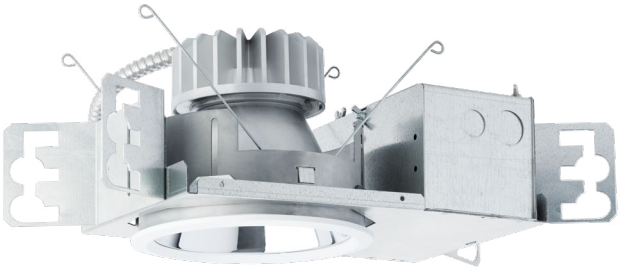
PROJECT INFORMATION				
	Job Name	_____	Catalog Number	_____
	Fixture Type	_____	Approved by	_____

MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

MDL SERIES



PRODUCT FEATURES:

» 6" sealed, recessed downlight with regressed or flush lens trim

» 675 - 5,000 delivered lumens with multiple distribution, reflector finish and lens options

» 1% Dimming via 0-10V or DALI-2 control

» NSF2 and IP64/IP65 ingress protection rating

SPECIFICATIONS

HEAT SINK: Die-cast aluminum with external radial fins for natural convection.

ROUGH-IN FRAME: 18-gauge die-formed, corrosion-resistant steel. Vertically adjustable collar accommodates ceiling thicknesses up to 2", adjustable post-installation. Universal mounting brackets accept 3/4" and 1-1/2" lathers channel, 1/2" EMT conduit and hanger bars. Quick-access junction box accessible post-installation from above and below ceiling. Includes (4) 1/2" and (2) 3/4" knock-outs to allow straight conduit runs. Listed for (8) 12AWG, 90ºC conductors and feed-thru branch wiring. Provided with FMC with electrical quick-connect to Trim Section.

TRIM/HOUSING SECTION: IP-rated housing section incorporates the heat sink, LED module, optics and lower trim. Configurable with an IP64-rated Regressed or Flush lens trim that is secured to the Rough-In frame with hidden torsion springs, and an IP65 Flush lens trim secured with four (4) Phillips-head, captive fasteners. Anti-microbial finish standard on all exposed painted surfaces. See Trim Ordering Information for available options.

OPTICAL: Clear tempered glass upper lens. Flush lens trims provided with 1/8" clear impact-resistant acrylic lens at ceiling trim. Continuous seal between lens and trim ring. Available with various reflector distribution patterns and finishes. See Ordering Information for available options.

ELECTRICAL: LED source available in multiple CCT and CRI combinations with a maximum 3-step MacAdam variation allowance. See Trim Ordering Information for available options. 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable constant current driver (<20% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities; 0.2mA maximum source current. Optional eldoLED ECOdrive DALI-2 (DT6) / LEDcode2 driver with 1-100% range.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratory for non-IC and Wet Location installations. IP64 and IP65 rating per IEC60598. NSF2 Splash/Non-Food Zone. Optional CCEA compliance.

LED NSF IP64 IP65 CCEA OPTION

ORDERING INFORMATION (EX: MDL6-FF-2FW-18L-40K8-W-CSS-T-RIG6-DV-DIM1)

TRIM

Model	Trim Style	Trim Finish	Lamp Power	Lamp Color	Distribution	Reflector Finish	Flush Lens Type
MDL6							

ROUGH-IN

Rough-In	Input Voltage	Driver Type	Options
RIG6			

Trim Style
- **R** Regressed Lens (IP64)
- **NF** Flush Lens (Without Fasteners - IP64)
- **FF** Flush Lens (With Fasteners - IP65)

Trim Finish
- **DCFW** Die-Cast Aluminum in Flat White (R and NF Trim Style)
- **2FW** Cold-Rolled Steel in Flat White
- **5BR** Type 304 Stainless Steel with 4B Brushed Finish

Lamp Power
- **9L** 9 Watt LED
- **18L** 18 Watt LED
- **24L** 24 Watt LED
- **32L** 32 Watt LED
- **43L▲** 43 Watt LED

Lamp Color
- **30K8** 3000K / 80 CRI min.
- **35K8** 3500K / 80 CRI min.
- **35K9** 3500K / 90 CRI min.
- **40K8** 4000K / 80 CRI min.
- **40K9** 4000K / 90 CRI min.
- **50K8** 5000K / 80 CRI min.

