

0209

The values shown in the following table are approximate overall reducer efficiencies which have been determined and substantiated by extensive dynamometer testing. They are for a complete reducer and include all losses within the unit from oil churning, oil seals and bearings. The efficiencies shown are based on the catalog ratings with the unit at normal operating temperature and with an approved lubricant. Varying conditions such as extremely cold or hot ambient temperatures, and excessively high or low loading will affect the efficiency of the reducer.

If the reducer is required to start under load, consideration must be given to the starting efficiency, which would be less than the running efficiency.

For additional information on efficiency under abnormal temperatures and loading and for starting efficiencies, please contact Textron Power Transmission.

Efficiency (Percent) - Single Reduction

SIZE	RPM	RATIO									
		5	10	15	20	25	30	40	50	60	70
20 thru 35	1750	92	90	88	85	84	80	76	73	70	69
	1150	92	90	88	84	84	80	76	73	70	69
	870	92	89	87	83	83	79	75	72	69	68
	580	91	87	85	83	81	75	72	70	66	65
	300	91	86	82	78	77	72	67	64	61	60
	200	90	85	81	77	75	70	63	60	59	58
	100	89	83	79	75	71	68	61	54	53	52
40 thru 80	1750	95	93	91	88	87	83	79	76	73	72
	1150	95	93	91	87	87	83	79	76	73	72
	870	95	92	90	86	86	82	78	75	72	71
	580	94	90	88	86	84	78	75	73	69	68
	300	94	89	85	81	80	75	70	67	64	63
	200	93	88	84	80	78	73	66	63	62	61
	100	92	86	82	78	74	71	64	57	56	55
100 thru 120	1750	97	95	93	90	89	85	81	78	75	74
	1150	97	95	93	89	89	85	81	78	75	74
	870	97	94	92	88	88	84	80	77	74	73
	580	96	92	90	88	86	80	77	75	71	70
	300	96	91	87	83	82	77	72	69	66	65
	200	95	90	86	82	80	75	68	65	64	63
	100	94	88	84	80	76	73	66	59	58	57

The overall reducer efficiency is equal to the product of the efficiencies of each stage at the input speed to that stage.

Double reduction overall efficiency = Primary efficiency x secondary efficiency.

Triple reduction overall efficiency = Primary efficiency x secondary efficiency x tertiary efficiency.