

Selection

Torque-Arm shaft mount speed reducers Easy selection method for hydraulic motors

When to use easy selection

The Easy Selection tables for HXT shaft mount reducers are for hydraulic motor selections up to approximately horsepower with output speeds up to 400 RPM, using AGMA recommended application class numbers. For extreme repetitive shock loads, consult Dodge application engineering, (864) 284-5700.

How to select

Step 1: Determine class of service – See the table on page G1-6 to determine load classification for applications under normal conditions. Find the type application and duty cycle that most closely matches your specific application.

Class I – Steady load not exceeding motor Hp rating and light shock loads during 10 hours a day. Moderate shock loads are allowable if operation is intermittent.

- For Class I applications, the maximum value of starting and momentary peak loads should not exceed 2 x motor Hp rating.
- If it exceeds this amount it should be divided by 2 and the result used in the selection table instead of the motor Hp rating.

Class II – Steady load not exceeding motor Hp rating for over 10 hours a day. Moderate shock loads are allowable during 10 hours a day.

- For Class II applications, the maximum value of starting and momentary peak loads should not exceed 2.8 x motor Hp rating. If it exceeds this amount it should be divided by 2.8 and the result used in the selection table instead of the motor Hp rating.

Class III – Moderate shock loads for over 10 hours a day. Heavy shock loads are allowable during 10 hours a day. For Class III applications, the maximum value of starting and momentary peak loads should not exceed 4 x Motor Hp rating.

- If it exceeds this amount it should be divided by 4 and the result used in the selection table instead of the Motor Hp rating.

Step 2: Determine reducer size – See the Easy Selection tables, pages G3-120 thru G3-134. From Selection Table I, II or III read the reducer size for the application horsepower and output speed. Also compare the reducer/motor running and starting torque, running pressure and flow rate with that required for the application. See the table on page G3-135 for maximum hydraulic motor starting pressure for Hydroil vane motors.

Step 3: Compare hollow shaft bore with the size of the driven shaft. All Dodge Torque-Arm taper bushed reducers require bushings. Refer to TXT reducer pages for available bushings. If the driven shaft is larger than the bore of the selected reducer,

the shaft must be machined to the proper size, or select a larger reducer. Check driven shaft and key for strength.

Step 4: Check dimensions – See “Selection and dimensions” sections, pages G3-136 thru G3-143 for reducer dimensions, weights and part numbers. See “Engineering and Technical” section, pages G3-160 thru G3-176 for reducer and Torque-Arm rod mounting positions.

Step 5: Select a Hydroil vane motor – See “Selection and Dimensions” pages for listing of Hydroil vane motors required to drive each size and ratio of HXT reducer. See page G3-143 for dimensions and part numbers. **Note: 100 RPM is minimum speed for Hydroil vane motors.**

Example:

Easy selection method-HXT Torque-Arm reducer

A 3 Hp motor is used to drive the head shaft on a heavily loaded bucket elevator at 30 RPM, 16 hours per day. Head shaft diameter is 2-3/16”. User wants to use a hydraulic motor as prime mover since drive is not in an easily accessible location.

Step 1: Determine class of service – From the table on page G1-6, locate “bucket elevators, heavily loaded” for over 10 hours per day. This load will be classified as a Class II application.

Step 2: Determine reducer size – From the Class II Selection table on page G3-78, find the 30 RPM output column at the top of the table. Read down to the Hp rating of 3 Hp or greater. At 3.6 Hp, trace to the far left column to find that the basic reducer size for the application is an HXT3. Either an HXT315 or an HXT325 may be used, depending on the starting torque requirements.

Step 3: Compare hollow shaft bore of an HXT315/325 with the application driven shaft diameter. Per page G3-136, 2-3/16” is the maximum bore available for this size reducer, so it will work in this application. Select reducer bushing from part numbers listed with TXT reducers on page G3-33. Be sure to check driven shaft and key for strength.

Step 4: Check dimensions and weights – See Selection/Dimensions section, page G3-136, for reducer dimensions, weights, part numbers and other pertinent drive dimensions. See “Engineering and technical” section, pages G3-163 and G3-166 for information on reducer and torque-arm rod mounting positions.

Step 5: Select a Hydroil vane motor – See “Selection and dimension” page G3-140. Trace from reducer size HXT315 right to column labeled Hydroil motor. It must be driven by a size B30 Hydroil vane motor. Likewise a reducer size HXT325 is designed to be driven by an A20 Hydroil vane motor. See page G3-143 for the motor part numbers and dimensions.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class I selections – double reduction

Class I selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		10	15	20	25	30	35	40	45	50	55	60	65	70	
HXT115A	Output Hp (run)	0.6	0.9	1.2	1.4	1.7	1.9	2.2	2.4	2.7	2.9	3.1	3.3	3.6	
	Running torque (lb.-in.)	4025	3776	3651	3577	3527	3491	3465	3396	3342	3298	3260	3229	3202	
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	
	Running pressure (psi)	1685	1581	1529	1498	1477	1462	1451	1422	1399	1381	1365	1352	1341	
	Flow rate (gpm)	2.0	2.3	2.7	3.0	3.4	3.8	4.1	4.5	4.9	5.2	5.6	6.0	6.3	
HXT125A	Output Hp (run)	0.5	0.8	1.1	1.3	1.6	1.9	2.2	2.4	2.7	2.9	3.1	3.3	3.6	
	Running torque (lb.-in.)	3403	3403	3403	3403	3403	3403	3403	3396	3342	3298	3260	3229	3202	
	Starting torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	
	Running pressure (psi)	2000	2000	2000	2000	2000	2000	2000	1996	1964	1938	1916	1898	1882	
	Flow rate (gpm)	1.5	1.8	2.1	2.3	2.6	2.9	3.2	3.4	3.7	3.9	4.2	4.5	4.7	
HXT215A	Output Hp (run)	0.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.5	3.8	4.2	4.5	4.9	
	Running torque (lb.-in.)	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	
	Running pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
	Flow rate (gpm)	2.2	2.6	2.9	3.3	3.6	4.0	4.3	4.7	5.0	5.4	5.7	6.1	6.4	
HXT225A	Output Hp (run)	1.1	1.6	2.1	2.6	3.0	3.5	4.0	4.4	4.8	5.2	5.6	6.0	6.5	
	Running torque (lb.-in.)	7245	6824	6613	6486	6402	6342	6297	6171	6070	5988	5919	5861	5811	
	Starting torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	
	Running pressure (psi)	1985	1870	1812	1777	1754	1737	1725	1691	1663	1640	1622	1606	1592	
	Flow rate (gpm)	2.7	3.2	3.7	4.3	4.8	5.4	6.0	6.5	7.1	7.6	8.2	8.8	9.3	
HXT315B	Output Hp (run)	1.8	2.6	3.4	4.3	5.1	5.9	6.8	7.4	8.1	8.7	9.4	10.0	10.7	
	Running torque (lb.-in.)	11098	10894	10791	10730	10689	10660	10638	10379	10171	10001	9860	9740	9637	
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	
	Running pressure (psi)	1523	1495	1481	1473	1467	1463	1460	1425	1396	1373	1353	1337	1323	
	Flow rate (gpm)	4.6	5.7	6.9	8.0	9.2	10.3	11.5	12.6	13.7	14.8	15.9	17.1	18.2	
HXT325B	Output Hp (run)	1.2	1.8	2.4	3.0	3.7	4.3	4.9	5.5	6.1	6.7	7.3	7.9	8.5	
	Running torque (lb.-in.)	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689	7689	
	Starting torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	
	Running pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
	Flow rate (gpm)	2.7	3.4	4.0	4.6	5.2	5.8	6.4	7.0	7.6	8.3	8.9	9.5	10.1	
HXT415B	Output Hp (run)	2.6	3.9	5.1	6.3	7.5	8.7	9.9	11.0	12.1	13.1	14.2	15.3	16.3	
	Running torque (lb.-in.)	16676	16229	16005	15871	15781	15717	15669	15424	15227	15066	14932	14818	14721	
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	
	Running pressure (psi)	2251	2191	2161	2142	2130	2122	2115	2082	2056	2034	2016	2000	1987	
	Flow rate (gpm)	5.7	6.8	8.0	9.1	10.3	11.4	12.6	13.7	14.9	16.0	17.2	18.30	19.5	
HXT425B	Output Hp (run)	2.6	3.9	5.1	6.3	7.5	8.7	9.9	11.0	12.1	13.1	14.2	15.30	16.3	
	Running torque (lb.-in.)	16676	16229	16005	15871	15781	15717	15669	15424	15227	15066	14932	14818	14721	
	Starting torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	
	Running pressure (psi)	1397	1360	1341	1330	1322	1317	1313	1292	1276	1262	1251	1241	1233	
	Flow rate (gpm)	5.9	7.7	9.6	11.5	13.4	15.3	17.2	19.0	20.9	22.8	24.7	26.6	28.5	
HXT515C	Output Hp (run)	4.6	6.5	8.5	10.5	12.5	14.4	16.4	17.9	19.3	20.8	22.3	23.7	24.8	
	Running torque (lb.-in.)	28751	27474	26835	26451	26196	26013	25876	25046	24381	23838	23384	23001	22329	
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	
	Running pressure (psi)	2125	2031	1983	1955	1936	1923	1913	1851	1802	1762	1728	1700	1650	
	Flow rate (gpm)	10.0	11.9	13.9	16.0	18.1	20.2	22.3	24.3	26.3	28.4	30.5	32.5	34.6	

★ See Page G3-145 for definition of requirements.

(continued)

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class I selections – double reduction

Class I selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT115A	Output Hp (run)	3.8	4.0	4.2	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.50
	Running torque (lb.-in.)	3179	3158	3140	3124	3099	3076	3056	3037	3020	3005	2983	2964	2945	2929
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running pressure (psi)	1331	1322	1315	1308	1298	1288	1280	1272	1265	1258	1249	1241	1233	1226
	Flow rate (gpm)	6.7	7.1	7.5	7.8	8.2	8.6	9.0	9.3	9.7	10.1	10.5	10.8	11.2	11.6
HXT125A	Output Hp (run)	3.8	4.0	4.2	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	3179	3158	3140	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	2868	2868	2868	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1868	1856	1845	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	5.0	5.2	5.5	-	-	-	-	-	-	-	-	-	-	-
HXT215A	Output Hp (run)	5.2	5.6	5.9	6.3	6.6	7.0	7.3	7.7	8.0	8.4	8.7	9.0	9.4	9.7
	Running torque (lb.-in.)	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387	4387
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Flow rate (gpm)	6.8	7.1	7.5	7.8	8.2	8.5	8.9	9.2	9.6	9.9	10.3	10.6	11.0	11.3
HXT225A	Output Hp (run)	6.9	7.3	7.7	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	5768	5730	5697	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6152	6152	6152	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1580	1570	1561	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	9.9	10.5	11.1	-	-	-	-	-	-	-	-	-	-	-
HXT315B	Output Hp (run)	11.4	12.0	12.7	13.3	13.8	14.3	14.8	15.3	15.8	15.9	15.7	15.5	15.2	15.0
	Running torque (lb.-in.)	9549	9471	9402	9341	9172	9020	8883	8758	8644	8351	7916	7515	7096	6753
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	Running pressure (psi)	1311	1300	1291	1282	1259	1238	1219	1202	1186	1146	1087	1031	974	927
	Flow rate (gpm)	19.4	20.5	21.7	22.8	23.9	25.1	26.2	27.3	28.5	29.6	30.6	31.7	32.8	33.9
HXT325B	Output Hp (run)	9.1	9.8	10.4	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	7689	7689	7689	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6479	6479	6479	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	2000	2000	2000	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	10.7	11.3	11.9	-	-	-	-	-	-	-	-	-	-	-
HXT415B	Output Hp (run)	17.4	18.5	19.6	20.6	21.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5	18.0
	Running torque (lb.-in.)	14636	14563	14497	14440	14295	13866	12905	12032	11235	10504	9832	9211	8637	8103
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running pressure (psi)	1976	1966	1957	1949	1930	1872	1742	1624	1517	1418	1327	1244	1166	1094
	Flow rate (gpm)	20.7	21.8	23.0	24.1	25.3	26.4	27.4	28.4	29.4	30.4	31.5	32.5	33.6	34.7
HXT425B	Output Hp (run)	17.4	18.5	19.6	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	14636	14563	14497	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	28164	28164	28164	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1226	1220	1215	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	30.3	32.2	34.1	-	-	-	-	-	-	-	-	-	-	-
HXT515C	Output Hp (run)	24.2	23.5	22.9	22.3	21.7	21.1	20.5	19.8	19.2	18.6	18.0	-	-	-
	Running torque (lb.-in.)	20336	18514	16980	15616	14396	13298	12305	11345	10522	9769	9076	-	-	-
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	-	-	-
	Running pressure (psi)	1503	1368	1255	1154	1064	983	909	838	778	722	671	-	-	-
	Flow rate (gpm)	36.3	38.1	40.0	41.8	43.8	45.7	47.7	49.6	51.6	53.6	55.6	-	-	-

★ See Page G3-145 for definition of requirements.