Distribution
- **M** Medium
- **W** Wide
- **WW*** Wall Wash

Reflector Finish
- **FW** Flat White
- **CS** Clear Specular
- **CSS** Clear Semi-Specular

Flush Lens Type (n/a Regressed Trim Style)
- **T** 1/8" Clear High-Impact Acrylic

Rough-In
- **RIG6** 6" Rough-In

Input Voltage
- **DV** 120-277V, 50/60Hz
- **120** 120VAC, 60Hz
- **277** 277VAC, 60Hz
- **347†** 347VAC, 60Hz

Driver Type
- **DIM1** 0-10V Dimming to 1% with Dim-to-Dark
- **DALI** DALI-2/LEDcode2 Dimming to 1% without Dim-to-Dark

Options
- **LEL** Emergency Battery Backup with Remote Test Switch
- **FS** Fuse & Holder
- **CCEA•** CCEA Approved (specified voltage required)

* Available with CSS reflector finish only
† N/A with DALI Driver Type. N/A with LEL and CCEA option
▲ Must be installed with a minimum 24" on-center spacing, 12" from wall, and have 3" clearance above the Trim/Housing
• N/A with W-CS Distribution-Reflector Finish

MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

MDL SERIES

PERFORMANCE - REGRESSED LENS

Optic		Lamp Power	Initial Delivered Lumens, By Lamp Color						Efficacy (lm/W)	Input Power (W)	TM-21 Reported L90 (hrs)	TM-21 Reported L70 (hrs)
Distribution	Reflector Finish		30K8	35K8	35K9	40K8	40K9	50K8				
M	CS	9L	1,162	1,189	978	1,196	998	1,210	80 - 103	12	>55,000	>55,000
		18L	2,032	2,080	1,710	2,092	1,745	2,116	81 - 104	20	>55,000	>55,000
		24L	2,982	3,052	2,509	3,070	2,561	3,105	85 - 109	28	52,000	>55,000
		32L	3,751	3,838	3,155	3,861	3,221	3,905	81 - 104	38	52,000	>55,000
		43L	4,803	4,916	4,041	4,945	4,125	5,001	77 - 98	51	51,000	>55,000
	CSS	9L	1,028	1,052	865	1,059	883	1,071	71 - 91	12	>55,000	>55,000
		18L	1,799	1,841	1,513	1,851	1,544	1,873	72 - 92	20	>55,000	>55,000
		24L	2,639	2,701	2,220	2,717	2,266	2,748	75 - 97	28	52,000	>55,000
		32L	3,319	3,397	2,792	3,417	2,850	3,456	72 - 92	38	52,000	>55,000
		43L	4,250	4,350	3,576	4,375	3,650	4,425	68 - 87	51	51,000	>55,000
	FW	9L	1,056	1,081	888	1,087	907	1,099	73 - 94	12	>55,000	>55,000
		18L	1,847	1,890	1,554	1,901	1,586	1,923	74 - 95	20	>55,000	>55,000
		24L	2,710	2,773	2,280	2,789	2,327	2,821	77 - 99	28	52,000	>55,000
		32L	3,408	3,488	2,867	3,508	2,927	3,548	74 - 95	38	52,000	>55,000
		43L	4,365	4,467	3,672	4,493	3,748	4,544	70 - 89	51	51,000	>55,000
W	CS	9L	1,139	1,166	958	1,173	978	1,186	79 - 101	12	>55,000	>55,000
		18L	1,993	2,039	1,676	2,051	1,711	2,075	80 - 102	20	>55,000	>55,000
		24L	2,924	2,992	2,459	3,010	2,511	3,044	83 - 107	28	52,000	>55,000
		32L	3,677	3,763	3,093	3,785	3,158	3,828	80 - 102	38	52,000	>55,000
		43L	4,709	4,819	3,961	4,847	4,044	4,903	75 - 96	51	51,000	>55,000
	CSS	9L	1,099	1,125	924	1,131	944	1,144	76 - 98	12	>55,000	>55,000
		18L	1,922	1,967	1,617	1,979	1,651	2,001	77 - 99	20	>55,000	>55,000
		24L	2,820	2,886	2,373	2,903	2,422	2,936	80 - 103	28	52,000	>55,000
		32L	3,547	3,630	2,984	3,652	3,046	3,693	77 - 98	38	52,000	>55,000
		43L	4,543	4,649	3,821	4,676	3,901	4,730	72 - 93	51	51,000	>55,000
	FW	9L	989	1,012	832	1,018	849	1,029	68 - 88	12	>55,000	>55,000
		18L	1,729	1,770	1,455	1,780	1,485	1,800	69 - 89	20	>55,000	>55,000
		24L	2,537	2,597	2,134	2,612	2,179	2,642	72 - 93	28	52,000	>55,000
		32L	3,191	3,266	2,684	3,285	2,740	3,323	69 - 89	38	52,000	>55,000
		43L	4,087	4,182	3,438	4,207	3,509	4,255	65 - 84	51	51,000	>55,000
WW	CSS	9L	916	938	771	943	787	954	63 - 81	12	>55,000	>55,000
		18L	1,603	1,640	1,348	1,650	1,376	1,669	64 - 82	20	>55,000	>55,000
		24L	2,351	2,406	1,978	2,421	2,019	2,448	32 - 86	28	52,000	>55,000
		32L	2,957	3,027	2,488	3,044	2,540	3,079	42 - 82	38	52,000	>55,000
		43L	3,787	3,876	3,186	3,899	3,252	3,943	60 - 77	51	51,000	>55,000

