

# LUZI

METALÚRGICA

*Conformando ideas, fijando soluciones*

CALIDAD  
**ISO  
9001**  
EMPRESA CERTIFICADA

SEGMENTO AUTOMOTRIZ - REPUESTO



[www.metalurgicaluzi.com.br](http://www.metalurgicaluzi.com.br)

Operando en el  
mercado de

# FIJADORES POR 30 AÑOS

Actuando en el mercado de elementos de fijación, Luzi optó por ser referencia en la producción de elementos de fijación especiales, de acuerdo con las necesidades de sus clientes. En esta trayectoria, nos afianzamos como sinónimo de calidad, servicio, versatilidad y agilidad, conquistando importantes y reconocidos clientes, que posibilitan el crecimiento de nuestro negocio.

## Conformando ideas, **FIJANDO SOLUCIONES**

El emprendimiento y la búsqueda de nuevos desafíos combinados con las necesidades de nuestros clientes requirieron cambios en toda la empresa. Buscando actuar con fuerza en el mercado automotriz y vial, en 2015 pasamos a componer la lista de productos de la empresa: grapas para resortes, carrocería, suspensión neumática y pernos centrales. Debido a este nuevo segmento de mercado, se desarrolló una nueva planta de fabricación. El resultado de esto fue la certificación ISO 9001:2015, que da fe de la eficiencia del sistema de gestión de calidad.



**30 años**  
de Fundación

**+ de 3 mil**  
Productos  
Registrados

**+ de 120 ton/mes**  
Capacidad  
Productivo

CALIDAD

# COMPROBADA

Nuestros procesos están estrictamente controlados, desde la recepción de materias primas hasta el envío de nuestros productos, el cual se realiza a través de un sistema de código de barras computarizado. Luzi cuenta actualmente con un sistema MES - Manufacturing Execution Systems - donde todos los equipos y procesos son controlados y monitoreados.



El resultado de esto es una mayor competitividad a través de ganancias de productividad y reducción de pérdidas, asegurando así la completa rastreabilidad de los procesos de fabricación. Proceso completo certificado desde 2021 con ISO 9001.



## ALTOS NIVELES DE STOCK

Cuente con Luzi para mejorar su flujo de caja. Además de excelentes condiciones de pago, mantenemos altas reservas de materias primas para que nuestros clientes puedan tener la menor cantidad posible en sus propios stocks. De esta forma, el cliente programa sus compras y recibe la cantidad necesaria en el plazo deseado, de manera segura y ágil.



Tratamiento superficial con excelente resistencia a la corrosión, con expresivos resultados de más de 500 horas en ensayo de salt-spray. El acabado de la superficie negra brillante garantiza que los productos se vean excelentes.



Con más de 30 años de know-how en el suministro de fijadores a importantes fabricantes y un sistema de gestión de calidad certificado, somos capaces de cumplir con los más rigurosos patrones de calidad

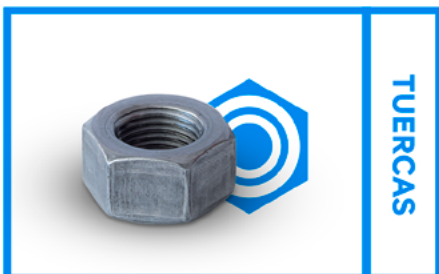
# sobre nuestros PRODUCTOS

Luzy desarrolla y produce artículos para el sector automotriz y partes para la suspensión de vehículos pesados como camiones, ómnibus y furgonetas.

Con el objetivo de entregar productos de alta calidad, Luzy ha desarrollado una línea completa e independiente, destinada a la producción de componentes en este sector. Suministramos a este segmento productos como grapas de resorte, grapas de carrocería, grapas de suspensión neumática, pernos centrales y tuercas.

## Donde se utilizan los PRODUCTOS

Las partes para el segmento automotriz son desarrolladas para promover más seguridad, siendo utilizadas para conectar el chasis al eje de las ruedas en vehículos pesados, tales como: Implementos viales, camiones, ómnibus y camionetas.



## FIJACIÓN CON MÁS CONFIANZA

Referencia en la producción de tornillería especial según las necesidades del cliente.

Con calidad, servicio completo, versatilidad y agilidad, ¡hacemos posible que tu negocio crezca!



## ● ÍNDICE

### **Automotriz Grapas**

Datos técnicos .....	7
1/2" .....	9
9/16" .....	12
5/8" .....	15
3/4" .....	19
7/8" .....	21
M18 .....	26
M20 .....	28
M22 .....	29
M24 .....	31
M30 .....	33
Suspensión Neumática .....	34
Carrocería .....	35

### **Pernos Centrales**

Datos técnicos .....	39
1/2" .....	40
5/16" .....	40
3/8" .....	41
7/16" .....	41
9/16" .....	42
M10 .....	42
M12 .....	43

### **Tuercas Automotrices**

Simple .....	45
Dobles .....	45

### **Implementos de Carretera**

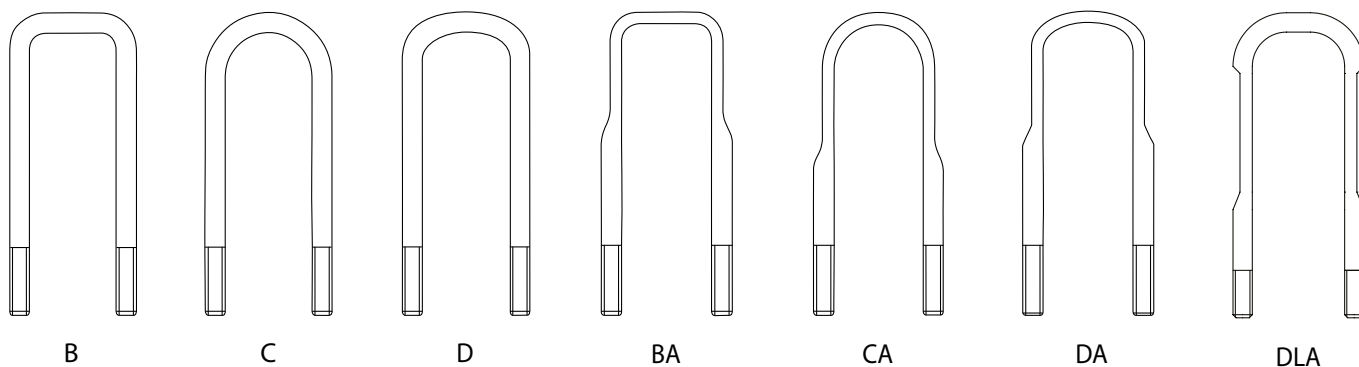
Componentes .....	46
-------------------	----



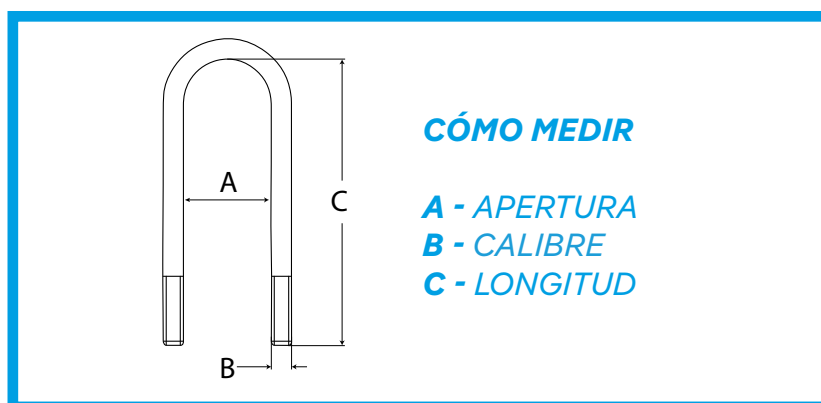
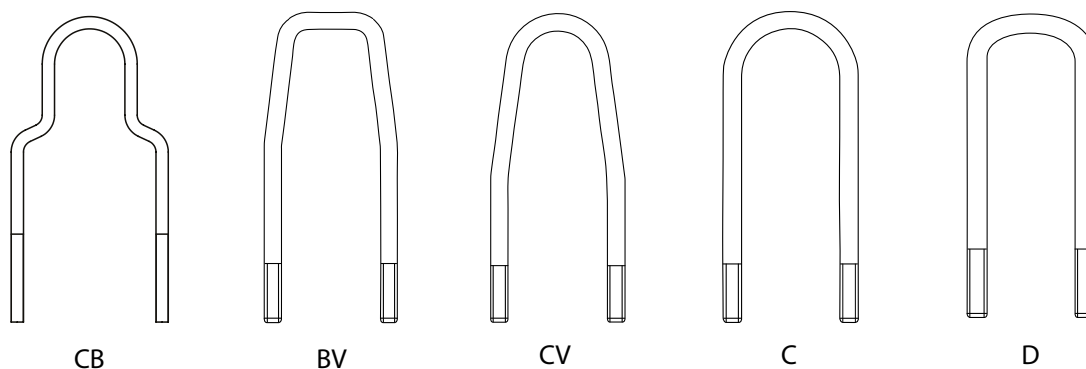
# AUTOMOTRIZ

## Grapas

### GRAPAS DE RESORTE



### GRAPAS DE SUSPENSION NEUMÁTICA



## Tipos de Roscas de Grapas

Línea de Pulgadas			Línea Métrica		
CALIBRE	ROSCA	FIOS/POL	CALIBRE	ROSCA	PASSO
5/16	UNF	24	M18	MB	1,50
3/8	UNF	24	M20	MA	2,50
7/16	UNF	20	M22	MA	2,50
1/2	UNF	20	M24	MB	2,0
9/16	UNF	18	M30	MB	3,50
5/8	UNF	18	-	-	-
5/8 - CARROCERÍA	UNC	11	-	-	-
3/4	UNF	16	-	-	-
1/2 - CARROCERÍA	UNC	13	-	-	-
7/8	UNF	14	-	-	-
1*	UNS	14	-	-	-

## Longitud de Roscas de Grapas

LONGITUD DE LA GRAPA (MM)	LONGITUD DE LA ROSCA (MM)
Hasta 60	25
De 61 a 80	30
De 81 a 100	40
De 101 a 120	50
De 121 a 170	60
Más de 170	76
Grapa 5/8 UNC - Carrocería (todas las longitudes)	76
Grampa 1/2 UNC - Carrocería (todas las longitudes) Grapas	76
M30 - Todos	76

## Embalaje Estándar de Grapas

TIPOS	EMBALAJE (PARTES)
Grapas M30 (todos)	2
Grapa de Suspensión (todos)	2
Otras Grapas	4



# TABLA DE GRAPAS

## por Calibre/Rosca

GRAPAS  
1/2"

CÓDIGO	DESCRIPCIÓN
22.019.264	GR 1/2 X 30 X 120 C 1045
22.019.143	GR 1/2 X 40 X 75 C 1045
22.019.249	GR 1/2 X 40 X 90 C 1045
22.019.193	GR 1/2 X 52 X 50 B 1045
22.019.194	GR 1/2 X 52 X 70 B 1045
22.019.195	GR 1/2 X 52 X 80 B 1045
22.019.261	GR 1/2 X 52 X 80 C 1045
22.019.222	GR 1/2 X 52 X 90 C 1045
22.019.011	GR 1/2 X 52 X 100 B 1045
22.019.135	GR 1/2 X 52 X 100 C 1045
22.019.156	GR 1/2 X 52 X 110 C 1045
22.019.012	GR 1/2 X 52 X 120 B 1045
22.019.124	GR 1/2 X 52 X 120 C 1045
22.019.247	GR 1/2 X 52 X 120 D 1045
22.019.130	GR 1/2 X 52 X 130 B 1045
22.019.223	GR 1/2 X 52 X 130 C 1045
22.019.173	GR 1/2 X 52 X 140 B 1045
22.019.138	GR 1/2 X 52 X 140 C 1045
22.019.209	GR 1/2 X 52 X 150 B 1045
22.019.224	GR 1/2 X 52 X 150 C 1045
22.019.164	GR 1/2 X 52 X 160 B 1045
22.019.213	GR 1/2 X 52 X 160 C 1045
22.019.214	GR 1/2 X 52 X 170 C 1045
22.019.185	GR 1/2 X 52 X 180 B 1045
22.019.065	GR 1/2 X 52 X 190 B 1045
22.019.066	GR 1/2 X 52 X 210 B 1045
22.019.227	GR 1/2 X 52 X 220 B 1045
22.019.228	GR 1/2 X 52 X 240 B 1045
22.019.229	GR 1/2 X 52 X 260 B 1045
22.019.178	GR 1/2 X 55 X 110 C 1045
22.019.179	GR 1/2 X 55 X 120 C 1045
22.019.180	GR 1/2 X 55 X 130 C 1045
22.019.181	GR 1/2 X 55 X 140 C 1045
22.019.182	GR 1/2 X 55 X 150 C 1045
22.019.183	GR 1/2 X 55 X 180 C 1045
22.019.201	GR 1/2 X 58 X 100 B 1045
22.019.250	GR 1/2 X 58 X 100 C 1045
22.019.013	GR 1/2 X 58 X 110 B 1045
22.019.014	GR 1/2 X 58 X 120 B 1045
22.019.028	GR 1/2 X 58 X 120 C 1045
22.019.131	GR 1/2 X 58 X 130 B 1045

CÓDIGO	DESCRIPCIÓN
22.019.015	GR 1/2 X 58 X 140 B 1045
22.019.122	GR 1/2 X 58 X 140 C 1045
22.019.069	GR 1/2 X 58 X 150 C 1045
22.019.076	GR 1/2 X 58 X 160 B 1045
22.019.061	GR 1/2 X 58 X 160 C 1045
22.019.070	GR 1/2 X 58 X 170 C 1045
22.019.016	GR 1/2 X 58 X 180 B 1045
22.019.062	GR 1/2 X 58 X 180 C 1045
22.019.187	GR 1/2 X 58 X 180 D 1045
22.019.017	GR 1/2 X 58 X 185 B 1045
22.019.018	GR 1/2 X 58 X 190 B 1045
22.019.071	GR 1/2 X 58 X 190 C 1045
22.019.019	GR 1/2 X 58 X 200 B 1045
22.019.072	GR 1/2 X 58 X 200 C 1045
22.019.188	GR 1/2 X 58 X 200 D 1045
22.019.020	GR 1/2 X 58 X 210 B 1045
22.019.144	GR 1/2 X 58 X 210 C 1045
22.019.021	GR 1/2 X 58 X 220 B 1045
22.019.189	GR 1/2 X 58 X 220 D 1045
22.019.022	GR 1/2 X 58 X 230 B 1045
22.019.233	GR 1/2 X 58 X 230 D 1045
22.019.023	GR 1/2 X 58 X 240 B 1045
22.019.190	GR 1/2 X 58 X 240 D 1045
22.019.074	GR 1/2 X 58 X 250 B 1045
22.019.024	GR 1/2 X 58 X 260 B 1045
22.019.191	GR 1/2 X 58 X 260 D 1045
22.019.253	GR 1/2 X 58 X 270 B 1045
22.019.025	GR 1/2 X 58 X 280 B 1045
22.019.192	GR 1/2 X 58 X 280 D 1045
22.019.116	GR 1/2 X 58 X 300 B 1045
22.019.203	GR 1/2 X 58 X 300 D 1045
22.019.026	GR 1/2 X 58 X 320 B 1045
22.019.027	GR 1/2 X 58 X 340 B 1045
22.019.085	GR 1/2 X 62 X 60 D 1045
22.019.086	GR 1/2 X 62 X 80 D 1045
22.019.158	GR 1/2 X 62 X 100 C 1045
22.019.157	GR 1/2 X 62 X 100 D 1045
22.019.200	GR 1/2 X 62 X 120 B 1045
22.019.136	GR 1/2 X 62 X 120 C 1045
22.019.001	GR 1/2 X 62 X 120 D 1045
22.019.132	GR 1/2 X 62 X 130 D 1045

CÓDIGO	DESCRIPCIÓN
22.019.167	GR 1/2 X 62 X 140 B 1045
22.019.159	GR 1/2 X 62 X 140 C 1045
22.019.002	GR 1/2 X 62 X 140 D 1045
22.019.133	GR 1/2 X 62 X 150 D 1045
22.019.165	GR 1/2 X 62 X 160 C 1045
22.019.003	GR 1/2 X 62 X 160 D 1045
22.019.212	GR 1/2 X 62 X 180 B 1045
22.019.166	GR 1/2 X 62 X 180 C 1045
22.019.004	GR 1/2 X 62 X 180 D 1045
22.019.168	GR 1/2 X 62 X 200 B 1045
22.019.217	GR 1/2 X 62 X 200 C 1045
22.019.005	GR 1/2 X 62 X 200 D 1045
22.019.202	GR 1/2 X 62 X 210 D 1045
22.019.240	GR 1/2 X 62 X 220 B 1045
22.019.006	GR 1/2 X 62 X 220 D 1045
22.019.220	GR 1/2 X 62 X 230 D 1045
22.019.007	GR 1/2 X 62 X 240 D 1045
22.019.276	GR 1/2 X 62 X 250 B 1045
22.019.257	GR 1/2 X 62 X 260 B 1045
22.019.008	GR 1/2 X 62 X 260 D 1045
22.019.258	GR 1/2 X 62 X 280 B 1045
22.019.009	GR 1/2 X 62 X 280 D 1045
22.019.259	GR 1/2 X 62 X 300 B 1045
22.019.010	GR 1/2 X 62 X 300 D 1045
22.019.099	GR 1/2 X 62 X 320 D 1045
22.019.100	GR 1/2 X 62 X 340 D 1045
22.019.273	GR 1/2 X 62 X 350 D 1045
22.019.221	GR 1/2 X 62 X 380 D 1045
22.019.029	GR 1/2 X 65 X 100 B 1045
22.019.030	GR 1/2 X 65 X 120 B 1045
22.019.101	GR 1/2 X 65 X 120 C 1045
22.019.031	GR 1/2 X 65 X 130 B 1045
22.019.075	GR 1/2 X 65 X 130 C 1045
22.019.032	GR 1/2 X 65 X 140 B 1045
22.019.033	GR 1/2 X 65 X 140 C 1045
22.019.034	GR 1/2 X 65 X 150 C 1045
22.019.129	GR 1/2 X 65 X 160 B 1045
22.019.035	GR 1/2 X 65 X 160 C 1045
22.019.077	GR 1/2 X 65 X 160 D 1045
22.019.073	GR 1/2 X 65 X 165 C 1045
22.019.145	GR 1/2 X 65 X 170 B 1045

CÓDIGO	DESCRIPCIÓN
22.019.089	GR 1/2 X 65 X 170 C 1045
22.019.067	GR 1/2 X 65 X 180 B 1045
22.019.036	GR 1/2 X 65 X 180 C 1045
22.019.078	GR 1/2 X 65 X 180 D 1045
22.019.146	GR 1/2 X 65 X 190 D 1045
22.019.068	GR 1/2 X 65 X 200 B 1045
22.019.037	GR 1/2 X 65 X 200 C 1045
22.019.274	GR 1/2 X 65 X 200 D 1045
22.019.268	GR 1/2 X 65 X 220 B 1045
22.019.038	GR 1/2 X 65 X 220 C 1045
22.019.125	GR 1/2 X 65 X 220 D 1045
22.019.204	GR 1/2 X 65 X 240 D 1045
22.019.205	GR 1/2 X 65 X 260 D 1045
22.019.206	GR 1/2 X 65 X 280 D 1045
22.019.169	GR 1/2 X 68 X 160 C 1045
22.019.170	GR 1/2 X 68 X 180 C 1045
22.019.186	GR 1/2 X 70 X 180 C 1045
22.019.126	GR 1/2 X 72 X 50 B 1045
22.019.238	GR 1/2 X 72 X 55 B 1045
22.019.087	GR 1/2 X 72 X 60 B 1045
22.019.084	GR 1/2 X 72 X 70 B 1045
22.019.123	GR 1/2 X 72 X 80 B 1045
22.019.139	GR 1/2 X 72 X 80 D 1045
22.019.260	GR 1/2 X 72 X 90 B 1045
22.019.127	GR 1/2 X 72 X 100 B 1045
22.019.137	GR 1/2 X 72 X 100 D 1045
22.019.147	GR 1/2 X 72 X 120 B 1045
22.019.106	GR 1/2 X 72 X 120 D 1045
22.019.215	GR 1/2 X 72 X 130 C 1045
22.019.107	GR 1/2 X 72 X 130 D 1045
22.019.148	GR 1/2 X 72 X 140 B 1045
22.019.141	GR 1/2 X 72 X 140 C 1045
22.019.108	GR 1/2 X 72 X 140 D 1045
22.019.109	GR 1/2 X 72 X 150 D 1045
22.019.177	GR 1/2 X 72 X 160 B 1045
22.019.207	GR 1/2 X 72 X 160 C 1045
22.019.110	GR 1/2 X 72 X 160 D 1045
22.019.230	GR 1/2 X 72 X 170 B 1045
22.019.111	GR 1/2 X 72 X 170 D 1045
22.019.161	GR 1/2 X 72 X 180 B 1045
22.019.234	GR 1/2 X 72 X 180 C 1045

