



G•APEX

HEAT SHRINK TUBING AND ACCESSORIES

G•APEX

G•APEX

台灣雲林應用材料股份有限公司

Taiwan Yun Lin Applied Materials Co., Ltd.

No. 361-1, Sec. 1, Shanjiao Road., Yuanlin City, Changhua County, Taiwan 510

T : +886-4-8381860 / F : +886-4-8381915 / E : sales@g-apex.com.tw

<https://www.g-apex.com.tw>



Taiwan Yun Lin Applied Materials Co., Ltd.



企業簡介 Company Profile

For over 20 years, G-APEX has been focused on research and development the new materials and products in the fields of heat shrink, cold shrink tubing, and tapes. To solve the requirement of quality, safety, cost reduction, and services for the market. Providing solutions of electrical insulation and sealing protection applications for different industries.

Production: 50 million meters of monthly production capabilities of heat shrinkable tubing, the strongest product supplying abilities.

Technology: 21 patents and professional R&D team.

Certification: ISO9001、UL、ROHS、REACH、ISO10993、ISO14001、IATF16949, providing a reliable quality guarantee.

Services: Mass storage of products and our service staff in Taiwan, Japan, Thailand, Vietnam, and China, providing the fastest ship out and instant services.

Under our team structure, we're confident to fulfill all your inquiries.

G-APEX 20年來長期致力在熱縮套管、冷縮套管、膠帶領域研究開發新材料及產品，解決市場對品質、安全性、成本降低及服務的需求，提供了不同行業電氣絕緣及密封保護應用解決方案。

生產：熱縮套管月產能5千萬米，提供強大的供貨能力。

技術：21項專利技術及專業的工程研發團隊。

認證：ISO9001、UL、ROHS、REACH、ISO10993、ISO14001、IATF16949提供可靠的品質保證。

服務：台灣、日本、泰國、越南、中國各地提供大量產品庫存倉儲及服務人員，提供最快速的發貨及服務。在整體的團隊架構下，我們很自信可以完成對您的需求所託。



目錄 CONTENTS



薄壁熱縮套管 THIN WALL HEAT SHRINK TUBING
G5 通用型熱縮套管 General purpose, flame retardant heat shrink tubing
G5-CB 超薄型熱縮套管 Ultra thin wall, flame retardant heat shrink tubing
G1 無阻燃型熱縮套管 Non flame retardant heat shrink tubing
G5-3X 高收縮倍率熱縮套管 High shrink ratio heat shrink tubing
G5-135 135°C 阻燃型熱縮套管 135°C Flame retardant heat shrink tubing
G5-YG 接地標示用黃綠熱縮套管 Yellow & Green striped heat shrink tubing
GA 耐磨型PE熱縮套管 Abrasion-resistant PE heat shrink tubing
YLPET PET熱縮套管 PET heat shrink tubing
DR 150°C 耐油熱縮套管 150° Diesel resistant elastomeric heat shrinkable tubing

含膠型熱縮套管 ADHESIVE-LINED HEAT SHRINK TUBING
AIS 雙壁含膠型熱縮套管 Dual wall heat shrink tubing
AIS-ES 車用線束含膠熱縮套管 Adhesive heat shrinkable tubing for automotive
AECM 迷你電線防水封帽 Miniature waterproof cable end cap
ATM 通用型中壁含膠熱縮套管 Medium wall heat shrink tubing
ATM-FR 通用型中壁阻燃含膠熱縮套管 Flame retardant medium wall heat shrink tubing
AOS 柔軟型中壁含膠熱縮套管 Flexible medium wall heat shrink tubing
ABS 防水端子用熱縮套管 Watertight tube for terminals and crimp splices
ASM 通用型厚壁含膠熱縮套管 Heavy wall heat shrink tubing
ASM-6X 六倍收縮厚壁熱縮套管 Heavy wall high shrink ratio heat shrink tubing

耐高溫熱縮套管 HIGH TEMPERATURE RESISTANT HEAT SHRINK TUBING
HTK150 柔軟型PVDF熱縮套管 Flexible PVDF heat shrinkable tubing
KYNAR 半硬型PVDF熱縮套管 Semi-rigid PVDF heat shrinkable tubing
VITON 氟橡膠熱縮套管 Fluoroelastomer heat shrinkable tubing
FEP 200°C FEP熱縮套管 200°C FEP heat shrinkable tubing
PTFE 260°C PTFE熱縮套管 260°C PTFE heat shrinkable tubing
PFA 260°C PFA熱縮套管 260°C PFA heat shrinkable tubing

