

TOOTH CLUTCHES

“Air Champ”

5HP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCH

The 5HP-E Series provides:

- ▶ Water protection per NEMA standard 1.26.5 (Water-proof machine)
- ▶ Instantaneous Torque up to 12,000 In. Lbs. @ 80 psi
- ▶ Maximum Operating Speed up to 1,650 rpm
- ▶ **6 Bore** sizes ranging from 0.875 to 1.938 inches
- ▶ Positive engagements in random positions
- ▶ For in-line applications to accommodate misalignment, we recommend use of Nexen Single and Double Flexible Couplings

6 Models offer design flexibility:

- ▶ Sealed, radial ball bearings
- ▶ **Pilot Mount** design with tapped mounting holes
- ▶ Thru-shaft mounting design uses a full-length keyway
- ▶ Ability to mount a pulley, sprocket or gear on the clutch
- ▶ Ability to use a Flexible Clutch Coupling for the in-line shaft coupling applications
- ▶ 8.25 inch hose included.
- ▶ Nickel-plated exterior
- ▶ For additional corrosion protection, contact the factory

▶ **5HP-E, ENCLOSED PILOT MOUNT TOOTH CLUTCHES—MULTIPOSITION**

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size (Sq)	# of Teeth	Shipping Wt. (Lbs)	COUPLING ASSEMBLIES	
							SINGLE FLEX Product Number	DOUBLE FLEX Product Number
5H20P-E	911319	1800	0.750	0.188	64	8	---	---
5H30P-E	913000	1650	0.875	0.188	91	13	909980	909981
5H35P-E	913010	1350	1.125	0.250	106	18	910080	910081
5H40P-E	913020	1350	1.250	0.250	122	19	910180	910181
5H45P-E	913030	1200	1.500	0.375	137	26	910280	910281
5H50P-E	913040	1100	1.750	0.375	152	34	910380	910381
5H60P-E	913050	1000	1.938	0.500	183	47	910480	910481

Keys are customer furnished and must be full-length.

▶ **ATTACHMENT OPTIONS**

Flexible Coupling Assemblies

Flexible Coupling Assemblies are required for in-line coupling applications and are available in single or double flex designs to provide **high misalignment capabilities with high torque**. Turn to pages 84 and 85 for Flexible Coupling details.

For quick selection of Flexible Couplings, refer to the chart above.

Pulleys, Sprockets, Gears

These can be attached to the clutch for offset shaft applications. Tapped holes are provided for ease of mounting. Nexen does not furnish these items.

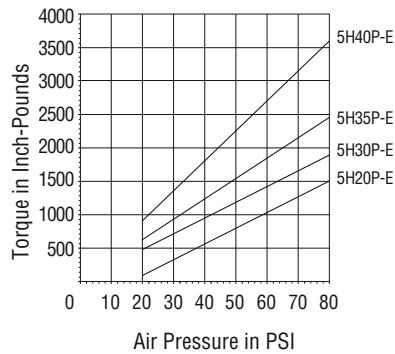
For minimum sprocket requirements, see page 371.

CAUTION!

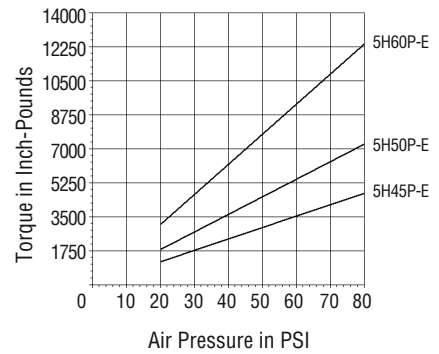
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential speeds.

