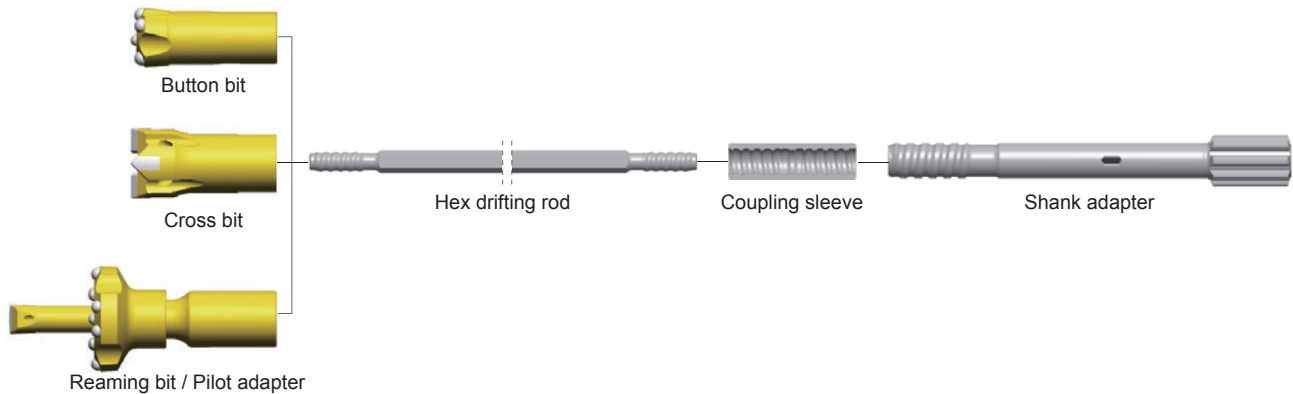


# D R I F T I N G & T U N N E L L I N G E Q U I P M E N T



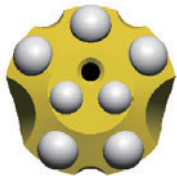
# DRIFTING & TUNNELLING EQUIPMENT

## R25 (1") SERIES (Recommended gauge diameter Ø33 - Ø45)



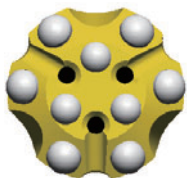
Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST  
For details of bit design, please refer to p.14

### Button bit Type 06



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
33	1 5/16"	35	5×7	2×7	1	1	0.4	25RTPWS33R06M
33	1 5/16"	30	5×8	2×7	1	1	0.4	25RTPWS33R06L
35	1 3/8"	40	5×8	2×7	1	1	0.4	25RTPWS35R06H
37	1 15/32"	35	5×9	2×7	1	1	0.5	25RTPWS37R06M
38	1 1/2"	35	5×9	2×8	1	1	0.5	25RTPWS38R06M
41	1 5/8"	40	5×9	2×8	2	1	0.6	25RTPWS41R06H
43	1 11/16"	40	5×9	2×9	2	1	0.6	25RTPWS43R06H
45	1 3/4"	35	5×10	2×9	2	1	0.7	25RTPWS45R06M

### Button bit Type 23



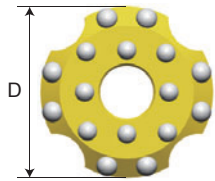
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
35	1 3/8"	35	6×7	3×7	1	3	0.4	25RTPWS35R23M
37	1 15/32"	35	6×7	3×7	1	3	0.5	25RTPWS37R23M
38	1 1/2"	35	6×8	3×7	1	3	0.5	25RTPWS38R23M
41	1 5/8"	40	6×8	3×7	1	3	0.6	25RTPWS41R23H
43	1 11/16"	35	6×8	3×8	1	3	0.6	25RTPWS43R23M
45	1 3/4"	30	6×9	3×8	1	3	0.7	25RTPWS45R23L

### Cross bit



Gauge diameter		Carbide size W × H [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
35	1 3/8"	10×19	-	-	2	1	0.4	25RTC35V
38	1 1/2"	10×19	-	-	2	1	0.5	25RTC38V
41	1 5/8"	10×19	-	-	2	1	0.6	25RTC41V
45	1 3/4"	10×19	-	-	2	1	0.7	25RTC45V

