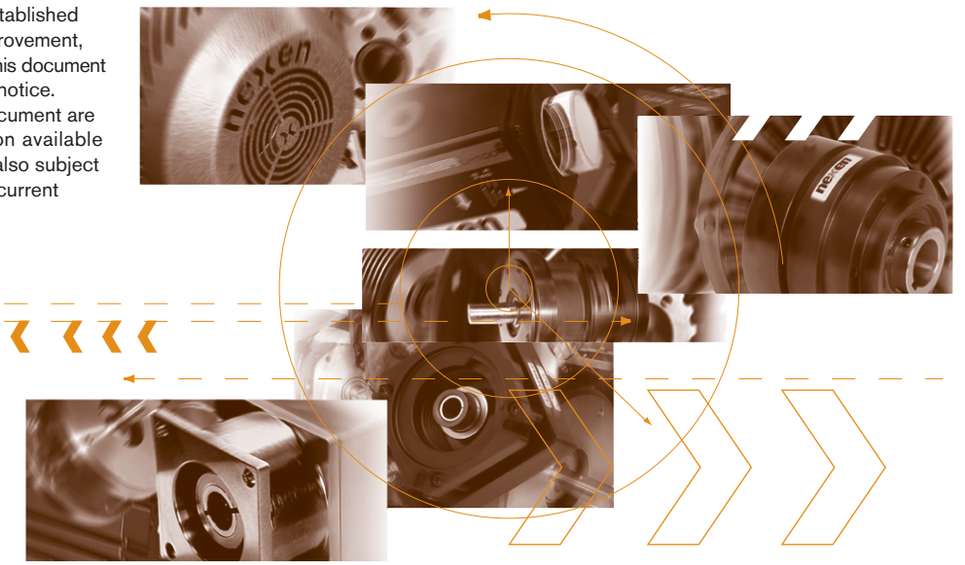
In accordance with Nexen's established policy of constant product improvement, the specifications contained in this document are subject to change without notice. Technical data listed in this document are based on the latest information available at the time of printing and are also subject to change without notice. For current information, please consult:
www.nexengroup.com



TOOTH CLUTCHES

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TOOTH CLUTCHES

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5H SERIES, FLANGE MOUNT TOOTH CLUTCHES

The 5H Series provides:

- Instantaneous Torque up to 17,500 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 3,700 rpm
- **7 Bore sizes** ranging from 0.875 to 2.188 inches
- Positive engagements in multiple positions
- Immediate start-up with no slippage
- Versatile mounting capability for bearing supported pulley, sprocket or gear

7 Models offer design flexibility:

- Sealed, radial ball bearings
- **Flange Mount** design with tapped mounting holes
- Thru-shaft mounting design uses a full-length keyway
- 8.25 inch hose included.

5H Series, Flange Mount Tooth Clutches

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size (Sq)	# of Teeth	Shipping Wt. (Lbs)
5H30	906700	3700	0.875	0.188	91	7
5H35	906800	3200	1.125	0.250	106	9
5H40	906900	3000	1.250	0.250	122	11
5H45	907000	3000	1.500	0.375	137	15
5H50	907100	3000	1.750	0.375	152	18
5H60	907200	2400	1.938	0.500	183	28
5H70	907300	2000	2.188	0.500	214	40

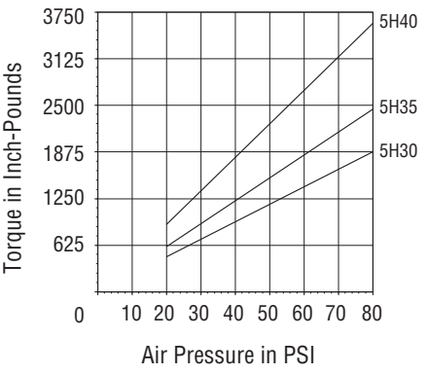
Bearing life is optimized at lower speeds and air pressure. For higher speeds consult factory.
Keys are customer furnished and must be full-length.

CAUTION!

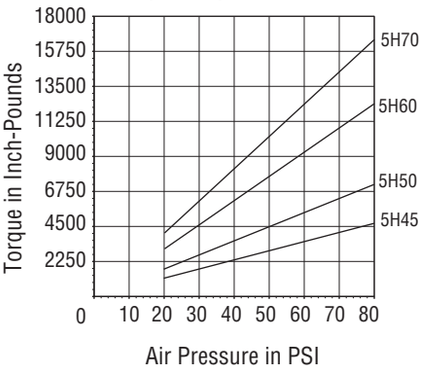
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

Torque Vs. Air Pressure

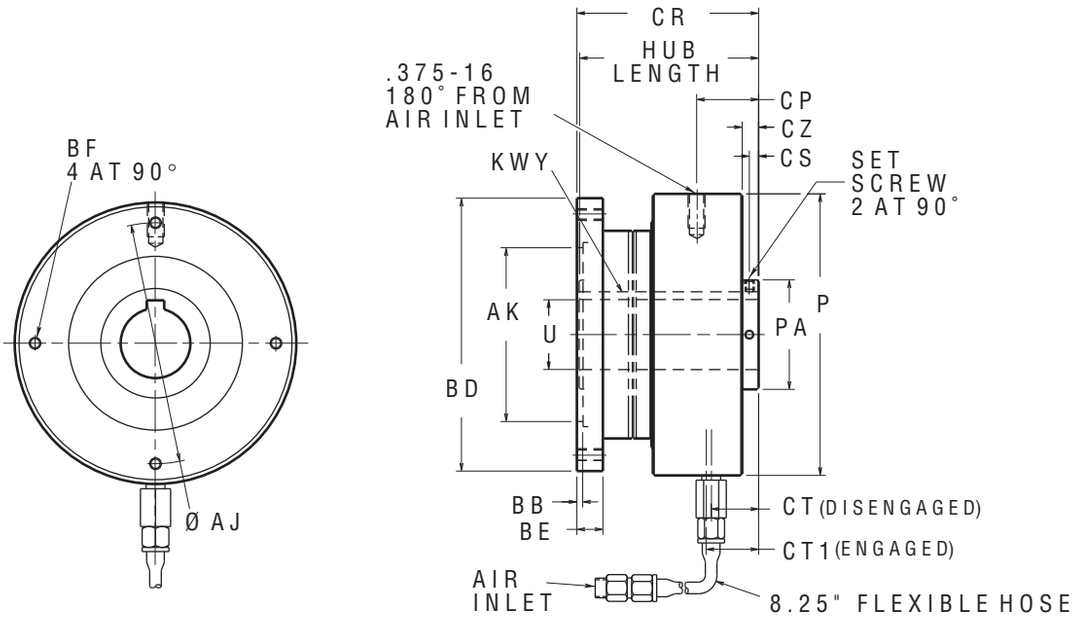
5H30, 5H35 & 5H40



5H45, 5H50, 5H60 & 5H70



5H SERIES, FLANGE MOUNT TOOTH CLUTCHES - APPROXIMATE DIMENSIONS (INCHES)



MODEL	PRODUCT NUMBER	AIR INLET NPT	HUB LENGTH	AJ	AK +.001 -.000	BB	BD ±.001	BE	BF	CP	CR	CS	CT	CT1	CZ	P	PA
5H30	906700	.125	3.28	3.687	2.441	0.13	4.374	0.50	.250-20	--	3.35	0.20	0.92	0.99	0.25	4.56	1.38
5H35	906800	.125	3.42	4.187	2.953	0.11	4.874	0.56	.250-20	--	3.49	0.20	0.95	1.03	0.29	5.06	1.77
5H40	906900	.125	3.51	4.687	2.953	0.13	5.374	0.56	.250-20	--	3.58	0.20	0.93	1.00	0.26	5.31	1.76
5H45	907000	.125	3.85	5.187	3.740	0.13	5.874	0.56	.250-20	--	3.91	0.20	1.02	1.09	0.35	6.06	2.36
5H50	907100	.125	3.99	5.687	3.937	0.14	6.374	0.69	.375-16	--	4.07	0.26	1.15	1.22	0.49	6.56	2.56
5H60	907200	.125	4.48	6.812	4.527	0.17	7.624	0.69	.375-16	--	4.55	0.26	1.33	1.41	0.54	7.56	2.95
5H70	907300	.250	5.11	7.687	5.118	0.37	8.374	0.81	.375-16	1.61	5.18	0.26	1.41	1.51	0.62	8.31	3.34

MODEL	PRODUCT NUMBER	SET SCREW	KEYWAY WD	KEYWAY DP	U +.001 -.000
5H30	906700	.190-24	0.188	0.094	0.875
5H35	906800	.190-24	0.250	0.125	1.125
5H40	906900	.190-24	0.250	0.125	1.250
5H45	907000	.190-24	0.375	0.188	1.500
5H50	907100	.250-20	0.375	0.188	1.750
5H60	907200	.250-20	0.500	0.250	1.938
5H70	907300	.250-20	0.500	0.250	2.188

5HP SERIES, PILOT MOUNT TOOTH CLUTCH

The 5HP Series provides:

- Instantaneous Torque up to 55,000 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 4,000 rpm
- **15 Bore** sizes ranging from 0.625 to 3.938 inches
- Positive engagement in random positions
- For in-line applications to accommodate misalignment, we recommend use of Nexen Single and Double Flexible Couplings.

