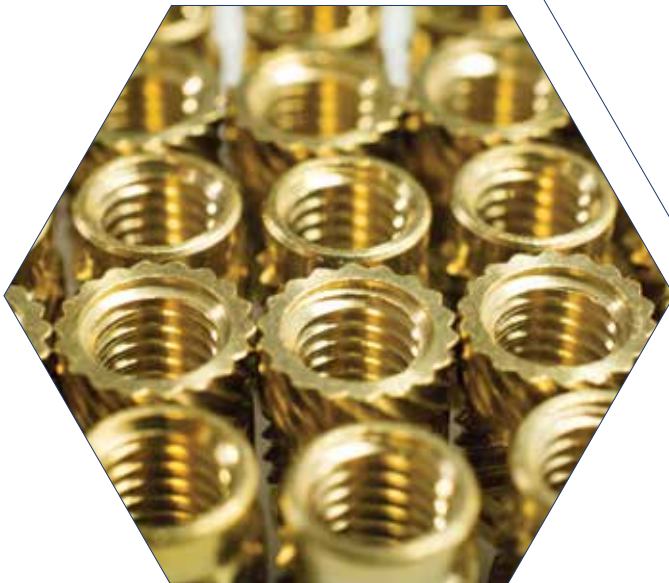


FASTENERS FOR PLASTICS

TR Fastenings is recognised throughout the industry for world class products & services

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Edition 8

Fasteners for Plastics

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All data is correct to the best of our knowledge, however TR cannot be held responsible for any errors or omissions.

Conversion Table

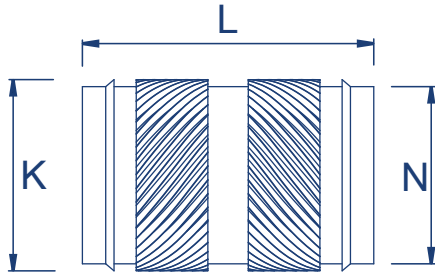
TR Insert range		PSM Insert range	
Part No	Description	Part No	Description
UHBRHE	Heat Sert	HL	Heat Lok
HDBRHE	Headed Heat Sert	HLH	Headed Heat Lok
UHBRBR	Broaching Sert	SP	Spiro
HDBRBR	Headed Broaching Sert	HSR	Headed Spiro
UHBRTH	Thread Sert	SCT	Screw Sert
HDBRTH	Headed Thread Sert	HSCT	Headed Screw Sert
UHBRXP	Expansion Sert	N41	Banc Lok
HDBRXP	Headed Expansion Sert	N42	Headed Banc Lok
RVBRXP	R/Headed Expansion Sert	N42R	R/Headed Banc Lok
UHBRSO	Sonic Sert	SL	Sonic Lok
HDBRSO	Headed Sonic Sert	SHK	Headed Sonic Lok
UHBRTTE	Tech Sert	TEC	Tech-Sonic
UHBRFI	Fin Sert	FL	Fin-Lok
HDBRFI	Headed Fin Sert	FLH	Headed Fin-Lok
UHBRPR	Press Sert	PLK	Press Lok
UHBRFL	Flow Sert	FTC	Flo Tech

Note: PSM codes are made up of Product 1st, Material type 2nd and Diameter 3rd

Example: An alternative to a PSM Headed Sonic Lok, M3 in Brass. PSM code SHK-B-M3.

The TR alternative would be M3 - HDBRSO

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*	M10*
L mm		4.0	5.7	5.7	7.1	8.1	9.5	12.7	12.7	12.7
K mm		3.5	4.4	4.4	5.2	6.1	6.8	8.5	10.0	12.3
N mm		3.1	3.9	3.9	4.7	5.5	6.3	7.9	9.5	11.8
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6	11.9
Minimum Wall Thickness mm		1.3	1.6	1.6	1.8	2.1	2.6	3.3	4.5	6.0

***Non preferred - Please enquire for availability**

Non standard lengths and stud versions available on request
Unified price and delivery available upon request

Tech-Sert™ Information for designers

The Tech-Sert™ has been designed for post mould installation into thermoplastics using heat or ultrasonics with the opposing knurls and vanes providing high levels of pull out and torque resistance. The symmetrical design means the insert can be installed either way round which allows for automated installation.

Advantages:

- Rapid installation
- Symmetrical design for automated installation
- Allows for thin walls in the boss
- High pull out and torque resistance

Installation Data

The Tech-Sert™ is installed using either heat or ultrasonics.

Heat Installation

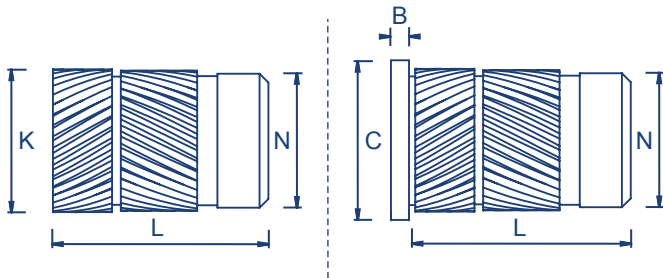
Where heat is used you must ensure that the insert softens, but does not melt the plastic, which helps avoid flash forming around the top of the insert.

Ultrasonic Installation

Ultrasonic installation works best with low amplitude vibrations and enough power to soften the surrounding plastic.

Care should be taken to avoid excessive downward pressure being applied during installation which can result in the insert being forced into the hole rather than allowing the plastic to soften around it.

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*	M10*
L mm		4.0	5.7	5.7	7.1	8.2	9.5	12.7	12.7	12.7
K mm		3.6	4.6	4.6	5.4	6.3	7.1	8.7	10.2	12.6
B mm		0.53	0.61	0.61	0.76	0.91	1.09	1.35	1.35	1.60
C mm		4.8	5.5	5.5	6.4	7.1	7.9	9.5	11.1	14.0
N mm		3.1	3.9	3.9	4.7	5.5	6.3	7.9	9.5	11.8
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6	11.9
Minimum Wall Thickness mm		1.3	1.6	1.6	1.8	2.1	2.6	3.3	4.5	6.0

***Non preferred - Please enquire for availability**

Non standard lengths and stud versions available on request
Unified price and delivery available upon request

Sonic-Sert™ Information for designers

The Sonic-Sert™ has been designed for post mould installation into thermoplastics using heat or ultrasonics with the opposing knurls providing a combination of high pull out and torque resistance.

Advantages:

- Rapid installation
- Allows for thin walls in the boss
- High pull out and torque resistance

Installation Data

The Sonic-Sert™ is installed using either heat or ultrasonics.