## Reaming bit / Pilot adapter 6° taper



Gauge diameter(D)		Gauge angle [°]	Button x Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
64	2 1/2"	30	6×9	3×8	-	-	1.0	<b>WTHP64R11</b>
76	3"	30	6×10	6×9	-	-	1.3	<b>WTHP76R11</b>
89	3 1/2"	30	8×11	8×10	-	-	1.7	<b>WTHP89R15</b>



Gauge diameter(D)		Carbide size [mm]	Button x Button dia. [mm]		Flushing hole	Weight [Kg]	Part number
[mm]	[in]		Gauge	Face			
26	1"	8	-	-	1	1.4	<b>WR25THI26B</b>

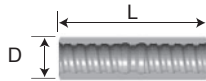
## Hex drifting rod



Thread	Hex		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R25 - R32	25	1"	2200	7' 2"	8.8	<b>EH25R32R25-2200</b>
			2475	8' 2"	10.2	<b>EH25R32R25-2475</b>
			2600	8' 6"	10.7	<b>EH25R32R25-2600</b>
			2800	9' 2"	11.2	<b>EH25R32R25-2800</b>
			3100	10' 2"	12.7	<b>EH25R32R25-3100</b>

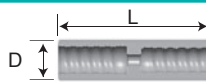
\* Custom lengths may be available upon request

## Coupling sleeve



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R25 - R25	35	1 3/8"	160	6 1/4"	0.7	<b>CR25</b>
R32 - R32	45	1 3/4"	150	6"	1.0	<b>CR32D</b>

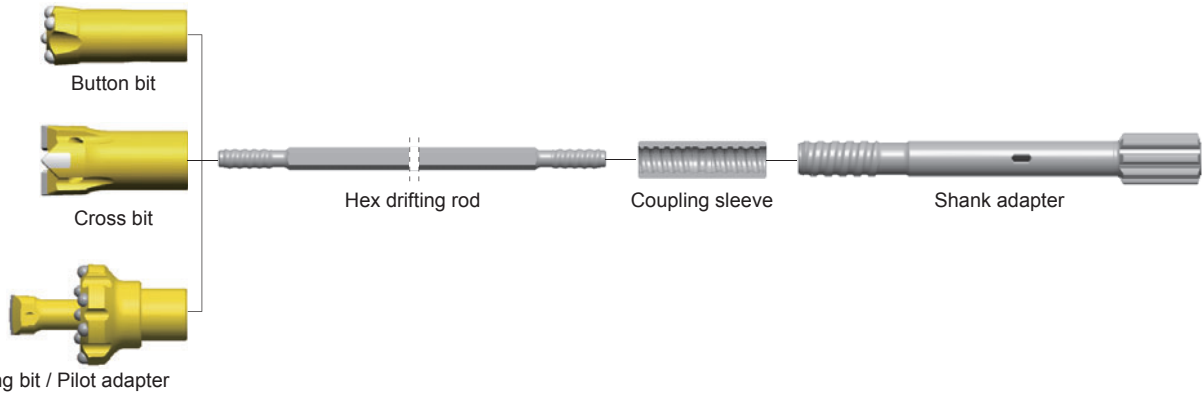
## Crossover coupling



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R25 - R32	45	1 3/4"	175	6 7/8"	1.5	<b>CR32R25</b>

# DRIFTING & TUNNELLING EQUIPMENT

## R28 (1 1/8") SERIES (Recommended gauge diameter Ø37 - Ø45)



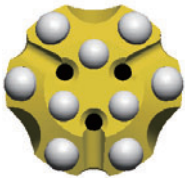
Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST  
For details of bit design, please refer to p.14

### Button bit Type 06



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
37	1 15/32"	35	5×9	2×7	1	1	0.5	28RTPWS37R06M
38	1 1/2"	35	5×9	2×8	1	1	0.5	28RTPWS38R06M
41	1 5/8"	40	5×9	2×8	2	1	0.6	28RTPWS41R06H
43	1 11/16"	40	5×9	2×9	2	1	0.7	28RTPWS43R06H
45	1 3/4"	35	5×10	2×9	2	1	0.7	28RTPWS45R06M