10 Models offer design flexibility:

- Sealed, radial ball bearing
- **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 in-line shaft coupling applications
- 8.25 inch flexible hose included.

5HP Series, Pilot Mount Tooth Clutches

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size WD x DP	# of Teeth	Shipping Wt. (Lbs)	COUPLING ASSEMBLIES SINGLE FLEX Product Number	COUPLING ASSEMBLIES DOUBLE FLEX Product Number
5H20P	911300	4000	0.625	0.188 x 0.188	64	6	--	--
5H30P	909900	3700	0.875	0.188 x 0.188	91	7	909980	909981
5H30P	909912	3700	0.750	0.188 x 0.188	91	7	909980	909981
5H35P	910000	3200	1.125	0.250 x 0.250	106	10	910080	910081
5H35P	910011	3200	1.000	0.250 x 0.250	106	10	910080	910081
5H40P	910100	3000	1.250	0.250 x 0.250	122	12	910180	910181
5H40P	910112	3000	1.188	0.250 x 0.250	122	12	910180	910181
5H45P	910200	3000	1.500	0.375 x 0.375	137	16	910280	910281
5H45P	910211	3000	1.438	0.375 x 0.375	137	16	910280	910281
5H50P	910300	3000	1.750	0.375 x 0.375	152	19	910380	910381
5H50P	910311	3000	1.688	0.375 x 0.375	152	19	910380	910381
5H60P	910400	2400	1.938	0.500 x 0.500	183	30	910480	910481
5H70P	910500	2000	2.188	0.500 x 0.500	214	45	910580	910581
5H80P	911700	2000	2.938	0.750 x 0.500	244	70	911780	911781
5H100P	913100	1000	3.938	1.000 x 0.750	328	170	--	--

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

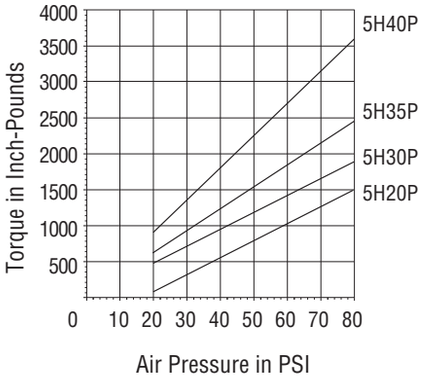
These can be attached to the clutch for offset shaft applications. Tapped holes are provided for ease of mounting. Nexen does not furnish these items.
For minimum sprocket requirements, see page 369.

CAUTION!

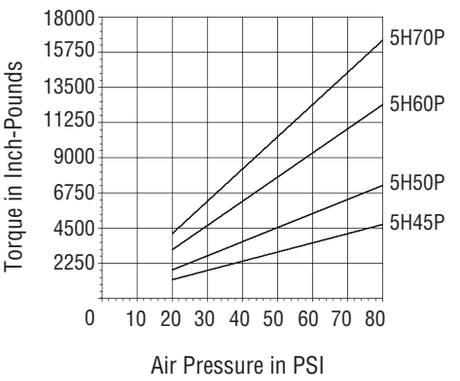
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

