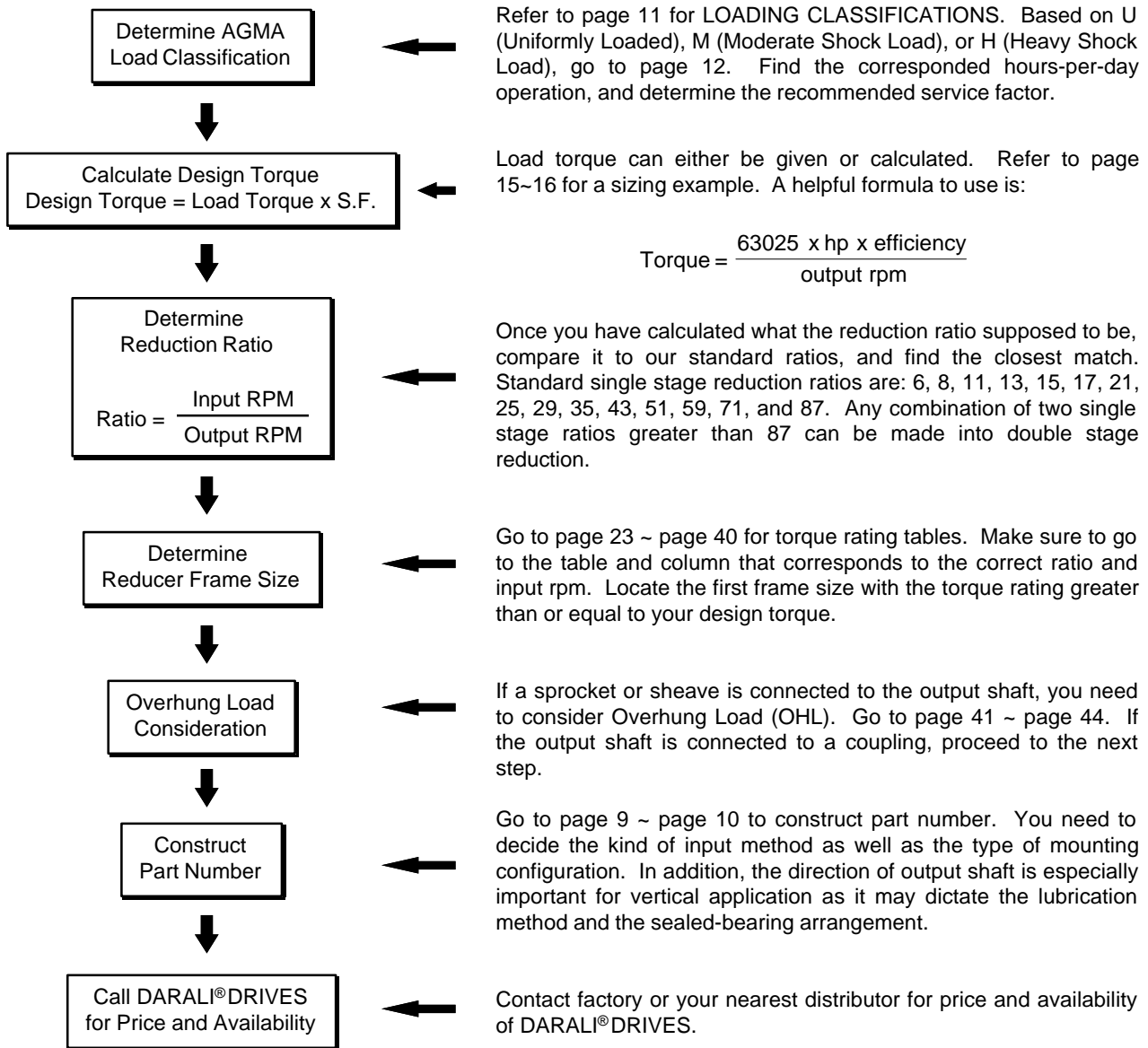


Quick & Simple Selection Procedures



EXAMPLE:

You are designing a heavy duty, uniformly fed assembly conveyor. This conveyor will operate 24 hours per day. The output shaft of speed reducer will be coupled to the conveyor. You have determined the torque requirement at the output shaft being 12,000 in-lbs, and the output speed being 59 rpm. Find appropriate DARALI®DRIVES frame size that suits the requirement.

1). Based on conditions given above, refer to LOADING CLASSIFICATIONS. The load nature designation is M which means moderate shock load. Refer to RECOMMENDED SERVICE FACTORS. Based on a 24 hours per day application,

$$\text{S.F.} = 1.35$$

2). Assuming input rpm = 1750,

$$\text{Ratio} = \frac{1750 \text{ rpm}}{59 \text{ rpm}} = 29.66$$

use 29:1 as the reduction ratio.

3). Since Load Torque is given already, multiply Load Torque by S.F. to obtain Design Torque.

$$\text{Design Torque} = 12,000 \text{ in-lbs} \times 1.35 = 16,200 \text{ in-lbs}$$

4). From the TORQUE RATING TABLE, we determine that B17 is the appropriate frame size (B16 torque rating at 1750 rpm input and 29:1 does not exceed 16,200 in-lbs, therefore was not chosen).

5). Since the output shaft is directly coupled to the conveyor, no OHL considerations are required.

** For a more detailed SIZING EXAMPLE, please refer to "Sizing Example".