醫療等級熱縮套管 MEDICAL-GRADE HEAT SHRINKABLE TUBING
MTA 醫療級半硬質PVDF熱縮套管 Medical grade semi-rigid PVDF heat shrinkable tubing
MT2 醫療級超薄型LDPE熱縮套管 Medical grade ultra thin wall LDPE heat shrinkable tubing
MTC 醫療級柔軟型PVDF熱縮套管 Medical grade flexible PVDF heat shrinkable tubing
MTE 醫療級LDPE熱縮套管 Medical grade LDPE heat shrinkable tubing
MTF 醫療級高柔軟性熱縮套管 Medical grade high flexibility heat shrinkable tubing

冷縮套管 COLD SHRINK TUBING
DNC 硅矽橡膠雙層冷縮套管 Dual layer cold shrink silicone rubber sleeve
ANC 硅矽橡膠冷縮套管 Cold shrink silicone rubber sleeve
GNC 硅矽橡膠冷縮套管 Cold shrink silicone rubber sleeve
NS7 硅矽橡膠握把冷縮套管 Cold shrink silicone rubber sleeve for handle
EEC EPDM橡膠冷縮封帽 Cold shrink EPDM rubber end cap
ENC EPDM 橡膠冷縮套管 Cold shrink EPDM rubber sleeve

編織網管 BRAIDED SLEEVING
BS5000 編織熱縮套管 Fabric heat shrinkable tubing
BS1000 PET 半剛性捲式編織管 PET semi-rigid wrappable split braided sleeving
BS3000 汽車線束用捲式編織管 Wrap around braided sleeving for automotive wire assembly
BSPET PET 編織擴充管 PET expandable braided sleeving

電線連接用熱縮套管 ELECTRICAL INTERCONNECT HEAT SHRINKABLE TUBING
GAST-R 125°C 防水焊錫環熱縮中接管 125°C Solder sleeve wire splices
GAST-B 125°C 防水焊錫環熱縮中接管 125°C Solder sleeve wire splices
GAST-RS 125°C 防水焊錫環熱縮中接管 125°C Solder sleeve wire splices
CRIMP 防水熱縮中接管 Waterproof heat shrinkable crimp splices
GAST-E 防水焊錫環熱縮封帽 Solder grip closed end connector splices

高壓絕緣熱縮套管 HIGH VOLTAGE INSULATION HEAT SHRINK TUBING
HB1 高壓母排熱縮套管 (耐壓3.6kV) Busbar insulating heat shrink tubing (Withstand voltage up to 3.6kV)
HB2 高壓母排熱縮套管 (耐壓24kV) Busbar insulating heat shrink tubing (Withstand voltage up to 24kV)
HB3 高壓母排熱縮套管 (耐壓36kV) Busbar insulating heat shrink tubing (Withstand voltage up to 36kV)

熱縮模塑套件 MOULDED SHAPES
BOOT 模縮套 Molded parts
AEC 電纜防水熱縮封帽 Heat shrinkable cable end cap

光纖用熱縮套管 FIBER OPTICAL HEAT SHRINKABLE TUBING
ADW 光纖接續盒專用防水熱縮套管 Heat shrinkable tubing for fiber optic splice closure
FOSP 光纖保護套管 Heat shrinkable fiber optic splice protector
FOSP-K 高溫光纖保護套管 High-temperature optical fiber protection sleeve

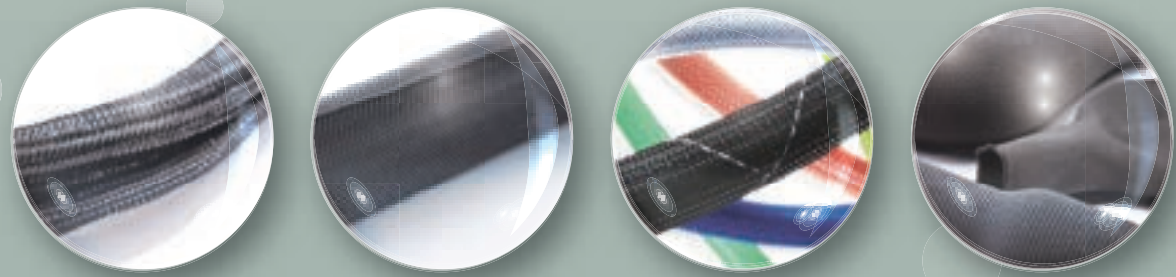
膠帶 TAPE
WT800 自融性防水膠帶 Rubber mastic tape
WT200 自融性防水膠帶 Rubber mastic tape
WT300 自融性絕緣填縫膠膏帶 Self-fusing insulation caulking mastic tape
HBT 耐電壓矽膠膠帶 (耐壓15~24kV) High voltage silicone busbar insulation tape (Withstand voltage up to 15~24kV)

