



# PANTOGRAPH REACH TRUCK

3,000-4,500 LB CAPACITY

A NEW LEVEL OF PERFORMANCE IS WITHIN YOUR REACH



# POWERFUL EFFICIENCY.

ADVANCED TECHNOLOGY SAVES ENERGY AND TIME FOR GREATER PRODUCTIVITY.



## Industry-Leading Run Times:

The ESR and EDR series of reach trucks has the ability to run up to two shifts on one battery charge, saving your business valuable operating time and money. All the major components – software, motors and controllers – are designed into one advanced system for superior energy efficiency, productivity and speed.

## Dynamic Lift Speeds:

Built for productivity, this series of reach trucks achieves exceptional lift and travel speeds without compromising on control. One of the fastest in the industry, the reach truck's hydraulic system reaches a lifting speed of up to 165 feet per minute – helping your operators move more pallets in less time.

## Advanced Brake Performance:

The ESR / EDR series uses advanced regenerative braking, which puts energy back into the battery when the truck slows down. This intuitive design also requires fewer parts and less maintenance. All of these features result in longer run times while maintaining consistent performance levels for even greater productivity.

## Sealed Components For Greater Reliability:

These reach trucks feature sealed components for added protection in severe conditions, such as cooler or freezer applications. Sealed components offer greater reliability and require less maintenance over time, lowering your overall cost of operation today and in the future.

- Runs up to two shifts on one battery charge\*
- Dynamic lift speeds – up to 165 ft. / minute
- Efficient design, advanced AC technology
- Lower total cost of ownership

The ESR and EDR series delivers the efficiency and performance that your operation demands.

## Exceptional Performance, Exceptional Value:

Mitsubishi Forklift Trucks developed the ESR and EDR series of reach trucks to deliver superior performance – at an exceptional value. Featuring advanced AC technology, this series is designed to reach new heights quickly and efficiently for greater productivity, shift after shift.



\* in most applications



### **Advanced Technology, Advanced Performance**

AC technology is integrated into the reach truck design for even greater efficiency and productivity.

Your business will benefit from:

- Low energy consumption
- Longer run times
- Powerful acceleration
- Leading lift speeds
- Excellent energy management
- Smooth directional changes
- Less maintenance

Combined, these provide a lower cost of ownership and a better bottom line.

### **Lithium-Ion Availability:**

- Greater power efficiency
- Run for 24 hours a day, 7 days a week with opportunity charging
- Zero battery maintenance
- No watering
- No more battery exchanges
- No gas emissions, odor or acidification
- No special charging areas or equipment needed
- Longer lasting life cycles (up to 3,000)
- 5-year warranty on batteries
- 2-year warranty on chargers



Ask your local dealer about additional performance and operator comfort options.

# PRECISE CONTROL.

ENHANCED DESIGN AND STABILITY KEEP OPERATORS IN CHARGE OF THEIR SHIFT.



- Superior stability at high lift heights
- Precise operation with intuitive controls
- Adjustable performance settings

These features help keep your operators productive and focused, shift after shift.

## Designed For Stability From The Ground Up

The ESR / EDR series delivers industry-leading stability that is unmatched at high lift heights.

- 1 Rigid mast design provides excellent load stability and smooth pantograph performance
- 2 Suspended articulating drive axle helps to spread loading forces between the drive and caster wheels
- 3 Dual-articulating load wheels provide more contact area to the floor, helping to more evenly distribute load forces at very high lift heights

The result? Greater operator confidence and less risk of product damage.



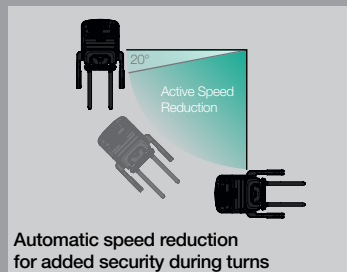
Intuitive control handle for precise positioning



Ergo-cushioned floor for added support



Electronic power steering for easy maneuvering



Automatic speed reduction for added security during turns

### Exceptional Comfort And Control:

- Electronic power steering makes maneuvering in and out of aisles easy, while allowing the operator to experience less fatigue.
- Generous padding at the back, arm and knee locations provides added comfort and support.

### Added Security:

- Automatic speed reduction – reduces travel speed when the truck turns past a predetermined angle overriding operator speed commands.
- Automatic parking brake – this brake automatically engages when the reach truck is initially turned on and when the operator steps off of the reach truck. For added security, the electromagnetic brake is only disengaged by operator command.



### Informative Display:

Through one easy-to-read screen, operators can view key indicators, such as the current battery charge level, hour meter and performance modes.



