

# KOMATSU®

## PC78MR-6

**FLYWHEEL HORSEPOWER**  
40.5 kW **54 HP** @ 1850 rpm

**OPERATING WEIGHT**  
8270 kg **18,230 lb**

**BUCKET CAPACITY**  
0.28 m<sup>3</sup> **0.37 yd<sup>3</sup>**

*Utility*

**PC**  
**78MR**



Photo may include optional equipment.

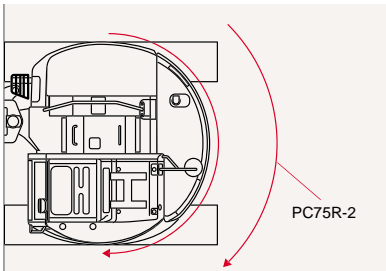
HYDRAULIC EXCAVATOR  
COMPACT

**GALEO**

# WALK-AROUND

## Tight Tail Swing

Operators can focus more on the work in front of them and worry less about rear swing impact even in confined areas with only 150 mm 6" protrusion over the tracks.



## Swing Boom

The PC78MR-6 efficiently works against side walls by utilizing swing boom.

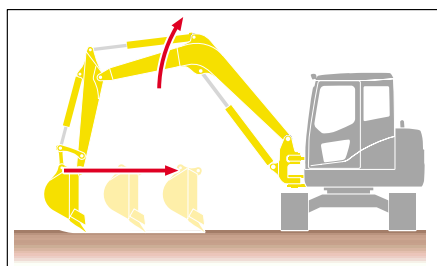
**Two Working Modes** provide a choice between extra workload and low fuel consumption.

## Back Fill Blade

The PC78MR-6 features a standard back fill blade that can quickly and conveniently fill trenches and clean-up jobsites.

## New Pressure-Compensated CLSS HydraMind Hydraulic System

Even when two or more actuators are operated simultaneously, the PC78MR-6's pressure-compensated CLSS system ensures each actuator works according to its control input regardless of the size of the load. This gives the operator precise control at all times.



## Powerful Engine With Turbocharger

Engine meets the EPA Tier 2 emissions regulations.



High production and low fuel consumption.

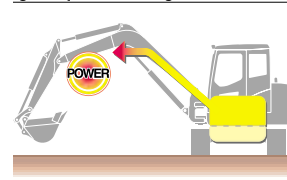


Photo may include optional equipment.

## Engine Speed Sensing = Optimum Power

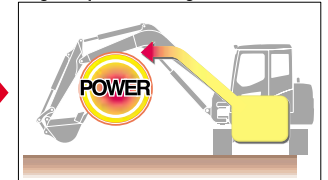
Power utilized by main pump is adjusted automatically in accordance with the engine speed. That means this computerized system maintains optimum engine speed even under high load conditions.

Engine speed sensing not installed



Engine speed can be dropped under high load condition. Maximum pump power must be limited to prevent engine speed from dropping.

Engine speed sensing installed



Engine speed is maintained even under high load condition. Pump can utilize full potential power of engine all the time.

# PRODUCTIVITY FEATURES

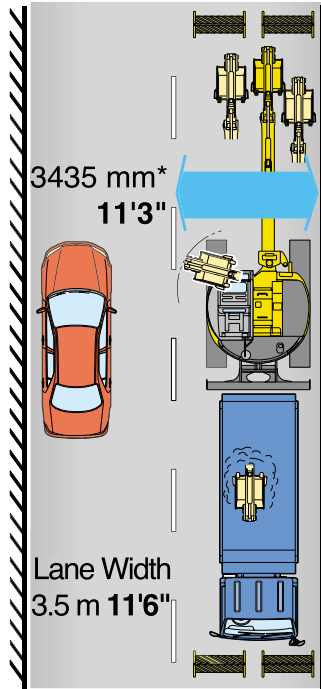
**FLYWHEEL HORSEPOWER**  
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8270 kg 18,230 lb