### Button bit Type 23



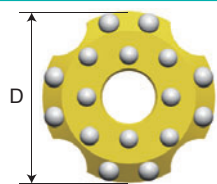
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
37	1 15/32"	35	6×7	3×7	1	3	0.5	28RTPWS37R23M
38	1 1/2"	35	6×8	3×7	1	3	0.5	28RTPWS38R23M
41	1 5/8"	40	6×8	3×7	1	3	0.6	28RTPWS41R23H
43	1 11/16"	35	6×8	3×8	1	3	0.7	28RTPWS43R23M
45	1 3/4"	30	6×9	3×8	1	3	0.7	28RTPWS45R23L

### Cross bit



Gauge diameter		Carbide size W × H [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
38	1 1/2"	10×19	-	-	4	1	0.5	28RTC38V
41	1 5/8"	10×19	-	-	4	1	0.6	28RTC41V
43	1 11/16"	10×19	-	-	4	1	0.7	28RTC43V
45	1 3/4"	10×19	-	-	4	1	0.7	28RTC45V

## Reaming bit / Pilot adapter 6° taper

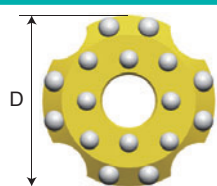


Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
64	2 1/2"	30	6×9	3×8	-	-	1.0	<b>WTHP64R11</b>
76	3"	30	6×10	6×9	-	-	1.3	<b>WTHP76R11</b>
89	3 1/2"	30	8×11	8×10	-	-	1.7	<b>WTHP89R15</b>



Gauge diameter(D)		Carbide size [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Front		
26	1"	8	-	-	1	1	1.4	<b>WR28THI26B</b>

## Reaming bit / Pilot adapter 12° taper



Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	30	8×11	4×10	-	-	1.6	<b>WTKP89R15</b>
102	4"	35	8×14	6×12	-	-	2.3	<b>WTKP102R16</b>
127	5"	35	12×13	8×13	-	-	4.8	<b>WTKP127R16</b>



Gauge diameter(D)		Carbide size [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Front		
40	1 5/8"	8	-	-	3	1	2.1	<b>WR28TKI40B</b>

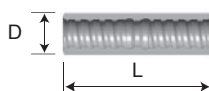
## Hex drifting rod



Thread	Hex		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R28 - R32	28	1 1/8"	2800	9'2"	14.1	<b>EH28R32R28-2800</b>
			3100	10'2"	15.8	<b>EH28R32R28-3100</b>
			3700	12'2"	19.2	<b>EH28R32R28-3700</b>
			4310	14'2"	23.0	<b>EH32R32R28-4310</b>

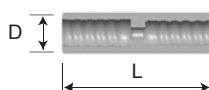
\* Custom lengths may be available upon request

## Coupling sleeve



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R28 - R28	41	1 5/8"	160	6 1/4"	1.0	<b>CR28D</b>
R32 - R32	45	1 3/4"	150	6"	1.0	<b>CR32D</b>