(continued)

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class I selections – double reduction

Class I selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed												
		10	15	20	25	30	35	40	45	50	55	60	65	70
HXT525C	Output Hp (run)	4.6	6.5	8.5	10.5	12.5	14.4	16.4	17.9	19.3	20.8	22.3	23.7	24.8
	Running torque (lb.-in.)	28751	27474	26835	26451	26196	26013	25876	25046	24381	23838	23384	23001	22329
	Starting torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running pressure (psi)	2298	2195	2144	2114	2093	2079	2068	2001	1948	1905	1869	1838	1784
	Flow rate (gpm)	7.4	9.3	11.2	13.1	15.1	17.1	19.0	20.9	22.8	24.8	26.7	28.7	30.6
HXT615A	Output Hp (run)	5.3	8.0	10.7	13.4	16.0	18.7	21.4	24.0	26.7	29.4	32.1	34.7	37.4
	Running torque (lb.-in.)	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671	33671
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running pressure (psi)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
	Flow rate (gpm)	11.0	13.1	15.3	17.4	19.5	21.7	23.8	26.0	28.1	30.3	32.4	34.5	36.7
HXT625A	Output Hp (run)	7.2	10.4	13.7	16.9	20.1	23.3	26.6	29.1	31.6	34.1	36.6	39.1	41.5
	Running torque (lb.-in.)	45427	43830	43031	42552	42233	42004	41833	40699	39792	39050	38431	37908	37365
	Starting torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running pressure (psi)	2058	1985	1949	1927	1913	1903	1895	1843	1802	1769	1741	1717	1692
	Flow rate (gpm)	12.5	15.8	19.3	22.7	26.2	29.7	33.2	36.6	40.0	43.4	46.8	50.3	53.7
HXT715A	Output Hp (run)	9.6	14.4	19.2	23.8	28.3	32.9	37.4	41.4	45.3	49.3	53.2	57.2	55.6
	Running torque (lb.-in.)	60533	60533	60533	59918	59483	59173	58940	57937	57135	56478	55931	55468	50060
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running pressure (psi)	2500	2500	2500	2475	2457	2444	2434	2393	2360	2333	2310	2291	2067
	Flow rate (gpm)	12.7	16.6	20.4	24.2	28.0	31.9	35.7	39.5	43.3	47.1	50.9	54.7	58.1
HXT725A	Output Hp (run)	8.6	12.9	17.1	21.4	25.7	30.0	34.3	38.6	42.8	47.1	51.4	55.7	55.6
	Running torque (lb.-in.)	54009	54009	54009	54009	54009	54009	54009	54009	54009	54009	54009	54009	50060
	Starting torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running pressure (psi)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2317
	Flow rate (gpm)	13.6	17.0	20.4	23.9	27.3	30.7	34.2	37.6	41.1	44.5	47.9	51.4	54.3

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class I selections – double reduction

Class I selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT525C	Output Hp (run)	24.2	23.5	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	20336	18514	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	29528	29528	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1625	1479	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	32.3	34.1	-	-	-	-	-	-	-	-	-	-	-	-
HXT615A	Output Hp (run)	39.6	37.6	35.7	33.7	31.8	29.8	27.8	25.9	23.9	22.0	20.0	-	-	-
	Running torque (lb.-in.)	33277	29622	26471	23599	21097	18781	16687	14840	13098	11555	10084	-	-	-
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	-	-	-
	Running pressure (psi)	2471	2199	1965	1752	1566	1395	1239	1102	973	858	749	-	-	-
	Flow rate (gpm)	38.8	40.2	41.7	43.3	44.9	46.6	48.3	50.1	51.9	53.7	55.6	-	-	-
HXT625A	Output Hp (run)	39.6	37.6	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	33277	29622	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	52094	52094	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1507	1342	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	56.7	59.8	-	-	-	-	-	-	-	-	-	-	-	-
HXT715A	Output Hp (run)	53.5	51.4	49.3	47.2	45.0	43.0	41.0	39.0	37.0	35.0	-	-	-	-
	Running torque (lb.-in.)	44958	40494	36555	33053	29854	27101	24610	22345	20278	18382	-	-	-	-
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	-	-	-	-
	Running pressure (psi)	1857	1672	1510	1365	1233	1119	1016	923	837	759	-	-	-	-
	Flow rate (gpm)	61.5	65.0	68.5	72.1	75.7	79.3	83.0	86.6	90.3	94.0	-	-	-	-
HXT725A	Output Hp (run)	53.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	44958	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	50975	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	2081	-	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	57.1	-	-	-	-	-	-	-	-	-	-	-	-	-

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class II selections – double reduction

Class II selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed												
		10	15	20	25	30	35	40	45	50	55	60	65	70
HXT115A	Output Hp (run)	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.7	1.9	2.1	2.2	2.40	2.50
	Running torque (lb.-in.)	2875	2697	2608	2555	2519	2494	2475	2426	2387	2355	2329	2306	2287
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running pressure (psi)	1204	1129	1092	1070	1055	1044	1036	1016	1000	986	975	966	958
	Flow rate (gpm)	1.7	2.0	2.4	2.7	3.1	3.5	3.8	4.2	4.6	4.9	5.3	5.7	6.1
HXT125A	Output Hp (run)	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.7	1.9	2.1	2.2	2.4	2.5
	Running torque (lb.-in.)	2875	2697	2608	2555	2519	2494	2475	2426	2387	2355	2329	2306	2287
	Starting torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868
	Running pressure (psi)	1690	1585	1533	1501	1480	1465	1454	1426	1403	1384	1369	1355	1344
	Flow rate (gpm)	1.4	1.6	1.8	2.1	2.4	2.6	2.9	3.1	3.4	3.7	3.9	4.2	4.5
HXT215A	Output Hp (run)	0.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.4	3.7	4.0	4.3	4.6
	Running torque (lb.-in.)	4387	4387	4387	4387	4387	4387	4387	4387	4336	4277	4228	4186	4151
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running pressure (psi)	2000	2000	2000	2000	2000	2000	2000	2000	1976	1950	1927	1908	1892
	Flow rate (gpm)	2.2	2.6	2.9	3.3	3.6	4.0	4.3	4.7	5	5.3	5.7	6.0	6.3
HXT225A	Output Hp (run)	0.8	1.2	1.5	1.8	2.2	2.5	2.9	3.1	3.4	3.7	4.0	4.3	4.6
	Running torque (lb.-in.)	5175	4874	4723	4633	4573	4530	4498	4408	4336	4277	4228	4186	4151
	Starting torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152
	Running pressure (psi)	1418	1335	1294	1269	1253	1241	1232	1208	1188	1172	1158	1147	1137
	Flow rate (gpm)	2.2	2.8	3.3	3.9	4.4	5.0	5.6	6.2	6.7	7.3	7.9	8.4	9.0
HXT315B	Output Hp (run)	1.3	1.9	2.4	3.0	3.6	4.2	4.8	5.3	5.8	6.2	6.7	7.2	7.6
	Running torque (lb.-in.)	7927	7781	7708	7664	7635	7614	7599	7413	7265	7144	7043	6957	6884
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190
	Running pressure (psi)	1088	1068	1058	1052	1048	1045	1043	1018	997	981	967	955	945
	Flow rate (gpm)	4.0	5.1	6.2	7.4	8.5	9.7	10.8	12.0	13.1	14.2	15.4	16.5	17.7
HXT325B	Output Hp (run)	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.3	5.8	6.2	6.7	7.2	7.6
	Running torque (lb.-in.)	7689	7689	7689	7664	7635	7614	7599	7413	7265	7144	7043	6957	6884
	Starting torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479
	Running pressure (psi)	2000	2000	2000	1994	1986	1981	1977	1928	1890	1858	1832	1810	1791
	Flow rate (gpm)	2.7	3.4	4.0	4.6	5.2	5.8	6.4	7.0	7.6	8.1	8.7	9.3	9.9
HXT415B	Output Hp (run)	1.9	2.8	3.6	4.5	5.4	6.2	7.1	7.9	8.6	9.4	10.2	10.9	11.7
	Running torque (lb.-in.)	11911	11592	11432	11336	11272	11227	11192	11017	10876	10761	10665	10584	10515
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running pressure (psi)	1608	1565	1543	1530	1522	1516	1511	1487	1468	1453	1440	1429	1419
	Flow rate (gpm)	4.8	5.9	7.0	8.2	9.4	10.5	11.7	12.8	14	15.2	16.3	17.5	18.6
HXT425B	Output Hp (run)	1.9	2.8	3.6	4.5	5.4	6.2	7.1	7.9	8.6	9.4	10.2	10.9	11.7
	Running torque (lb.-in.)	11911	11592	11432	11336	11272	11227	11192	11017	10876	10761	10665	10584	10515
	Starting torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164
	Running pressure (psi)	998	971	958	950	944	941	938	923	911	902	894	887	881
	Flow rate (gpm)	5.3	7.2	9.0	10.9	12.8	14.7	16.6	18.5	20.4	22.3	24.1	26	27.9
HXT515C	Output Hp (run)	3.3	4.7	6.1	7.5	8.9	10.3	11.7	12.8	13.8	14.9	15.9	16.9	18.0
	Running torque (lb.-in.)	20537	19624	19168	18894	18711	18581	18483	17890	17415	17027	16703	16429	16195
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924
	Running pressure (psi)	1518	1450	1417	1396	1383	1373	1366	1322	1287	1258	1235	1214	1197
	Flow rate (gpm)	8.4	10.3	12.4	14.5	16.6	18.7	20.9	22.9	25.0	27.1	29.1	31.2	33.3

★ See Page G3-145 for definition of requirements.

(continued)

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class II selections – double reduction

Class II selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT115A	Output Hp (run)	2.70	2.90	3.00	3.20	3.30	3.50	3.60	3.80	3.90	4.10	4.20	4.40	4.50	4.60
	Running torque (lb.-in.)	2271	2256	2243	2232	2214	2197	2183	2169	2157	2146	2131	2117	2104	2092
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running pressure (psi)	951	945	939	934	927	920	914	908	903	899	892	886	881	876
	Flow rate (gpm)	6.4	6.8	7.2	7.6	7.9	8.3	8.7	9.1	9.4	9.8	10.2	10.6	10.9	11.3
HXT125A	Output Hp (run)	2.7	2.9	3.0	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	2271	2256	2243	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	2868	2868	2868	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1334	1326	1318	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	4.7	5.0	5.3	-	-	-	-	-	-	-	-	-	-	-
HXT215A	Output Hp (run)	4.9	5.2	5.5	5.8	6.0	6.3	6.6	6.8	7.1	7.4	7.6	7.9	8.2	8.4
	Running torque (lb.-in.)	4120	4093	4069	4048	4010	3976	3945	3917	3891	3868	3847	3828	3810	3793
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running pressure (psi)	1878	1866	1855	1845	1828	1812	1798	1786	1774	1763	1754	1745	1737	1729
	Flow rate (gpm)	6.7	7.0	7.4	7.7	8.0	8.4	8.7	9.0	9.4	9.7	10.1	10.4	10.8	11.1
HXT225A	Output Hp (run)	4.9	5.2	5.5	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	4120	4093	4069	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6152	6152	6152	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1129	1121	1115	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	9.6	10.2	10.7	-	-	-	-	-	-	-	-	-	-	-
HXT315B	Output Hp (run)	8.1	8.6	9.1	9.5	9.9	10.2	10.6	10.9	11.3	11.6	11.9	12.3	12.6	12.9
	Running torque (lb.-in.)	6820	6765	6716	6672	6552	6443	6345	6256	6174	6099	6022	5951	5885	5824
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	Running pressure (psi)	936	929	922	916	899	884	871	859	847	837	827	817	808	799
	Flow rate (gpm)	18.8	20	21.1	22.2	23.4	24.5	25.7	26.8	27.9	29.1	30.2	31.4	32.5	33.7
HXT325B	Output Hp (run)	8.1	8.6	9.1	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	6820	6765	6716	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6479	6479	6479	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1774	1760	1747	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	10.5	11.1	11.7	-	-	-	-	-	-	-	-	-	-	-
HXT415B	Output Hp (run)	12.4	13.2	14.0	14.7	15.4	16.1	16.7	17.4	18.0	18.7	19.2	19.0	18.5	18.0
	Running torque (lb.-in.)	10455	10402	10355	10314	10211	10118	10034	9957	9887	9823	9693	9211	8637	8103
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running pressure (psi)	1411	1404	1398	1392	1378	1366	1355	1344	1335	1326	1309	1244	1166	1094
	Flow rate (gpm)	19.8	21.0	22.1	23.3	24.5	25.6	26.8	28.0	29.1	30.3	31.4	32.5	33.6	34.7
HXT425B	Output Hp (run)	12.4	13.2	14.0	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	10455	10402	10355	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	28164	28164	28164	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	876	871	868	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	29.8	31.7	33.6	-	-	-	-	-	-	-	-	-	-	-
HXT515C	Output Hp (run)	19.0	20.1	21.1	22.2	21.7	21.1	20.5	19.8	19.2	18.6	18.0	-	-	-
	Running torque (lb.-in.)	15991	15813	15656	15517	14396	13298	12305	11344	10522	9769	9076	-	-	-
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	-	-	-
	Running pressure (psi)	1182	1169	1157	1147	1064	983	909	838	778	722	671	-	-	-
	Flow rate (gpm)	35.5	37.6	39.7	41.8	43.8	45.7	47.7	49.6	51.6	53.6	55.6	-	-	-

★ See Page G3-145 for definition of requirements.

(continued)

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class II selections – double reduction

Class II selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed												
		10	15	20	25	30	35	40	45	50	55	60	65	70
HXT525C	Output Hp (run)	3.3	4.7	6.1	7.5	8.9	10.3	11.7	12.8	13.8	14.9	15.9	16.9	18.0
	Running torque (lb.-in.)	20537	19624	19168	18894	18711	18581	18483	17890	17415	17027	16703	16429	16195
	Starting torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running pressure (psi)	1641	1568	1532	1510	1495	1485	1477	1430	1392	1361	1335	1313	1294
	Flow rate (gpm)	6.4	8.3	10.3	12.2	14.2	16.2	18.2	20.1	22.0	24.0	25.9	27.9	29.8
HXT615A	Output Hp (run)	5.1	7.5	9.8	12.1	14.4	16.7	19.0	20.8	22.5	24.3	26.1	27.9	29.7
	Running torque (lb.-in.)	32448	31307	30737	30394	30166	30003	29881	29071	28423	27893	27451	27077	26756
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running pressure (psi)	2409	2325	2282	2257	2240	2228	2219	2158	2110	2071	2038	2010	1987
	Flow rate (gpm)	10.7	12.6	14.7	16.7	18.8	21.0	23.1	25.1	27.1	29.1	31.2	33.2	35.3
HXT625A	Output Hp (run)	5.1	7.5	9.8	12.1	14.4	16.7	19.0	20.8	22.5	24.3	26.1	27.9	29.7
	Running torque (lb.-in.)	32448	31307	30737	30394	30166	30003	29881	29071	28423	27893	27451	27077	26756
	Starting torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running pressure (psi)	1470	1418	1392	1377	1366	1359	1353	1317	1287	1263	1243	1226	1212
	Flow rate (gpm)	11.0	14.3	17.8	21.3	24.7	28.2	31.7	35.1	38.6	42.0	45.5	49.0	52.4
HXT715A	Output Hp (run)	7.2	10.5	13.7	17.0	20.2	23.5	26.7	29.5	32.4	35.2	38.0	40.9	43.7
	Running torque (lb.-in.)	45591	44040	43264	42798	42488	42266	42100	41384	40811	40342	39951	39620	39337
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running pressure (psi)	1883	1819	1787	1768	1755	1746	1739	1709	1685	1666	1650	1636	1625
	Flow rate (gpm)	11.5	15.2	19.0	22.8	26.6	30.5	34.3	38.1	41.9	45.7	49.5	53.4	57.2
HXT725A	Output Hp (run)	7.2	10.5	13.7	17.0	20.2	23.5	26.7	29.5	32.4	35.2	38.0	40.9	43.7
	Running torque (lb.-in.)	45591	44040	43264	42798	42488	42266	42100	41384	40811	40342	39951	39620	39337
	Starting torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running pressure (psi)	2110	2039	2003	1981	1967	1956	1949	1916	1889	1867	1849	1834	1821
	Flow rate (gpm)	12.5	15.8	19.1	22.5	25.9	29.3	32.7	36.1	39.4	42.8	46.2	49.6	53.0