CÓDIGO	DESCRIPCIÓN
22.019.098	GR 1/2 X 72 X 180 D 1045
22.019.244	GR 1/2 X 72 X 190 B 1045
22.019.251	GR 1/2 X 72 X 190 C 1045
22.019.112	GR 1/2 X 72 X 190 D 1045
22.019.277	GR 1/2 X 72 X 200 B 1045
22.019.113	GR 1/2 X 72 X 200 D 1045
22.019.265	GR 1/2 X 72 X 210 B 1045
22.019.114	GR 1/2 X 72 X 210 D 1045
22.019.246	GR 1/2 X 72 X 220 B 1045
22.019.262	GR 1/2 X 72 X 220 B 1045
22.019.115	GR 1/2 X 72 X 220 D 1045
22.019.272	GR 1/2 X 72 X 230 D 1045
22.019.248	GR 1/2 X 72 X 260 D 1045
22.019.140	GR 1/2 X 72 X 300 D 1045
22.019.174	GR 1/2 X 72 X 400 D 1045
22.019.218	GR 1/2 X 72 X 600 B 1045
22.019.239	GR 1/2 X 75 X 110 C 1045
22.019.163	GR 1/2 X 75 X 120 C 1045
22.019.039	GR 1/2 X 75 X 125 C 1045
22.019.162	GR 1/2 X 75 X 140 C 1045
22.019.040	GR 1/2 X 75 X 150 C 1045
22.019.041	GR 1/2 X 75 X 160 C 1045
22.019.042	GR 1/2 X 75 X 170 C 1045
22.019.043	GR 1/2 X 75 X 180 C 1045
22.019.044	GR 1/2 X 75 X 200 C 1045
22.019.153	GR 1/2 X 75 X 210 C 1045
22.019.045	GR 1/2 X 75 X 220 C 1045
22.019.046	GR 1/2 X 75 X 240 C 1045
22.019.282	GR 1/2 X 75 X 250 C 1045
22.019.175	GR 1/2 X 75 X 280 C 1045
22.019.281	GR 1/2 X 75 X 295 C 1045
22.019.266	GR 1/2 X 77 X 80 B 1045
22.019.267	GR 1/2 X 77 X 100 B 1045
22.019.151	GR 1/2 X 77 X 140 C 1045
22.019.171	GR 1/2 X 77 X 140 D 1045
22.019.275	GR 1/2 X 77 X 160 B 1045
22.019.152	GR 1/2 X 77 X 160 C 1045
22.019.172	GR 1/2 X 77 X 160 D 1045
22.019.270	GR 1/2 X 77 X 180 B 1045
22.019.196	GR 1/2 X 77 X 180 C 1045
22.019.210	GR 1/2 X 77 X 180 D 1045

CÓDIGO	DESCRIPCIÓN
22.019.225	GR 1/2 X 77 X 190 C 1045
22.019.184	GR 1/2 X 77 X 190 D 1045
22.019.047	GR 1/2 X 77 X 200 B 1045
22.019.048	GR 1/2 X 77 X 220 B 1045
22.019.049	GR 1/2 X 77 X 240 B 1045
22.019.117	GR 1/2 X 77 X 240 C 1045
22.019.245	GR 1/2 X 77 X 300 C 1045
22.019.243	GR 1/2 X 78 X 100 C 1045
22.019.241	GR 1/2 X 78 X 120 C 1045
22.019.242	GR 1/2 X 78 X 140 C 1045
22.019.231	GR 1/2 X 78 X 150 C 1045
22.019.103	GR 1/2 X 78 X 150 D 1045
22.019.235	GR 1/2 X 78 X 160 B 1045
22.019.232	GR 1/2 X 78 X 160 C 1045
22.019.104	GR 1/2 X 78 X 160 D 1045
22.019.105	GR 1/2 X 78 X 170 D 1045
22.019.092	GR 1/2 X 78 X 180 C 1045
22.019.093	GR 1/2 X 78 X 190 C 1045
22.019.094	GR 1/2 X 78 X 200 C 1045
22.019.095	GR 1/2 X 78 X 210 C 1045
22.019.096	GR 1/2 X 78 X 220 C 1045
22.019.097	GR 1/2 X 78 X 230 C 1045
22.019.102	GR 1/2 X 78 X 250 D 1045
22.019.197	GR 1/2 X 78 X 260 C 1045
22.019.236	GR 1/2 X 82 X 80 B 1045
22.019.081	GR 1/2 X 82 X 80 C 1045
22.019.176	GR 1/2 X 82 X 80 D 1045
22.019.082	GR 1/2 X 82 X 100 B 1045
22.019.154	GR 1/2 X 82 X 100 D 1045
22.019.216	GR 1/2 X 82 X 110 B 1045
22.019.079	GR 1/2 X 82 X 120 B 1045
22.019.142	GR 1/2 X 82 X 120 C 1045
22.019.121	GR 1/2 X 82 X 120 D 1045
22.019.155	GR 1/2 X 82 X 130 B 1045
22.019.149	GR 1/2 X 82 X 140 B 1045
22.019.237	GR 1/2 X 82 X 140 C 1045
22.019.120	GR 1/2 X 82 X 140 D 1045
22.019.083	GR 1/2 X 82 X 150 B 1045
22.019.150	GR 1/2 X 82 X 160 B 1045
22.019.118	GR 1/2 X 82 X 160 C 1045
22.019.128	GR 1/2 X 82 X 160 D 1045

# GRAPAS 1/2"

CÓDIGO	DESCRIPCIÓN
22.019.269	GR 1/2 X 82 X 180 B 1045
22.019.063	GR 1/2 X 82 X 180 C 1045
22.019.119	GR 1/2 X 82 X 180 D 1045
22.019.271	GR 1/2 X 82 X 190 C 1045
22.019.059	GR 1/2 X 82 X 200 C 1045
22.019.208	GR 1/2 X 82 X 200 D 1045
22.019.060	GR 1/2 X 82 X 220 C 1045
22.019.255	GR 1/2 X 82 X 220 D 1045
22.019.256	GR 1/2 X 82 X 240 D 1045
22.019.252	GR 1/2 X 82 X 250 B 1045
22.019.279	GR 1/2 X 82 X 250 C 1045
22.019.211	GR 1/2 X 82 X 260 C 1045
22.019.050	GR 1/2 X 85 X 160 C 1045
22.019.051	GR 1/2 X 85 X 175 C 1045
22.019.052	GR 1/2 X 85 X 180 C 1045
22.019.053	GR 1/2 X 85 X 185 C 1045
22.019.054	GR 1/2 X 85 X 190 C 1045
22.019.088	GR 1/2 X 85 X 195 C 1045
22.019.055	GR 1/2 X 85 X 200 C 1045
22.019.056	GR 1/2 X 85 X 205 C 1045
22.019.134	GR 1/2 X 85 X 215 C 1045
22.019.057	GR 1/2 X 85 X 220 C 1045
22.019.058	GR 1/2 X 85 X 225 C 1045
22.019.160	GR 1/2 X 85 X 230 C 1045
22.019.064	GR 1/2 X 85 X 240 C 1045
22.019.198	GR 1/2 X 85 X 260 C 1045
22.019.080	GR 1/2 X 92 X 120 B 1045
22.019.280	GR 1/2 X 92 X 170 B 1045
22.019.226	GR 1/2 X 92 X 200 B 1045
22.019.278	GR 1/2 X 92 X 250 C 1045
22.019.254	GR 1/2 X 92 X 260 B 1045
22.019.263	GR 1/2 X 92 X 320 B 1045
22.019.090	GR 1/2 X 95 X 185 C 1045
22.019.199	GR 1/2 X 95 X 200 C 1045
22.019.091	GR 1/2 X 95 X 205 C 1045
22.019.219	GR 1/2 X 104 X 300 C 1045

# GRAPAS 9/16"

CÓDIGO	DESCRIPCIÓN
22.086.127	GR 9/16 X 52 X 100 B 1045
22.086.128	GR 9/16 X 52 X 110 B 1045
22.086.129	GR 9/16 X 52 X 120 B 1045
22.086.130	GR 9/16 X 52 X 130 B 1045
22.086.131	GR 9/16 X 52 X 140 B 1045
22.086.243	GR 9/16 X 52 X 140 D 1045
22.086.132	GR 9/16 X 52 X 150 B 1045
22.086.133	GR 9/16 X 52 X 160 B 1045
22.086.244	GR 9/16 X 52 X 160 D 1045
22.086.134	GR 9/16 X 52 X 170 B 1045
22.086.135	GR 9/16 X 52 X 180 B 1045
22.086.136	GR 9/16 X 52 X 190 B 1045
22.086.137	GR 9/16 X 52 X 200 B 1045
22.086.225	GR 9/16 X 58 X 160 B 1045
22.086.123	GR 9/16 X 58 X 160 D 1045
22.086.221	GR 9/16 X 58 X 180 B 1045
22.086.091	GR 9/16 X 58 X 180 C 1045
22.086.056	GR 9/16 X 58 X 190 D 1045
22.086.237	GR 9/16 X 58 X 200 B 1045
22.086.092	GR 9/16 X 58 X 200 C 1045
22.086.043	GR 9/16 X 58 X 200 D 1045
22.086.057	GR 9/16 X 58 X 210 D 1045
22.086.073	GR 9/16 X 58 X 220 C 1045
22.086.044	GR 9/16 X 58 X 220 D 1045
22.086.058	GR 9/16 X 58 X 230 D 1045
22.086.093	GR 9/16 X 58 X 240 C 1045
22.086.045	GR 9/16 X 58 X 240 D 1045
22.086.059	GR 9/16 X 58 X 250 D 1045
22.086.060	GR 9/16 X 58 X 260 D 1045
22.086.264	GR 9/16 X 62 X 120 B 1045
22.086.195	GR 9/16 X 62 X 120 D 1045
22.086.022	GR 9/16 X 62 X 140 B 1045
22.086.001	GR 9/16 X 62 X 140 D 1045
22.086.023	GR 9/16 X 62 X 160 B 1045
22.086.199	GR 9/16 X 62 X 160 C 1045
22.086.002	GR 9/16 X 62 X 160 D 1045
22.086.238	GR 9/16 X 62 X 180 B 1045
22.086.197	GR 9/16 X 62 X 180 C 1045
22.086.003	GR 9/16 X 62 X 180 D 1045
22.086.260	GR 9/16 X 62 X 185 B 1045
22.086.261	GR 9/16 X 62 X 200 B 1045

# TABLA DE GRAPAS

## por Calibre/Rosca

GRAPAS  
9/16"

CÓDIGO	DESCRIPCIÓN
22.086.196	GR 9/16 X 62 X 200 C 1045
22.086.004	GR 9/16 X 62 X 200 D 1045
22.086.247	GR 9/16 X 62 X 220 B 1045
22.086.005	GR 9/16 X 62 X 220 D 1045
22.086.087	GR 9/16 X 62 X 230 D 1045
22.086.006	GR 9/16 X 62 X 240 D 1045
22.086.007	GR 9/16 X 62 X 260 D 1045
22.086.117	GR 9/16 X 62 X 270 D 1045
22.086.210	GR 9/16 X 62 X 280 C 1045
22.086.008	GR 9/16 X 62 X 280 D 1045
22.086.088	GR 9/16 X 62 X 290 D 1045
22.086.211	GR 9/16 X 62 X 300 C 1045
22.086.009	GR 9/16 X 62 X 300 D 1045
22.086.189	GR 9/16 X 62 X 310 D 1045
22.086.010	GR 9/16 X 62 X 320 D 1045
22.086.212	GR 9/16 X 62 X 340 C 1045
22.086.011	GR 9/16 X 62 X 340 D 1045
22.086.012	GR 9/16 X 62 X 360 D 1045
22.086.085	GR 9/16 X 62 X 380 D 1045
22.086.086	GR 9/16 X 62 X 400 D 1045
22.086.165	GR 9/16 X 62 X 420 D 1045
22.086.230	GR 9/16 X 65 X 120 D 1045
22.086.024	GR 9/16 X 65 X 140 B 1045
22.086.180	GR 9/16 X 65 X 140 C 1045
22.086.099	GR 9/16 X 65 X 140 D 1045
22.086.025	GR 9/16 X 65 X 160 B 1045
22.086.181	GR 9/16 X 65 X 160 C 1045
22.086.079	GR 9/16 X 65 X 160 D 1045
22.086.026	GR 9/16 X 65 X 180 B 1045
22.086.182	GR 9/16 X 65 X 180 C 1045
22.086.080	GR 9/16 X 65 X 180 D 1045
22.086.027	GR 9/16 X 65 X 200 B 1045
22.086.110	GR 9/16 X 65 X 200 D 1045
22.086.198	GR 9/16 X 65 X 220 B 1045
22.086.147	GR 9/16 X 65 X 220 D 1045
22.086.248	GR 9/16 X 65 X 240 D 1045
22.086.173	GR 9/16 X 65 X 245 C 1045
22.086.172	GR 9/16 X 65 X 260 B 1045
22.086.219	GR 9/16 X 65 X 260 D 1045
22.086.184	GR 9/16 X 65 X 280 D 1045
22.086.054	GR 9/16 X 65 X 300 B 1045

CÓDIGO	DESCRIPCIÓN
22.086.208	GR 9/16 X 65 X 300 D 1045
22.086.055	GR 9/16 X 65 X 320 B 1045
22.086.209	GR 9/16 X 65 X 320 D 1045
22.086.215	GR 9/16 X 65 X 360 D 1045
22.086.216	GR 9/16 X 65 X 380 D 1045
22.086.118	GR 9/16 X 65 X 400 D 1045
22.086.119	GR 9/16 X 65 X 420 D 1045
22.086.234	GR 9/16 X 68 X 140 B 1045
22.086.254	GR 9/16 X 68 X 140 C 1045
22.086.235	GR 9/16 X 68 X 160 B 1045
22.086.253	GR 9/16 X 68 X 160 C 1045
22.086.236	GR 9/16 X 68 X 180 B 1045
22.086.255	GR 9/16 X 68 X 200 B 1045
22.086.193	GR 9/16 X 72 X 80 B 1045
22.086.194	GR 9/16 X 72 X 100 B 1045
22.086.164	GR 9/16 X 72 X 100 D 1045
22.086.201	GR 9/16 X 72 X 120 B 1045
22.086.013	GR 9/16 X 72 X 120 D 1045
22.086.053	GR 9/16 X 72 X 130 D 1045
22.086.179	GR 9/16 X 72 X 140 B 1045
22.086.162	GR 9/16 X 72 X 140 C 1045
22.086.014	GR 9/16 X 72 X 140 D 1045
22.086.166	GR 9/16 X 72 X 150 D 1045
22.086.178	GR 9/16 X 72 X 160 B 1045
22.086.074	GR 9/16 X 72 X 160 C 1045
22.086.015	GR 9/16 X 72 X 160 D 1045
22.086.016	GR 9/16 X 72 X 170 D 1045
22.086.188	GR 9/16 X 72 X 180 B 1045
22.086.094	GR 9/16 X 72 X 180 C 1045
22.086.017	GR 9/16 X 72 X 180 D 1045
22.086.018	GR 9/16 X 72 X 190 D 1045
22.086.089	GR 9/16 X 72 X 200 C 1045
22.086.019	GR 9/16 X 72 X 200 D 1045
22.086.258	GR 9/16 X 72 X 205 B 1045
22.086.020	GR 9/16 X 72 X 210 D 1045
22.086.090	GR 9/16 X 72 X 220 C 1045
22.086.021	GR 9/16 X 72 X 220 D 1045
22.086.259	GR 9/16 X 72 X 230 B 1045
22.086.149	GR 9/16 X 72 X 240 C 1045
22.086.076	GR 9/16 X 72 X 240 D 1045
22.086.150	GR 9/16 X 72 X 260 C 1045

CÓDIGO	DESCRIPCIÓN
22.086.157	GR 9/16 X 72 X 260 D 1045
22.086.158	GR 9/16 X 72 X 280 D 1045
22.086.169	GR 9/16 X 72 X 300 D 1045
22.086.161	GR 9/16 X 72 X 320 D 1045
22.086.231	GR 9/16 X 72 X 340 D 1045
22.086.190	GR 9/16 X 72 X 380 D 1045
22.086.257	GR 9/16 X 72 X 390 D 1045
22.086.191	GR 9/16 X 72 X 400 D 1045
22.086.232	GR 9/16 X 72 X 420 D 1045
22.086.100	GR 9/16 X 75 X 120 C 1045
22.086.101	GR 9/16 X 75 X 130 C 1045
22.086.102	GR 9/16 X 75 X 140 C 1045
22.086.120	GR 9/16 X 75 X 140 D 1045
22.086.103	GR 9/16 X 75 X 150 C 1045
22.086.104	GR 9/16 X 75 X 160 C 1045
22.086.121	GR 9/16 X 75 X 160 D 1045
22.086.105	GR 9/16 X 75 X 180 C 1045
22.086.122	GR 9/16 X 75 X 180 D 1045
22.086.106	GR 9/16 X 75 X 200 C 1045
22.086.107	GR 9/16 X 75 X 220 C 1045
22.086.108	GR 9/16 X 75 X 240 C 1045
22.086.265	GR 9/16 X 75 X 300 D 1045
22.086.256	GR 9/16 X 75 X 320 C 1045
22.086.159	GR 9/16 X 77 X 120 D 1045
22.086.218	GR 9/16 X 77 X 130 D 1045
22.086.138	GR 9/16 X 77 X 140 B 1045
22.086.046	GR 9/16 X 77 X 140 D 1045
22.086.061	GR 9/16 X 77 X 150 D 1045
22.086.139	GR 9/16 X 77 X 160 B 1045
22.086.095	GR 9/16 X 77 X 160 C 1045
22.086.047	GR 9/16 X 77 X 160 D 1045
22.086.202	GR 9/16 X 77 X 170 C 1045
22.086.062	GR 9/16 X 77 X 170 D 1045
22.086.140	GR 9/16 X 77 X 180 B 1045
22.086.077	GR 9/16 X 77 X 180 C 1045
22.086.048	GR 9/16 X 77 X 180 D 1045
22.086.063	GR 9/16 X 77 X 190 D 1045
22.086.141	GR 9/16 X 77 X 200 B 1045
22.086.075	GR 9/16 X 77 X 200 C 1045
22.086.049	GR 9/16 X 77 X 200 D 1045
22.086.064	GR 9/16 X 77 X 210 D 1045

CÓDIGO	DESCRIPCIÓN
22.086.142	GR 9/16 X 77 X 220 B 1045
22.086.078	GR 9/16 X 77 X 220 C 1045
22.086.050	GR 9/16 X 77 X 220 D 1045
22.086.174	GR 9/16 X 77 X 230 B 1045
22.086.065	GR 9/16 X 77 X 230 D 1045
22.086.222	GR 9/16 X 77 X 240 B 1045
22.086.214	GR 9/16 X 77 X 240 C 1045
22.086.152	GR 9/16 X 77 X 240 D 1045
22.086.186	GR 9/16 X 77 X 250 D 1045
22.086.246	GR 9/16 X 77 X 260 D 1045
22.086.262	GR 9/16 X 77 X 280 D 1045
22.086.171	GR 9/16 X 77 X 300 C 1045
22.086.170	GR 9/16 X 77 X 320 C 1045
22.086.143	GR 9/16 X 78 X 160 C 1045
22.086.144	GR 9/16 X 78 X 170 C 1045
22.086.145	GR 9/16 X 78 X 180 C 1045
22.086.146	GR 9/16 X 78 X 200 C 1045
22.086.124	GR 9/16 X 78 X 220 C 1045
22.086.213	GR 9/16 X 78 X 240 C 1045
22.086.109	GR 9/16 X 82 X 80 B 1045
22.086.187	GR 9/16 X 82 X 80 D 1045
22.086.082	GR 9/16 X 82 X 100 B 1045
22.086.083	GR 9/16 X 82 X 120 B 1045
22.086.227	GR 9/16 X 82 X 120 C 1045
22.086.183	GR 9/16 X 82 X 120 D 1045
22.086.084	GR 9/16 X 82 X 140 B 1045
22.086.081	GR 9/16 X 82 X 140 C 1045
22.086.066	GR 9/16 X 82 X 140 D 1045
22.086.251	GR 9/16 X 82 X 150 D 1045
22.086.148	GR 9/16 X 82 X 160 B 1045
22.086.096	GR 9/16 X 82 X 160 C 1045
22.086.067	GR 9/16 X 82 X 160 D 1045
22.086.223	GR 9/16 X 82 X 170 D 1045
22.086.167	GR 9/16 X 82 X 180 B 1045
22.086.097	GR 9/16 X 82 X 180 C 1045
22.086.068	GR 9/16 X 82 X 180 D 1045
22.086.069	GR 9/16 X 82 X 190 D 1045
22.086.168	GR 9/16 X 82 X 200 B 1045
22.086.051	GR 9/16 X 82 X 200 C 1045
22.086.070	GR 9/16 X 82 X 200 D 1045
22.086.071	GR 9/16 X 82 X 210 D 1045

