

# THREDGARDS

MAIN PRODUCT CATALOGUE

INJECTION MOULDINGS

KNOWLEDGE DESIGN QUALITY PERFORMANCE



**Enabling Solutions for Global Industry** 

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Thredgards was incorporated on 31st October 1962 and is proud of its heritage and reputation in the plastic injection moulding industry. For over 50 years now we have built up an expertise within the company that is respected and valued throughout the industry and with our customers, some who have been with us for over 30 years.

Exporting to customers all over the world, we pride ourselves on four main attributes:

Knowledge: The expertise within Thredgards is without question, with employees being here in some cases for over 40 years. This expertise is passed on through training and apprenticeship schemes to preserve the heritage and pool of knowledge within the company.

Design: At Thredgards we can help our customers from the design stage of a project to its completion so to produce the right end solution and total customer satisfaction with no delays.

Quality: Products are constantly checked for faults and defects so corrections and adjustments can be made with immediate effect.

Performance: 93% of orders are fulfilled early or on time due to the stock control measures in place coupled with dialogue with our customers to ascertain the stock levels needed on a monthly or annual basis.

















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Our experienced team at Thredgards work hard alongside our customers to develop partnerships that ensure the best possible outcomes for everyone involved.

We work with customers to assist with design, custom tooling, stock levels, scheduled deliveries or other specific aspects to ensure our customers can meet the demands placed on them.

In some instances, supply chains can be long and complicated for customers. We have a great deal of experience working alongside customers to ensure their stock levels are kept just right, thereby avoiding the need for them to keep excess stocks on the shelf using up valuable resources. We are happy to discuss a visit to your premises to see how we can assist with our products and stock advice.

Deliveries: Thredgards carry over 5,000,000 individual parts in stock covering over 2,500 individual products that are available for next day delivery. 93% of orders are fulfilled from this stock with even bespoke products leaving us well within target delivery dates agreed with our customers.\*

Order Quantities: We work with Standard Pack Quantities for larger orders, however smaller quantities can be ordered from our online web shop where you can buy as little as one single piece if that's all you need. Where agreed, customers can place bulk or advance orders, allowing us to plan production and deliveries to them. The customer then simply calls off the stock they need as required. This gives peace of mind that stock will always be on hand to deliver exactly when required.

Technical Assistance: Our friendly Customer Service Team will help you choose the right product. If you require a sample of a product, please feel free to request this. We can provide you with any technical information you require about the suitability of our products, as well as material and dimensional specifications.

If you require advice regarding a bespoke product you want to manufacture, we have a great pool of experience and can provide the expertise you need in getting your design into production. See page 10 of this catalogue for more information.

Payment: Approved customers are invoiced for goods on account.

New customers are issued with a pro-forma invoice.

We have the facility to accept credit or debit payment by card over the phone or online.

BACS and cheque payments are also welcome.

Terms and Conditions: See our Conditions of Sale on page 43 of this catalogue, or at www.thredgards.com

<sup>\*</sup>Figures correct as of January 2018

#### MADE IN BRITAIN

Thredgards is a company that has thrived in the UK for over 50 years since its start in 1962.

Since then we have developed our manufacturing capabilities to cope with the demands placed on us by many different sectors both in the UK and overseas. We've grown from a small family business into a company who has a strong presence with our customers and on the internet.

We've invested in keeping up to date with the latest production machinery and tooling and in retaining experienced staff. Our customers can be confident that when they choose to deal with Thredgards, they know they've made a good decision.

With ever changing and uncertain world markets,
Thredgards is well positioned to continue to develop
lasting partnerships both in the UK and the rest of the
world in response to customer needs and demands.

Thredgards' Quality Management System ISO 9001 has been certified by ISOQAR Ltd, a UKAS accredited certification body.

Our Quality Policy states that 'we will work closely with our customers and suppliers to establish service levels and the highest quality standards'. We have developed our systems to ensure that our customers always receive the best quality products at the best price and that they can feel confident that the team at Thredgards handle their enquiries promptly and efficiently. Our suppliers are chosen for their ability to comply with the standards we set out in our Quality System and we continuously monitor their performance.

All of our products are designed and manufactured to achieve delivery of the best possible service to our customers.

We are happy to work with customers to develop any new products to the customer's own specifications.

As a supplier to the automotive industry, we can supply PPAP (Production Part Approval Process) Level 3 approved documentation, which involves a rigorous documented process that measures both the quality of our products and our customer service. We are proud that our excellent reputation and working relationships have taken us forward in this direction.

A copy of our Quality Policy is available on request and on our website.



Cert 10060 ISO 9001:2008

#### FOOD PACKAGING

Thredgards operations include manufacturing food packaging products and we achieved Grade AA certification\*, meeting the BRC Global Standard for Packaging and Packaging Materials.

We produce food packaging products in our clean area, on site here in our factory. Using state of the art injection moulding machines and robotics, we ensure that safe, hygienic, high quality products are manufactured to customers specifications and requirements.

We've worked with a number of food packaging manufacturers to design and develop high quality products that specifically meet their very individual needs.

Audits and inspections are carried out annually by an external certifying body, ensuring that we continue to meet the very high standards set by BRC.

If you have a requirement for a food grade packaging product, we would be very happy to discuss this with you. We can provide you with a cost-effective solution specific to your needs working with you from the design stage and onwards to ensure that the most effective manufacturing design is achieved for your needs.





<sup>\*</sup>Information correct as of January 2018

As a UK based supplier to the automotive industry, Thredgards deal with major manufacturers and their supply chains.

We have developed excellent relationships with our clients, offering effective supply chain management, and offering just in time parts delivery in accordance with set service level agreements.

Several of our clients are delighted that we have brought manufacture of their parts to the UK reducing delivery timescales, providing cost savings and allowing them greater control over service levels.

Our capabilities include developing bespoke parts alongside protective products and parts used in general production.

We can provide PPAP and ISIR documentation for any part and provide full traceability on all parts we manufacture and supply. We rigorously test our products and provide relevant paperwork as required.

In keeping with our ISO9001 Quality Management System and ISO14001 Environmental Management System, our products and systems are audited annually by an external accredited body ensuring that we fully comply with the latest standards.

Thredgards' Environmental Management System ISO 14001 has been certified by ISOQAR Ltd, a UKAS accredited certification body.

Thredgards' commitment to maintaining a low impact on the environment is high on our list of priorities. Our business is to give our customers the products they need and we recognise that this must not come at a high cost to the world we live in. Our certification in ISO14001 shows our commitment to reducing our impact via our management and production systems.

Our Environmental Statement confirms that Thredgards has a vital interest in ensuring a clean, healthy environment. We will 'continue to improve systems, reduce waste and efficiently utilise resources to meet the environmental challenges of the years to come'.

We strive to keep our wastage of raw materials and other resources to a bare minimum, allowing us to keep costs as low as possible for our customers and at the same time minimise our impact on the environment. Every part of our business has been scrutinised to find ways to reduce our carbon footprint while providing best value for our customers and the high standard of products they expect.

A copy of our Environmental Policy and Statement is available on request and on the website.

We have invested heavily in new injection moulding machines and tooling with environmentally friendly versions requiring less energy to run them. This investment is ensuring that our operations are modern and fit for purpose for many years to come.

We recycle all of our plastic waste on site, granulating and re-using it for various products and processes.

We source our raw materials and packaging from environmentally conscious companies and in turn we continue to recycle our cardboard and paper locally limiting our waste going to landfill to an absolute minimum.

Visitors to our premises are always impressed that our heating system is run virtually from fresh air using an external heat pump with minimal electricity.

We introduced our Bio-Compostable LDPE products some time ago and continue to offer this option. When these products come into contact with soil e.g. at landfill, they degrade over a 4 to 5 year period. Please feel free to ask us about these products for more information.

With the combination of all of the above environmental measures along with our UK based manufacturing, you can be assured that the products you receive have a minimal carbon footprint. We take great care not to pollute the environment with plastics, a hot topic in the media and with those working hard to ensure our beautiful planet stays safe for future generations. New raw material arrives with us in pellet form known as nurdles and we go to great lengths to ensure that none of these nurdles leave our premises in their raw state.

See our case study at www.nurdlehunt.org.uk/ whats-the-solution/nurdle-case-studies.html



Cert 10060 ISO 14001:2004

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### CUSTOM TRADE MOULDINGS



'Time and tide wait for no-one' and the Thredgards team are no exception.

When customers come to us with new projects we excel in collaborating with them in the process of product and tooling design. We've helped to develop and bring some exciting and innovative products to market including:

- Golfing accessories
- Mini skis for children
- Accessories for high power electric fencing
- Bespoke products for prestige automotive manufacturers
- Food grade jars, containers and lids
- Piping Nozzles
- Food utensils



- Highly specialised parts used in construction such as the Upper Forth Crossing—pictured above
- Water drainage products

We've provided 3D Modelling prototypes for customers to allow them to visualise a 'hard copy prototype' of their product at design stage.

We've also been busy expanding our own standard range of products of plugs, caps, flange protectors and ribbed inserts.

Most types of plastics can be moulded in our state of the art machines including LDPE, HDPE, Polypropylene, Polystyrene, ABS, Nylons and rubberised materials.

Getting products to market within budget and on time can be a stressful business and we aim to provide a service that puts the customer's needs at the heart of the process at every stage from design to delivery.



