KVT
SOLUTIONEERING
A BOSSARD COMPANY

Tappex® Thread inserts

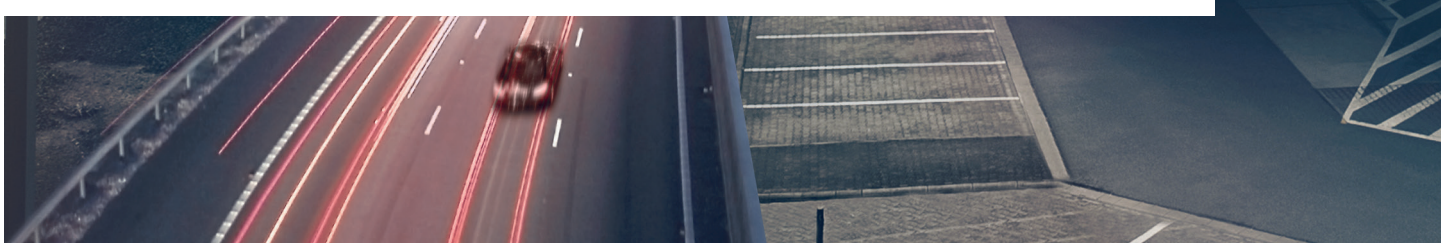
Precise and durable in light materials

The center of excellence for high-performance fastening technology

KVT-Fastening is an expert for high-quality fastening applications and offers engineering solutions based on the wide product portfolio of the leading manufacturers in the market.

Mechanical engineering | Automotive | Electrical engineering | Energy | Precision engineering | Fluid power | Transportation | Off-shore and Marine | Medical equipment Aviation and aerospace | Construction industry | Watch manufacturing industry

www.kvt-fastening.com



SOLUTIONEERING
A BOSSARD COMPANY

High-performance solutions from KVT-Fastening are found wherever absolutely safe and secure connections are essential. These small but extremely resilient components play key roles where it matters most – whether in the electronics and energy sector, the automotive and transportation industries, aviation and aerospace, engineering and construction, precision engineering, or medical equipment.

KVT-Fastening does not just supply standard products and individual components, but also provides close and active customer support in the search for ideal solutions, particularly when specific requirements must be fulfilled. This portfolio is complemented by a range of innovative tools and machines as well as, if needed, the integration into automated serial production workflows.

Ever since 1927, KVT-Fastening has stood for experience, solution-driven know-how, unique expertise in development and consultancy as well as the ultimate in reliability. Since December 2012, KVT-Fastening is a member of the Bossard Group. Bossard is a leading provider of intelligent solutions for industrial fastening technology. The range includes global sales, technical consulting (engineering) and logistics of fastening technology components and bolts. Customers benefit from the extension of competencies in industrial fastening technology and from an optimally enhanced product or service portfolio.

Tappex® – reliable and cost-efficient thread inserts

Tappex® brass thread inserts (steel or stain-less steel) create precise, durable internal threads in workpieces made of plastic, light metal alloy, and other notch-sensitive materials.

- **TRISERT® self-tapping inserts** reinforced plastics (GRP) and thermoset plastics. In moulded and drilled holes the three cutting flutes ensure secure embedding in the base material. Available in brass in sizes M2 – M10 with and without a head, TRISERT® guarantees a clean, swarf-free internal thread. The particular advantage of the double ended thread insert is that it can be installed bidirectional.

- **TRISERT-3® self-tapping inserts**, a sub-group of TRISERT® thread inserts, made of steel or stain-less steel, meet the strictest of requirements, e.g. in medical technology, the maritime sector, or in the food industry.

- **FOAMSERT® self-tapping inserts.** This subgroup of TRISERT® thread insert is used in drilled holes in expanded materials and wood. A hand installation tool and a pneumatic tool, each with their own accessories, are available for installation TRISERT®, TRISERT-3® and FOAMSERT®.

- **MULTISERT® press-fitting inserts** with internal thread and patented barb form section are particularly suitable for use with thermoplastic materials. They are available in sizes M1.6 – M12 both with and without a head. Processing methods: press-fitting, ultrasonic insertion, heat insertion (local melting of plastic).

- **MICROBARB® press-fitting inserts with micro knurling.** This sub-group of MULTISERT® thread inserts is ideal for use in thin-walled materials. Both MULTISERTS® and MICROBARBS® can be installed using the Heat Inserter 074/02.

- **HiMOULD® brass threaded inserts for molding** in M2 – M12 are used in moulded and cast components. The HiMOULD® insert can be molded in very close the edge of a component or in situations where there are thin walls or bosses which would be impractical for post-mold installed inserts. Exceptionally wide range of applications for thermoplastic and thermoset plastic molded parts with open ended or blind ended design.

The following applies to all Tappex® variants:
With non-chamfered threads, a small burr is possible at the end of the thread.

Contents

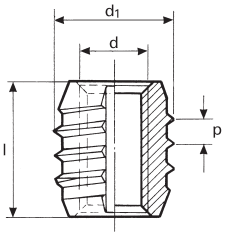
Technical performances, installation recommendations as well as unspecified tolerances regarding the dimensions of the parts have to be requested individual for each application before starting the series production.

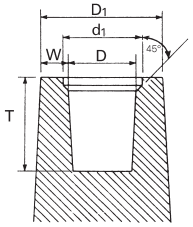
All dimensions are specified in mm.

Thread inserts

TRISERT®

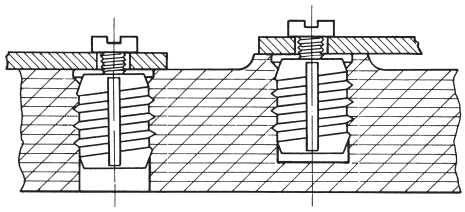
- **Double ended bidirectional purpose**
- **Self-tapping** thread insert
- **For thermoplastic materials**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded





Material
Brass

Typical applications



3-D Data: http://kvt.partcommunity.com

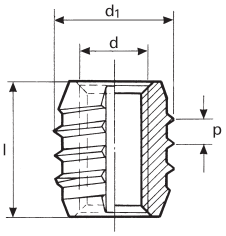
	Thread insert					Location hole*			
Order reference	d	l		d_1 nom.	p nom.	D	W min.	D_1 min.	T min.
145M2	M2	4.00	±0.20	3.50	0.79	3.1– 3.3	1.25	5.8	4.4
136M2	M2	4.80		3.50	0.79	3.1– 3.3	1.25	5.8	5.3
145M2,5	M2.5	4.00	±0.20	4.33	1.06	3.8 – 4.1	1.55	7.2	4.4
136M2,5	M2.5	5.25		4.33	1.06	3.8 – 4.1	1.55	7.2	5.8
137M2,5	M2.5	6.25		4.33	1.06	3.8 – 4.1	1.55	7.2	6.9
145M3	M3	4.00	±0.20	4.73	1.06	4.1– 4.4	1.65	7.7	4.4
136M3	M3	5.25		4.73	1.06	4.1– 4.4	1.65	7.7	5.8
137M3	M3	6.25		4.73	1.06	4.1– 4.4	1.65	7.7	6.9
145M3,5	M3.5	5.00	±0.20	5.52	1.15	5.0 – 5.3	2.00	9.3	5.5
136M3,5	M3.5	6.20		5.52	1.15	5.0 – 5.3	2.00	9.3	6.9
137M3,5	M3.5	7.30		5.52	1.15	5.0 – 5.3	2.00	9.3	8.1
145M4	M4	5.60	±0.20	6.31	1.27	5.8 – 6.1	2.30	10.7	6.2
136M4	M4	7.10		6.31	1.27	5.8 – 6.1	2.30	10.7	7.9
137M4	M4	8.40		6.31	1.27	5.8 – 6.1	2.30	10.7	9.3
145M5	M5	6.40	±0.25	7.50	1.41	6.9 – 7.2	2.70	12.6	7.1
136M5	M5	8.40		7.50	1.41	6.9 – 7.2	2.70	12.6	9.3
137M5	M5	10.00		7.50	1.41	6.9 – 7.2	2.70	12.6	11.0
145M6	M6	7.90	±0.25	8.69	1.59	8.0 – 8.4	3.15	14.7	8.7
136M6	M6	9.80		8.69	1.59	8.0 – 8.4	3.15	14.7	10.8
137M6	M6	12.00		8.69	1.59	8.0 – 8.4	3.15	14.7	13.2
145M8-21	M8	8.00	±0.30	11.06	1.95	10.1 – 10.6	4.00	18.6	8,8
145M8	M8	9.50		11.06	1.95	10.1 – 10.6	4.00	18.6	10.5
136M8	M8	12.40		11.06	1.95	10.1 – 10.6	4.00	18.6	13.7
145M10	M10	12.00	±0.30	13.95	1.95	13.0 – 13.5	5.10	23.7	13.2
136M10	M10	16.00		13.95	1.95	13.0 – 13.5	5.10	23.7	17.6