**BUCKET CAPACITY**  
0.28 m<sup>3</sup> 0.37 yd<sup>3</sup>

## Advantage Even in Confined Job Site

### Road & Bridge Work



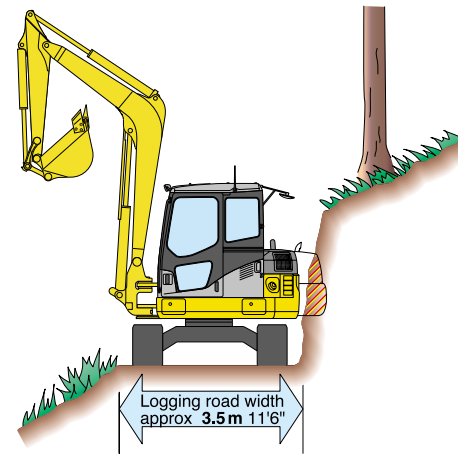
\*: When boom swing

### Against Side Wall

PC78MR-6 works efficiently by utilizing swing boom.

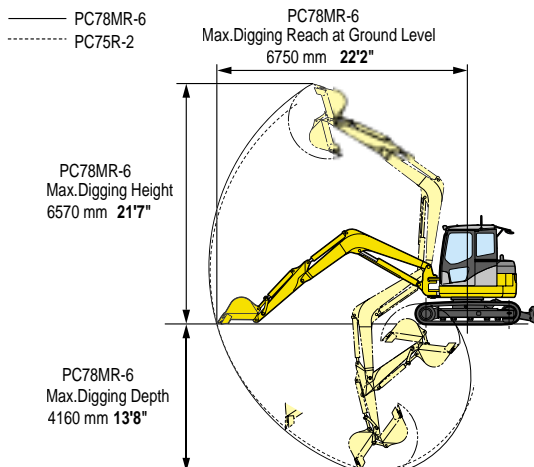


### Road Construction



### Wide Working Ranges

	PC78MR-6	PC75R-2
Max. digging Height	6570 mm 21'7"	6420 mm 21'0"
Max. Digging Depth	4160 mm 13'8"	4050 mm 13'3"
Max. Digging Reach at Ground Level	6750 mm 22'2"	6820 mm 22'4"

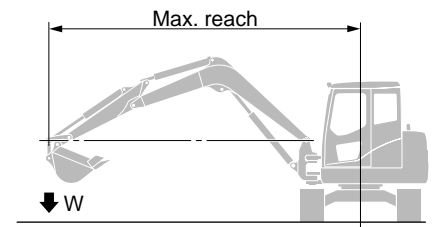


### High Stability

The PC78MR-6 offers exceptional lifting capacity and high stability.

	PC78MR-6	PC78MR-6 with additional counter weight	PC75R-2
3 m 9'	2000 kg 4,420 lb	2090 kg 4,610 lb	1900 kg 4,190 lb
Rating at max. reach	760 kg 1,690 lb	820 kg 1,810 lb	800 kg 1,760 lb

The conditions of this comparison are a standard arm, sideways, blade on ground, and at a height of 0 m (ground level).



# GALEO

Komatsu's highly productive, innovative technology, environmentally friendly machines built for the 21st century.



# OPERATOR ENVIRONMENT

## *Comfortable Operator's Cab*

The cab offers comfort and space allowing the operator to become even more confident and productive. The ergonomically designed features help reduce fatigue and increase focus on the job at hand. The low noise levels of the engine helps reduce fatigue and can make the operator even more comfortable.

Low Noise Design Cab

**73dB(A)**



Suspension Seat with Retractable Seat Belt

Upper-rail type sliding door opens and closes smoothly.



Wiper motor location provides improved visibility.



Monitor panel improves visual confirmation.



Better dump visibility



Cup holder

Large capacity air conditioning system combined with carefully placed vents provide optimum cool air flow.



# EASY MAINTENANCE

Engine hood can be opened and closed even in confined areas.

Control pattern change valve



Whether you are comfortable with ISO or Backhoe control patterns, you can easily change from one to the other.