**P7** 

**P8** 

P9

P10

P10E

P11LF

P11

P12

P13

P13LF

### LDPE TAPERED PLUGS

10.0

11.0

11.5

12.4

12.5

13.6

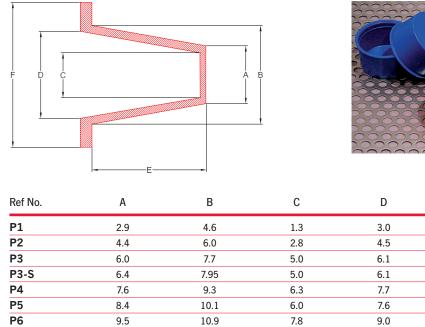
13.6

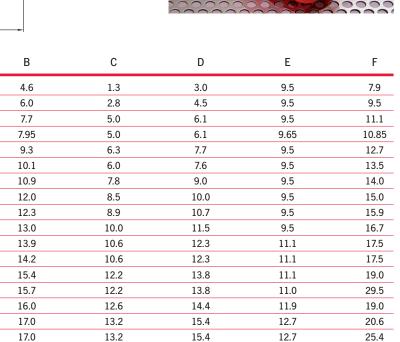
14.1

14.7

14.7

Universally designed plug which can also be used as a cap and is used in engineering sectors such as automotive, pipe fabrication and valve manufacturing. Plugs normally are manufactured in Red LDPE, however other colours can be manufactured on request. Other sizes may also be available.



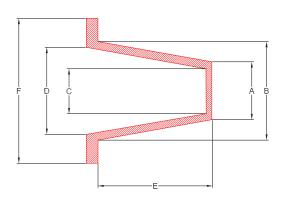


Ref No.	А	В	С	D	E	F
P14	16.4	18.5	14.4	16.9	12.7	22.2
P15	17.0	20.0	15.7	17.5	12.7	22.2
P15-S	17.8	19.9	15.7	17.45	14.1	23.0
P16	17.1	20.1	16.1	18.5	14.3	23.8
P17	18.5	21.2	17.1	19.3	14.3	24.6
P18	19.0	21.5	17.6	19.8	14.3	25.4
P19	20.3	23.4	19.2	21.5	15.9	27.0
P192	20.3	23.2	17.8	20.3	8.9	25.4
P20	22.1	25.0	20.0	22.6	15.9	28.6
P202	22.1	25.1	20.5	20.7	11.0	29.3
P21	23.1	26.3	21.4	24.4	16.0	29.0
P211	24.3	26.9	21.4	24.4	16.0	30.0
P22	25.0	27.8	23.1	26.1	16.4	32.0
P61	26.0	28.0	22.4	25.5	16.6	36.5
P23	28.1	31.0	26.5	29.3	19.0	34.9
P233	28.5	31.8	26.5	29.3	19.0	33.6
P24	30.2	32.6	28.6	31.0	15.9	36.5
P25	31.4	34.0	30.0	32.8	13.0	36.1
P252	29.3	33.9	27.9	31.7	9.5	36.8
P254	32.0	36.3	30.5	34.0	22.0	40.0
P26	32.9	37.0	31.4	34.8	22.0	41.0
P265	33.5	37.7	31.7	35.6	24.0	41.3
P27	37.0	40.5	35.4	39.0	21.5	44.5
P28	39.6	42.7	38.1	41.1	18.0	47.6
P29	41.4	44.6	39.7	43.0	17.4	49.2
P30	43.9	47.2	41.4	46.1	18.0	50.8
P301	44.9	47.0	43.1	46.1	20.4	50.5
P31	45.6	50.0	43.6	47.9	25.4	54.0
P32	48.7	52.5	46.6	50.9	25.4	57.1
P33	32.0	34.0	31.4	32.8	9.5	38.1
P34	38.0	40.6	37.1	39.0	12.7	44.5
P36	47.4	50.7	45.2	49.0	25.4	54.0
P37	49.3	53.8	48.8	52.5	25.4	57.1
P38	51.2	54.0	50.2	52.9	17.0	58.7
P39	53.1	56.6	51.2	55.1	25.4	61.9

measurements in millimetres unless otherwise indicated • other sizes may be available on request

continued over

# LDPE TAPERED PLUGS continued



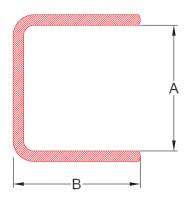


Ref No.	Α	В	С	D	E	F
P40	52.6	58.1	52.7	55.8	25.4	64.0
P40LF	53.6	58.2	52.7	55.8	25.4	77.0
P42	53.7	61.0	53.1	59.6	25.4	64.3
P43	59.3	62.5	57.2	61.0	25.4	66.6
P44	61.3	65.0	57.7	63.3	25.0	69.8
P45	64.0	67.3	62.1	65.3	15.9	70.6
P46	59.7	67.3	57.7	65.4	31.8	70.6
P47	64.8	69.7	61.5	67.8	25.4	73.0
P48	67.8	70.8	66.3	69.3	19.0	74.6
P49	70.1	75.1	68.6	73.9	24.0	80.0
P49-S	73.9	74.9	71.4	76.4	23.8	80.2
P50	73.3	74.4	71.5	73.9	19.0	82.5
P505	73.6	76.8	72.2	73.5	24.0	80.0
P51	77.5	80.2	74.8	78.2	18.0	86.0
P52	76.8	82.4	74.8	80.8	25.4	85.7
P53	79.4	85.6	77.7	83.2	25.4	88.9
P54	85.7	88.0	82.9	85.5	19.0	92.0
P55	84.0	90.0	80.3	88.3	28.0	95.0
P551	83.1	87.5	80.0	87.0	24.5	92.5

Ref No.	Α	В	С	D	E	F
P56	93.5	100.3	89.9	97.8	26.5	107.5
P58	89.1	93.3	85.1	89.9	27.6	97.5
P59	98.4	103.4	94.2	98.2	28.6	106.0
P595	98.0	101.4	94.8	98.5	24.7	107.2
P599	98.5	102.5		110.0	30.0	
P60	108.0	116.0	104.5	112.0	33.0	124.0
P61	26.0	28.3	22.4	25.5	16.6	36.5
P63	92.4	97.0	89.0	94.0	28.0	102.0
P64	102.4	105.4	100.0	103.4	19.0	111.0
P65	106.7	111.7	102.4	107.6	28.4	113.3
P651	106.0	120.0	103.5	116.0	35.0	135.0
P655	106.1	111.2	102.4	107.6	28.0	113.4
P66	112.1	114.3	107.5	109.8	28.0	117.0
P660	113.8	118.2	110.3	114.7	28.7	122.4
P661	116.7	119.6	114.8	117.5	24.2	123.0
P662	117.8	123.2	116.1	121.4	22.4	133.3
P665	124.0	128.0	125.0	121.0	23.0	134.0
P70	126.6	131.8	124.7	129.3	25.0	137.0
P71	129.0	134.5	126.0	131.5	37.7	140.2
P72	133.0	137.0	130.2	134.2	22.0	143.0
P668	136.5	144.0	132.3	140.8	35.0	155.3
P67	145.0	147.0	142.0	144.0	25.0	151.0
P675	142.0	148.0	139.0	145.5	28.75	151.8
P677	146.8	151.0	142.8	148.6	33.0	159.5
P68	153.0	159.0	148.0	156.0	36.0	162.0
P69	157.0	163.0	152.0	160.0	36.5	167.5
P75	179.5	185.7	174.2	183.7	35.1	193.8
P80	192.0	200.0			38.0	215.0
P81	223.0	230.0		239.0	38.0	
P82	218.0	227.0	214.8	224.5	45.4	236.9
P86	249.0	254.0			46.0	254.0
P87	250.7	254.1	247.1	250.5	30.0	259.5
P96	284.0	293.0			46.0	315.0
P98	298.0	301.0		314.0	23.0	

### LDPE PIPE END CAPS

High quality pipe protection caps which can also be used as end caps for the packaging industry in a variety of sizes and depths. Other sizes may also be available.



Ref No.	DN	Α	В
C12/28		12.0	28.0
C13		12.7	10.0
C20/40		19.8	40.0
C20/76		20.0	76.0
C21	1/2"	21.3	20.0
C22		22.0	25.0
C24		23.9	16.0
C24F		23.9	16.0
C25		25.4	23.0
C26		26.0	26.0
C27	3/4"	26.9	25.0
C28		28.0	24.0
C28/1		28.0	28.0
C30		30.0	26.5
C31	·	31.7	13.0



Ref No.	DN	Α	В
C34	1"	33.7	28.0
C35/22		34.7	22.0
C35		34.8	13.0
C36		35.8	22.0
C38		38.0	12.0
C42		42.4	32.0
C44		44.4	12.0
C44/1		44.4	34.0
C45F		45.0	36.0
C48	11/2"	48.0	26.0
C48F		48.0	36.0
C51		50.8	27.0
C54		54.0	34.0
C57		57.0	35.0
C57/40		56.5	40.0

Ref No.	DN	Α	В
C59		59.0	10.0
C59/1		59.0	25.2
C60	2"	60.0	28.0
C61F		61.0	26.0
C63		63.0	24.0
C64		63.5	33.0
C69		69.8	15.0
C70		70.0	30.0
C72		72.0	15.0
C75		75.0	31.0
C76	21/2"	76.0	28.0
C78		78.0	12.0
C81		80.6	12.0
C85		85.0	25.0
C85/82		85.0	82.0
C89	3"	88.9	32.0
C96		96.0	10.0
C100	31/2"	100.0	12.0
C101		101.0	30.0
C110		110.0	39.0
C114	4''	114.3	40.0
C117		117.0	30.0
C120		120.0	16.0
C121		121.0	19.0
C125		125.0	41.0
C127	41/2"	127.0	40.5
C134		134.0	19.0
C134/35		134.0	35.0
C139	5"	139.0	19.0
C141		141.3	40.0
C160		160.0	19.0

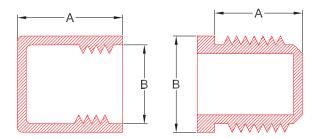
Ref No.	DN	Α	В
C168	6"	168.3	40.0
C180		180.0	40.0
C182		182.0	24.0
C190		190.0	24.0
C219	8"	219.1	40.0
C273	10"	273.0	45.0
C323	12"	323.9	50.0
C355	14"	355.6	57.0
C406	16"	406.4	62.0
C457	18"	457.2	62.0
C508	20"	508.0	67.0
C559	22"	558.8	60.0
C609	24"	609.6	67.0
C762	30"	762.0	120.0

32" and above available on request.