熱縮套管組合包 ASSORTMENT KIT
K1-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K1-102 熱縮套管組裝盒 Heat shrinkable tubing kit
K1-201 熱縮套管組裝盒 Heat shrinkable tubing kit
K1-301 熱縮套管組裝盒 Heat shrinkable tubing kit
K2-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K2-102 熱縮套管組裝盒 Heat shrinkable tubing kit
K2-103 熱縮套管組裝盒 Heat shrinkable tubing kit
K4-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K5-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K6-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K7-101 熱縮套管組裝盒 Heat shrinkable tubing kit
K7-201 熱縮套管組裝盒 Heat shrinkable tubing kit
B2 熱縮套管捲式包 (紙盒) Tube and sleeve - mini box
R2 熱縮套管圓形泡殼包裝 Tube and sleeve - blister pack
GR 熱縮套管捲式包裝 Heat shrinkable tubing pack - mini spool pack

號碼標識系統 MARKING SYSTEMS
135°C TMS 軌道式號碼標示印字熱縮套管 Heat shrink markers
125°C TMS 軌道式號碼標示印字熱縮套管 Heat shrink markers
135°C CTMS 捲式號碼標示印字熱縮套管 Heat shrink markers
125°C CTMS 捲式號碼標示印字熱縮套管 Heat shrink markers
MP 貼紙簿 Pocket pack marker book
MO 號碼標誌器 Snap-on wire markers
MH PVC熱縮電線標示號碼圈 PVC Heat shrinkable wire marking number ring

工具 TOOL
GHG 微型熱風槍 Gas heat gun
BSC 熱裁切機 Hot knife device

BRAIDED SLEEVING 編織網管

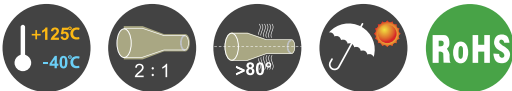


BRAIDED SLEEVING

BRAIDED SLEEVING

BS5000

Fabric heat shrinkable tubing
編織熱縮套管



Product Dimensions
產品規格

Part Number	Nominal Size (mm)	As supplied 收縮前	After recovered 收縮後	Packing Feet (Meter / Roll)
產品型號	尺寸	I.D.內徑	I.D.(max) 內徑(最大)	包裝英尺(米/每卷)
BS5000-0120	12	12±2	6	200(61)
BS5000-0200	20	22±3	10	200(61)
BS5000-0300	30	35±3	15	200(61)
BS5000-0400	40	43±3	20	200(61)
BS5000-0500	50	54±3	25	100(30.5)
BS5000-0600	60	61±3	30	100(30.5)
BS5000-0700	70	71±3	35	100(30.5)
BS5000-0800	80	81±3	40	100(30.5)

Technical Data

Property	Test Method	Typical Value
Transverse shrinkage	≥ 50%	50%
Longitudinal shrinkage	≤ 20%	20%
Abrasion test	1. Observe the surface of the sleeve after 144000 times of friction at low temperature -35°C. 2. Observe the surface of the sleeve after 144000 times of friction at high temperature 140°C.	No damage on the surface of Sleeve.
Long-term temperature test	1. After the high temperature 140°C/500 hours aging test, bent the sample180 degrees when it returned to room temperature and not allowed breaking. 2. Perform a -30°C/22-hour low-temperature test on the sample after high-temperature age. Bent the sample180 degrees when it returned to room temperature and not allowed breaking.	No cracks after bending 180 degrees.
Short-term temperature test	1. After a high temperature 160°C/22 hours aging test, bent the sample180 degrees when it returned to room temperature and not allowed breaking. 2. Perform a -35°C/22-hour low-temperature test on the sample after high-temperature age. Bent the sample180 degrees when it returned to room temperature and not allowed breaking.	No cracks after bending 180 degrees.
Low temperature flexibility	ASTM D2671 (-55°C/4 hrs)	No crack
Salt spray test	ASTM B117 (30 days)	No lysis
Water absorption	ASTM D570	1.39%

Standard color : black
Other colors, special sizes, and cut pieces are available on request.