### Excellent Visibility:

Operators experience confidence with this series' enhanced design. Features such as wide channel spacing, stacked hydraulic hosing and a robust overhead guard with angled bars provide excellent visibility to the load and the surrounding area.

CHARACTERISTICS			ESR15N2		ESR18N2		ESR20N2	
1	Type		Single Reach		Single Reach		Single Reach	
2	Power voltage		36		36		36	
3	Capacity at rated load center	lb kg	3,000	1,400	3,500	1,600	4,000	1,810
4	Capacity load center – distance from fork face	in mm	24	600	24	600	24	600
DIMENSIONS								
5	Maximum fork height	in mm	242	6,145	242	6,145	242	6,145
6	Free fork height	in mm	59	1,500	59	1,500	59	1,500
7	Fork width	in mm	3.9	100	3.9	100	3.9	100
8	Fork thickness	in mm	1.4	35	1.4	35	1.6	40
9	Fork spacing - out-to-out minimum	in mm	12	305	12	305	12	305
10	Fork spacing - out-to-out maximum <sup>1)</sup>	in mm	31.5	802	31.5	802	31.5	802
11	Tilt angle - forward / backward	deg	3° / 4°		3° / 4°		3° / 4°	
12	Mast width <sup>2)</sup>	in mm	30.2	766	30.2	766	32.2	816
12a	Reach stroke		24	610	24	610	24	610
13	Baseleg opening	in mm	33 - 49	839 - 1,245	33 - 49	839 - 1,245	33 - 49	839 - 1,245
14	Baseleg width <sup>3)</sup>	in mm	5.5	140	5.5	140	5.5	140
15	Overall length	in mm	74.1	1,882	76.1	1,932	76.1	1,932
16	Length to fork face	in mm	52	1,321	55	1,397	55	1,397
17	Overall chassis width	in mm	41.5	1,054	41.5	1,054	41.5	1,054
18	Overall lowered height	in mm	107	2,720	107	2,720	107	2,720
19	Overall height to top of overhead guard	in mm	95	2,413	95	2,413	95	2,413
20	Overall height with extended mast	in mm	290	7,370	290	7,370	290	7,370
21	Step height	in mm	9.8	250	9.8	250	9.8	250
22	Battery roller height	in mm	7	178	7	178	7	178
23	Minimum outside turning radius	in mm	68.74	1,746	70.74	1,797	70.74	1,797
24	Minimum aisle - 90° stack - zero clearance	in mm	Please consult your Mitsubishi forklift truck dealer					
25	Load wheel centerline <sup>4)</sup>	in mm	5.3	133	5.3	133	5.3	133
PERFORMANCE								
26	Grade clearance <sup>5)</sup>	%	13		13		15.5	
27	Travel speed loaded/empty – standard <sup>6)</sup>	mph km/h	6.8 / 7.5	11.0 / 12.1	6.8 / 7.5	11.0 / 12.1	7.5 / 7.5	12.1 / 12.1
28	Travel speed loaded / empty – high performance <sup>6)</sup>	mph km/h	–	–	–	–	7.5 / 8.0	12.1 / 12.9
29	Lift speed loaded / empty (triplex) – standard	fpm m/s	100 / 128	0.51 / 0.65	100 / 128	0.51 / 0.65	75 / 120	0.38 / 0.60
30	Lift speed loaded / empty (triplex) – high performance	fpm m/s	–	–	–	–	90 / 160	0.45 / 0.80
31	Lower speed loaded / empty (triplex) – standard	fpm m/s	108 / 108	0.55 / 0.55	108 / 108	0.55 / 0.55	110 / 110	0.55 / 0.55
32	Lower speed loaded / empty (triplex) – high performance	fpm m/s	–	–	–	–	110 / 110	0.55 / 0.55
33	Gradeability - loaded / empty - maximum	%	9 / 9		9 / 9		9 / 9	
WEIGHT								
34	Truck weight - empty - without battery	lb kg	6,850	3,100	6,850	3,100	7,050	3,200
35	Battery weight - min	lb kg	1,800	910	1,800	910	2,000	910
36	Battery weight - max	lb kg	2,300	1,050	2,300	1,050	2,300	1,050
CHASSIS								
37	Chassis type (stand/sit)		Stand		Stand		Stand	
38	Wheelbase	in mm	59.5	1,511	61.5	1,562	61.5	1,562
39	Ground clearance - center of wheelbase	in mm	2.4	61	2.4	61	2.4	61
40	Ground clearance - lowest point at mast	in mm	2.4	61	2.4	61	2.4	61
41	Tire size - steer	in mm	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140
42	Tire size - caster	in mm	7 x 4	180 x 100	7 x 4	180 x 100	7 x 4	180 x 100
43	Tire size - load wheels	in mm	5 x 3.62	127 x 92	5 x 3.62	127 x 92	5 x 3.62	127 x 92
44	Brake type		Electromagnetic Disc		Electromagnetic Disc		Electromagnetic Disc	
ELECTRICAL								
45	Traction / pump / steer motor type		AC Induction		AC Induction		AC Induction	
46	Traction motor output (60 minute rating) – standard	hp kW	6.0	4.5	6.0	4.5	6.0	4.5
47	Traction motor output (60 minute rating) – high performance	hp kW	–	–	–	–	9.2	6.9
48	Pump motor output (5 minute rating)	hp kW	27.2	20	27.2	20	27.2	20
49	Steer motor output (60 minute rating)	hp kW	1.0	0.7	1.0	0.7	1.0	0.7
OTHER								
50	Battery maximum capacity - A/H (6 hour rating)		1,120		1,120		1,120	
51	Battery compartment length <sup>7)</sup>	in mm	14.25	362	16.25	413	16.25	413
52	Battery compartment width	in mm	38.42	976	38.42	976	38.42	976
53	Battery compartment height	in mm	31.65	804	31.65	804	31.65	804