Torque Vs. Air Pressure

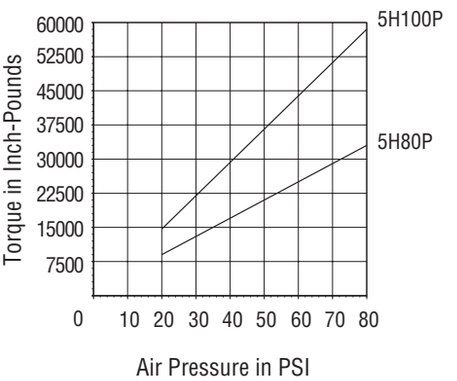
5H20P, 5H30P, 5H35P & 5H40P



5H45P, 5H50P, 5H60P, 5H70P

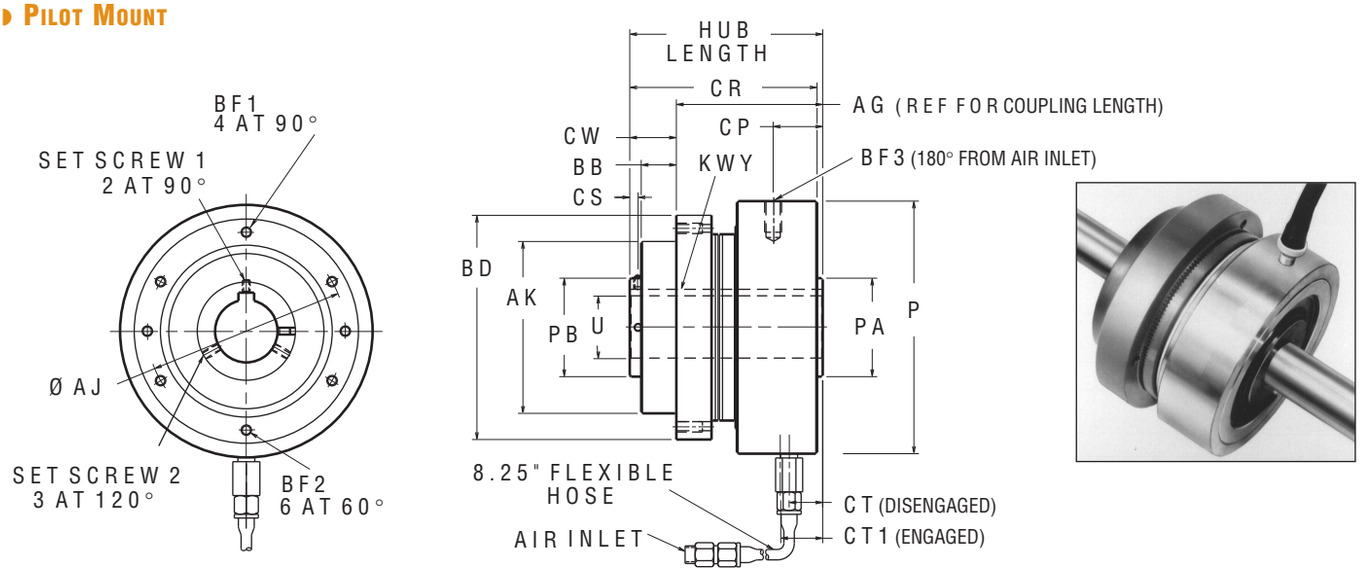


5H80P & 5H100P



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

Pilot Mount



MODEL	PRODUCT NUMBER	AIR INLET NPT	HUB LENGTH	AG	AJ	AK ±.001	BB	BD	BF1	BF2	BF3	CP	CR	CS	CT	CT1	CW	P	PA	PB
5H20P	911300	.125	3.44	2.51	2.750	2.249	0.56	3.12	--	.190-24	--	--	3.75	0.25	0.56	0.62	0.93	3.69	0.98	1.50
5H30P	909900	.125	3.89	2.95	3.437	2.874	0.69	3.88	.250-20	--	--	--	3.85	0.20	0.71	0.78	0.94	4.56	1.38	1.38
5H35P	910000	.125	4.12	3.16	4.062	3.499	0.69	4.50	.250-20	--	--	--	4.06	0.20	0.72	0.80	0.96	5.06	1.77	1.77
5H40P	910100	.125	4.20	3.22	4.250	3.499	0.69	4.88	.250-20	--	--	--	4.17	0.20	0.70	0.76	0.98	5.31	1.76	1.76
5H45P	910200	.125	4.63	3.51	4.750	4.124	0.84	5.38	.250-20	--	--	--	4.49	0.20	0.81	0.88	1.12	6.06	2.36	2.36
5H50P	910300	.125	4.76	3.60	5.250	4.499	0.78	6.00	.312-18	--	--	--	4.61	0.26	0.81	0.88	1.16	6.56	2.56	2.56
5H60P	910400	.125	5.39	4.13	6.125	5.249	0.88	7.00	.312-18	--	--	--	5.18	0.26	1.00	1.08	1.26	7.56	2.95	2.95
5H70P	910500	.250	5.96	4.35	7.000	5.749	1.19	8.25	.500-13	--	.375-16	1.19	5.76	0.26	0.99	1.10	1.61	8.31	3.34	3.34
5H80P	911700	.250	8.62	5.69	8.500	7.374	1.88	9.50	--	.500-13	.375-16	2.26	8.33	0.62	2.27	2.37	2.93	9.25	3.74	5.00
5H100P	913100	.250	10.51	7.46	11.000	8.999	2.00	12.00	--	.500-13	.500-13	3.00	9.46	0.62	3.00	3.07	3.05	12.25	6.50	6.50

MODEL	PRODUCT NUMBER	SET SCREW 1	SET SCREW 2	KEYWAY WD	KEYWAY DP	U +.001 -.000
5H20P	911300	.250-20	--	0.188	0.094	0.625
5H30P	909900	.190-24	--	0.188	0.094	0.875
5H35P	910000	.190-24	--	0.250	0.125	1.125
5H40P	910100	.190-24	--	0.250	0.125	1.250
5H45P	910200	.190-24	--	0.375	0.188	1.500
5H50P	910300	.250-20	--	0.375	0.188	1.750
5H60P	910400	.250-20	--	0.500	0.250	1.937
5H70P	910500	.250-20	--	0.500	0.250	2.187
5H80P	911700	--	.625-11	0.750	0.250	2.937
5H100P	913100	--	.750-10	1.000	0.375	3.937

SINGLE AND DOUBLE FLEXIBLE COUPLING ASSEMBLIES

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

5HP & 5HP-E CLUTCH FLEXIBLE COUPLING ASSEMBLIES

Couple your shaft to a 5HP or 5HP-E Series Tooth Clutch with a Flexible Coupling Assembly. There are 16 Single Flex and 16 Double Flex Couplings, each designed to fit a specific 5HP or 5HP-E Tooth Clutch. Whatever the design style, you'll get:

- High Misalignment Capability
- Torque ratings up to 128,000 In. Lbs.
- Nickel-plated surfaces
- Coupling discs made from composite materials provide the benefits of both a steel disc and elastomeric coupling.

Other benefits include:

- Corrosion resistant
- Requires no lubrication
- Coupling adds no backlash to the drive
- Provides torsional stiffness
- Dampens shock and vibration through the power train
- Reverse Bushing Tapers for bushing installation from the inside of the coupling.

Find the Flexible Coupling that matches your clutch and your application specifications on this page.

5HP, 5HP-E Single & Double Flexible Coupling Selection Chart

1. Determine the Tooth Clutch required for your application and find it on the chart below;
2. Find the matching Flexible Coupling Assembly at the top of the column;
3. Double check the Flexible Coupling specifications to ensure conformity with all mating components;
4. A Taper Lock Bushing is required, see chart below for recommended part. This is customer furnished;
5. Clutch and Flexible Coupling Assembly must be ordered separately.

Single Flex #:	909980	910080	910180	910280	910380	910480	910580	911780	913140
Double Flex #:	909981	910081	910181	910281	910381	910481	910581	911781	---

Model Size:	5H30P	5H35P	5H40P	5H45P	5H50P	5H60P	5H70P	5H80P	5H100P
Clutch Product #:	909900	910000	910100	910200	910300	910400	910500	911700	913100
	909912	910011	910112	910211	910311				
Model Size:	5H30P-E	5H35P-E	5H40P-E	5H45P-E	5H50P-E	5H60P-E			
Clutch Product #:	913000	913010	913020	913030	913040	913050			

NOTE: There are no Flexible Couplings for the 5H20P or 5H100P Clutches.

Single & Double Flexible Coupling Product Details

Single Flex Product Number	Double Flex Product Number	Dodge Taper Lock® Bushing Number	Bore Range MIN. (In)	Bore Range MAX. (In)	Single Flex Shipping Wt. (Lbs)	Single Flex Inertia (lb-in/in)	Double Flex Shipping Wt. (Lbs)	Double Flex Inertia (lb-in/in)
909980	909981	1215	0.500	1.250	8	2.6	10	3.2
910080	910081	1615	0.500	1.625	10	6.7	13	8.2
910180	910181	2012	0.500	2.000	12	14.2	15	17.5
910280	910281	2517	0.500	2.500	14	30.2	16	36.3
910380	910381	2517	0.500	2.500	22	54.3	25	64.3
910480	910481	3030	0.938	3.000	29	240.7	34	285.7
910580	910581	3535	1.188	3.938	70	254.0	82	629.3
911780	911781	4040	1.438	4.438	110	293.0	130	726.0
913140	---	4545	1.938	4.938	152	301.1	---	---

Single Flexible Coupling Misalignment Capacity

Product Number	Angular (Degrees)	Axial (In)	Parallel (In)
909980	1.5	0.065	0.011
910080	1.5	0.070	0.012
910180	1.5	0.080	0.013
910280	1.5	0.090	0.014
910380	1.5	0.105	0.017
910480	1.5	0.120	0.019
910580	1.5	0.135	0.022
911780	1.5	.0135	0.026
913140	2.0	0.216	0.012

Double Flexible Coupling Misalignment Capacity

Product Number	Angular (Degrees)	Axial (In)	Parallel (In)
909981	3.0	0.130	0.063
910081	3.0	0.140	0.078
910181	3.0	0.160	0.085
910281	3.0	0.180	0.091
910381	3.0	0.210	0.104
910481	3.0	0.240	0.117
910581	3.0	0.270	0.137
911781	3.0	0.310	0.170

NOTE: If parallel, angular and axial misalignment are all required, be certain that the combined percentage of each does not exceed 100%. For instance, if 100% of the parallel misalignment rating is required, no angular or axial misalignment is allowed. If 50% of the parallel misalignment rating is required, only 50% of the angular misalignment OR 50% of the axial rating will be available.

Reverse Bushing Tapered Couplings

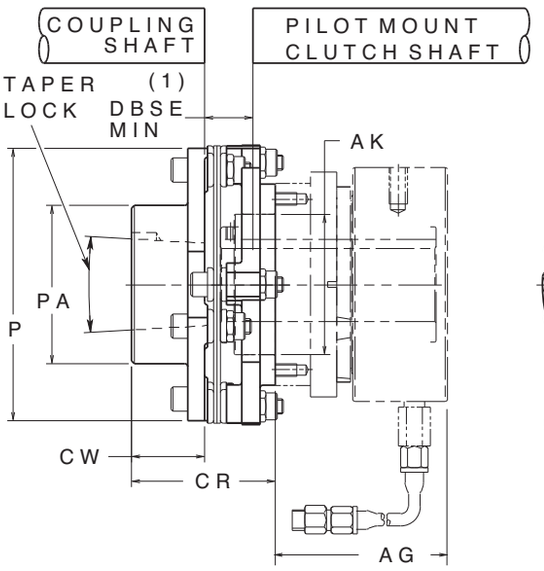
Single Flex #:	909984	910084	910184	910284	910384	910484	910584	911784
Double Flex #:	909985	910085	910185	910285	910385	910485	910585	911785

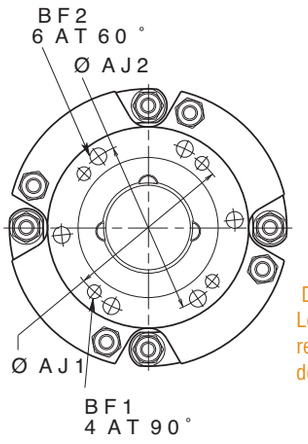
Model Size:	5H30P	5H35P	5H40P	5H45P	5H50P	5H60P	5H70P	5H80P
Clutch Product #:	909900	910000	910100	910200	910300	910400	910500	911700
	909912	910011	910112	910211	910311			
Model Size:	5H30P-E	5H35P-E	5H40P-E	5H45P-E	5H50P-E	5H60P-E		
Clutch Product #:	913000	913010	913020	913030	913040	913050		

NOTE: There are no Flexible Couplings for the 5H20P Clutches.