▶ **TORQUE VS. AIR PRESSURE**

5H20P-E, 5H30P-E, 5H35P-E & 5H40P-E

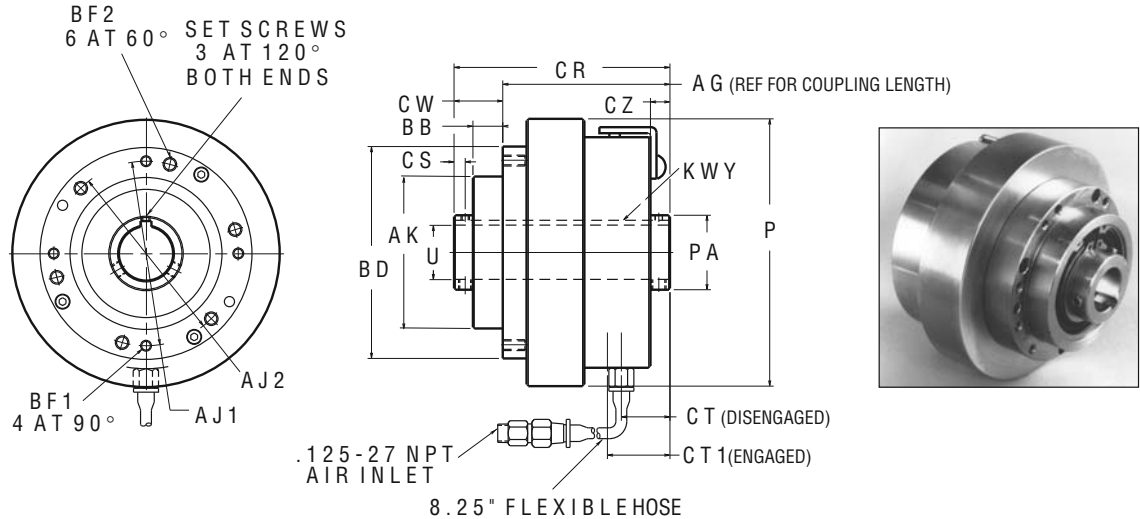


5H45P-E, 5H50P-E & 5H60P-E



5HP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCHES - APPROXIMATE DIMENSIONS (INCHES)

▸ PILOT MOUNT



MODEL	PRODUCT NUMBER	AG	AJ1	AJ2	AK ^{+0.000} _{-0.001}	BB	BD	BF1	BF2	CR	CS	CT	CT1	CW	CZ	P	PA	KEYWAY		U ^{+0.001} _{-0.000}
																		WD	DP	
5H20P-E	911319	2.82	2.75	--	2.250	0.56	3.12	.190-24	--	3.75	0.25	0.56	0.63	0.93	--	3.94	1.50	0.188	0.094	0.750
5H30P-E	913000	3.80	3.437	3.562	2.875	0.69	4.12	.250-20	.312-18	4.83	0.23	1.06	1.12	1.03	0.38	5.03	1.34	0.188	0.094	0.875
5H35P-E	913010	3.97	4.062	4.062	3.500	0.69	4.50	.250-20	.312-18	5.10	0.25	1.05	1.12	1.13	0.39	6.16	1.72	0.250	0.125	1.125
5H40P-E	913020	3.85	4.250	4.250	3.500	0.69	4.88	.250-20	.312-18	4.97	0.26	1.12	1.18	1.12	0.45	6.16	1.72	0.250	0.125	1.250
5H45P-E	913030	4.35	4.750	4.750	4.125	0.84	5.40	.250-20	.375-16	5.71	0.31	1.19	1.27	1.36	0.52	6.66	2.31	0.375	0.188	1.500
5H50P-E	913040	4.72	5.250	5.375	4.500	0.78	6.12	.312-18	.500-13	5.97	0.31	1.22	1.33	1.25	0.51	7.66	2.51	0.375	0.188	1.750
5H60P-E	913050	4.92	6.125	6.125	5.250	0.87	7.00	.312-18	.500-13	6.40	0.37	1.45	1.54	1.48	0.66	8.41	2.87	0.500	0.250	1.938

MODEL	PRODUCT NUMBER	SET SCREW
5H20P-E	911319	(2) .250-20 ---
5H30P-E	913000	(2) .190-24 (4) .312-24
5H35P-E	913010	(2) .190-24 (4) .312-24
5H40P-E	913020	(2) .190-24 (4) .312-24
5H45P-E	913030	(2) .190-24 (4) .312-24
5H50P-E	913040	(2) .250-20 (4) .500-13
5H60P-E	913050	(2) .250-20 (4) .500-13

SINGLE AND DOUBLE FLEXIBLE COUPLING ASSEMBLIES

Both Single and Double Flexible Couplings are available for the 5HP-E Pilot Mount Tooth Clutch. See the following pages for details.