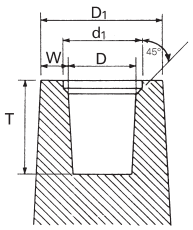
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

TRISERT®

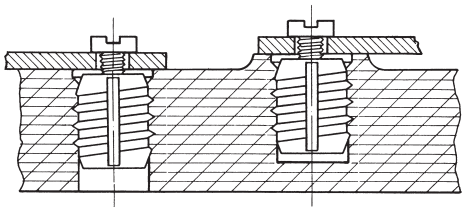
- **Double ended bidirectional purpose**
- **Self-tapping** thread insert
- **For thermoset plastics, glass-fiber reinforced plastics (GRP) > 35%**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded
- Design of cutting flutes modified for use in thermoset plastics





Material
Brass

Typical applications



3-D Data: http://kvt.partcommunity.com

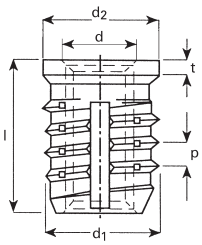
	Thread insert				Location hole			
Order reference	d	l ±0.125	d1 nom.	p nom.	D	W min.	D1 min.	T min.
139M2	M2	4.00	3.50	0.79				
138M2	M2	4.80	3.50	0.79				
139M2,5	M2.5	4.00	4.33	1.06				
138M2,5	M2.5	5.25	4.33	1.06				
170M2,5	M2.5	6.25	4.33	1.06				
139M3	M3	4.00	4.73	1.06				
138M3	M3	5.25	4.73	1.06				
170M3	M3	6.25	4.73	1.06				
139M3,5	M3.5	5.00	5.52	1.15				
138M3,5	M3.5	6.20	5.52	1.15				
170M3,5	M3.5	7.30	5.52	1.15				
139M4	M4	5.60	6.31	1.27				
138M4	M4	7.10	6.31	1.27				
170M4	M4	8.40	6.31	1.27				
139M5	M5	6.40	7.50	1.41				
138M5	M5	8.40	7.50	1.41				
170M5	M5	10.00	7.50	1.41				
139M6	M6	7.90	8.69	1.59				
138M6	M6	9.80	8.69	1.59				
170M6	M6	12.00	8.69	1.59				
139M8	M8	9.50	11.06	1.95				
138M8	M8	12.40	11.06	1.95				
139M10	M10	12.00	13.95	1.95				
138M10	M10	16.00	13.95	1.95				

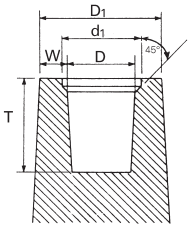
Upon request

Thread inserts

TRISERT®

- **Reduced head**
- **Self-tapping** thread insert
- **For thermoplastic materials oder thermoset plastics**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded
- Larger contact surface
- Higher torque performances
- Higher axial forces
- Design of cutting flutes modified for use in thermoset plastics





Material
Brass

3-D Data: http://kvt.partcommunity.com

For thermoplastic materials

	Thread insert							Location hole*			
Order reference	d	l		d_1 nom.	p nom.	d_2 nom.	t ±0.15	D	W min.	D_1 min.	T min.
237M3	M3	6.25	±0.20	4.73	1.06	4.7	0.75	4.1 – 4.4	1.65	7.7	6.9
237M4	M4	8.40	±0.20	6.31	1.27	6.3	0.80	5.8 – 6.1	2.30	10.7	9.3
237M5	M5	10.00	±0.25	7.50	1.41	7.5	0.80	6.9 – 7.2	2.70	12.6	11.0
237M6 245M6	M6 M6	12.00 7.90	±0.25	8.69 8.69	1.59 1.59	8.6 8.6	0.90 0.90	8.0 – 8.4 8.0 – 8.4	3.15 3.15	14.7 14.7	13.2 8.7
237M8	M8	14.00	±0.30	11.06	1.95	11.1	1.00	10.1 – 10.6	4.00	18.6	15.6

For thermoset plastics

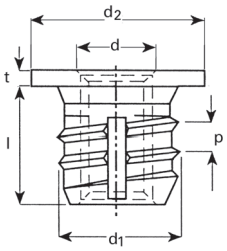
	Thread insert						Location hole*			
Order reference	d	l ±0.125	d_1 nom.	p nom.	d_2 nom.	t ±0.15	D	W min.	D_1 min.	T min.
270M3	M3	6.25	4.73	1.06	4.7	0.75	Upon request			
270M4	M4	8.40	6.31	1.27	6.3	0.80				
270M5	M5	10.00	7.50	1.41	7.5	0.80				
270M6 239M6	M6 M6	12.00 7.90	8.69 8.69	1.59 1.59	8.6 8.6	0.90 0.90				
270M8	M8	14.00	11.06	1.95	11.1	1.00				

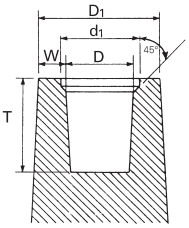
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

TRISERT®

- **Regular head**
- **Self-tapping** thread insert
- **For thermoplastic materials**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded
- Larger contact surface
- Higher torque performances
- Higher axial forces





Material
Brass

3-D Data: http://kvt.partcommunity.com

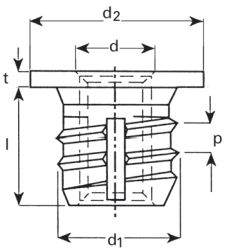
	Thread insert							Location hole*			
Order reference	d	l		d_1 nom.	p nom.	d_2 nom.	t ±0.15	D	W min.	D_1 min.	T min.
345M2,5	M2.5	4.00	±0.20	4.33	1.06	6.35	0.60	3.8 – 4.1	1.55	7.2	4.4
336M2,5	M2.5	5.25		4.33	1.06	6.35	0.60	3.8 – 4.1	1.55	7.2	5.8
345M3	M3	4.00	±0.20	4.73	1.06	7.10	0.75	4.1 – 4.4	1.65	7.7	4.4
336M3	M3	5.25		4.73	1.06	7.10	0.75	4.1 – 4.4	1.65	7.7	5.8
345M3,5	M3.5	5.00	±0.20	5.52	1.15	8.30	0.75	5.0 – 5.3	2.00	9.3	5.5
336M3,5	M3.5	6.20		5.52	1.15	8.30	0.75	5.0 – 5.3	2.00	9.3	6.9
345M4	M4	5.60	±0.20	6.31	1.27	8.70	0.75	5.8 – 6.1	2.30	10.7	6.2
336M4	M4	7.10		6.31	1.27	8.70	0.75	5.8 – 6.1	2.30	10.7	7.9
345M5	M5	6.40	±0.25	7.50	1.41	11.10	0.90	6.9 – 7.2	2.70	12.6	7.1
336M5	M5	8.40		7.50	1.41	11.10	0.90	6.9 – 7.2	2.70	12.6	9.3
345M6	M6	7.90	±0.25	8.69	1.59	12.00	1.00	8.0 – 8.4	3.15	14.7	8.7
336M6	M6	9.80		8.69	1.59	12.00	1.00	8.0 – 8.4	3.15	14.7	10.8
345M8-02	M8	7.50	±0.30	11.06	1.95	14.30	1.25	10.1 – 10.6	4.00	18.6	8.3
336M8	M8	12.40		11.06	1.95	14.30	1.25	10.1 – 10.6	4.00	18.6	13.7
345M10	M10	12.00	±0.30	13.95	1.95	18.00	1.50	13.0 – 13.5	5.10	23.7	13.2
336M10	M10	16.00		13.95	1.95	18.00	1.50	13.0 – 13.5	5.10	23.7	17.6