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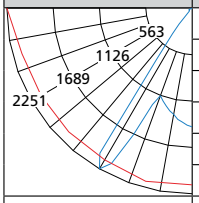
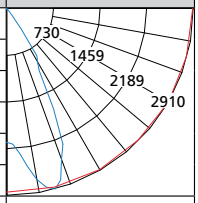
This product is able to comply with the latest domestic preference legislation, such as the Buy American Act (BAA), Trade Agreement Ace (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents.Content of specification sheets is subject to change; please consult www.kenall.com for current product details. ©2024 Kenall Mfg.Co.

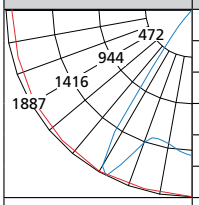
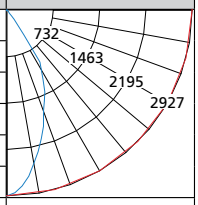
MEDMASTER DOWNLIGHT

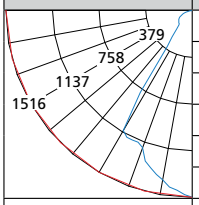
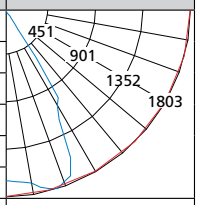
Luminaires for Medical Applications

MDL SERIES

PERFORMANCE - REGRESSED LENS

Wide Distribution Candela Curve	MDL6-R-18L-40K8-W-CS		Distance to illuminated plane (ft)	MDL6-R-18L-40K8-M-CS		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	57.7	6.8	5'	83.7	4.9	
	40.1	8.2	6'	58.1	5.9	
	29.5	9.6	7'	42.7	6.9	
	22.6	10.9	8'	32.7	7.8	
	17.8	12.3	9'	25.8	8.8	
	14.4	13.7	10'	20.9	9.8	
Spacing Criteria: 1.33	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 0.98
Beam Angle: 69°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 52°

Wide Distribution Candela Curve	MDL6-R-18L-40K8-W-CSS		Distance to illuminated plane (ft)	MDL6-R-18L-40K8-M-CSS		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	58.9	4.1	5'	117.1	4.5	
	40.9	4.9	6'	81.3	5.4	
	30.1	5.7	7'	59.7	6.3	
	23.0	6.5	8'	45.7	7.2	
	18.2	7.3	9'	36.1	8.1	
	14.7	8.1	10'	29.3	9.0	
Spacing Criteria: 1.31	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 0.71
Beam Angle: 44°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 48°

Wide Distribution Candela Curve	MDL6-R-18L-40K8-W-FW		Distance to illuminated plane (ft)	MDL6-R-18L-40K8-M-FW		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	60.6	6.4	5'	66.3	6.5	
	42.1	7.7	6'	46.0	7.9	
	30.9	9.0	7'	33.8	9.2	
	23.7	10.3	8'	25.9	10.5	
	18.7	11.5	9'	20.5	11.8	
	15.2	12.8	10'	16.6	13.1	
Spacing Criteria: 1.11	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 1.05
Beam Angle: 65°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 66°

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MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

