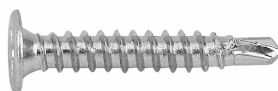




TAEZ



BCPN



BCPA2



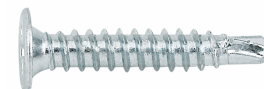
TAEN



BCPB



RSZ



BCPZ



BCPZ__BL



RSA2

CHARACTERISTICS

- Drill point: drill material directly – no need for pre-drilled hole.
- Self-tapping thread.
- Wide variety of head types, diameters and lengths for different applications: flexibility in installation.
- Available in zinc plated, black zinc-plated and white zinc-plated.
- Versions in standard commercial lacquered plate colours (RAL colour scheme).
- Coloured caps available for hexagonal heads.

APPLICATIONS

- For joining metal to wood, joining metallic elements, or plastic, wood or other materials on metallic materials.
- Versions with galvanized steel-EPDM or stainless steel-EPDM washer for sealed joints in façades and roofing, in different diameters.

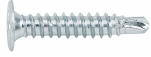
BASE MATERIALS



APPLICATION EXAMPLES



1.RANGE

ITEM	DENOMINACION	PHOTO	REGULATION	HEAD	SOCKET	ØEPDM WASHER (1)	MATERIAL/ COATING (2) (3)	MATERIAL TO BE FIXED
1	TAEZ		---	Flat head	Ph	---	Steel / Zinc-plated	Steel
2	TAEN		---	Flat head	Ph	---	Steel / Black Zinc-plated	Steel
3	BCPZ		---	Extra-flat bevelled	Ph	---	Steel / Zinc-plated	Steel
4	BCPN		---	Extra-flat bevelled	Ph	---	Steel / Black Zinc-plated	Steel
5	BCPB		---	Extra-flat bevelled	Ph	---	Steel / Zinc-plated + paint	Steel
6	BCPZ__BL		---	Extra-flat bevelled	Ph	---	Steel / Zinc-plated + paint	Steel
7	BCPA2		---	Extra-flat bevelled	Ph	---	Stainless Steel	Aluminium
8	RSZ		---	Flat bevelled	Ph	---	Steel / Zinc-plated	Steel
9	RSA2		---	Flat bevelled	Ph	---	Stainless Steel	Aluminium

(1) EPMD washer characteristics according to ARVUL Data Sheet

(2) Coatings: Zinc-plated $\geq 3 \mu\text{m}$ according to ISO 4042 A1J
Black zinc-plated $\geq 3 \mu\text{m}$ according to ISO 4042 A1N

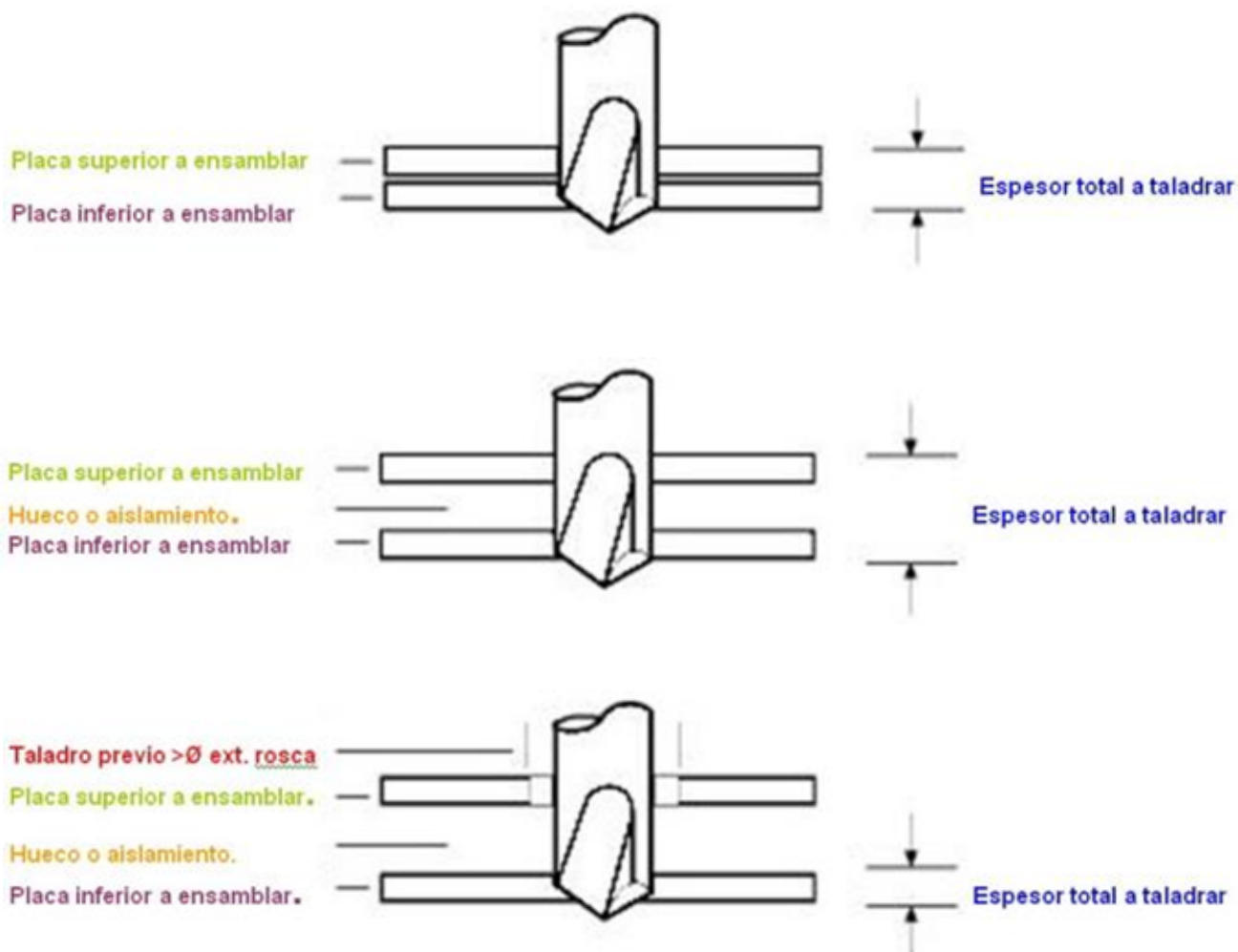
(3) Available in various coatings and colors upon request.