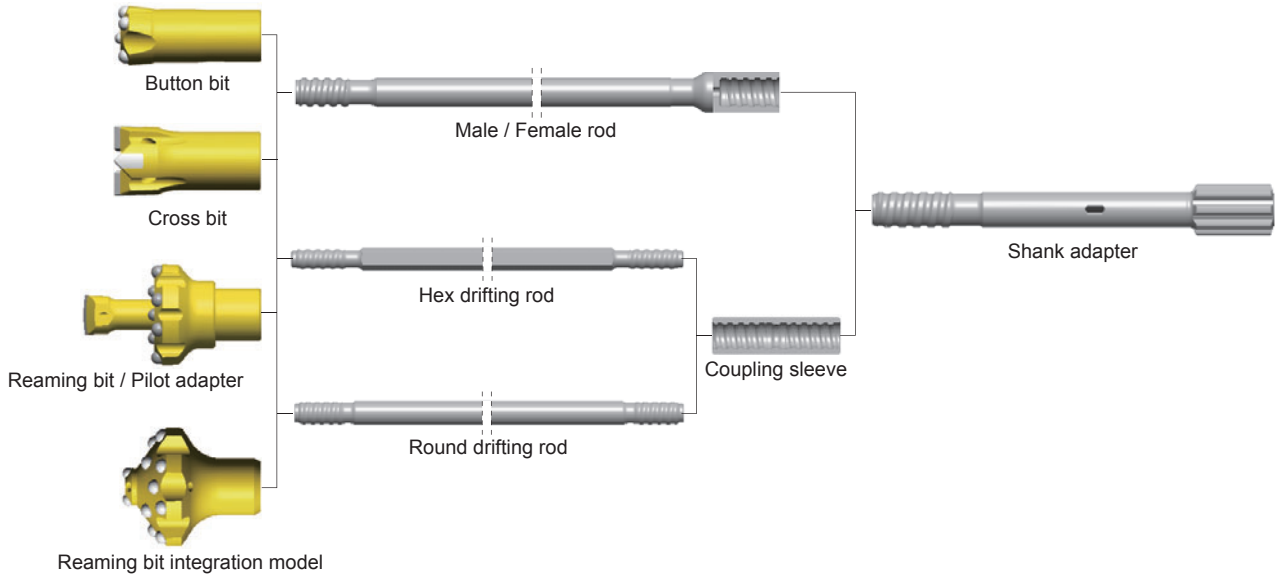
## Crossover coupling



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R28 - R32	45	1 3/4"	171	6 3/4"	1.4	<b>CR32R28</b>

# DRIFTING & TUNNELLING EQUIPMENT

## R32 (1 1/4") SERIES (Recommended gauge diameter Ø41 - Ø64)



Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST  
For details of bit design, please refer to p.14

### Button bit Type 06



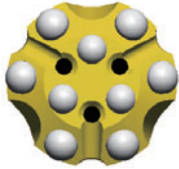
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
41	1 5/8"	40	5×9	2×8	2	1	0.6	32RTPWS41R06H
43	1 11/16"	40	5×9	2×9	2	1	0.7	32RTPWS43R06H
43	1 11/16"	30	5×10	2×8	2	1	0.7	32RTPWS43R06L
45	1 3/4"	35	5×10	2×9	2	1	0.8	32RTPWS45R06M
45	1 3/4"	30	5×11	2×9	2	1	0.8	32RTPWS45R06L
48	1 7/8"	30	5×11	2×9	2	1	0.9	32RTPWS48R06L
51	2"	30	5×12	2×10	2	1	1.0	32RTPWS51R06L

### Button bit Type 03



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
43	1 11/16"	35	6×9	3×8	1	3	0.7	32RTPWS43R03M
43	1 11/16"	30	6×10	3×8	1	3	0.7	32RTPWS43R03L
45	1 3/4"	30	6×10	3×8	1	3	0.8	32RTPWS45R03L
48	1 7/8"	35	6×10	3×9	1	3	0.9	32RTPWS48R03M

### Button bit Type 23



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
45	1 3/4"	30	6×9	3×8	1	3	0.8	<b>32RTPWS45R23L</b>
48	1 7/8"	30	6×10	3×9	1	3	0.9	<b>32RTPWS48R23L</b>
51	2"	30	6×10	3×9	1	3	1.0	<b>32RTPWS51R23L</b>
54	2 1/8"	40	6×10	3×10	1	3	1.1	<b>32RTPWS54R23H</b>
57	2 1/4"	40	6×11	3×10	1	3	1.2	<b>32RTPWS57R23H</b>
64	2 1/2"	35	6×12	3×11	1	3	1.4	<b>32RTPWS64R23M</b>

### Button bit Type 08



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
43	1 11/16"	35	6×9	2×8	-	2	0.7	<b>32RTPVS43BB08M</b>
45	1 3/4"	35	6×9	2×9	-	2	0.8	<b>32RTPVS45BB08M</b>
48	1 7/8"	35	6×10	2×9	-	2	0.9	<b>32RTPVS48BB08M</b>

### Button bit Type 09



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
43	1 11/16"	35	6×9	3×8	2	1	0.7	<b>32RTPWS43BB09M</b>
45	1 3/4"	35	6×9	3×9	2	1	0.8	<b>32RTPWS45BB09M</b>
48	1 7/8"	35	6×9	3×9	2	1	0.9	<b>32RTPWS48BB09M</b>

### Cross bit

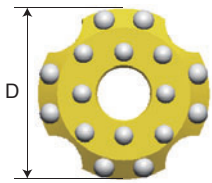


Gauge diameter		Carbide size W × H [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
41	1 5/8"	10×19	-	-	4	1	0.6	<b>32RTC41V</b>
45	1 3/4"	10×19	-	-	4	1	0.7	<b>32RTC45V</b>
48	1 7/8"	10×19	-	-	4	1	0.9	<b>32RTC48V</b>
51	2"	10×19	-	-	4	1	1.0	<b>32RTC51V</b>