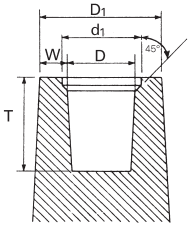
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

TRISERT®

- **Regular head**
- **Self-tapping** thread insert
- **For thermoset plastics**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded
- Larger contact surface
- Higher torque performances
- Higher axial forces
- Design of cutting flutes modified for use in thermoset plastics





Material
Brass

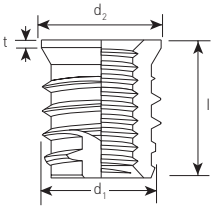
3-D Data: http://kvt.partcommunity.com

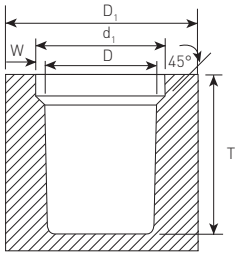
	Thread insert							Location hole			
Order reference	d	l		d_1 nom.	p nom.	d_2 nom.	t ±0.15	D	W min.	D_1 min.	T min.
339M2,5	M2.5	4.00	±0.20	4.33	1.06	6.35	0.60				
338M2,5	M2.5	5.25		4.33	1.06	6.35	0.60				
339M3	M3	4.00	±0.20	4.73	1.06	7.10	0.75				
338M3	M3	5.25		4.73	1.06	7.10	0.75				
339M3,5	M3.5	5.00	±0.20	5.52	1.15	8.30	0.75				
338M3,5	M3.5	6.20		5.52	1.15	8.30	0.75				
339M4	M4	5.60	±0.20	6.31	1.27	8.70	0.75				
338M4	M4	7.10		6.31	1.27	8.70	0.75				
339M5	M5	6.40	±0.25	7.50	1.41	11.10	0.90		Upon request		
338M5	M5	8.40		7.50	1.41	11.10	0.90				
339M6	M6	7.90	±0.25	8.69	1.59	12.00	1.00				
338M6	M6	9.80		8.69	1.59	12.00	1.00				
339M8-02	M8	7.50	±0.30	11.06	1.95	14.30	1.25				
338M8	M8	12.40		11.06	1.95	14.30	1.25				
339M10	M10	12.00	±0.30	13.95	1.95	18.00	1.50				
338M10	M10	16.00		13.95	1.95	18.00	1.50				

Thread inserts

TRISERT-3®

- **Reduced head**
- **Self-tapping** thread insert
- **For light metal and plastics**
- Can be used in drilled or molded holes
- Fully internal through threaded
- Case hardening steel Zn/Ni with surface coating, passivated (Cr VI+-free)
- Faster installation due to greater helix angle of the thread flanks
- Corrosion resistance up to 720 hours to red rust





Material
Steel

3-D Data: http://kvt.partcommunity.com

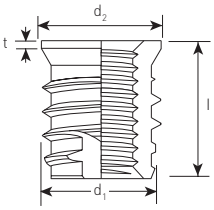
	Thread insert					Location hole*				
Order reference	d	l ±0.125	d_1 nom.	d_2 nom.	t ±0.1	D Plastics	D Metals	W min.	D_1 min.	T min.
6238 M3	M3	5.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	5.80
6270 M3	M3	6.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	6.90
6238 M4	M4	7.10	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	7.90
6270 M4	M4	8.40	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	9.30
6238 M5	M5	8.40	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	9.30
6270 M5	M5	10.00	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	11.00
6238 M6	M6	9.80	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	10.80
6270 M6	M6	12.00	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	13.20
6238 M8	M8	12.40	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	13.70
6270 M8	M8	14.00	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	15.40
6239 M10	M10	12.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	13.20
6238 M10	M10	16.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	17.60
6270 M10	M10	18.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	19.80

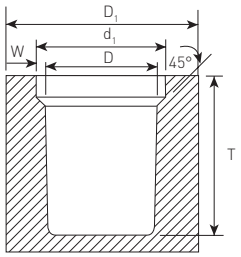
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

TRISERT-3®

- **Reduced head**
- **Self-tapping** thread insert
- For **light metal** and **plastics**
- M10 also available in blind-ended design
- Can be used in drilled or molded holes
- Fully internal through threaded
- Faster installation due to greater helix angle of the thread flanks
- Stainless steel 303 comparable with 1.4305





Material
Stainless steel

3-D Data: http://kvt.partcommunity.com

	Thread insert					Location hole*				
Order reference	d	l ±0.125	d_1 nom.	d_2 nom.	t ±0.1	D Plastics	D Metals	W min.	D_1 min.	T min.
6238 M3-303	M3	5.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	5.80
6270 M3-303	M3	6.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	6.90
6238 M4-303	M4	7.10	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	7.90
6270 M4-303	M4	8.40	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	9.30
6238 M5-303	M5	8.40	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	9.30
6270 M5-303	M5	10.00	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	11.00
6238 M6-303	M6	9.80	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	10.80
6270 M6-303	M6	12.00	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	13.20
6238 M8-303	M8	12.40	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	13.70
6270 M8-303	M8	14.00	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	15.40
6239 M10-303	M10	12.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	13.20
6238 M10-303	M10	16.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	17.60
6270 M10-303	M10	18.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	19.80
6239 M12-303	M12	13.50	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	14.85
6238 M12-303	M12	18.00	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	19.80
6270 M12-303	M12	20.00	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	22.00

Blind ended

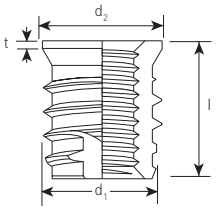
	Thread insert					Location hole*				
Order reference	d	l ±0.125	d_1 nom.	d_2 nom.	t ±0.1	D Plastics	D Metals	W min.	D_1 min.	T min.
6238 M10B-303	M10	16.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	17.60
6270 M10B-303	M10	18.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	19.80

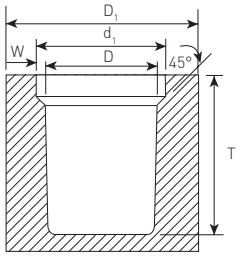
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

TRISERT-3®

- **Reduced head**
- **Self-tapping** thread insert
- For **light metal** and **plastics**
- M10 also available in blind-ended design
- Can be used in drilled or molded holes
- Fully internal through threaded
- Faster installation due to greater helix angle of the thread flanks
- Stainless steel 316 comparable with 1.4401