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class II selections – double reduction

Class II selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT525C	Output Hp (run)	19.0	20.1	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	15991	15813	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	29528	29528	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1278	1264	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	31.8	33.8	-	-	-	-	-	-	-	-	-	-	-	-
HXT615A	Output Hp (run)	31.5	33.3	35.1	33.7	31.8	29.8	27.8	25.9	23.9	22.0	20.0	-	-	-
	Running torque (lb.-in.)	26479	26236	26021	23599	21097	18781	16687	14840	13098	11555	10084	-	-	-
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	-	-	-
	Running pressure (psi)	1966	1948	1932	1752	1566	1395	1239	1102	973	858	749	-	-	-
	Flow rate (gpm)	37.4	39.5	41.6	43.3	44.9	46.6	48.3	50.1	51.9	53.7	55.6	-	-	-
HXT625A	Output Hp (run)	31.5	33.3	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	26479	26236	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	52094	52094	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1199	1188	-	-	-	-	-	-	-	-	-	-	-	-
HXT715A	Flow rate (gpm)	55.9	59.4	-	-	-	-	-	-	-	-	-	-	-	-
	Output Hp (run)	46.5	49.3	49.3	47.2	45.0	43.0	41.0	39.0	37.0	35.0	-	-	-	-
	Running torque (lb.-in.)	39091	38876	36555	33053	29854	27101	24610	22345	20278	18382	-	-	-	-
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	-	-	-	-
	Running pressure (psi)	1614	1606	1510	1365	1233	1119	1016	923	837	759	-	-	-	-
HXT725A	Flow rate (gpm)	61.0	64.9	68.5	72.1	75.7	79.3	83.0	86.6	90.3	94.0	-	-	-	-
	Output Hp (run)	46.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	39091	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	50975	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running pressure (psi)	1809	-	-	-	-	-	-	-	-	-	-	-	-	-
HXT725A	Flow rate (gpm)	56.4	-	-	-	-	-	-	-	-	-	-	-	-	-

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class III selections – double reduction

Class III selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed												
		10	15	20	25	30	35	40	45	50	55	60	65	70
HXT115A	Output Hp (run)	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8
	Running torque (lb.-in.)	2013	1888	1826	1788	1763	1746	1732	1698	1671	1649	1630	1615	1601
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running pressure (psi)	843	791	764	749	738	731	725	711	700	690	683	676	670
	Flow rate (gpm)	1.4	1.7	2.1	2.5	2.8	3.2	3.6	4.0	4.3	4.7	5.1	5.5	5.8
HXT125A	Output Hp (run)	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8
	Running torque (lb.-in.)	2013	1888	1826	1788	1763	1746	1732	1698	1671	1649	1630	1615	1601
	Starting torque (lb.-in.)	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868	2868
	Running pressure (psi)	1183	1110	1073	1051	1036	1026	1018	998	982	969	958	949	941
	Flow rate (gpm)	1.1	1.4	1.6	1.9	2.1	2.4	2.7	2.9	3.2	3.5	3.7	4.0	4.3
HXT215A	Output Hp (run)	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2
	Running torque (lb.-in.)	3623	3412	3306	3243	3201	3171	3148	3085	3035	2994	2959	2930	2906
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running pressure (psi)	1651	1555	1507	1478	1459	1445	1435	1406	1383	1365	1349	1336	1324
	Flow rate (gpm)	2.0	2.2	2.5	2.9	3.2	3.5	3.9	4.2	4.5	4.9	5.2	5.6	5.9
HXT225A	Output Hp (run)	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2
	Running torque (lb.-in.)	3623	3412	3306	3243	3201	3171	3148	3085	3035	2994	2959	2930	2906
	Starting torque (lb.-in.)	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152	6152
	Running pressure (psi)	993	935	906	889	877	869	863	845	832	820	811	803	796
	Flow rate (gpm)	1.9	2.5	3.0	3.6	4.2	4.7	5.3	5.9	6.4	7.0	7.6	8.2	8.7
HXT315B	Output Hp (run)	0.9	1.3	1.7	2.1	2.5	3.0	3.4	3.7	4.0	4.4	4.7	5.0	5.4
	Running torque (lb.-in.)	5549	5447	5396	5365	5345	5330	5319	5189	5086	5001	4930	4870	4819
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190	17190
	Running pressure (psi)	762	748	741	736	734	732	730	712	698	686	677	668	661
	Flow rate (gpm)	3.5	4.6	5.8	6.9	8.1	9.2	10.4	11.5	12.6	13.8	14.9	16.1	17.2
HXT325B	Output Hp (run)	0.9	1.3	1.7	2.1	2.5	3.0	3.4	3.7	4.0	4.4	4.7	5.0	5.4
	Running torque (lb.-in.)	5549	5447	5396	5365	5345	5330	5319	5189	5086	5001	4930	4870	4819
	Starting torque (lb.-in.)	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479	6479
	Running pressure (psi)	1443	1417	1403	1396	1390	1386	1384	1350	1323	1301	1282	1267	1253
	Flow rate (gpm)	2.3	2.9	3.5	4.1	4.7	5.3	6.0	6.5	7.1	7.7	8.3	8.9	9.5
HXT415B	Output Hp (run)	1.3	1.9	2.5	3.1	3.8	4.4	5.0	5.5	6.0	6.6	7.1	7.6	8.2
	Running torque (lb.-in.)	8338	8114	8002	7935	7891	7859	7835	7712	7613	7533	7466	7409	7360
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running pressure (psi)	1126	1095	1080	1071	1065	1061	1058	1041	1028	1017	1008	1000	994
	Flow rate (gpm)	4.1	5.2	6.3	7.5	8.7	9.8	11.0	12.2	13.3	14.5	15.7	16.8	18.0
HXT425B	Output Hp (run)	1.3	1.9	2.5	3.1	3.8	4.4	5.0	5.5	6.0	6.6	7.1	7.6	8.2
	Running torque (lb.-in.)	8338	8114	8002	7935	7891	7859	7835	7712	7613	7533	7466	7409	7360
	Starting torque (lb.-in.)	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164	28164
	Running pressure (psi)	699	680	670	665	661	658	656	646	638	631	625	621	617
	Flow rate (gpm)	4.9	6.7	8.6	10.5	12.4	14.3	16.2	18.1	20.0	21.8	23.7	25.6	27.5
HXT515C	Output Hp (run)	2.3	3.3	4.3	5.2	6.2	7.2	8.2	8.9	9.7	10.4	11.1	11.9	12.6
	Running torque (lb.-in.)	14376	13737	13417	13226	13098	13007	12938	12523	12191	11919	11692	11501	11336
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924
	Running pressure (psi)	1063	1015	992	978	968	961	956	926	901	881	864	850	838
	Flow rate (gpm)	7.1	9.2	11.3	13.4	15.5	17.6	19.8	21.9	23.9	26.0	28.2	30.3	32.4

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class III selections – double reduction

Class III selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT115A	Output Hp (run)	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3
	Running torque (lb.-in.)	1589	1579	1570	1562	1550	1538	1528	1519	1510	1502	1492	1482	1473	1464
	Starting torque (lb.-in.)	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025	4025
	Running Pressure (psi)	666	661	657	654	649	644	640	636	632	629	625	620	617	613
	Flow rate (gpm)	6.2	6.6	7.0	7.3	7.7	8.1	8.5	8.9	9.2	9.6	10.0	10.4	10.7	11.1
HXT125A	Output Hp (run)	1.9	2.0	2.1	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	1589	1579	1570	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	2868	2868	2868	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	934	928	923	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	4.5	4.8	5.1	-	-	-	-	-	-	-	-	-	-	-
HXT215A	Output Hp (run)	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.3	5.5	5.7	5.9
	Running torque (lb.-in.)	2884	2865	2848	2834	2807	2783	2762	2742	2724	2707	2693	2679	2667	2655
	Starting torque (lb.-in.)	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697	3697
	Running Pressure (psi)	1315	1306	1298	1292	1280	1269	1259	1250	1242	1234	1228	1221	1216	1210
	Flow rate (gpm)	6.2	6.6	6.9	7.3	7.6	8.0	8.3	8.6	9.0	9.3	9.7	10.0	10.4	10.7
HXT225A	Output Hp (run)	3.4	3.6	3.8	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	2884	2865	2848	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6152	6152	6152	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	790	785	780	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	9.3	9.9	10.5	-	-	-	-	-	-	-	-	-	-	-
HXT315B	Output Hp (run)	5.7	6.0	6.3	6.7	6.9	7.2	7.4	7.6	7.9	8.1	8.4	8.6	8.8	9.1
	Running torque (lb.-in.)	4774	4735	4701	4671	4586	4510	4441	4379	4322	4270	4216	4166	4119	4077
	Starting torque (lb.-in.)	17190	17190	17190	17190	17190	17190	17190	17190	17190	17078	16862	16663	16478	16306
	Running Pressure (psi)	655	650	645	641	630	619	610	601	593	586	579	572	565	560
	Flow rate (gpm)	18.4	19.5	20.7	21.8	23.0	24.1	25.3	26.4	27.6	28.7	29.9	31.0	32.2	33.3
HXT325B	Output Hp (run)	5.7	6.0	6.3	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	4774	4735	4701	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	6479	6479	6479	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	1242	1232	1223	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	10.1	10.7	11.3	-	-	-	-	-	-	-	-	-	-	-
HXT415B	Output Hp (run)	8.7	9.2	9.8	10.3	10.8	11.2	11.7	12.2	12.6	13.1	13.5	13.8	14.2	14.6
	Running torque (lb.-in.)	7318	7281	7249	7220	7147	7082	7024	6970	6921	6876	6785	6701	6623	6551
	Starting torque (lb.-in.)	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479	17479
	Running Pressure (psi)	988	983	979	975	965	956	948	941	934	928	916	905	894	884
	Flow rate (gpm)	19.2	20.3	21.5	22.7	23.9	25.0	26.2	27.4	28.5	29.7	30.9	32.0	33.2	34.3
HXT425B	Output Hp (run)	8.7	9.2	9.8	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	7318	7281	7249	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	28164	28164	28164	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	613	610	607	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	29.4	31.3	33.2	-	-	-	-	-	-	-	-	-	-	-
HXT515C	Output Hp (run)	13.3	14.1	14.8	15.5	16.1	16.6	17.2	17.7	18.2	18.6	18	-	-	-
	Running torque (lb.-in.)	11194	11069	10959	10862	10653	10466	10296	10141	10000	9769	9076	-	-	-
	Starting torque (lb.-in.)	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	31924	-	-	-
	Running Pressure (psi)	827	818	810	803	787	774	761	750	739	722	671	-	-	-
	Flow rate (gpm)	34.5	36.6	38.8	40.9	43.0	45.1	47.3	49.4	51.5	53.6	55.6	-	-	-

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class III selections – double reduction

Class III selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed												
		10	15	20	25	30	35	40	45	50	55	60	65	70
HXT525C	Output Hp (run)	2.3	3.3	4.3	5.2	6.2	7.2	8.2	8.9	9.7	10.4	11.1	11.9	12.6
	Running torque (lb.-in.)	14376	13737	13417	13226	13098	13007	12938	12523	12191	11919	11692	11501	11336
	Starting torque (lb.-in.)	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528	29528
	Running pressure (psi)	1149	1098	1072	1057	1047	1039	1034	1001	974	952	934	919	906
	Flow rate (gpm)	5.7	7.6	9.6	11.5	13.5	15.5	17.5	19.4	21.4	23.3	25.3	27.3	29.2
HXT615A	Output Hp (run)	3.6	5.2	6.8	8.4	10.1	11.7	13.3	14.5	15.8	17	18.3	19.5	20.8
	Running torque (lb.-in.)	22714	21915	21516	21276	21116	21002	20917	20350	19896	19525	19216	18954	18729
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779
	Running pressure (psi)	1686	1627	1598	1580	1568	1559	1553	1511	1477	1450	1427	1407	1391
	Flow rate (gpm)	8.8	10.8	12.8	14.9	17.1	19.2	21.3	23.3	25.4	27.5	29.5	31.6	33.7
HXT625A	Output Hp (run)	3.6	5.2	6.8	8.4	10.1	11.7	13.3	14.5	15.8	17	18.3	19.5	20.8
	Running torque (lb.-in.)	22714	21915	21516	21276	21116	21002	20917	20350	19896	19525	19216	18954	18729
	Starting torque (lb.-in.)	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094	52094
	Running pressure (psi)	1029	993	975	964	956	951	947	922	901	884	870	858	848
	Flow rate (gpm)	9.8	13.2	16.7	20.1	23.6	27.1	30.6	34.1	37.5	41.0	44.5	48.0	51.5
HXT715A	Output Hp (run)	5.1	7.3	9.6	11.9	14.2	16.4	18.7	20.7	22.7	24.6	26.6	28.6	30.6
	Running torque (lb.-in.)	31914	30828	30285	29959	29742	29587	29470	28969	28567	28239	27966	27734	27536
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132
	Running pressure (psi)	1318	1273	1251	1237	1228	1222	1217	1196	1180	1166	1155	1145	1137
	Flow rate (gpm)	10.3	14.1	17.9	21.7	25.6	29.4	33.3	37.1	40.9	44.7	48.6	52.4	56.2
HXT725A	Output Hp (run)	5.1	7.3	9.6	11.9	14.2	16.4	18.7	20.7	22.7	24.6	26.6	28.6	30.6
	Running torque (lb.-in.)	31914	30828	30285	29959	29742	29587	29470	28969	28567	28239	27966	27734	27536
	Starting torque (lb.-in.)	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975	50975
	Running pressure (psi)	1477	1427	1402	1387	1377	1370	1364	1341	1322	1307	1294	1284	1275
	Flow rate (gpm)	10.8	14.1	17.5	20.9	24.3	27.7	31.2	34.5	37.9	41.3	44.7	48.1	51.5

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class III selections – double reduction