5HP, 5HP-E SERIES FLEXIBLE COUPLING ASSEMBLIES - APPROXIMATE DIMENSIONS (INCHES)

Single Flex

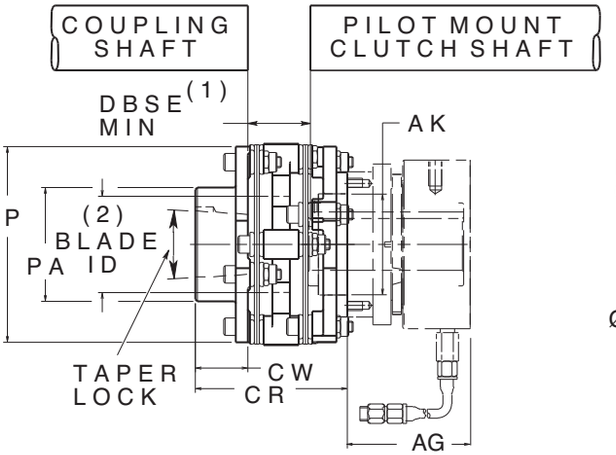


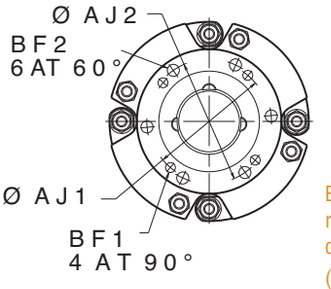


DBSE (1) = Distance Between Shaft Ends. Less than MIN requires equipment removal for service; the MAX distance is dependent on the clutch.

PRODUCT NUMBER	5HP AG	5HP-E AG	AJ1	AJ2	AK +.001 -.000	HOLE SIZE BF1	HOLE SIZE BF2	BF1 BOLT SIZE	BF2 BOLT SIZE	CR	CW	P	PA	DBSE MIN.	DBSE MAX.
909980	2.95	3.80	3.437	3.562	2.875	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	2.95	1.50	5.75	3.25	0.39	0.51
910080	3.16	3.97	4.062	4.062	3.500	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	3.17	1.50	6.38	3.88	0.52	0.71
910180	3.22	3.85	4.250	4.250	3.500	0.265	0.327	.250-20 x 1.25	.312-18 x 1.25	2.97	1.25	6.75	4.38	0.59	0.74
910280	3.51	4.35	4.750	4.750	4.125	0.265	0.390	.250-20 x 1.25	.375-16 x 1.50	3.70	1.75	7.25	4.88	0.59	0.83
910380	3.60	4.72	5.250	5.375	4.500	0.327	0.515	.312-18 x 1.25	.500-13 x 1.50	4.61	2.50	8.38	5.00	0.86	1.45
910480	4.13	4.92	6.125	6.125	5.250	0.327	0.515	.312-18 x 1.50	.500-13 x 1.75	5.31	3.00	9.50	5.75	0.88	1.07
910580	4.35	—	7.000	7.000	5.750	0.515	0.640	.500-13 x 1.75	.625-11 x 2.00	6.23	3.53	11.38	6.75	1.02	1.09
911780	5.69	—	8.500	8.500	7.375	0.515	0.640	.500-13 x 2.50	.625-11 x 2.75	7.95	4.12	13.12	7.50	1.06	1.06
913140	7.46	—	11.000	11.000	9.000	0.531	0.781	.500-13 x 2.50	M24-3 x 140	9.33	4.63	14.84	9.00	1.85	1.85

Double Flex





DBSE (1) = Distance Between Shaft Ends. Less than MIN requires equipment removal for service; the MAX distance is dependent on the clutch.

(2) Blade ID is the diameter of the hole in the intermediate member.

PRODUCT NUMBER	5HP AG	5HP-E AG	AJ1	AJ2	AK +.001 -.000	HOLE SIZE BF1	HOLE SIZE BF2	BF1 BOLT SIZE	BF2 BOLT SIZE	CR	CW	P	PA	BLADE ID (2)	DBSE MIN.	DBSE MAX.
909981	2.95	3.80	3.437	3.562	2.875	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	4.34	1.50	5.75	3.25	2.75	1.78	1.90
910081	3.16	3.97	4.062	4.062	3.500	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	4.86	1.50	6.38	3.88	3.00	2.20	2.40
910181	3.22	3.85	4.250	4.250	3.500	0.265	0.327	.250-20 x 1.25	.312-18 x 1.25	4.81	1.25	6.75	4.38	3.12	2.44	2.58
910281	3.51	4.35	4.750	4.750	4.125	0.265	0.390	.250-20 x 1.25	.375-16 x 1.50	5.70	1.75	7.25	4.88	3.38	2.59	2.83
910381	3.60	4.72	5.250	5.375	4.500	0.327	0.515	.312-18 x 1.25	.500-13 x 1.50	6.92	2.50	8.38	5.00	4.12	3.17	3.75
910481	4.13	4.92	6.125	6.125	5.250	0.327	0.515	.312-18 x 1.50	.500-13 x 1.75	7.89	3.00	9.50	5.75	4.38	3.45	3.63
910581	4.35	—	7.000	7.000	5.750	0.515	0.640	.500-13 x 1.75	.625-11 x 2.00	9.28	3.53	11.38	6.75	5.25	3.81	4.14
911781	5.69	—	8.500	8.500	7.375	0.515	0.640	.500-13 x 2.50	.625-11 x 2.75	11.72	4.12	13.12	7.50	6.00	4.67	4.67

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	COUPLING ASSEMBLIES 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

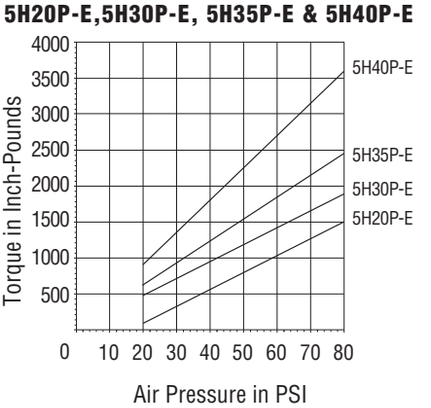
These can be attached to the clutch for offset shaft applications. Tapped holes are provided for ease of mounting. Nexen does not furnish these items.
For minimum sprocket requirements, see page 371.

CAUTION!

