13 Technical Data—RD 16

13.1 Engine

Item no.		RD 16 / RD 16 IRH			
Engine					
Engine type		3-cylinder, 4-cycle, liquid-cooled, diesel engine			
Engine make		Kohler			
Engine model		KDW 1003			
Max. rated power @ rated speed ¹	kW (hp)	16.8 (22.5) @ 2,850 rpm			
Displacement	cm³ (in³)	1,028 (62.7)			
Engine speed - operating	rpm	2,850			
Engine speed - idle	rpm	1,300			
Valve clearance (cold) intake: exhaust:	mm (in.)	0.15 (0.006) 0.20 (0.008)			
Battery	V	12V DC			
Air cleaner	type	Dry pleated paper elements			
Fuel	type	Diesel Low sulfur fuel or ultra low sulfur fuel only			
Fuel tank capacity	L (gal)	23 (6.1)			
Fuel consumption	L (gal)/hr	3.6 (0.96)			
Engine oil	type L (qt)	SAE 15W40 Class CF rated 2.4 (2.5)			
Coolant capacity	L (gal)	4.75 (1.25)			

¹Net power rating per ISO 3046/1-IFN. Actual power output may vary due to conditions of specific use.

13.2 Roller

Item No.		RD 16/16 IRH		
Roller				
Dry Weight	kg (lb)	1,356 (2,990)		
Curb Clearance: Right Left	mm (in.)	400 (15.7) 400 (15.7)		
Water Tank Capacity	L (gal)	100 (26.4)		
Outside Turning Radius	m (ft)	2.87 (9.4)		
Forward / Reverse Speed	kph (mph)	0-9.3 (0-5.8)		
Gradeability		30%		
Vibration Frequency	vpm	4,200		

13.3 Lubrication

Item No.		RD 16 / RD 16 IRH		
Lubrication				
Engine Lubrication	type L (pt)	SAE 15W40 Class SJ rated 2.4 (2.5)		
Hydraulic System	type L (gal)	Premium grade, anti-wear hydraulic fluid 10W30 21.6 (5.7)		
Exciter	type	Mobil SHC 220 grease		
Rear Drum Drive Bearing	type	Sealed Bearings—No lubrication required		
Front Drum Drive Bearing	type			
Articulated Joint	type qty.	Mobil SHC 220 grease as required		

13.4 Hydraulic Pressures

System	Operating Pressure		Relief Pressure	
	bar	psi	bar	psi
Drive**	55–76	800–1,100	300	4,350
Steering* —normal	41–55	600–800	45–51	650–725
—while turning	90–103	1,300–1,500		
Vibration —single drum	103–131	1,500–1,900	290	4,200
—dual drum	138–165	2,000–2,400		

^{*} Values for hard-packed surfaces. Values may differ depending on surface.

13.5 Sound Measurements

Products are tested for sound pressure level in accordance with EN 500-4:2011.

Sound power level is tested in accordance with European Directive 2000/14/EC - Noise Emission in the Environment by Equipment for use outdoors.

Machine	Sound Pressure at Operator's Location dB(A)	Guaranteed Sound Power dB(A)	
RD 16	88	106	

^{**} Charge pressure: 29.3 – 30.7 bar (425–445 psi).