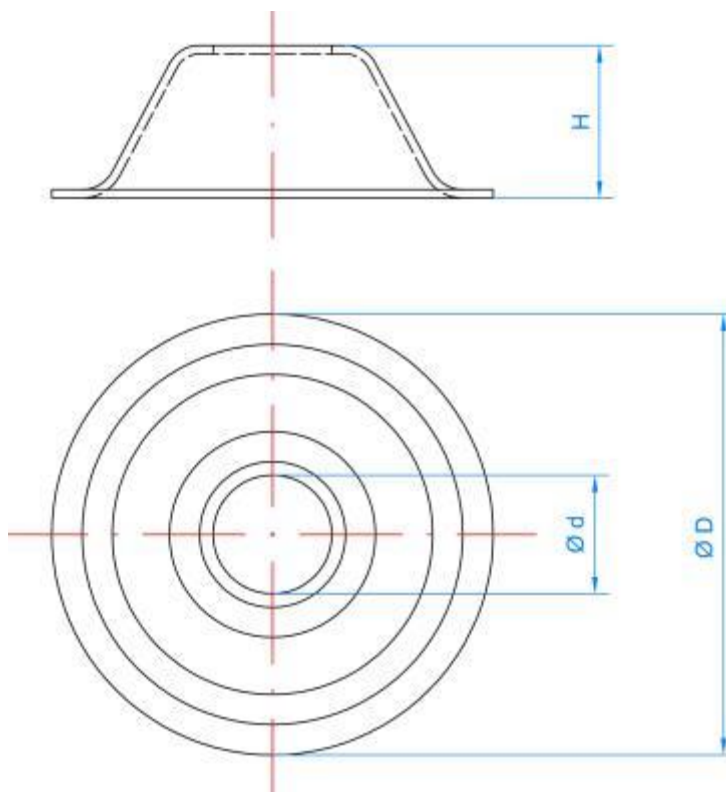


Zin Plated coating

Sizes

CODE	$\varnothing d$	$\varnothing D$	H
ABFC09	7	26	9
ABFC14	7	30	14
ABFC19	7	34	19