# DRIFTING & TUNNELLING EQUIPMENT

## R32 (1 1/4") SERIES (Recommended gauge diameter Ø41 - Ø57)

### Reaming bit / Pilot adapter 6° taper

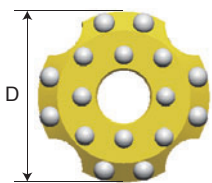


Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
64	2 1/2"	30	6×9	3×8	-	-	1.0	<b>WTHP64R11</b>
76	3"	30	6×10	6×9	-	-	1.3	<b>WTHP76R11</b>
89	3 1/2"	30	8×11	8×10	-	-	1.7	<b>WTHP89R15</b>



Gauge diameter(D)		Carbide size [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Front		
26	1"	8	-	-	1	1	1.7	<b>WR32THI26B</b>

### Reaming bit / Pilot adapter 12° taper

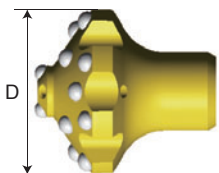


Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	30	8×11	4×10	-	-	1.6	<b>WTKP89R15</b>
102	4"	35	8×14	6×12	-	-	2.3	<b>WTKP102R16</b>
127	5"	35	12×13	8×13	-	-	4.8	<b>WTKP127R16</b>



Gauge diameter(D)		Carbide size [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Front		
40	1 5/8"	8	-	-	3	1	2.1	<b>WR32TKI40B</b>

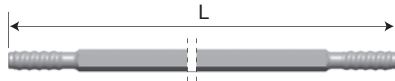
### Reaming bit integration model



Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole			Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face	Reverse		
76	3"	35	8×12	6×10	2	1	2	2.2	<b>WI32RTPJ76R-30R</b>
89	3 1/2"	35	8×12	10×10	2	1	2	2.5	<b>WI32RTPJ89R-30R</b>
102	4"	35	8×12	9×12, 2×10	2	1	2	2.7	<b>WI32RTPJ102R-30R</b>

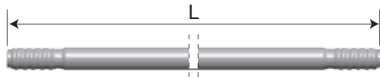


## Hex Drifting rod



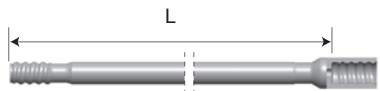
Thread	Hex		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R32 - R38	32	1 1/4"	3100	10' 2"	19.7	<b>EH32R38R32-3100</b>
			3700	12' 2"	23.3	<b>EH32R38R32-3700</b>
			4310	14' 2"	27.0	<b>EH32R38R32-4310</b>
			4920	16' 2"	30.9	<b>EH32R38R32-4920</b>
R32 - R38	35	1 3/8"	3100	10' 2"	23.9	<b>EH35R38R32-3100</b>
			3700	12' 2"	28.5	<b>EH35R38R32-3700</b>
			4310	14' 2"	33.2	<b>EH35R38R32-4310</b>
			4920	16' 2"	36.7	<b>EH35R38R32-4920</b>
R32 - T38	35	1 3/8"	5530	18' 2"	41.3	<b>EH35R38R32-5530</b>
			3100	10' 2"	19.7	<b>EH32M38R32-3100</b>
			3700	12' 2"	23.3	<b>EH32M38R32-3700</b>
			4310	14' 2"	27.0	<b>EH32M38R32-4310</b>
R32 - T38	35	1 3/8"	4920	16' 2"	30.9	<b>EH32M38R32-4920</b>
			3100	10' 2"	23.9	<b>EH35M38R32-3100</b>
			3700	12' 2"	28.5	<b>EH35M38R32-3700</b>
			4310	14' 2"	33.2	<b>EH35M38R32-4310</b>
R32 - T38	35	1 3/8"	4920	16' 2"	36.7	<b>EH35M38R32-4920</b>
			5530	18' 2"	41.3	<b>EH35M38R32-5530</b>

## Round Drifting rod



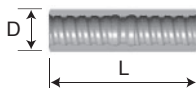
Thread	Outside diameter		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R32 - R32	32	1 1/4"	1830	6'	8.0	<b>ER32R32-1830</b>
			2440	8'	11.5	<b>ER32R32-2440</b>
			3050	10'	16.2	<b>ER32R32-3050</b>
			3660	12'	19.5	<b>ER32R32-3660</b>

