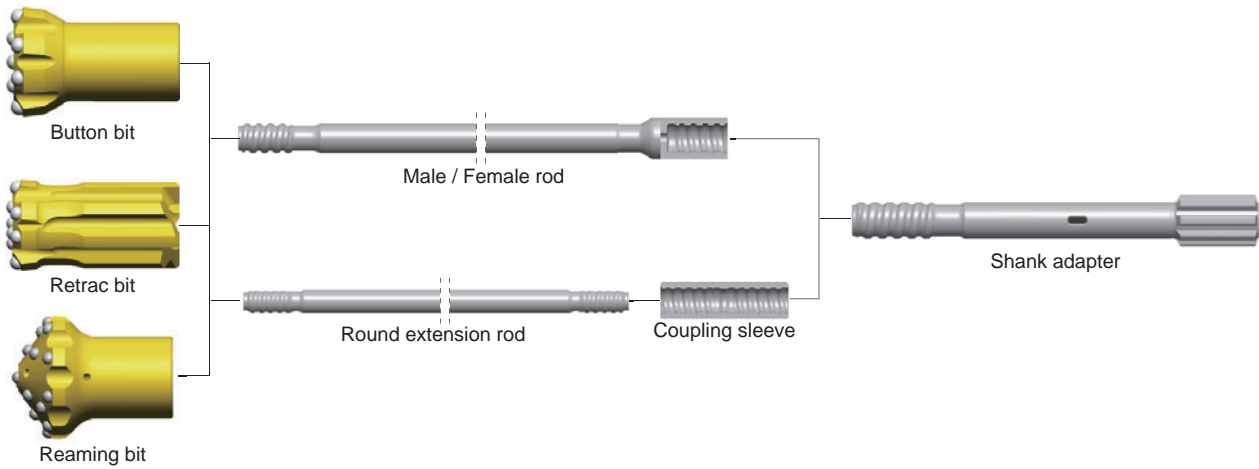


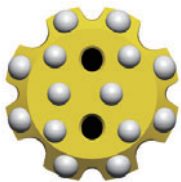
BENCH & LONG HOLE DRILLING EQUIPMENT

T51 (2") SERIES (Recommended gauge diameter $\phi 89\sim\phi 127$)



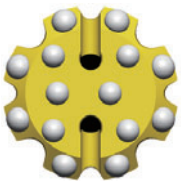
Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST
For details of bit design, please refer to p.20

Button bit Type 15



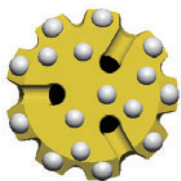
Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	8x13	6x12	-	2	4.1	51MPVS89R15M
89	3 1/2"	40	8x12	6x12	-	2	4.1	51MPVS89R15H
102	4"	35	8x14	6x13	-	2	5.2	51MPVS102R15M
102	4"	40	8x13	6x13	-	2	5.2	51MPVS102R15H

Button bit Type 25



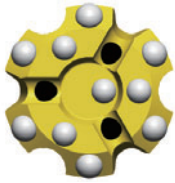
Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	8x13	6x12	-	2	4.0	51MPVS89R25M
102	4"	35	8x14	6x13	-	2	5.1	51MPVS102R25M
115	4 1/2"	35	8x14	7x13	-	2	6.6	51MPVS115R25M
127	5"	35	8x16	8x14	-	2	8.7	51MPVS127R25M

Button bit Type 23



Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	9x12	6x12	-	3	4.1	51MPVS89R23M
102	4"	35	9x13	6x13	-	3	5.2	51MPVS102R23M
115	4 1/2"	35	9x13	7x13	-	3	6.7	51MPVS115R23MS
115	4 1/2"	35	9x14	7x14	-	3	6.8	51MPVS115R23M
127	5"	35	9x14	7x14	-	3	8.8	51MPVS127R23MS
127	5"	35	9x16	7x16	-	3	8.9	51MPVS127R23M