1) Maximum fork spacing 27.5 inches (698 mm) with 33 inch BLO.

2) Out-to-out dimension across mast outer channels.

3) 5.9 inches (150 mm) on single reach chassis with MFH over 332 inches (8430 mm).

4) 7.3 inches (186 mm) on single reach chassis with mast MFH above 332 inches (8430 mm).

5) Reduce grade clearance by 1.5% with 18.25 inch (463 mm) battery compartment length or 21.25 inch (539 mm) battery compartment length vs. 16.25 inch (412 mm) length.

6) Maximum speed attainable, after break-in period, varies with travel direction, truck weight, rolling resistance, mast height, options and battery condition.

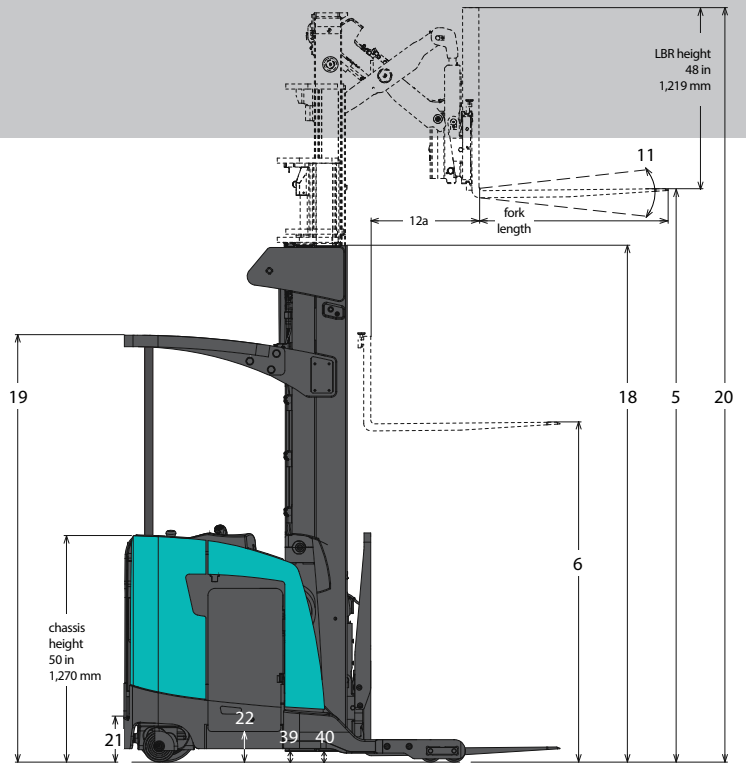
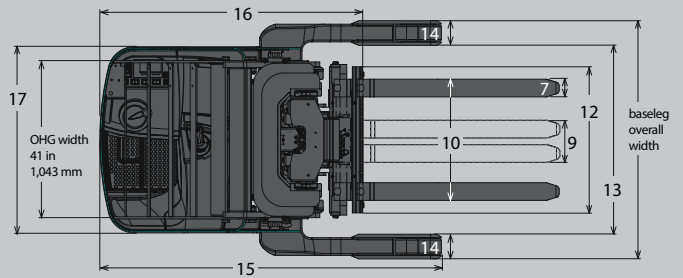
7) 21.25 inch (539 mm) battery compartment length standard on chassis with MFH over 332 inches (8430 mm).