Air cleaner with easily replaceable element

Aluminum oil cooler and radiator are corrosion resistant and easy to clean

Single fuel system inspection window for fast and easy maintenance



Wide-opening side hood makes everyday inspection simple

Large and accessible toolbox

Main valve can be easily inspected

Window washer tank is easy to check and refill



Smaller and longer lasting Ecowhite hydraulic oil filter element

Battery inspection window enables instant check of fluid level

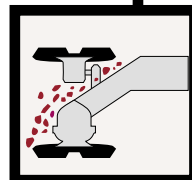
Work equipment greasing interval is 250 h (100 h for armtop only)

Large fuel filler with strainer



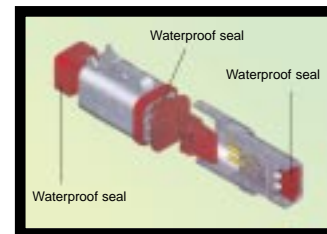
Larger opening reduces fuel back splash.

Inclined track frame



The track frame is sloped so that dirt will not accumulate and can be easily removed.

DT Connector



Water-resistant DT connectors seal tight and have higher reliability.

Face Seal



O-ring face seals having high sealing performance are used for the hydraulic piping joints.

# PC78MR-6 HYDRAULIC EXCAVATOR

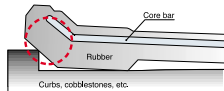
## OPTIONS

**Roadliner** Ideal performance has been achieved with combining the merits of rubber and the strengths of steel in the new Road Liner shoes. Road Liners can last up to twice as long as rubber tracks under most normal operating conditions. Similar to all rubber tracks, pavement is not easily damaged. Replacement is fast and easy. Increased cost reductions are possible by replacing only the damaged or worn-out shoes, which differs from the need to replace a full rubber or steel track.



### Reinforced Type

Rubber thickness has been upgraded using a new type of core bar, and this section that is often sheared, has been reinforced.



### Optional Blade



Bolt-on cutting edge type.

### X-Weight

(Additional Counter Weight)



Advanced X-weight design for increased lift capacity and easy installation.



### LIFTING CAPACITY

PC78MR-6	Arm : 1650 mm 5'5"		Bucket width : 650 mm 26.0"		Shoe width : 450 mm 17.7"		Blade on ground		Unit : kg lb	
	1.5 m 4'		3.0 m 9'		4.5 m 14'		Maximum			
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
5.0 m 16'									*1590	1360
									<b>*3520</b>	<b>3010</b>
3.0 m 9'			*2680	2450	*1955	1230	*1865	820	*4120	<b>1810</b>
			<b>*5910</b>	<b>5420</b>	<b>*4320</b>	<b>2720</b>	<b>*4120</b>	<b>1810</b>	<b>*4120</b>	<b>1810</b>
0.0 m 0'			*4725	2000	*3140	1070	*2390	760	*5270	<b>1690</b>
			<b>*10420</b>	<b>4420</b>	<b>*6920</b>	<b>2360</b>	<b>*5270</b>	<b>1690</b>	<b>*5270</b>	<b>1690</b>
-2.0 m -6'	*6040	1100	*4890	2070			*3060	1210	*6750	<b>2680</b>
	<b>*13310</b>	<b>2420</b>	<b>*10780</b>	<b>4570</b>			<b>*6750</b>	<b>2680</b>	<b>*6750</b>	<b>2680</b>

\*Load is limited by hydraulic capacity rather than tipping. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

PC78MR-6	Arm : 1650 mm 5'5"		Bucket width : 650 mm 26.0"		Shoe width : 450 mm 17.7"		Blade on ground		Addition counterweight		Unit : kg lb	
	1.5 m 4'		3.0 m 9'		4.5 m 14'		Maximum					
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs		
5.0 m 16'									*1590	1435		
									<b>*3520</b>	<b>3150</b>		
3.0 m 9'			*2680	2550	*1955	1300	*1865	880	*4120	<b>1940</b>		
			<b>*5910</b>	<b>5620</b>	<b>*4320</b>	<b>2860</b>	<b>*4120</b>	<b>1940</b>	<b>*4120</b>	<b>1940</b>		
0.0 m 0'			*4725	2090	*3140	1135	*2390	820	*5270	<b>1810</b>		
			<b>*10420</b>	<b>4610</b>	<b>*6920</b>	<b>2500</b>	<b>*5270</b>	<b>1810</b>	<b>*5270</b>	<b>1810</b>		
-2.0 m -6'	*6040	1130	*4890	2165			*3060	1285	*6750	<b>2830</b>		
	<b>*13310</b>	<b>2490</b>	<b>*10780</b>	<b>4770</b>			<b>*6750</b>	<b>2830</b>	<b>*6750</b>	<b>2830</b>		