Heat Installation

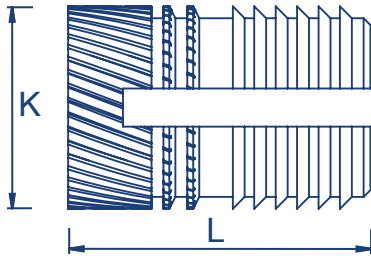
Where heat is used you must ensure that the insert softens, but does not melt the plastic, which helps avoid flash forming around the top of the insert.

Ultrasonic Installation

Ultrasonic installation works best with low amplitude vibrations and enough power to soften the surrounding plastic.

Care should be taken to avoid excessive downward pressure being applied during installation which can result in the insert being forced into the hole rather than allowing the plastic to soften around it.

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*
L mm		4.0	5.8	5.8	7.2	8.2	9.5	12.7	12.7
K mm		3.7	4.5	4.5	5.3	6.2	6.9	8.5	10.1
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6
Minimum Wall Thickness mm		1.6	2.0	2.0	2.4	2.8	3.2	4.0	4.8

*Non preferred - Please enquire for availability

Non standard lengths and stud versions available on request
Unified price and delivery available upon request

Press-Sert™ Information for designers

The Press-Sert™ is a press-in insert, designed for post mould installation into thermoplastics. The combination of plain and knurled vanes provides good levels of pull out and torque resistance.

Advantages:

- Simple, press-in installation
- Provides self-locking action on mating screw
- Good pull out and torque resistance

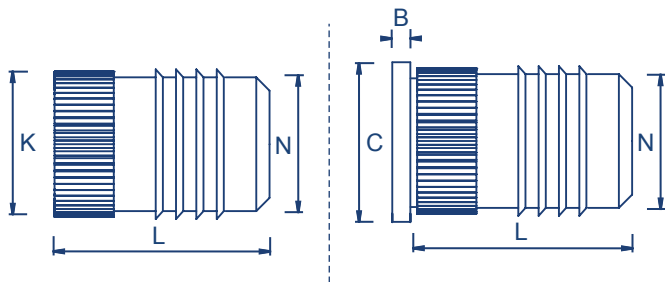
Installation Data

The Press-Sert™ should be installed with a press that can provide a steady squeezing action to prevent damage to the mating boss.

The mating screw should always be installed into the knurled end of the insert to allow it to expand. It is important that the screw fully penetrates the insert to achieve full expansion and optimum pull-out resistance.

Press-Sert™ inserts should not be used in notch-sensitive plastics.

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*
L mm		4.0	4.8	4.8	6.4	7.9	9.5	12.7	12.7
K mm		3.7	4.5	4.5	5.3	6.1	7.0	8.6	10.2
B mm		0.45	0.58	0.58	0.74	0.89	1.07	1.32	1.32
C mm		4.8	5.5	5.5	6.4	7.1	7.9	9.5	11.1
N mm		3.1	3.9	3.9	4.7	5.5	6.3	7.9	9.5
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6
Minimum Wall Thickness mm		1.6	2.0	2.0	2.4	2.8	3.2	4.0	4.8

*Non preferred - Please enquire for availability

Non standard lengths and stud versions available on request

Unified price and delivery available upon request

Fin-Sert™ Information for designers

The Fin-Sert™ is a press-in insert, designed for post mould installation into thermoplastics. The combination of fins and knurls provides good levels of pull out and torque resistance.

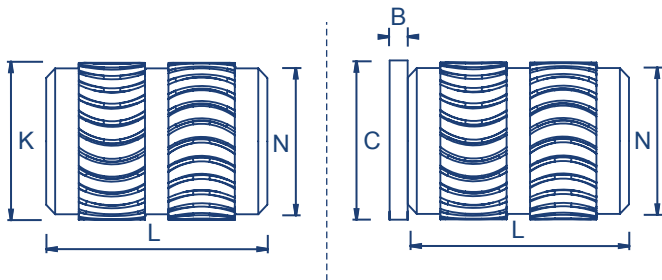
Advantages:

- Simple, press-in installation
- Free running female thread
- Good pull out and torque resistance

Installation Data

The Fin-Sert™ should be installed with a press that can provide a steady squeezing action to prevent damage to the mating boss.

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*
L mm		3.9	5.8	5.8	7.1	8.1	9.5	12.7	12.7
K mm		3.5	4.4	4.4	5.2	6.1	6.9	8.5	10.0
B mm		0.51	0.58	0.58	0.74	0.89	1.07	1.32	1.32
C mm		4.8	5.5	5.5	6.4	7.1	7.9	9.5	11.1
N mm		3.1	3.9	3.9	4.7	5.5	6.3	7.9	9.5
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6
Minimum Wall Thickness mm		1.4	1.8	1.8	2.1	2.4	2.8	3.6	5.0

*Non preferred - Please enquire for availability

Non standard lengths and stud versions available on request
 Unified price and delivery available upon request

Heat-Sert™ Information for designers

The Heat-Sert™ has been designed for post mould installation into notch-sensitive thermoplastics using heat. The rounded knurls alleviate stress in the mating boss.

Advantages:

- Designed specifically for notch-sensitive plastics
- Symmetrical design for automated installation
- High pull out and torque resistance

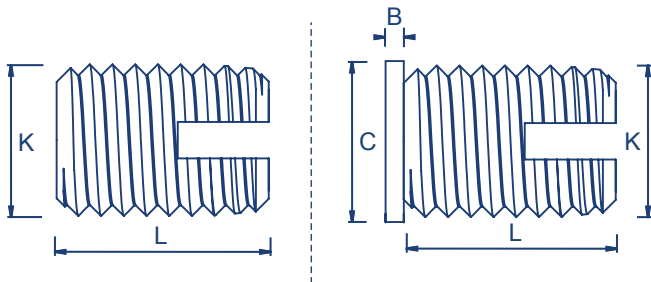
Installation Data

The Heat-Sert™ is installed using heat and you must ensure that the insert softens, but does not melt the plastic which helps avoid flash forming around the top of the insert.

Thread-Sert™

Unheaded (UHBRTH) Headed (HDBRTH)

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2.5*	M3	M3.5	M4	M5	M6	M8*	M10*
L mm		6.0	6.0	8.0	8.0	10.0	14.0	15.0	18.0
B mm		0.58	0.58	0.73	0.89	1.06	1.32	1.32	1.57
C mm		6.0	6.5	8.5	8.0	9.5	12.0	14.0	16.0
K max mm		4.5	5.0	6.0	6.5	8.0	10.0	12.0	14.0
Recommended Hole Size Thermoplastics mm		4.0-4.1	4.5-4.6	5.3-5.4	5.8-5.9	7.1-7.2	8.6-8.8	10.6-10.8	12.6-12.8
Recommended Hole Size Thermosets mm		4.1-4.3	4.6-4.8	5.5-5.7	6.0-6.2	7.3-7.6	9.0-9.4	11.0-11.4	13.0-13.4

*Non preferred - Please enquire for availability

Minimum wall thickness can only be advised by pre-production evaluation

Non standard lengths and stud versions available on request

Unified price and delivery available upon request

Thread-Sert™ Information for designers

The Thread-Sert™ is a self-tapping insert, designed for post mould installation into thermoplastics and thermosets. They are ideally suited to applications which may involve high jack-out loading.