# GRAPAS 9/16"

CÓDIGO	DESCRIPCIÓN
22.086.226	GR 9/16 X 82 X 220 B 1045
22.086.052	GR 9/16 X 82 X 220 C 1045
22.086.072	GR 9/16 X 82 X 220 D 1045
22.086.163	GR 9/16 X 82 X 235 C 1045
22.086.098	GR 9/16 X 82 X 240 C 1045
22.086.125	GR 9/16 X 82 X 240 D 1045
22.086.263	GR 9/16 X 82 X 260 C 1045
22.086.126	GR 9/16 X 82 X 260 D 1045
22.086.176	GR 9/16 X 82 X 280 C 1045
22.086.153	GR 9/16 X 82 X 280 D 1045
22.086.154	GR 9/16 X 82 X 300 D 1045
22.086.155	GR 9/16 X 82 X 320 D 1045
22.086.156	GR 9/16 X 82 X 340 D 1045
22.086.229	GR 9/16 X 82 X 360 D 1045
22.086.217	GR 9/16 X 82 X 420 D 1045
22.086.177	GR 9/16 X 85 X 140 C 1045
22.086.205	GR 9/16 X 85 X 140 D 1045
22.086.028	GR 9/16 X 85 X 160 C 1045
22.086.206	GR 9/16 X 85 X 160 D 1045
22.086.029	GR 9/16 X 85 X 170 C 1045
22.086.030	GR 9/16 X 85 X 175 C 1045
22.086.111	GR 9/16 X 85 X 175 D 1045
22.086.031	GR 9/16 X 85 X 180 C 1045
22.086.207	GR 9/16 X 85 X 180 D 1045
22.086.032	GR 9/16 X 85 X 185 C 1045
22.086.033	GR 9/16 X 85 X 195 C 1045
22.086.112	GR 9/16 X 85 X 195 D 1045
22.086.192	GR 9/16 X 85 X 200 B 1045
22.086.034	GR 9/16 X 85 X 200 C 1045
22.086.113	GR 9/16 X 85 X 200 D 1045
22.086.035	GR 9/16 X 85 X 205 C 1045
22.086.114	GR 9/16 X 85 X 205 D 1045
22.086.185	GR 9/16 X 85 X 210 C 1045
22.086.115	GR 9/16 X 85 X 210 D 1045
22.086.036	GR 9/16 X 85 X 215 C 1045
22.086.037	GR 9/16 X 85 X 220 C 1045
22.086.116	GR 9/16 X 85 X 220 D 1045
22.086.038	GR 9/16 X 85 X 225 C 1045
22.086.200	GR 9/16 X 85 X 230 C 1045
22.086.039	GR 9/16 X 85 X 235 C 1045
22.086.040	GR 9/16 X 85 X 240 C 1045

CÓDIGO	DESCRIPCIÓN
22.086.160	GR 9/16 X 85 X 240 D 1045
22.086.041	GR 9/16 X 85 X 245 C 1045
22.086.042	GR 9/16 X 85 X 260 C 1045
22.086.204	GR 9/16 X 85 X 280 C 1045
22.086.240	GR 9/16 X 85 X 300 C 1045
22.086.241	GR 9/16 X 85 X 320 C 1045
22.086.242	GR 9/16 X 85 X 340 C 1045
22.086.151	GR 9/16 X 92 X 140 C 1045
22.086.249	GR 9/16 X 92 X 220 B 1045
22.086.250	GR 9/16 X 92 X 240 B 1045
22.086.175	GR 9/16 X 92 X 260 D 1045
22.086.203	GR 9/16 X 102 X 80 B 1045
22.086.224	GR 9/16 X 102 X 220 B 1045
22.086.233	GR 9/16 X 110 X 95 B 1045

# GRAPAS 5/8"

CÓDIGO	DESCRIPCIÓN
22.070.241	GR 5/8 X 58 X 140 B 1045
22.070.242	GR 5/8 X 58 X 160 B 1045
22.070.143	GR 5/8 X 58 X 260 B 1045
22.070.144	GR 5/8 X 58 X 280 B 1045
22.070.145	GR 5/8 X 58 X 300 B 1045
22.070.146	GR 5/8 X 58 X 320 B 1045
22.070.147	GR 5/8 X 58 X 340 B 1045
22.070.148	GR 5/8 X 58 X 360 B 1045
22.070.149	GR 5/8 X 58 X 380 B 1045
22.070.150	GR 5/8 X 58 X 400 B 1045
22.070.196	GR 5/8 X 62 X 120 D 1045
22.070.210	GR 5/8 X 62 X 130 B 1045
22.070.211	GR 5/8 X 62 X 140 B 1045
22.070.212	GR 5/8 X 62 X 160 B 1045
22.070.120	GR 5/8 X 62 X 160 D 1045
22.070.213	GR 5/8 X 62 X 180 B 1045

CÓDIGO	DESCRIPCIÓN
22.070.121	GR 5/8 X 62 X 180 D 1045
22.070.239	GR 5/8 X 62 X 200 B 1045
22.070.122	GR 5/8 X 62 X 200 D 1045
22.070.123	GR 5/8 X 62 X 220 D 1045
22.070.124	GR 5/8 X 62 X 240 D 1045
22.070.232	GR 5/8 X 62 X 380 D 1045
22.070.172	GR 5/8 X 62 X 400 D 1045
22.070.251	GR 5/8 X 65 X 120 B 1045
22.070.015	GR 5/8 X 65 X 140 B 1045
22.070.166	GR 5/8 X 65 X 140 D 1045
22.070.016	GR 5/8 X 65 X 150 B 1045
22.070.017	GR 5/8 X 65 X 160 B 1045
22.070.018	GR 5/8 X 65 X 180 B 1045
22.070.162	GR 5/8 X 65 X 180 D 1045
22.070.019	GR 5/8 X 65 X 200 B 1045
22.070.163	GR 5/8 X 65 X 200 D 1045
22.070.020	GR 5/8 X 65 X 210 B 1045
22.070.021	GR 5/8 X 65 X 220 B 1045
22.070.170	GR 5/8 X 65 X 220 D 1045
22.070.022	GR 5/8 X 65 X 230 B 1045
22.070.023	GR 5/8 X 65 X 240 B 1045
22.070.167	GR 5/8 X 65 X 240 D 1045
22.070.240	GR 5/8 X 65 X 260 B 1045
22.070.256	GR 5/8 X 65 X 260 D 1045
22.070.263	GR 5/8 X 65 X 280 B 1045
22.070.171	GR 5/8 X 65 X 280 D 1045
22.070.024	GR 5/8 X 65 X 300 B 1045
22.070.191	GR 5/8 X 65 X 300 D 1045
22.070.025	GR 5/8 X 65 X 320 B 1045
22.070.135	GR 5/8 X 65 X 320 D 1045
22.070.195	GR 5/8 X 65 X 330 B 1045
22.070.026	GR 5/8 X 65 X 340 B 1045
22.070.136	GR 5/8 X 65 X 340 D 1045
22.070.027	GR 5/8 X 65 X 350 B 1045
22.070.028	GR 5/8 X 65 X 360 B 1045
22.070.137	GR 5/8 X 65 X 360 D 1045
22.070.029	GR 5/8 X 65 X 370 B 1045
22.070.030	GR 5/8 X 65 X 380 B 1045
22.070.138	GR 5/8 X 65 X 380 D 1045
22.070.031	GR 5/8 X 65 X 400 B 1045
22.070.130	GR 5/8 X 65 X 400 D 1045

CÓDIGO	DESCRIPCIÓN
22.070.032	GR 5/8 X 65 X 420 B 1045
22.070.139	GR 5/8 X 65 X 420 D 1045
22.070.161	GR 5/8 X 65 X 440 B 1045
22.070.169	GR 5/8 X 65 X 440 D 1045
22.070.173	GR 5/8 X 65 X 460 B 1045
22.070.186	GR 5/8 X 65 X 460 D 1045
22.070.192	GR 5/8 X 65 X 480 D 1045
22.070.193	GR 5/8 X 65 X 500 D 1045
22.070.194	GR 5/8 X 65 X 520 D 1045
22.070.243	GR 5/8 X 72 X 140 B 1045
22.070.230	GR 5/8 X 72 X 140 D 1045
22.070.203	GR 5/8 X 72 X 160 B 1045
22.070.001	GR 5/8 X 72 X 160 D 1045
22.070.204	GR 5/8 X 72 X 180 B 1045
22.070.002	GR 5/8 X 72 X 180 D 1045
22.070.223	GR 5/8 X 72 X 200 B 1045
22.070.003	GR 5/8 X 72 X 200 D 1045
22.070.004	GR 5/8 X 72 X 210 D 1045
22.070.205	GR 5/8 X 72 X 220 B 1045
22.070.005	GR 5/8 X 72 X 220 D 1045
22.070.006	GR 5/8 X 72 X 230 D 1045
22.070.206	GR 5/8 X 72 X 240 B 1045
22.070.007	GR 5/8 X 72 X 240 D 1045
22.070.231	GR 5/8 X 72 X 260 B 1045
22.070.008	GR 5/8 X 72 X 260 D 1045
22.070.074	GR 5/8 X 72 X 270 D 1045
22.070.207	GR 5/8 X 72 X 280 B 1045
22.070.009	GR 5/8 X 72 X 280 D 1045
22.070.188	GR 5/8 X 72 X 290 D 1045
22.070.224	GR 5/8 X 72 X 300 B 1045
22.070.010	GR 5/8 X 72 X 300 D 1045
22.070.208	GR 5/8 X 72 X 320 B 1045
22.070.011	GR 5/8 X 72 X 320 D 1045
22.070.209	GR 5/8 X 72 X 340 B 1045
22.070.012	GR 5/8 X 72 X 340 D 1045
22.070.013	GR 5/8 X 72 X 360 D 1045
22.070.014	GR 5/8 X 72 X 380 D 1045
22.070.189	GR 5/8 X 72 X 400 B 1045
22.070.080	GR 5/8 X 72 X 400 D 1045
22.070.140	GR 5/8 X 72 X 420 D 1045
22.070.141	GR 5/8 X 72 X 440 D 1045



CÓDIGO	DESCRIPCIÓN
22.070.175	GR 5/8 X 72 X 460 D 1045
22.070.176	GR 5/8 X 72 X 480 D 1045
22.070.177	GR 5/8 X 72 X 500 D 1045
22.070.181	GR 5/8 X 72 X 520 D 1045
22.070.255	GR 5/8 X 77 X 160 B 1045
22.070.033	GR 5/8 X 77 X 160 D 1045
22.070.125	GR 5/8 X 77 X 180 C 1045
22.070.034	GR 5/8 X 77 X 180 D 1045
22.070.126	GR 5/8 X 77 X 190 C 1045
22.070.174	GR 5/8 X 77 X 190 D 1045
22.070.225	GR 5/8 X 77 X 200 B 1045
22.070.127	GR 5/8 X 77 X 200 C 1045
22.070.035	GR 5/8 X 77 X 200 D 1045
22.070.128	GR 5/8 X 77 X 210 C 1045
22.070.036	GR 5/8 X 77 X 210 D 1045
22.070.226	GR 5/8 X 77 X 220 B 1045
22.070.129	GR 5/8 X 77 X 220 C 1045
22.070.037	GR 5/8 X 77 X 220 D 1045
22.070.038	GR 5/8 X 77 X 230 D 1045
22.070.227	GR 5/8 X 77 X 240 B 1045
22.070.039	GR 5/8 X 77 X 240 D 1045
22.070.198	GR 5/8 X 77 X 250 D 1045
22.070.228	GR 5/8 X 77 X 260 B 1045
22.070.040	GR 5/8 X 77 X 260 D 1045
22.070.258	GR 5/8 X 77 X 280 D 1045
22.070.246	GR 5/8 X 77 X 320 D 1045
22.070.264	GR 5/8 X 77 X 360 D 1045
22.070.259	GR 5/8 X 77 X 380 D 1045
22.070.260	GR 5/8 X 77 X 400 D 1045
22.070.220	GR 5/8 X 82 X 110 B 1045
22.070.221	GR 5/8 X 82 X 120 B 1045
22.070.197	GR 5/8 X 82 X 120 D 1045
22.070.222	GR 5/8 X 82 X 140 B 1045
22.070.202	GR 5/8 X 82 X 160 D 1045
22.070.168	GR 5/8 X 82 X 170 C 1045
22.070.079	GR 5/8 X 82 X 180 D 1045
22.070.041	GR 5/8 X 82 X 200 D 1045
22.070.082	GR 5/8 X 82 X 220 C 1045
22.070.075	GR 5/8 X 82 X 220 D 1045
22.070.083	GR 5/8 X 82 X 240 C 1045
22.070.042	GR 5/8 X 82 X 240 D 1045

CÓDIGO	DESCRIPCIÓN
22.070.043	GR 5/8 X 82 X 250 D 1045
22.070.084	GR 5/8 X 82 X 260 C 1045
22.070.044	GR 5/8 X 82 X 260 D 1045
22.070.045	GR 5/8 X 82 X 270 D 1045
22.070.085	GR 5/8 X 82 X 280 C 1045
22.070.046	GR 5/8 X 82 X 280 D 1045
22.070.047	GR 5/8 X 82 X 290 D 1045
22.070.086	GR 5/8 X 82 X 300 C 1045
22.070.048	GR 5/8 X 82 X 300 D 1045
22.070.049	GR 5/8 X 82 X 310 D 1045
22.070.087	GR 5/8 X 82 X 320 C 1045
22.070.050	GR 5/8 X 82 X 320 D 1045
22.070.051	GR 5/8 X 82 X 330 D 1045
22.070.118	GR 5/8 X 82 X 340 C 1045
22.070.052	GR 5/8 X 82 X 340 D 1045
22.070.053	GR 5/8 X 82 X 350 D 1045
22.070.119	GR 5/8 X 82 X 360 C 1045
22.070.054	GR 5/8 X 82 X 360 D 1045
22.070.055	GR 5/8 X 82 X 370 D 1045
22.070.056	GR 5/8 X 82 X 380 D 1045
22.070.057	GR 5/8 X 82 X 390 D 1045
22.070.245	GR 5/8 X 82 X 400 B 1045
22.070.058	GR 5/8 X 82 X 400 D 1045
22.070.059	GR 5/8 X 82 X 410 D 1045
22.070.060	GR 5/8 X 82 X 420 D 1045
22.070.061	GR 5/8 X 82 X 430 D 1045
22.070.062	GR 5/8 X 82 X 440 D 1045
22.070.063	GR 5/8 X 82 X 450 D 1045
22.070.064	GR 5/8 X 82 X 460 D 1045
22.070.065	GR 5/8 X 82 X 470 D 1045
22.070.066	GR 5/8 X 82 X 480 D 1045
22.070.067	GR 5/8 X 82 X 490 D 1045
22.070.068	GR 5/8 X 82 X 500 D 1045
22.070.069	GR 5/8 X 82 X 510 D 1045
22.070.070	GR 5/8 X 82 X 520 D 1045
22.070.071	GR 5/8 X 82 X 530 D 1045
22.070.072	GR 5/8 X 82 X 540 D 1045
22.070.073	GR 5/8 X 82 X 550 D 1045
22.070.131	GR 5/8 X 82 X 560 D 1045
22.070.219	GR 5/8 X 82 X 600 D 1045
22.070.233	GR 5/8 X 85 X 140 D 1045

CÓDIGO	DESCRIPCIÓN
22.070.076	GR 5/8 X 92 X 180 D 1045
22.070.088	GR 5/8 X 92 X 200 C 1045
22.070.091	GR 5/8 X 92 X 200 D 1045
22.070.092	GR 5/8 X 92 X 210 D 1045
22.070.089	GR 5/8 X 92 X 220 C 1045
22.070.093	GR 5/8 X 92 X 220 D 1045
22.070.094	GR 5/8 X 92 X 230 D 1045
22.070.090	GR 5/8 X 92 X 240 C 1045
22.070.095	GR 5/8 X 92 X 240 D 1045
22.070.115	GR 5/8 X 92 X 250 C 1045
22.070.096	GR 5/8 X 92 X 250 D 1045
22.070.116	GR 5/8 X 92 X 260 C 1045
22.070.097	GR 5/8 X 92 X 260 D 1045
22.070.117	GR 5/8 X 92 X 270 C 1045
22.070.098	GR 5/8 X 92 X 270 D 1045
22.070.164	GR 5/8 X 92 X 280 C 1045
22.070.099	GR 5/8 X 92 X 280 D 1045
22.070.100	GR 5/8 X 92 X 290 D 1045
22.070.185	GR 5/8 X 92 X 300 C 1045
22.070.101	GR 5/8 X 92 X 300 D 1045
22.070.102	GR 5/8 X 92 X 310 D 1045
22.070.103	GR 5/8 X 92 X 320 D 1045
22.070.104	GR 5/8 X 92 X 330 D 1045
22.070.229	GR 5/8 X 92 X 335 C 1045
22.070.105	GR 5/8 X 92 X 340 D 1045
22.070.106	GR 5/8 X 92 X 350 D 1045
22.070.107	GR 5/8 X 92 X 360 D 1045
22.070.081	GR 5/8 X 92 X 370 D 1045
22.070.108	GR 5/8 X 92 X 380 D 1045
22.070.109	GR 5/8 X 92 X 390 D 1045
22.070.110	GR 5/8 X 92 X 400 D 1045
22.070.111	GR 5/8 X 92 X 410 D 1045
22.070.112	GR 5/8 X 92 X 420 D 1045
22.070.113	GR 5/8 X 92 X 430 D 1045
22.070.114	GR 5/8 X 92 X 440 D 1045
22.070.132	GR 5/8 X 92 X 460 D 1045
22.070.133	GR 5/8 X 92 X 480 D 1045
22.070.134	GR 5/8 X 92 X 500 D 1045
22.070.248	GR 5/8 X 92 X 520 D 1045
22.070.249	GR 5/8 X 92 X 560 D 1045
22.070.165	GR 5/8 X 95 X 210 C 1045

CÓDIGO	DESCRIPCIÓN
22.070.182	GR 5/8 X 95 X 220 C 1045
22.070.190	GR 5/8 X 95 X 230 C 1045
22.070.183	GR 5/8 X 95 X 240 C 1045
22.070.184	GR 5/8 X 95 X 260 C 1045
22.070.179	GR 5/8 X 95 X 320 C 1045
22.070.180	GR 5/8 X 95 X 340 C 1045
22.070.257	GR 5/8 X 102 X 80 B 1045
22.070.247	GR 5/8 X 102 X 140 D 1045
22.070.151	GR 5/8 X 102 X 220 D 1045
22.070.152	GR 5/8 X 102 X 230 D 1045
22.070.214	GR 5/8 X 102 X 240 B 1045
22.070.153	GR 5/8 X 102 X 240 D 1045
22.070.154	GR 5/8 X 102 X 250 D 1045
22.070.178	GR 5/8 X 102 X 260 C 1045
22.070.155	GR 5/8 X 102 X 260 D 1045
22.070.244	GR 5/8 X 102 X 280 C 1045
22.070.156	GR 5/8 X 102 X 280 D 1045
22.070.157	GR 5/8 X 102 X 300 D 1045
22.070.252	GR 5/8 X 102 X 320 C 1045
22.070.158	GR 5/8 X 102 X 320 D 1045
22.070.253	GR 5/8 X 102 X 340 C 1045
22.070.254	GR 5/8 X 102 X 360 C 1045
22.070.215	GR 5/8 X 102 X 500 D 1045
22.070.216	GR 5/8 X 102 X 520 D 1045
22.070.217	GR 5/8 X 102 X 540 D 1045
22.070.218	GR 5/8 X 102 X 560 D 1045
22.070.236	GR 5/8 X 105 X 240 C 1045
22.070.235	GR 5/8 X 105 X 250 C 1045
22.070.237	GR 5/8 X 105 X 260 C 1045
22.070.238	GR 5/8 X 105 X 280 C 1045
22.070.159	GR 5/8 X 110 X 220 C 1045
22.070.160	GR 5/8 X 110 X 240 C 1045
22.070.142	GR 5/8 X 110 X 250 C 1045
22.070.077	GR 5/8 X 110 X 260 C 1045
22.070.078	GR 5/8 X 110 X 280 C 1045
22.070.250	GR 5/8 X 110 X 300 C 1045
22.070.199	GR 5/8 X 130 X 280 D 1045
22.070.200	GR 5/8 X 130 X 300 D 1045
22.070.201	GR 5/8 X 130 X 320 D 1045
22.070.234	GR 5/8 X 130 X 380 D 1045
22.070.187	GR 5/8 X 140 X 320 D 1045

CÓDIGO	DESCRIPCIÓN
22.080.183	GR 3/4 X 65 X 220 D 1045
22.080.152	GR 3/4 X 65 X 460 D 1045
22.080.212	GR 3/4 X 72 X 180 D 1045
22.080.168	GR 3/4 X 72 X 200 D 1045
22.080.167	GR 3/4 X 72 X 220 D 1045
22.080.169	GR 3/4 X 72 X 240 D 1045
22.080.025	GR 3/4 X 77 X 360 D 1045
22.080.161	GR 3/4 X 77 X 380 B 1045
22.080.172	GR 3/4 X 77 X 380 C 1045
22.080.026	GR 3/4 X 77 X 380 D 1045
22.080.159	GR 3/4 X 77 X 400 B 1045
22.080.027	GR 3/4 X 77 X 400 D 1045
22.080.162	GR 3/4 X 77 X 440 B 1045
22.080.041	GR 3/4 X 77 X 460 D 1045
22.080.042	GR 3/4 X 77 X 480 D 1045
22.080.043	GR 3/4 X 77 X 500 D 1045
22.080.044	GR 3/4 X 77 X 520 D 1045
22.080.170	GR 3/4 X 77 X 540 D 1045
22.080.171	GR 3/4 X 77 X 600 D 1045
22.080.187	GR 3/4 X 82 X 140 D 1045
22.080.182	GR 3/4 X 82 X 160 D 1045
22.080.001	GR 3/4 X 82 X 180 D 1045
22.080.002	GR 3/4 X 82 X 200 D 1045
22.080.116	GR 3/4 X 82 X 200 DA 1045
22.080.173	GR 3/4 X 82 X 210 D 1045
22.080.003	GR 3/4 X 82 X 220 D 1045
22.080.117	GR 3/4 X 82 X 220 DA 1045
22.080.039	GR 3/4 X 82 X 230 D 1045
22.080.004	GR 3/4 X 82 X 240 D 1045
22.080.111	GR 3/4 X 82 X 240 DA 1045
22.080.005	GR 3/4 X 82 X 250 D 1045
22.080.006	GR 3/4 X 82 X 260 D 1045
22.080.118	GR 3/4 X 82 X 260 DA 1045
22.080.040	GR 3/4 X 82 X 270 D 1045
22.080.007	GR 3/4 X 82 X 280 D 1045
22.080.119	GR 3/4 X 82 X 280 DA 1045
22.080.174	GR 3/4 X 82 X 290 D 1045
22.080.008	GR 3/4 X 82 X 300 D 1045
22.080.120	GR 3/4 X 82 X 300 DA 1045
22.080.087	GR 3/4 X 82 X 310 D 1045
22.080.190	GR 3/4 X 82 X 320 B 1045