Class III selection table HXT reducers – double reduction – HXT115A - HXT725B

Reducer size	Requirements ★	Output speed													
		75	80	85	90	95	100	105	110	115	120	125	130	135	140
HXT525C	Output Hp (run)	13.3	14.1	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	11194	11069	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	29528	29528	-	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	895	885	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	31.2	33.2	-	-	-	-	-	-	-	-	-	-	-	-
HXT615A	Output Hp (run)	22.1	23.3	24.6	25.8	26.6	27.5	27.8	25.9	23.9	22.0	20.0	-	-	-
	Running torque (lb.-in.)	18535	18365	18215	18081	17680	17318	16687	14840	13098	11555	10084	-	-	-
	Starting torque (lb.-in.)	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	31779	-	-	-
	Running Pressure (psi)	1376	1364	1352	1343	1313	1286	1239	1102	973	858	749	-	-	-
	Flow rate (gpm)	35.8	37.9	40.1	42.2	44.2	46.3	48.3	50.1	51.9	53.7	55.6	-	-	-
HXT625A	Output Hp (run)	22.1	23.3	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	18535	18365	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	52094	52094	-	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	840	832	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	55.0	58.4	-	-	-	-	-	-	-	-	-	-	-	-
HXT715A	Output Hp (run)	32.6	34.5	36.5	38.5	40.2	41.9	41.0	39.0	37.0	35.0	-	-	-	-
	Running torque (lb.-in.)	27364	27213	27080	26962	26663	26394	24610	22345	20278	18382	-	-	-	-
	Starting torque (lb.-in.)	57132	57132	57132	57132	57132	57132	57132	57132	57132	57132	-	-	-	-
	Running Pressure (psi)	1130	1124	1118	1114	1101	1090	1016	923	837	759	-	-	-	-
	Flow rate (gpm)	60.1	63.9	67.8	71.6	75.4	79.3	83	86.6	90.3	94	-	-	-	-
HXT725A	Output Hp (run)	32.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running torque (lb.-in.)	27364	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting torque (lb.-in.)	50975	-	-	-	-	-	-	-	-	-	-	-	-	-
	Running Pressure (psi)	1267	-	-	-	-	-	-	-	-	-	-	-	-	-
	Flow rate (gpm)	55.0	-	-	-	-	-	-	-	-	-	-	-	-	-

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class I selections – single reduction

Class I selection table HXT reducers – single reduction – HXT105 - HXT505A

Reducer size	Requirements ★	Output speed															
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400	
HXT105	Output Hp (run)	3.9	4.2	4.4	4.7	5.0	5.2	5.5	5.7	6.2	6.7	6.9	7.1	7.6	7.9	8.3	
	Running torque (lb.-in.)	2758	2641	2546	2467	2400	2342	2293	2249	2176	2118	1973	1799	1586	1424	1303	
	Starting torque (lb.-in.)	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605	
	Running pressure (psi)	982	940	907	878	854	834	816	801	775	754	702	640	565	507	464	
	Flow rate (gpm)	9.4	10.2	11.0	11.8	12.7	13.5	14.4	15.2	16.9	18.7	20.3	22.9	27.1	31.4	35.7	
HXT205	Output Hp (run)	6.8	7.1	7.4	7.7	8.0	8.3	8.6	8.9	9.5	10.1	10.5	11.1	12.0	12.9	13.8	
	Running torque (lb.-in.)	4759	4475	4243	4049	3886	3745	3624	3517	3340	3198	3014	2793	2523	2322	2171	
	Starting torque (lb.-in.)	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342	
	Running pressure (psi)	1800	1693	1605	1532	1470	1417	1371	1330	1263	1210	1140	1056	954	878	821	
	Flow rate (gpm)	10.1	10.8	11.5	12.2	12.9	13.7	14.4	15.2	16.7	18.3	19.9	22.2	26.2	30.2	34.2	
HXT305A	Output Hp (run)	10.1	10.7	11.3	12.0	12.6	13.2	13.8	14.4	15.7	16.9	17.6	17.7	16.8	15.9	15.0	
	Running torque (lb.-in.)	7074	6758	6499	6284	6102	5946	5810	5692	5495	5337	5056	4462	3529	2863	2363	
	Starting torque (lb.-in.)	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024	
	Running pressure (psi)	1408	1346	1294	1251	1215	1184	1157	1133	1094	1063	1007	888	703	570	471	
	Flow rate (gpm)	17.9	19.3	20.7	22.1	23.6	25.1	26.6	28.1	31.1	34.2	37.1	41.5	48.9	56.3	63.9	
HXT405A	Output Hp (run)	17.7	18.5	19.3	20.1	20.9	21.7	22.5	23.3	24.5	23.8	23.1	22.1	20.4	18.7	17.0	
	Running torque (lb.-in.)	12387	11655	11056	10557	10135	9773	9459	9185	8578	7500	6618	5571	4286	3367	2679	
	Starting torque (lb.-in.)	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	
	Running pressure (psi)	2445	2300	2182	2083	2000	1929	1867	1813	1693	1480	1306	1099	846	665	529	
	Flow rate (gpm)	20.8	21.9	23.2	24.5	25.9	27.3	28.7	30.1	33.0	35.6	38.3	42.4	49.7	57.1	64.6	
HXT505A	Output Hp (run)	21.9	23.1	24.3	25.5	26.7	27.9	29.1	30.4	31.3	30.1	28.9	27.1	24.1	21.0	18.0	
	Running torque (lb.-in.)	15321	14552	13923	13398	12954	12574	12244	11955	10959	9485	8279	6832	5063	3782	2836	
	Starting torque (lb.-in.)	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808	
	Running pressure (psi)	1665	1581	1513	1456	1408	1366	1331	1299	1191	1031	900	742	550	411	308	
	Flow rate (gpm)	29.2	31.9	34.6	37.3	40.1	42.9	45.7	48.5	54.0	59.5	64.9	73.2	87.20	101.3	115.4	

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class II selections – single reduction

Class II selection table HXT reducers – single reduction – HXT105 - HXT505A

Reducer size	Requirements ★	Output speed														
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400
HXT105	Output Hp (run)	2.8	3.0	3.2	3.4	3.5	3.7	3.9	4.1	4.4	4.8	4.9	5.1	5.4	5.6	5.9
	Running torque (lb.-in.)	1970	1887	1819	1762	1714	1673	1638	1606	1555	1513	1409	1285	1133	1017	930
	Starting torque (lb.-in.)	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605
	Running pressure (psi)	701	672	648	627	610	596	583	572	553	539	502	457	403	362	331
	Flow rate (gpm)	8.9	9.8	10.6	11.5	12.3	13.2	14.0	14.9	16.6	18.3	20.0	22.6	26.9	31.2	35.5
HXT205	Output Hp (run)	4.9	5.1	5.3	5.5	5.7	5.9	6.2	6.4	6.8	7.2	7.5	7.9	8.6	9.2	9.8
	Running torque (lb.-in.)	3399	3197	3031	2892	2775	2675	2588	2512	2386	2284	2153	1995	1802	1659	1551
	Starting torque (lb.-in.)	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342
	Running pressure (psi)	1286	1209	1146	1094	1050	1012	979	950	902	864	814	755	682	627	587
	Flow rate (gpm)	9.4	10.1	10.8	11.5	12.3	13.1	13.8	14.6	16.2	17.8	19.4	21.7	25.8	29.8	33.9
HXT305A	Output Hp (run)	7.2	7.7	8.1	8.5	9.0	9.4	9.9	10.3	11.2	12.1	12.6	13.4	14.6	15.3	15.0
	Running torque (lb.-in.)	5053	4827	4642	4489	4358	4247	4150	4066	3925	3812	3611	3371	3076	2752	2363
	Starting torque (lb.-in.)	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024
	Running pressure (psi)	1006	961	924	894	868	846	826	810	781	759	719	671	613	548	471
	Flow rate (gpm)	16.8	18.2	19.7	21.2	22.7	24.2	25.7	27.2	30.3	33.4	36.4	40.9	48.6	56.3	63.9
HXT405A	Output Hp (run)	12.6	13.2	13.8	14.4	14.9	15.5	16.1	16.7	17.8	19.0	20.2	22.0	20.4	18.7	17.0
	Running torque (lb.-in.)	8848	8325	7897	7541	7239	6981	6757	6561	6234	5973	5776	5541	4286	3367	2679
	Starting torque (lb.-in.)	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956
	Running pressure (psi)	1746	1643	1559	1488	1429	1378	1333	1295	1230	1179	1140	1093	846	665	529
	Flow rate (gpm)	18.9	20.2	21.5	22.9	24.4	25.8	27.3	28.7	31.7	34.8	37.8	42.4	49.7	57.1	64.6
HXT505A	Output Hp (run)	15.6	16.5	17.4	18.2	19.1	20.0	20.8	21.7	23.4	25.1	26.8	27.1	24.1	21.0	18.0
	Running torque (lb.-in.)	10944	10394	9945	9570	9253	8981	8746	8540	8196	7921	7689	6832	5063	3782	2836
	Starting torque (lb.-in.)	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808
	Running pressure (psi)	1189	1130	1081	1040	1006	976	950	928	891	861	836	742	550	411	308
	Flow rate (gpm)	28.2	31.0	33.7	36.5	39.3	42.1	44.9	47.8	53.4	59.1	64.8	73.2	87.2	101.3	115.4

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Class III selections – single reduction

Class III selection table HXT reducers – single reduction – HXT105 - HXT505A

Reducer size	Requirements ★	Output speed														
		90	100	110	120	130	140	150	160	180	200	220	250	300	350	400
HXT105	Output Hp (run)	3.9	4.2	4.4	4.7	5.0	5.2	5.5	5.7	6.2	6.7	6.9	7.1	7.6	7.9	8.3
	Running torque (lb.-in.)	2758	2641	2546	2467	2400	2342	2293	2249	2176	2118	1973	1799	1586	1424	1303
	Starting torque (lb.-in.)	5515	5283	5093	4934	4800	4685	4585	4498	4353	4237	3946	3598	3172	2848	2605
	Running pressure (psi)	982	940	907	878	854	834	816	801	775	754	702	640	565	507	464
	Flow rate (gpm)	9.4	10.2	11.0	11.8	12.7	13.5	14.4	15.2	16.9	18.7	20.3	22.9	27.1	31.4	35.7
HXT205	Output Hp (run)	6.8	7.1	7.4	7.7	8.0	8.3	8.6	8.9	9.5	10.1	10.5	11.1	12.0	12.9	13.8
	Running torque (lb.-in.)	4759	4475	4243	4049	3886	3745	3624	3517	3340	3198	3014	2793	2523	2322	2171
	Starting torque (lb.-in.)	6238	6238	6238	6238	6238	6238	6238	6238	6238	6238	6028	5586	5046	4644	4342
	Running pressure (psi)	1800	1693	1605	1532	1470	1417	1371	1330	1263	1210	1140	1056	954	878	821
	Flow rate (gpm)	10.1	10.8	11.5	12.2	12.9	13.7	14.4	15.2	16.7	18.3	19.9	22.2	26.2	30.2	34.2
HXT305A	Output Hp (run)	10.1	10.7	11.3	12.0	12.6	13.2	13.8	14.4	15.7	16.9	17.6	17.7	16.8	15.9	15.0
	Running torque (lb.-in.)	7074	6758	6499	6284	6102	5946	5810	5692	5495	5337	5056	4462	3529	2863	2363
	Starting torque (lb.-in.)	11851	11851	11851	11851	11851	11851	11621	11384	10989	10673	10112	9438	8614	7705	7024
	Running pressure (psi)	1408	1346	1294	1251	1215	1184	1157	1133	1094	1063	1007	888	703	570	471
	Flow rate (gpm)	17.9	19.3	20.7	22.1	23.6	25.1	26.6	28.1	31.1	34.2	37.1	41.5	48.9	56.3	63.9
HXT405A	Output Hp (run)	17.7	18.5	19.3	20.1	20.9	21.7	22.5	23.3	24.5	23.8	23.1	22.1	20.4	18.7	17.0
	Running torque (lb.-in.)	12387	11655	11056	10557	10135	9773	9459	9185	8578	7500	6618	5571	4286	3367	2679
	Starting torque (lb.-in.)	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956	11956
	Running pressure (psi)	2445	2300	2182	2083	2000	1929	1867	1813	1693	1480	1306	1099	846	665	529
	Flow rate (gpm)	20.8	21.9	23.2	24.5	25.9	27.3	28.7	30.1	33.0	35.6	38.3	42.4	49.7	57.1	64.6
HXT505A	Output Hp (run)	21.9	23.1	24.3	25.5	26.7	27.9	29.1	30.4	31.3	30.1	28.9	27.1	24.1	21.0	18.0
	Running torque (lb.-in.)	15321	14552	13923	13398	12954	12574	12244	11955	10959	9485	8279	6832	5063	3782	2836
	Starting torque (lb.-in.)	21713	21713	21713	21713	21713	21713	21713	21713	21713	21713	21529	20748	19794	18659	17808
	Running pressure (psi)	1665	1581	1513	1456	1408	1366	1331	1299	1191	1031	900	742	550	411	308
	Flow rate (gpm)	29.2	31.9	34.6	37.3	40.1	42.9	45.7	48.5	54.0	59.5	64.9	73.2	87.20	101.3	115.4

★ See Page G3-145 for definition of requirements.

Easy selection

Hydroil Torque-Arm shaft mount speed reducers
Definition of requirements

★ Requirements:

Output Hp – Horsepower rating of the reducer/motor under continuous operation after load has been started.

Running torque – Continuous output torque rating of reducer/motor (in.-lbs.)

Starting torque – Momentary output torque available for starting (in.-lbs.)

Running pressure – Motor pressure required to generate running torque. This will start loads not to exceed 75% of the running load. For greater starting requirements, motor pressure may be increased – see table (PSI).

