

# GM60 SERIES



High-energy transfer  
Larger cross section  
Higher bending stiffness  
Faster penetration rates  
Straighter holes



**MMC RYOTEC Corporation**

A Group Company of  MITSUBISHI MATERIALS

# GM60 SERIES



Compared with T51 rods, GM60 rods have

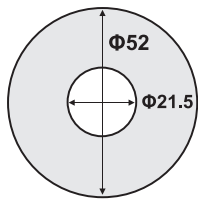
- 38% larger rod cross-section, providing higher penetration rate.
- 10% bigger flushing area, providing more efficient flushing.
- 55% higher bending stiffness, providing straighter holes.

	T51	GM60
Rod Cross Section	100%	138%
Flushing Area	100%	110%
Bending Stiffness	100%	155%

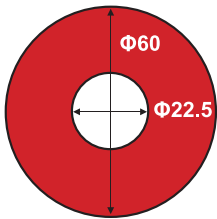
- The GM60 system provides double the penetration rate at half the energy consumed compared with DTH drilling.
- Our top-quality Carbide buttons, formulated and sintered in house.
- Compared with other drilling tool systems, the GM60 system permits a wider hole range using the same rock drill.



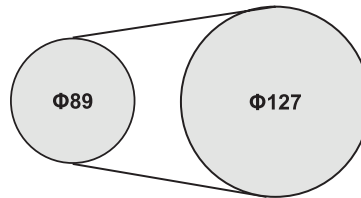
T51 Cross Section



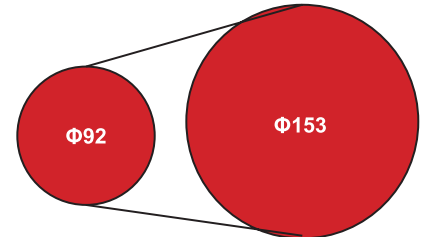
GM60 Cross Section



T51 Hole Range



GM60 Hole Range



## BUTTON BIT

### NORMAL SKIRT

Gauge diameter		Gauge angle[°]	Button x Button dia.[mm]		Flushing hole [mm]	Face design	Weight [Kg]	Part number
[mm]	[in]		Gauge	Face				
92	3 5/8"	35	8X12	6X12	4X11	55	5.6	60GMPVS92BB55M
102	4"	35	8X14	6X14	4X11	55	6.9	60GMPVS102R55M
102	4"	35	8X14	6X14	4X11	55	6.9	60GMPVS102BB55M
115	4 1/2"	35	8X14	8X14	4X11	55	8.4	60GMPVS115R55M
127	5"	35	8X16	4X14 4X16	4X12	55	9.5	60GMPVS127R55M
140	5 1/2"	35	8X16	8X16	4X12	55	11.9	60GMPVS140R55M
140	5 1/2"	35	9X16	9X16	3X14	53	11.9	60GMPVS140R53M
153	6"	35	10X16	3X14 6X16	4X13	5X	15.4	60GMPVS153BB5X

### RETRAC SKIRT

92	3 5/8"	35	8X12	6X12	4X11	55	6.2	60GMPVR92BB55M
102	4"	35	8X14	6X14	4X11	55	7.6	60GMPVR102R55M
112	4 3/8"	35	8X14	8X14	4X11	55	9.1	60GMPVR112R55M
115	4 1/2"	35	8X14	6X14	4X11	55	9.6	60GMPVR115R55M
115	4 1/2"	35	8X14	6X14	4X11	55	9.6	60GMPVR115BB55M
115	4 1/2"	35	9X16	7X14	3X15	23	10.1	60GMPVR115R23MB
121	4 3/4"	35	8X16	8X14	4X12	55	12.1	60GMPVR121BB55M
127	5"	35	8X16	4X14 4X16	4X12	55	13.1	60GMPVR127R55M
127	5"	35	8X16	4X14 4X16	4X12	55	13.1	60GMPVR127BB55M
127	5"	35	9X16	9X14	3X15	23	13.8	60GMPVR127R23M1
140	5 1/2"	35	9X16	9X16	3X14	53	15.2	60GMPVR140R53M
153	6"	35	10X16	3X14 6X16	4X13	5X	18.8	60GMPVR153R5X