\*Load is limited by hydraulic capacity rather than tipping. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

PC78MR-6	Arm : 2250 mm 7'5"		Bucket width : 650 mm 26.0"		Shoe width : 450 mm 17.7"		Blade on ground		Unit : kg lb	
	1.5 m 4'		3.0 m 9'		4.5 m 14'		Maximum			
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
5.0 m 16'									*1335	1050
									<b>*2940</b>	<b>2330</b>
3.0 m 9'					*1530	1270	*1530	690	*3390	<b>1530</b>
					<b>*3390</b>	<b>2800</b>	<b>*3370</b>	<b>1530</b>	<b>*3370</b>	<b>1530</b>
0.0 m 0'			*4715	1960	*2960	1050	*2045	630	*4510	<b>1400</b>
			<b>*10400</b>	<b>4330</b>	<b>*6520</b>	<b>2320</b>	<b>*4510</b>	<b>1400</b>	<b>*4510</b>	<b>1400</b>
-2.0 m -6'	*4470	*4470	*5380	1970	*3020	1030	*2615	890	*5750	<b>1970</b>
	<b>*9860</b>	<b>*9860</b>	<b>*11860</b>	<b>4360</b>	<b>*6660</b>	<b>2270</b>	<b>*5750</b>	<b>1970</b>	<b>*5750</b>	<b>1970</b>

\*Load is limited by hydraulic capacity rather than tipping. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

PC78MR-6	Arm : 2250 mm 7'5"		Bucket width : 650 mm 26.0"		Shoe width : 450 mm 17.7"		Blade on ground		Addition counterweight		Unit : kg lb	
	1.5 m 4'		3.0 m 9'		4.5 m 14'		Maximum					
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs		
5.0 m 16'									*1320	1150		
									<b>*2920</b>	<b>2530</b>		
3.0 m 9'					*1530	1380	*1530	760	*3370	<b>1690</b>		
					<b>*3390</b>	<b>3040</b>	<b>*3370</b>	<b>1690</b>	<b>*3370</b>	<b>1690</b>		
0.0 m 0'			*4715	2150	*2960	1160	*2045	710	*4510	<b>1560</b>		
			<b>*10400</b>	<b>4750</b>	<b>*6520</b>	<b>2560</b>	<b>*4510</b>	<b>1560</b>	<b>*4510</b>	<b>1560</b>		
-2.0 m -6'	*4470	*4470	*5380	2160	*3020	1140	*2615	990	*5760	<b>2180</b>		
	<b>*9860</b>	<b>*9860</b>	<b>*11860</b>	<b>4770</b>	<b>*6660</b>	<b>2510</b>	<b>*5760</b>	<b>2180</b>	<b>*5760</b>	<b>2180</b>		

\*Load is limited by hydraulic capacity rather than tipping. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

# SPECIFICATIONS



### ENGINE

Model .....Komatsu S4D95LE-3  
 Type .....Water-cooled, 4-cycle, direct injection  
 Aspiration .....Turbocharged  
 Number of cylinders .....4  
 Piston displacement .....3.26 ltr **199 in<sup>3</sup>**  
 Flywheel Horsepower (SAE J1349 NET) .....40.5 kW **54 HP** @ 1850 rpm



### HYDRAULICS

Type .....HydraMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load-sensing valves and pressure-compensated valves

Pump:

For implement .....Variable displacement axial piston  
 Maximum flow .....80.0 ltr x 2 = 160 ltr/min **42.2 U.S. gal/min**  
 For swing and blade .....Fixed displacement gear  
 Maximum flow .....60 ltr/min **15.9 U.S. gal/min**  
 Auxiliary Hydraulic flow (opt) .....123 ltr/min **32.5 U.S. gal/min**

Valve rating:

Relief valve setting for implement .....270 kgf/cm<sup>2</sup> **3,839 psi**  
 Relief valve setting for swing and blade .....210 kgf/cm<sup>2</sup> **2,986 psi**  
 Bucket digging force (ISO) .....6250 kg **13,780 lb**  
 Arm crowd force (ISO)  
 with arm length .....4230 kg **9,330 lb**