### THREADED CAPS & PLUGS

Threaded caps and plugs used mainly in the automotive, radiator and valve manufacturing industries. A selection of BSP, metric and UNF sizes. BSP caps are usually manufactured in red or yellow LDPE, however they can be made in any colour LDPE to suit the application.





#### **BSP CAPS**

Ref No.	BSP	Α	В
THC1	1/8"	9.50	12.90
THC2	1/4"	11.10	14.20
THC3	3/8"	11.10	19.00
THC4	1/2"	12.70	24.60
THC5/8	5/8"	15.70	25.00
THC5	3/4"	18.20	28.50
THC7/8	7/8"	19.50	30.40
THC6	1"	19.80	38.10
THC7	11/4"	20.00	44.60
THC8	1½"	28.00	50.00
THC9	2"	21.10	62.20
THC10	21/2"	27.40	78.00

### **BSP PLUGS**

Ref No.	BSP	Α	В
THP1	1/8"	5.50	15.80
THP2	1/4"	6.00	20.60
THP3	3/8"	8.00	24.60
THP4	1/2"	9.00	27.90
THP5	3/4"	11.00	34.70
THP5/8	5/8"	18.67	29.90
THP6	1"	12.00	38.80
THP7	11/4"	11.00	49.70
THP8	1½"	11.00	54.50
THP9	2"	10.80	68.50
THP10	21/2"	23.32	93.65
THP11	3"	10.80	100.00

# METRIC CAPS

Ref No.	BSP	Α	В
THC20	M8 x 1	10.0	9.9
THC21	M10 x 1	10.0	11.9
THC22	M12 x 1	12.0	13.8
THC23	M12 x 1.5	12.0	14.0
THC24	M14 x 1.5	12.0	15.9
THC25	M16 x 1.5	12.0	17.9
THC26	M18 x 1.5	14.0	19.7
THC27	M20 x 1.5	14.0	21.9
THC28	M22 x 1.5	13.8	24.3
THC29	M24 x 1.5	14.0	26.2
THC295	M30 x 2	9.8	14.6
THC30	M25 x 1.5	14.0	27.2
THC31	M26 x 1.5	14.0	28.3
THC32	M28 x 1.5	14.0	32.0
THC33	M30 x 2	14.0	34.0
THC34	M36 x 2	16.0	38.8
THC35	M42 x 2	16.0	44.5
THC36	M52 x 2	16.0	54.7

# METRIC PLUGS

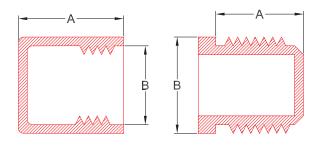
Ref No.	BSP	Α	В
THP201	M8 x 1	9.5	12.3
THP20	M10 x 1	7.0	10.0
THP205	M12 x 1	10.7	18.5
THP21	M12 x 1.5	10.0	17.2
THP22	M14 x 1.5	10.0	19.2
THP23	M16 x 1.5	10.0	22.0
THP24	M18 x 1.5	10.0	24.0
THP25	M20 x 1.5	10.0	26.0
THP26	M22 x 1.5	10.0	27.2
THP27	M24 x 1.5	12.0	31.5
THP275	M25 x 1.5	14.0	31.3
THP28	M26 x 1.5	10.0	32.0
THP29	M27 x 2	13.0	32.3
THP30	M33 x 2	13.0	40.4
THP31	M42 x 2	13.0	50.0
THP32	M45 x 2	12.7	57.8
THP34	M52 x 1.5	15.5	63.7





# UNF THREADED CAPS

UNF caps and plugs are manufactured in red LDPE





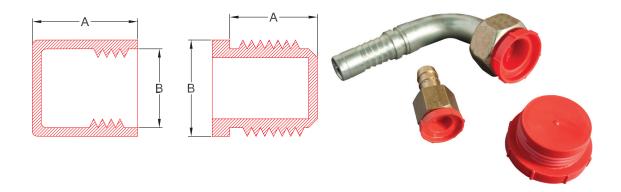
# UNF CAPS

Ref No.	UNF	Α	В
THC50	3/8-24	11.3	13.6
THC505	7/16-24	12.9	13.3
THC51	7/16-20	11.9	15.6
THC52	1/2-20	14.1	17.0
THC53	9/16-18	12.5	18.7
THC54	5/8-18	18.0	20.3
THC55	3/4-16	17.6	23.6
THC56	11/16-16	14.2	21.2
THC565	13/16-16	15.3	23.3
THC57	7/8-14	19.5	27.0
THC575	7/8-18	20.0	25.3
THC577	1-14	17.2	27.6
THC58	1.1/16-12	20.1	31.7

Ref No.	UNF	Α	В
THC585	1.3/16-12	19.1	32.7
THC59	1.5/16-12	21.1	39.3
THC60	1.3/8-12	24.5	37.4
THC61	1.7/16-12	21.7	38.9
THC62	1.5/8-12	22.0	44.8
THC63	1.7/8-12	25.0	50.3

# UNF THREADED PLUGS

UNF caps and plugs are manufactured in red LDPE



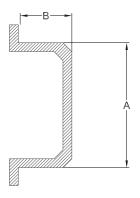
# **UNF PLUGS**

Ref No.	UNF	Α	В
THP505	5/16-18	7.4	14.5
THP50	5/16-24	11.18	11.18
THP51	3/8-24	11.68	12.70
THP52	7/16-20	13.46	15.75
THP525	7/16-24	7.1	17.8
THP53	1/2-20	13.46	17.27
THP54	9/16-18	12.70	20.57
THP545	9/16-24	9.0	18.9
THP55	5/8-18	14.99	20.57
THP555	5/8-24	10.0	20.7
THP56	11/16-16	11.18	22.10
THP57	3/4-16	19.05	23.88
THP58	13/16-16	12.70	23.88

Ref No.	UNF	Α	В
THP59	7/8-14	22.10	26.93
THP60	1-14	14.99	29.47
THP61	1.1/16-12	22.61	31.75
THP62	1.1/16-14	28.45	33.28
THP63	1.3/16-12	23.62	35.56
THP64	1.5/16-12	23.62	38.10
THP65	1.7/16-12	19.05	41.40
THP66	1.1/2-12	23.62	44.45
THP67	1.5/8-12	23.62	50.80
THP68	1.3/4-12	24.13	55.63
THP69	1.7/8-12	29.21	58.68
THP70	2.1/4-12	33.28	66.80
THP71	2.1/2-12	33.28	74.68

### **ROUND TUBE END PLUGS**

Round Tube End Plugs for cores and cardboard tubes mainly for the packaging industry. Manufactured in LDPE and can be produced in any colour. "TPE" part numbers indicate the plug has "ear" pull tabs.





# **UNF CAPS**

Ref No.	Α	В
TP075	19.0	8.5
TP087	23.0	9.0
TP098	25.4	8.0
TP100	25.4	9.5
TP102	26.0	9.5
TP102LF	26.0	9.5
TP116	29.5	6.3
TP118	30.0	8.0
TP125	31.7	9.5
TP126	31.7	6.3
TP127	33.0	10.0
TP150	38.4	9.5
TP151	38.4	6.3
TP157	39.0	7.0

Ref No.	Α	В
TPE160	40.8	9.5
TP174	44.3	11.0
TPE175	44.5	9.5
TP175	44.5	9.5
TP176	44.4	6.3
TP184	46.0	6.4
TP200	50.8	9.5
TP201	50.8	6.3
TP203	51.8	11.2
TP219	55.2	9.0
TP224	57.1	6.0
TP225	57.1	9.5
TP236	60.0	7.0
TPE240	61.8	11.0

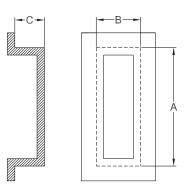
Ref No.	А	В
TP250	63.5	9.0
TPE250	63.5	11.0
TP251	63.5	6.3
TP252	63.5	12.5
TP256	65.0	11.0
TP257	65.6	11.0
TP271	68.9	11.0
TP275	69.8	11.0
TP276	69.8	6.3
TP280	71.0	11.0
TP300	76.2	11.0
TPE300	76.2	12.0
TP302	77.0	12.0
TP315W	80.0	10.0
TPE325	82.0	9.5
TP350	88.9	12.7
TPE350	88.9	13.8
TP375	95.3	12.7
TP376	96.0	10.0

Ref No.	Α	В
TPE376	96.0	12.7
TP390W	99.0	10.0
TPE393	100.0	12.7
TPE400	101.6	9.0
TP400	101.6	9.0
TP412	104.7	12.7
TP450	114.3	12.7
TP475	120.0	12.7
TPE481	122.0	12.7
TP500	127.0	12.7
TPE600	152.4	15.0
TPE610	155.0	15.0
TPE710	180.0	15.0
TPE787	200.0	15.0
TPE800	203.0	17.5
TP1000	254.0	19.0



### SQUARE END PLUGS

Square and rectangle end plugs manufactured mainly for the packaging industry. Manufactured in LDPE or Polypropylene and can be produced in any colour. A selection of sizes can be manufactured with holes to enable insertion of loops for hanging purposes. Integral hook and cap also available in SQ48 size.