CÓDIGO	DESCRIPCIÓN
22.080.009	GR 3/4 X 82 X 320 D 1045
22.080.112	GR 3/4 X 82 X 320 DA 1045
22.080.088	GR 3/4 X 82 X 330 D 1045
22.080.191	GR 3/4 X 82 X 340 B 1045
22.080.218	GR 3/4 X 82 X 340 C 1045
22.080.010	GR 3/4 X 82 X 340 D 1045
22.080.113	GR 3/4 X 82 X 340 DA 1045
22.080.089	GR 3/4 X 82 X 350 D 1045
22.080.142	GR 3/4 X 82 X 360 B 1045
22.080.219	GR 3/4 X 82 X 360 C 1045
22.080.011	GR 3/4 X 82 X 360 D 1045
22.080.100	GR 3/4 X 82 X 360 DA 1045
22.080.090	GR 3/4 X 82 X 370 D 1045
22.080.143	GR 3/4 X 82 X 380 B 1045
22.080.012	GR 3/4 X 82 X 380 D 1045
22.080.101	GR 3/4 X 82 X 380 DA 1045
22.080.045	GR 3/4 X 82 X 390 D 1045
22.080.013	GR 3/4 X 82 X 400 D 1045
22.080.102	GR 3/4 X 82 X 400 DA 1045
22.080.144	GR 3/4 X 82 X 410 B 1045
22.080.141	GR 3/4 X 82 X 410 D 1045
22.080.014	GR 3/4 X 82 X 420 D 1045
22.080.103	GR 3/4 X 82 X 420 DA 1045
22.080.145	GR 3/4 X 82 X 430 B 1045
22.080.148	GR 3/4 X 82 X 430 D 1045
22.080.015	GR 3/4 X 82 X 440 D 1045
22.080.104	GR 3/4 X 82 X 440 DA 1045
22.080.146	GR 3/4 X 82 X 450 B 1045
22.080.016	GR 3/4 X 82 X 450 D 1045
22.080.017	GR 3/4 X 82 X 460 D 1045
22.080.105	GR 3/4 X 82 X 460 DA 1045
22.080.150	GR 3/4 X 82 X 470 D 1045
22.080.018	GR 3/4 X 82 X 480 D 1045
22.080.106	GR 3/4 X 82 X 480 DA 1045
22.080.151	GR 3/4 X 82 X 490 D 1045
22.080.019	GR 3/4 X 82 X 500 D 1045
22.080.107	GR 3/4 X 82 X 500 DA 1045
22.080.200	GR 3/4 X 82 X 510 D 1045
22.080.020	GR 3/4 X 82 X 520 D 1045
22.080.108	GR 3/4 X 82 X 520 DA 1045
22.080.201	GR 3/4 X 82 X 530 D 1045

CÓDIGO	DESCRIPCIÓN
22.080.021	GR 3/4 X 82 X 540 D 1045
22.080.109	GR 3/4 X 82 X 540 DA 1045
22.080.115	GR 3/4 X 82 X 550 D 1045
22.080.022	GR 3/4 X 82 X 560 D 1045
22.080.110	GR 3/4 X 82 X 560 DA 1045
22.080.202	GR 3/4 X 82 X 570 D 1045
22.080.023	GR 3/4 X 82 X 580 D 1045
22.080.158	GR 3/4 X 82 X 600 BA 1045
22.080.024	GR 3/4 X 82 X 600 D 1045
22.080.220	GR 3/4 X 82 X 600 DA 1045
22.080.092	GR 3/4 X 82 X 620 D 1045
22.080.160	GR 3/4 X 82 X 640 D 1045
22.080.221	GR 3/4 X 82 X 640 DA 1045
22.080.211	GR 3/4 X 82 X 660 D 1045
22.080.180	GR 3/4 X 82 X 680 D 1045
22.080.203	GR 3/4 X 82 X 700 D 1045
22.080.224	GR 3/4 X 82 X 710 D 1045
22.080.204	GR 3/4 X 82 X 720 D 1045
22.080.225	GR 3/4 X 82 X 750 D 1045
22.080.157	GR 3/4 X 92 X 160 D 1045
22.080.046	GR 3/4 X 92 X 180 D 1045
22.080.210	GR 3/4 X 92 X 180 DA 1045
22.080.047	GR 3/4 X 92 X 190 D 1045
22.080.048	GR 3/4 X 92 X 200 D 1045
22.080.121	GR 3/4 X 92 X 200 DA 1045
22.080.049	GR 3/4 X 92 X 210 D 1045
22.080.050	GR 3/4 X 92 X 220 D 1045
22.080.122	GR 3/4 X 92 X 220 DA 1045
22.080.051	GR 3/4 X 92 X 230 D 1045
22.080.052	GR 3/4 X 92 X 240 D 1045
22.080.123	GR 3/4 X 92 X 240 DA 1045
22.080.053	GR 3/4 X 92 X 250 D 1045
22.080.054	GR 3/4 X 92 X 260 D 1045
22.080.124	GR 3/4 X 92 X 260 DA 1045
22.080.055	GR 3/4 X 92 X 270 D 1045
22.080.056	GR 3/4 X 92 X 280 D 1045
22.080.125	GR 3/4 X 92 X 280 DA 1045
22.080.057	GR 3/4 X 92 X 290 D 1045
22.080.058	GR 3/4 X 92 X 300 D 1045
22.080.126	GR 3/4 X 92 X 300 DA 1045
22.080.059	GR 3/4 X 92 X 310 D 1045

CÓDIGO	DESCRIPCIÓN
22.080.060	GR 3/4 X 92 X 320 D 1045
22.080.127	GR 3/4 X 92 X 320 DA 1045
22.080.061	GR 3/4 X 92 X 330 D 1045
22.080.062	GR 3/4 X 92 X 340 D 1045
22.080.128	GR 3/4 X 92 X 340 DA 1045
22.080.063	GR 3/4 X 92 X 350 D 1045
22.080.149	GR 3/4 X 92 X 360 C 1045
22.080.064	GR 3/4 X 92 X 360 D 1045
22.080.129	GR 3/4 X 92 X 360 DA 1045
22.080.065	GR 3/4 X 92 X 370 D 1045
22.080.066	GR 3/4 X 92 X 380 D 1045
22.080.130	GR 3/4 X 92 X 380 DA 1045
22.080.067	GR 3/4 X 92 X 390 D 1045
22.080.068	GR 3/4 X 92 X 400 D 1045
22.080.131	GR 3/4 X 92 X 400 DA 1045
22.080.069	GR 3/4 X 92 X 410 D 1045
22.080.070	GR 3/4 X 92 X 420 D 1045
22.080.132	GR 3/4 X 92 X 420 DA 1045
22.080.071	GR 3/4 X 92 X 430 D 1045
22.080.072	GR 3/4 X 92 X 440 D 1045
22.080.133	GR 3/4 X 92 X 440 DA 1045
22.080.185	GR 3/4 X 92 X 450 B 1045
22.080.073	GR 3/4 X 92 X 450 D 1045
22.080.214	GR 3/4 X 92 X 460 B 1045
22.080.074	GR 3/4 X 92 X 460 D 1045
22.080.134	GR 3/4 X 92 X 460 DA 1045
22.080.075	GR 3/4 X 92 X 470 D 1045
22.080.076	GR 3/4 X 92 X 480 D 1045
22.080.135	GR 3/4 X 92 X 480 DA 1045
22.080.077	GR 3/4 X 92 X 490 D 1045
22.080.215	GR 3/4 X 92 X 500 B 1045
22.080.186	GR 3/4 X 92 X 500 B 1045
22.080.078	GR 3/4 X 92 X 500 D 1045
22.080.136	GR 3/4 X 92 X 500 DA 1045
22.080.079	GR 3/4 X 92 X 510 D 1045
22.080.080	GR 3/4 X 92 X 520 D 1045
22.080.137	GR 3/4 X 92 X 520 DA 1045
22.080.081	GR 3/4 X 92 X 530 D 1045
22.080.216	GR 3/4 X 92 X 540 B 1045
22.080.082	GR 3/4 X 92 X 540 D 1045
22.080.138	GR 3/4 X 92 X 540 DA 1045

## GRAPAS 3/4"

CÓDIGO	DESCRIPCIÓN
22.080.188	GR 3/4 X 92 X 550 B 1045
22.080.083	GR 3/4 X 92 X 550 D 1045
22.080.189	GR 3/4 X 92 X 560 B 1045
22.080.084	GR 3/4 X 92 X 560 D 1045
22.080.139	GR 3/4 X 92 X 560 DA 1045
22.080.085	GR 3/4 X 92 X 570 D 1045
22.080.086	GR 3/4 X 92 X 580 D 1045
22.080.184	GR 3/4 X 92 X 650 B UNC 1045
22.080.094	GR 3/4 X 102 X 140 B 1045
22.080.177	GR 3/4 X 102 X 140 D 1045
22.080.179	GR 3/4 X 102 X 160 D 1045
22.080.091	GR 3/4 X 102 X 180 D 1045
22.080.095	GR 3/4 X 102 X 200 B 1045
22.080.195	GR 3/4 X 102 X 200 C 1045
22.080.028	GR 3/4 X 102 X 200 D 1045
22.080.154	GR 3/4 X 102 X 200 DA 1045
22.080.193	GR 3/4 X 102 X 210 B 1045
22.080.029	GR 3/4 X 102 X 210 D 1045
22.080.096	GR 3/4 X 102 X 220 B 1045
22.080.166	GR 3/4 X 102 X 220 C 1045
22.080.030	GR 3/4 X 102 X 220 D 1045
22.080.155	GR 3/4 X 102 X 220 DA 1045
22.080.031	GR 3/4 X 102 X 230 D 1045
22.080.140	GR 3/4 X 102 X 240 B 1045
22.080.198	GR 3/4 X 102 X 240 C 1045
22.080.032	GR 3/4 X 102 X 240 D 1045
22.080.156	GR 3/4 X 102 X 240 DA 1045
22.080.175	GR 3/4 X 102 X 250 C 1045
22.080.033	GR 3/4 X 102 X 250 D 1045
22.080.181	GR 3/4 X 102 X 260 B 1045
22.080.165	GR 3/4 X 102 X 260 C 1045
22.080.034	GR 3/4 X 102 X 260 D 1045
22.080.035	GR 3/4 X 102 X 270 D 1045
22.080.192	GR 3/4 X 102 X 280 B 1045
22.080.164	GR 3/4 X 102 X 280 C 1045
22.080.036	GR 3/4 X 102 X 280 D 1045
22.080.176	GR 3/4 X 102 X 300 C 1045
22.080.037	GR 3/4 X 102 X 300 D 1045
22.080.097	GR 3/4 X 102 X 310 D 1045
22.080.226	GR 3/4 X 102 X 320 B 1045
22.080.163	GR 3/4 X 102 X 320 C 1045

CÓDIGO	DESCRIPCIÓN
22.080.038	GR 3/4 X 102 X 320 D 1045
22.080.153	GR 3/4 X 102 X 340 C 1045
22.080.114	GR 3/4 X 102 X 340 D 1045
22.080.147	GR 3/4 X 102 X 360 D 1045
22.080.178	GR 3/4 X 102 X 380 B 1045
22.080.093	GR 3/4 X 102 X 380 D 1045
22.080.194	GR 3/4 X 102 X 400 D 1045
22.080.217	GR 3/4 X 102 X 420 D 1045
22.080.213	GR 3/4 X 102 X 440 C 1045
22.080.222	GR 3/4 X 102 X 440 D 1045
22.080.223	GR 3/4 X 102 X 480 D 1045
22.080.197	GR 3/4 X 102 X 500 B 1045
22.080.199	GR 3/4 X 102 X 650 B 1045

## GRAPAS 7/8"

CÓDIGO	DESCRIPCIÓN
22.090.202	GR 7/8 X 72 X 500 D 1045
22.090.203	GR 7/8 X 72 X 540 D 1045
22.090.313	GR 7/8 X 77 X 280 C 1045
22.090.380	GR 7/8 X 77 X 380 D 1045
22.090.038	GR 7/8 X 77 X 400 B 1045
22.090.156	GR 7/8 X 77 X 400 D 1045
22.090.228	GR 7/8 X 77 X 400 DA 1045
22.090.039	GR 7/8 X 77 X 420 B 1045
22.090.442	GR 7/8 X 77 X 420 BA 1045
22.090.318	GR 7/8 X 77 X 420 D 1045
22.090.229	GR 7/8 X 77 X 420 DA 1045
22.090.040	GR 7/8 X 77 X 440 B 1045
22.090.059	GR 7/8 X 77 X 440 D 1045
22.090.230	GR 7/8 X 77 X 440 DA 1045
22.090.041	GR 7/8 X 77 X 460 B 1045

CÓDIGO	DESCRIPCIÓN
22.090.060	GR 7/8 X 77 X 460 D 1045
22.090.231	GR 7/8 X 77 X 460 DA 1045
22.090.042	GR 7/8 X 77 X 480 B 1045
22.090.324	GR 7/8 X 77 X 480 C 1045
22.090.061	GR 7/8 X 77 X 480 D 1045
22.090.232	GR 7/8 X 77 X 480 DA 1045
22.090.043	GR 7/8 X 77 X 500 B 1045
22.090.062	GR 7/8 X 77 X 500 D 1045
22.090.233	GR 7/8 X 77 X 500 DA 1045
22.090.127	GR 7/8 X 77 X 510 D 1045
22.090.044	GR 7/8 X 77 X 520 B 1045
22.090.063	GR 7/8 X 77 X 520 D 1045
22.090.045	GR 7/8 X 77 X 540 B 1045
22.090.064	GR 7/8 X 77 X 540 D 1045
22.090.366	GR 7/8 X 77 X 550 D 1045
22.090.157	GR 7/8 X 77 X 560 B 1045
22.090.065	GR 7/8 X 77 X 560 D 1045
22.090.046	GR 7/8 X 77 X 580 B 1045
22.090.066	GR 7/8 X 77 X 580 D 1045
22.090.158	GR 7/8 X 77 X 600 B 1045
22.090.201	GR 7/8 X 77 X 600 D 1045
22.090.159	GR 7/8 X 77 X 620 B 1045
22.090.298	GR 7/8 X 77 X 620 D 1045
22.090.314	GR 7/8 X 77 X 640 B 1045
22.090.381	GR 7/8 X 77 X 640 D 1045
22.090.430	GR 7/8 X 77 X 660 B 1045
22.090.382	GR 7/8 X 77 X 680 D 1045
22.090.422	GR 7/8 X 82 x 180 D 1045
22.090.331	GR 7/8 X 82 X 200 D 1045
22.090.440	GR 7/8 X 82 X 220 D 1045
22.090.441	GR 7/8 X 82 X 240 C 1045
22.090.235	GR 7/8 X 82 X 240 D 1045
22.090.417	GR 7/8 X 82 X 250 D 1045
22.090.269	GR 7/8 X 82 X 260 C 1045
22.090.088	GR 7/8 X 82 X 260 D 1045
22.090.270	GR 7/8 X 82 X 280 C 1045
22.090.089	GR 7/8 X 82 X 280 D 1045
22.090.271	GR 7/8 X 82 X 300 C 1045
22.090.090	GR 7/8 X 82 X 300 D 1045
22.090.080	GR 7/8 X 82 X 320 C 1045
22.090.091	GR 7/8 X 82 X 320 D 1045

CÓDIGO	DESCRIPCIÓN
22.090.081	GR 7/8 X 82 X 340 C 1045
22.090.001	GR 7/8 X 82 X 340 D 1045
22.090.338	GR 7/8 X 82 X 340 DA 1045
22.090.082	GR 7/8 X 82 X 360 C 1045
22.090.002	GR 7/8 X 82 X 360 D 1045
22.090.083	GR 7/8 X 82 X 380 C 1045
22.090.003	GR 7/8 X 82 X 380 D 1045
22.090.336	GR 7/8 X 82 X 380 DA 1045
22.090.371	GR 7/8 X 82 X 390 D 1045
22.090.084	GR 7/8 X 82 X 400 C 1045
22.090.004	GR 7/8 X 82 X 400 D 1045
22.090.319	GR 7/8 X 82 X 400 DA 1045
22.090.352	GR 7/8 X 82 X 410 D 1045
22.090.085	GR 7/8 X 82 X 420 C 1045
22.090.005	GR 7/8 X 82 X 420 D 1045
22.090.337	GR 7/8 X 82 X 420 DA 1045
22.090.086	GR 7/8 X 82 X 440 C 1045
22.090.006	GR 7/8 X 82 X 440 D 1045
22.090.446	GR 7/8 X 82 X 440 DA 1045
22.090.418	GR 7/8 X 82 X 450 D 1045
22.090.087	GR 7/8 X 82 X 460 C 1045
22.090.007	GR 7/8 X 82 X 460 D 1045
22.090.404	GR 7/8 X 82 X 460 DA 1045
22.090.346	GR 7/8 X 82 X 480 B 1045
22.090.196	GR 7/8 X 82 X 480 C 1045
22.090.008	GR 7/8 X 82 X 480 D 1045
22.090.347	GR 7/8 X 82 X 500 B 1045
22.090.279	GR 7/8 X 82 X 500 C 1045
22.090.009	GR 7/8 X 82 X 500 D 1045
22.090.340	GR 7/8 X 82 X 500 DA 1045
22.090.348	GR 7/8 X 82 X 520 B 1045
22.090.280	GR 7/8 X 82 X 520 C 1045
22.090.010	GR 7/8 X 82 X 520 D 1045
22.090.281	GR 7/8 X 82 X 540 C 1045
22.090.011	GR 7/8 X 82 X 540 D 1045
22.090.388	GR 7/8 X 82 X 540 DA 1045
22.090.357	GR 7/8 X 82 X 550 D A1045
22.090.012	GR 7/8 X 82 X 560 D 1045
22.090.320	GR 7/8 X 82 X 560 DA 1045
22.090.013	GR 7/8 X 82 X 580 D 1045
22.090.321	GR 7/8 X 82 X 580 DA 1045

CÓDIGO	DESCRIPCIÓN
22.090.443	GR 7/8 X 82 X 600 C 1045
22.090.014	GR 7/8 X 82 X 600 D 1045
22.090.322	GR 7/8 X 82 X 600 DA 1045
22.090.215	GR 7/8 X 82 X 620 D 1045
22.090.323	GR 7/8 X 82 X 620 DA 1045
22.090.216	GR 7/8 X 82 X 640 D 1045
22.090.217	GR 7/8 X 82 X 660 D 1045
22.090.218	GR 7/8 X 82 X 680 D 1045
22.090.219	GR 7/8 X 82 X 700 D 1045
22.090.093	GR 7/8 X 92 X 180 C 1045
22.090.015	GR 7/8 X 92 X 180 D 1045
22.090.094	GR 7/8 X 92 X 200 C 1045
22.090.016	GR 7/8 X 92 X 200 D 1045
22.090.095	GR 7/8 X 92 X 220 C 1045
22.090.017	GR 7/8 X 92 X 220 D 1045
22.090.315	GR 7/8 X 92 X 230 C 1045
22.090.096	GR 7/8 X 92 X 240 C 1045
22.090.018	GR 7/8 X 92 X 240 D 1045
22.090.190	GR 7/8 X 92 X 250 D 1045
22.090.097	GR 7/8 X 92 X 260 C 1045
22.090.019	GR 7/8 X 92 X 260 D 1045
22.090.354	GR 7/8 X 92 X 280 BA 1045
22.090.098	GR 7/8 X 92 X 280 C 1045
22.090.020	GR 7/8 X 92 X 280 D 1045
22.090.333	GR 7/8 X 92 X 280 DA 1045
22.090.297	GR 7/8 X 92 X 290 D 1045
22.090.182	GR 7/8 X 92 X 300 B 1045
22.090.164	GR 7/8 X 92 X 300 BA 1045
22.090.099	GR 7/8 X 92 X 300 C 1045
22.090.021	GR 7/8 X 92 X 300 D 1045
22.090.205	GR 7/8 X 92 X 300 DA 1045
22.090.191	GR 7/8 X 92 X 310 D 1045
22.090.390	GR 7/8 X 92 X 320 B 1045
22.090.165	GR 7/8 X 92 X 320 BA 1045
22.090.100	GR 7/8 X 92 X 320 C 1045
22.090.022	GR 7/8 X 92 X 320 D 1045
22.090.206	GR 7/8 X 92 X 320 DA 1045
22.090.101	GR 7/8 X 92 X 330 C 1045
22.090.023	GR 7/8 X 92 X 330 D 1045
22.090.391	GR 7/8 X 92 X 340 B 1045
22.090.166	GR 7/8 X 92 X 340 BA 1045