Material
Stainless steel

3-D Data: http://kvt.partcommunity.com

	Thread insert					Location hole*				
Order reference	d	l ±0.125	d_1 nom.	d_2 nom.	t ±0.1	D Plastics	D Metals	W min.	D_1 min.	T min.
6238 M3-316	M3	5.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	5.80
6270 M3-316	M3	6.25	4.73	4.70	0.38	4.10 – 4.40	4.35 – 4.55	1.65	7.70	6.90
6238 M4-316	M4	7.10	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	7.90
6270 M4-316	M4	8.40	6.31	6.30	0.38	5.80 – 6.10	5.95 – 6.15	2.30	10.70	9.30
6238 M5-316	M5	8.40	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	9.30
6270 M5-316	M5	10.00	7.50	7.50	0.40	6.90 – 7.20	7.15 – 7.35	2.70	12.60	11.00
6238 M6-316	M6	9.80	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	10.80
6270 M6-316	M6	12.00	8.69	8.60	0.45	8.00 – 8.40	8.35 – 8.55	3.15	14.70	13.20
6238 M8-316	M8	12.40	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	13.70
6270 M8-316	M8	14.00	11.06	11.10	0.50	10.10 – 10.60	10.55 – 10.85	4.00	18.60	15.40
6239 M10-316	M10	12.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	13.20
6238 M10-316	M10	16.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	17.60
6270 M10-316	M10	18.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	19.80
6239 M12-316	M12	13.50	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	14.85
6238 M12-316	M12	18.00	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	19.80
6270 M12-316	M12	20.00	15.95	16.10	0.75	15.00 - 15.50	15.45 - 15.65	5.95	27.40	22.00

Blind ended

	Thread insert					Location hole*				
Order reference	d	l ±0.125	d_1 nom.	d_2 nom.	t ±0.1	D Plastics	D Metals	W min.	D_1 min.	T min.
6238 M10B-316	M10	16.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	17.60
6270 M10B-316	M10	18.00	13.95	14.10	0.75	13.00 – 13.50	13.45 – 13.65	5.10	23.70	19.80

* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

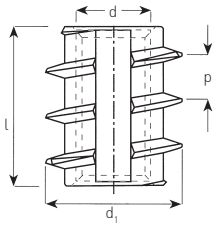
Thread inserts

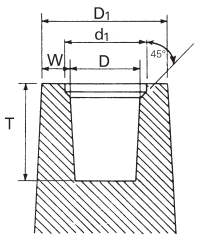
FOAMSERT®

- **Double ended bidirectional purpose or reduced head**
- **Self-tapping** thread insert
- **Designed especially for expanded material and wood**
- 3 special cutting flutes prevent swarf in the internal thread
- Can be used in drilled or molded holes
- Fully internal through threaded

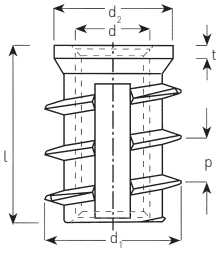
Material
Brass

Double ended
Usable both sides
Type 040





Reduced head
Type 240



3-D Data: http://kvt.partcommunity.com

	Thread insert				Location hole*			
Order reference	d	l ±0.125	d_1 nom.	p nom.	D	W min.	D_1 min.	T min.
040M2,5	M2.5	8.00	5.50	1.81	4.25 – 5.00	3.75	12.50	8.8
040M3	M3	8.00	5.50	1.81	4.25 – 5.00	3.75	12.50	8.8
040M3,5	M3.5	8.50	6.30	2.12	5.00 – 5.75	4.33	14.40	9.4
040M4	M4	9.00	7.10	2.31	5.70 – 6.50	4.90	16.30	9.9
040M5	M5	10.00	8.70	2.54	7.20 – 8.10	6.10	20.30	11.0
040M6	M6	12.00	10.00	2.82	8.40 – 9.30	7.00	23.30	13.2
040M8	M8	16.00	12.00	3.63	10.40 – 11.30	8.50	28.30	17.6

	Thread insert						Location hole*			
Order reference	d	l ±0.125	d_1 nom.	p nom.	d_2 nom.	t nom.	D	W min.	D_1 min.	T min.
240M3	M3	9.00	5.50	1.81	5.50	0.50	4.25 – 5.00	3.75	12.50	9.9
240M4	M4	11.00	7.10	2.31	7.10	0.50	5.70 – 6.50	4.90	16.30	12.1
240M5	M5	12.00	8.70	2.54	8.70	0.50	7.20 – 8.10	6.10	20.30	13.2
240M6	M6	16.00	10.00	2.82	10.00	0.60	8.40 – 9.30	7.00	23.30	17.6
240M8	M8	20.00	12.00	3.63	12.00	0.70	10.40 – 11.30	8.50	28.30	22.0

* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Installation equipment

TRISERT®, TRISERT-3® and FOAMSERT®

Production driver

(magnified picture)
For pantograph tool

Ordering example for M2:
029EM2-01, etc.

Pantograph

Pneumatic screwdriver with an automatic reverse torque-clutch control

Picture with tool stud linear quick for vertical, stationary mounting and mounting piece, not included in the delivery.

Electric screwdriver 035/E/A

- Automatic reverse function
- Adjustable torque settings
- Torque range 0,29 – 25 Nm
- ¼" output spindle.

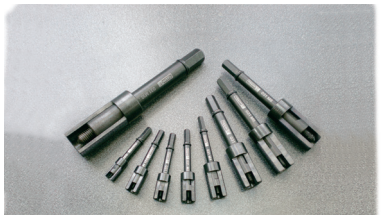
Power supply and adapter lead for electric screwdriver 035/E/A

- Selectable count method
- Speed adjustment
- Audible alarm
- Adapter lead for 40 V power supply and 32 V

Hand installation tool

With hexagonal retainer for prototyping and small series

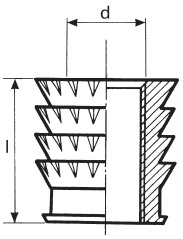
Ordering example for M4:
031M4, etc.

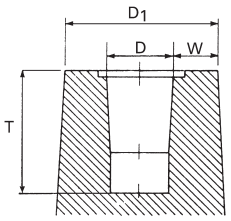


Thread inserts

MULTISERT®

- **Unheaded**
- **Particularly suitable for thermoplastic materials**
- Patented external form
- Special plain location spigot

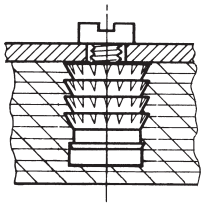




Installation options
Press-fitting
Ultrasonic insertion
Heat insertion

Material
Brass

Typical application



3-D Data: http://kvt.partcommunity.com

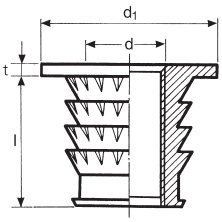
	Thread insert		Location hole*			
Order reference	d	l 0 –0.25	D	W min.	D_1 min.	T min.
001M2	M2	4.20	3.00 – 3.30	1.35	6.0	4.3
002M2	M2	3.10	3.00 – 3.30	1.35	6.0	3.2
001M2,5	M2.5	5.20	3.70 – 4.00	1.70	7.4	5.3
002M2,5	M2.5	4.10	3.70 – 4.00	1.70	7.4	4.2
001M3	M3	5.20	3.70 – 4.00	1.70	7.4	5.3
002M3	M3	4.10	3.70 – 4.00	1.70	7.4	4.2
001M3,5	M3.5	7.00	4.60 – 5.00	2.25	9.5	7.2
002M3,5	M3.5	4.10	4.60 – 5.00	2.25	9.5	4.2
001M4	M4	8.50	5.40 – 5.90	2.50	10.9	8.6
002M4	M4	5.60	5.40 – 5.90	2.50	10.9	5.8
001M5	M5	10.10	6.00 – 6.50	2.85	12.2	10.2
002M5	M5	6.60	6.00 – 6.50	2.85	12.2	6.8
001M6	M6	12.30	7.70 – 8.20	3.20	14.6	12.5
002M6	M6	7.70	7.70 – 8.20	3.20	14.6	7.9
001M8	M8	13.80	10.20 – 10.60	4.25	19.1	14.0
002M8	M8	8.30	10.20 – 10.60	4.25	19.1	8.9
001M10	M10	16.10	12.50 – 13.00	5.10	23.2	16.3
002M10	M10	10.50	12.50 – 13.00	5.10	23.2	10.7
001M12	M12	16.10	15.00 – 15.40	5.20	25.8	16.3