48.0

48.0

48.0

57.0

SO48/2

SQ48/57



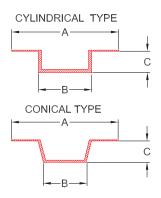
Ref No.	Α	В	С
SQ48/80	48.0	80.0	13.0
SQ49/99	49.0	99.0	20.0
SQ50	50.0	50.0	13.0
SQ60/1	60.0	60.0	23.0
SQ60/2	60.0	60.0	13.0
SQ61	61.0	61.0	13.0
SQ60/100	60.0	100.0	23.0
SQ60/110	60.0	110.0	13.0
SQ64	64.0	64.0	13.0
SQ70	70.0	70.0	23.0
SQ70/110	70.0	110.0	23.0
SQ75/85	75.0	85.0	14.0
SQ76	76.0	76.0	13.0
SQ76/116	76.0	116	16.0
SQ76/135	76.0	135.0	23.0
SQ80/120	80.0	120.0	23.0
SQ85	85.0	85.0	23.0
SQ100	100.0	100.0	23.0
Loops			
Hook & Cap	48.0	48.0	13.0

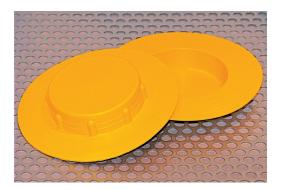
19.0 measurements in millimetres unless otherwise indicated • other sizes may be available on request

13.0

# FLANGE FACE PROTECTION PLUGS

Protection plugs for valves and other machined parts to protect the flange face only. Manufactured in yellow LDPE.





Ref No.	DN	Nominal	Туре	Α	В	С
FFP1	10		Conical	40.0	9.0	10.0
FFP2	15	1/2"	Conical	45.0	14.0	10.0
FFP3	20	3/4"	Conical	58.0	19.0	15.0
FFP4	25	1"	Conical	68.0	23.0	15.0
FFP5	32	11/4"	Conical	78.0	30.0	15.0
FFP6	40	1½"	Conical	88.0	38.0	15.0
FFP7	50	2"	Conical	102.0	48.0	15.0
FFP8	65	21/2"	Conical	122.0	62.0	20.0
FFP9	80	3"	Conical	138.0	77.0	20.0
FFP10	100	4"	Conical	162.0	96.0	20.0
FFP11	125	5"	Conical	188.0	122.0	20.0
FFP12	150	6"	Conical	213.0	147.0	20.0
FFP13	200	8"	Conical	268.0	193.0	25.0
FFP14	250	10"	Conical	340.0	247.0	25.0
FFP15	300	12"	Cylindrical	408.0	303.0	22.0
FFP16	350	14"	Cylindrical	455.0	355.0	21.0
FFP17	400	16"	Cylindrical	510.0	406.0	32.0

### STUD HOLE FITTING FLANGE PROTECTORS

Stud-hole protection plugs for valves and other machined parts. Manufactured in LDPE.



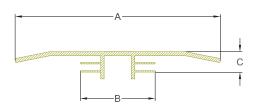




Ref No.	lbs	Nominal Dimensions
SFP22	300/600	1"
SFP225	300/600	11/4"
SFP23	300/600	1½"
SFP24	300/600	2"
SFP245	300/600	2½"
SFP25	300/600	3"
SFP26	300	4"
SFP27	300	6"
SFP28	300	8"
SFP29	300	10"
SFP30	300	12"

# PUSH IN FLANGE PROTECTORS

Protection plugs for valves and other machined parts to protect the entire flange area including bolt holes. Manufactured in yellow LDPE.





Ref No.	DN	Nominal	Α	В	С
PFP1	10	3/8"	86	14	15.0
PFP2	15	1/2"	90	19	15.0
PFP3	20	3/4"	100	24	15.0
PFP4	25	1"	110	30	20.0
PFP5	32	11/4"	136	39	20.0
PFP6	40	1½"	146	45	20.0
PFP7	50	2"	160	56	20.0
PFP8	65	21/2"	180	72	20.0
PFP9	80	3"	196	85	25.0
PFP10	100	4"	216	109	25.0
PFP11	125	5"	246	134	25.0
PFP12	150	6"	280.0	161.0	35.0
PFP13	200	8"	336.0	210.0	35.0
PFP14	250	10"	390.0	262.0	40.0
PFP15	300	12"	450.0	318.0	48.0
PFP16	400	16"	580.0	410.0	62.0

# FLANGE PROTECTION DISCS

Simple, cost effective flange protection discs made from corrugated Polypropylene for full flange face protection. Attached to flange using cable ties through bolt holes.



# 150lbs range

Ref No.	DN	OD
FD1/2-150	1/2"	88.9
FD3/4-150	3/4"	98.4
FD1-150	1"	108.0
FD1.1/4-150	11/4"	117.5
FD1.1/2-150	1½"	127.0
FD2-150	2"	152.4
FD2.1/2-150	21/2"	177.8
FD3-150	3"	190.5
FD3.1/2-150	3½"	215.9
FD4-150	4"	228.6
FD5-150	5"	254.0
FD6-150	6"	279.4
FD8-150	8"	342.9
FD10-150	10"	406.4

Ref No.	DN	OD
FD12-150	12"	482.6
FD14-150	14"	533.5
FD16-150	16"	596.9
FD18-150	18"	635.0
FD20-150	20"	698.5
FD22-150	22"	749.3
FD24-150	24"	812.8
FD26-150	26"	870.0
FD28-150	28"	927.1
FD30-150	30"	984.3
FD32-150	32"	1060.5
FD34-150	34"	1111.3
FD36-150	36"	1168.4

# 300lbs range

Ref No.	DN	OD
FD1/2-300	1/2"	95.3
FD3/4-300	3/4"	117.5
FD1-300	1"	123.8
FD1.1/4-300	11/4"	133.4
FD1.1/2-300	1½"	155.6
FD2-300	2"	165.1
FD2.1/2-300	2½"	190.5
FD3-300	3"	209.6
FD3.1/2-300	3½"	228.6
FD4-300	4"	254.0
FD5-300	5"	279.4
FD6-300	6"	317.5
FD8-300	8"	318.0

Ref No.	DN	OD
FD10-300	10"	444.5
FD12-300	12"	520.7
FD14-300	14"	584.2
FD16-300	16"	647.7
FD18-300	18"	711.2
FD20-300	20"	774.7
FD22-300	22"	838.2
FD24-300	24"	914.4
FD26-300	26"	971.6
FD28-300	28"	1035.1
FD30-300	30"	1092.2
FD32-300	32"	1149.4
FD34-300	34"	1206.5

# 600lbs range

Ref No.	DN	OD
FD1/2-600	1/2"	95.3
FD3/4-600	3/4"	117.5
FD1-600	1"	123.8
FD1.1/4-600	11/4"	133.4
FD1.1/2-600	1½"	155.6
FD2-600	2"	165.1
FD2.1/2-600	2½"	190.5
FD3-600	3"	209.6
FD3.1/2-600	3½"	228.6
FD4-600	4"	273.1
FD5-600	5"	330.2
FD6-600	6"	355.6
FD8-600	8"	419.1

Ref No.	DN	OD
FD10-600	10"	508.0
FD12-600	12"	558.8
FD14-600	14"	590.6
FD16-600	16"	685.8
FD18-600	18"	743.0
FD20-600	20"	812.8
FD22-600	22"	870.0
FD24-600	24"	939.8
FD26-600	26"	1016.0
FD28-600	28"	1073.2
FD30-600	30"	1130.3
FD32-600	32"	1193.8

30

# FLANGE PROTECTION DISCS continued



# 900lbs range

Ref No.	DN	OD
FD1/2-900	1/2"	120.7
FD3/4-900	3/4"	130.2
FD1-900	1"	149.2
FD1.1/4-900	11/4"	158.8
FD1.1/2-900	1½"	177.8
FD2-900	2"	215.9
FD2.1/2-900	2½"	244.5
FD3-900	3"	241.3
FD4-900	4"	292.1
FD5-900	5"	349.3
FD6-900	6"	381.0
FD8-900	8"	469.9
FD10-900	10"	546.1
FD12-900	12"	609.6
FD14-900	14"	641.4

Ref No.	DN	OD
FD16-900	16"	704.9
FD18-900	18"	787.4
FD20-900	20"	857.3
FD24-900	24"	1041.4
FD26-900	26"	1085.9
FD28-900	28"	1168.4

### VINYL END CAPS

Vinyl end caps for a variety of uses in engineering and packaging. Manufactured in black, however other colours may be available.



Ref	Inside	Inside	Inside	Inside			
No.	Diameter	Length 1	Length 2	Length 3	Metric	BSP	UNF
VC1	2.0	13.0					
VC2	2.8	13.0			M3		
VC3	3.2	13.0					
VC4	3.6	13.0	19.0	25.0	M4		
VC5	3.9	13.0	19.0	25.0			
VC6	4.4	13.0	19.0	25.0	M5		3/16"
VC7	4.8	13.0	19.0	25.0	M5		3/16"
VC8	5.2	13.0	19.0	25.0			
VC9	5.5	13.0	19.0	25.0			
VC10	5.9	13.0	19.0	25.0	M6		1/4"
VC11	6.4	13.0	19.0	25.0			
VC12	7.0	13.0	19.0	25.0			
VC13	7.7	13.0	19.0	25.0	M8		5/16"
VC14	7.9	13.0	19.0	25.0			5/16"
VC15	8.3	13.0	19.0	25.0			
VC16	8.7	13.0	19.0	25.0			
VC17	9.5	13.0	19.0	25.0	M10	1/8"	3/8"
VC18	10.3	13.0	19.0	25.0			
VC19	11.1	13.0	19.0	25.0	M12		7/16"