CÓDIGO	DESCRIPCIÓN
22.090.102	GR 7/8 X 92 X 340 C 1045
22.090.024	GR 7/8 X 92 X 340 D 1045
22.090.207	GR 7/8 X 92 X 340 DA 1045
22.090.103	GR 7/8 X 92 X 350 C 1045
22.090.025	GR 7/8 X 92 X 350 D 1045
22.090.167	GR 7/8 X 92 X 360 BA 1045
22.090.104	GR 7/8 X 92 X 360 C 1045
22.090.026	GR 7/8 X 92 X 360 D 1045
22.090.208	GR 7/8 X 92 X 360 DA 1045
22.090.105	GR 7/8 X 92 X 370 C 1045
22.090.027	GR 7/8 X 92 X 370 D 1045
22.090.168	GR 7/8 X 92 X 380 BA 1045
22.090.106	GR 7/8 X 92 X 380 C 1045
22.090.028	GR 7/8 X 92 X 380 D 1045
22.090.174	GR 7/8 X 92 X 380 DA 1045
22.090.107	GR 7/8 X 92 X 390 C 1045
22.090.029	GR 7/8 X 92 X 390 D 1045
22.090.183	GR 7/8 X 92 X 400 B 1045
22.090.209	GR 7/8 X 92 X 400 BA 1045
22.090.108	GR 7/8 X 92 X 400 C 1045
22.090.030	GR 7/8 X 92 X 400 D 1045
22.090.175	GR 7/8 X 92 X 400 DA 1045
22.090.170	GR 7/8 X 92 X 410 D 1045
22.090.413	GR 7/8 X 92 X 420 B 1045
22.090.210	GR 7/8 X 92 X 420 BA 1045
22.090.109	GR 7/8 X 92 X 420 C 1045
22.090.031	GR 7/8 X 92 X 420 D 1045
22.090.176	GR 7/8 X 92 X 420 DA 1045
22.090.376	GR 7/8 X 92 X 430 C 1045
22.090.171	GR 7/8 X 92 X 430 D 1045
22.090.148	GR 7/8 X 92 X 440 B 1045
22.090.211	GR 7/8 X 92 X 440 BA 1045
22.090.110	GR 7/8 X 92 X 440 C 1045
22.090.032	GR 7/8 X 92 X 440 D 1045
22.090.177	GR 7/8 X 92 X 440 DA 1045
22.090.173	GR 7/8 X 92 X 450 C 1045
22.090.147	GR 7/8 X 92 X 450 D 1045
22.090.414	GR 7/8 X 92 X 460 B 1045
22.090.212	GR 7/8 X 92 X 460 BA 1045
22.090.111	GR 7/8 X 92 X 460 C 1045
22.090.033	GR 7/8 X 92 X 460 D 1045

CÓDIGO	DESCRIPCIÓN
22.090.178	GR 7/8 X 92 X 460 DA 1045
22.090.172	GR 7/8 X 92 X 470 D 1045
22.090.169	GR 7/8 X 92 X 480 BA 1045
22.090.112	GR 7/8 X 92 X 480 C 1045
22.090.034	GR 7/8 X 92 X 480 D 1045
22.090.179	GR 7/8 X 92 X 480 DA 1045
22.090.192	GR 7/8 X 92 X 490 D 1045
22.090.213	GR 7/8 X 92 X 500 BA 1045
22.090.121	GR 7/8 X 92 X 500 C 1045
22.090.035	GR 7/8 X 92 X 500 D 1045
22.090.180	GR 7/8 X 92 X 500 DA 1045
22.090.214	GR 7/8 X 92 X 520 BA 1045
22.090.122	GR 7/8 X 92 X 520 C 1045
22.090.115	GR 7/8 X 92 X 520 D 1045
22.090.181	GR 7/8 X 92 X 520 DA 1045
22.090.123	GR 7/8 X 92 X 540 C 1045
22.090.120	GR 7/8 X 92 X 540 D 1045
22.090.283	GR 7/8 X 92 X 540 DA 1045
22.090.124	GR 7/8 X 92 X 550 C 1045
22.090.373	GR 7/8 X 92 X 550 D 1045
22.090.125	GR 7/8 X 92 X 560 C 1045
22.090.036	GR 7/8 X 92 X 560 D 1045
22.090.393	GR 7/8 X 92 X 560 DA 1045
22.090.126	GR 7/8 X 92 X 580 C 1045
22.090.037	GR 7/8 X 92 X 580 D 1045
22.090.223	GR 7/8 X 92 X 600 D 1045
22.090.273	GR 7/8 X 92 X 620 D 1045
22.090.304	GR 7/8 X 92 X 630 D 1045
22.090.378	GR 7/8 X 92 X 640 D 1045
22.090.396	GR 7/8 X 92 X 650 D 1045
22.090.421	GR 7/8 X 92 X 660 D 1045
22.090.420	GR 7/8 X 92 X 680 D 1045
22.090.341	GR 7/8 X 92 X 700 D 1045
22.090.444	GR 7/8 X 92 X 720 D 1045
22.090.397	GR 7/8 X 92 X 750 D 1045
22.090.398	GR 7/8 X 92 X 800 D 1045
22.090.399	GR 7/8 X 92 X 850 D 1045
22.090.400	GR 7/8 X 92 X 900 D 1045
22.090.445	GR 7/8 X 92 X 960 D 1045
22.090.199	GR 7/8 X 102 X 160 D 1045
22.090.200	GR 7/8 X 102 X 180 D 1045

CÓDIGO	DESCRIPCIÓN
22.090.296	GR 7/8 X 102 X 200 C 1045
22.090.267	GR 7/8 X 102 X 200 D 1045
22.090.067	GR 7/8 X 102 X 220 D 1045
22.090.294	GR 7/8 X 102 X 230 D 1045
22.090.311	GR 7/8 X 102 X 240 C 1045
22.090.068	GR 7/8 X 102 X 240 D 1045
22.090.069	GR 7/8 X 102 X 260 D 1045
22.090.438	GR 7/8 X 102 X 280 C 1045
22.090.070	GR 7/8 X 102 X 280 D 1045
22.090.071	GR 7/8 X 102 X 300 D 1045
22.090.342	GR 7/8 X 102 X 300 DA 1045
22.090.193	GR 7/8 X 102 X 310 D 1045
22.090.439	GR 7/8 X 102 X 320 C 1045
22.090.072	GR 7/8 X 102 X 320 D 1045
22.090.395	GR 7/8 X 102 X 340 C 1045
22.090.073	GR 7/8 X 102 X 340 D 1045
22.090.284	GR 7/8 X 102 X 360 C 1045
22.090.074	GR 7/8 X 102 X 360 D 1045
22.090.075	GR 7/8 X 102 X 380 D 1045
22.090.285	GR 7/8 X 102 X 400 C 1045
22.090.076	GR 7/8 X 102 X 400 D 1045
22.090.408	GR 7/8 X 102 X 400 DA 1045
22.090.410	GR 7/8 X 102 X 420 BA 1045
22.090.077	GR 7/8 X 102 X 420 D 1045
22.090.286	GR 7/8 X 102 X 440 C 1045
22.090.078	GR 7/8 X 102 X 440 D 1045
22.090.365	GR 7/8 X 102 X 440 DA 1045
22.090.295	GR 7/8 X 102 X 460 D 1045
22.090.368	GR 7/8 X 102 X 480 C 1045
22.090.316	GR 7/8 X 102 X 480 D 1045
22.090.079	GR 7/8 X 102 X 500 D 1045
22.090.369	GR 7/8 X 102 X 520 C 1045
22.090.268	GR 7/8 X 102 X 520 D 1045
22.090.361	GR 7/8 X 105 X 150 C 1045
22.090.334	GR 7/8 X 105 X 312 D 1045
22.090.362	GR 7/8 X 109 X 250 C 1045
22.090.301	GR 7/8 X 125 X 340 DA 1045
22.090.290	GR 7/8 X 130 X 200 D 1045
22.090.160	GR 7/8 X 130 X 220 C 1045
22.090.291	GR 7/8 X 130 X 220 D 1045
22.090.335	GR 7/8 X 130 X 230 C 1045



CÓDIGO	DESCRIPCIÓN
22.090.302	GR 7/8 X 130 X 230 CA 1045
22.090.299	GR 7/8 X 130 X 240 C 1045
22.090.292	GR 7/8 X 130 X 240 D 1045
22.090.254	GR 7/8 X 130 X 260 C 1045
22.090.255	GR 7/8 X 130 X 280 C 1045
22.090.256	GR 7/8 X 130 X 300 C 1045
22.090.328	GR 7/8 X 130 X 300 CA 1045
22.090.222	GR 7/8 X 130 X 300 D 1045
22.090.416	GR 7/8 X 130 X 320 BA 1045
22.090.161	GR 7/8 X 130 X 320 C 1045
22.090.379	GR 7/8 X 130 X 320 CA 1045
22.090.448	GR 7/8 X 130 X 320 D 1045
22.090.434	GR 7/8 X 130 X 320 DA 1045
22.090.435	GR 7/8 X 130 X 325 CA 1045
22.090.436	GR 7/8 X 130 X 325 DA 1045
22.090.114	GR 7/8 X 130 X 330 C 1045
22.090.419	GR 7/8 X 130 X 330 CA 1045
22.090.257	GR 7/8 X 130 X 340 C 1045
22.090.197	GR 7/8 X 130 X 340 CA 1045
22.090.433	GR 7/8 X 130 X 340 D 1045
22.090.198	GR 7/8 X 130 X 340 DA 1045
22.090.339	GR 7/8 X 130 X 350 CA 1045
22.090.383	GR 7/8 X 130 X 360 BA 1045
22.090.184	GR 7/8 X 130 X 360 C 1045
22.090.363	GR 7/8 X 130 X 360 CA 1045
22.090.432	GR 7/8 X 130 X 360 D 1045
22.090.317	GR 7/8 X 130 X 360 DA 1045
22.090.258	GR 7/8 X 130 X 380 C 1045
22.090.429	GR 7/8 X 130 X 380 CA 1045
22.090.252	GR 7/8 X 130 X 380 D 1045
22.090.259	GR 7/8 X 130 X 400 C 1045
22.090.253	GR 7/8 X 130 X 400 D 1045
22.090.260	GR 7/8 X 130 X 420 C 1045
22.090.261	GR 7/8 X 130 X 440 C 1045
22.090.406	GR 7/8 X 130 X 460 C 1045
22.090.437	GR 7/8 X 130 X 480 C 1045
22.090.116	GR 7/8 X 132 X 340 C 1045
22.090.189	GR 7/8 X 132 X 360 C 1045
22.090.234	GR 7/8 X 132 X 380 C 1045
22.090.266	GR 7/8 X 132 X 400 C 1045
22.090.394	GR 7/8 X 140 X 220 C 1045

CÓDIGO	DESCRIPCIÓN
22.090.344	GR 7/8 X 140 X 220 CA 1045
22.090.265	GR 7/8 X 140 X 320 C 1045
22.090.113	GR 7/8 X 140 X 320 CA 1045
22.090.447	GR 7/8 X 140 X 320 D 1045
22.090.407	GR 7/8 X 140 X 330 C 1045
22.090.236	GR 7/8 X 140 X 340 C 1045
22.090.332	GR 7/8 X 140 X 340 CA 1045
22.090.289	GR 7/8 X 140 X 340 D 1045
22.090.272	GR 7/8 X 140 X 340 DA 1045
22.090.237	GR 7/8 X 140 X 360 C 1045
22.090.355	GR 7/8 X 140 X 360 CA 1045
22.090.288	GR 7/8 X 140 X 360 D 1045
22.090.343	GR 7/8 X 140 X 360 DA 1045
22.090.238	GR 7/8 X 140 X 380 C 1045
22.090.356	GR 7/8 X 140 X 380 CA 1045
22.090.300	GR 7/8 X 140 X 400 C 1045
22.090.312	GR 7/8 X 140 X 400 D 1045
22.090.402	GR 7/8 X 140 X 410 C 1045
22.090.449	GR 7/8 X 140 X 420 C 1045
22.090.240	GR 7/8 X 140 X 550 C 1045
22.090.358	GR 7/8 X 142 X 360 C 1045
22.090.359	GR 7/8 X 142 X 380 C 1045
22.090.360	GR 7/8 X 142 X 400 C 1045
22.090.293	GR 7/8 X 145 X 550 C 1045
22.090.431	GR 7/8 X 145 X 600 C 1045
22.090.350	GR 7/8 X 145 X 600 DA 1045
22.090.351	GR 7/8 X 145 X 700 D 1045
22.090.282	GR 7/8 X 148 X 660 D 1045
22.090.239	GR 7/8 X 148 X 680 C 1045
22.090.345	GR 7/8 X 150 X 340 CA 1045
22.090.374	GR 7/8 X 150 X 360 C 1045
22.090.364	GR 7/8 X 150 X 360 CA 1045
22.090.375	GR 7/8 X 150 X 380 C 1045
22.090.194	GR 7/8 X 150 X 400 C 1045
22.090.220	GR 7/8 X 150 X 500 C 1045
22.090.221	GR 7/8 X 150 X 550 C 1045
22.090.195	GR 7/8 X 160 X 350 C 1045

CÓDIGO	DESCRIPCIÓN
22.057.141	GR 18 X 72 X 140 D 1045
22.057.157	GR 18 X 72 X 150 D 1045
22.057.025	GR 18 X 72 X 160 D 1045
22.057.026	GR 18 X 72 X 180 D 1045
22.057.027	GR 18 X 72 X 190 D 1045
22.057.160	GR 18 X 72 X 200 C 1045
22.057.028	GR 18 X 72 X 200 D 1045
22.057.029	GR 18 X 72 X 210 D 1045
22.057.161	GR 18 X 72 X 220 C 1045
22.057.030	GR 18 X 72 X 220 D 1045
22.057.031	GR 18 X 72 X 230 D 1045
22.057.162	GR 18 X 72 X 240 C 1045
22.057.032	GR 18 X 72 X 240 D 1045
22.057.033	GR 18 X 72 X 250 D 1045
22.057.034	GR 18 X 72 X 260 D 1045
22.057.035	GR 18 X 72 X 270 D 1045
22.057.036	GR 18 X 72 X 280 D 1045
22.057.037	GR 18 X 72 X 300 D 1045
22.057.038	GR 18 X 72 X 320 D 1045
22.057.039	GR 18 X 72 X 340 D 1045
22.057.133	GR 18 X 72 X 350 D 1045
22.057.107	GR 18 X 72 X 360 D 1045
22.057.117	GR 18 X 72 X 380 D 1045
22.057.118	GR 18 X 72 X 400 D 1045
22.057.119	GR 18 X 72 X 420 D 1045
22.057.120	GR 18 X 72 X 440 D 1045
22.057.121	GR 18 X 72 X 460 D 1045
22.057.143	GR 18 X 72 X 520 D 1045
22.057.144	GR 18 X 72 X 540 D 1045
22.057.145	GR 18 X 72 X 560 D 1045
22.057.128	GR 18 X 82 X 160 D 1045
22.057.124	GR 18 X 82 X 170 D 1045
22.057.001	GR 18 X 82 X 180 D 1045
22.057.002	GR 18 X 82 X 200 D 1045
22.057.079	GR 18 X 82 X 200 DA 1045
22.057.104	GR 18 X 82 X 210 D 1045
22.057.003	GR 18 X 82 X 220 D 1045
22.057.080	GR 18 X 82 X 220 DA 1045
22.057.142	GR 18 X 82 X 230 D 1045
22.057.081	GR 18 X 82 X 230 DA 1045
22.057.004	GR 18 X 82 X 240 D 1045

CÓDIGO	DESCRIPCIÓN
22.057.082	GR 18 X 82 X 240 DA 1045
22.057.074	GR 18 X 82 X 250 D 1045
22.057.083	GR 18 X 82 X 250 DA 1045
22.057.005	GR 18 X 82 X 260 D 1045
22.057.084	GR 18 X 82 X 260 DA 1045
22.057.137	GR 18 X 82 X 270 D 1045
22.057.006	GR 18 X 82 X 280 D 1045
22.057.085	GR 18 X 82 X 280 DA 1045
22.057.007	GR 18 X 82 X 300 D 1045
22.057.086	GR 18 X 82 X 300 DA 1045
22.057.132	GR 18 X 82 X 310 D 1045
22.057.149	GR 18 X 82 X 310 DA 1045
22.057.008	GR 18 X 82 X 320 D 1045
22.057.087	GR 18 X 82 X 320 DA 1045
22.057.108	GR 18 X 82 X 330 D 1045
22.057.009	GR 18 X 82 X 340 D 1045
22.057.088	GR 18 X 82 X 340 DA 1045
22.057.110	GR 18 X 82 X 350 D 1045
22.057.089	GR 18 X 82 X 350 DA 1045
22.057.010	GR 18 X 82 X 360 D 1045
22.057.116	GR 18 X 82 X 360 DA 1045
22.057.040	GR 18 X 82 X 370 D 1045
22.057.090	GR 18 X 82 X 370 DA 1045
22.057.072	GR 18 X 82 X 380 B 1045
22.057.011	GR 18 X 82 X 380 D 1045
22.057.091	GR 18 X 82 X 380 DA 1045
22.057.077	GR 18 X 82 X 390 D 1045
22.057.092	GR 18 X 82 X 390 DA 1045
22.057.012	GR 18 X 82 X 400 D 1045
22.057.093	GR 18 X 82 X 400 DA 1045
22.057.078	GR 18 X 82 X 410 D 1045
22.057.147	GR 18 X 82 X 410 DA 1045
22.057.013	GR 18 X 82 X 420 D 1045
22.057.094	GR 18 X 82 X 420 DA 1045
22.057.014	GR 18 X 82 X 430 D 1045
22.057.095	GR 18 X 82 X 430 DA 1045
22.057.073	GR 18 X 82 X 440 B 1045
22.057.164	GR 18 X 82 X 440 C 1045
22.057.015	GR 18 X 82 X 440 D 1045
22.057.096	GR 18 X 82 X 440 DA 1045
22.057.109	GR 18 X 82 X 450 D 1045

CÓDIGO	DESCRIPCIÓN
22.057.148	GR 18 X 82 X 450 DA 1045
22.057.016	GR 18 X 82 X 460 D 1045
22.057.097	GR 18 X 82 X 460 DA 1045
22.057.017	GR 18 X 82 X 480 D 1045
22.057.098	GR 18 X 82 X 480 DA 1045
22.057.130	GR 18 X 82 X 490 D 1045
22.057.018	GR 18 X 82 X 500 D 1045
22.057.099	GR 18 X 82 X 500 DA 1045
22.057.019	GR 18 X 82 X 510 D 1045
22.057.020	GR 18 X 82 X 520 D 1045
22.057.100	GR 18 X 82 X 520 DA 1045
22.057.021	GR 18 X 82 X 540 D 1045
22.057.101	GR 18 X 82 X 540 DA 1045
22.057.138	GR 18 X 82 X 550 D 1045
22.057.022	GR 18 X 82 X 560 D 1045
22.057.102	GR 18 X 82 X 560 DA 1045
22.057.023	GR 18 X 82 X 580 D 1045
22.057.165	GR 18 X 82 X 580 DA 1045
22.057.024	GR 18 X 82 X 600 D 1045
22.057.166	GR 18 X 82 X 600 DA 1045
22.057.076	GR 18 X 82 X 620 D 1045
22.057.122	GR 18 X 82 X 640 D 1045
22.057.106	GR 18 X 82 X 660 D 1045
22.057.123	GR 18 X 82 X 680 D 1045
22.057.114	GR 18 X 92 X 160 D 1045
22.057.115	GR 18 X 92 X 180 D 1045
22.057.111	GR 18 X 92 X 200 D 1045
22.057.112	GR 18 X 92 X 220 D 1045
22.057.113	GR 18 X 92 X 240 D 1045
22.057.041	GR 18 X 92 X 250 D 1045
22.057.042	GR 18 X 92 X 260 D 1045
22.057.134	GR 18 X 92 X 270 B 1045
22.057.043	GR 18 X 92 X 270 D 1045
22.057.044	GR 18 X 92 X 280 D 1045
22.057.045	GR 18 X 92 X 290 D 1045
22.057.046	GR 18 X 92 X 300 D 1045
22.057.047	GR 18 X 92 X 310 D 1045
22.057.048	GR 18 X 92 X 320 D 1045
22.057.049	GR 18 X 92 X 330 D 1045
22.057.050	GR 18 X 92 X 340 D 1045
22.057.051	GR 18 X 92 X 350 D 1045
22.057.052	GR 18 X 92 X 360 D 1045