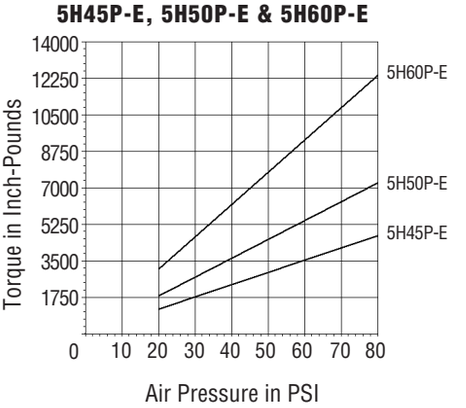
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

Torque Vs. Air Pressure

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

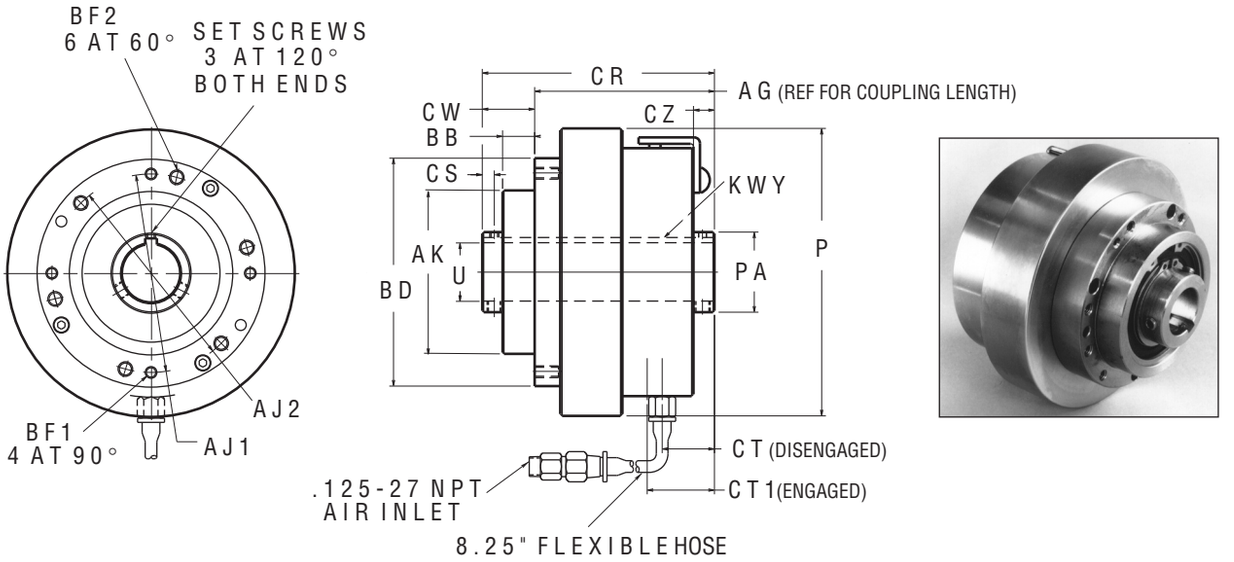


5H45P-E, 5H50P-E & 5H60P-E



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

Pilot Mount



MODEL	PRODUCT NUMBER	AG	AJ1	AJ2	AK +.000 -.001	BB	BD	BF1	BF2	CR	CS	CT	CT1	CW	CZ	P	KEYWAY PA	KEYWAY WD	KEYWAY DP	U +.001 -.000
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.

5HP-SP SERIES, PILOT MOUNT TOOTH CLUTCH

The 5HP-SP Series provides:

- Instantaneous Torque up to 32,000 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 3,700 rpm
- **13 Bore** sizes ranging from 0.875 to 2.938 inches
- Positive engagements for accurate positioning and registration
- For in-line applications to accommodate misalignment, we recommend use of Nexen Single and Double Flexible Couplings.

8 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 in-line shaft coupling applications
- 8.25 inch hose included.

5HP-SP Series, Pilot Mount Tooth Clutches–Single Position

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size WD x DP	# of Teeth	Shipping Wt. (Lbs)	COUPLING ASSEMBLIES SINGLE FLEX Product Number	COUPLING ASSEMBLIES DOUBLE FLEX Product Number
5H30PSP	912100	3700	0.875	0.188 x 0.188	91	7	909980	909981
5H30PSP	912112	3700	0.750	0.188 x 0.188	91	7	909980	909981
5H35PSP	912200	3200	1.125	0.250 x 0.250	106	10	910080	910081
5H35PSP	912213	3200	1.000	0.250 x 0.290	106	10	910080	910081
5H40PSP	912300	3000	1.250	0.250 x 0.250	122	12	910180	910181
5H40PSP	912312	3000	1.188	0.375 x 0.375	122	12	910180	910181
5H45PSP	912400	3000	1.500	0.375 x 0.375	137	16	910280	910281
5H45PSP	912412	3000	1.438	0.375 x 0.375	137	16	910280	910281
5H50PSP	912500	3000	1.750	0.375 x 0.375	152	20	910380	910381
5H50PSP	912512	3000	1.688	0.375 x 0.375	152	20	910380	910381
5H60PSP	912700	2400	1.938	0.500 x 0.500	183	30	910480	910481
5H70PSP	912800	2000	2.188	0.500 x 0.500	214	45	910580	910581
5H80PSP	912900	2000	2.938	0.750 x 0.500	244	70	911780	911781

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 90 and 91 for Flexible Coupling details.
For quick selection of Flexible Couplings, refer to the chart above.

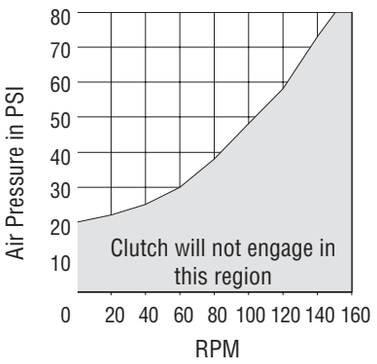
Pulleys, Sprockets, Gears

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!

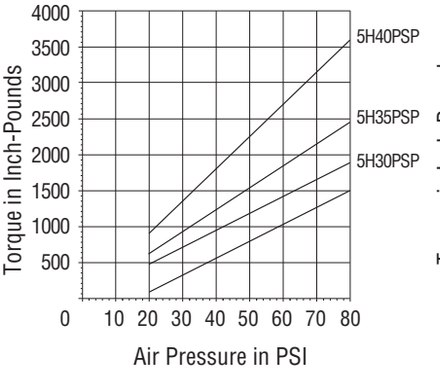
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

Min. Static Air Pressure for Engagement Vs. RPM

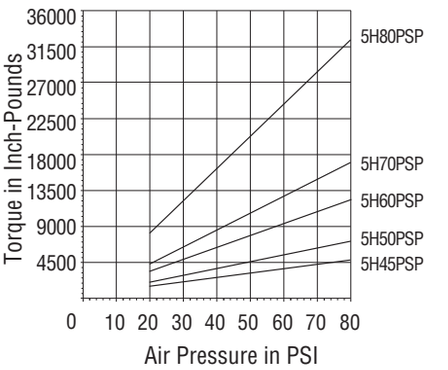


Torque Vs. Air Pressure

5H30PSP, 5H35PSP & 5H40PSP



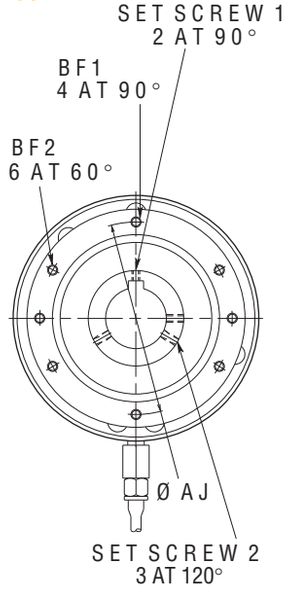
5H45PSP, 5H50PSP, 5H60PSP, 5H70PSP & 5H80PSP

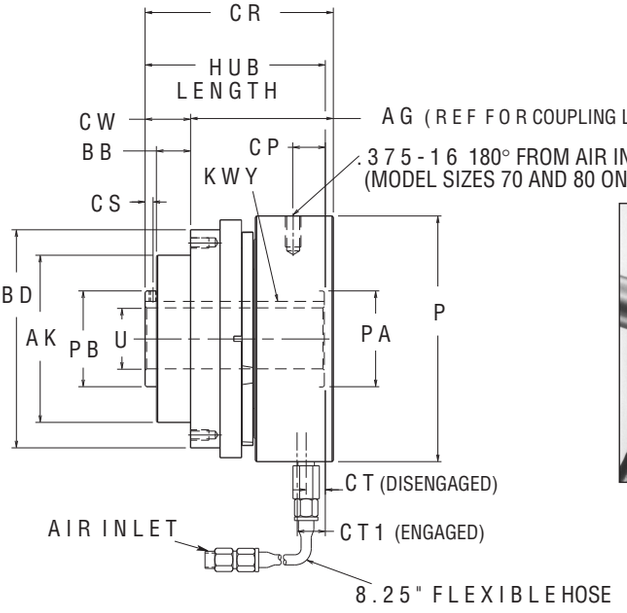


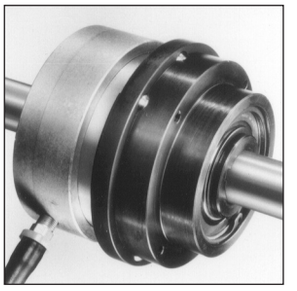
NOTE: Proper Single Position Tooth Clutch engagement depends upon 1) the allowable engagement speed with specific inertia loads and air pressure, and 2) the acceptable speed and air pressure which allow the clutch to engage in one position.