# VINYL END CAPS continued

Ref	Inside	Inside	Inside	Inside			
No.	Diameter	Length 1	Length 2	Length 3	Metric	BSP	UNF
VC20	11.9	13.0	19.0	25.0	M12	1/2"	
VC22	12.7	13.0	19.0	25.0		1/4"	1/2"
VC23	13.5	13.0	19.0	25.0	M14		
VC24	13.8	13.0	19.0	25.0	M14		
VC25	14.3	13.0	19.0	25.0	M15		
VC26	15.2	13.0	19.0	25.0			
VC27	15.9	13.0	19.0	25.0	M16	3/8"	
VC29	17.4	13.0	19.0	25.0	M18		
VC31	19.1	13.0	19.0	25.0	M20	3/4"	
VC32	19.9	13.0	19.0	25.0			
VC33	20.6	13.0	25.0	38.0		1/2"	
VC34	21.4	13.0	25.0	38.0	M22		
VC35	22.2	13.0	25.0	38.0		5/8"	7/8"
VC36	23.8	13.0	25.0	38.0	M24		
VC365	24.6	13.0	25.0	38.0	M25		
VC37	25.4	13.0	25.0	38.0		1"	
VC375	26.3	13.0	25.0	38.0			
VC377	26.9	13.0	25.0	38.0	M27	3/4"	
VC378	28.6	25.0	38.0	50.0	M30	7/8"	11/8"
VC38	30.2	25.0	38.0	50.0		7/8"	
VC39	31.8	25.0	38.0	50.0		1"	11/4"
VC40	33.0		38.0				
VC41	34.9	25.0	38.0	50.0	M35		13/8"
VC42	38.1	25.0	38.0	50.0	M39		11/2"
VC43	41.3	25.0	38.0	50.0	M42	11/4"	
VC44	44.5	25.0	38.0	50.0	M45	13/8"	
VC45	47.6	25.0	38.0	50.0	M48	1½"	
VC46	50.8	25.0	38.0	50.0			2"
VC47	53.9		38.0	50.0		13/4"	
VC48	57.2		38.0	50.0	M58	21/4"	
VC49	60.3		38.0	50.0		23/8"	
VC50	63.5		38.0	50.0		21/2"	
VC51	66.7		38.0	50.0			
VC52	69.8		38.0	50.0			
VC53	76.2		38.0	50.0		3"	

### ROUND RIBBED INSERTS

Mainly for use in the furniture, scaffolding and tubing industries to provide protection from sharp tube edges, but can be used in various applications. Used to protect floor surfaces when used as feet. Ribbed for easy assembly and secure fitting. Manufactured from black or white LDPE, with polished or eroded (textured) finish.



Ref No	D (mm)	D (ins)	h (mm)	h1 (mm)	L (mm)	L (gauge)	Colour
RRI-10	10.0		3.5	11.5	0.8-2.0		Black or White
RRI-12	12.0		3.5	11.5	0.8-2.0		Black or White
RRI-12.7	12.7	1/2	4.0	11.5	0.8-2.0	12-20	Black or White
RRI-13	13.0		4.0	11.5	0.8-2.0		Black
RRI-14	14.0		5.0	11.5	1.5-2.0		Black
RRI-15	15.0		5.0	11.5	0.8-2.0		Black
RRI-16	16.0		5.0	11.5	0.8-2.0	12-20	Black or White
RRI-18	18.0		5.0	11.5	0.8-2.0		Black or White
RRI-19	19.0	3/4	5.0	11.5	0.8-2.0	12-20	Black or White
RRI-20	20.0		5.0	11.5	0.8-2.0		Black or White
RRI-21	21.0		5.0	11.5	0.8-2.0		Black
RRI-22	22.0		5.0	11.5	0.8-2.0	12-20	Black or White
RRI-23	23.0		5.0	11.5	0.8-2.0		Black
RRI-24	24.0		5.0	11.5	1.0-2.5		Black
RRI-25	25.0		5.0	11.5	1.0-3.0		Black or White
RRI-25.4	25.4		5.0	11.5	1.0-3.0	10-18	Black or White
RRI-26	26.0		5.0	11.5	1.0-3.0		Black
RRI-28	28.0	11/8	5.0	12.4	1.0-3.0		Black

measurements in millimetres unless otherwise indicated • other sizes may be available on request

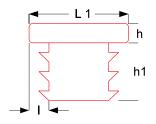
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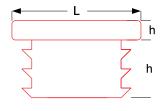
# ROUND RIBBED INSERTS continued

Ref No	D (mm)	D (ins)	h (mm)	h1 (mm)	L (mm)	L (gauge)	Colour
RRI-28.6	28.6		5.0	11.5	1.0-3.0	10-18	Black or White
RRI-30	30.0		5.0	12.4	1.0-3.0		Black or White
RRI-32	32.0	11/4	5.0	11.5	1.0-3.0	10-18	Black or White
RRI-34	34.0		5.0	11.5	1.0-3.0		Black
RRI-35	35.0		5.0	11.5	1.0-3.0		Black or White
RRI-37	37.0		5.0	11.5	1.0-3.0		Black or White
RRI-38	38.0	1½	5.0	11.5	1.0-3.0	10-18	Black or White
RRI-38.1	38.1	1½	5.0	14.5	2.0-4.0	8-12	Black
RRI-40	40.0		5.0	11.5	1.0-3.0		Black or White
RRI-41.3	41.3	15/8	5.0	11.5	1.0-3.0	11–20	Black or White
RRI-42	42.0		5.0	11.5	1.0-3.0		Black or White
RRI-44.4	44.4	13/4	5.0	11.5	1.0-3.0	11-20	Black or White
RRI-45	45.0		5.0	11.5	1.0-3.0		Black or White
RRI-47.6	47.6	17/8	5.0	11.5	1.0-3.0	11–20	Black or White
RRI-50	50.0		5.0	14.5	1.0-3.0		Black or White
RRI-50.8	50.8	2	5.0	14.5	1.0-3.0	10-18	Black or White
RRI-55	55.0		5.0	11.5	1.0-3.0		Black
RRI-60	60.0		5.0	14.5	1.0-3.0		Black
RRI-60/1	60.0		6.0	20.1	3.5-5.0		Black or White
RRI-63.5	63.5	21/2	6.0	20.0	2.0-4.0	8-12	Black
RRI-63.5/1	63.5	21/2	5.0	14.5	1.0-3.0	11–20	Black or White
RRI-65	65.0		5.0	14.5	1.0-3.0		Black or White
RRI-70	70.0		5.0	21.0	2.0-4.5		Black
RRI-75	75.0		6.0	22.0	2.0-4.0		Black
RRI-76.2	76.2	3	6.2	20.2	1.0-2.0	14-18	Black
RRI-76.2/1	76.2	3	6.0	22.0	2.0-4.0	8-14	Black or White
RRI-80	80.0		4.0	21.0	1.5-3.0		Black
RRI-85	85.0		6.0	21.0	1.5-4.0		Black
RRI-90	90.0		5.0	20.0	2.5-5.0		Black
RRI-95	95.0		6.0	21.0	1.5-4.0		Black
RRI-100	100.0		6.0	28.0	2.0-4.5		Black or White
RRI-105	105.0		6.0	28.0	2.0-4.5		Black
RRI-110	110.0		6.0	28.0	2.0-4.5		Black
RRI-120	120.0		6.0	28.0	2.0-4.5		Black

### RECTANGULAR RIBBED INSERTS

Mainly for use in the furniture and tubing industries to provide protection from sharp tube edges, but can be used in various applications. Used to protect floor surfaces when used as feet. Ribbed for easy assembly and secure fitting. Manufactured from black or white LDPE, with polished or eroded (textured) finish.





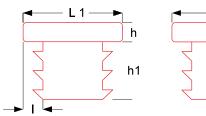


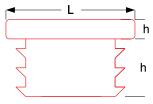
Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	I(mm)	I(gauge)	Colour
RI 20x10	20 x 10		3.0	11.5	0.8-2.0		Black
RI 20x15	20 x 15		3.0	11.5	1.0-2.0		Black
RI 25x10	25 x 10		3.0	11.5	0.8-2.0		Black
RI 25x15	25 x 15		5.0	11.5	0.8-2.5		Black
RI 25x20	25 x 20		5.0	11.5	1.0-3.0		Black
RI 25.4x12.7	25.4 x 12.7	1 x ½	3.0	11.5	0.8-2.0	14–20	Black
RI 30x10	30 x 10		3.0	11.5	0.75-2.0		Black
RI 30x15	30 x 15		5.0	11.5	1.0-3.0		Black or White
RI 30x20	30 x 20		5.0	11.5	1.0-3.0		Black
RI 30x25	30 x 25		5.0	13.5	1.5-2.0		Black
RI 34.9x15.9	34.9 x 15.9	13/8 x 5/8	4.0	11.5	1.0-3.0	11–20	Black or White
RI 35x10	35 x 10		3.5	11.5	0.75-2.0		Black
RI 35x15	35 x 15		3.5	11.5	1.0-3.0		Black
RI 35x20	35 x 20		5.0	11.5	1.0-3.0		Black or White
RI 38.1x19.1	38.1 x 19.1	1½ x ¾	5.0	11.5	1.0-3.0	10-18	Black or White

measurements in millimetres unless otherwise indicated • other sizes may be available on request

continued over

### RECTANGULAR RIBBED INSERTS continued







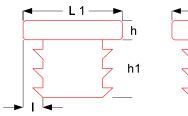
Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	I(mm)	l(gauge)	Colour
RI 38.1x19.1/1	38.1 x 19.1	1½ x ¾	5.0	11.5	1.0-2.0	14–18	Black
RI 38.1x25.4	38.1 x 25.4	1½ x 1	5.0	11.5	1.0-3.0	11–20	Black or White
RI 40x15	40 x 15		5.0	11.7	1.5-2.0		Black
RI 40x20	40 x 20		5.0	11.5	1.0-3.0		Black or White
RI 40x25	40 x 25		5.0	11.5	1.0-3.0		Black or White
RI 40x27	40 x 27		5.0	11.5	1.2-1.7		Black
RI 40x30	40 x 30		5.0	11.5	1.0-3.0		Black
RI 45x15	45 x 15		5.0	11.0	1.5-2.0		Black
RI 45x20	45 x 20		5.0	11.5	1.0-3.0		Black
RI 45x25	45 x 25		5.0	11.5	1.0-3.0		Black
RI 45x30	45 x 30		5.0	11.5	1.0-2.5		Black
RI 50x20	50 x 20		5.0	11.5	1.0-3.0		Black
RI 50x25	50 x 25		5.0	11.5	1.0-3.0		Black or White
RI 50x30	50 x 30		5.0	11.5	1.0-3.0		Black or White
RI 50x40	50 x 40		5.0	12.0	1.5-2.0		Black
RI 50.8x25.4	50.8 x 25.4	2 x 1	5.0	11.5	1.0-3.0	10-18	Black or White
RI 50.8x31.8	50.8 x 31.8	2 x 11/4	5.0	11.5	1.0-3.0	11–20	Black or White