CÓDIGO	DESCRIPCIÓN
22.057.053	GR 18 X 92 X 370 D 1045
22.057.054	GR 18 X 92 X 380 D 1045
22.057.055	GR 18 X 92 X 390 D 1045
22.057.150	GR 18 X 92 X 400 B 1045
22.057.056	GR 18 X 92 X 400 D 1045
22.057.057	GR 18 X 92 X 410 D 1045
22.057.151	GR 18 X 92 X 420 B 1045
22.057.058	GR 18 X 92 X 420 D 1045
22.057.059	GR 18 X 92 X 430 D 1045
22.057.060	GR 18 X 92 X 440 D 1045
22.057.061	GR 18 X 92 X 450 D 1045
22.057.152	GR 18 X 92 X 460 B 1045
22.057.062	GR 18 X 92 X 460 D 1045
22.057.063	GR 18 X 92 X 470 D 1045
22.057.153	GR 18 X 92 X 480 B 1045
22.057.064	GR 18 X 92 X 480 D 1045
22.057.065	GR 18 X 92 X 490 D 1045
22.057.154	GR 18 X 92 X 500 B 1045
22.057.066	GR 18 X 92 X 500 D 1045
22.057.067	GR 18 X 92 X 510 D 1045
22.057.068	GR 18 X 92 X 520 D 1045
22.057.069	GR 18 X 92 X 530 D 1045
22.057.070	GR 18 X 92 X 540 D 1045
22.057.071	GR 18 X 92 X 560 D 1045
22.057.163	GR 18 X 102 X 160 D 1045
22.057.129	GR 18 X 102 X 180 D 1045
22.057.159	GR 18 X 102 X 200 D 1045
22.057.125	GR 18 X 102 X 220 D 1045
22.057.126	GR 18 X 102 X 240 D 1045
22.057.127	GR 18 X 102 X 260 D 1045
22.057.139	GR 18 X 102 X 280 D 1045
22.057.140	GR 18 X 102 X 300 D 1045
22.057.158	GR 18 X 102 X 320 D 1045
22.057.131	GR 18 X 110 X 200 C 1045
22.057.135	GR 18 X 110 X 240 C 1045
22.057.156	GR 18 X 110 X 250 C 1045
22.057.136	GR 18 X 110 X 260 C 1045
22.057.103	GR 18 X 110 X 270 C 1045
22.057.105	GR 18 X 110 X 280 C 1045
22.057.075	GR 18 X 110 X 300 C 1045
22.057.146	GR 18 X 110 X 320 C 1045
22.057.155	GR 18 X 130 X 360 C 1045

CÓDIGO	DESCRIPCIÓN
22.059.183	GR 20 X 75 X 320 C 1045
22.059.052	GR 20 X 82 X 180 D 1045
22.059.014	GR 20 X 82 X 180 DA 1045
22.059.104	GR 20 X 82 X 200 B 1045
22.059.053	GR 20 X 82 X 200 D 1045
22.059.015	GR 20 X 82 X 200 DA 1045
22.059.103	GR 20 X 82 X 220 B 1045
22.059.192	GR 20 X 82 X 220 C 1045
22.059.054	GR 20 X 82 X 220 D 1045
22.059.016	GR 20 X 82 X 220 DA 1045
22.059.055	GR 20 X 82 X 230 D 1045
22.059.116	GR 20 X 82 X 240 B 1045
22.059.056	GR 20 X 82 X 240 D 1045
22.059.017	GR 20 X 82 X 240 DA 1045
22.059.057	GR 20 X 82 X 250 D 1045
22.059.105	GR 20 X 82 X 260 B 1045
22.059.058	GR 20 X 82 X 260 D 1045
22.059.018	GR 20 X 82 X 260 DA 1045
22.059.059	GR 20 X 82 X 270 D 1045
22.059.060	GR 20 X 82 X 280 D 1045
22.059.019	GR 20 X 82 X 280 DA 1045
22.059.087	GR 20 X 82 X 300 C 1045
22.059.061	GR 20 X 82 X 300 D 1045
22.059.020	GR 20 X 82 X 300 DA 1045
22.059.102	GR 20 X 82 X 310 C 1045
22.059.100	GR 20 X 82 X 320 B 1045
22.059.080	GR 20 X 82 X 320 C 1045
22.059.062	GR 20 X 82 X 320 D 1045
22.059.021	GR 20 X 82 X 320 DA 1045
22.059.193	GR 20 X 82 X 340 C 1045
22.059.063	GR 20 X 82 X 340 D 1045
22.059.022	GR 20 X 82 X 340 DA 1045
22.059.101	GR 20 X 82 X 360 B 1045
22.059.064	GR 20 X 82 X 360 D 1045
22.059.023	GR 20 X 82 X 360 DA 1045
22.059.098	GR 20 X 82 X 380 C 1045
22.059.065	GR 20 X 82 X 380 D 1045
22.059.024	GR 20 X 82 X 380 DA 1045
22.059.081	GR 20 X 82 X 390 DA 1045
22.059.099	GR 20 X 82 X 400 C 1045
22.059.066	GR 20 X 82 X 400 D 1045

CÓDIGO	DESCRIPCIÓN
22.059.025	GR 20 X 82 X 400 DA 1045
22.059.067	GR 20 X 82 X 420 D 1045
22.059.026	GR 20 X 82 X 420 DA 1045
22.059.068	GR 20 X 82 X 440 D 1045
22.059.088	GR 20 X 82 X 440 DA 1045
22.059.069	GR 20 X 82 X 460 D 1045
22.059.089	GR 20 X 82 X 460 DA 1045
22.591.001	GR 20 (PASO 1,5) X 82 X 460 DA 10.9
22.059.179	GR 20 X 82 X 480 BA 1045
22.059.070	GR 20 X 82 X 480 D 1045
22.059.090	GR 20 X 82 X 480 DA 1045
22.059.071	GR 20 X 82 X 500 D 1045
22.059.091	GR 20 X 82 X 500 DA 1045
22.059.092	GR 20 X 82 X 520 DA 1045
22.059.181	GR 20 X 82 X 540 BA 1045
22.059.093	GR 20 X 82 X 540 DA 1045
22.059.094	GR 20 X 82 X 560 DA 1045
22.059.095	GR 20 X 82 X 580 DA 1045
22.059.097	GR 20 X 82 X 600 DA 1045
22.059.096	GR 20 X 82 X 620 DA 1045
22.059.083	GR 20 X 92 X 140 D 1045
22.059.084	GR 20 X 92 X 160 D 1045
22.059.027	GR 20 X 92 X 180 D 1045
22.059.009	GR 20 X 92 X 180 DA 1045
22.059.028	GR 20 X 92 X 200 D 1045
22.059.001	GR 20 X 92 X 200 DA 1045
22.059.029	GR 20 X 92 X 220 D 1045
22.059.002	GR 20 X 92 X 220 DA 1045
22.059.180	GR 20 X 92 X 240 B 1045
22.059.030	GR 20 X 92 X 240 D 1045
22.059.003	GR 20 X 92 X 240 DA 1045
22.059.110	GR 20 X 92 X 260 B 1045
22.059.031	GR 20 X 92 X 260 D 1045
22.059.004	GR 20 X 92 X 260 DA 1045
22.059.086	GR 20 X 92 X 270 D 1045
22.059.032	GR 20 X 92 X 280 D 1045
22.059.005	GR 20 X 92 X 280 DA 1045
22.059.194	GR 20 X 92 X 300 C ***10.9
22.059.033	GR 20 X 92 X 300 D 1045
22.059.006	GR 20 X 92 X 300 DA 1045
22.059.034	GR 20 X 92 X 320 D 1045

## GRAPAS M20

CÓDIGO	DESCRIPCIÓN
22.059.007	GR 20 X 92 X 320 DA 1045
22.059.035	GR 20 X 92 X 340 D 1045
22.059.008	GR 20 X 92 X 340 DA 1045
22.059.036	GR 20 X 92 X 360 D 1045
22.059.010	GR 20 X 92 X 360 DA 1045
22.059.037	GR 20 X 92 X 380 D 1045
22.059.011	GR 20 X 92 X 380 DA 1045
22.059.038	GR 20 X 92 X 400 D 1045
22.059.012	GR 20 X 92 X 400 DA 1045
22.059.039	GR 20 X 92 X 420 D 1045
22.059.013	GR 20 X 92 X 420 DA 1045
22.059.075	GR 20 X 102 X 200 B 1045
22.059.073	GR 20 X 102 X 200 D 1045
22.059.076	GR 20 X 102 X 220 B 1045
22.059.040	GR 20 X 102 X 220 D 1045
22.059.077	GR 20 X 102 X 240 B 1045
22.059.041	GR 20 X 102 X 240 D 1045
22.059.079	GR 20 X 102 X 260 B 1045
22.059.051	GR 20 X 102 X 260 D 1045
22.059.196	GR 20 X 102 X 280 B 1045
22.059.074	GR 20 X 102 X 280 D 1045
22.059.078	GR 20 X 102 X 300 B 1045
22.059.182	GR 20 X 102 X 300 D 1045
22.059.082	GR 20 X 102 X 360 D 1045
22.059.085	GR 20 X 102 X 380 D 1045
22.059.042	GR 20 X 102 X 430 D 1045
22.059.113	GR 20 X 102 X 440 B 1045
22.059.043	GR 20 X 102 X 440 D 1045
22.059.044	GR 20 X 102 X 450 D 1045
22.059.112	GR 20 X 102 X 460 B 1045
22.059.045	GR 20 X 102 X 460 D 1045
22.059.046	GR 20 X 102 X 470 D 1045
22.059.114	GR 20 X 102 X 480 B 1045
22.059.047	GR 20 X 102 X 480 D 1045
22.059.111	GR 20 X 102 X 500 B 1045
22.059.048	GR 20 X 102 X 500 D 1045
22.059.195	GR 20 X 102 X 520 B 1045
22.059.049	GR 20 X 102 X 520 D 1045
22.059.050	GR 20 X 102 X 540 D 1045
22.059.072	GR 20 X 102 X 620 D 1045
22.059.197	GR 20 X 130 X 400 C 1045

CÓDIGO	DESCRIPCIÓN
22.059.198	GR 20 X 130 X 420 C 1045
22.059.191	GR 20 X 130 X 420 CA 1045
22.059.184	GR 20 X 130 X 440 CA 1045
22.059.185	GR 20 X 130 X 460 CA 1045
22.059.186	GR 20 X 130 X 480 CA 1045
22.059.187	GR 20 X 130 X 510 CA 1045
22.059.188	GR 20 X 130 X 540 CA 1045
22.059.189	GR 20 X 130 X 560 CA 1045
22.059.190	GR 20 X 130 X 590 CA 1045

## GRAPAS M22

CÓDIGO	DESCRIPCIÓN
22.063.088	GR 22 X 82 X 220 D 1045
22.063.074	GR 22 X 82 X 340 BA 1045
22.063.090	GR 22 X 82 X 350 D 1045
22.063.091	GR 22 X 82 X 400 D 1045
22.063.092	GR 22 X 82 X 450 D 1045
22.063.093	GR 22 X 82 X 480 D 1045
22.063.078	GR 22 X 82 X 480 D 1045
22.063.094	GR 22 X 82 X 500 D 1045
22.063.095	GR 22 X 82 X 520 D 1045
22.063.079	GR 22 X 82 X 520 D 1045
22.063.080	GR 22 X 82 X 540 D 1045
22.063.096	GR 22 X 82 X 580 D 1045
22.063.081	GR 22 X 82 X 580 D 1045
22.063.082	GR 22 X 82 X 600 D 1045
22.063.097	GR 22 X 82 X 650 D 1045
22.063.049	GR 22 X 92 X 180 D 1045
22.063.045	GR 22 X 92 X 180 DA 1045
22.063.004	GR 22 X 92 X 200 D 1045

**TABLA DE GRAPAS**  
por Calibre/Rosca

CÓDIGO	DESCRIPCIÓN
22.063.046	GR 22 X 92 X 200 DA 1045
22.063.005	GR 22 X 92 X 210 D 1045
22.063.006	GR 22 X 92 X 220 D 1045
22.063.047	GR 22 X 92 X 220 DA 1045
22.063.007	GR 22 X 92 X 230 D 1045
22.063.050	GR 22 X 92 X 240 B 1045
22.063.008	GR 22 X 92 X 240 D 1045
22.063.032	GR 22 X 92 X 240 DA 1045
22.063.009	GR 22 X 92 X 250 D 1045
22.063.051	GR 22 X 92 X 260 B 1045
22.063.010	GR 22 X 92 X 260 D 1045
22.063.048	GR 22 X 92 X 260 DA 1045
22.063.011	GR 22 X 92 X 270 D 1045
22.063.012	GR 22 X 92 X 280 D 1045
22.063.033	GR 22 X 92 X 280 DA 1045
22.063.013	GR 22 X 92 X 290 D 1045
22.063.054	GR 22 X 92 X 295 BA PASSOI,5 1045
22.063.014	GR 22 X 92 X 300 D 1045
22.063.034	GR 22 X 92 X 300 DA 1045
22.063.015	GR 22 X 92 X 310 D 1045
22.063.016	GR 22 X 92 X 320 D 1045
22.063.035	GR 22 X 92 X 320 DA 1045
22.063.017	GR 22 X 92 X 330 D 1045
22.063.069	GR 22 X 92 X 330 DA 1045
22.063.003	GR 22 X 92 X 340 D 1045
22.063.036	GR 22 X 92 X 340 DA 1045
22.063.018	GR 22 X 92 X 350 D 1045
22.063.019	GR 22 X 92 X 360 D 1045
22.063.037	GR 22 X 92 X 360 DA 1045
22.063.020	GR 22 X 92 X 370 D 1045
22.063.021	GR 22 X 92 X 380 D 1045
22.063.038	GR 22 X 92 X 380 DA 1045
22.063.022	GR 22 X 92 X 390 D 1045
22.063.023	GR 22 X 92 X 400 D 1045
22.063.039	GR 22 X 92 X 400 DA 1045
22.063.024	GR 22 X 92 X 410 D 1045
22.063.071	GR 22 X 92 X 420 BA 1045
22.063.025	GR 22 X 92 X 420 D 1045
22.063.040	GR 22 X 92 X 420 DA 1045
22.063.026	GR 22 X 92 X 430 D 1045
22.063.027	GR 22 X 92 X 440 D 1045

CÓDIGO	DESCRIPCIÓN
22.063.041	GR 22 X 92 X 440 DA 1045
22.063.028	GR 22 X 92 X 450 D 1045
22.063.029	GR 22 X 92 X 460 D 1045
22.063.042	GR 22 X 92 X 460 DA 1045
22.063.030	GR 22 X 92 X 470 D 1045
22.063.031	GR 22 X 92 X 480 D 1045
22.063.063	GR 22 X 92 X 480 DA 1045
22.063.043	GR 22 X 92 X 500 D 1045
22.063.044	GR 22 X 92 X 520 D 1045
22.063.052	GR 22 X 92 X 540 D 1045
22.063.083	GR 22 X 92 X 580 D 1045
22.063.084	GR 22 X 92 X 600 D 1045
22.063.058	GR 22 X 102 X 180 D 1045
22.063.056	GR 22 X 102 X 200 B 1045
22.063.089	GR 22 X 102 X 200 D 1045
22.063.057	GR 22 X 102 X 220 B 1045
22.063.059	GR 22 X 102 X 220 D 1045
22.063.053	GR 22 X 102 X 240 D 1045
22.063.001	GR 22 X 102 X 300 D 1045
22.063.002	GR 22 X 102 X 360 D 1045
22.063.064	GR 22 X 102 X 420 DA 1045
22.063.060	GR 22 X 126 X 350 DA 1045
22.063.062	GR 22 X 130 X 220 CA 1045
22.063.085	GR 22 X 130 X 300 CA 1045
22.063.086	GR 22 X 130 X 320 CA 1045
22.063.068	GR 22 X 130 X 330 CA 1045
22.063.070	GR 22 X 130 X 340 BA 1045
22.063.087	GR 22 X 130 X 340 CA 1045
22.063.061	GR 22 X 140 X 320 CA 1045
22.063.077	GR 22 X 140 X 330 CA 1045
22.063.098	GR 22 X 140 X 340 CA 1045
22.063.055	GR 22 X 145 X 330 CA 1045

CÓDIGO	DESCRIPCIÓN
22.170.128	GR 24 X 82 X 240 DA 1045
22.170.195	GR 24 X 82 X 260 DA 1045
22.170.167	GR 24 X 88 X 400 CA 1045
22.170.225	GR 24 X 92 X 170 D 1045
22.170.183	GR 24 X 92 X 220 D 1045
22.170.191	GR 24 X 92 X 240 C 1045
22.170.184	GR 24 X 92 X 240 D 1045
22.170.205	GR 24 X 92 X 320 C 1045
22.170.050	GR 24 X 92 X 320 DA 1045
22.170.012	GR 24 X 92 X 340 C 1045
22.170.089	GR 24 X 92 X 340 CA 1045
22.170.020	GR 24 X 92 X 340 D 1045
22.170.169	GR 24 X 92 X 340 DA 1045
22.170.013	GR 24 X 92 X 350 C 1045
22.170.021	GR 24 X 92 X 350 D 1045
22.170.014	GR 24 X 92 X 360 C 1045
22.170.022	GR 24 X 92 X 360 D 1045
22.170.114	GR 24 X 92 X 360 DA 1045
22.170.015	GR 24 X 92 X 370 C 1045
22.170.023	GR 24 X 92 X 370 D 1045
22.170.016	GR 24 X 92 X 380 C 1045
22.170.024	GR 24 X 92 X 380 D 1045
22.170.115	GR 24 X 92 X 380 DA 1045
22.170.017	GR 24 X 92 X 390 C 1045
22.170.025	GR 24 X 92 X 390 D 1045
22.170.194	GR 24 X 92 X 400 BA 1045
22.170.248	GR 24 X 92 X 400 BA 1045
22.170.018	GR 24 X 92 X 400 C 1045
22.170.176	GR 24 X 92 X 400 CA 1045
22.170.026	GR 24 X 92 X 400 D 1045
22.170.116	GR 24 X 92 X 400 DA 1045
22.170.027	GR 24 X 92 X 410 D 1045
22.170.124	GR 24 X 92 X 420 BA 1045
22.170.019	GR 24 X 92 X 420 C 1045
22.170.028	GR 24 X 92 X 420 D 1045
22.170.117	GR 24 X 92 X 420 DA 1045
22.170.138	GR 24 X 92 X 440 C 1045
22.170.157	GR 24 X 92 X 440 D 1045
22.170.118	GR 24 X 92 X 440 DA 1045
22.170.139	GR 24 X 92 X 460 C 1045
22.170.201	GR 24 X 92 X 500 C 1045

CÓDIGO	DESCRIPCIÓN
22.170.173	GR 24 X 92 X 540 D 1045
22.170.212	GR 24 (PASSO 2,0) X 102 X 440 DA 10.9
22.170.120	GR 24 X 102 X 160 B 1045
22.170.009	GR 24 X 102 X 160 D 1045
22.170.164	GR 24 X 102 X 170 B 1045
22.170.046	GR 24 X 102 X 180 B 1045
22.170.010	GR 24 X 102 X 180 D 1045
22.170.047	GR 24 X 102 X 200 B 1045
22.170.182	GR 24 X 102 X 200 D 1045
22.170.171	GR 24 X 102 X 210 B 1045
22.170.107	GR 24 X 102 X 210 D 1045
22.170.090	GR 24 X 102 X 220 B 1045
22.170.011	GR 24 X 102 X 220 D 1045
22.170.048	GR 24 X 102 X 240 B 1045
22.170.064	GR 24 X 102 X 240 D 1045
22.170.049	GR 24 X 102 X 260 B 1045
22.170.181	GR 24 X 102 X 260 D 1045
22.170.110	GR 24 X 102 X 280 B 1045
22.170.210	GR 24 X 102 X 280 CA 1045
22.170.149	GR 24 X 102 X 280 D 1045
22.170.108	GR 24 X 102 X 280 DA 1045
22.170.203	GR 24 X 102 X 290 B 1045
22.170.211	GR 24 X 102 X 300 CA 1045
22.170.150	GR 24 X 102 X 300 D 1045
22.170.166	GR 24 X 102 X 320 B 1045
22.170.247	GR 24 X 102 X 320 BA 1045
22.170.168	GR 24 X 102 X 320 C 1045
22.170.044	GR 24 X 102 X 320 CA 1045
22.170.207	GR 24 X 102 X 320 D 1045
22.170.109	GR 24 X 102 X 320 DA 1045
22.170.079	GR 24 X 102 X 340 C 1045
22.170.045	GR 24 X 102 X 340 CA 1045
22.170.029	GR 24 X 102 X 340 D 1045
22.170.113	GR 24 X 102 X 340 DA 1045
22.170.080	GR 24 X 102 X 360 C 1045
22.170.036	GR 24 X 102 X 360 CA 1045
22.170.065	GR 24 X 102 X 360 D 1045
22.170.051	GR 24 X 102 X 360 DA 1045
22.170.037	GR 24 X 102 X 370 CA 1045
22.170.140	GR 24 X 102 X 380 BA 1045
22.170.081	GR 24 X 102 X 380 C 1045

CÓDIGO	DESCRIPCIÓN
22.170.038	GR 24 X 102 X 380 CA 1045
22.170.126	GR 24 X 102 X 380 D 1045
22.170.052	GR 24 X 102 X 380 DA 1045
22.170.129	GR 24 X 102 X 400 BA 1045
22.170.185	GR 24 X 102 X 400 C 1045
22.170.039	GR 24 X 102 X 400 CA 1045
22.170.063	GR 24 X 102 X 400 D 1045
22.170.053	GR 24 X 102 X 400 DA 1045
22.170.186	GR 24 X 102 X 420 BA 1045
22.170.040	GR 24 X 102 X 420 CA 1045
22.170.123	GR 24 X 102 X 420 D 1045
22.170.054	GR 24 X 102 X 420 DA 1045
22.170.041	GR 24 X 102 X 430 CA 1045
22.170.005	GR 24 X 102 X 430 D 1045
22.170.055	GR 24 X 102 X 430 DA 1045
22.170.130	GR 24 X 102 X 440 BA 1045
22.170.042	GR 24 X 102 X 440 CA 1045
22.170.066	GR 24 X 102 X 440 D 1045
22.170.067	GR 24 X 102 X 440 DA 1045
22.170.006	GR 24 X 102 X 450 D 1045
22.170.043	GR 24 X 102 X 460 CA 1045
22.170.007	GR 24 X 102 X 460 D 1045
22.170.056	GR 24 X 102 X 460 DA 1045
22.170.131	GR 24 X 102 X 470 BA 1045
22.170.008	GR 24 X 102 X 470 D 1045
22.170.172	GR 24 X 102 X 480 CA 1045
22.170.001	GR 24 X 102 X 480 D 1045
22.170.057	GR 24 X 102 X 480 DA 1045
22.170.165	GR 24 X 102 X 490 D 1045
22.170.180	GR 24 X 102 X 500 B 1045
22.170.002	GR 24 X 102 X 500 D 1045
22.170.058	GR 24 X 102 X 500 DA 1045
22.170.187	GR 24 X 102 X 520 B 1045
22.170.003	GR 24 X 102 X 520 D 1045
22.170.059	GR 24 X 102 X 520 DA 1045
22.170.004	GR 24 X 102 X 540 D 1045
22.170.060	GR 24 X 102 X 540 DA 1045
22.170.193	GR 24 X 102 X 550 DA 1045
22.170.105	GR 24 X 102 X 560 D 1045
22.170.061	GR 24 X 102 X 560 DA 1045
22.170.106	GR 24 X 102 X 580 D 1045