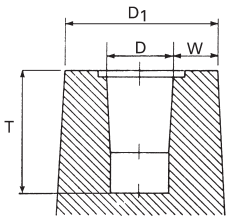
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

MULTISERT®

- **Single thickness head with large head diameter**
- **Particularly suitable for thermoplastic materials**
- Patented external form
- Special positioning shaft

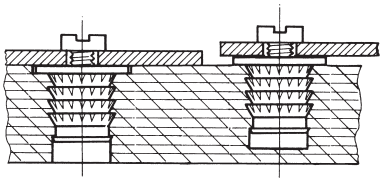




Installation options
Press-fitting
Heat insertion

Material
Brass

Typical applications



3-D Data: http://kvt.partcommunity.com

	Thread insert				Location hole*			
Order reference	d	l 0 −0.25	t ±0.15	d_1 nom.	D	W min.	D_1 min.	T min.
003M2,5	M2.5	5.20	0.75	7.1	3.70 – 4.00	1.70	7.4	5.3
004M2,5	M2.5	4.10	0.75	7.1	3.70 – 4.00	1.70	7.4	4.2
003M3	M3	5.20	0.75	7.1	3.70 – 4.00	1.70	7.4	5.3
004M3	M3	4.10	0.75	7.1	3.70 – 4.00	1.70	7.4	4.2
003M3,5	M3.5	7.00	0.75	7.9	4.60 – 5.00	2.25	9.5	7.2
004M3,5	M3.5	4.10	0.75	7.9	4.60 – 5.00	2.25	9.5	4.2
003M4	M4	8.50	0.75	8.7	5.40 – 5.90	2.50	10.9	8.6
004M4	M4	5.60	0.75	8.7	5.40 – 5.90	2.50	10.9	5.8
003M5	M5	10.10	0.90	11.1	6.00 – 6.50	2.85	12.2	10.2
004M5	M5	6.60	0.90	11.1	6.00 – 6.50	2.85	12.2	6.8
003M6	M6	12.30	1.00	12.7	7.70 – 8.20	3.20	14.6	12.5
004M6	M6	7.70	1.00	12.7	7.70 – 8.20	3.20	14.6	7.9
003M8	M8	13.80	1.25	14.3	10.20 – 10.60	4.25	19.1	14.0
004M8	M8	10.10	1.25	14.3	10.20 – 10.60	4.25	19.1	10.3

* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

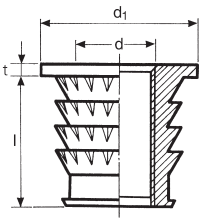
Thread inserts

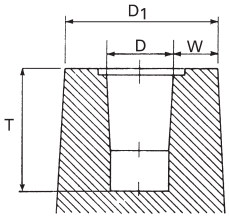
MULTISERT®

- **Single thickness head with small head diameter**
- **Particularly suitable for thermoplastic materials**
- Patented external form
- Special plain location spigot

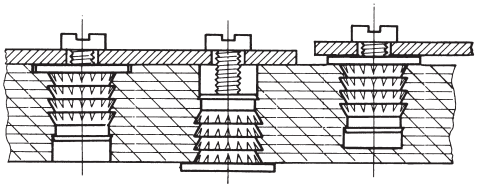
Installation options
Press-in
Ultrasonic insertion (type 073 only)
Heat insertion

Material
Brass





Typical applications



3-D Data: http://kvt.partcommunity.com

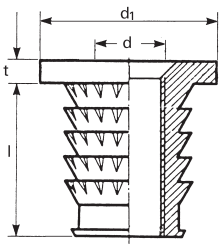
	Thread insert				Location hole*			
Order reference	d	l 0 −0.25	t ±0.15	d_1 nom.	D	W min.	D_1 min.	T min.
073M1,6	M1.6	2.00	0.50	3.2	2.30 – 2.50	1.00	4.5	2.1
071M2	M2	4.20	0.50	4.8	3.00 – 3.30	1.35	6.0	4.3
073M2	M2	2.00	0.50	4.8	3.00 – 3.30	1.35	6.0	2.1
071M2,5	M2.5	5.20	0.75	5.5	3.70 – 4.00	1.70	7.4	5.3
073M2,5	M2.5	4.10	0.75	5.5	3.70 – 4.00	1.70	7.4	4.2
071M3	M3	5.20	0.75	5.5	3.70 – 4.00	1.70	7.4	5.3
073M3	M3	4.10	0.75	5.5	3.70 – 4.00	1.70	7.4	4.2
071M3,5	M3.5	7.00	0.75	6.4	4.60 – 5.00	2.25	9.5	7.2
073M3,5	M3.5	4.10	1.25	6.4	4.60 – 5.00	2.25	9.5	4.2
071M4	M4	8.50	0.75	7.1	5.40 – 5.90	2.50	10.9	8.6
072M4	M4	5.60	0.75	7.1	5.40 – 5.90	2.50	10.9	5.8
073M4	M4	5.60	1.50	7.1	5.40 – 5.90	2.50	10.9	5.8
071M5	M5	10.10	1.00	7.9	6.00 – 6.50	2.85	12.2	10.2
072M5	M5	6.60	0.90	7.9	6.00 – 6.50	2.85	12.2	6.8
073M5	M5	6.60	1.75	7.9	6.00 – 6.50	2.85	12.2	6.8
071M6	M6	12.30	1.30	9.5	7.70 – 8.20	3.20	14.6	12.5
072M6	M6	7.70	1.30	9.5	7.70 – 8.20	3.20	14.6	7.9
073M6	M6	7.70	2.00	9.5	7.70 – 8.20	3.20	14.6	7.9
073M8	M8	10.10	2.50	12.7	10.20 – 10.60	4.25	19.1	10.3
073M10	M10	10.10	2.50	14.3	12.50 – 13.00	5.10	23.2	10.3

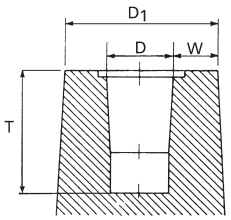
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thread inserts

MULTISERT®

- **Double thickness head with large head diameter**
- **Particularly suitable for thermoplastic materials**
- Patented external form
- Special plain location spigot

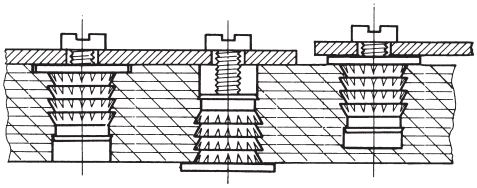




Installation options
Press-fitting
Ultrasonic insertion
Heat insertion

Material
Brass

Typical applications



3-D Data: http://kvt.partcommunity.com

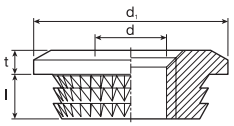
	Thread insert				Location hole*			
Order reference	d	l 0 −0.25	t ±0.15	d_1 nom.	D	W min.	D_1 min.	T min.
005M3	M3	5.20	1.50	7.1	3.70 – 4.00	1.70	7.4	5.3
006M3	M3	4.10	1.50	7.1	3.70 – 4.00	1.70	7.4	4.2
005M3,5	M3.5	7.00	1.25	7.9	4.60 – 5.00	2.25	9.5	7.2
006M3,5	M3.5	4.10	1.25	7.9	4.60 – 5.00	2.25	9.5	4.2
005M4	M4	8.50	1.50	8.7	5.40 – 5.90	2.50	10.9	8.6
006M4	M4	5.60	1.50	8.7	5.40 – 5.90	2.50	10.9	5.8
005M5	M5	10.10	1.75	11.1	6.00 – 6.50	2.85	12.2	10.2
006M5	M5	6.60	1.75	11.1	6.00 – 6.50	2.85	12.2	6.8
005M6	M6	12.30	2.00	12.7	7.70 – 8.20	3.20	14.6	12.5
006M6	M6	7.70	2.00	12.7	7.70 – 8.20	3.20	14.6	7.9
005M8	M8	13.80	2.50	14.3	10.20 – 10.60	4.25	19.1	14.0
006M8	M8	10.10	2.50	14.3	10.20 – 10.60	4.25	19.1	10.3

* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

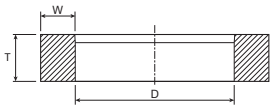
Thread inserts

MICROBARB®

- **With micro knurling**
- **Particularly suitable for thermoplastic materials**
- Patented external form
- Particularly suitable for thin section materials
- Especially for applications in electronics



Chamfer from thread size M4

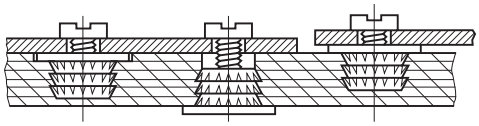


w = (½ D x 1.66 ...) - (½ D)

Installation options
Press-fitting
Ultrasonic insertion
Heat insertion

Material
Brass

Typical applications



3-D Data: http://kvt.partcommunity.com

	Thread insert					Location hole*	
Order reference	d	l 0 −0.2	d_1 0 −0.2	t 0 −0.2	Barbs	D	T min.
0006M2	M2	1.35	4.90	0.55	2	3.30	1.45
0006M2,5	M2.5	1.85	5.60	0.85	2	4.15	2.00
0006M3	M3	1.85	6.10	0.85	2	4.66	2.00
0006M4	M4	3.00	7.90	1.00	3	6.13	3.20
0006M5	M5	3.00	10.00	1.40	3	7.70	3.20
0006M6	M6	3.00	12.70	1.70	3	9.55	3.20
0006M8	M8	4.55	14.30	1.70	3	11.55	4.75
0006M10	M10	4.55	16.00	3.15	3	13.05	4.75

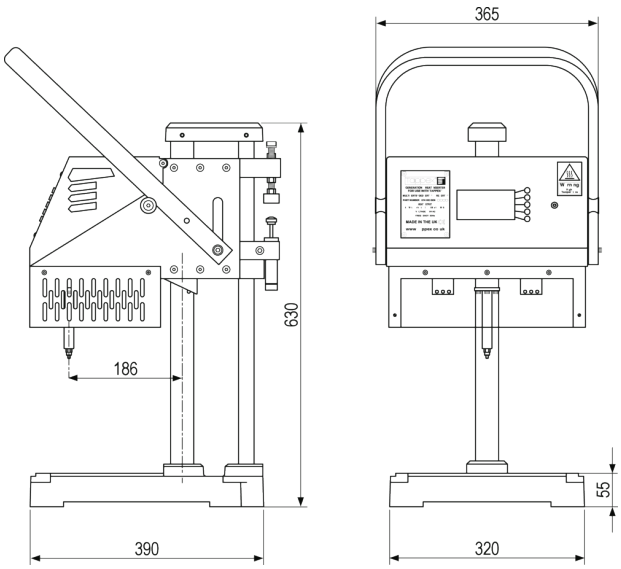
* Installation data: Please note that the dimensions quoted represent standard values and may vary depending on the material of the molded part. It is advisable to run trials prior to series production.

Thermal pressing device

For MULTISERT® and MICROBARB® thread inserts

Heat Inserter 074/HIE/GEN3

- Installation speed control
- Variable temperature up to 450 C°
- Adjustable stop position with indicator light
- Stroke length 65 mm
- Max. working height (with tip removed) 220 mm
- Voltage 110-230 V AC 50-60 Hz
- Output 400 W
- Baseplate and working area illuminated by dual
- LED lightning
- CE certified; EMC – EN61000-6-4: 2007 + A1: 2001
- Weight 31,5 kg



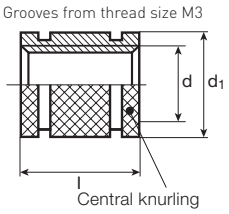
Thread inserts

HiMOULD®

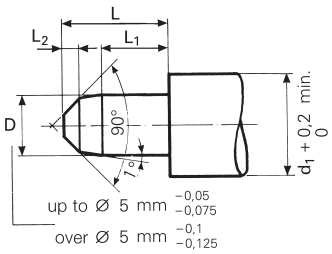
- **Open ended design**
- **For moulding in** during the cycle of the moulding machine
- **For thermoplastic materials and thermoset plastics**
- Sharp increase in axial forces due to additional grooves
- Can be plugged onto smooth locating pins
- Free of swarf after molding process
- Very thin-walled, particularly suitable for applications with low wall thickness

Material
Brass

Thread insert



Recommended pin design



3-D Data: http://kvt.partcommunity.com

Order reference	d	l ±0.10	d_1 ±0.25	D	L 0 −0.25	L_1	L_2
017M2	M2	3.925	3.40	1.60	3.60	2.00	0.70
017M2,5	M2.5	4.725	4.15	2.05	4.40	2.56	0.70
117M3	M3	4.725	4.15	2.50	4.40	3.13	0.75
117M3,5	M3.5	5.875	5.00	2.90	5.85	3.63	0.80
117M4	M4	7.125	5.90	3.30	6.80	4.13	0.85
117M5	M5	7.825	6.60	4.20	7.50	5.25	0.90
117M6	M6	9.925	9.25	5.00	9.60	6.25	0.95
117M8	M8	12.475	11.50	6.80	12.15	8.50	1.00
117M10	M10	13.975	13.90	8.50	13.65	10.63	1.00
117M12	M12	13.975	16.30	10.25	13.65	12.81	1.00

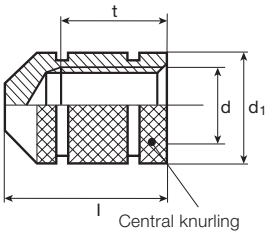
Thread inserts

HiMOULD®

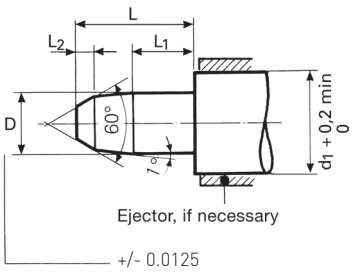
- **Blind-ended design**
- **For moulding in** during the cycle of the moulding machine
- **For thermoplastic materials and thermoset plastics**
- Sharp increase in axial forces due to additional grooves
- Can be plugged onto smooth locating pins
- Free of swarf after molding process
- Very thin-walled, particularly suitable for applications with low wall thickness

Material
Brass

Thread insert



Recommended pin design



3-D Data: http://kvt.partcommunity.com

Order reference	d	l ±0.25	d_1 ±0.25	t nom.	D	L 0 −0.25	L_1	L_2
116M3	M3	6.4	4.15	3.70	2.5	4.8	3.13	0.75
116M3,5	M3.5	7.9	5.00	4.90	2.9	5.4	3.63	0.80
116M4	M4	8.7	5.90	5.45	3.3	5.8	4.13	0.85
116M5	M5	9.5	6.60	6.45	4.2	6.7	5.25	0.90
116M6	M6	12.5	10.00	8.30	5.0	7.5	6.25	0.95

Thread inserts

HiMOULD®

Blind ended design with a counter bore in open end, which press fits on to a suitable design of tapered shoulded pin in the mold tool.