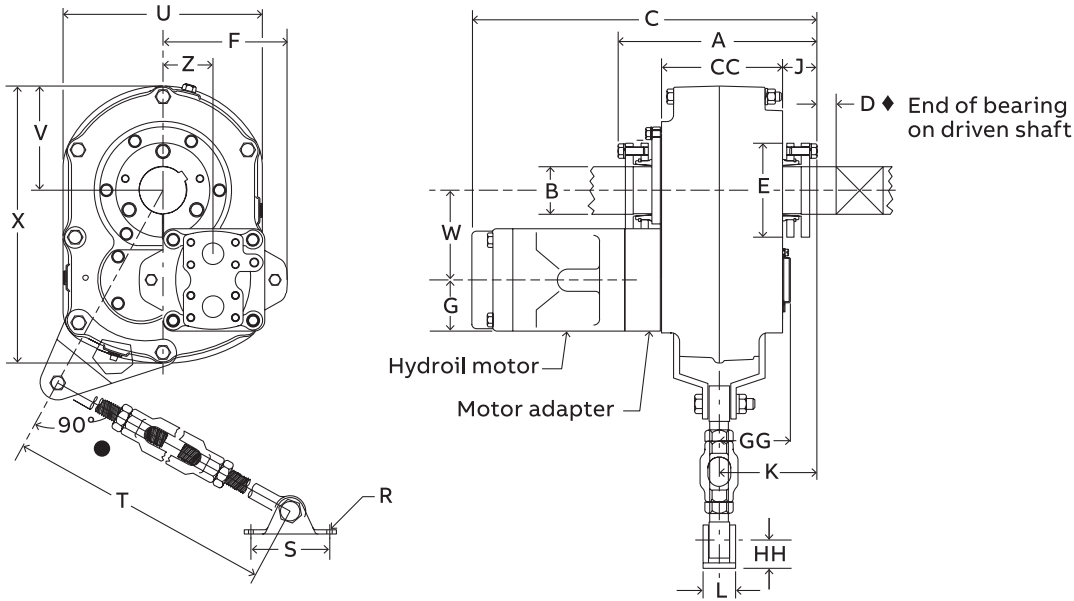
Flow rate – Flow required for given output RPM. With oil viscosity of 300SUS @ 100°F. for A10 and A20 motors, and 200SUS @ 100°F. for B30, B40 and B50 motors.

Maximum hydraulic motor pressures available for starting

Double reduction	Single reduction	Maximum hydraulic pressure
-	HXT105	-
-	HXT205	-
HXT315B	HXT305A	-
HXT415B, 425B	HXT405A	2500 psi
HXT515C, 525C	HXT505A	-
HXT615A, 625A	-	-
HXT715A, 725A	-	-
HXT115A, 125A	-	-
HXT215A, 225A	-	2000 psi
HXT325B	-	-

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers
HXT1 thru HXT7 Double reduction taper bushed



- Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.
- ◆ Recommended minimum distance to loosen bushing using bushing screws as jack screws.
 - The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT1A thru HXT7A Hydroil double reduction taper bushed Torque-Arm speed reducers

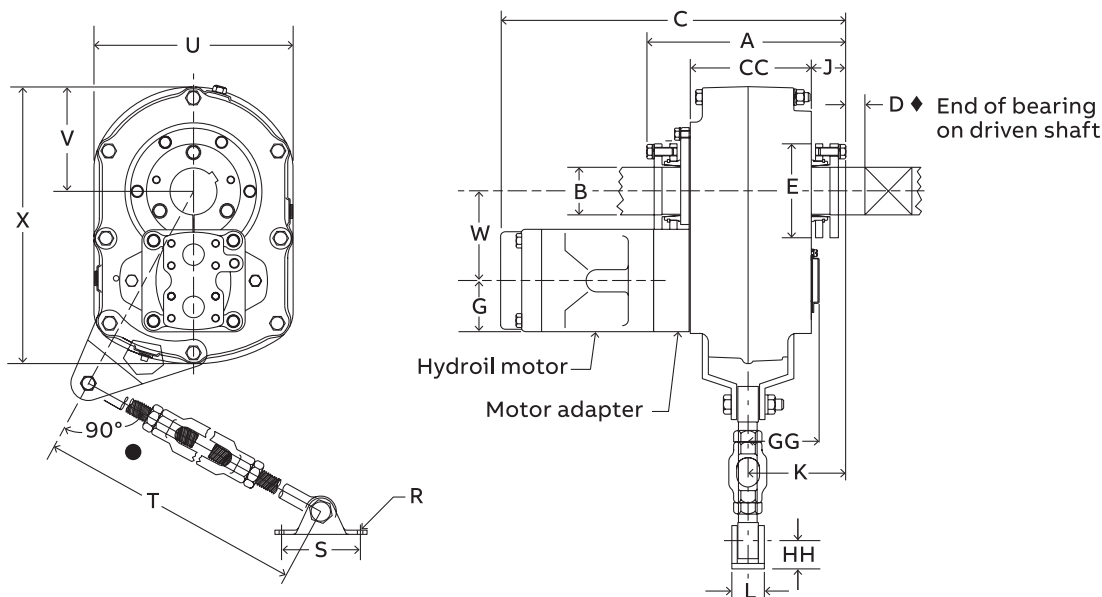
Reducer size	AGMA code		Gear ratio		Part number		Wt.	Hydroil motor		A	B Max. bore ▼	C	D	E	F	G	J	K	
	15:1	25:1	15:1	25:1	15:1	25:1		Size	Wt.										
-	HXT125A	-	107H25	-	25.64	-	241070 ♣	49	A10	11	7.06	1.44	13.22	1.25	3.25	4.47	2.41	1.28	3.53
HXT115A	-	107H15	-	15.35	-	241069 ♣	-	59	A20	11	7.31	1.94	13.38	1.25	4.06	4.69	2.41	1.38	3.66
HXT215A	HXT225A	115H15	115H25	14.10	23.46	242086 ♣	242087 ♣	65	A20	11	9.22	2.19	14.64	1.50	4.38	4.88	2.41	1.58	4.44
-	HXT325B	-	203H25	-	24.71	-	243508	112	B30	30	10	2.44	16.13	1.75	4.81	6.19	2.38	1.81	4.75
HXT315B	-	203H15	-	14.88	-	243507	-	112	B30	30	10	2.44	16.13	1.75	4.81	6.19	2.38	1.81	4.75
HXT415B	HXT425B	207H15	207H25	15.13	24.38	244532	244533 ♣	143	B30	30	10	2.44	16.13	1.75	4.81	6.19	2.38	1.81	4.75
-	HXT525C	-	215H25	-	25.56	-	245558	212	B30	30	10.5	2.94	16.88	1.81	5.63	6.50	2.38	1.94	5.50
HXT515C	-	215H15	-	15.40	-	245557	-	212	B40	55	10.5	2.94	17.63	1.81	5.63	7.25	3.06	1.94	5.50
HXT615A	HXT625A	307H15	307H25	15.33	25.13	246154 ♣	246155 ♣	293	B40	55	11.5	3.44	18.58	1.81	6.13	8.28	3.06	1.94	5.70
-	HXT725A	-	315H25	-	24.59	-	247165 ♣	470	B40	55	12.81	3.94	19.16	2.06	7.25	9.30	3.06	2.16	6.34
HXT715A	-	315H15	-	15.23	-	247164 ♣	-	470	B50	106	12.81	3.94	22.75	2.06	7.25	9.30	3.69	2.16	6.34

Reducer size	L	R Bolt	S	T		U	V	W	X	Z	CC	GG	HH
				Min.	Max.								
HXT1A	1.06	0.38	2.50	23.81	29.63	7.13	3.75	3.19	9.94	1.91	4.50	2.66	0.94
HXT2A	1.25	0.44	3.00	26.94	32.94	8.38	4.13	3.75	11.41	2.13	4.56	2.94	1.06
HXT3B	1.25	0.44	3.00	26.94	32.94	9.25	4.81	4.19	12.88	2.31	6.38	3.25	1.06
HXT4B	1.44	0.50	4.00	29.19	35.19	10.38	5.50	4.78	15.13	2.75	6.88	3.38	1.75
HXT5C	1.44	0.50	4.00	29.19	35.19	13.13	6.56	5.69	18.31	3.06	7.06	4.50	1.75
HXT6A	2.75	0.63	4.75	29.19	35.19	15.13	7.56	6.75	21.31	4.09	7.63	4.56	2.00
HXT7A	2.75	0.63	4.75	29.44	35.44	18.75	9.38	8.31	25.94	5.13	8.13	4.69	2.00

Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.
 ▼ See pages G3-24 thru G3-51 for bore and keyseat information and bushing part numbers.
 ♣ Made to order.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers
 HXT105 thru HXT505 Single reduction taper bushed



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- ◆ Recommended minimum distance to loosen bushing using bushing screws as jack screws.
- The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT105 thru HXT505A Hydrol single reduction taper bushed Torque-Arm speed reducers

Reducer size	AGMA code	Gear ratio	Part number	Reducer Wt	Hydroil motor		A	B Max. bore ▼	C	D	E	G	J	K	L
					Size	Wt.									
HXT105	107H05	5.62	241085	44	B30	30	5.63	1.44	14.97	1.25	3.25	2.38	1.28	3.53	1.06
HXT205	115H05	5.29	242251	56	B30	30	5.81	1.94	15.25	1.25	4.06	2.38	1.38	3.66	1.25
HXT305A	203H05	5.60	253153 ♣	90	B40	55	6.88	2.19	17.66	1.5	4.38	3.06	1.58	4.44	1.25
HXT405A	207H05	5.65	254202 ♣	126	B40	55	7.81	2.44	18.69	1.75	4.81	3.06	1.81	4.75	1.44
HXT505A	215H05	5.67	255202 ♣	186	B50	106	8.38	2.94	22	1.81	5.63	3.69	1.92	4.13	1.44

HXT105 thru HXT505A Hydrol single reduction taper bushed Torque-Arm speed reducers

Reducer size	R Bolt	S	T		U	V	W	X	CC	GG	HH
			Min.	Max.							
HXT105	0.38	2.50	23.81	29.63	7.13	3.75	3.25	9.94	4.50	2.64	0.94
HXT205	0.44	3.00	26.94	32.94	8.50	4.13	3.88	11.41	4.56	2.83	1.06
HXT305A	0.44	3.00	26.94	32.94	9.25	4.81	4.28	12.88	6.38	3.25	1.06
HXT405A	0.50	4.00	29.19	35.19	10.38	5.50	4.88	15.13	6.88	3.38	1.75
HXT505A	0.50	4.00	29.19	35.19	13.13	6.56	5.88	18.31	7.06	4.50	1.75

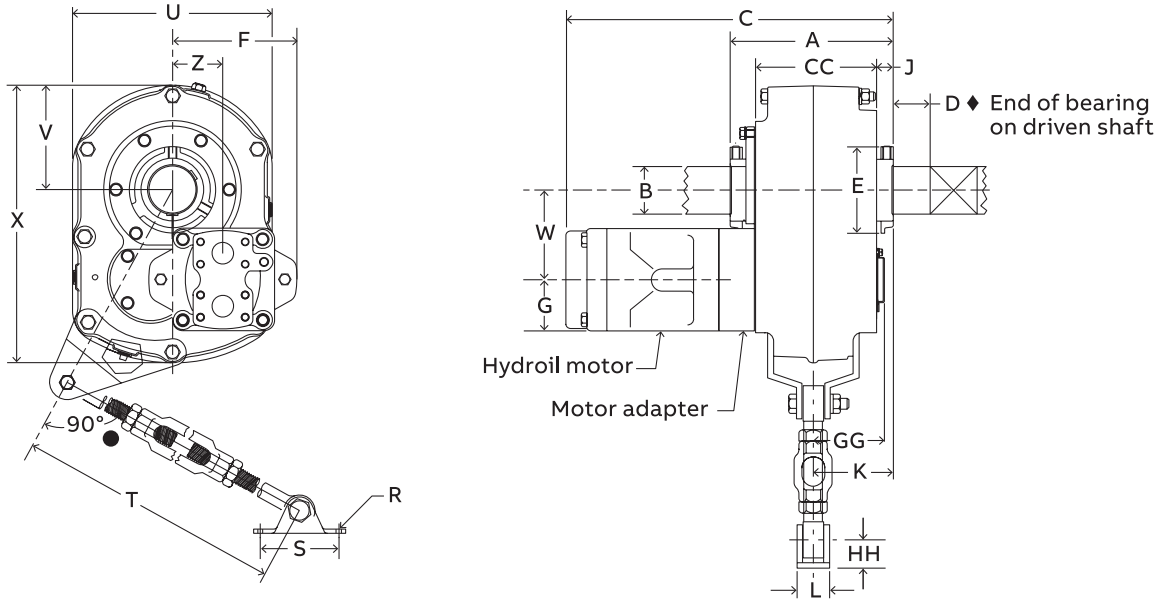
Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.

▼ See pages G3-24 thru G3-51 for bore and keyseat information and bushing part numbers.

♣ Made to order.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers
HXT1 thru HXT7 Double reduction straight bore



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.
 ● The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT1A thru HXT7A Hydroil double reduction straight bore Torque-Arm speed reducers

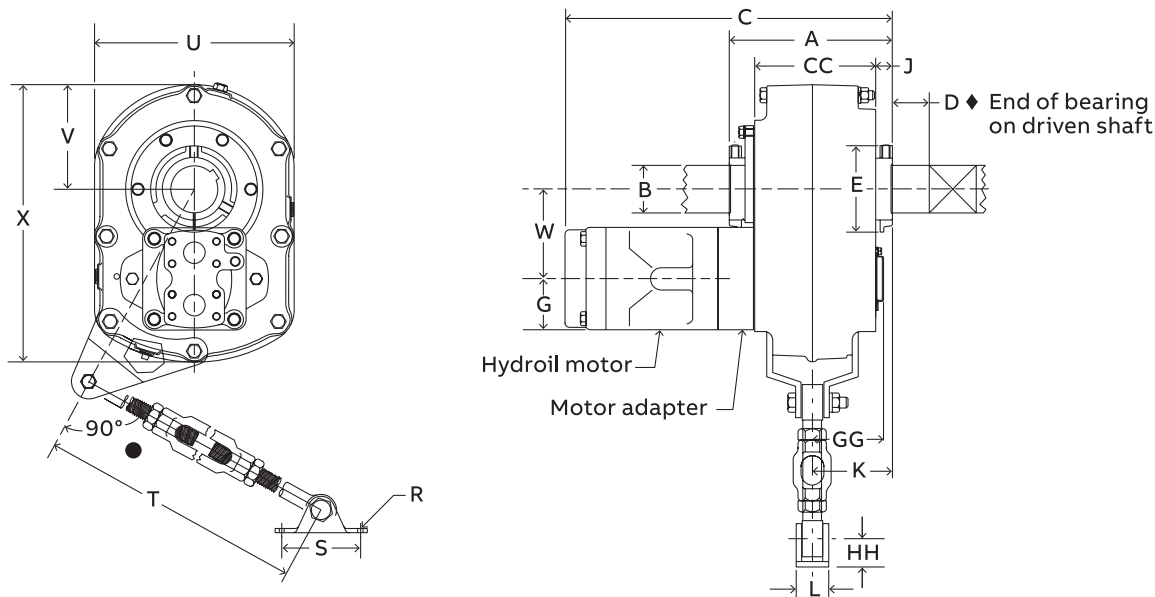
Reducer size		AGMA code		Gear ratio		Part number		Wt.	Hydroil motor		A	B Max. bore ▼	C	D	E	F	G	J	K
15:1	25:1	15:1	25:1	15:1	25:1	15:1	25:1		Size	Wt.									
-	HXT125A	-	107H25	-	25.64	-	241078	49	A10	11	5.63	1.44	12.50	3.19	4.47	2.41	0.56	2.81	1.06
HXT115A	-	107H15	-	15.35	-	241077	-	65	A20	11	5.81	1.94	12.63	3.56	4.69	2.41	0.63	2.91	1.25
HXT215A	HXT225A	115H15	115H25	14.10	23.46	242094	242095	112	A20	11	7.81	2.19	13.69	4.00	4.88	2.41	0.63	2.47	1.25
-	HXT325B	-	203H25	-	24.71	-	243520	143	B30	30	8.22	2.44	14.50	4.38	5.75	2.38	0.84	3.88	1.44
HXT315B	-	203H15	-	14.88	-	243519	-	212	B30	30	8.66	2.94	15.94	5.13	6.50	2.38	1.00	4.13	1.44
HXT415B	HXT425B	207H15	207H25	15.13	24.38	244544	244545	293	B40	55	9.63	3.44	16.69	5.63	7.25	3.06	1.00	4.81	2.75
-	HXT525C	-	215H25	-	25.56	-	245570	470	B40	55	10.78	3.94	18.19	6.69	9.31	3.06	1.14	5.39	2.75
HXT515C	-	215H15	-	15.40	-	245569	-	55	B50	106	10.78	3.94	21.50	6.69	8.38	3.69	1.14	5.39	2.75
HXT615A	HXT625A	307H15	307H25	15.33	25.13	246162	246163	470	B50	106	10.78	3.94	21.50	6.69	8.38	3.69	1.14	5.39	2.75
-	HXT725A	-	315H25	-	24.59	-	247173	-	-	-	-	-	-	-	-	-	-	-	-
HXT715A	-	315H15	-	15.23	-	247172	-	-	-	-	-	-	-	-	-	-	-	-	-