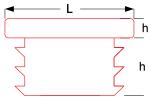
RI 60x20         60 x 20         5.0         14.5         1.03.0         Black or White           RI 60x25         60 x 25         5.0         11.5         3.04.5         Black           RI 60x30         60 x 30         5.0         14.5         1.03.0         Black           RI 60x30/1         60 x 30         5.0         14.5         2.04.0         Black or White           RI 60x40/1         60 x 40         5.0         14.5         2.04.0         Black           RI 63.5x25.4         63.5 x 25.4         2½ x 1         5.0         11.5         1.02.0         16-18         Black           RI 63.5x25.4/1         63.5 x 25.4         2½ x 1         5.5         11.5         1.02.0         16-18         Black           RI 63.5x25.4/1         63.5 x 25.4         2½ x 1½         6.2         18.0         2.02.5         12-16         Black           RI 63.5x25.4/2         70 x 20         5.0         17.0         1.02.0         Black           RI 63.5x25.4/2         70 x 25         5.0         17.0         1.02.0         Black           RI 70x20         70 x 20         5.0         17.0         1.02.0         Black           RI 70x25         70 x 25         5.0	Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	l(mm)	I(gauge)	Colour
RI 60x30         60 x 30         5.0         14.5         1.0-3.0         Black or White           RI 60x30/1         60 x 30         5.0         14.5         2.0-4.0         Black or White           RI 60x40         60 x 40         5.0         14.5         1.0-3.0         Black           RI 63.5x25.4         60 x 40         5.0         14.5         2.0-4.0         Black           RI 63.5x25.4         63.5 x 25.4         2½x x 1         5.0         11.5         1.0-2.0         16-18         Black           RI 63.5x25.4/1         63.5 x 25.4         2½x x 1         5.5         11.5         1.0-2.0         16-18         Black           RI 63.5x25.4/1         63.5 x 38.1         2½x x 1½         6.2         18.0         2.0-2.5         12-16         Black           RI 63.5x25.4/2         70 x 20         5.0         18.8         1.0-2.0         Black           RI 63.5x25.4/2         70 x 20         5.0         18.8         1.0-2.0         Black           RI 63.5x25.4/2         70 x 20         5.0         18.8         1.0-2.0         Black           RI 70x20         70 x 20         5.0         17.0         1.0-2.0         Black           RI 70x20         70 x 30 <th>RI 60x20</th> <td>60 x 20</td> <td></td> <td>5.0</td> <td>14.5</td> <td>1.0-3.0</td> <td></td> <td>Black or White</td>	RI 60x20	60 x 20		5.0	14.5	1.0-3.0		Black or White
RI 60x30/1         60 x 30         5.0         14.5         2.0-4.0         Black or White           RI 60x40         60 x 40         5.0         14.5         1.0-3.0         Black           RI 60x40/1         60 x 40         5.0         14.5         2.0-4.0         Black           RI 63.5x25.4         63.5 x 25.4         2½ x 1         5.0         11.5         1.0-2.0         16-18         Black           RI 63.5x25.4/1         63.5 x 25.4         2½ x 1½         6.2         18.0         2.0-2.5         12-16         Black           RI 63.5x25.4/1         63.5 x 38.1         2½ x 1½         6.2         18.0         2.0-2.5         12-16         Black           RI 70x20         70 x 20         5.0         18.8         1.0-2.0         Black           RI 70x30         70 x 20         5.0         17.0         1.0-2.0         Black           RI 70x30         70 x 30         5.7         17.7         1.0-2.0         Black           RI 70x40         70 x 40         5.0         17.1         1.0-2.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black           RI 75x25         75 x 50         6.0	RI 60x25	60 x 25		5.0	11.5	3.0-4.5		Black
RI 60x40         60 x 40         5.0         14.5         1.03.0         Black           RI 60x40/1         60 x 40         5.0         14.5         2.04.0         Black           RI 63.5x25.4         63.5 x 25.4         2½ x 1         5.0         11.5         1.02.0         16-18         Black           RI 63.5x25.4/1         63.5 x 25.4         2½ x 1         5.5         11.5         1.02.0         16-18         Black           RI 63.5x38.1         63.5 x 38.1         2½ x 1½         6.2         18.0         2.02.5         12-16         Black           RI 70x20         70 x 20         5.0         18.8         1.02.0         Black           RI 70x25         70 x 25         5.0         17.0         1.02.0         Black           RI 70x30         70 x 30         5.7         17.7         1.02.0         Black           RI 70x40         70 x 40         5.0         17.1         1.02.0         Black           RI 75x25         75 x 25         5.0         13.0         1.52.0         Black           RI 75x25         75 x 25         5.0         13.0         1.52.0         Black           RI 75x50         75 x 50         6.0         22.0 <t< th=""><th>RI 60x30</th><th>60 x 30</th><th></th><th>5.0</th><th>14.5</th><th>1.0-3.0</th><th></th><th>Black</th></t<>	RI 60x30	60 x 30		5.0	14.5	1.0-3.0		Black
Ri 60x40/1         60 x 40         5.0         14.5         2.04.0         Black           Ri 63.5x25.4         63.5 x 25.4         2½ x 1         5.0         11.5         1.02.0         16-18         Black           Ri 63.5x25.4/1         63.5 x 25.4         2½ x 1½         5.5         11.5         1.02.0         16-18         Black           Ri 63.5x38.1         63.5 x 38.1         2½ x 1½         6.2         18.0         2.02.5         12-16         Black           Ri 70x20         70 x 20         5.0         18.8         1.02.0         Black           Ri 70x25         70 x 25         5.0         17.0         1.02.0         Black           Ri 70x30         70 x 30         5.7         17.7         1.02.0         Black           Ri 70x40         70 x 40         5.0         17.1         1.02.0         Black           Ri 70x50         70 x 50         5.0         14.5         2.05.0         Black           Ri 75x25         75 x 25         5.0         13.0         1.52.0         Black or White           Ri 75x50         75 x 50         6.0         22.0         2.04.0         8-14         Black or White           Ri 76.2x38.1         76.2 x 50.8	RI 60x30/1	60 x 30		5.0	14.5	2.0-4.0		Black or White
RI 63.5x25.4 63.5 x 25.4 2½ x 1 5.0 11.5 1.0.2.0 16-18 Black RI 63.5x25.4/1 63.5 x 25.4 2½ x 1 5.5 11.5 1.0.2.0 16-18 Black RI 63.5x25.4/1 63.5 x 25.4 2½ x 1 5.5 11.5 1.0.2.0 16-18 Black RI 63.5x38.1 63.5 x 38.1 2½ x 1½ 6.2 18.0 2.0-2.5 12-16 Black RI 70x20 70 x 20 5.0 18.8 1.0-2.0 Black RI 70x25 70 x 25 5.0 17.0 1.0-2.0 Black RI 70x30 70 x 30 5.7 17.7 1.0-2.0 Black RI 70x40 70 x 40 5.0 17.1 1.0-2.0 Black RI 70x50 70 x 55 5.0 17.1 1.0-2.0 Black RI 70x50 70 x 50 5.0 14.5 2.0-5.0 Black RI 75x25 75 x 25 5.0 13.0 1.5-2.0 Black RI 75x25 75 x 25 5.0 13.0 1.5-2.0 Black RI 75x50 75 x 50 6.0 22.0 2.0-4.0 Black or White RI 76.2x38.1 76.2 x 38.1 3 x 1½ 6.0 14.5 2.0-4.0 Black or White RI 76.2x50.8 76.2 x 50.8 3 x 2 6.0 22.0 2.0-4.0 Black RI 80x20 80 x 20 6.0 17.6 1.0-2.0 Black RI 80x20 80 x 25 5.0 14.5 1.0-2.0 Black RI 80x30 80 x 30 5.0 14.5 1.0-2.0 Black RI 80x40 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x50 80 x 50 5.0 22.0 2.0-4.0 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 90x20 90 x 20 5.0 14.5 1.5-2.0 Black RI 90x40 90 x 40 5.0 14.5 1.5-2.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 100 x 20 5.0 14.5 1.5-3.0 Black RI 100x20 100 x 20 5.0 14.5 1.5-3.0 Black RI 100x20 100 x 25 5.0 14.5 1.5-3.0 Black	RI 60x40	60 x 40		5.0	14.5	1.0-3.0		Black
RI 63.5x25.4/1 63.5 x 25.4 2½ x 1 5.5 11.5 1.0-2.0 16-18 Black RI 63.5x38.1 63.5 x 38.1 2½ x 1½ 6.2 18.0 2.0-2.5 12-16 Black RI 70x20 70 x 20 5.0 18.8 1.0-2.0 Black RI 70x25 70 x 25 5.0 17.0 1.0-2.0 Black RI 70x30 70 x 30 5.7 17.7 1.0-2.0 Black RI 70x40 70 x 40 5.0 17.1 1.0-2.0 Black RI 70x50 70 x 50 5.0 14.5 2.0-5.0 Black RI 70x50 70 x 50 5.0 14.5 2.0-5.0 Black RI 75x25 75 x 25 5.0 13.0 1.5-2.0 Black RI 75x25 75 x 25 5.0 13.0 1.5-2.0 Black RI 75x50 75 x 50 6.0 22.0 2.0-4.0 Black or White RI 76.2x38.1 76.2 x 38.1 3 x 1½ 6.0 14.5 2.0-4.0 8-14 Black or White RI 76.2x50.8 76.2 x 50.8 3 x 2 6.0 22.0 2.0-4.0 8-14 Black or White RI 80x20 80 x 20 6.0 17.6 1.0-2.0 Black RI 80x25 80 x 25 5.0 14.5 1.0-2.0 Black RI 80x40 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-3.0 Black RI 80x50 80 x 50 5.0 22.0 2.0-4.0 Black RI 80x50 80 x 50 5.0 14.5 1.0-3.0 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 90x20 90 x 20 5.0 14.5 1.5-2.0 Black RI 90x20 90 x 20 5.0 14.5 1.5-2.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 100x25 100 x 25 5.0 14.5 1.5-3.0 Black	RI 60x40/1	60 x 40		5.0	14.5	2.0-4.0		Black
RI 63.5x38.1         63.5 x 38.1         2½ x 1½         6.2         18.0         2.0-2.5         12-16         Black           RI 70x20         70 x 20         5.0         18.8         1.0-2.0         Black           RI 70x25         70 x 25         5.0         17.0         1.0-2.0         Black           RI 70x30         70 x 30         5.7         17.7         1.0-2.0         Black           RI 70x40         70 x 40         5.0         17.1         1.0-2.0         Black           RI 70x50         70 x 50         5.0         14.5         2.0-5.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x30         80 x 30         5.0	RI 63.5x25.4	63.5 x 25.4	2½ x 1	5.0	11.5	1.0-2.0	16-18	Black