## Male / Female Drifting rod



Thread	Outside diameter		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R32 - R32	32	1 1/4"	1830	6'	9.4	<b>ER32R32MF-1830</b>
			2440	8'	12.9	<b>ER32R32MF-2440</b>
			3050	10'	17.4	<b>ER32R32MF-3050</b>
			3660	12'	20.6	<b>ER32R32MF-3660</b>

## Coupling sleeve



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R32 - R32	45	1 3/4"	150	6"	1.0	<b>CR32D</b>
R38 - R38	54	2 1/8"	170	6 3/4"	1.7	<b>CR38D</b>

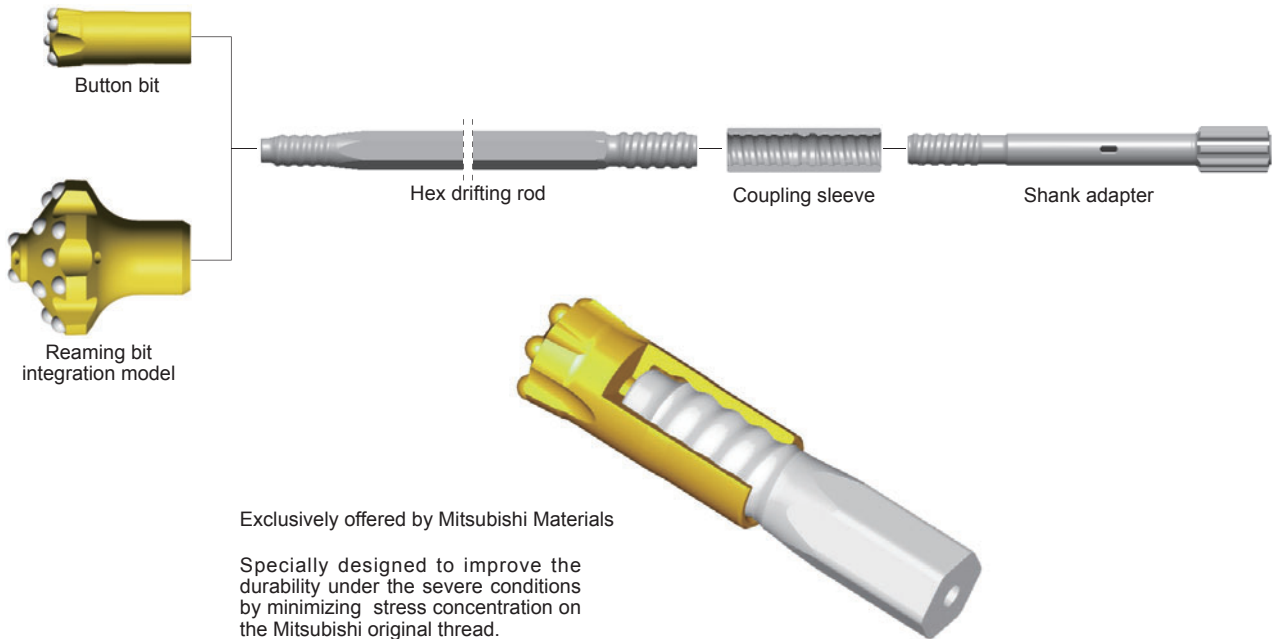
## Crossover coupling



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R32 - R25	45	1 3/4"	175	6 7/8"	1.5	<b>CR32R25</b>
R32 - R28	45	1 3/4"	171	6 3/4"	1.4	<b>CR32R28</b>
R32 - R38	54	2 1/8"	181	7 1/8"	2.1	<b>CR38R32</b>
R32 - T38	54	2 1/8"	188	7 1/2"	2.2	<b>CM38R32</b>

# DRIFTING & TUNNELLING EQUIPMENT

## NR34 (1 1/3") SERIES (Recommended gauge diameter Ø43 - Ø54)



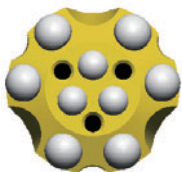
Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST  
For details of bit design, please refer to p.14