5HP-SP SERIES, PILOT MOUNT TOOTH CLUTCH - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount







MODEL	PRODUCT NUMBER	AIR INLET NPT	HUB LENGTH	AG	AJ	AK ±.001	BB	BD	BF1	BF2	CP	CR	CS	CT	CT1	CW	P	PA	PB
5H30PSP	912100	.125	3.89	3.09	3.437	2.874	0.69	3.88	.250-20	--	--	4.00	0.20	0.56	0.78	0.91	4.56	1.38	1.38
5H35PSP	912200	.125	4.12	3.25	4.062	3.499	0.69	4.50	.250-20	--	--	4.21	0.20	0.57	0.79	0.96	5.06	1.77	1.77
5H40PSP	912300	.125	4.21	3.35	4.250	3.499	0.69	4.88	.250-20	--	--	4.32	0.20	0.55	0.77	0.97	5.31	1.77	1.77
5H45PSP	912400	.125	4.63	3.52	4.750	4.124	0.84	5.38	.250-20	--	--	4.64	0.20	0.65	0.87	1.12	6.06	2.36	2.36
5H50PSP	912500	.125	4.76	3.60	5.250	4.499	0.78	6.00	.312-18	--	--	4.76	0.26	0.66	0.88	1.16	6.56	2.56	2.56
5H60PSP	912700	.125	5.39	4.08	6.125	5.249	0.87	7.00	.312-18	--	--	5.34	0.26	0.84	1.06	1.26	7.56	2.95	2.95
5H70PSP	912800	.250	5.96	4.46	7.000	5.749	1.00	8.25	.500-13	--	--	5.88	0.26	0.88	1.10	1.42	8.31	3.34	3.34
5H80PSP	912900	.250	8.60	5.74	8.500	7.374	1.88	9.50	--	.500-13	2.16	8.63	0.63	2.18	2.40	2.89	9.25	3.74	5.00

MODEL	PRODUCT NUMBER	SET SCREW 1	SET SCREW 2	KEYWAY WD	KEYWAY DP	U +.001 -.000
5H30PSP	912100	.190-24	--	0.188	0.094	0.875
5H35PSP	912200	.190-24	--	0.250	0.125	1.125
5H40PSP	912300	.190-24	--	0.250	0.125	1.250
5H45PSP	912400	.190-24	--	0.375	0.188	1.500
5H50PSP	912500	.250-20	--	0.375	0.188	1.750
5H60PSP	912700	.250-20	--	0.500	0.250	1.937
5H70PSP	912800	.250-20	--	0.500	0.250	2.187
5H80PSP	912900	--	.625-11	0.750	0.250	2.937

SINGLE AND DOUBLE FLEXIBLE COUPLING ASSEMBLIES

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

5HP-SP & 5HP-SP-E CLUTCH FLEXIBLE COUPLING ASSEMBLIES

Couple your shaft to a 5HP-SP or 5HP-SP-E Series Tooth Clutch with a Flexible Coupling Assembly. There are 16 Single Flex and 16 Double Flex Couplings, each designed to fit a specific 5HP-SP or 5HP-SP-E Tooth Clutch. Whatever the design style, you'll get:

- High Misalignment Capability
- Torque ratings up to 46,300 In. Lbs.
- Coupling discs made from composite materials provide the benefits of both a steel disc and elastomeric coupling.

Other benefits include:

- Requires no lubrication
- Coupling adds no backlash to the drive
- Provides torsional stiffness
- Dampens shock and vibration through the power train
- Reverse Bushing Tapers for bushing installation from the inside of the coupling.

Find the Flexible Coupling that matches your clutch and your application specifications on this page.

- Nickel-plated exterior
- For additional corrosion protection, contact the factory

5HP-SP, 5HP-SP-E Single & Double Flexible Coupling Selection Chart

1. Determine the Tooth Clutch required for your application and find it on the chart below;
2. Find the matching Flexible Coupling Assembly at the top of the column;
3. Double check the Flexible Coupling specifications to ensure conformity with all mating components;
4. A Taper Lock Bushing is required, see chart below for recommended part. This is customer furnished;
5. Clutch and Flexible Coupling Assembly must be ordered separately.

Single Flex #:	909980	910080	910180	910280	910380	910480	910580	911780
Double Flex #:	909981	910081	910181	910281	910381	910481	910581	911781

Model Size:	5H30PSP	5H35PSP	5H40PSP	5H45PSP	5H50PSP	5H60PSP	5H70PSP	5H80PSP
Clutch Product #:	912100	912200	912300	912400	912500	912700	912800	912900
	912112	912213	912312	912412	912512			
Model Size:	5H30PSP-E	5H35PSP-E	5H40PSP-E	5H45PSP-E	5H50PSP-E	5H60PSP-E		
Clutch Prod.#:	913002	913012	913022	913032	913042	913052		

Single & Double Flexible Coupling Product Details

Single Flex Product Number	Double Flex Product Number	Dodge Taper Lock® Bushing Number	Bore Range MIN. (In)	Bore Range MAX. (In)	Single Flex Shipping Wt. (Lbs)	Double Flex Shipping Wt. (Lbs)
909980	909981	1215	0.500	1.250	8	10
910080	910081	1615	0.500	1.625	10	13
910180	910181	2012	0.500	2.000	12	15
910280	910281	2517	0.500	2.500	14	16
910380	910381	2517	0.500	2.500	22	25
910480	910481	3030	0.938	3.000	29	34
910580	910581	3535	1.188	3.938	70	82
911780	911781	4040	1.438	4.438	110	130

Single Flexible Coupling Misalignment Capacity

Product Number	Angular (Degrees)	Axial (In)	Parallel (In)
909980	1.5	0.065	0.011
910080	1.5	0.070	0.012
910180	1.5	0.080	0.013
910280	1.5	0.090	0.014
910380	1.5	0.105	0.017
910480	1.5	0.120	0.019
910580	1.5	0.135	0.022
911780	1.5	0.155	0.026

Double Flexible Coupling Misalignment Capacity

Product Number	Angular (Degrees)	Axial (In)	Parallel (In)
909981	3.0	0.130	0.063
910081	3.0	0.140	0.078
910181	3.0	0.160	0.085
910281	3.0	0.180	0.091
910381	3.0	0.210	0.104
910481	3.0	0.240	0.117
910581	3.0	0.270	0.137
911781	3.0	0.310	0.170

NOTE: If parallel, angular and axial misalignment are all required, be certain that the combined percentage of each does not exceed 100%. For instance, if 100% of the parallel misalignment rating is required, no angular or axial misalignment is allowed. If 50% of the parallel misalignment rating is required, only 50% of the angular misalignment OR 50% of the axial rating will be available.