CÓDIGO	DESCRIPCIÓN
22.170.062	GR 24 X 102 X 580 DA 1045
22.170.134	GR 24 X 102 X 600 DA 1045
22.170.161	GR 24 X 102 X 620 C 1045
22.170.135	GR 24 X 102 X 620 DA 1045
22.170.136	GR 24 X 102 X 640 DA 1045
22.170.121	GR 24 (P.3,0) X 105 X 320 DLA
22.170.153	GR 24 (P.3,0) X 105 X 340 DLA
22.170.226	GR 24 X 130 X 220 C 1045
22.170.170	GR 24 X 130 X 300 C 1045
22.170.162	GR 24 X 130 X 300 CA 1045
22.170.093	GR 24 X 130 X 300 D 1045
22.170.192	GR 24 X 130 X 310 CA 1045
22.170.133	GR 24 X 130 X 320 C 1045
22.170.125	GR 24 X 130 X 320 CA 1045
22.170.094	GR 24 X 130 X 320 D 1045
22.170.175	GR 24 X 130 X 330 C 1045
22.170.202	GR 24 X 130 X 330 CA 1045
22.170.119	GR 24 X 130 X 340 C 1045
22.170.122	GR 24 X 130 X 340 CA 1045
22.170.095	GR 24 X 130 X 340 D 1045
22.170.249	GR 24 X 130 X 360 BA 1045
22.170.069	GR 24 X 130 X 360 C 1045
22.170.147	GR 24 X 130 X 360 CA 1045
22.170.096	GR 24 X 130 X 360 D 1045
22.170.077	GR 24 X 130 X 380 C 1045
22.170.148	GR 24 X 130 X 380 CA 1045
22.170.097	GR 24 X 130 X 380 D 1045
22.170.078	GR 24 X 130 X 400 C 1045
22.170.213	GR 24 X 130 X 400 CA 1045
22.170.151	GR 24 X 130 X 400 DA 1045
22.170.112	GR 24 X 132 X 320 C 1045
22.170.142	GR 24 X 132 X 320 CA 1045
22.170.101	GR 24 X 132 X 340 C 1045
22.170.143	GR 24 X 132 X 340 CA 1045
22.170.154	GR 24 X 132 X 400 CA 1045
22.170.163	GR 24 X 135 X 220 B 1045
22.170.155	GR 24 X 135 X 320 CA 1045
22.170.174	GR 24 X 135 X 350 CA 1045
22.170.098	GR 24 X 140 X 180 C 1045
22.170.099	GR 24 X 140 X 200 C 1045
22.170.100	GR 24 X 140 X 280 C 1045



CÓDIGO	DESCRIPCIÓN
22.170.137	GR 24 X 140 X 300 C 1045
22.170.030	GR 24 X 140 X 300 CA 1045
22.170.031	GR 24 X 140 X 310 CA 1045
22.170.104	GR 24 X 140 X 320 BA 1045
22.170.082	GR 24 X 140 X 320 C 1045
22.170.032	GR 24 X 140 X 320 CA 1045
22.170.141	GR 24 X 140 X 320 D 1045
22.170.088	GR 24 X 140 X 320 DA 1045
22.170.217	GR 24 X 140 X 325 CA 1045
22.170.218	GR 24 X 140 X 325 DA 1045
22.170.199	GR 24 X 140 X 330 CA 1045
22.170.070	GR 24 X 140 X 340 BA 1045
22.170.083	GR 24 X 140 X 340 C 1045
22.170.033	GR 24 X 140 X 340 CA 1045
22.170.216	GR 24 X 140 X 340 D 1045
22.170.085	GR 24 X 140 X 340 DA 1045
22.170.071	GR 24 X 140 X 360 BA 1045
22.170.084	GR 24 X 140 X 360 C 1045
22.170.034	GR 24 X 140 X 360 CA 1045
22.170.215	GR 24 X 140 X 360 D 1045
22.170.086	GR 24 X 140 X 360 DA 1045
22.170.072	GR 24 X 140 X 380 BA 1045
22.170.091	GR 24 X 140 X 380 C 1045
22.170.035	GR 24 X 140 X 380 CA 1045
22.170.087	GR 24 X 140 X 380 DA 1045
22.170.144	GR 24 X 140 X 400 BA 1045
22.170.092	GR 24 X 140 X 400 C 1045
22.170.068	GR 24 X 140 X 400 CA 1045
22.170.102	GR 24 X 140 X 400 DA 1045
22.170.132	GR 24 X 140 X 420 BA 1045
22.170.245	GR 24 X 140 X 420 C 1045
22.170.227	GR 24 X 140 X 420 CA 1045
22.170.103	GR 24 X 140 X 420 DA 1045
22.170.156	GR 24 X 145 X 320 CA 1045
22.170.219	GR 24 X 145 X 320 DA 1045
22.170.220	GR 24 X 145 X 325 CA 1045
22.170.221	GR 24 X 145 X 325 DA 1045
22.170.189	GR 24 X 145 X 330 CA 1045
22.170.214	GR 24 X 145 X 330 DA 1045
22.170.222	GR 24 X 145 X 340 CA 1045
22.170.223	GR 24 X 145 X 340 DA 1045
22.170.146	GR 24 X 145 X 360 BA 1045
22.170.188	GR 24 X 145 X 360 CA 1045

CÓDIGO	DESCRIPCIÓN
22.170.111	GR 24 X 145 X 360 D 1045
22.170.224	GR 24 X 145 X 360 DA 1045
22.170.200	GR 24 X 145 X 380 CA 1045
22.170.145	GR 24 X 145 X 400 BA 1045
22.170.246	GR 24 X 145 X 400 CA 1045
22.170.196	GR 24 X 150 X 220 C 1045
22.170.197	GR 24 X 150 X 240 C 1045
22.170.198	GR 24 X 150 X 260 C 1045
22.170.158	GR 24 X 150 X 300 DA 1045
22.170.159	GR 24 X 150 X 320 DA 1045
22.170.160	GR 24 X 150 X 340 DA 1045
22.170.152	GR 24 X 150 X 360 DA 1045
22.170.073	GR 24 X 150 X 400 C 1045
22.170.127	GR 24 X 150 X 420 BA 1045
22.170.074	GR 24 X 150 X 420 C 1045
22.170.075	GR 24 X 160 X 400 C 1045
22.170.076	GR 24 X 160 X 420 C 1045

CÓDIGO	DESCRIPCIÓN
22.074.008	GR 30 X 92 X 360 BA- PASSO 3,5 1045
22.074.009	GR 30 X 92 X 380 BA- PASSO 3,5 1045
22.074.010	GR 30 X 92 X 400 BA- PASSO 3,5 1045
22.074.001	GR 30 X 92 X 400 DA- PASSO 3,5 1045
22.074.011	GR 30 X 92 X 420 BA- PASSO 3,5 1045
22.074.002	GR 30 X 92 X 420 DA- PASSO 3,5 1045
22.074.012	GR 30 X 92 X 440 BA- PASSO 3,5 1045
22.074.016	GR 30 X 102 X 340 DA- PASSO 3,5 1045
22.074.005	GR 30 X 102 X 360 DA- PASSO 3,5 1045
22.074.006	GR 30 X 102 X 380 DA- PASSO 3,5 1045
22.074.003	GR 30 X 102 X 400 DA- PASSO 3,5 1045
22.074.004	GR 30 X 102 X 420 DA- PASSO 3,5 1045
22.074.007	GR 30 X 102 X 440 DA- PASSO 3,5 1045
22.074.013	GR 30 X 130 X 300 CA- PASSO 2,0 1045
22.074.017	GR 30 X 130 X 320 DA PASSO 3,5 1045
22.074.015	GR 30 X 130 X 330 BA- PASSO 2,0 1045
22.074.014	GR 30 X 130 X 330 CA- PASSO 2,0 1045

# SUSPENSOR NEUMÁTICO

W	DESCRIPCIÓN
22.090.372	GR SUSP. 7/8 X 86 X 750 C 1045
22.090.152	GR SUSP. 7/8 X 130 X 500 C 1045
22.090.092	GR SUSP. 7/8 X 130 X 500 D 1045
22.090.409	GR SUSP. 7/8 X 130 X 530 C 1045
22.090.187	GR SUSP. 7/8 X 130 X 540 D 1045
22.090.153	GR SUSP. 7/8 X 130 X 550 C 1045
22.090.051	GR SUSP. 7/8 X 130 X 550 D 1045
22.090.377	GR SUSP. 7/8 X 130 X 560 D 1045
22.090.188	GR SUSP. 7/8 X 130 X 580 D 1045
22.090.047	GR SUSP. 7/8 X 130 X 600 C 1045
22.090.052	GR SUSP. 7/8 X 130 X 600 D 1045
22.090.185	GR SUSP. 7/8 X 130 X 620 D 1045
22.090.224	GR SUSP. 7/8 X 130 X 640 D 1045
22.090.048	GR SUSP. 7/8 X 130 X 650 C 1045
22.090.053	GR SUSP. 7/8 X 130 X 650 D 1045
22.090.162	GR SUSP. 7/8 X 130 X 660 C 1045
22.090.186	GR SUSP. 7/8 X 130 X 660 D 1045
22.090.287	GR SUSP. 7/8 X 130 X 680 C 1045
22.090.225	GR SUSP. 7/8 X 130 X 680 D 1045
22.090.049	GR SUSP. 7/8 X 130 X 700 C 1045
22.090.054	GR SUSP. 7/8 X 130 X 700 D 1045
22.090.055	GR SUSP. 7/8 X 130 X 720 D 1045
22.090.050	GR SUSP. 7/8 X 130 X 750 C 1045
22.090.056	GR SUSP. 7/8 X 130 X 750 D 1045
22.090.277	GR SUSP. 7/8 X 130 X 760 D 1045
22.090.353	GR SUSP. 7/8 X 130 X 780 C 1045
22.090.349	GR SUSP. 7/8 X 130 X 780 D 1045
22.090.154	GR SUSP. 7/8 X 130 X 800 C 1045
22.090.057	GR SUSP. 7/8 X 130 X 800 D 1045
22.090.411	GR SUSP. 7/8 X 130 X 820 D 1045
22.090.117	GR SUSP. 7/8 X 130 X 850 C 1045
22.090.058	GR SUSP. 7/8 X 130 X 850 D 1045
22.090.278	GR SUSP. 7/8 X 130 X 860 D 1045
22.090.412	GR SUSP. 7/8 X 130 X 880 D 1045
22.090.118	GR SUSP. 7/8 X 130 X 900 C 1045
22.090.119	GR SUSP. 7/8 X 130 X 900 D 1045
22.090.385	GR SUSP. 7/8 X 130 X 950 C 1045
22.090.163	GR SUSP. 7/8 X 130 X 950 D 1045
22.090.262	GR SUSP. 7/8 X 130 X 1000 D 1045
22.090.241	GR SUSP. 7/8 X 140 X 500 C 1045
22.090.128	GR SUSP. 7/8 X 140 X 500 D 1045
22.090.426	GR SUSP. 7/8 X 140 X 520 C 1045

CÓDIGO	DESCRIPCIÓN
22.090.129	GR SUSP. 7/8 X 140 X 520 D 1045
22.090.384	GR SUSP. 7/8 X 140 X 530 C 1045
22.090.370	GR SUSP. 7/8 X 140 X 540 C 1045
22.090.242	GR SUSP. 7/8 X 140 X 550 C 1045
22.090.130	GR SUSP. 7/8 X 140 X 550 D 1045
22.090.415	GR SUSP. 7/8 X 140 X 560 C 1045
22.090.325	GR SUSP. 7/8 X 140 X 560 D 1045
22.090.243	GR SUSP. 7/8 X 140 X 600 C 1045
22.090.131	GR SUSP. 7/8 X 140 X 600 D 1045
22.090.132	GR SUSP. 7/8 X 140 X 610 D 1045
22.090.133	GR SUSP. 7/8 X 140 X 620 D 1045
22.090.307	GR SUSP. 7/8 X 140 X 200 X 630 CV 1020
22.090.134	GR SUSP. 7/8 X 140 X 630 D 1045
22.090.244	GR SUSP. 7/8 X 140 X 650 C 1045
22.090.135	GR SUSP. 7/8 X 140 X 650 D 1045
22.090.155	GR SUSP. 7/8 X 140 X 660 D 1045
22.090.136	GR SUSP. 7/8 X 140 X 675 D 1045
22.090.137	GR SUSP. 7/8 X 140 X 680 D 1045
22.090.138	GR SUSP. 7/8 X 140 X 690 D 1045
22.090.245	GR SUSP. 7/8 X 140 X 700 C 1045
22.090.139	GR SUSP. 7/8 X 140 X 700 D 1045
22.090.246	GR SUSP. 7/8 X 140 X 720 C 1045
22.090.140	GR SUSP. 7/8 X 140 X 720 D 1045
22.090.141	GR SUSP. 7/8 X 140 X 730 D 1045
22.090.247	GR SUSP. 7/8 X 140 X 750 C 1045
22.090.142	GR SUSP. 7/8 X 140 X 750 D 1045
22.090.249	GR SUSP. 7/8 X 140 X 800 C 1045
22.090.143	GR SUSP. 7/8 X 140 X 800 D 1045
22.090.204	GR SUSP. 7/8 X 140 X 820 D 1045
22.090.251	GR SUSP. 7/8 X 140 X 830 C 1045
22.090.144	GR SUSP. 7/8 X 140 X 830 D 1045
22.090.250	GR SUSP. 7/8 X 140 X 850 C 1045
22.090.145	GR SUSP. 7/8 X 140 X 850 D 1045
22.090.427	GR SUSP. 7/8 X 140 X 900 C 1045
22.090.146	GR SUSP. 7/8 X 140 X 900 D 1045
22.090.367	GR SUSP. 7/8 X 140 X 950 C 1045
22.090.226	GR SUSP. 7/8 X 140 X 950 D 1045
22.090.428	GR SUSP. 7/8 X 140 X 1000 C 1045
22.090.227	GR SUSP. 7/8 X 140 X 1000 D 1045
22.090.303	GR SUSP. 7/8 X 146 X 500 CB 1045
22.090.263	GR SUSP. 7/8 X 146 X 550 CB 1045
22.090.274	GR SUSP. 7/8 X 146 X 580 CB 1045
22.090.264	GR SUSP. 7/8 X 146 X 600 CB 1045
22.090.275	GR SUSP. 7/8 X 146 X 650 CB 1045
22.090.276	GR SUSP. 7/8 X 146 X 700 CB 1045
22.090.392	GR SUSP. 7/8 X 146 X 750 CB 1045
22.090.423	GR SUSP. 7/8 X 146 X 800 CB 1045

# TABLA DE GRAPAS

## por Calibre/Rosca


CÓDIGO	DESCRIPCIÓN
35.005.001	GRC 1/2 X 65 X 260 B 1020
35.005.002	GRC 1/2 X 65 X 280 B 1020
35.005.003	GRC 1/2 X 65 X 300 B 1020
35.005.004	GRC 1/2 X 65 X 310 B 1020
35.005.005	GRC 1/2 X 65 X 320 B 1020
35.005.006	GRC 1/2 X 65 X 340 B 1020
35.005.007	GRC 1/2 X 65 X 360 B 1020
35.005.008	GRC 1/2 X 65 X 380 B 1020
35.005.009	GRC 1/2 X 65 X 400 B 1020
35.005.010	GRC 1/2 X 65 X 420 B 1020
35.005.011	GRC 1/2 X 65 X 440 B 1020
35.005.012	GRC 1/2 X 65 X 460 B 1020
35.005.023	GRC 1/2 X 72 X 300 B 1020
35.005.024	GRC 1/2 X 72 X 320 B 1020
35.005.025	GRC 1/2 X 72 X 350 B 1020
35.005.026	GRC 1/2 X 72 X 370 B 1020
35.005.014	GRC 1/2 X 82 X 280 B 1020
35.005.015	GRC 1/2 X 82 X 300 B 1020
35.005.016	GRC 1/2 X 82 X 320 B 1020
35.005.017	GRC 1/2 X 82 X 340 B 1020
35.005.013	GRC 1/2 X 82 X 370 B 1020
35.005.018	GRC 1/2 X 82 X 380 B 1020
35.005.019	GRC 1/2 X 82 X 400 B 1020
35.005.020	GRC 1/2 X 82 X 420 B 1020
35.005.021	GRC 1/2 X 82 X 440 B 1020
35.005.022	GRC 1/2 X 82 X 460 B 1020
35.007.092	GRC 5/8 X 72 X 300 B 1020
35.007.093	GRC 5/8 X 77 X 250 B 1020
35.007.094	GRC 5/8 X 82 X 160 B 1020
35.007.085	GRC 5/8 X 82 X 200 B 1020
35.007.065	GRC 5/8 X 82 X 240 B 1020
35.007.001	GRC 5/8 X 82 X 250 B 1020
35.007.002	GRC 5/8 X 82 X 260 B 1020
35.007.003	GRC 5/8 X 82 X 280 B 1020
35.007.004	GRC 5/8 X 82 X 300 B 1020
35.007.005	GRC 5/8 X 82 X 310 B 1020
35.007.006	GRC 5/8 X 82 X 320 B 1020
35.007.007	GRC 5/8 X 82 X 330 B 1020
35.007.008	GRC 5/8 X 82 X 340 B 1020

CÓDIGO	DESCRIPCIÓN
35.007.009	GRC 5/8 X 82 X 350 B 1020
35.007.010	GRC 5/8 X 82 X 360 B 1020
35.007.011	GRC 5/8 X 82 X 370 B 1020
35.007.063	GRC 5/8 X 82 X 370 B R200 ESP.
35.007.012	GRC 5/8 X 82 X 380 B 1020
35.007.054	GRC 5/8 X 82 X 390 B 1020
35.007.013	GRC 5/8 X 82 X 400 B 1020
35.007.014	GRC 5/8 X 82 X 410 B 1020
35.007.023	GRC 5/8 X 82 X 420 B 1020
35.007.024	GRC 5/8 X 82 X 430 B 1020
35.007.025	GRC 5/8 X 82 X 440 B 1020
35.007.026	GRC 5/8 X 82 X 450 B 1020
35.007.027	GRC 5/8 X 82 X 460 B 1020
35.007.028	GRC 5/8 X 82 X 470 B 1020
35.007.064	GRC 5/8 X 82 X 470 B R200 ESP.
35.007.029	GRC 5/8 X 82 X 480 B 1020
35.007.030	GRC 5/8 X 82 X 490 B 1020
35.007.031	GRC 5/8 X 82 X 500 B 1020
35.007.058	GRC 5/8 X 82 X 500 B R200 ESP.
35.007.032	GRC 5/8 X 82 X 520 B 1020
35.007.070	GRC 5/8 X 82 X 530 B 1020
35.007.033	GRC 5/8 X 82 X 540 B 1020
35.007.059	GRC 5/8 X 82 X 540 B R200 ESP.
35.007.043	GRC 5/8 X 82 X 550 B 1020
35.007.060	GRC 5/8 X 82 X 550 B R200 ESP.
35.007.034	GRC 5/8 X 82 X 560 B 1020
35.007.086	GRC 5/8 X 82 X 570 B 1020
35.007.035	GRC 5/8 X 82 X 580 B 1020
35.007.061	GRC 5/8 X 82 X 580 B R200 ESP.
35.007.036	GRC 5/8 X 82 X 600 B 1020
35.007.091	GRC 5/8 X 82 X 620 B 1020
35.007.076	GRC 5/8 X 82 X 650 B 1020
35.007.072	GRC 5/8 X 92 X 260 B 1020
35.007.050	GRC 5/8 X 92 X 280 B 1020
35.007.015	GRC 5/8 X 92 X 300 B 1020
35.007.055	GRC 5/8 X 92 X 320 B 1020
35.007.057	GRC 5/8 X 92 X 330 B 1020
35.007.056	GRC 5/8 X 92 X 340 B 1020
35.007.016	GRC 5/8 X 92 X 350 B 1020