Type 23



Type 53



Type 55

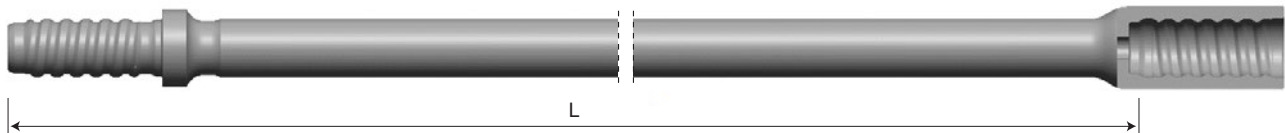


Type 5X

## MF-ROD, GM60-round 60-GM60. For bits from 96mm.

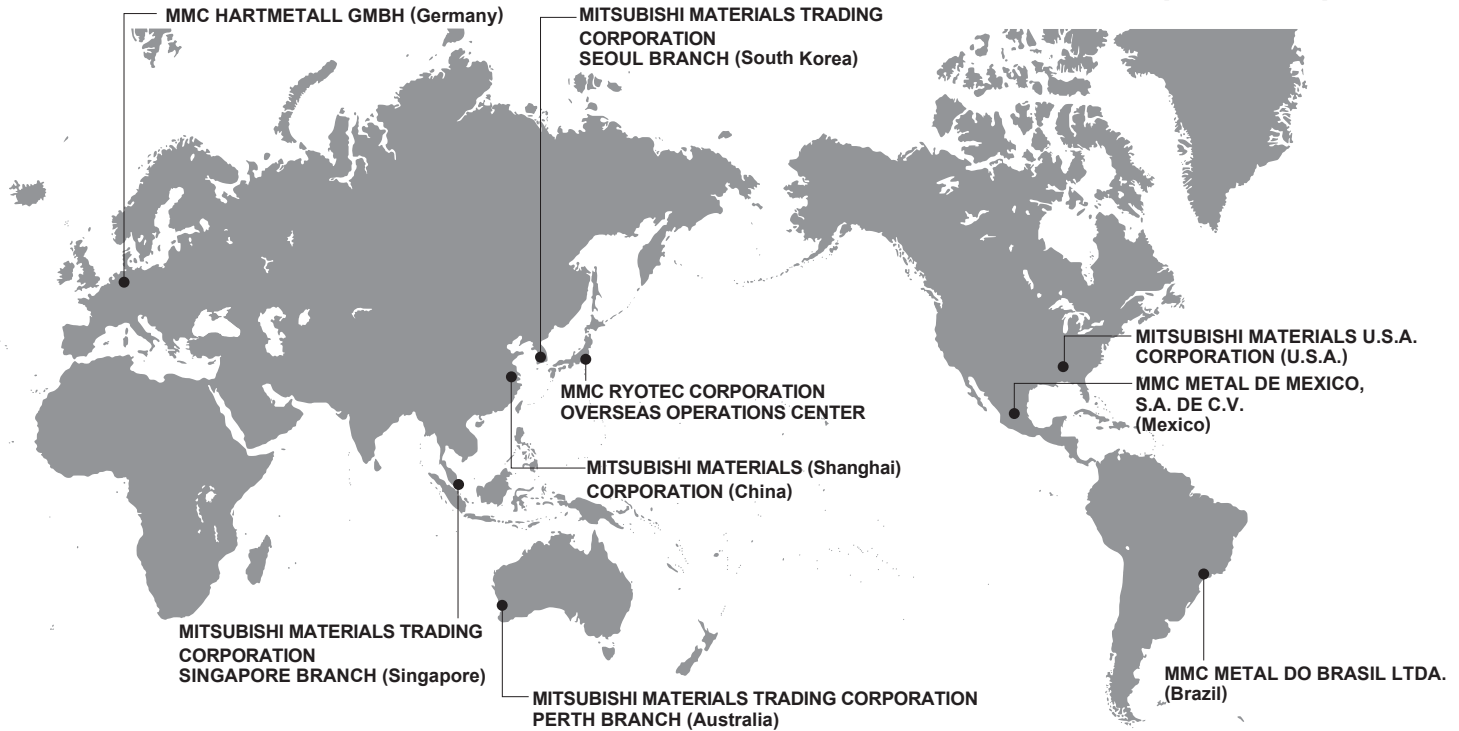
Thread	Outside diameter		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
GM60 – GM60	60	2 1/4"	3660	12'	74.4	<b>ER60GM60MF-3660</b>
	60	2 1/4"	4270	14'	86.0	<b>ER60GM60MF-4270</b>
	60	2 1/4"	5490	18'	109.3	<b>ER60GM60MF-5490</b>
	60	2 1/4"	6100	20'	121.0	<b>ER60GM60MF-6100</b>

Female end ø85mm, Flushing hole ø22.5mm.