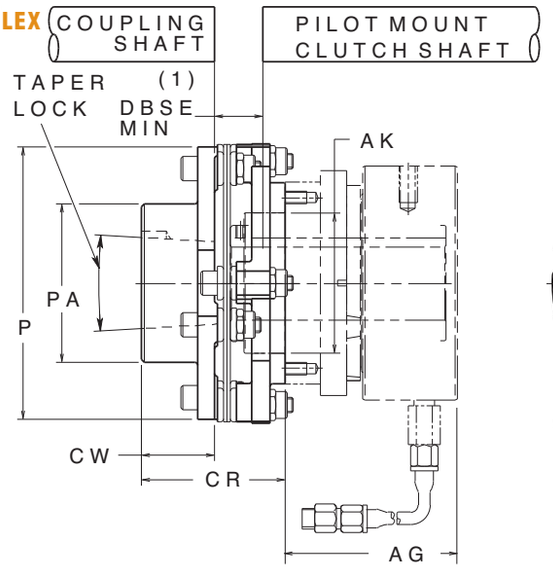
Reverse Bushing Tapered Couplings

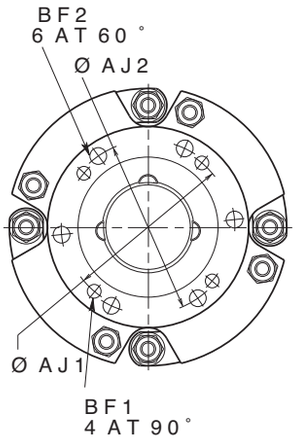
Single Flex #:	909984	910084	910184	910284	910384	910484	910584	911784
Double Flex #:	909985	910085	910185	910285	910385	910485	910585	911785

Model Size:	5H30PSP	5H35PSP	5H40PSP	5H45PSP	5H50PSP	5H60PSP	5H70PSP	5H80PSP
Clutch Product #:	912100	912200	912300	912400	912500	912700	912800	912900
	912112	912213	912312	912412	912512			
Model Size:	5H30PSP-E	5H35PSP-E	5H40PSP-E	5H45PSP-E	5H50PSP-E	5H60PSP-E		
Clutch Prod. #:	913002	913012	913022	913032	913042	913052		

5HP-SP, 5HP-SP-E SERIES FLEXIBLE COUPLING ASSEMBLIES - APPROX. DIMENSIONS (INCHES)

Single Flex

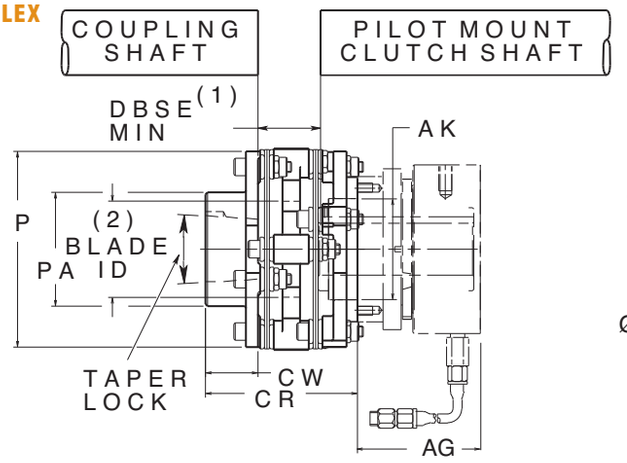


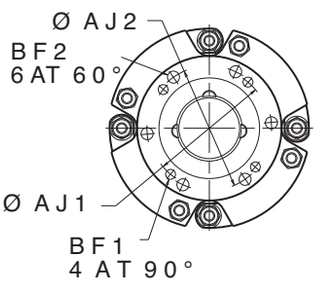


DBSE (1) = Distance Between Shaft Ends. Less than MIN requires equipment removal for service; the MAX distance is dependent on the clutch.

PRODUCT NUMBER	5HP-SP AG	5HP-SP-E AG	AJ1	AJ2	AK +.001 -.000	HOLE SIZE BF1	HOLE SIZE BF2	BF1 BOLT SIZE	BF2 BOLT SIZE	CR	CW	P	PA	DBSE MIN.	DBSE MAX.
909980	3.09	3.80	3.437	3.562	2.875	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	2.95	1.50	5.75	3.25	0.39	0.51
910080	3.25	3.97	4.062	4.062	3.500	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	3.17	1.50	6.38	3.88	0.52	0.71
910180	3.35	3.85	4.250	4.250	3.500	0.265	0.327	.250-20 x 1.25	.312-18 x 1.25	2.97	1.25	6.75	4.38	0.59	0.74
910280	3.52	4.35	4.750	4.750	4.125	0.265	0.390	.250-20 x 1.25	.375-16 x 1.50	3.70	1.75	7.25	4.88	0.59	0.83
910380	3.60	4.72	5.250	5.375	4.500	0.327	0.515	.312-18 x 1.25	.500-13 x 1.50	4.61	2.50	8.38	5.00	0.86	1.45
910480	4.08	4.92	6.125	6.125	5.250	0.327	0.515	.312-18 x 1.50	.500-13 x 1.75	5.31	3.00	9.50	5.75	0.88	1.07
910580	4.46	—	7.000	7.000	5.750	0.515	0.640	.500-13 x 1.75	.625-11 x 2.00	6.23	3.53	11.38	6.75	1.02	1.09
911780	5.74	—	8.500	8.500	7.375	0.515	0.640	.500-13 x 2.50	.625-11 x 2.75	7.95	4.12	13.12	7.50	1.06	1.06

Double Flex





DBSE (1) = Distance Between Shaft Ends. Less than MIN requires equipment removal for service; the MAX distance is dependent on the clutch.

(2) Blade ID is the diameter of the hole in the intermediate member.

PRODUCT NUMBER	5HP-SP AG	5HP-SP-E AG	AJ1	AJ2	AK +.001 -.000	HOLE SIZE BF1	HOLE SIZE BF2	BF1 BOLT SIZE	BF2 BOLT SIZE	CR	CW	P	PA	BLADE ID (2)	DBSE MIN.	DBSE MAX.
909981	3.09	3.80	3.437	3.562	2.875	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	4.34	1.50	5.75	3.25	2.75	1.78	1.90
910081	3.25	3.97	4.062	4.062	3.500	0.265	0.327	.250-20 x 1.00	.312-18 x 1.25	4.86	1.50	6.38	3.88	3.00	2.20	2.40
910181	3.35	3.83	4.250	4.250	3.500	0.265	0.327	.250-20 x 1.25	.312-18 x 1.25	4.81	1.25	6.75	4.38	3.12	2.44	2.58
910281	3.52	4.35	4.750	4.750	4.125	0.265	0.390	.250-20 x 1.25	.375-16 x 1.50	5.70	1.75	7.25	4.88	3.38	2.59	2.83
910381	3.60	4.72	5.250	5.375	4.500	0.327	0.515	.312-18 x 1.25	.500-13 x 1.50	6.92	2.50	8.38	5.00	4.12	3.17	3.75
910481	4.08	4.92	6.125	6.125	5.250	0.327	0.515	.312-18 x 1.50	.500-13 x 1.75	7.89	3.00	9.50	5.75	4.38	3.45	3.63
910581	4.46	—	7.000	7.000	5.750	.515	.640	.500-13 x 1.75	.625-11 x 2.00	9.28	3.53	11.38	6.75	5.25	3.81	4.14
911781	5.74	—	8.500	8.500	7.375	.515	.640	.500-13 x 2.50	.625-11 x 2.75	11.72	4.12	13.12	7.50	6.00	4.67	4.67

5HP-SP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCH

The 5HP-SP-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 engagement for accurate position and registration
- 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-SP-E, Enclosed Pilot Mount Tooth Clutches–Single position

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size (SQ)	# of Teeth	Shipping Wt. (Lbs)	COUPLING ASSEMBLIES SINGLE FLEX Product Number	COUPLING ASSEMBLIES DOUBLE FLEX Product Number
5H30PSP-E	913002	1650	0.875	0.188	91	7	909980	909981
5H35PSP-E	913012	1350	1.125	0.250	106	10	910080	910081
5H40PSP-E	913022	1350	1.250	0.250	122	12	910180	910181
5H45PSP-E	913032	1200	1.500	0.375	137	16	910280	910281
5H50PSP-E	913042	1100	1.750	0.375	152	20	910380	910381
5H60PSP-E	913052	1000	1.938	0.500	183	30	910480	910481

Keys are customer furnished and must be ful- 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 90 and 91 for Flexible Coupling details.
For quick selection of Flexible Couplings, refer to the chart above.