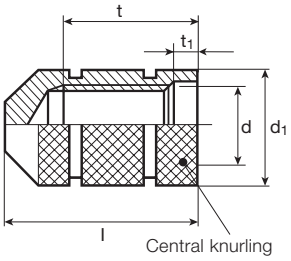
- **For moulding in** during the cycle of the moulding machine
- **For thermoplastic materials and thermoset plastics**
- Sharp increase in axial forces due to additional grooves
- Can be plugged onto smooth locating pins
- Free of swarf after molding process
- Very thin-walled, particularly suitable for applications with low wall thickness

Material

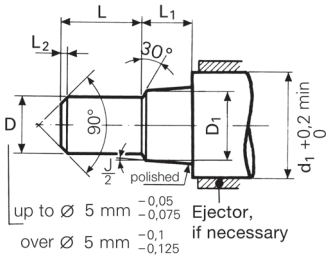
Brass

Thread insert

Grooves from thread size M3



Recommended pin design



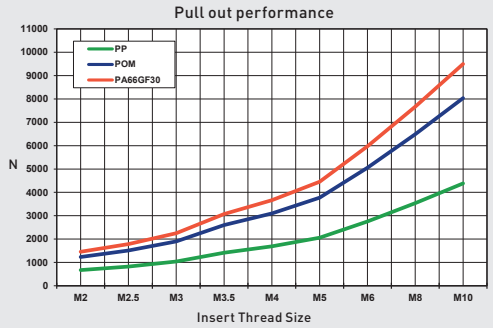
3-D Data: http://kvt.partcommunity.com

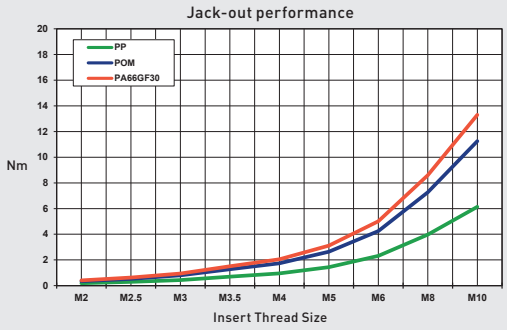
Order reference	d	l ±0.25	d_1 ±0.25	t nom.	t_1 nom.	D_1 ±0.0125	L 0 −0.25	D	L_1 −0.075 −0.125	L_2	J
018M2	M2	5.60	3.40	3.75	0.85	2.300	2.50	1.60	0.85	0.20	6.0°
018M2,5	M2.5	6.50	4.15	4.10	0.95	2.800	3.00	2.05	0.95	0.20	5.0°
118M3	M3	7.45	4.60	4.75	1.10	3.125	3.50	2.50	1.10	0.25	4.5°
118M3,5	M3.5	9.30	5.00	6.25	1.35	3.750	4.50	2.90	1.35	0.30	4.5°
118M4	M4	10.30	5.90	7.05	1.60	4.425	5.00	3.30	1.60	0.35	4.5°
118M5	M5	11.30	6.60	8.35	1.75	5.125	5.75	4.20	1.75	0.40	5.0°
118M6	M6	14.50	10.00	10.35	1.85	6.600	6.75	5.00	1.85	0.45	4.5°
118M8	M8	16.60	11.50	12.00	2.05	8.500	9.00	6.80	2.05	0.50	4.5°
118M10	M10	18.00	13.90	13.00	2.15	10.500	10.00	8.50	2.15	0.55	4.5°

Technical data

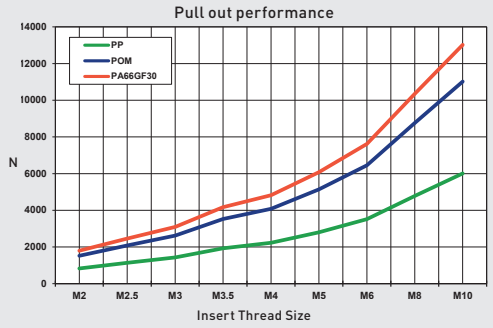
We inform you that the values presented here are **benchmark values** and can differ depending on the application. Tests are highly recommended before beginning serial production!

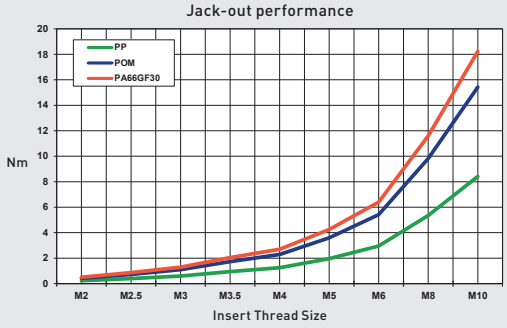
TRISERT® series 145



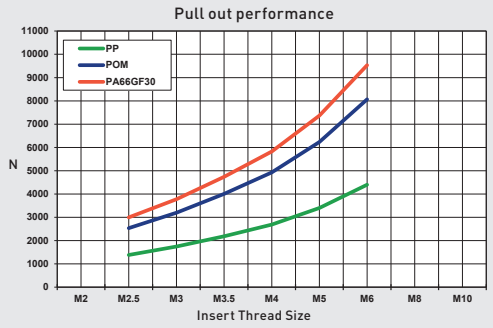


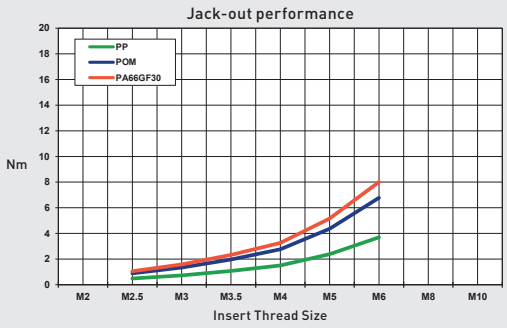
TRISERT® series 136





TRISERT® series 137

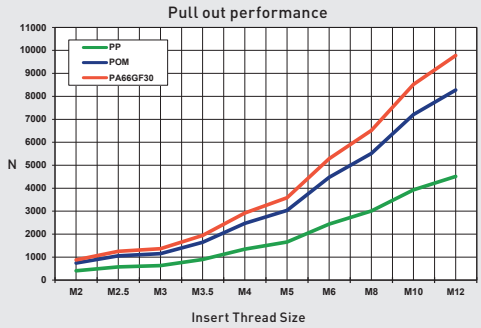


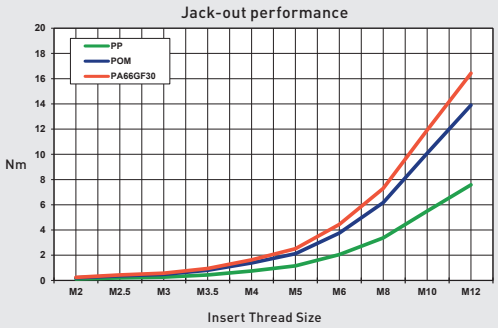


Technical data

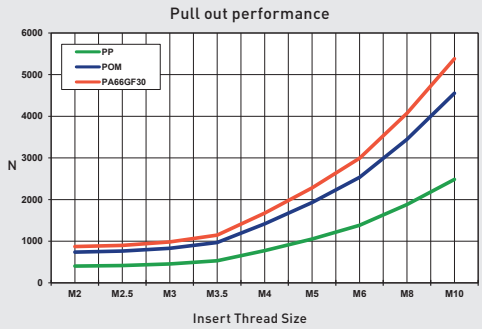
We inform you that the values presented here are **benchmark values** and can differ depending on the application. Tests are highly recommended before beginning serial production!