Reducer size	R Bolt	S	T		U	V	W	X	Z	CC	GG	HH
			Min.	Max.								
HXT1A	0.38	2.50	23.81	29.63	7.13	3.75	3.19	9.94	1.91	4.50	2.66	0.94
HXT2A	0.44	3.00	26.94	32.94	8.38	4.13	3.75	11.41	2.13	4.56	2.94	1.06
HXT3B	0.44	3.00	26.94	32.94	9.25	4.81	4.19	12.88	2.31	6.38	3.25	1.06
HXT4B	0.50	4.00	29.19	35.19	10.38	5.50	4.78	15.13	2.75	6.88	3.38	1.75
HXT5C	0.50	4.00	29.19	35.19	13.13	6.56	5.69	18.31	3.06	7.06	4.50	1.75
HXT6A	0.63	4.75	29.19	35.19	15.13	7.50	6.75	21.31	4.09	7.63	4.56	2.00
HXT7A	0.63	4.75	29.44	35.44	18.75	9.38	8.31	25.94	5.13	8.50	4.69	2.00

Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.
 ♥ See pages G3-24 thru G3-51 for bore and keyseat information and bushing part numbers.
 ♣ Made to order.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers
 HXT105 thru HXT505A Single reduction straight bore



Reducer will operate satisfactorily at 90° or 180° from normal position shown in front view by relocating breather and drain plugs.

- The ideal position for the Torque-Arm is at right angles to a line between the point of attachment of the Torque-Arm to the reducer and the output shaft. This may vary up to + / - 20° in tension, and + / - 20° in compression.

Caution: Exceeding the position variance of the Torque-Arm could result in excessive reaction load and result in damage to the equipment.

HXT105 thru HXT505A Hydrol single reduction straight bore Torque-Arm speed reducers

Reducer size	AGMA code	Gear Ratio	Part number	Reducer Wt	Hydroil motor		A	B Max. bore ▼	C	D	E	G	J	K	L
					Size	Wt.									
HXT105	107H05	5.62	241089 ♣	44	B30	30	5.63	1.44	14.25	3.19	2.38	0.56	2.81	1.06	
HXT205	115H05	5.29	242255	56	B30	30	5.81	1.94	14.5	3.56	2.38	0.63	2.91	1.25	
HXT305A	203H05	5.60	253157	90	B40	55	7.41	2.19	16.69	4	3.06	0.63	4.44	1.25	
HXT405A	207H05	5.65	254206 ♣	126	B40	55	8.22	2.44	17.72	4.38	3.06	0.84	4.75	1.44	
HXT505A	215H05	5.67	255206 ♣	186	B50	106	8.66	2.94	21.06	5.13	3.69	1	4.13	1.44	

HXT105 thru HXT505A Hydrol single reduction straight bore Torque-Arm speed reducers

Reducer size	R Bolt	S	T		U	V	W	X	CC	GG	HH
			Min.	Max.							
HXT105	0.38	2.5	23.81	29.63	7.13	3.75	3.25	9.94	4.5	2.64	0.94
HXT205	0.44	3	26.94	32.94	8.5	4.13	3.88	11.41	4.56	2.83	1.06
HXT305A	0.44	3	26.94	32.94	9.25	4.81	4.29	12.88	6.38	3.25	1.06
HXT405A	0.5	4	29.19	35.19	10.38	5.5	4.88	15.13	6.88	3.38	1.75
HXT505A	0.5	4	29.19	35.19	13.13	6.56	5.88	18.31	7.06	4.15	1.75

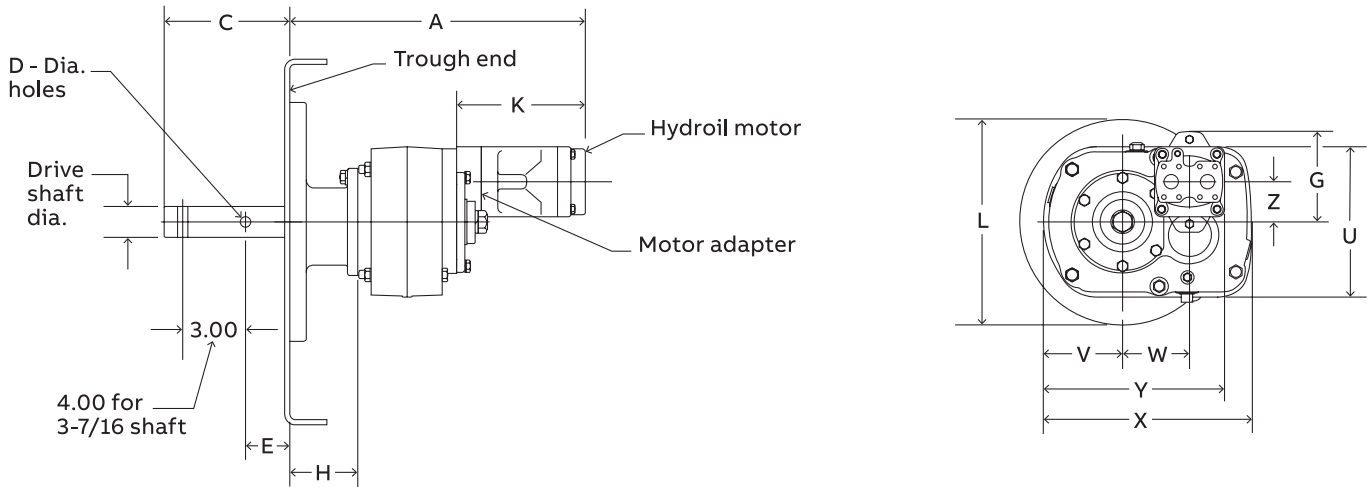
Note: All reducers on this page require bushings. Stock HXT reducers are drilled for vertical mounting. Reducer includes motor adapter.

▼ See pages G3-24 thru G3-51 for bore and keyseat information and bushing part numbers.

♣ Made to order.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers



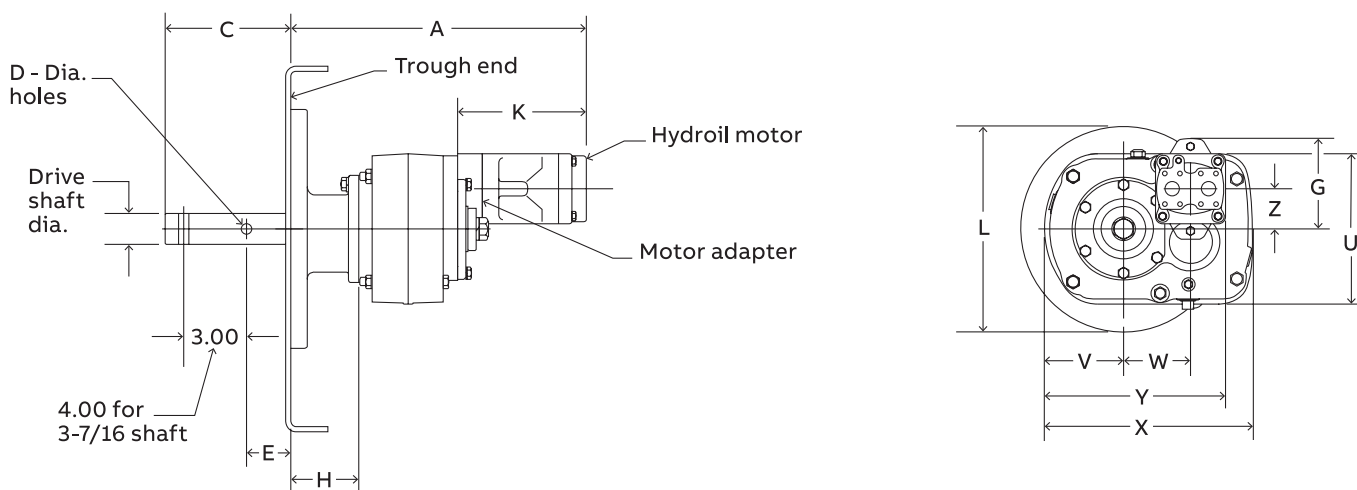
HSCXT1A thru HSCXT7A Double reduction Hydroil screw conveyor drives †

Reducer size	Drive shaft dia.	To fit screw dia.	Hydroil motor		Parts when ordering separately											
			Size	Wt.	Reducer ■		CEMA Drive shaft ★			Adapter						
					Part number	Wt.	Size	Part No.	Wt.	C	D	E	Size	Part no.	Wt.	
HSCXT115A	1-1/2	6, 9	A20	11	351191	351192	46	C1 x 1-1/2	351094	7.2	6.00	0.52	2.13	C1A	351086	17
	2	9, 12						C1 x 2	351095	9.1	6.00	0.64	2.13			
HSCXT125A	2-7/16	12, 14	A10	3	12 thru 20	58	46	C1 x 2-7/16	351096	12.5	6.69	0.64	2.75	C2A	352052	20
	3	12 thru 20						C1 x 3	351097	17.4	6.88	0.77	2.88			
HSCXT215A	1-1/2	6, 9	A20	11	352191	352192	58	C2 x 1-1/2	352090	11.4	6.00	0.52	2.13	C3	353047	27
	2	9, 12						C2 x 2	352091	13.8	6.00	0.64	2.13			
HSCXT225A	2-7/16	12, 14	A20	3	12 thru 20	90	58	C2 x 2-7/16	352092	17.3	6.69	0.64	2.75	C4	354121	31
	3	12 thru 20						C2 x 3	352093	22.1	6.88	0.77	2.88			
HSCXT315B	1-1/2	9	B30	11	243528	243529		C3A x 1-1/2	243562	13.5	6.00	0.52	2.13	C5	355072	43
	2	9, 12						C3A x 2	243563	16	6.00	0.64	2.13			
HSCXT325B	2-7/16	12, 14	A20	30	3	12 thru 20		C3A x 2-7/16	243564	19.5	6.69	0.64	2.75	C6	356055	56
	3	12 thru 20						C3A x 3	243565	26	6.88	0.77	2.88			
HSCXT415B	1-1/2	9	B30	30	244553	244554		C4A x 1-1/2	244594	19	6.00	0.52	2.13	C7	356187	72
	2	9, 12						C4A x 2	244595	20.8	6.00	0.64	2.13			
HSCXT425B	2-7/16	12, 14	B30	30	3	12 thru 20		C4A x 2-7/16	244596	24.3	6.69	0.64	2.75	C7	356187	72
	3	12 thru 20						C4A x 3	244597	29.2	6.88	0.77	2.88			
HSCXT515C	3-7/16	18 thru 24	B40	30	245578	245579		C4A x 3-7/16	244598	29.3	9.13	0.89	3.88	C7	356187	72
	2	9, 12						C5B x 2	355175	29.4	6.00	0.64	2.13			
HSCXT525C	2-7/16	12, 14	B40	55	356291	356292	165	C5B x 2-7/16	355176	33	6.69	0.64	2.75	C7	356187	72
	3	12 thru 20						C5B x 3	355177	37.9	6.88	0.77	2.88			
HSCXT615A	3-7/16	18 thru 24	B30	55	3	12 thru 24		C5B x 3-7/16	355178	48.3	9.13	0.89	3.88	C7	356187	72
	2-7/16	12, 14						C6 x 2-7/16	356042	47.7	6.69	0.64	2.75			
HSCXT625A	3	12 thru 20	B40	55	356291	356292	225	C6 x 3	356043	52.7	6.88	0.77	2.88	C7	356187	72
	3-7/16	18 thru 24						C6 x 3-7/16	356044	63	9.13	0.89	3.88			
HSCXT715A	2-7/16	12, 14	B50	55	356296	356297	390	C7 x 2-7/16	356182	65	6.69	0.64	2.75	C7	356187	72
	3	12 thru 20						C7 x 3	356183	70	6.88	0.77	2.88			
HSCXT725A	3-7/16	18 thru 24	B40	106				C7 x 3-7/16	356184	80.3	9.13	0.89	3.88			

† For a complete HSCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.
 ▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seals. See page G3-XXX for adapter bolt pattern details.
 ■ Reducer includes hydroil motor adapter.
 ★ CEMA drive shaft and key furnished unless otherwise specified. See pages G3-117 thru G3-119 for optional drive shafts available from Dodge.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers



HSCXT1A thru HSCXT7A Double reduction Hydroil screw conveyor drives †

Reducer size	Actual ratio		Max. RPM of shaft				A	G	H	K	L	U	V	W	X	Y	Z
	15:1	25:1	Input		Driven												
			15:1	25:1	15:1	25:1											
HSCXT1A	15.35	-	2149	-	140	-	15.34	4.47	3.22	7.44	7.00	7.13	3.75	3.38	9.94	9.34	1.91
	-	25.64	-	2179	-	85											
HSCXT2A	14.97	24.92	2096	2118	140	85	15.94	4.69	3.56	7.44	7.00	8.38	4.09	3.77	11.41	10.27	2.14
	-	-	-	-	-	-											
HSCXT3B	15.26	-	2136	-	140	-	17.81	5.75	3.69	7.44	11.38	9.25	4.84	4.17	13.72	11.39	2.33
	-	25.34	-	2155	-	85	17.00	4.88							11.42		
HSCXT4B	15.30	24.64	2142	2094	140	85	18.44	6.19	4.00	7.38	11.38	10.38	5.50	4.78	15.31	12.66	2.75
	-	-	-	-	-	-											
HSCXT5C	15.38	-	1919	-	125	-	20.56	7.25	4.25	9.19	11.38	13.13	6.56	5.67	18.31	14.30	3.05
	-	25.54	-	2043	-	80	19.81	6.50		7.75					14.61		
HSCXT6A	15.33	25.13	1895	1985	125	80	21.81	8.28	5.50	9.31	11.38	15.13	7.56	6.73	21.31	17.36	4.09
	-	-	-	-	-	-											
HSCXT7A	15.23	-	1767	-	116	-	26.28	8.38	6.31	10.56	11.38	18.75	9.38	8.30	25.94	22.11	5.11
	-	24.59	-	1844	-	75	23.00	9.31		8.81					20.36		

† For a complete HSCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.