Button bit Type 53 & 55



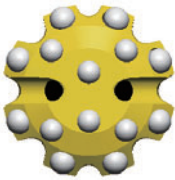
Type 53 (φ89)



Type 55 (φ89-φ127)

Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	6x13	5x12	-	3	3.9	51MPVS89R53M
89	3 1/2"	35	8x12	6x12	-	4	4.0	51MPVS89R55M
102	4"	35	8x14	6x14	-	4	5.1	51MPVS102R55M
115	4 1/2"	35	8x14	8x14	-	4	6.6	51MPVS115R55M
127	5"	35	8x16	4x16,4x14	-	4	8.7	51MPVS127R55M

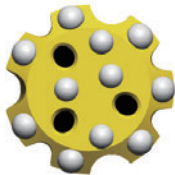
Button bit Type 85



Gauge diameter		* Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	20-40	8x12	6x12	2	2	3.9	51MPWS89BB85H
102	4"	20-40	8x12	7x12	-	2	5.0	51MPVS102BB85H
115	4 1/2"	20-40	8x14	8x12	-	2	6.5	51MPVS115BB85H
127	5"	20-40	8x14	4x14, 4x12	-	2	8.6	51MPVS127BB85H

* Face angle 20°, Gauge angle 40°

Button bit Type 14

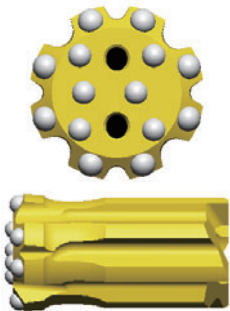


Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	7x14	5x12	-	3	4.0	51MPVS89R14M
102	4"	35	7x14	5x13	-	3	5.1	51MPVS102R14M

BENCH & LONG HOLE DRILLING EQUIPMENT

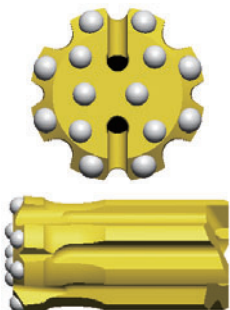
T51 (2") SERIES (Recommended gauge diameter $\phi 89\sim\phi 127$)

Retrac Button bit Type 15



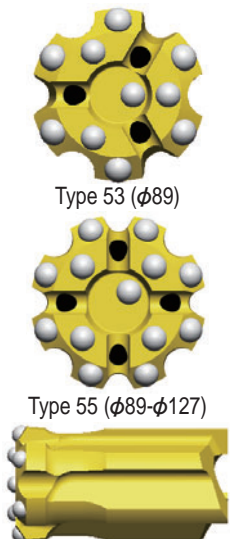
Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	8x13	6x12	-	2	4.4	51MPVR89R15M
102	4"	35	8x14	6x13	-	2	6.5	51MPVR102R15M

Retrac Button bit Type 25



Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	8x13	6x12	-	2	4.3	51MPVR89R25M
102	4"	35	8x14	6x13	-	2	6.4	51MPVR102R25M
115	4 1/2"	35	8x14	7x13	-	2	8.3	51MPVR115R25M
127	5"	35	8x16	8x14	-	2	10.7	51MPVR127R25M

Retrac Button bit Type 53 & 55

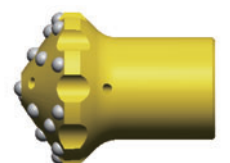


Type 53 ($\phi 89$)

Type 55 ($\phi 89\sim\phi 127$)

Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	35	6x13	5x12	-	3	4.2	51MPVR89R53M
89	3 1/2"	35	8x12	6x12	-	4	4.3	51MPVR89R55M
102	4"	35	8x14	6x14	-	4	6.4	51MPVR102R55M
115	4 1/2"	35	8x14	8x14	-	4	8.3	51MPVR115R55M
127	5"	35	8x16	4x16, 4x14	-	4	10.7	51MPVR127R55M

Reaming bit integration model



Gauge diameter		Gauge angle [°]	Button x Button dia.[mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
152	6"	35	9x14	11x14	3	1	10.6	51MPJ152-D