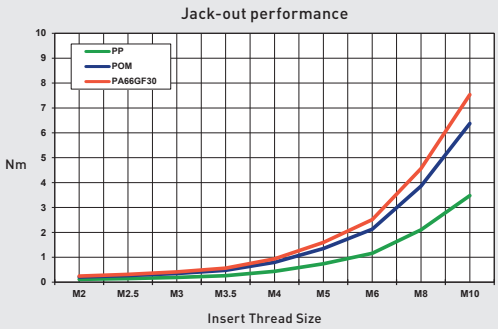
MULTISERT® series 001





MULTISERT® series 002



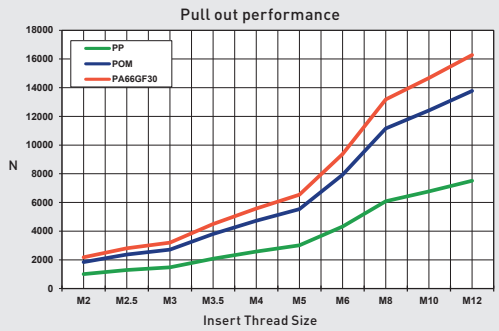


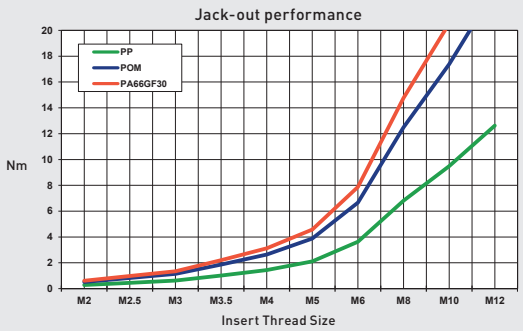
Performance data for heat installed thread inserts MULTISERT® series 001 and 002.

Technical data

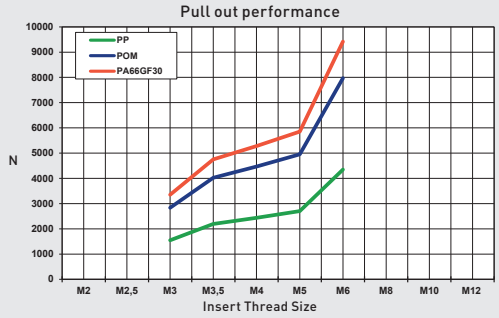
We inform you that the values presented here are **benchmark values** and can differ depending on the application. Tests are highly recommended before beginning serial production!

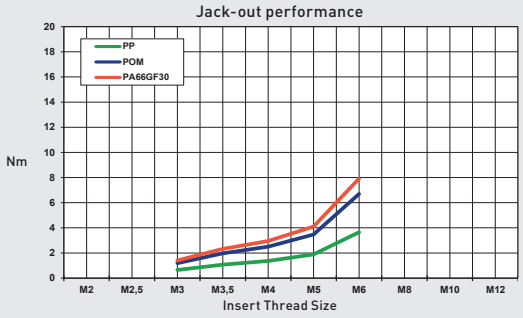
HiMOULD® series 117



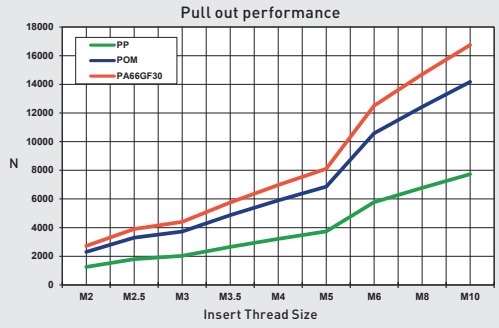


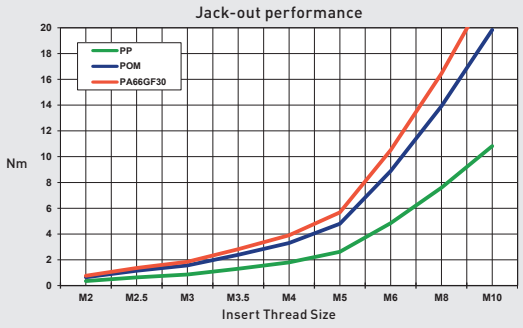
HiMOULD® series 116





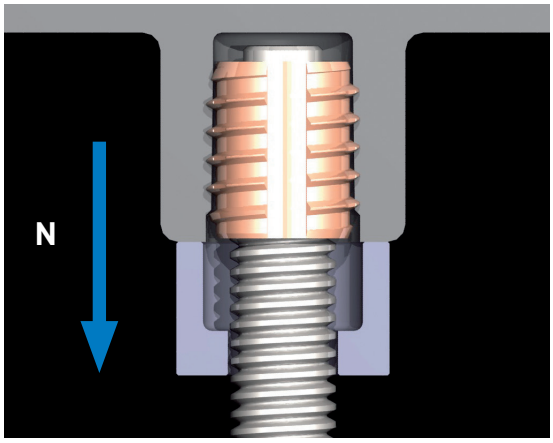
HiMOULD® series 118





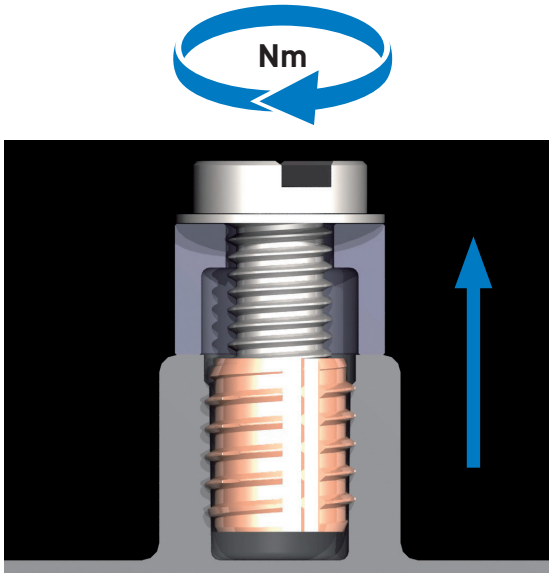
Test procedures

Based on practical tests, we offer test values to constructors to enable them to realize even special applications, normally with standard parts.



Pull-out Force

The pull-out force is defined as the maximum axial load on the insert until the insert is removed from the parent material.



Jack-out Torque

The pull-out force is defined as the maximum axial-torque on the insert by tightening the fastener until the insert is moved in an axial way.

KVT-Fastening – Fastening technology


Blind rivet nuts


Blind rivet technology


Thread inserts


Self-clinching fasteners


Stud welding systems [1]


Lock nuts


Bonding fasteners

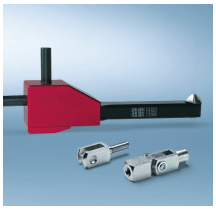

Access solutions


Quick fastening elements and clips


Quick release pins and spring plungers


Adhesives and sealants [1]


Construction fasteners [2]


Special processes [2]


Plugs


Pressure intensifiers [3]


Installation technology


Quick connectors [4]

Fastening, sealing and flow control solutions for complex applications

The extensive KVT-Fastening portfolio offers optimal solutions for your most challenging applications. The products included in this catalog represent only a selection from our entire product portfolio. Upon request, we will be pleased to provide additional information or an individual consultation to you.

Intelligent logistic systems

Bossard SmartBin and SmartLabel are intelligent logistics systems which monitor stock with total reliability and ensure stock replenishment automatically.
An online system transmits the data to our server, and this – if necessary – triggers an order. These systems ensure quick and easy availability of C-parts while production is running.


Logistic systems

Competent analysis for efficient Engineering Services

KVT-Fastening's highly qualified experts analyze the given task at hand.
Based on this sound understanding of the project, they then develop ideal solutions that are economical, efficient, and safe.


Engineering Services

For more information about our range of products and order at our E-shop, please visit www.kvt-fastening.com

[1] Not available in Germany. [2] Only available in Switzerland. [3] Not available in Switzerland. [4] Not available in Austria.

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