## SHANK ADAPTER

Manufacturer	Drifter	Thread	Length(L) [mm]	Flushing tube dia [mm]	Weight [Kg]	Part number
Sandvik/Tamrock	HL1000/ HL1500	GM60	670	SF	13.2	<b>S357GM60SFBG</b>
Sandvik/Tamrock	HL1500	GM60	760	SF	21.3	<b>S283GM60SFCG</b>
Atlas copco	COP2560	GM60	770	SF	14.3	<b>S312GM60SFA</b>
Atlas copco	COP3060MEX	GM60	840	SF	17.3	<b>S399GM60SFB</b>



# MMC RYOTEC Corporation

A Group Company of  MITSUBISHI MATERIALS

## JAPAN / ROCK TOOLS

**MMC RYOTEC CORPORATION**  
**TOKYO OFFICE [Overseas Operations Center]**  
 KFC Bldg. 7F, 1-6-1 Yokoami, Sumida-ku, Tokyo 130-0015  
 TEL +81-3-5819-8723  
 E-Mail: [rocktool@mmc.co.jp](mailto:rocktool@mmc.co.jp)

<http://www.ryotec.co.jp/en/>



### Subsidiaries of MITSUBISHI MATERIALS CORPORATION

U.S.A.	<b>MITSUBISHI MATERIALS U.S.A. CORPORATION</b> 105 Corporate Center Dr. Suite A, Mooresville, NC 28117, U.S.A TEL +1-980-312-3150 FAX +1-704-746-9595 E-Mail: <a href="mailto:mmusclt@mmus.com">mmusclt@mmus.com</a>	Australia	<b>MITSUBISHI MATERIALS TRADING CORPORATION PERTH BRANCH</b> Suite 10, 137 Kewdale Road, Kewdale, WA 6105, Australia TEL +61-8-6258-7200 FAX +61-8-6258-5614 E-Mail: <a href="mailto:ml-sales@mmtc.co.jp">ml-sales@mmtc.co.jp</a> Website: <a href="http://www.mmtc.co.jp/au/">http://www.mmtc.co.jp/au/</a>
Germany	<b>MMC HARTMETALL GMBH</b> Comeniusstr. 2, 40670 Meerbusch, Germany TEL +49-2159-9189-32 FAX +49-2159-9189-30079 E-Mail: <a href="mailto:rocktools@mmchg.de">rocktools@mmchg.de</a>	South Korea	<b>MITSUBISHI MATERIALS TRADING CORPORATION SEOUL BRANCH</b> #1812 Samsung Cheil Bldg., 309, Teheran-ro, Gangnam-gu, Seoul 06151, South Korea TEL +82-2-3474-2331 FAX +82-2-527-2834 Email: <a href="mailto:mb-rocktool@mmtc.co.jp">mb-rocktool@mmtc.co.jp</a> Website: <a href="https://www.mmtc.co.jp/en/">https://www.mmtc.co.jp/en/</a>
Brazil	<b>MMC METAL DO BRASIL LTDA.</b> Rua Cincinato Braga, 340 13º andar, Bela Vista-CEP 01333-010 São Paulo-SP., BRASIL TEL +55-11-3262-5095 FAX +55-11-3285-4906 E-Mail: <a href="mailto:mabr@mabr.com.br">mabr@mabr.com.br</a>	Singapore	<b>MITSUBISHI MATERIALS TRADING CORPORATION SINGAPORE BRANCH</b> 10 Anson Road, #32-09 International Plaza, Singapore 079903 TEL +65-6221-7233 FAX +65-6325-4220 Email: <a href="mailto:mb-rocktool@mmtc.co.jp">mb-rocktool@mmtc.co.jp</a> Website: <a href="https://www.mmtc.co.jp/en/">https://www.mmtc.co.jp/en/</a>
Mexico	<b>MMC METAL DE MEXICO S.A. DE C.V.</b> Av. La Canada No.16 Parque Industrial Bernardo Quintana El marques, Queretaro. TEL +52-442-221-6136 +52-442-221-6137 FAX +52-442-221-6134 E-Mail: <a href="mailto:gonzalez@mmcex.com">gonzalez@mmcex.com</a>	China	<b>MITSUBISHI MATERIALS (SHANGHAI) CORPORATION</b> 2101 Tower 1, Raffles City, 1133 Changning Road Changning District, Shanghai, 200051, China TEL :+86-(0)21-6235-0745 FAX :+86-(0)21-6235-0741 Inquiry form : <a href="http://www.mmc.sh.cn/contact-us/">http://www.mmc.sh.cn/contact-us/</a>