Advantages:

- Simple, self-tapping installation
- Helps prevent jack-out
- High torque resistance

Installation Data

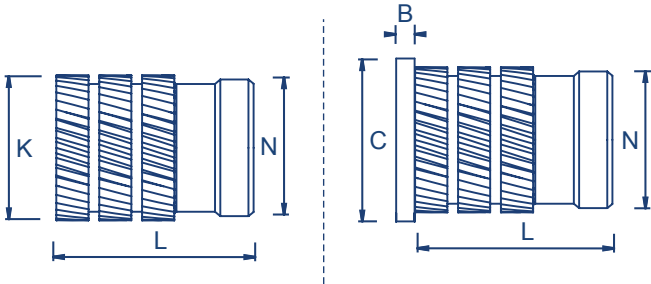
The Thread-Sert™ is installed by tapping using a hand tool, vertical drill with tapping attachment or standard tapping machine. Max RPM 35-40. Mandrel must not go past slot.

Broaching-Sert™

Unheaded (UHBRBR) Headed (HDBRBR)



Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*	M10*
L mm		4.1	5.3	5.3	6.3	7.4	8.3	9.2	9.2	9.2
B mm		0.51	0.58	0.58	0.74	0.89	1.07	1.32	1.32	1.57
C mm		4.8	5.5	5.5	6.4	7.1	7.9	9.5	11.1	14.0
K mm		3.3	4.2	4.2	5.0	5.8	6.6	8.2	9.7	12.7
N mm		3.0	3.7	3.7	4.5	5.3	6.1	7.7	9.3	12.2
Recommended Hole Size mm (-0.0/+0.1)		3.1	3.8	3.8	4.6	5.4	6.2	7.8	9.3	12.2
Minimum Wall Thickness mm		1.6	2.0	2.0	2.5	2.5	2.5	2.8	3.8	5.0

***Non preferred - Please enquire for availability**

Non standard lengths and stud versions available on request
 Unified price and delivery available upon request

Broaching-Sert™ Information for designers

The Broaching-Sert™ is a press-in insert, designed for post mould installation into thermosets. The sharp knurls of the insert cut into the mating material during installation thereby reducing stress in brittle thermosets.

Advantages:

- Simple, press-in installation
- Allows for thin walls in the boss
- Good pull out and torque resistance

Installation Data

The Broaching-Sert™ should be installed with a press that can provide a steady squeezing action to prevent damage to the mating boss.

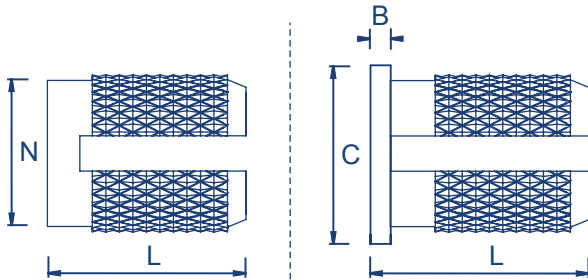
The insert should be allowed to freely rotate during installation.

Expansion-Sert™

Unheaded (UHBRXP) Headed (HDBRXP) Reverse Headed (RVBRXP)



Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*
L mm		3.9	4.7	4.7	6.3	7.9	9.4	12.6	12.6
B mm		0.43	0.51	0.51	0.66	0.82	0.99	1.25	1.25
C mm		4.8	5.5	5.5	6.4	7.1	7.9	9.5	11.1
N max mm		3.2	4.0	4.0	4.7	5.5	6.3	7.9	9.5
Recommended Hole Size mm (-0.0/+0.1)		3.2	4.0	4.0	4.8	5.6	6.4	8.0	9.6
Minimum Wall Thickness mm		2.4	3.2	3.2	3.6	4.0	4.8	6.0	7.0

*Non preferred - Please enquire for availability

Non standard lengths and stud versions available on request
Unified price and delivery available upon request

Expansion-Sert™ Information for designers

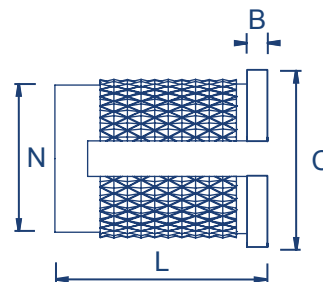
The Expansion-Sert™ is a press-in insert, designed for post mould installation into thermosets. The knurl pattern makes this insert ideal for hard thermosets.

Advantages:

- Simple, press-in installation
- Provides self-locking action on mating screw
- Good pull out and torque resistance

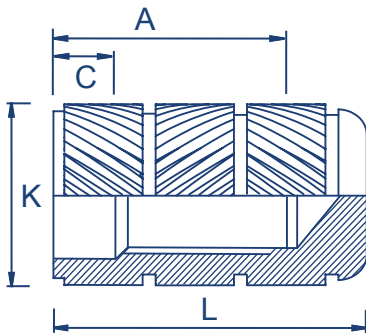
Installation Data

The Expansion-Sert™ should be installed with a press that can provide a steady squeezing action to prevent damage to the mating boss. It is important that the mating screw fully penetrates the insert to achieve full expansion and optimum pull-out resistance.



Reverse Headed Expansion-Sert™ - RVBRXP

Brass/Self Colour



Dimensions (Metric)

Thread size	Metric	M2*	M2.5*	M3	M3.5	M4	M5	M6	M8*	M10*
L mm		5.5	6.4	7.3	9.2	10.2	11.2	14.4	16.5	17.9
K mm		3.4	4.3	4.7	5.5	6.3	7.3	9.8	11.4	13.8
A min. mm		3.6	4.0	4.6	6.0	6.7	7.4	8.1	11.1	11.9
C mm		1.0	1.2	1.3	1.6	1.8	2.0	2.0	2.3	2.4

***Non preferred - Please enquire for availability**

Non standard lengths and stud versions available on request
 Unified price and delivery available upon request

Flow-Sert™ Information for designers

The Flow-Sert™ is a blind insert, designed to be installed during the moulding process.