標準顏色：黑
其他顏色，其他尺寸，裁切可依客戶需求另行訂製



應用 Applications

布質編織熱縮套管以聚烯烴及聚酯纖維兩種經緯編織而成，適用於汽車工業及各式不規則形狀的線束、部品上。柔軟、耐磨的材質運用在各種環境中具極佳的保護及美化效果，並具備減震、降噪能力，避免摩擦產生的噪音。

The fabric heat shrink sleeve is warp and weft woven with polyolefin and polyester yarns, it is suitable for the automobile industry and various irregular-shaped wire harnesses and parts. Flexible and abrasion-resistant materials have excellent protection and beautification effects in various environments, and the ability to reduce vibration and noise. Avoid the noise caused by friction.

操作溫度範圍 Operating temperature range

- Continuous operating temperature : -40°C~125°C
- Minimum shrink temperature : 80°C
- Full recovery temperature : Above 120°C

- 連續使用溫度：-40°C~125°C
- 最低收縮溫度：80°C
- 完全收縮溫度：120°C以上

特性 Characteristics

- 收縮率：2:1
- 抗紫外線
- 抗腐蝕性
- 良好的抗機械及耐候性
- 優異的抗磨擦性能
- 非常柔軟
- Shrink ratio: 2:1
- Anti-UV
- Corrosion resistance
- Excellent mechanical and weather property
- Superior abrasion resistance property
- Very flexible

BRAIDED SLEEVING

BS1000

PET semi-rigid wrappable
split braided sleeving
PET半剛性捲式編織管



Product Dimensions
產品規格

● 應用 Applications

由PET單絲及多絲聚酯纖維編織而成。剖開捲式設計方便施工及應用在不規格的形狀，並適合應用在雙端封閉的場合安裝和卸除，允許不拆卸的狀況下添加或取出電線。取代波紋管，避免摩擦產生的噪音。

Braided from PET monofilament and multifilament polyester yarns. The split self-wrapping design makes it easy to install and apply in irregular shapes and is suitable for installation and removal in double-ended closed sites, allowing for the addition or removal of wires without disassembly. It replaces the split loom to avoid the noise caused by friction.

● 操作溫度範圍 Operating temperature range

- Continuous operating temperature: -50°C~125°C
- 連續使用溫度：-50°C~125°C

● 特性 Characteristics

- 抗紫外線
- 對大部分的化學和溶解性物質有抵抗性
- 阻燃
- 優異的抗磨擦性能
- 捲繞重疊度25%以上
- UV resistance
- Resistant to most chemicals and solvents
- Flame retardant
- Excellent abrasion resistance
- Edge overlap of 25% and more

Approvals / Specifications 認證 / 規範
UL file no. E304566

Part Number	Nominal Size 公稱尺寸		Opening expansion width	Packing (Feet / Roll)	Packing (Meter / Roll)
產品型號	mm	inch	張開寬度 (mm)	包裝 (英尺/每卷)	包裝 (米/每卷)
BS1000-0032	3.2	1/8"	23±4	328'	100
BS1000-0064	6.4	1/4"	45±5	328'	100
BS1000-0095	9.5	3/8"	53±5	75'	22.8
BS1000-0127	12.7	1/2"	60±5	75'	22.8
BS1000-0191	19.1	3/4"	89±5	50'	15.2
BS1000-0254	25.4	1"	115±5	25'	7.6
BS1000-0381	38.1	1 1/2"	153±5	25'	7.6
BS1000-0508	50.8	2"	205±5	25'	7.6

Technical Data

Property	Test Method	Typical Value
Melting temperature	ASTM D276	240°C
Low temperature flexibility	-50°C/4 hrs	No cracking
Flammability	UL224	VW-1
Abrasion test	ISO 6722	No damage after 14200 times

Standard color : black
Special sizes are available on request.