MATERIALES

Characteristic	ABE, ARE, AUTO, ABR, ABRBL, NBR, ABRC, ABA, FS, ABP, NBP, ABPC, TAEZ, TAEN, BCPZ, BCPN, BCPB, RS	ABRA2, ABRCA2, ABPCA2, BCPA2	BIE, BAUTO (silver ruspert coating)
Material	Special steel for SAE J403 1022 thermal treatment	A2 Stainless Steel	A2 Stainless Steel head and shaft. Special steel point for SAE J403 1022 thermal treatment
Surface hardness	> 500 HV	---	Head and shaft --- Point > 500 HV
Core hardness	240 - 450 HV	---	Head and shaft --- Point 240 - 450 HV
Depth hardness	ST 2.5 – 3.5: 0.05 – 0.18 mm. ST 3.9 – 5.5: 0.10 – 0.23 mm. ST 6.3: 0.15 – 0.28 mm.	---	Head and shaft --- Point: ST 4.8 – 5.5: 0.10 – 0.23 mm. ST 6.3: 0.15 – 0.28 mm.

POINT SELECTION

The choice of screw point must be such that the total thickness of materials to be joined (including any intermediate spaces) is lower than the edge of the drill point; otherwise screw breakage may occur during installation.



INSTALLATION PARAMETERS

Parameter			ST 3.5	ST 3.9	ST 4.2	ST 4.8	ST 5.5 M 5.5	ST 6.3
Drill Speed	Steel	[rpm]	1800 - 2500				1000 - 1800	
	Stainless Steel	[rpm]	1000 - 1500				600 - 1000	

With high drilling times or excessive drilling speed there is a risk of burning the drill bit and therefore not drilling the material.

SCREW	ØTHREAD	THICKNESS TO BE FIXED IN STEEL [mm]									
RS	6.3			2,5			6,0				
	5.5		1,75			5,25					
	4.8		1,75		4,4						
	4.2		1,75	3,0							
	3.9	0,7		2,4							
	3.5	0,7	2,25								
TAE	4.2		1,75	3,0							
BCP	4.2	0,7	2,0								

0,00 0,25 0,50 0,75 1,00 1,25 1,50 1,75 2,00 2,25 2,50 2,75 3,00 3,25 3,50 3,75 4,00 4,25 4,50 4,75 5,00 5,25 5,50 5,75 6,00 6,5 7,0 7,5 8,0 8,5 9,0 9,5 10,0 10,5 11,0 11,5 12,0

MAXIMUM THICKNESS TO BE FIXED						
Length	ST 3,5	ST 3,9	ST 4,2	ST 4,8	ST 5,5	ST 6,3
9,5	2,85					
11	4,2					
13	6,2	5,8	4,3	3,7		
16	9,2	8,8	7,3	5,5		
19	12,1	11,7	10,3	8,7	8,7	7
22	15,1	14,7	13,3	11,7	11,7	10
25	18,1	17,7	16,3	14,7	14,7	13
32	25,1	24,5	23	21,5	21,5	20
38		30,5	29	27,5	27,5	26
45			36	34,5	34,5	33
50			41	39,5	39,5	38
60				49,5	49,5	48
63				52,5	52,5	51
73				62,5	62,5	61
75				64,5	64,5	63
80				69,5		68
90				79,5		78
100				89,5		88
110						98
120						108
130						118
140						128