Advantages:

- The blind end prevents plastic ingress during moulding
- Very high pull out and torque resistance

Installation Data

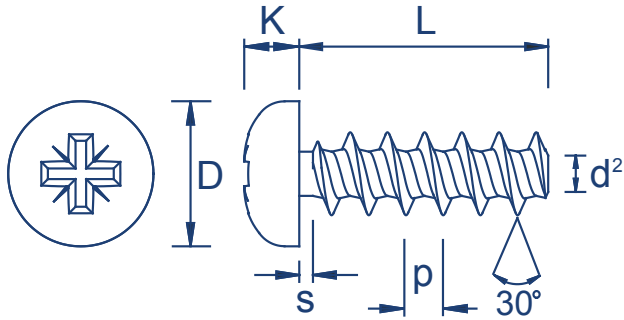
The Flow-Sert™ is designed to be installed during moulding. It is critical that the mould pin used is designed to locate the Flow-Sert™ and prevent plastic ingress.

Please contact your nearest TR location for mould pin design assistance.

Plas-Tech® 30

Pan CR (Z) (PR30)

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

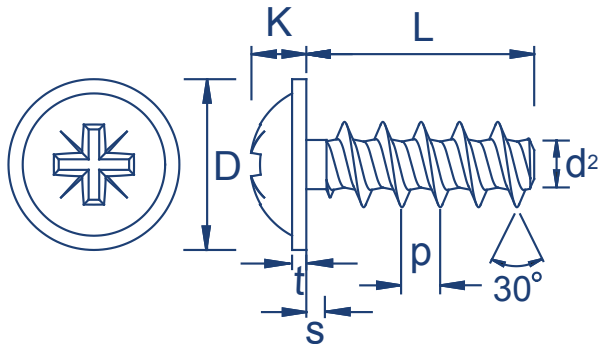
Thread Dimensions	Screw Size	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	3.9	4.4	5.3	6.1	7.0	8.8	10.5
	K	1.5	1.7	2.0	2.5	2.7	3.4	4.0
	Recess No.	1	1	1	2	2	2	3

Preferred Lengths (Metric)

		Length (L)												
		5	6	8	10	12	14	16	18	20	25	30	35	40
Screw Size	2.2	ST, A2	ST, A2	ST, A2	ST									
	2.5	ST	ST, A2	ST, A2	ST	ST	ST	ST	ST					
	3.0	ST	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST		
	3.5			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST		
	4.0			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST
	5.0				ST	ST, A2	ST	ST, A2	ST	ST, A2	ST	ST	ST	ST
	6.0					ST		ST		ST	ST	ST	ST	

ST = Steel
A2 = A2 Stainless Steel
Driver bits are available from stock for all screw sizes

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

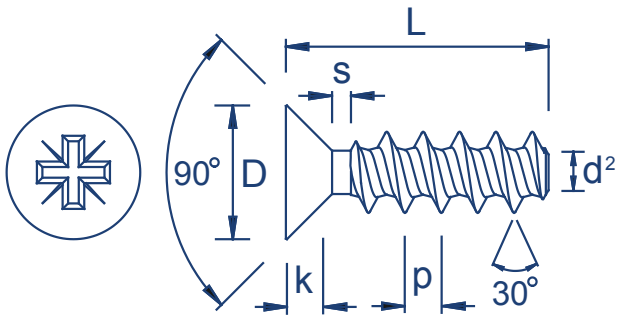
Thread Dimensions	Screw Size	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	4.4	5.0	6.0	7.0	8.0	10.0	12.0
	K	1.6	1.8	2.1	2.4	2.5	3.2	4.0
	t	0.5	0.6	0.7	0.8	0.9	1.1	1.3
	Recess No.	1	1	1	2	2	2	3

Preferred Lengths (Metric)

Screw Size		Length (L)										
		5	6	8	10	12	14	16	18	20	25	30
Screw Size	2.2	ST	ST	ST	ST							
	2.5	ST	ST	ST	ST	ST						
	3.0		ST	ST, A2	ST, A2	ST, A2	ST, A2	ST		ST		
	3.5			ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	
	4.0			ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST
	5.0					ST	ST	ST	ST	ST	ST	ST
	6.0					ST		ST		ST	ST	ST

ST = Steel | A2 = Stainless Steel | Driver bits are available from stock for all screw sizes

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Thread Dimensions	Screw Size	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	3.8	4.7	5.5	7.3	8.4	9.3	11.3
	K	1.30	1.75	2.05	2.80	3.25	3.40	3.80
	Recess No.	1	1	1	2	2	2	3

Preferred Lengths (Metric)

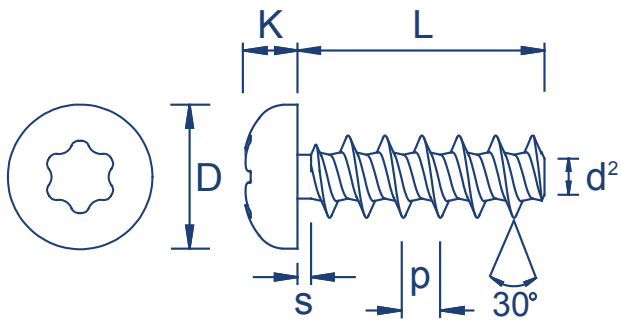
		Length (L)										
		5	6	8	10	12	14	16	18	20	25	30
Screw Size	2.2	ST	ST	ST	ST							
	2.5	ST	ST	ST	ST	ST	ST	ST	ST			
	3.0		ST	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST	ST	
	3.5			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	
	4.0			ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST
	5.0				ST	ST	ST	ST	ST	ST	ST	ST
	6.0					ST		ST		ST	ST	ST

ST = Steel

A2 = Stainless Steel

Driver bits are available from stock for all screw sizes

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

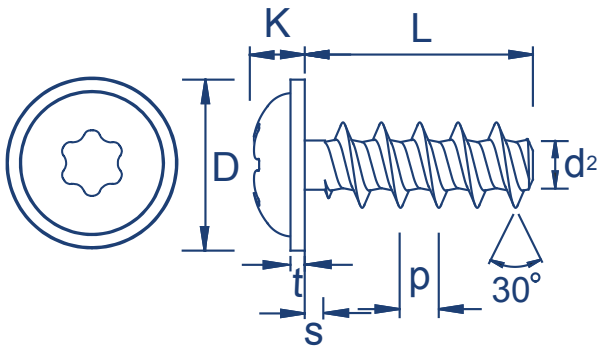
Thread Dimensions	Screw Size	1.8	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.04	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.80	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	1.8	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	0.9	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.26 - 1.53	1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	3.6	4.0	4.2	5.6	6.9	7.5	8.2	10.8
	K	1.3	1.5	1.6	2.1	2.3	2.6	2.9	3.8
	Recess No.	T6	T6	T7/T8*	T10	T10	T20	T20	T23/T25*

Preferred Lengths (Metric)