### Button bit Type 06



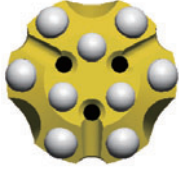
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
43	1 11/16"	30	5×10	2×8	2	1	0.7	34NRTPWS43R06L
45	1 3/4"	30	5×11	2×9	2	1	0.8	34NRTPWS45R06L
48	1 7/8"	30	5×11	2×9	2	1	0.9	34NRTPWS48R06L
51	2"	30	5×12	2×10	2	1	1.0	34NRTPWS51R06L

### Button bit Type 03



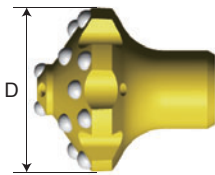
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
43	1 11/16"	35	6×9	3×8	1	3	0.7	34NRTPWS43R03M
45	1 3/4"	30	6×10	3×8	1	3	0.8	34NRTPWS45R03L
48	1 7/8"	35	6×10	3×9	1	3	0.9	34NRTPWS48R03M

## Button bit Type 23



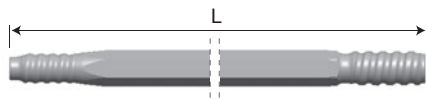
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
51	2"	30	6×10	3×9	1	3	1.0	<b>34NRTPWS51R23L</b>
54	2 1/8"	40	6×10	3×10	1	3	1.1	<b>34NRTPWS54R23H</b>

## Reaming bit integration model



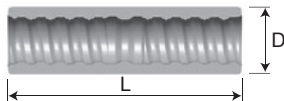
Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole			Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face	Reverse		
76	3"	35	8×12	6×10	2	1	2	2.3	<b>WI34NRTPJ76R-30R</b>
89	3 1/2"	35	8×12	10×10	2	1	2	2.6	<b>WI34NRTPJ89R-30R</b>
102	4"	35	8×12	9×12, 2×10	2	1	2	2.8	<b>WI34NRTPJ102R-30R</b>

## Hex drifting rod



Thread	Hex		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
NR34 - T38	35	1 3/8"	3100	10' 2"	24.8	<b>EH35M38NR34-3100</b>
			3700	12' 2"	29.5	<b>EH35M38NR34-3700</b>
			4310	14' 2"	34.1	<b>EH35M38NR34-4310</b>
			4920	16' 2"	37.6	<b>EH35M38NR34-4920</b>
			5530	18' 2"	42.3	<b>EH35M38NR34-5530</b>

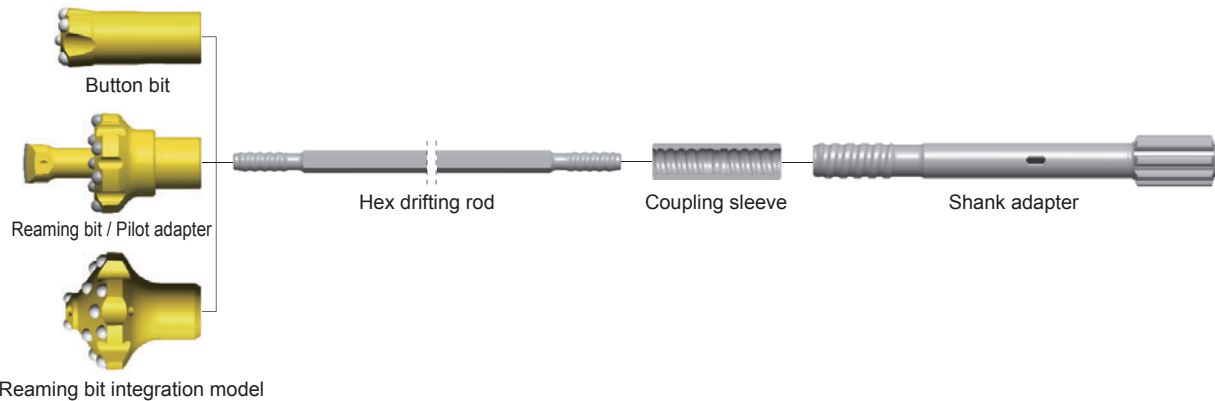
## Coupling sleeve



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
T38 - T38	54	2 1/8"	190	7 1/2"	2.0	<b>CM38</b>