SCREW RESISTANCE CHARACTERISTICS*

SIZE	TENSION [kN]	SHEAR [kN]
ST 2.9	2.62	1.31
ST 3.5	3.81	1.91
ST 3.9	4.64	2.32
ST 4.2	5.26	2.63
ST 4.8	7.11	3.56
ST 5.5	9.63	4.82
ST 6.3	13.36	6.68

1 kN ≈ 100 Kg

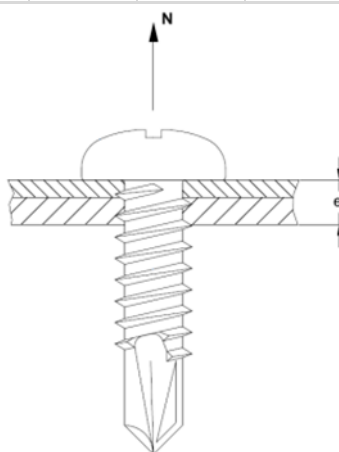
For tension loads, the inherent resistance of plates to be fixed must be taken into account, which is usually less than the resistance of the screw itself, as the screw will probably tear the plates.

RECOMMENDED TENSION LOAD IN STEEL PLATE

SIZE	RECOMMENDED LOAD					
	e[mm]	N[kN]	e[mm]	N[kN]	e[mm]	N[kN]
ST 3.5	0.8	0.55	1.5	0.89	2.0	1.13
ST 3.9	0.8	0.54	1.5	0.97	2.0	1.50
ST 4.2	2.0	1.63	2.5	1.51	3.0	2.62
ST 4.8	2.0	1.87	3.0	2.77	4.0	3.71
ST 5.5	2.0	1.77	3.5	2.86	5.0	3.43
ST 6.3	2.5	1.44	4.0	3.19	5.0	4.83

RECOMMENDED TENSION LOAD IN ALUMINIUM PLATE

SIZE	RECOMMENDED LOAD					
	e[mm]	N[kN]	e[mm]	N[kN]	e[mm]	N[kN]
ST 4.8	2.0	0.95	3.0	1.52	4.0	2.10
ST 5.5	2.0	0.66	3.0	2.48	4.0	3.44
ST 6.3	2.0	0.78	3.0	2.47	4.0	4.51

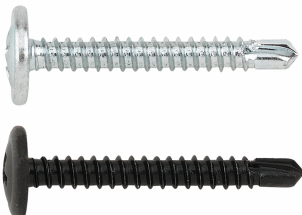


2. INSTALLATION DATA

2.1

TAEZ,TAEN

Self-drilling screw – low dome head – Ph socket
with embossed washer

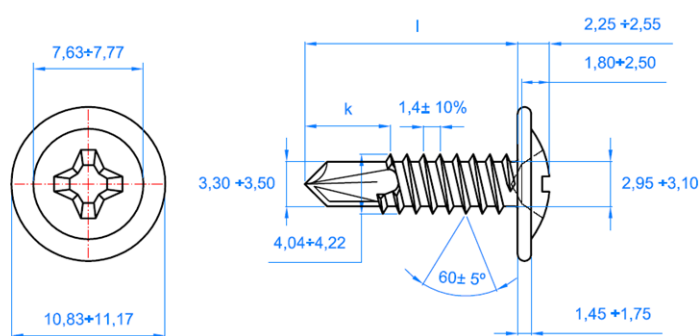
	Properties		
			
	Steel	Zinc-plated coating	Black zinc-plated

Base material		Properties		
				
Metal plate assembly	Plate profile	Ph	Low dome head	Screw point

Installation data

CODE		ST 4.2
d_k : head diameter $\leq$	[mm]	11.17
Head thickness $\leq$	[mm]	2.55
Ph bit	[mm]	nº 2
k: point length	[mm]	4.4 – 5.2
D: exterior thread diameter		4.22
d: interior thread diameter	[mm]	3.10
p: thread	[mm]	1.4
l: lengths	[mm]	13 - 32
Installation bit code (Ph bit)	[mm]	PUPHC02/PUPHL02
Drill capacity		1.00 - 2.50

DRAWING



- Zinc-plated (code TAEZ) or black zinc-plated (code TAEN) finish.
- For use in fixings where an even distribution of pressure is required, without the need for assembling additional flat washers, and without the head protruding excessively:
 - For fixing soft materials on metal (methacrylate, plastic, chipboard, thin metallic plates, etc).
 - Large or oversized holes.