		Length (L)												
		4	5	6	8	10	12	14	16	18	20	25	30	35
Screw Size	1.8		ST	ST		ST	ST							
	2.2	ST	ST	ST	ST	ST	ST							
	2.5		ST	ST, A2	ST, A2	ST	ST	ST	ST					
	3.0			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2		ST	ST	ST
	3.5				ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	
	4.0				ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	
	5.0					ST, A2	ST, A2	ST	ST, A2		ST, A2	ST, A2	ST, A2	
	6.0						ST		ST		ST	ST	ST	

ST = Steel | A2 = Stainless Steel | * Please contact sales for details | Driver bits are available from stock for all screw sizes

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

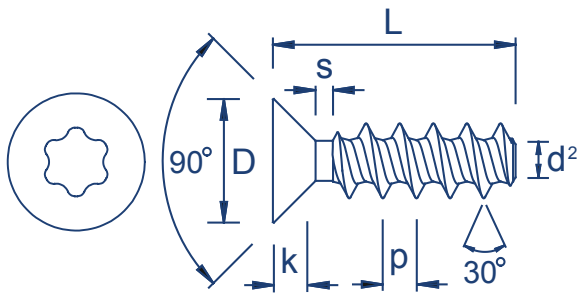
Thread Dimensions	Screw Size	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	4.5	5.0	6.0	7.0	8.0	10.0	12.0
	K	1.4	1.5	2.1	2.4	2.6	3.3	3.6
	t	0.5	0.5	0.6	0.7	0.8	1.0	1.2
	Recess No.	T6	T6/T7*	T10	T10	T20	T20	T23/T25*

Preferred Lengths (Metric)

		Length (L)											
		4	5	6	8	10	12	14	16	18	20	25	30
Screw Size	2.5		ST	ST		ST							
	3.0			ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST	
	3.5				ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	
	4.0				ST	ST, A2	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST
	5.0				ST	ST	ST, A2	ST, A2	ST, A2	ST	ST	ST	ST
	6.0						ST	ST	ST	ST	ST	ST	ST

ST = Steel | A2 = Stainless Steel | * Please contact sales for details | Driver bits are available from stock for all screw sizes

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Thread Dimensions	Screw Size	1.8	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	d2 nom.	1.04	1.25	1.40	1.66	1.91	2.17	2.68	3.19
	p	0.80	0.98	1.12	1.34	1.57	1.79	2.24	2.69
	s (L > 3 x d1)	1.8	2.2	2.5	3.0	3.5	4.0	5.0	6.0
	s (L < 3 x d1)	0.9	1.1	1.3	1.5	1.8	2.0	2.5	3.0
Recommended Hole Size mm		1.26 - 1.53	1.54 - 1.87	1.75 - 2.12	2.10 - 2.55	2.45 - 2.97	2.80 - 3.40	3.50 - 4.25	4.20 - 5.10
Head Dimensions	D	3.4	3.8	4.7	5.5	7.3	8.4	9.2	11.3
	K	0.35	0.35	0.35	0.35	0.40	0.45	0.50	0.55
	Recess No.	T6	T6	T8	T8	T15	T20	T20	T30

Preferred Lengths (Metric)

		Length (L)											
		4	5	6	8	10	12	14	16	18	20	25	30
Screw Size	2.2			ST									
	2.5			ST	ST	ST							
	3.0			ST, A2	ST, A2	ST, A2	ST, A2		ST, A2		ST		
	3.5				A2	ST, A2	ST, A2		ST, A2		ST		
	4.0					ST, A2	ST, A2		ST, A2		ST, A2		
	5.0					A2	A2		ST, A2		ST, A2	A2	A2
	6.0												

ST = Steel

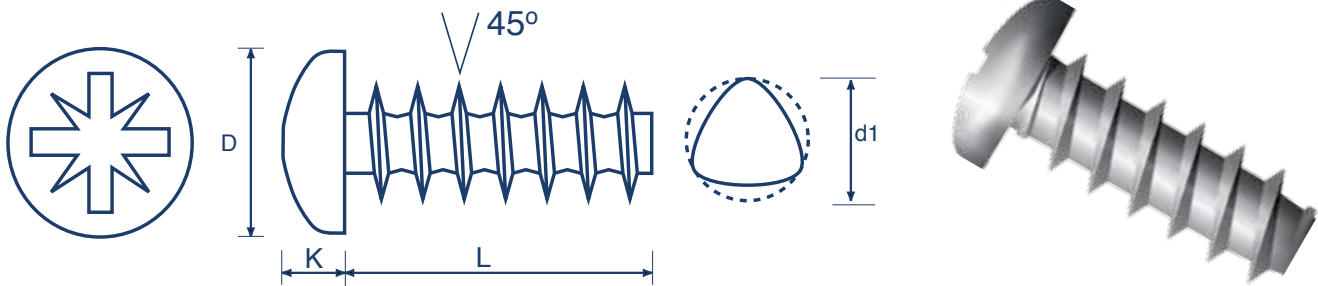
A2 = Stainless Steel

Driver bits are available from stock for all screw sizes

Plas-Fix® 45

Pan CR (Z) (PR45)

Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Screw Size	1.8	2.2	2.5	3	3.5	4	5	6
Dia. d1 Max	1.85	2.25	2.55	3.05	3.55	4.06	5.06	6.06
D	3.60	4.24	4.00	5.00	6.00	7.00	8.00	10.00
K - Max	1.50	1.57	1.60	1.95	2.30	2.45	2.80	3.50
Recess	0	1	1	1	1	2	2	2
Recommended Hole Size mm	1.19 - 1.45	1.47 - 1.79	1.80 - 2.00	2.26 - 2.50	2.73 - 2.95	3.18 - 3.41	3.62 - 4.10	4.55 - 5.05

Preferred Lengths (Metric)

		Length (L)									
		4	5	6	8	10	12	16	20	25	30
Screw Size	1.8	ST	ST	ST	ST	ST					
	2.2		ST	ST	ST	ST	ST				
	2.5			ST, A2	ST, A2	ST, A2	ST, A2				
	3.0			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	3.5			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	
	4.0			ST	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	
	5.0					ST	ST	ST	ST	ST	ST
	6.0							ST	ST	ST	

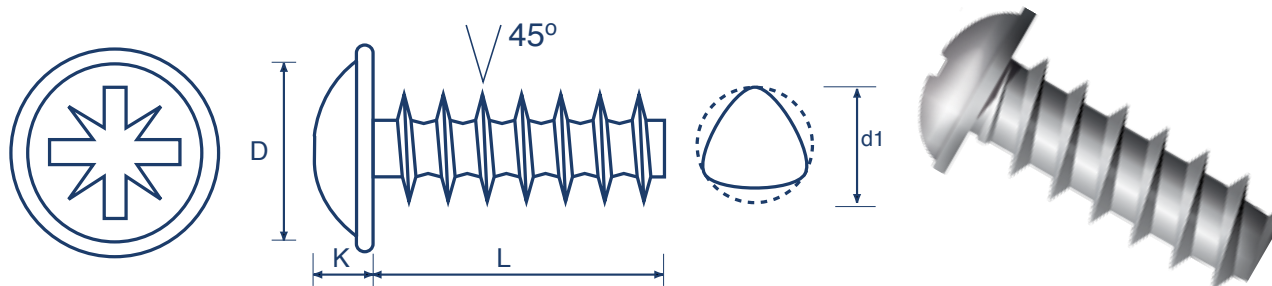
ST = Steel
 A2 = Stainless Steel
 Driver bits are available from stock for all screw sizes