RI 70x20         70 x 20         5.0         18.8         1.0-2.0         Black           RI 70x25         70 x 25         5.0         17.0         1.0-2.0         Black           RI 70x30         70 x 30         5.7         17.7         1.0-2.0         Black           RI 70x40         70 x 40         5.0         17.1         1.0-2.0         Black           RI 70x50         70 x 50         5.0         14.5         2.0-5.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black or White           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         Black or White           RI 76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8 -14         Black or White           RI 76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8 -14         Black or White           RI 76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8 -14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Blac	RI 63.5x25.4/1	63.5 x 25.4	2½ x 1	5.5	11.5	1.0-2.0	16-18	Black
RI 70x25 70 x 25 5.0 17.0 1.0-2.0 Black RI 70x30 70 x 30 5.7 17.7 1.0-2.0 Black RI 70x40 70 x 40 5.0 17.1 1.0-2.0 Black RI 70x50 70 x 50 5.0 14.5 2.0-5.0 Black RI 75x25 75 x 25 5.0 13.0 1.5-2.0 Black RI 75x50 75 x 50 6.0 22.0 2.0-4.0 Black or White RI 76.2x38.1 76.2 x 38.1 3 x 1½ 6.0 14.5 2.0-4.0 8-14 Black or White RI 76.2x50.8 76.2 x 50.8 3 x 2 6.0 22.0 2.0-4.0 8-14 Black or White RI 80x20 80 x 20 6.0 17.6 1.0-2.0 Black RI 80x25 80 x 25 5.0 14.5 1.0-2.0 Black RI 80x40 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-2.5 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-3.0 Black RI 80x40/1 80 x 40 5.0 14.5 1.0-3.0 Black RI 80x60 80 x 50 5.0 22.0 2.0-4.0 Black RI 80x60 80 x 60 5.0 24.0 1.5-3.5 Black RI 90x20 90 x 20 5.0 14.5 1.5-3.0 Black RI 90x40 90 x 40 5.0 14.5 1.5-3.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.0 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 90x50 90 x 50 6.0 21.5 2.0-4.5 Black RI 100x25 100 x 25 5.0 14.5 1.5-3.0 Black	RI 63.5x38.1	63.5 x 38.1	2½ x 1½	6.2	18.0	2.0-2.5	12–16	Black
RI 70x30         70 x 30         5.7         17.7         1.0-2.0         Black           RI 70x40         70 x 40         5.0         17.1         1.0-2.0         Black           RI 70x50         70 x 50         5.0         14.5         2.0-5.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black or White           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         8-14         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black or White           RI 80x40/1         80 x 40         5.0         14.5	RI 70x20	70 x 20		5.0	18.8	1.0-2.0		Black
RI 70x40         70 x 40         5.0         17.1         1.0-2.0         Black           RI 70x50         70 x 50         5.0         14.5         2.0-5.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black or White           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         8-14         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.5         Black           RI 80x40/1         80 x 40         5.0         14.5         1.0-3.0         Black or White           RI 80x50         80 x 50         5.0         22.0	RI 70x25	70 x 25		5.0	17.0	1.0-2.0		Black
RI 70x50         70 x 50         5.0         14.5         2.0-5.0         Black           RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x40/1         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x50         80 x 50         5.0         14.5         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         <	RI 70x30	70 x 30		5.7	17.7	1.0-2.0		Black
RI 75x25         75 x 25         5.0         13.0         1.5-2.0         Black           RI 75x50         75 x 50         6.0         22.0         2.0-4.0         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black or White           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-	RI 70x40	70 x 40		5.0	17.1	1.0-2.0		Black
RI 75x50         75 x 50         6.0         22.0         2.0-4.0         Black or White           RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.0         Black or White           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 90x20         90 x 20         5.0         14.5         1.5-	RI 70x50	70 x 50		5.0	14.5	2.0-5.0		Black
RI 76.2x38.1         76.2 x 38.1         3 x 1½         6.0         14.5         2.0-4.0         8-14         Black or White           RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-2.5         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         2.0-4.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         <	RI 75x25	75 x 25		5.0	13.0	1.5-2.0		Black
RI 76.2x50.8         76.2 x 50.8         3 x 2         6.0         22.0         2.0-4.0         8-14         Black or White           RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         1.5-2.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         Black           RI 100x20         100 x 20         5.0         14.5         1.5-3.0         Black           RI 100x25	RI 75x50	75 x 50		6.0	22.0	2.0-4.0		Black or White
RI 80x20         80 x 20         6.0         17.6         1.0-2.0         Black           RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         1.5-2.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         Black           RI 100x20         100 x 20         5.0         14.5         1.5-3.0         Black           RI 100x25         100 x 25         5.0         14.5         1.5-3.0         Black	RI 76.2x38.1	76.2 x 38.1	3 x 1½	6.0	14.5	2.0-4.0	8-14	Black or White
RI 80x25         80 x 25         5.0         14.5         1.0-2.0         Black           RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         1.5-2.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         Black           RI 100x20         100 x 20         5.0         14.5         1.5-3.0         Black           RI 100x25         100 x 25         5.0         14.5         1.5-3.0         Black	RI 76.2x50.8	76.2 x 50.8	3 x 2	6.0	22.0	2.0-4.0	8-14	Black or White
RI 80x30         80 x 30         5.0         14.5         1.0-2.5         Black           RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         1.5-2.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         Black           RI 100x20         100 x 20         5.0         14.5         1.5-3.0         Black           RI 100x25         100 x 25         5.0         14.5         1.5-3.0         Black	RI 80x20	80 x 20		6.0	17.6	1.0-2.0		Black
RI 80x40         80 x 40         5.0         14.5         1.0-3.0         Black           RI 80x40/1         80 x 40         5.0         14.5         2.0-4.0         Black or White           RI 80x50         80 x 50         5.0         22.0         2.0-4.0         Black           RI 80x60         80 x 60         5.0         24.0         1.5-3.5         Black           RI 90x20         90 x 20         5.0         14.5         1.5-2.0         Black           RI 90x40         90 x 40         5.0         14.5         2.0-4.0         Black           RI 90x50         90 x 50         6.0         21.5         2.0-4.5         Black           RI 100x20         100 x 20         5.0         14.5         1.5-3.0         Black           RI 100x25         100 x 25         5.0         14.5         1.5-3.0         Black	RI 80x25	80 x 25		5.0	14.5	1.0-2.0		Black
RI 80x40/1       80 x 40       5.0       14.5       2.0-4.0       Black or White         RI 80x50       80 x 50       5.0       22.0       2.0-4.0       Black         RI 80x60       80 x 60       5.0       24.0       1.5-3.5       Black         RI 90x20       90 x 20       5.0       14.5       1.5-2.0       Black         RI 90x40       90 x 40       5.0       14.5       2.0-4.0       Black         RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 80x30	80 x 30		5.0	14.5	1.0-2.5		Black
RI 80x50       80 x 50       5.0       22.0       2.0-4.0       Black         RI 80x60       80 x 60       5.0       24.0       1.5-3.5       Black         RI 90x20       90 x 20       5.0       14.5       1.5-2.0       Black         RI 90x40       90 x 40       5.0       14.5       2.0-4.0       Black         RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 80x40	80 x 40		5.0	14.5	1.0-3.0		Black
RI 80x60       80 x 60       5.0       24.0       1.5-3.5       Black         RI 90x20       90 x 20       5.0       14.5       1.5-2.0       Black         RI 90x40       90 x 40       5.0       14.5       2.0-4.0       Black         RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 80x40/1	80 x 40		5.0	14.5	2.0-4.0		Black or White
RI 90x20       90 x 20       5.0       14.5       1.5-2.0       Black         RI 90x40       90 x 40       5.0       14.5       2.0-4.0       Black         RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 80x50	80 x 50		5.0	22.0	2.0-4.0		Black
RI 90x40       90 x 40       5.0       14.5       2.0-4.0       Black         RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 80x60	80 x 60		5.0	24.0	1.5-3.5		Black
RI 90x50       90 x 50       6.0       21.5       2.0-4.5       Black         RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 90x20	90 x 20		5.0	14.5	1.5-2.0		Black
RI 100x20       100 x 20       5.0       14.5       1.5-3.0       Black         RI 100x25       100 x 25       5.0       14.5       1.5-3.0       Black	RI 90x40	90 x 40		5.0	14.5	2.0-4.0		Black
RI 100x25 100 x 25 5.0 14.5 1.5-3.0 Black	RI 90x50	90 x 50		6.0	21.5	2.0-4.5		Black
	RI 100x20	100 x 20		5.0	14.5	1.5-3.0		Black
<b>RI 100x30</b> 100 x 30 5.0 14.5 1.5-3.5 Black	RI 100x25	100 x 25		5.0	14.5	1.5-3.0		Black
	RI 100x30	100 x 30		5.0	14.5	1.5-3.5		Black