MDL SERIES

PERFORMANCE - FLUSH LENS

Optic			Lamp Power	Initial Delivered Lumens, By Lamp Color						Efficacy (lm/W)	Input Power (W)	TM-21 Reported L90 (hrs)	TM-21 Reported L70 (hrs)
Distribution	Reflector Finish	Lens Type		30K8	35K8	35K9	40K8	40K9	50K8				
M	CS	T	9L	1,119	1,145	941	1,152	961	1,165	77 - 99	12	>55,000	>55,000
			18L	1,957	2,002	1,646	2,014	1,680	2,037	78 - 100	20	>55,000	>55,000
			24L	2,871	2,938	2,415	2,955	2,465	2,989	82 - 105	28	52,000	>55,000
			32L	3,611	3,695	3,038	3,717	3,101	3,759	78 - 100	38	52,000	>55,000
			43L	4,624	4,732	3,890	4,760	3,971	4,815	74 - 94	51	51,000	>55,000
	CSS	T	9L	983	1,006	827	1,012	844	1,024	68 - 87	12	>55,000	>55,000
			18L	1,720	1,760	1,447	1,771	1,477	1,791	69 - 88	20	>55,000	>55,000
			24L	2,524	2,583	2,123	2,598	2,167	2,628	72 - 92	28	52,000	>55,000
			32L	3,174	3,248	2,670	3,267	2,726	3,305	69 - 88	38	52,000	>55,000
			43L	4,065	4,160	3,420	4,184	3,491	4,232	65 - 83	51	51,000	>55,000
	FW	T	9L	1,016	1,040	855	1,046	873	1,058	70 - 90	12	>55,000	>55,000
			18L	1,777	1,819	1,495	1,830	1,526	1,851	71 - 91	20	>55,000	>55,000
			24L	2,608	2,669	2,194	2,685	2,239	2,715	74 - 95	28	52,000	>55,000
			32L	3,280	3,357	2,759	3,376	2,817	3,415	71 - 91	38	52,000	>55,000
			43L	4,200	4,299	3,533	4,324	3,607	4,373	67 - 86	51	51,000	>55,000
W	CS	T	9L	1,103	1,129	928	1,135	947	1,148	76 - 98	12	>55,000	>55,000
			18L	1,929	1,974	1,623	1,986	1,656	2,008	77 - 99	20	>55,000	>55,000
			24L	2,830	2,896	2,381	2,913	2,430	2,947	81 - 104	28	52,000	>55,000
			32L	3,560	3,643	2,994	3,664	3,057	3,706	77 - 99	38	52,000	>55,000
			43L	4,559	4,665	3,835	4,693	3,915	4,746	73 - 93	51	51,000	>55,000
	CSS	T	9L	1,045	1,070	879	1,076	898	1,088	72 - 93	12	>55,000	>55,000
			18L	1,828	1,871	1,538	1,882	1,570	1,903	73 - 94	20	>55,000	>55,000
			24L	2,682	2,745	2,256	2,761	2,303	2,793	76 - 98	28	52,000	>55,000
			32L	3,374	3,453	2,838	3,473	2,897	3,513	73 - 94	38	52,000	>55,000
			43L	4,320	4,422	3,634	4,448	3,710	4,498	69 - 88	51	51,000	>55,000
	FW	T	9L	932	954	784	959	800	970	65 - 83	12	>55,000	>55,000
			18L	1,630	1,668	1,371	1,678	1,400	1,697	65 - 84	20	>55,000	>55,000
			24L	2,392	2,448	2,012	2,462	2,054	2,491	68 - 87	28	52,000	>55,000
			32L	3,008	3,079	2,531	3,097	2,583	3,132	65 - 84	38	52,000	>55,000
			43L	3,853	3,943	3,241	3,966	3,309	4,011	61 - 79	51	51,000	>55,000
WW	CSS	T	9L	833	852	700	857	715	867	58 - 74	12	>55,000	>55,000
			18L	1,456	1,490	1,225	1,499	1,251	1,516	58 - 75	20	>55,000	>55,000
			24L	2,137	2,187	1,798	2,200	1,835	2,225	61 - 78	28	52,000	>55,000
			32L	2,688	2,750	2,261	2,767	2,308	2,798	58 - 75	38	52,000	>55,000
			43L	3,442	3,522	2,895	3,543	2,956	3,584	55 - 70	51	51,000	>55,000

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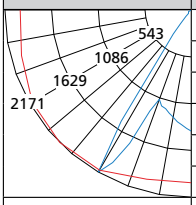
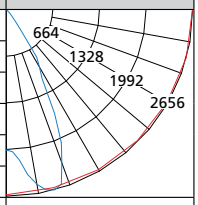
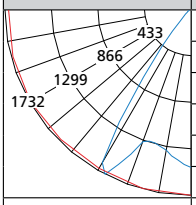
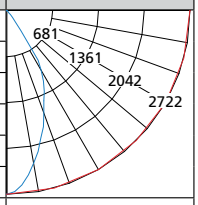
MEDMASTER DOWNLIGHT