Plas-Fix® 45

Flange CR (Z) (FL45)



Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Screw Size	3.5	4	5	6
Dia. d1 Max	3.55	4.06	5.06	6.06
D	6.60	8.00	9.60	12.00
K - Max	1.60	2.00	2.30	2.90
Recess	1	2	2	2
Recommended Hole Size mm	2.73 - 2.95	3.18 - 3.41	3.62 - 4.10	4.55 - 5.05

Preferred Lengths (Metric)

		Length (L)						
		6	8	10	12	16	20	25
Screw Size	3.5	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2
	4.0		ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2
	5.0			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2

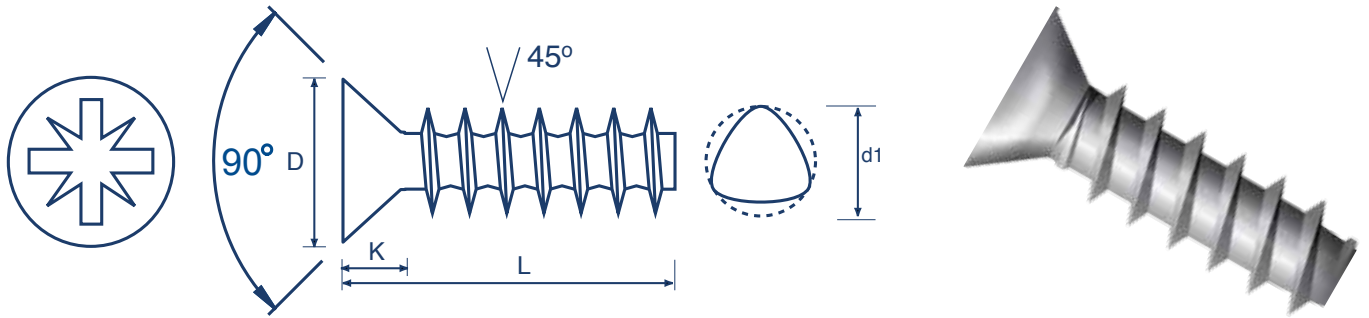
ST = Steel
 A2 = Stainless Steel
 Driver bits are available from stock for all screw sizes

Plas-Fix® 45

Countersunk CR (Z) (KR45)



Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Screw Size	2.5	3	3.5	4	5	6
Dia. d1 Max	2.55	3.05	3.55	4.06	5.06	6.06
D	4.40	5.50	6.30	7.35	8.40	10.00
K - Max	1.30	1.50	1.65	1.90	2.20	2.50
Recess	1	1	1	2	2	2
Recommended Hole Size mm	1.80 - 2.00	2.26 - 2.50	2.73 - 2.95	3.18 - 3.41	3.62 - 4.10	4.55 - 5.05

Preferred Lengths (Metric)

		Length (L)								
		4	6	8	10	12	16	20	25	30
Screw Size	2.5		ST	ST	ST					
	3.0		ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	3.5		ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2		
	4.0			ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	5.0				ST	ST	ST	ST	ST	ST

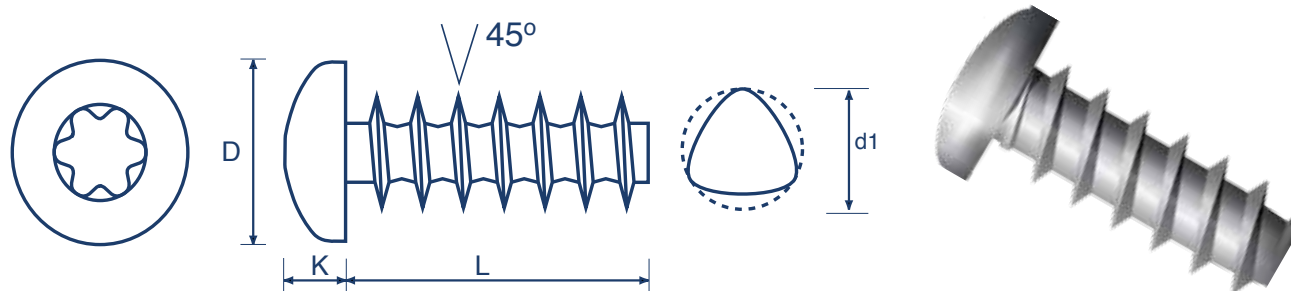
ST = Steel
A2 = Stainless Steel
Driver bits are available from stock for all screw sizes

Plas-Fix® 45

Pan T-Drive (PT45)



Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Screw Size	2.5	3	3.5	4	5
Dia. d1 Max	2.55	3.05	3.55	4.06	5.06
D	4.00	5.00	6.00	7.00	8.00
K - Max	1.60	1.95	2.30	2.45	2.80
Recess	T6	T8	T10	T15	T20
Recommended Hole Size mm	1.80 - 2.00	2.26 - 2.50	2.73 - 2.95	3.18 - 3.41	3.62 - 4.10

Preferred Lengths (Metric)

		Length (L)							
		6	8	10	12	16	20	25	30
Screw Size	2.5	ST	ST	ST					
	3.0	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2		
	3.5	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	4.0	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	5.0			ST	ST	ST	ST	ST	ST

ST = Steel

A2 = Stainless Steel

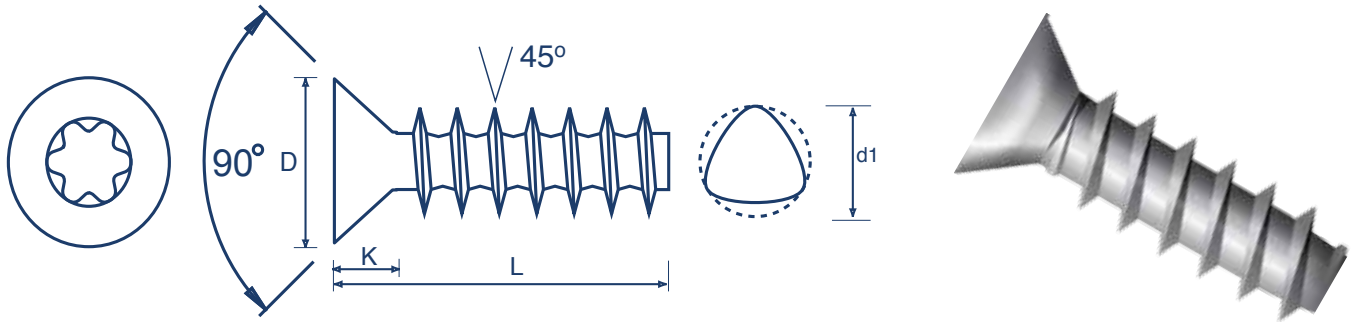
Driver bits are available from stock for all screw sizes

