

Industrial Feeder Capacity Calculator

Estimate adjusted feeder load, current, utilization, and remaining capacity from an entered rating and demand factor.

Generated October 10, 2026

<https://www.elecatrix.com/commercial-industrial-loads/industrial-feeder-capacity-calculator/>

Inputs

Input	Value	Unit
Feeder capacity	225	A
Connected load	150000	VA
Demand factor	80	%
System voltage	480	V
Phase model	Balanced three phase	

Results

Result	Value	Unit
Adjusted feeder load	120000	VA
Feeder current	144.3376	A
Remaining capacity	80.6624	A
Utilization	64.15	%
Phase multiplier	1.7321	x

Calculation details

Detail	Value	Unit
Calculation basis	Industrial feeder screening applies the entered demand factor to connected VA and compares estimated line current with the entered rating.	
Boundary	Capacity screening only; no short-circuit, motor starting, conductor, protection, equipment, or code-compliance decision is made.	

Formulas

$$\text{adjusted VA} = \text{connected VA} \times \text{demand} / 100$$

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$\text{feeder current} = \text{adjusted VA} / (\text{phase multiplier} \times \text{voltage})$

$\text{utilization} = \text{feeder current} / \text{entered capacity} \times 100$

Warnings and limitations

This is capacity screening only and does not approve a feeder, conductor, breaker, service, or industrial installation.