CÓDIGO	DESCRIPCIÓN
35.007.052	GRC 5/8 X 92 X 360 B 1020
35.007.046	GRC 5/8 X 92 X 380 B 1020
35.007.053	GRC 5/8 X 92 X 390 B 1020
35.007.017	GRC 5/8 X 92 X 400 B 1020
35.007.051	GRC 5/8 X 92 X 410 B 1020
35.007.037	GRC 5/8 X 92 X 420 B 1020
35.007.068	GRC 5/8 X 92 X 430 B 1020
35.007.018	GRC 5/8 X 92 X 440 B 1020
35.007.019	GRC 5/8 X 92 X 450 B 1020
35.007.042	GRC 5/8 X 92 X 460 B 1020
35.007.049	GRC 5/8 X 92 X 470 B 1020
35.007.020	GRC 5/8 X 92 X 480 B 1020
35.007.067	GRC 5/8 X 92 X 490 B 1020
35.007.021	GRC 5/8 X 92 X 500 B 1020
35.007.069	GRC 5/8 X 92 X 510 B 1020
35.007.044	GRC 5/8 X 92 X 520 B 1020
35.007.041	GRC 5/8 X 92 X 540 B 1020
35.007.022	GRC 5/8 X 92 X 550 B 1020
35.007.047	GRC 5/8 X 92 X 560 B 1020
35.007.048	GRC 5/8 X 92 X 580 B 1020
35.007.045	GRC 5/8 X 92 X 600 B 1020
35.007.066	GRC 5/8 X 92 X 650 B 1020
35.007.038	GRC 5/8 X 92 X 650 B R160 ESP.
35.007.077	GRC 5/8 X 92 X 660 B 1020
35.007.039	GRC 5/8 X 92 X 680 B R160 ESP.
35.007.090	GRC 5/8 X 92 X 750 B 1020
35.007.040	GRC 5/8 X 92 X 750 B R200 ESP.
35.007.078	GRC 5/8 X 102 X 300 B 1020
35.007.079	GRC 5/8 X 102 X 340 B 1020
35.007.080	GRC 5/8 X 102 X 360 B 1020
35.007.062	GRC 5/8 X 102 X 380 B 1020
35.007.071	GRC 5/8 X 102 X 400 B 1020
35.007.081	GRC 5/8 X 102 X 420 B 1020
35.007.082	GRC 5/8 X 102 X 440 B 1020
35.007.083	GRC 5/8 X 102 X 460 B 1020
35.007.084	GRC 5/8 X 102 X 480 B 1020
35.007.089	GRC 5/8 X 102 X 490 B 1020
35.007.073	GRC 5/8 X 102 X 500 B 1020
35.007.074	GRC 5/8 X 102 X 560 B 1020



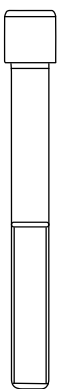


	<p><b>PERNOS CENTRALES</b></p>
---	------------------------------------

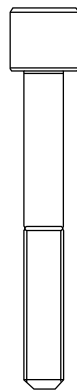
# **AUTOMOTRIZ**

## **Pernos**

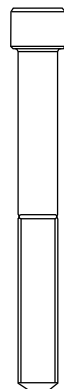
### MODELOS



CA



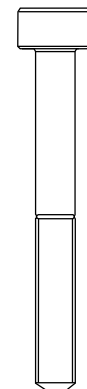
CAL



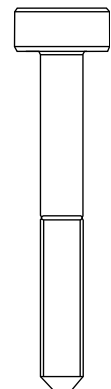
CB



CEA



CL



CLE

### Tipos de Roscas de Pernos

Línea de Pulgadas			Línea Métrica		
CALIBRE	ROSCA	FIOS/POL	CALIBRE	ROSCA	PASSO
5/16"	UNF	24	M10	MA	1,50
3/8"	UNF	24	M12	MB	1,50
7/16"	UNF	20	M14	MB	1,50
1/2"	UNF	20	M18	MB	1,50
9/16"	UNF	18	-	-	-
5/8"	UNF	18	-	-	-

### Longitud de Roscas de Pernos

LONGITUD DEL PIN (MM)	LONGITUD DE LA ROSCA (MM)
Até 10"	Medio Cuerpo
Por encima de 10"	128mm

# PERNOS 1/2"

CLASE 5.8	
CÓDIGO	DESCRIPCIÓN
47.019.008	PINO DE CENTRO 1/2" X 4" CB 5.8
47.019.009	PINO DE CENTRO 1/2" X 5" CB 5.8
47.019.010	PINO DE CENTRO 1/2" X 6" CB 5.8
47.019.011	PINO DE CENTRO 1/2" X 7" CB 5.8
47.019.012	PINO DE CENTRO 1/2" X 8" CB 5.8
47.019.013	PINO DE CENTRO 1/2" X 9" CB 5.8
47.019.014	PINO DE CENTRO 1/2" X 10" CB 5.8

CLASE 8.8	
CÓDIGO	DESCRIPCIÓN
47.019.020	PINO DE CENTRO 1/2" X 5" CAL 8.8
47.019.002	PINO DE CENTRO 1/2" X 5" CB 8.8
47.019.021	PINO DE CENTRO 1/2" X 6" CAL 8.8
47.019.003	PINO DE CENTRO 1/2" X 6" CB 8.8
47.019.015	PINO DE CENTRO 1/2" X 6" CL 8.8
47.019.022	PINO DE CENTRO 1/2" X 7" CAL 8.8
47.019.004	PINO DE CENTRO 1/2" X 7" CB 8.8
47.019.023	PINO DE CENTRO 1/2" X 8" CAL 8.8
47.019.005	PINO DE CENTRO 1/2" X 8" CB 8.8
47.019.016	PINO DE CENTRO 1/2" X 8" CL 8.8
47.019.006	PINO DE CENTRO 1/2" X 9" CB 8.8
47.019.007	PINO DE CENTRO 1/2" X 10" CB 8.8
47.019.017	PINO DE CENTRO 1/2" X 10" CL 8.8
47.019.024	PINO DE CENTRO 1/2" X 12" CB 8.8
47.019.018	PINO DE CENTRO 1/2" X 12" CL 8.8
47.019.019	PINO DE CENTRO 1/2" X 14" CL 8.8

# PERNOS 5/16"

CLASE 5.8	
CÓDIGO	DESCRIPCIÓN
47.200.005	PINO DE CENTRO 5/16" X 4" CB 5.8
47.200.006	PINO DE CENTRO 5/16" X 5" CB 5.8

CLASE 8.8	
CÓDIGO	DESCRIPCIÓN
47.200.002	PINO DE CENTRO 5/16" X 4" CB 8.8
47.200.003	PINO DE CENTRO 5/16" X 5" CB 8.8



# PERNOS 3/8"

## CLASSE 5.8

CÓDIGO	DESCRIPCIÓN
47.300.006	PINO DE CENTRO 3/8" X 4" CB 5.8
47.300.007	PINO DE CENTRO 3/8" X 5" CB 5.8
47.300.008	PINO DE CENTRO 3/8" X 6" CB 5.8
47.300.010	PINO DE CENTRO 3/8" X 7" CB 5.8

## CLASSE 8.8

CÓDIGO	DESCRIPCIÓN
47.300.001	PINO DE CENTRO 3/8" X 3" CB 8.8
47.300.002	PINO DE CENTRO 3/8" X 4" CB 8.8
47.300.003	PINO DE CENTRO 3/8" X 5" CB 8.8
47.300.004	PINO DE CENTRO 3/8" X 6" CB 8.8
47.300.009	PINO DE CENTRO 3/8" X 7" CB 8.8
47.300.012	PINO DE CENTRO 3/8" X 8" CB 8.8

# PERNOS 7/16"

## CLASSE 5.8

CÓDIGO	DESCRIPCIÓN
47.160.005	PINO DE CENTRO 7/16" X 5" CB 5.8
47.160.006	PINO DE CENTRO 7/16" X 6" CB 5.8
47.160.008	PINO DE CENTRO 7/16" X 8" CB 5.8

## CLASSE 8.8

CÓDIGO	DESCRIPCIÓN
47.160.002	PINO DE CENTRO 7/16" X 5" CB 8.8
47.160.003	PINO DE CENTRO 7/16" X 6" CB 8.8
47.160.009	PINO DE CENTRO 7/16" X 7" CB 8.8
47.160.007	PINO DE CENTRO 7/16" X 8" CB 8.8

## PERNOS 9/16"

CLASSE 5.8	
CÓDIGO	DESCRIPCIÓN
47.086.006	PINO DE CENTRO 9/16" X 6" CB 5.8
47.086.007	PINO DE CENTRO 9/16" X 7" CB 5.8
47.086.008	PINO DE CENTRO 9/16" X 8" CB 5.8
47.086.009	PINO DE CENTRO 9/16" X 9" CB 5.8
47.086.010	PINO DE CENTRO 9/16" X 10" CB 5.8
47.086.015	PINO DE CENTRO 9/16" X 16" CB 5.8
47.086.014	PINO DE CENTRO 9/16" X 18" CB 5.8

CLASSE 8.8	
CÓDIGO	DESCRIPCIÓN
47.086.001	PINO DE CENTRO 9/16" X 6" CB 8.8
47.086.002	PINO DE CENTRO 9/16" X 7" CB 8.8
47.086.003	PINO DE CENTRO 9/16" X 8" CB 8.8
47.086.004	PINO DE CENTRO 9/16" X 9" CB 8.8
47.086.005	PINO DE CENTRO 9/16" X 10" CB 8.8
47.086.011	PINO DE CENTRO 9/16" X 12" CB 8.8

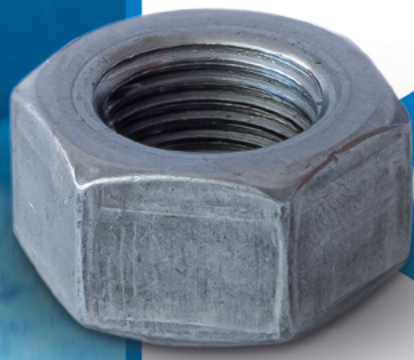
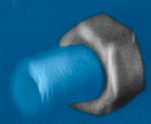
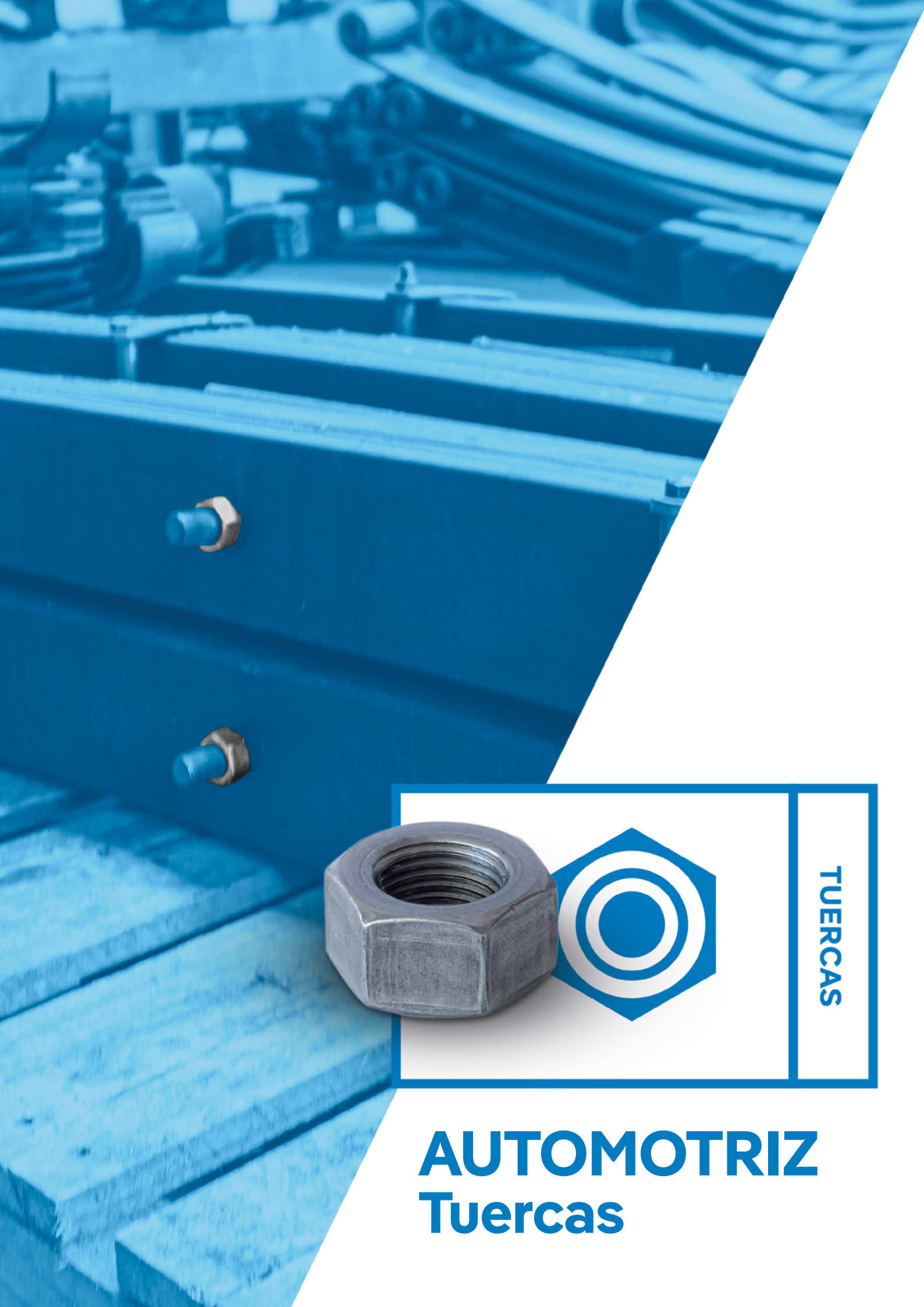
## PERNOS M10

CLASSE 5.8	
CÓDIGO	DESCRIPCIÓN
47.020.005	PINO DE CENTRO M10 X 5" CB 5.8
47.020.006	PINO DE CENTRO M10 X 6" CB 5.8

CLASSE 8.8	
CÓDIGO	DESCRIPCIÓN
47.020.002	PINO DE CENTRO M10 X 5" CB 8.8
47.020.003	PINO DE CENTRO M10 X 6" CB 8.8
47.020.008	PINO DE CENTRO M10 X 8" CB 8.8
47.020.007	PINO DE CENTRO M10 X 10" CB 8.8

<b>CLASE 5.8</b>	
<b>CÓDIGO</b>	<b>DESCRIPCIÓN</b>
47.047.027	PINO DE CENTRO M12 X 5" CB 5.8
47.047.019	PINO DE CENTRO M12 X 6" CA 5.8
47.047.014	PINO DE CENTRO M12 X 6" CB 5.8
47.047.020	PINO DE CENTRO M12 X 7" CA 5.8
47.047.015	PINO DE CENTRO M12 X 7" CB 5.8
47.047.021	PINO DE CENTRO M12 X 8" CA 5.8
47.047.016	PINO DE CENTRO M12 X 8" CB 5.8
47.047.022	PINO DE CENTRO M12 X 9" CA 5.8
47.047.017	PINO DE CENTRO M12 X 9" CB 5.8
47.047.023	PINO DE CENTRO M12 X 10" CA 5.8
47.047.018	PINO DE CENTRO M12 X 10" CB 5.8
47.047.024	PINO DE CENTRO M12 X 12" CA 5.8
47.047.028	PINO DE CENTRO M12 X 12" CB 5.8

<b>CLASE 8.8</b>	
<b>CÓDIGO</b>	<b>DESCRIPCIÓN</b>
47.047.029	PINO DE CENTRO M12 X 4" CEA 8.8
47.047.025	PINO DE CENTRO M12 X 5" CB 8.8
47.047.030	PINO DE CENTRO M12 X 5" CEA 8.8
47.047.007	PINO DE CENTRO M12 X 6" CA 8.8
47.047.002	PINO DE CENTRO M12 X 6" CB 8.8
47.047.031	PINO DE CENTRO M12 X 6" CEA 8.8
47.047.008	PINO DE CENTRO M12 X 7" CA 8.8
47.047.003	PINO DE CENTRO M12 X 7" CB 8.8
47.047.032	PINO DE CENTRO M12 X 7" CEA 8.8
47.047.009	PINO DE CENTRO M12 X 8" CA 8.8
47.047.004	PINO DE CENTRO M12 X 8" CB 8.8
47.047.033	PINO DE CENTRO M12 X 8" CEA 8.8
47.047.010	PINO DE CENTRO M12 X 9" CA 8.8
47.047.005	PINO DE CENTRO M12 X 9" CB 8.8
47.047.011	PINO DE CENTRO M12 X 10" CA 8.8
47.047.006	PINO DE CENTRO M12 X 10" CB 8.8
47.047.034	PINO DE CENTRO M12 X 10" CEA 8.8
47.047.012	PINO DE CENTRO M12 X 12" CA 8.8
47.047.026	PINO DE CENTRO M12 X 12" CB 8.8
47.047.035	PINO DE CENTRO M12 X 12" CEA 8.8



**TUERCAS**

# **AUTOMOTRIZ**

## **Tuercas**

# AUTOMOTRIZ

## Tuercas

### TUERCAS DOBLES

CÓDIGO	DESCRIPCIÓN
13.005.001	PORCA DUPLA SX 1/2" UNC - 13 FIOS 5.8
13.019.001	PORCA DUPLA SX 1/2" UNF - 20 FIOS 5.8
13.086.001	PORCA DUPLA SX 9/16" UNF - 18 FIOS 5.8
13.007.002	PORCA DUPLA SX 5/8" UNC - 11 FIOS 5.8
13.070.001	PORCA DUPLA SX 5/8" UNF - 18 FIOS 5.8
13.080.001	PORCA DUPLA SX 3/4" UNF - 16 FIOS 5.8
13.090.001	PORCA DUPLA SX 7/8" UNF - 14 FIOS 5.8
13.057.001	PORCA DUPLA SX M18 X 1,5 - MB 5.8
13.060.001	PORCA DUPLA SX M20 X 1,5 MB 5.8
13.059.001	PORCA DUPLA SX M20 X 2,5 - MA 5.8
13.063.001	PORCA DUPLA SX M22 X 2,5 - MA 5.8
13.170.001	PORCA DUPLA SX M24 X 2,0 - MB 5.8
13.170.003	PORCA DUPLA SX M24 X 3,0 5.8
13.091.002	PORCA DUPLA SX M27 - PASSO2,0 5.8
13.074.001	PORCA DUPLA SX M30 X 3,5 - MA 5.8

### TUERCAS SIMPLES

CÓDIGO	DESCRIPCIÓN
13.019.002	PORCA SIMPLES SX 1/2" UNF - 20 FIOS 5.8
13.086.002	PORCA SIMPLES SX 9/16" UNF - 18 FIOS 5.8
13.300.001	PORCA SIMPLES SX 3/8" UNF - 24 FIOS 5.8
13.200.001	PORCA SIMPLES SX 5/16" UNF - 24 FIOS 5.8
13.160.001	PORCA SIMPLES SX 7/16" UNF - 20 FIOS 5.8
13.090.002	PORCA SIMPLES SX 7/8" UNF - 14 FIOS 5.8
13.020.001	PORCA SIMPLES SX M10 X 1,5 - MA 5.8
13.047.001	PORCA SIMPLES SX M12 X 1,5 - MB 5.8
30.056.001	PORCA SIMPLES SX M12 X 1,75 5.8
13.091.001	PORCA SIMPLES SX M27 - PASSO3,0 5.8

## IMPLEMENTOS DE CARRETERA



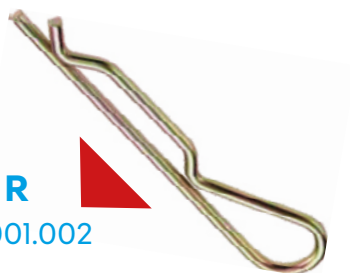
**ELO PARA ENGATE DE CADENA**

Cód: 40.003.002



**ENGATE DE CADENA "S"**

Cód: 40.003.001



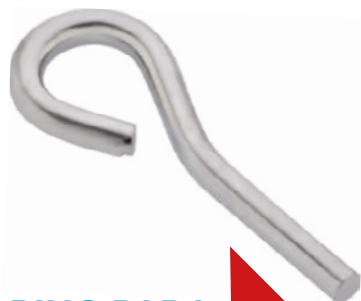
**GRAPA R**

Cód: 40.001.002



**JOANINHA TOMBADOR**

Cód: 40.001.001



**PINO PARA CANTO**

CÓDIGO	MODELO
40.003.006	6,90 (5/16")

# IMPLEMENTOS DE CARRETERA



**PINO PARA CANTO CON CADENA**

CÓDIGO	MODELO
40.003.007	5,30 (1/4")
40.003.008	6,90 (5/16")



**PINO PARA CADENA MAIAL**

CÓDIGO	MODELO
40.003.003	6,90 (5/16")
40.003.004	8,30 (3/8")



**TUERCA DE CANTO**

CÓDIGO	MODELO
38.007.001	5/8"
38.008.001	3/4"



**TRAVESSA DEL GRAPA**

DESCRIPCIÓN	CÓDIGO
TRAVESSA GRAMPO 1/2" X 65	40.006.015
TRAVESSA GRAMPO 5/8" X 82	40.006.014
TRAVESSA GRAMPO 5/8" X 92	40.006.016



**PRESILHA DE CINTA PARA TAMPA**

Cód: 40.002.003



**PRESILHA ESTREITA PARA TAMPA**

Cód: 40.002.001



**PRESILHA LARGA PARA TAMPA**

Cód: 40.002.002



**+55 (54) 3225.6544**

**+55 (54) 99269.5235 (WhatsApp)**

[vendas@metalurgicaluzi.com.br](mailto:vendas@metalurgicaluzi.com.br)

Rua Natal Chiarello, 452 - Bairro Desvio Rizzo

Caxias do Sul/RS - 95012-663

Brasil

[www.metalurgicaluzi.com.br](http://www.metalurgicaluzi.com.br)