DRAWING



2.22 AB-PM7

Cylindrical spacer for clamps M7



Properties



Steel

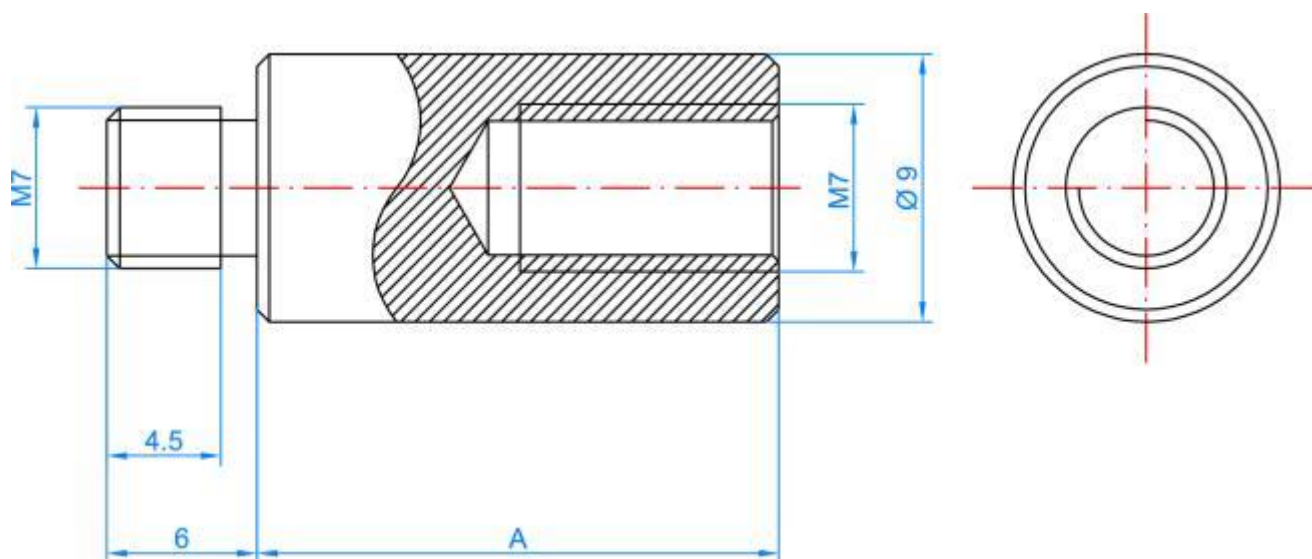


Zin Plated coating

Sizes

CODE	A	B	C
ABPM720	20	8	11
ABPM730	30	8	12
ABPM740	40	8	13

DRAWING



2.23

TM-VR

Screw coupling nut for threaded rod



Properties



Steel

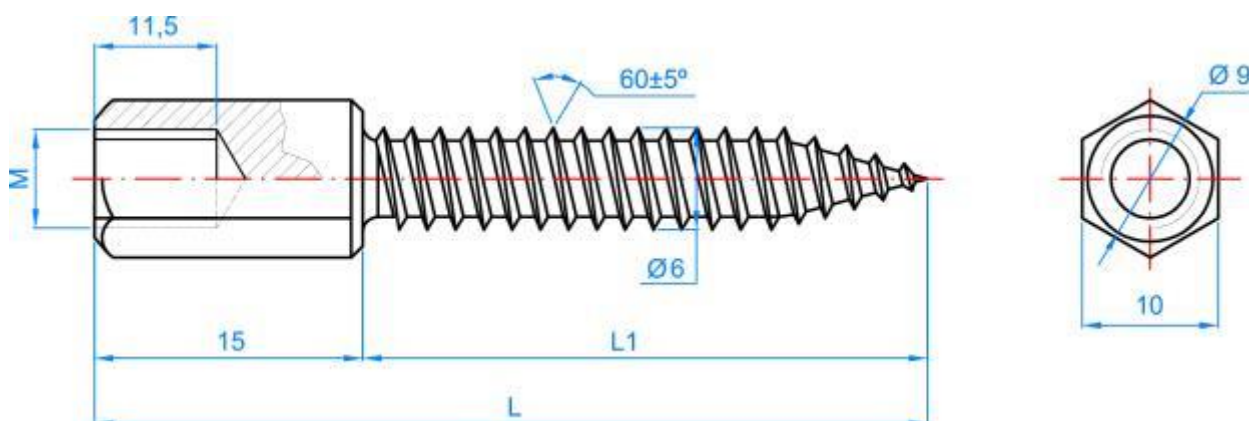


Zin Plated coating

Sizes

CODE	M	L	L1
TMVR06065	M6	65	50
TMVR07065	M7	65	50
TMVR08065	M8	65	50

DRAWING



2.24 MAMH

Spacer nut M/F



Properties



Steel

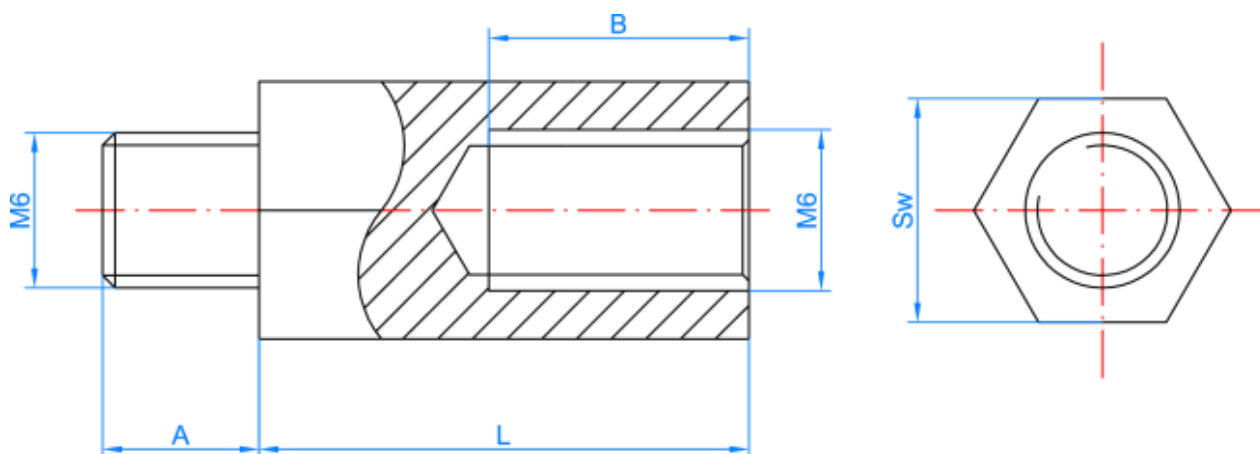


Zin Plated coating

Sizes

CODE	A	B	L	SW
MAMH0610	8	8	10	10
MAMH0620	10	12	20	10
MAMH0630	10	18	30	10
MAMH0640	10	18	40	10
MAMH0650	10	18	50	10

DRAWING



2.25 UN-CO

C clamp for duct



Properties



Steel

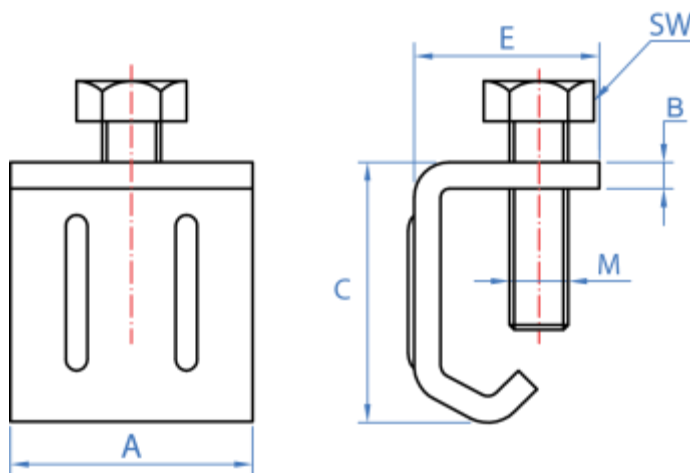


Zin Plated coating

Sizes

CODE	A	B	C	E	M	SW
UNCO3220	27,5	2,75	30	22	M8	10

DRAWING



2.26 CO-AR

Articulated Hanger

Properties



Steel



Zin Plated coating

Sizes

CODE	ØM (mm)	ØM1 (mm)	L1	Sw	Sw2
COAR08060	M8	M8	60	12,8 – 12,9	14,8 -14,9
COAR10060	M10	M10	61	16,8 – 16,9	16,8 – 16,9

DRAWING