Plas-Fix® 45

Countersunk T-Drive (KT45)



Steel/Zinc & Clear (CR3) | A2 Stainless Steel/Self Colour (SF)



Dimensions (Metric)

Screw Size	2.5	3	3.5	4	5
Dia. d1 Max	2.55	3.05	3.55	4.06	5.06
D	4.40	5.50	6.30	7.35	8.40
K - Max	1.30	1.50	1.65	1.90	2.20
Recess	T6	T8	T10	T15	T20
Recommended Hole Size mm	1.80 - 2.00	2.26 - 2.50	2.73 - 2.95	3.18 - 3.41	3.62 - 4.10

Preferred Lengths (Metric)

		Length (L)							
		6	8	10	12	16	20	25	30
Screw Size	2.5	ST	ST	ST					
	3.0	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2		
	3.5	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	4.0		ST, A2	ST, A2	ST, A2	ST, A2	ST, A2	ST	
	5.0			ST	ST	ST	ST	ST	ST

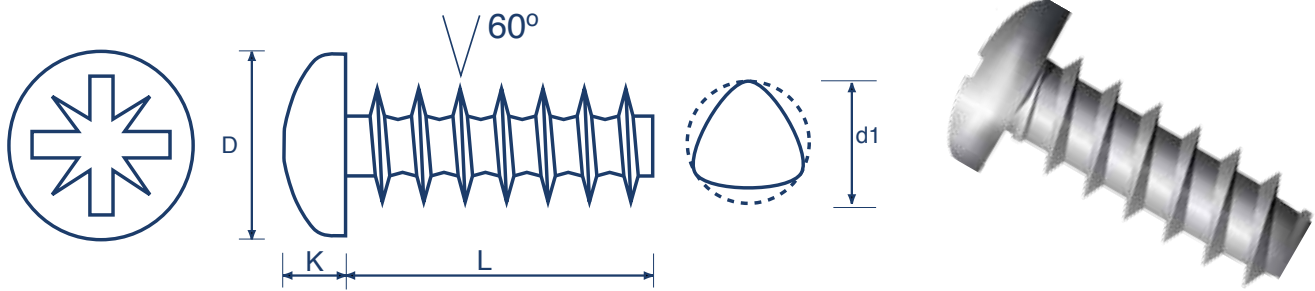
ST = Steel
 A2 = Stainless Steel
 Driver bits are available from stock for all screw sizes

Plas-Fix® 60

Pan CR (Z) (PR60)



Steel/Zinc & Clear (CR3)



Dimensions (Imperial)

Screw Size	No 2	No 4	No 6	No 8	No 10
Dia. d1 Max	0.089	0.123	0.143	0.179	0.208
D	0.167	0.219	0.270	0.322	0.373
K - Max	0.062	0.080	0.097	0.115	0.133
Recess	1	1	2	2	2
Recommended Hole Size In	0.079 - 0.080	0.099 - 0.106	0.121 - 0.128	0.147 - 0.157	0.173 - 0.184

Preferred Lengths (Imperial)

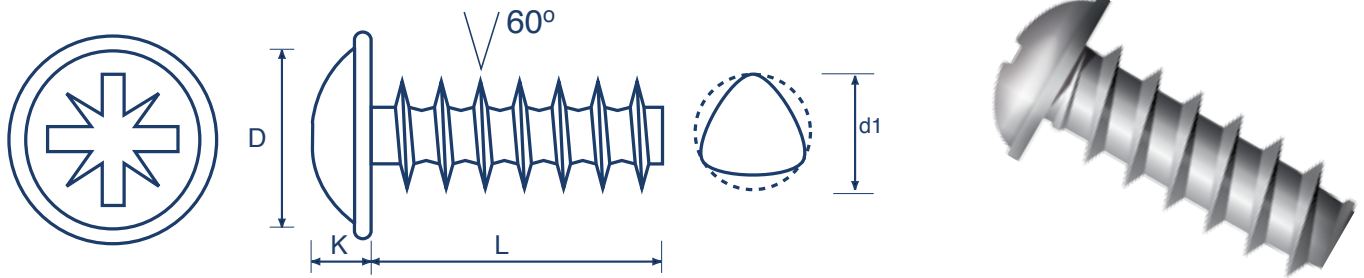
		Length (L)										
		3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	1 3/8	1 1/2
Screw Size	No 2	ST	ST	ST	ST	ST	ST	ST	ST			
	No 4	ST	ST	ST	ST		ST	ST	ST	ST	ST	
	No 6	ST	ST	ST	ST		ST	ST	ST	ST	ST	ST
	No 8			ST	ST		ST	ST	ST	ST		
	No 10				ST		ST	ST	ST			

ST = Steel
 Stainless Steel - please enquire for availability
 Driver bits are available from stock for all screw sizes

Plas-Fix® 60

Flange CR (Z) (FL60)

Steel/Zinc & Clear (CR3)



Dimensions (Imperial)

Screw Size	No 2	No 4	No 6	No 8	No 10
Dia. d1 Max	0.089	0.123	0.143	0.179	0.208
D	0.167	0.219	0.270	0.322	0.373
K - Max	0.062	0.080	0.097	0.115	0.133
Recess	1	1	2	2	2
Recommended Hole Size In	0.079 - 0.080	0.099 - 0.106	0.121 - 0.128	0.147 - 0.157	0.173 - 0.184

Preferred Lengths (Imperial)

		Length (L)										
		3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	1 3/8	1 1/2
Screw Size	No 2		ST	ST	ST		ST					
	No 4		ST	ST	ST		ST	ST	ST	ST		
	No 6		ST	ST	ST		ST	ST	ST	ST		
	No 8			ST	ST		ST	ST	ST	ST		
	No 10				ST		ST	ST	ST	ST		