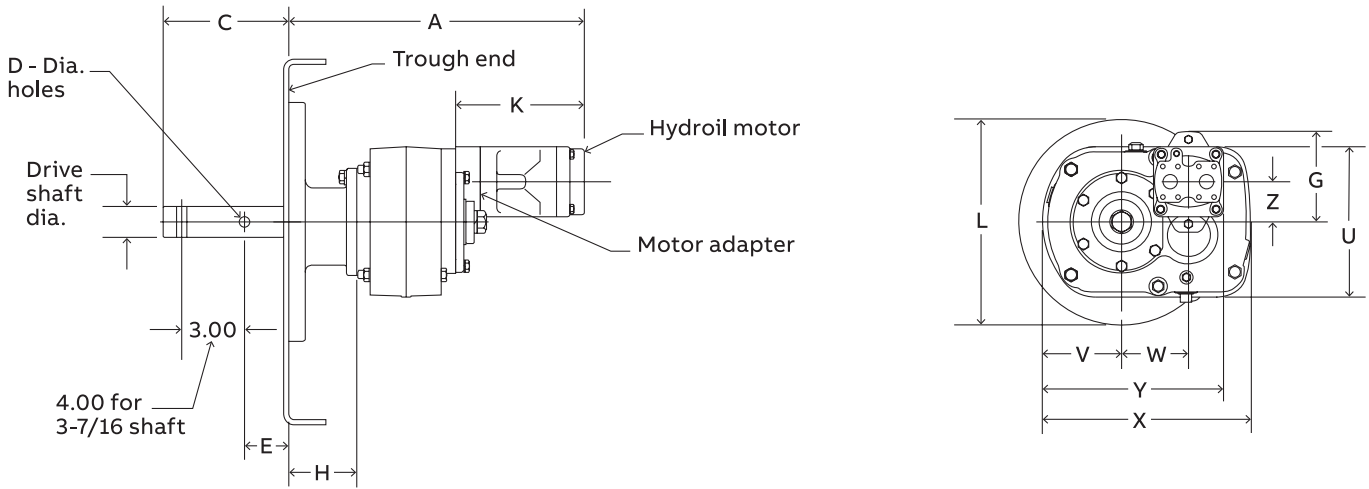
▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seals. See page G3-XXX for adapter bolt pattern details.

■ Reducer includes hydroil motor adapter.

★ CEMA drive shaft and key furnished unless otherwise specified. See pages G3-117 thru G3-119 for optional drive shafts available from Dodge.

Selection and dimensions

Hydroil Torque-Arm shaft mount speed reducers



HSCXT105 thru HSCXT505A Single reduction Hydroil screw conveyor drives †

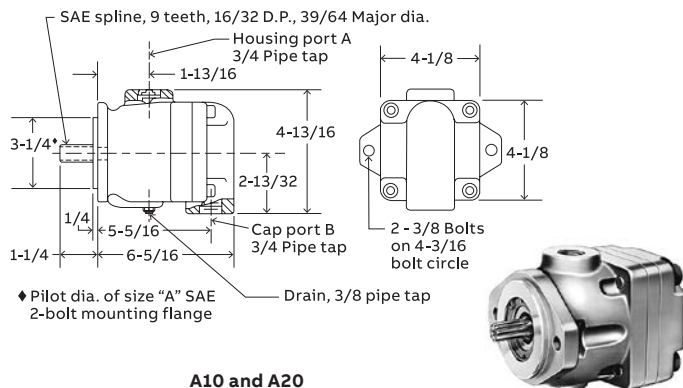
Reducer size	Drive shaft dia.	To fit screw dia.	Hydroil motor		Reducer ■		Parts when ordering separately								
			Size	Wt.	Part no.	Wt.	CEMA Drive shaft ★			Adapter Assy. ▲					
							Size	Part no.	Wt.	C	D	E	Size	Part no.	Wt.
HSCXT105	1-1/2	6, 9	B30	30	351190	41	C1 x 1-1/2	351094	7.2	6.00	0.52	2.13	C1A	351086	17
	2	9, 12					C1 x 2	351095	9.1	6.00	0.64	2.13			
	2-7/16	12, 14					C1 x 2-7/16	351096	12.5	6.69	0.64	2.75			
	3	12 thru 20					C1 x 3	351097	14.4	6.88	0.77	2.88			
HSCXT205	1-1/2	6, 9	B30	30	352190	53	C2 x 1-1/2	352090	11.4	6.00	0.52	2.13	C2A	352052	20
	2	9, 12					C2 x 2	352091	13.8	6.00	0.64	2.13			
	2-7/16	12, 14					C2 x 2-7/16	352092	17.3	6.69	0.64	2.75			
	3	12 thru 20					C2 x 3	352093	22.1	6.88	0.77	2.88			
HSCXT305A	1-1/2	9	B40	55	253160	79	C3A x 1-1/2	243562	13.5	6.00	0.52	2.13	C3	353047	27
	2	9, 12					C3A x 2	243563	16.0	6.00	0.64	2.13			
	2-7/16	12, 14					C3A x 2-7/16	243564	19.5	6.69	0.64	2.75			
	3	12 thru 20					C3A x 3	243565	26.0	6.88	0.77	2.88			
HSCXT405A	1-1/2	9	B40	55	254209	101	C4A x 1-1/2	244594	19.0	6.00	0.52	2.13	C4	354121	31
	2	9, 12					C4A x 2	244595	20.8	6.00	0.64	2.13			
	2-7/16	12, 14					C4A x 2-7/16	244596	24.3	6.69	0.64	2.75			
	3	12 thru 20					C4A x 3	244597	29.2	6.88	0.77	2.88			
	3-7/16	18 thru 24					C4A x 3-7/16	244598	39.3	9.13	0.89	3.88			
HSCXT505A	2	9, 12	B50	106	255209	160	C5B x 2	355175	29.4	6.00	0.64	2.13	C5	355072	43
	2-7/16	12, 14					C5B x 2-7/16	355176	33.0	6.69	0.64	2.75			
	3	12 thru 20					C5B x 3	355177	37.9	6.88	0.77	2.88			
	3-7/16	18 thru 24					C5B x 3-7/16	355178	48.3	9.13	0.89	3.88			

Reducer size	Actual ratio	Max. RPM of shaft		A	H	K	L	U	V	W	X	Y
		Input	Driven									
HSCXT105	5.62	2246	400	16.28	3.22	8.38	7.00	7.13	3.75	3.27	9.94	9.39
HSCXT205	5.62	2246	400	16.50	3.56	8.50	7.00	8.38	4.09	3.86	11.41	10.33
HSCXT305A	5.31	2124	400	20.00	3.69	10.31	11.38	9.25	4.84	4.28	13.72	12.19
HSCXT405A	5.27	2108	400	21.00	4.00	10.63	11.38	10.38	5.50	4.88	15.94	16.50
HSCXT505A	5.69	2275	400	22.00	4.25	11.72	11.38	13.00	6.56	5.86	18.31	16.86

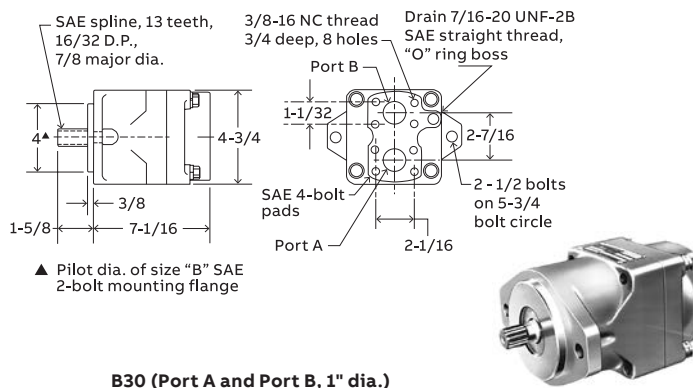
† For a complete HSCXT drive, order a reducer, drive shaft and adapter assembly by their respective part numbers. Drive is shipped unassembled.
 ▲ Includes adapter, necessary mounting bolts, seal retainer and lip type seals. See page G3-XXX for adapter bolt pattern details.
 ■ Reducer includes hydroil motor adapter.
 ★ CEMA drive shaft and key furnished unless otherwise specified. See pages G3-117 thru G3-119 for optional drive shafts available from Dodge.

Selection and dimensions

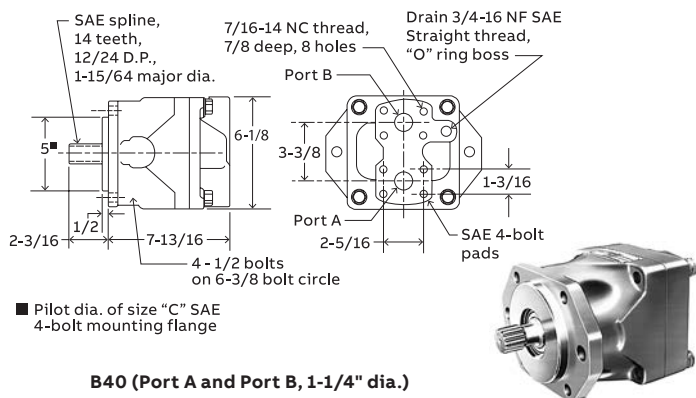
Hydroil Torque-Arm shaft mount speed reducers
Hydroil vane motors



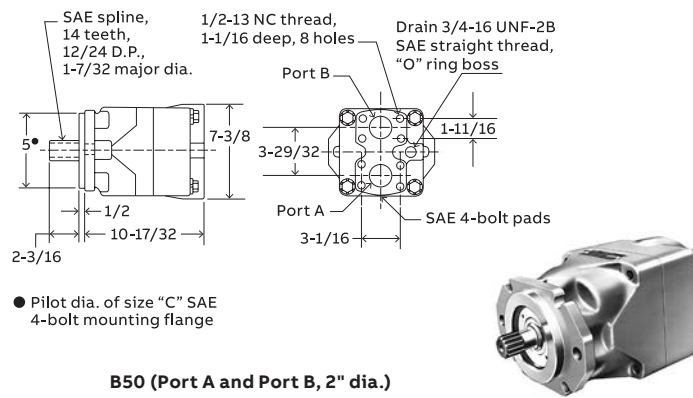
A10 and A20



B30 (Port A and Port B, 1" dia.)



B40 (Port A and Port B, 1-1/4" dia.)



B50 (Port A and Port B, 2" dia.)

All dimensions are in inches.

Hydroil vane motors – are superior single stage vane type fluid motor. A series of internal ports admit oil to and carry it from the power element. Complete hydraulic balance of the assembly contributes to the mechanical efficiency and long life of these motors as well as to their unusually quiet operation. Other exclusive features assure a minimum of friction and efficient valving action regardless of operating speeds.

Hydroil vane motors can be run in either direction of rotation. Flow into port A (see drawing) will result in clockwise rotation as viewed from shaft end of motor. Flow into port B will result in counterclockwise rotation.

Inlet and outlet ports on sizes A10 and A20 will accommodate standard tapered pipe fittings. Larger sizes will accommodate SAE split flanges.

Drains should be connected to tank with connections and hoses capable of withstanding 50 psi. No drain is required on sizes A10 and A20 if the housing port is the low pressure port and is never subjected to more than 20 psi, in which case the motor drains internally.

Hydroil vane motors for HXT reducers

Motor size	Part number	Displacemnt (in ³ /rev.)	Running torque (in lb/100 psi)	Starting torque (in lb/100 psi)	Flow rate (gpm/100 rpm)	Internal leakage (gpm/1000 psi) *	Minimum motor RPM	Wt. (lbs)
A10	444049	0.49	6.9	5.75	0.21	0.49	60	11
A20	444050	1.14	16.1	13.4	0.50	0.76	60	11
B30	444054	3.59	51.3	46.2	1.60	1.50	100	30
B40	444055	6.40	91.8	82.6	2.77	2.67	100	55
B50	444056	11.69	167.4	150.7	5.10	2.00	100	106

Related products

Hydroil Torque-Arm shaft mount speed reducers Char-Lynn™* compatible 6B spline reducer

New hydraulically powered Dodge Torque-Arm twin taper bushed speed reducers with 6B spline, SAE "A" 2-bolt motor flange. Suitable for Char-Lynn H, S, T and 2000 series motors or equal. This is a modified version of the HXT Torque-Arm speed reducer.

- Twin tapered mounting
- Material cost savings
- Installed cost savings
- Simple installation
- No periodic maintenance cost associated with chain drives
- Eliminate V-drives
- Compact drive design
- Infinitely adjustable speeds/torque
 - Driven machinery can be inched/jogged
 - Direction of rotation can be reversed
 - Low speed, high torque capability
- Shock resistant helical gearing
- Reduced motor costs
- Optimized pressure, ratio and flow
- No motor drain

Specifications

Reducer will be modified on the input section to facilitate the mounting of a basic Char-Lynn hydraulic motor or equivalent. This modification allows the mounting of H, S and T series motors which must be equipped with a two-bolt SAE "A" flange (3.25 pilot diameter) and a 6B splined shaft (other comparably equipped motor brands will also work).