measurements in millimetres unless otherwise indicated • other sizes may be available on request

continued over

# RECTANGULAR RIBBED INSERTS continued



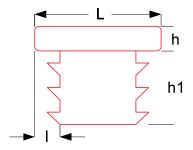




Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	l(mm)	I(gauge)	Colour
RI 100x40	100 x 40		7.2	19.0	2.0-4.0		Black or White
RI 100x50	100 x 50		8.0	18.5	2.0-4.0		Black
RI 100x60	100 x 60		6.0	24.5	2.5-4.5		Black
RI 100x80	100 x 80		6.0	24.0	3.0-5.0		Black
RI 120x30	120 x 30		5.0	14.5	1.0-2.5		Black
RI 120x40	120 x 40		6.0	21.5	3.0-5.0		Black
RI 120x50	120 x 50		6.0	21.5	3.0-5.5		Black
RI 120x60	120 x 60		6.0	22.0	2.0-4.0		Black or White
RI 120x80	120 x 80		5.0	24.5	2.0-3.0		Black
RI 120x100	120 x 100		6.0	24.0	3.5-6.0		Black
RI 150x50	150 x 50		6.0	28.0	2.0-4.0		Black
RI 150x100	150 x 100		7.0	27.5	3.0-8.0		Black

### SQUARE RIBBED INSERTS

Mainly for use in the furniture and tubing industries to provide protection from sharp tube edges, but can be used in various applications. Used to protect floor surfaces when used as feet. Ribbed for easy assembly and secure fitting. Manufactured from black or white LDPE, with polished or eroded (textured) finish.





Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	l(mm)	I(gauge)	Colour
SQRI-10	10.0		4.0	11.5	1.5-2.0		Black
SQRI-12	12.0		4.0	11.5	1.5-2.0		Black
SQRI-12.7	12.7	1/2	4.0	11.5	0.8-2.0	14–20	Black or White
SQRI-13	13.0		5.0	11.5	0.8-2.0		Black
SQRI-15	15.0		4.0	11.5	0.8-2.0		Black or White
SQRI-16	16.0		5.0	11.5	0.8-2.5	12–20	Black or White
SQRI-18	18.0		5.0	16.5	1.2-1.5		Black
SQRI-19	19.0	3/4	5.0	11.5	0.8-2.5	10-12	Black or White
SQRI-20	20.0		5.0	11.5	0.8-2.5		Black or White
SQRI-22	22.0		5.0	11.5	0.8-2.5	10-12	Black
SQRI-25	25.0		5.0	11.5	1.0-2.5		Black or White
SQRI-25.4	25.4	1	5.0	11.5	1.0-2.5	12–20	Black or White
SQRI-28.6	28.6	11/8	5.0	12.4	1.0-2.0	16-20	Black or White
SQRI-30	30.0		5.0	11.5	1.0-3.0		Black or White
SQRI-32	32.0	11/4	5.0	11.5	1.0-3.0	10-18	Black or White
SQRI-35	35.0	13/8	5.0	11.5	1.0-3.0	10-18	Black or White

measurements in millimetres unless otherwise indicated • other sizes may be available on request

continued over

# SQUARE RIBBED INSERTS

Ref No	L x L1(mm)	L x L1(ins)	h(mm)	h1(mm)	l(mm)	I(gauge)	Colour
SQRI-38	38.0	1½	5.0	14.5	1.0-3.0	10-18	Black or White
SQRI-40	40.0		5.0	14.5	1.0-3.0		Black or White
SQRI-44.4	44.4	13/4	4.7	15.7	1.0-2.0	14–18	Black
SQRI-44.4/1	44.4		4.7	15.1	2.0-3.0	10-14	Black
SQRI-45	45.0		5.0	14.5	1.0-3.0		Black
SQRI-50	50.0		5.0	14.5	1.0-3.0		Black
SQRI-50/1	50.0		6.6	18.0	3.0-5.0		Black or White
SQRI-50.8	50.8	2	5.0	14.5	1.0-3.0	10-18	Black or White
SQRI-55	55.0		5.0	14.5	2.0-4.0		Black
SQRI-60	60.0		5.0	24.3	3.0-4.0		Black
SQRI-60/1	60.0		5.0	14.5	1.0-3.0		Black or White
SQRI-63.5	63.5	2½	6.0	14.5	1.0-3.0	11–20	Black
SQRI-65	65.0		6.0	14.5	1.0-3.0		Black or White
SQRI-70	70.0		6.0	22.0	2.0-4.0		Black or White
SQRI-75	75.0		6.0	22.0	2.0-4.0		Black or White
SQRI-76.2	76.2	3	6.0	22.0	2.0-4.0	8-14	Black or White
SQRI-80	80.0		6.0	22.0	2.0-4.0		Black or White
SQRI-90	90.0		6.0	21.0	3.0-5.0		Black
SQRI-100	100.0		7.0	22.0	2.0-4.0		Black or White
SQRI-110	110.0		6.0	24.5	3.0-5.0		Black
SQRI-120	120.0		5.0	25.0	2.5-5.0		Black
SQRI-150	150.0		7.0	27.0	5.0-8.0		Black



#### Terms and Conditions for the Sale of Goods

#### 1. Definitions

Buyer: the person who buys or agrees to buy the goods from the Seller.

Conditions: the terms and conditions of sale as set out in this document and any special terms and conditions agreed in writing by the Seller.

Goods: the articles which the Buyer agrees to buy from the Seller.

Price: the price for the Goods, excluding VAT and any carriage, packaging and insurance costs

Seller means Thredgards Limited of Milne House, Ward Street, Alloa, Clackmannanshire, U.K. FK10 1ET.

#### 2. Conditions

- 2.1 These Conditions shall form the basis of the contract between the Seller and the Buyer in relation to the sale of Goods, to the exclusion of all other terms and conditions including the Buyer's standard conditions of purchase or any other conditions which the Buyer may purport to apply under any purchase order or confirmation of order or any other document.
- 2.2 All orders for Goods shall be deemed to be an offer by the Buyer to purchase Goods from the Seller pursuant to these Conditions.
- 2.3 Acceptance of delivery of the Goods shall be deemed to be conclusive evidence of the Buyer's acceptance of these Conditions.
- 2.4 These Conditions may not be varied except by the written agreement of the General Manager of the Seller.
- 2.5 These Conditions represent the whole of the agreement between the Seller and the Buyer. They supersede any other conditions previously issued.

#### 3. Price

The Price shall be the price quoted on the Seller's confirmation of order or invoice. The Price is exclusive of VAT which shall be due at the rate in force on the date of the Seller's invoice.

#### 4. Payment and Interest

- 4.1 Payment of the Price and VAT shall be due within 30 days of the date of the Seller's invoice.
- 4.2 Interest on overdue invoices shall accrue from the date when payment becomes due calculated on a daily basis until the date of payment at the rate of 2% per annum above the Bank of England base rate from time to time in force. Such interest shall accrue after as well as before any judgment.
- 4.3 The Buyer shall pay all accounts in full and not exercise any rights of set-off or counter-claim against invoices submitted by the Seller.

#### 5. Goods

The quantity and description of the Goods shall be as set out in the Seller's confirmation of order or invoice.

#### 6. Warranties

The Seller warrants that the Goods will at the time of delivery correspond to the description given by the Seller in the confirmation of order.

#### 7. Delivery of the Goods

- 7.1 Delivery of the Goods shall be made to the Buyer's address. The Buyer shall make all arrangements necessary to take delivery of the Goods on the day notified by the Seller for delivery.
- 7.2 The Seller undertakes to use its reasonable endeavours to despatch the Goods on an agreed delivery date, but does not guarantee to do so. Time of delivery shall not be of the essence of the contract.
- 7.3 The Seller shall not be liable to the Buyer for any loss or damage whether arising directly or indirectly from the late delivery or short delivery of the Goods. If short delivery does take place, the Buyer undertakes not to reject the Goods but to accept the Goods delivered as part performance of the contract.
- 7.4 If the Buyer fails to take delivery of the Goods on the agreed delivery date or, if no specific delivery date has been agreed, when the Goods are ready for despatch, the Seller shall be entitled to store and insure the Goods and to charge the Buyer the reasonable costs of so doing.

#### 8. Acceptance of the Goods

- 8.1 The Buyer shall be deemed to have accepted the Goods 72 hours after delivery to the Buyer.
- 8.2 The Buyer shall carry out a thorough inspection of the Goods within 48 hours of delivery and shall give written notification to the Seller within 5 working days of delivery of the Goods of any defects which a reasonable examination would have revealed.
- 8.3 Where the Buyer has accepted, or has been deemed to have accepted, the Goods the Buyer shall not be entitled to reject Goods which are not in accordance with the contract.

#### 9. Title and risk

- 9.1 Risk shall pass on delivery of the Goods to the Buyer's address.
- 9.2 Notwithstanding the earlier passing of risk, title in the Goods shall remain with the Seller and shall not pass to the Buyer until the amount due under the invoice for them (including interest and costs) has been paid in full.
- 9.3 Until title passes the Buyer shall hold the Goods as bailee for the Seller and shall store or mark them so that they can at all times be identified as the property of the Seller.
- 9.4 The Seller may at any time before title passes and without any liability to the Buyer:
- 9.4.1 repossess and dismantle and use or sell all or any of the Goods and by doing so terminate the Buyer's right to use, sell or otherwise deal in them; and 9.4.2 for that purpose (or determining what if any Goods are held by the Buyer
- and inspecting them) enter any premises of or occupied by the Buyer.

  9.5 The Seller may maintain an action for the price of any Goods notwithstanding
- that title in them has not passed to the Buyer.

#### 10. Carriage of Goods

Carriage will be chargeable on all sales unless previously agreed with all parties. This will be calculated by the weight of the consignment.



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Thredgards, Milne House, Ward Street, Alloa, Clackmannanshire, United Kingdom FK10 1ET

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Fax: 01 259 212 777