Note: Equipping this model (these models) with a power source (e.g. Lithium-ion, Hydrogen Fuel cell, etc.) that has not been previously approved by the factory is considered a modification. Per OSHA 1910.178 and ANSI/ITSDF B56.1, please consult with your factory representative prior to installing any non-OEM power source that has not been previously approved.

ESR23N2		EDR18N2		
1	Single Reach		Double Deep Reach	
2	36		36	
3	4,500	2,040	3,500	1,580
4	24	600	24	600
5	242	6,145	242	6,145
6	59	1,500	59	1,500
7	3.9	100	3.9	100
8	1.6	40	1.4	35
9	12	305	12	305
10	31.5	802	31.5	802
11	3° / 4°		3° / 4°	
12	32.2	816	32.2	816
12a	24	610	42	1,067
13	33 - 49	839 - 1,245	33 - 49	839 - 1,245
14	5.5	140	5	127
15	76.1	1,932	78.1	1,983
16	55	1,397	62.3	1,582
17	41.5	1,054	41.5	1,054
18	107	2,720	107	2,720
19	95	2,413	95	2,413
20	290	7,370	290	7,370
21	9.8	250	9.8	250
22	7	178	7	178
23	70.74	1,797	70.74	1,797
24	Please consult your Mitsubishi forklift truck dealer			
25	5.3	133	5.3	133
26	15.5		15.5	
27	7.5 / 7.5	12.1 / 12.1	7.5 / 7.5	12.1 / 12.1
28	7.5 / 8.0	12.1 / 12.9	7.5 / 8.0	12.1 / 12.9
29	75 / 120	0.38 / 0.60	75 / 120	0.38 / 0.60
30	90 / 160	0.45 / 0.80	90 / 160	0.45 / 0.80
31	110 / 110	0.55 / 0.55	110 / 110	0.55 / 0.55
32	110 / 110	0.55 / 0.55	110 / 110	0.55 / 0.55
33	9 / 9		9 / 9	
34	7,050	3,200	7,400	3,350
35	2,000	910	2,000	910
36	2,300	1,050	2,300	1,050
37	Stand		Stand	
38	61.5	1,562	61.5	1,562
39	2.4	61	2.4	61
40	2.4	61	2.4	61
41	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140
42	7 x 4	180 x 100	7 x 4	180 x 100
43	5 x 3.62	127 x 92	5 x 3.62	127 x 92
44	Electromagnetic Disc		Electromagnetic Disc	
45	AC Induction		AC Induction	
46	6.0	4.5	6.0	4.5
47	9.2	6.9	9.2	6.9
48	27.2	20	27.2	20
49	1.0	0.7	1.0	0.7
50	1,120		1,120	
51	16.25	413	16.25	413
52	38.42	976	38.42	976
53	31.65	804	31.65	804

Call-out numbers shown in the diagram below correspond to the first column of the specifications chart.

# ESR15N2-EDR18N2



Add 9.1 in (230mm) for extended operator backrest

## SAFETY STANDARDS

These trucks meet American National Standards Institute/Industrial Truck Standards Development Foundation, ANSI/ITSDF B56.1. UL-Classified by Underwriters Laboratories, Inc., as a fire and electric shock hazard only; Type E, EE (optional), Industrial Trucks. Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1.
- NFPA 505, fire safety standard for powered industrial trucks - type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Specifications, equipment, technical data, photos and illustrations based on information at time of printing and subject to change without notice. Some products may be shown with optional equipment.

# ESR15N2-EDR18N2

3,000-4,500 LB CAPACITY PANTOGRAPH REACH TRUCK

## Delivering Exceptional Value

### More Than 296,000 Parts To Keep You Running

Mitsubishi Forklift Trucks offers several parts programs, all designed to bring you top performance and convenience for your material handling needs. Contact your local dealer to put our services to work for you.

### Support To Fit Your Operation

Find out why more companies are relying on Mitsubishi forklift truck dealers to keep their fleet operating at top performance. Our efficiency provides customers with a better return on investment, and qualified service technicians, diverse parts inventory and unparalleled selection of service options can help reduce your total cost of ownership.

### Extensive Dealer Network

The Mitsubishi forklift truck dealer network is dedicated to finding the right forklift solution for your business. With more than 300 dealer locations, you can rely on your local dealer to provide the service you need when you need it most.



Manufactured with superior quality and exceptional value, Mitsubishi forklift trucks are supported by an extensive dealer and field support network located throughout North and South America. Don't forget to ask your local Mitsubishi forklift truck dealer about details on factory retail programs, financing plans and additional options and dealer services like planned maintenance and operator training.