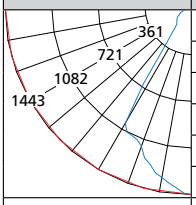
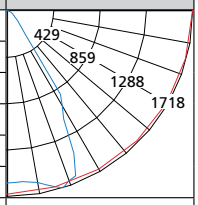
Luminaires for Medical Applications

MDL SERIES

PERFORMANCE - FLUSH LENS

Wide Distribution Candela Curve	MDL6-xF-18L-40K8-W-CS-T		Distance to illuminated plane (ft)	MDL6-xF-18L-40K8-M-CS-T		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	56.5	5.3	5'	80.0	5.0	
	39.3	6.4	6'	55.6	6.0	
	28.8	7.5	7'	40.8	7.0	
	22.1	8.5	8'	31.3	8.0	
	17.5	9.6	9'	24.7	9.0	
	14.1	10.7	10'	20.0	10.0	
Spacing Criteria: 1.35	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 0.97
Beam Angle: 56°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 53°

Wide Distribution Candela Curve	MDL6-xF-18L-40K8-W-CSS-T		Distance to illuminated plane (ft)	MDL6-xF-18L-40K8-M-CSS-T		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	59.0	3.9	5'	108.9	4.5	
	41.0	4.6	6'	75.6	5.4	
	30.1	5.4	7'	55.6	6.3	
	23.1	6.2	8'	42.5	7.2	
	18.2	7.0	9'	33.6	8.1	
	14.8	7.7	10'	27.2	9.0	
Spacing Criteria: 1.28	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 0.72
Beam Angle: 42°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 49°

Wide Distribution Candela Curve	MDL6-xF-18L-40K8-W-FW-T		Distance to illuminated plane (ft)	MDL6-xF-18L-40K8-M-FW-T		Medium Distribution Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	57.7	6.3	5'	63.9	6.4	
	40.1	7.6	6'	44.3	7.7	
	29.4	8.8	7'	32.6	9.0	
	22.5	10.1	8'	24.9	10.3	
	17.8	11.4	9'	19.7	11.6	
	14.4	12.6	10'	16.0	12.9	
Spacing Criteria: 1.1	Foot-candle multipliers for 30K8 (0.97), 35K8 (0.99), 35K9 (0.82), 40K9 (0.83), 50K8 (1.01)					Spacing Criteria: 1.03
Beam Angle: 64.6°	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 65.6°

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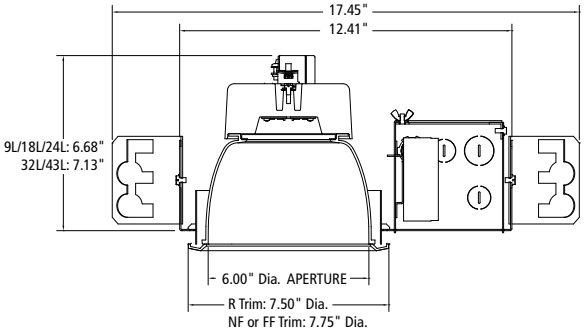
MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

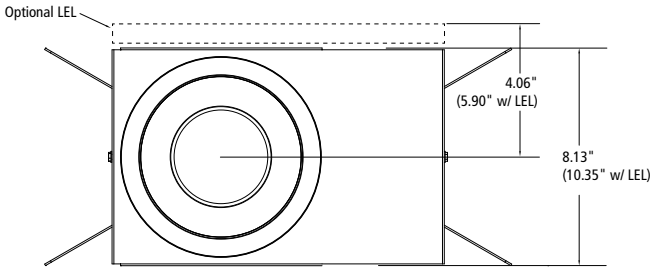
MDL SERIES

DIMENSIONAL DATA

CROSS SECTION



BOTTOM VIEW



RECOMMENDED CEILING CUT-OUT
R and NF Trims: 7.13" Dia.
FF Trims: 7.38" Dia.

This product is able to comply with the latest domestic preference legislation, such as the Buy American Act (BAA), Trade Agreement Ace (TAA), Build America, Buy America Act (BABA), and others. It may be covered by patents found at www.kenall.com/patents.Content of specification sheets is subject to change; please consult www.kenall.com for current product details. ©2024 Kenall Mfg.Co.