Reducer installation shall be accomplished by using ductile iron, fully split twin tapered bushings. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

* Char-Lynn is a registered trademark of EATON

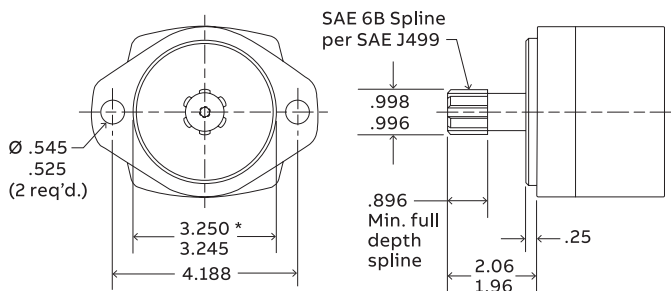
Maximum input and driven speeds for HXT6B reducers

Reducer size	Double reduction						Single reduction	
	Input RPM		Driven RPM		Reducer size	Input RPM	Driven	
	15	25	9	15				25
HXT3 6B	–	2100	200	140	85	HXT105 6B	2246	400
HXT4 6B	2118	2072	200	140	85	HXT205 6B	2116	400
HXT5 6B	–	2044	200	125	80	HXT305 6B	2240	400
HXT6 6B	–	2010	200	125	80	HXT405 6B	2280	400
HXT7 6B	–	1844	200	125	75	HXT505 6B	2287	400

Torque-Arm hydraulic taper bushed speed reducers

Reducer size	Part number	Exact ratios	Max. bore
HXT105T C/L 6B	251140	5.62	1.44
HXT205T C/L 6B	252140	5.29	1.94
HXT305AT C/L 6B	253140	5.60	2.19
HXT405AT C/L 6B	254140	5.65	2.44
HXT505AT C/L 6B	255160	5.67	2.94
HXT325BT C/L 6B	243571	24.71	2.19
HXT415BT C/L 6B	244556	15.13	2.44
HXT425BT C/L 6B	244557	24.38	2.44
HXT525CT C/L 6B	245640	25.56	2.94
HXT625AT C/L 6B	246520	25.13	3.44
HXT725AT C/L 6B	247520	24.59	3.94

Motor mounting dimensions



* Pilot dia. of size "A" SAE two-bolt mounting flange

Related products

Hydroil Torque-Arm shaft mount speed reducers

Class I – Refer to pages G3-18 thru G3-23 to determine appropriate drive service factor for your specific application and duty cycle. Refer to tables below for reducer Class I ratings.

Class II – Refer to pages G3-18 thru G3-23 to determine appropriate drive service factor for your specific application and duty cycle. To obtain Class II reducer ratings, divide Class I ratings from the tables below by 1.4.

Class III – Refer to pages G3-18 thru G3-23 to determine appropriate drive service factor for your specific application and duty cycle. To obtain Class III reducer ratings, divide Class I ratings from the tables below by 2.0.

Continuous input horsepower - Class I*

Output RPM	Reducer size										
	HXT105 C/L	HXT205 C/L	HXT305A C/L	HXT405A C/L	HXT505A C/L	HXT325B C/L	HXT415B C/L	HXT425B C/L	HXT525C C/L	HXT625A C/L	HXT725A C/L
1	0.06	0.11	0.16	0.22	0.33	0.17	0.26	0.26	0.44	0.69	1.00
5	0.26	0.52	0.72	1.01	1.55	0.84	1.29	1.29	2.18	3.46	4.98
10	0.50	0.99	1.41	1.96	3.04	1.68	2.52	2.52	4.35	6.89	9.66
20	0.98	1.95	2.45	3.88	6.05	3.30	4.98	4.98	8.38	13.37	18.68
30	1.47	2.94	4.14	5.78	8.74	4.90	7.33	7.33	12.24	-	-
40	1.95	3.85	5.51	7.64	11.13	-	9.52	-	-	-	-
50	2.43	4.81	6.88	9.55	13.51	-	11.57	-	-	-	-
60	2.70	5.34	7.92	11.07	-	-	-	-	-	-	-
70	2.95	5.86	8.97	12.46	-	-	-	-	-	-	-
80	3.22	6.38	10.01	13.85	-	-	-	-	-	-	-
90	3.48	6.92	11.06	15.29	-	-	-	-	-	-	-
100	3.75	7.44	12.10	16.83	-	-	-	-	-	-	-
110	3.77	7.48	12.53	-	-	-	-	-	-	-	-
120	3.98	7.92	13.46	-	-	-	-	-	-	-	-
130	4.21	8.37	14.41	-	-	-	-	-	-	-	-
140	4.42	8.81	-	-	-	-	-	-	-	-	-
150	4.66	9.27	-	-	-	-	-	-	-	-	-
160	4.87	9.71	-	-	-	-	-	-	-	-	-

* Input Hp – Hp rating of reducer at input shaft under continuous operation after load has been started

Continuous output torque - Class I**

Output RPM	Reducer size										
	HXT105 C/L	HXT205 C/L	HXT305A C/L	HXT405A C/L	HXT505A C/L	HXT325B C/L	HXT415B C/L	HXT425B C/L	HXT525C C/L	HXT625A C/L	HXT725A C/L
1	3470	6980	9580	13500	20100	10400	16000	16000	27000	42700	61600
5	3200	6380	8950	12500	19200	10400	16000	16000	27000	42700	61600
10	3100	6140	8700	12100	18800	10400	15600	15600	26900	42600	59700
20	3040	6020	8580	12000	18700	10200	15400	15400	25900	41300	57700
30	3020	5980	8530	11900	18000	10100	15100	15100	25200	-	-
40	3010	5950	8510	11800	17200	-	14700	-	-	-	-
50	3000	5940	8500	11800	16700	-	14300	-	-	-	-
60	2780	5500	8160	11400	-	-	-	-	-	-	-
70	2600	5170	7920	11000	-	-	-	-	-	-	-
80	2490	4930	7730	10700	-	-	-	-	-	-	-
90	2390	4750	7590	10500	-	-	-	-	-	-	-
100	2320	4600	7480	10400	-	-	-	-	-	-	-
110	2120	4200	7040	-	-	-	-	-	-	-	-
120	2050	4080	6930	-	-	-	-	-	-	-	-
130	2000	3980	6850	-	-	-	-	-	-	-	-
140	1950	2890	-	-	-	-	-	-	-	-	-
150	1920	3820	-	-	-	-	-	-	-	-	-
160	1880	3750	-	-	-	-	-	-	-	-	-

** Output torque – Continuous output torque rating of reducer (lb-in)

Peak Hp – Momentarily, peak horsepower may be very high. For example, in applications with high inertia loads, oversize or high torque motors, etc.

Where this momentary peak exceeds 200% of normal (100% overload) the equivalent Hp may be obtained by dividing the peak Hp by two.

If the results exceed the horsepower obtained from a consideration of service and duty, it should be used to select the reducer size.

Note: Below 15 RPM output speed, oil level must be adjusted to reach highest oil level plug (P).

Related products

Torque-Arm shaft mount speed reducers
Harsh duty accessories

Corrosion resistance

Zinc plated tie rods

Includes tie rods, turnbuckles, and Torque-Arm rod fasteners. Standard accessory

TDNC Coated tapered bushings (thin dense nickel chrome)

TDNC coating on bushing, backup plate and snap rings provide maximum corrosion resistance. Zinc plated fasteners included. Consult Dodge for price and delivery.

CEMA Stainless steel drive shafts for screw conveyor drives

#316 stainless steel, three hole construction now available on short cycle delivery. Consult Dodge for delivery.

Hostile environment

Hydra-Lock desiccant breather

- Built in standpipe
- 3 micron filter media top and bottom
- Desiccant material changes color from blue (good) to pink (replace)
- Check valve system, so breather is only open to atmosphere under pressure or vacuum. Closed when not running.

Enclosed breather chamber

Elastic diaphragm enclosed in steel chamber provides closed system. Protects reducer components and lubricant in wet, dusty or hot environments. Install in new reducer installations only. Mounts in uppermost position and replaces standard breather. Stock item.



Oil sump heater

110 volt, single phase, AC cartridge heater, threads into standard tapped drain hole. Provides approximately 70° F temperature rise in one hour for cold climates. Simple time phased on/off construction. Standard oil sump heater does not come with thermostat. Factory cycle item.

Long term storage

Preparation for long storage or delayed job start-up. Reducer is protected internally with a vapor phase corrosion inhibit ing oil. Breather removed and reducer sealed with pipe plug. See page G2-181 for details.



Related products

Torque-Arm shaft mount speed reducers
Harsh duty accessories

Safety and sealing

ABS Polymer Bushing covers, closed and split

- Protection for oil seal areas and from rotating components.
- Enhances seal life.
- Closed or open for input shaft side. Two piece split for backstop side.
- Simply position on reducer, insert bolts and tighten to specified torque values. Stock item.



Related products

Torque-Arm shaft mount speed reducers
Harsh duty accessories

XT Lubrication

- Oil level sight gauge. Stock item.
- New Dodge/AGMA/ISO viscosity standards
- New higher viscosity lubricant selections
- Brand options

Maximizing productivity and uptime is paramount in today's industry. By following some simple recommendations on lubrication, OEMs and users can improve product performance and reduce downtime. Remember, the purpose of speed reducer lubrication is to minimize frictional forces, eliminate wear and dissipate heat.

The American Gear Manufacturing Association (AGMA) and ISO have changed their lubrication standards.

This change was necessitated by the increased horsepower that helical gearing is asked to transmit. As a result, higher ISO viscosity grades have been selected. The proper oil viscosity is based upon ambient temperature and gearing pitch line velocity. Dodge has converted pitch line velocity into reducer output speed (RPM).



Oil sight glass



Oil sight tube

Recommended lubricants for Torque-Arm reducers +

Brand	With or without backstop	EP oils WITHOUT backstops		
Exxon				
150	Teresstic	150	Spartan EP	150
220	Teresstic	220	Spartan EP	220
320	Teresstic	320	Spartan EP	320
Chevron				
150	Machine	150	Gear compound	150
220	Machine	220	EP	220
320	Machine	320	-	320
Unical				
150	Turbine oil	150	Extra Duty HL	141
220	Turbine oil	220	Gear Lube	207
320	Turbine oil	320	-	300
Kluber Synthetic				
150	Gem 4-150N	-	-	-
220	GEM 4-220N	-	-	-
320	GEM 4-320N	-	-	-
Kluber				
150	Gem 4-150N	-	-	-
220	GEM 4-220N	-	-	-
320	GEM 4-320N	-	-	-
Mobil Synthetic				
150	SHC	629	SHC	629
220	SHC	630	SHC	630
320	SHC	632	SHC	632
Mobil				
150	Mobil DTE	BB	Mobil Gear	629
220	Extra Heavy	AA	Mobil Gear	630
320	-	-	Mobil Gear	632
Texaco				
150	Regal Oil R&O	150	Meropa	150
220	Regal Oil R&O	220	Meropa	220
320	Regal Oil R&O	320	Meropa	320
Shell Synthetic				
150	Morlina S4 B	150	-	-
220	Morlina S4 B	220	-	-
320	Morlina S4 B	320	-	-
Shell				
150	Morlina S2 B or S3 BA	150	Omala S2 G	150
220	Morlina S2 B or S3 BA	220	Omala S2 G	220
320	Morlina S2 B or S3 BA	320	Omala S2 G	320

For further lubrication information, refer to Dodge Torque-Arm lubrication manual MN1682 (replaces #499336) or individual product manuals.

+ Partial list. Consult Dodge or a lubricant manufacturer for further options

Related products

Torque-Arm shaft mount speed reducers
Harsh duty accessories

Harsh duty and sensorized accessories

Product	Part no.
TXT Enclosed breather system sm (1-10)	240050
TXT Enclosed breather system lg (12-15)	240051
Pressure breather vent plug	6-030657 *
TXT 1-4 Immersion heater	241103
TXT 5-6 Immersion heater	241104
TXT 7-10 Immersion heater	241105
TXT1 Taconite auxiliary seal kit	272515
TXT105 Taconite auxiliary seal kit	272521
TXT2 Taconite auxiliary seal kit	272446
TXT205 Taconite auxiliary seal kit	272459
TXT305A Taconite auxiliary seal kit	253186
TXT3A,3B Taconite auxiliary seal kit	243577
TXT405A Taconite auxiliary seal kit	254267
TDT14 Taconite auxiliary seal kit	272457
TDT15 Taconite auxiliary seal kit	272458
3/8 Sight oil level gauge (TXT1-4)	430120 *
1/2 Sight oil level gauge (TXT5-6)	430121 *
3/4 Sight oil level gauge (TXT7-TDT15)	430159 *

* Available as renewal parts

Product	Part no.
SCXT1 Taconite auxiliary seal kit	272721
SCXT2 Taconite auxiliary seal kit	272722
SCXT3A,3BTaconite auxiliary seal kit	243582
SCXT4A,4B Taconite auxiliary seal kit	244677
SCXT5B,5C Taconite auxiliary seal kit	245637
SCXT505A Taconite auxiliary seal kit	255148
SCXT6 Taconite auxiliary seal kit	272726
SCXT7 Taconite auxiliary seal kit	272727
TXT/SCXT1 Input Taconite seal	241102
TXT/SCXT2 Input Taconite seal	242102
TXT/SCXT3A,3B Input Taconite seal	243108
TXT/SCXT4A,4B Input Taconite seal	244117
TXT/SCXT5B,5C Input Taconite seal	245104
TXT/SCXT6, 605 Input Taconite seal	246102
TXT/SCXT7, 705 Input Taconite seal	247102
TXT8, 805 Input Taconite seal	248102
TXT9, 905 Input Taconite seal	249102
TXT10 Input Taconite seal	250102
TXT12 Input Taconite seal	242102
TXT/SCXT105 Input Taconite seal	241109
TXT/SCXT205 Input Taconite seal	242109
TXT/SCXT305A Input Taconite seal	243109
TXT/SCXT405A Input Taconite seal	244159
TXT/SCXT505A Input Taconite seal	245106
TXT/TDT10 Taconite aux seal kit	272454
TXT/TDT12 Taconite aux seal kit	272455
TDT13 Taconite aux seal kit	272455

* Available as renewal parts

Product	Part no.
Hydra-Lock – TXT1-TXT4 = size HL-0	964372
Hydra-Lock – TXT5-TXT9 = size HL-1	964364
Hydra-Lock – TXT10-TXT12 = size HL-2	964366
Hydra-Lock – TDT13-TDT15 = size HL-2	964366