### ELECTRICAL SYSTEM

Operating voltage .....24 V  
 Battery .....55 Ah  
 Alternator .....24 A  
 Starter .....3.0 kW

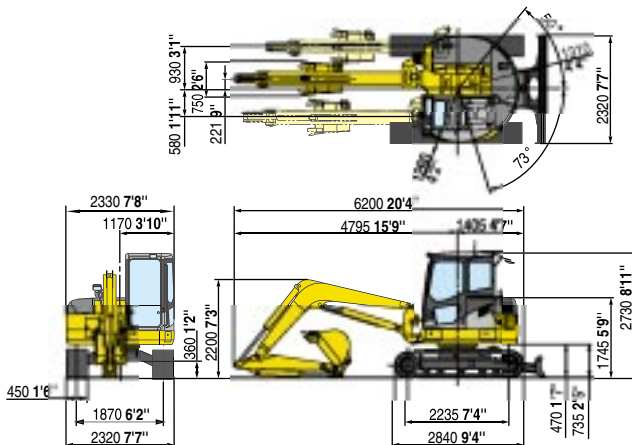


### SWING SYSTEM

Drive method .....Hydrostatic  
 Swing speed .....10.0 rpm  
 180-degree swing width .....4085 mm **13'5"**



### DIMENSIONS



### DRIVES AND BRAKES

Steering control .....Two levers with pedals  
 Drive method .....Fully hydrostatic  
 Hydraulic motors .....Variable displacement, axial piston motors  
 Maximum drawbar pull .....64.7 kN 6600 kg **14,550 lb**  
 Maximum travel speed:  
 High .....4.2 km/h **2.6 mph**  
 Low .....2.8 km/h **1.7 mph**  
 Parking brakes .....Mechanical disk



### UNDERCARRIAGE

Track adjustment of the track tension .....Grease  
 Number of shoes .....39 each side  
 Number of carrier rollers .....1 each side  
 Number of track rollers .....5 each side  
 Ground pressure .....0.38 kg/cm<sup>2</sup> **5.4 psi**



### OPERATING WEIGHT (APPROXIMATE)

Operating weight including 1650 mm **5'5"** arm, bucket with 0.28 m<sup>3</sup> **0.37 yd<sup>3</sup>** capacity, blade, operator, lubricant, steel shoes, full fuel tank, and standard equipment.

Shoe Width	Operating Weight
450 mm <b>17.7"</b>	8270 kg <b>18,230 lb</b>

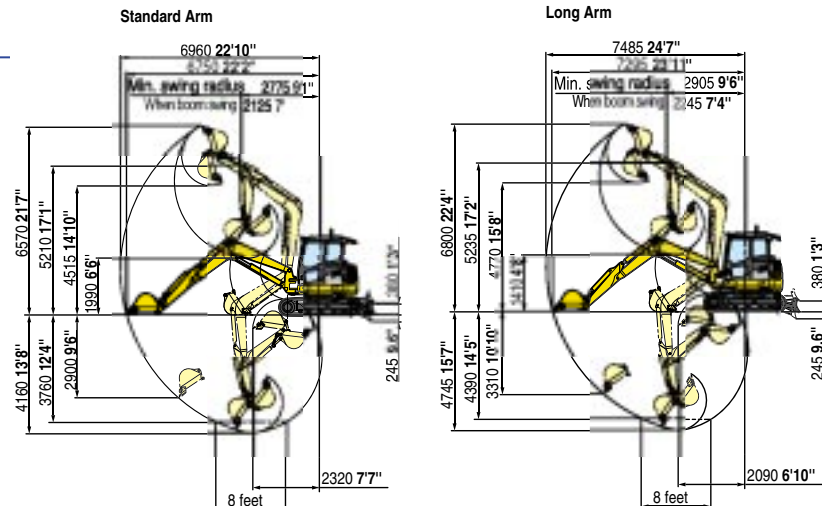


### COOLANT AND LUBRICANT CAPACITY

Fuel tank .....125 ltr **33 US gal**  
 Radiator .....10.5 ltr **2.8 US gal**  
 Engine oil (refilling) .....7.0–7.5 ltr **1.8–2.0 US gal**  
 Hydraulic (refilling) .....64–110 ltr **16.9–29.1 US gal**