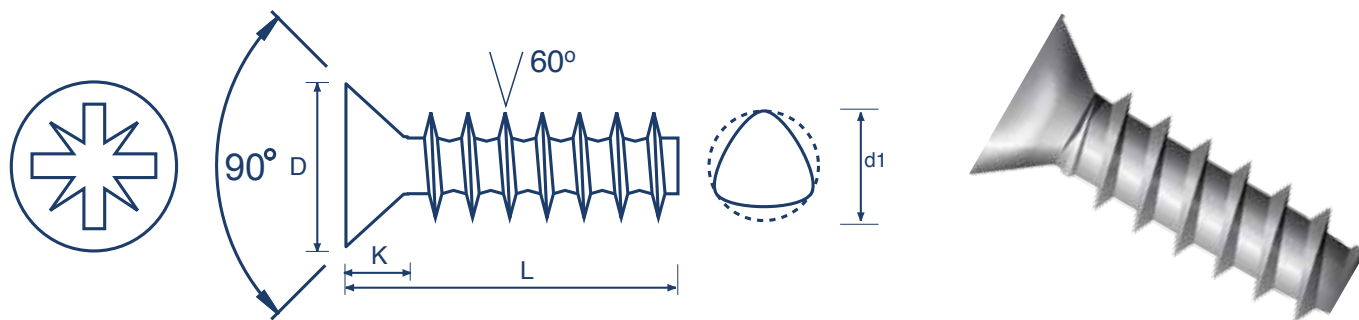
ST = Steel
 Stainless Steel - please enquire for availability
 Driver bits are available from stock for all screw sizes

Plas-Fix® 60

Countersunk CR (Z) (KR60)



Steel/Zinc & Clear (CR3)



Dimensions (Imperial)

Screw Size	No 2	No 4	No 6	No 8	No 10
Dia. d1 Max	0.089	0.123	0.143	0.179	0.208
D	0.172	0.225	0.279	0.332	0.385
K - Max	0.051	0.067	0.083	0.100	0.116
Recess	1	1	2	2	2
Recommended Hole Size In	0.079 - 0.080	0.099 - 0.106	0.121 - 0.128	0.147 - 0.157	0.173 - 0.184

Preferred Lengths (Imperial)

		Length (L)						
		3/16	1/4	5/16	3/8	1/2	5/8	3/4
Screw Size	No 2	ST	ST	ST	ST	ST	ST	
	No 4		ST	ST	ST	ST	ST	ST
	No 6			ST	ST	ST	ST	ST
	No 8			ST	ST	ST	ST	ST
	No 10					ST		

ST = Steel
 Stainless Steel - please enquire for availability
 Driver bits are available from stock for all screw sizes



High-low screws have two widely spaced threads. One, the high thread, shall have a 30° included angle whilst the second, the low thread, has a 60° included angle. The unique thread form has three important advantages in plastic applications:

1. High pull out loads.
2. Wider differential between driving and stripping torque values.
3. Reduced radial pressure which minimises both cracking or busting.



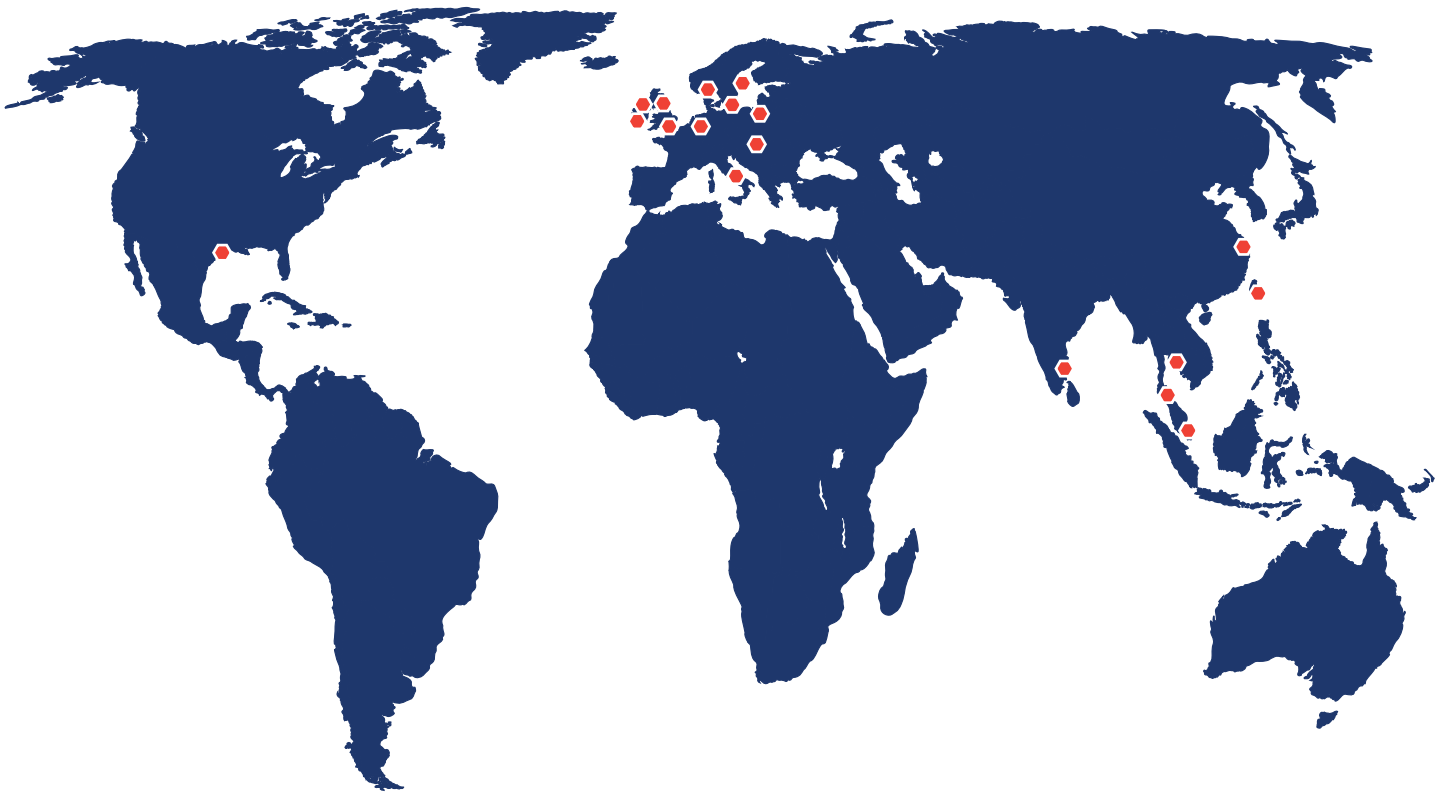
Type BT thread cutting screws have spaced threads with a blunt point and tapered lead threads, as with Type F self tappers with a thread cutting edge and chip cavity.

These screws cut their mating thread form and are therefore more suited to applications in less ductile materials (which are unsuitable for the Type F screws) such as thermoset plastics and cast aluminium.



Type Y thread cutting screws have spaced threads with a blunt point and tapered entering threads, as with Type F self tappers, with multi cutting flutes extended from point to under head.

The screws cut their mating thread and are therefore suitable to less ductile materials such as thermoset plastics and aluminium.



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