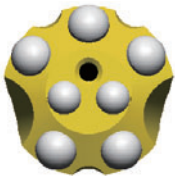
# DRIFTING & TUNNELLING EQUIPMENT

## R35 (1 3/8") SERIES (Recommended gauge diameter Ø48 - Ø64)



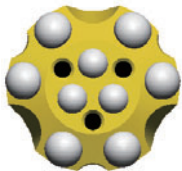
Standard item list - CUSTOM BUTTONS AND FLUSHING CONFIGURATIONS ARE AVAILABLE UPON REQUEST  
For details of bit design, please refer to p.14

### Button bit Type 06



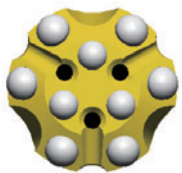
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
48	1 7/8"	30	5×11	2×9	2	1	0.8	35RTPWS48R06L
51	2"	30	5×12	2×10	2	1	0.9	35RTPWS51R06L

### Button bit Type 03



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
48	1 7/8"	35	6×10	3×9	1	3	0.8	35RTPWS48R03M

### Button bit Type 23



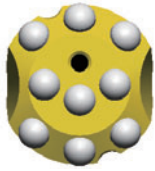
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
48	1 7/8"	30	6×10	3×9	1	3	0.8	35RTPWS48R23L
51	2"	30	6×10	3×9	1	3	0.9	35RTPWS51R23L
54	2 1/8"	40	6×10	3×9	1	3	1.0	35RTPWS54R23H
57	2 1/4"	40	6×11	3×10	1	3	1.1	35RTPWS57R23H
64	2 1/2"	35	6×12	3×11	1	3	1.3	35RTPWS64R23M

### Button bit Type 08



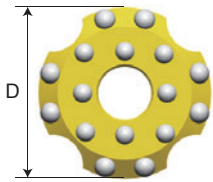
Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
48	1 7/8"	35	6×10	2×9	-	2	0.8	35RTPVS48BB08M

## Button bit Type 09



Gauge diameter		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
48	1 7/8"	35	6×9	3×9	2	1	0.8	<b>35RTPWS48BB09M</b>

## Reaming bit / Pilot adapter 12° taper

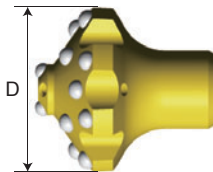


Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face		
89	3 1/2"	30	8×11	4×10	-	-	1.6	<b>WTKP89R15</b>
102	4"	35	8×14	6×12	-	-	2.3	<b>WTKP102R16</b>
127	5"	35	12×13	8×13	-	-	4.8	<b>WTKP127R16</b>



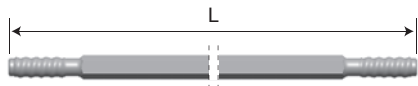
Gauge diameter(D)		Carbide size [mm]	Button × Button dia. [mm]		Flushing hole		Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Front		
40	1 9/16"	8	-	-	3	1	1.5	<b>WR35TKI40B</b>

## Reaming bit integration model



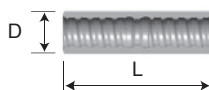
Gauge diameter(D)		Gauge angle [°]	Button × Button dia. [mm]		Flushing hole			Weight [Kg]	Part number
[mm]	[in]		Gauge	Face	Side	Face	Reverse		
76	3"	35	8×12	6×10	2	1	2	2.3	<b>WI35RTPJ76R-30R</b>
89	3 1/2"	35	8×12	10×10	2	1	2	2.7	<b>WI35RTPJ89R-30R</b>
102	4"	35	8×12	9×12, 2×10	2	1	2	2.9	<b>WI35RTPJ102R-30R</b>

## Hex drifting rod



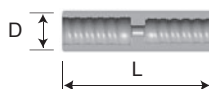
Thread	Hex		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[ft/in]		
R35 - T38	35	1 3/8"	4310	14' 2"	33.3	<b>EH35M38R35-4310</b>
			4920	16' 2"	36.8	<b>EH35M38R35-4920</b>
			5530	18' 2"	41.4	<b>EH35M38R35-5530</b>

## Coupling sleeve



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R35 - R35	48	1 7/8"	160	6 1/4"	1.2	<b>CR35D</b>

## Crossover coupling



Thread	Outside diameter(D)		Length(L)		Weight [Kg]	Part number
	[mm]	[in]	[mm]	[in]		
R35 - R32	48	1 7/8"	171	6 3/4"	1.5	<b>CR35R32</b>