### WORKING RANGE





# PC78MR-6 Configuration

Cab	Cab with A/C							
	1 With aux piping				2 Without aux piping			
<b>Auxiliary piping</b>								
<b>Shoe</b>	A Rubber 450 mm 17.7"	B Road Liner 450 mm 17.7"	C Steel 450 mm 17.7"	D Steel Wide 600 mm 23.6"	A Rubber 450 mm 17.7"	B Road Liner 450 mm 17.7"	C Steel 450 mm 17.7"	D Steel Wide 600 mm 23.6"
<b>Package</b>	1A	1B	1C	1D	2A	2B	2C	2D
<b>Arm</b>								
Standard 1650 mm 5'5"					x	x	x	x
Long 2250 mm 7'5"					x	x	x	x
Std with aux piping 1650 mm 5'5"	x	x	x	x				
Long with aux piping 2250 mm 7'5"	x	x	x	x				
<b>Bucket</b>								
3.2 ft <sup>3</sup> /14" (18" w/Cutters)	x	x	x	x	x	x	x	x
4.2 ft <sup>3</sup> /18" (22" w/Cutters)	x	x	x	x	x	x	x	x
7.1 ft <sup>3</sup> /22" (26" w/Cutters)	x	x	x	x	x	x	x	x
9.9 ft <sup>3</sup> /26" (30" w/Cutters)	x	x	x	x	x	x	x	x
9.9 ft <sup>3</sup> /26" (30" w/Cutters)	x	x	x	x	x	x	x	x
12.0 ft <sup>3</sup> /30" (32" w/Cutters)	x	x	x	x	x	x	x	x
<b>Dozer</b>								
Dozer Assembly 2311 mm 7'7"	In base	In base	In base	In base	In base	In base	In base	In base
Wide Dozer 2464 mm 8'1"	x	x	x	x	x	x	x	x
Reinforced Dozer with BOCE 2311 mm 7'7"	x	x	x	x	x	x	x	x
<b>Others</b>								
Additional Counter Weight	x	x	x	x	x	x	x	x
Additional Working Light	x	x	x	x	x	x	x	x
Window Guard Net	x	x	x	x	x	x	x	x
Heater & Defroster	x	x	x	x	x	x	x	x
Radiator Dust Proof Net	x	x	x	x	x	x	x	x
Field Attachments	x	x	x	x	x	x	x	x

x: Available



## STANDARD EQUIPMENT

- Air cleaner, double element
- Air conditioner
- AM/FM Radio
- Ashtray
- Blade
- Cab
- Cooling fan, suction type
- Engine sensing system
- Pattern change valve (ISO-Backhoe)
- Rear view mirror
- Retractable seat belt 76 mm 3" wide
- Suspension seat
- Travel alarm
- Two mode system
- Water separator
- Window washer, front



## OPTIONAL EQUIPMENT

- Additional counter weight
- Additional working light
- Heater & Defroster
- Radiator Dust Proof Net
- Reinforced blade with BOCE
- Wide blade 2464 mm 8'1"
- Window Guard Net

PC78MR-6					
Bucket Capacity	0.09 m <sup>3</sup> <b>0.12 yd<sup>3</sup></b>	0.12 m <sup>3</sup> <b>0.16 yd<sup>3</sup></b>	0.20 m <sup>3</sup> <b>0.26 yd<sup>3</sup></b>	0.28 m <sup>3</sup> <b>0.37 yd<sup>3</sup></b>	0.34 m <sup>3</sup> <b>0.45 yd<sup>3</sup></b>
Without Sidecutter	350 mm <b>14 in</b>	450 mm <b>18 in</b>	550 mm <b>22 in</b>	650 mm <b>26 in</b>	725 mm <b>29 in</b>
With Sidecutter	450 mm <b>18 in</b>	550 mm <b>22 in</b>	650 mm <b>26 in</b>	750 mm <b>30 in</b>	825 mm <b>32 in</b>
Standard Arm	X	X	X	X	X
Long Arm	X	X	X	N/A	N/A

KUSS150-02

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DK10(5M) SFI

10/03(EV-1)

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