標準顏色：黑
其他尺寸可依客戶需求另行訂製



BRAIDED SLEEVING

BS3000

Wrap around braided sleeving for automotive wire assembly
汽車線束用捲式編織管



Product Dimensions
產品規格

Part Number	Nominal Size	Opening expansion width	Packing (Meter / Roll)
產品型號	公稱尺寸 (mm)	張開寬度 (mm)	包裝 (米/每卷)
BS3000-0050	5	29±5	220
BS3000-0080	8	45±5	100
BS3000-0100	10	55±5	70
BS3000-0130	13	68±5	70
BS3000-0160	16	75±5	35
BS3000-0190	19	95±5	35
BS3000-0250	25	102±5	18
BS3000-0290	29	114±5	18
BS3000-0320	32	131±5	18
BS3000-0380	38	160±5	18
BS3000-0480	48	202±5	7.6

Technical Data

Property	Test Method	Typical Value
Melting Temperature	ASTM D276	265°C
Low temperature flexibility	-50°C/4 hrs	No cracking
Flammability	ASTM D350B	Pass
Abrasion test	STL S21 5101	No damage after 220000 times
Solvent resistance	16726-F01	Pass

Standard color : black
Special sizes are available on request.

標準顏色：黑
其他尺寸可依客戶需求另行訂製

應用 Applications

由PET單絲及多絲聚酯纖維編織而成。剖開捲式設計可快速方便將線組集線捆束，並適合應用在雙端封閉的場合安裝和卸除，允許不拆卸的狀況下添加或取出電線。極為柔軟的材質提供抗磨損保護及良好的避震吸音作用，取代波紋管，避免摩擦產生的噪音。

Braided from PET monofilament and multifilament polyester yarns. The split self-wrapping design allows for quick and easy bundling of wire and cable assemblies, and is suitable for installation and removal in double-ended closed sites, allowing for the addition or removal of wires without disassembly. The extremely flexible material provides abrasion protection and excellent shock absorption and sound absorption, replacing the split loom and avoiding the noise caused by friction.

操作溫度範圍 Operating temperature range

- Continuous operating temperature: -50°C~125°C
- 連續使用溫度：-50°C~125°C

特性 Characteristics

- 阻燃
- 抗紫外線
- 對大部分的化學和溶解性物質有抵抗性
- 柔軟
- 優異的抗磨擦性能
- 優異的降噪音功能
- 捲繞重疊度25%以上
- Flame retardant
- UV resistance
- Resistant to most chemicals and solvents
- Flexible
- Excellent abrasion resistance
- Excellent noise suppression
- Edge overlap of 25% and more

BRAIDED SLEEVING

BSPET

PET expandable braided sleeving
PET編織擴充管

● 應用 Applications

由PET單絲聚酯纖維編織而成，大倍率擴張比可以快速方便地安裝在線材上。主要用於工業中電線、電纜的捆束及保護。

It is braided from PET monofilament polyester yarns, and high expansion ratio allows for quick and easy installation over wires. Mainly used for bundling and protection of wires and cables in industry.

● 操作溫度範圍 Operating temperature range

- Continuous operating temperature: -50°C~150°C
- 連續使用溫度：-50°C~150°C

● 特性 Characteristics

- 抗紫外線、化學物質
- 輕、柔軟
- 高倍擴充比
- 優異的抗磨擦性能
- 阻燃
- UV and chemical resistance
- Lightweight and flexible
- High expansion ratio
- Excellent abrasion resistance
- Flame retardant

Approvals / Specifications 認證 / 規範

 UL file no. E304566



Product Dimensions
產品規格

Flame retardant material 阻燃材質						
Part Number	Nominal Size	Size Range 尺寸範圍		Ends	mesh/inch	Packing Feet (Meter / Roll)
產品型號	公稱尺寸 (mm)	min最小 (mm)	max最大 (mm)	編數	目數/英寸	包裝 (米/每卷)
BSPETFR0032-1	3.2	2.37	6.35	1	13±1	1000ft (305M)
BSPETFR0064-3	6.4	3.17	9.53	3	8±1	1000ft (305M)
BSPETFR0095-3	9.5	4.76	15.88	3	8±1	500ft (153M)
BSPETFR0127-3	12.7	6.35	23.0	3	8±1	500ft (153M)
BSPETFR0150-3	15.0	7.0	30.0	3	8±1	500ft (153M)
BSPETFR0191-3	19.1	12.70	36.0	3	8±1	250ft (77M)
BSPETFR0320-3	32.0	19.05	50.0	3	7±1	250ft (77M)
BSPETFR0381-4	38.1	25.4	57.15	4	6±1	200ft (61M)
BSPETFR0445-4	44.5	31.75	69.85	4	7±1	200ft (61M)
BSPETFR0500-5	50.0	44.5	75	5	5±1	200ft (61M)

單紗直徑 Yarn diameter (mm): 0.25±0.01

Technical Data

Property	Test Method	Typical Value
Flammability	UL224	VW-1
Abrasion test	ISO 6722	No damage after 6900 times

Standard color : black
Special sizes are available on request.

標準顏色：黑
其他尺寸可依客戶需求另行訂製

●

Cross Reference Number For G-APEX Heat Shrinkable Tubing

	Raychem	SUMITUBE	DSG-Canusa	LG	3M	Alpha
G1	CGPE-105	C	CPX 51	GSHS-1605		
G5	VERSAFIT V2	F32. F2Z	CPX 876	GSHS-1625	CP-221	FIT221V
G5-CB	VERSAFIT V4	F34. F4Z	DERAY ITW	GSHS-1625T		
GA		A				
G5-135	RNF-100	A2. B2	CPX-100	GSHS-1635F	FP-301	FIT221
G5-YG	DCPT 2:1	B2(YG)	CPX 201	GSHS-1635F-YG	GYS	FIT260
G5135-3X	RNF-3000	B2(3X)	CPX 300	GSHS-3635	SFTW-203	FIT321V
AIS	ATUM. DWP-125	W3B2. W3F2	CPA 300	GSHS-3635W	EPS-300	FIT321
AIS-ES	ES-2000	SA2F	SPLICEMELT125	GSHS-4635WS	EPS-4000	FIT421
ACS200	RBK-ILS125					
ATM	MWTM. SST-M	SCD. SCM2	CFM	PMWT	MDT. IMCSN	
ASM-6X	HRHT	SCH	CFHR			FIT621
ANF		IRRAX SCM2			IMCS	
ASM	WCSM.SST		CFW/RHW	PHWT	ITCSN	FIT700
ABS		W3D		GSHS-1625BS		
DR	DR-25	R120	DERAY V25	DRET	PSTH	FIT601
HTK150	RT-375	K2	KYF190	GSHS-1650F	MFP	
KYNAR	RW-175. KYNAR	K	KY175	GSHS-1675	KYNAR	FIT350
VITON	VITON. RW200	FE3. KH200	VT220		VTN200	FIT650
FEP	FEP	FEP			FEP	FIT400
PTFE	TFE	TFE	CTFE250		TFE	FIT500
MTA	MT1000					
MT2/MTE	MT2000					
MTC	MT3000					
MTF	MT-5000/MT5500					
TMS	TMS-SCE					FIT-PRINT
CTMS	TTMS					
HB1	LVIT			LG-BBLV		
HB2	BPTM	SBI300	CBTM	LG-BBHV	BBI	
HB3	BBIT	SBI350	CBTH	LG-BBHT	BBI	
AEC	SSC. ESC		CCAP		ICEC. SKE	FITCAP
AECM	ES CAPS	SA3 CAP	SPLICEMELT CAP 125			
BOOT	Molded parts					BOOTS

Cross Reference Number For G-APEX Heat Shrinkable Tubing

[illegible]

METRIC/INCH CONVERSION CHART

Inches英吋	mm公釐	Inches英吋	mm公釐
1/64	0.40	1/2	12.70
1/32	0.79	33/64	13.10
3/64	1.19	17/32	13.49
1/16	1.59	35/64	13.89
5/64	1.98	9/16	14.29
3/32	2.38	37/64	14.68
7/64	2.78	19/32	15.08
1/8	3.18	39/64	15.48
9/64	3.57	5/8	15.88
5/32	3.97	41/64	16.27
11/64	4.37	21/32	16.67
3/16	4.76	11/16	17.46
13/64	5.16	23/32	18.26
7/32	5.56	3/4	19.05
15/64	5.95	25/32	19.84
1/4	6.35	13/16	20.64
17/64	6.75	7/8	22.23
9/32	7.14	29/32	23.02
19/64	7.54	15/16	23.81
5/16	7.94	61/64	24.21
21/64	8.33	31/32	24.61
11/32	8.73	63/64	25.00
23/64	9.13	1	25.40
3/8	9.53	1-1/4	32.00
25/64	9.92	1-1/2	38.10
13/32	10.32	1-3/4	44.50
27/64	10.72	2	50.80
7/16	11.11	2-1/2	63.50
29/64	11.51	3	76.20
15/32	11.91	3-1/2	88.90
31/64	12.30	4	101.60

Notes