Pulleys, Sprockets, Gears

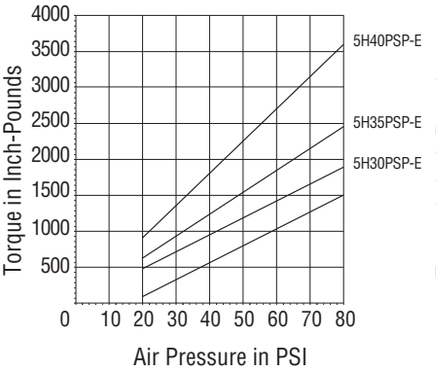
These can be attached to the clutch for off set shaft applications. Tapped holes are provided for ease of mounting. Nexen does not furnish these items.
For minimum sprocket requirements, see page 371.

CAUTION!

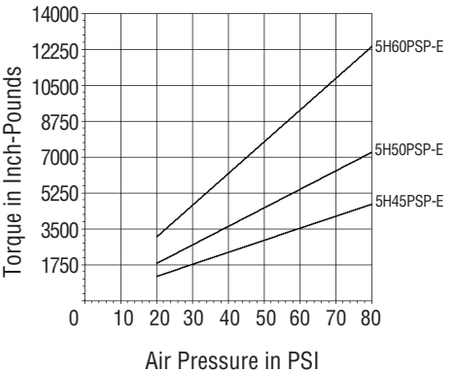
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

Torque Vs. Air Pressure

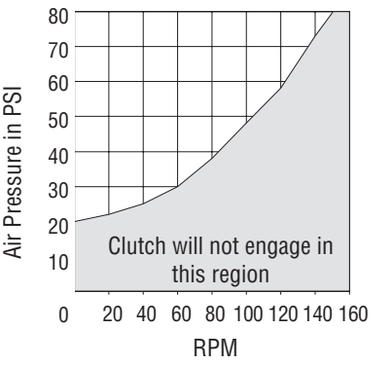
5H30PSP-E, 5H35PSP-E & 5H40PSP-E



5H45PSP-E, 5H50PSP-E & 5H60PSP-E



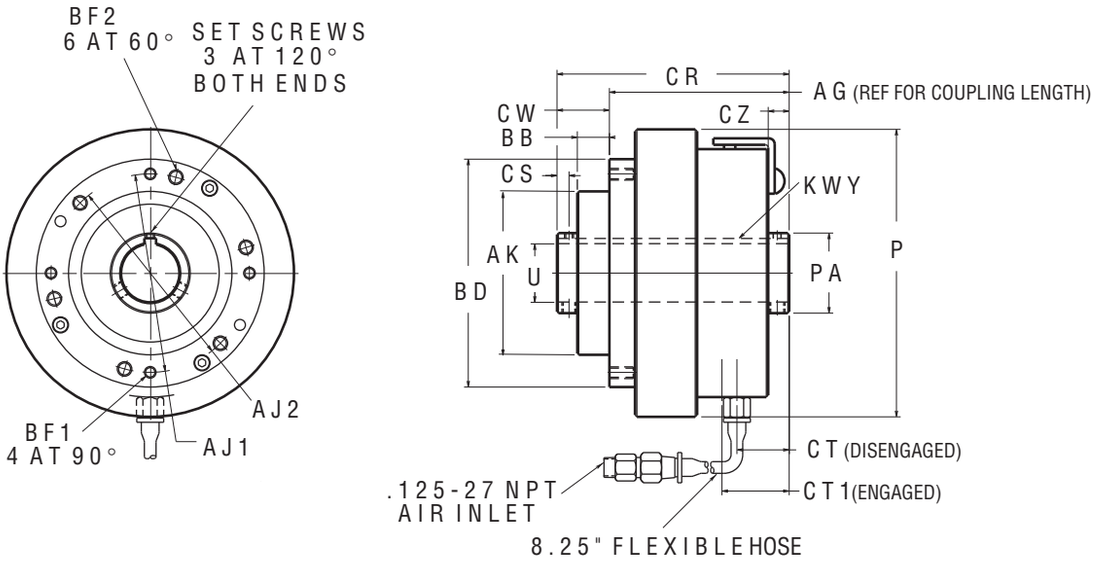
Min. Static Air Pressure for Engagement Vs. RPM



NOTE: Proper Single Position Tooth Clutch engagement depends upon 1) the allowable engagement speed with specific inertia loads and air pressure, and 2) the acceptable speed and air pressure which allow the clutch to engage in one position.

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

Pilot Mount



MODEL	PRODUCT NUMBER	AG	AJ1	AJ2	AK +.000 -.001	BB	BD	BF1	BF2	CR	CS	CT	CT1	CW	CZ	P	PA	KEYWAY WD	KEYWAY DP	U +.001 -.000
5H30PSP-E	913002	3.80	3.437	3.562	2.875	0.69	4.12	.250-20	.312-18	4.83	0.23	1.06	1.27	1.03	0.38	5.03	1.34	0.188	0.094	0.875
5H35PSP-E	913012	3.97	4.062	4.062	3.500	0.69	4.50	.250-20	.312-18	5.10	0.25	1.05	1.27	1.13	0.39	6.16	1.72	0.250	0.125	1.125
5H40PSP-E	913022	3.85	4.250	4.250	3.500	0.69	4.88	.250-20	.312-18	4.97	0.26	1.12	1.34	1.12	0.45	6.16	1.72	0.250	0.125	1.250
5H45PSP-E	913032	4.35	4.750	4.750	4.125	0.84	5.40	.250-20	.375-16	5.71	0.31	1.19	1.41	1.36	0.52	6.66	2.31	0.375	0.188	1.500
5H50PSP-E	913042	4.72	5.250	5.375	4.500	0.78	6.12	.312-18	.500-13	5.97	0.31	1.22	1.48	1.25	0.51	7.66	2.51	0.375	0.188	1.750
5H60PSP-E	913052	4.92	6.125	6.125	5.250	0.87	7.00	.312-18	.500-13	6.40	0.37	1.45	1.67	1.48	0.66	8.41	2.87	0.500	0.250	1.938

MODEL	PRODUCT NUMBER	SET SCREW	
5H30PSP-E	913002	(2) .190-24	(4) .312-24
5H35PSP-E	913012	(2) .190-24	(4) .312-24
5H40PSP-E	913022	(2) .190-24	(4) .312-24
5H45PSP-E	913032	(2) .190-24	(4) .312-24
5H50PSP-E	913042	(2) .250-20	(4) .500-13
5H60PSP-E	913052	(2) .250-20	(4) .500-13

SINGLE AND DOUBLE FLEXIBLE COUPLING ASSEMBLIES

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

5HS SERIES, SPROCKET TOOTH CLUTCHES

The 5HS Series Provides:

- Torque capacity up to 3500 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 4000 rpm
- **3 Bore** sizes ranging from 0.625 to 1.250 inches
- Positive engagement without slippage
- Bi-directional operation
- Adjustable torque by varying air pressure
- Sprocket mount capability
- Static air pressure operation
- Small, light weight durability
- 5 inch or 8.25 inch hose included

3 Models offer design flexibility:

- 1 Integral Single Sprocket design
- 2 Integral Double/Single Sprocket designs

These clutches are ideal for in-line, zoned conveyor applications, as well as other applications that require bi-directional movement.

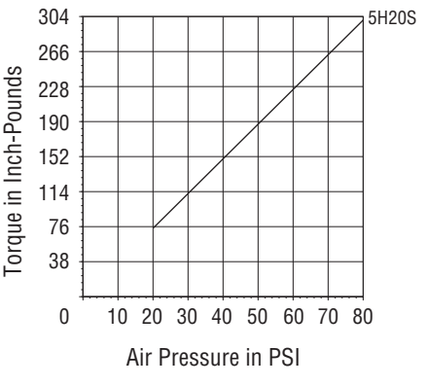
5HS Series, Sprocket Tooth Clutches

Model	Product Number	Sprocket	Bore (In)	Speeds Up to RPM	Key Size (SQ)	SPROCKET SPECS Chain Size	SPROCKET SPECS Pitch	# of Teeth	Shipping Wt. (Lbs)
5H20S	911386	single	0.625	4000	0.188	40	0.500	18	10
5H30S	911310	double/single	1.000	3700	0.250	50	0.625	20	18
5H40S	911320	double/single	1.250	3000	0.250	60	0.750	21	40

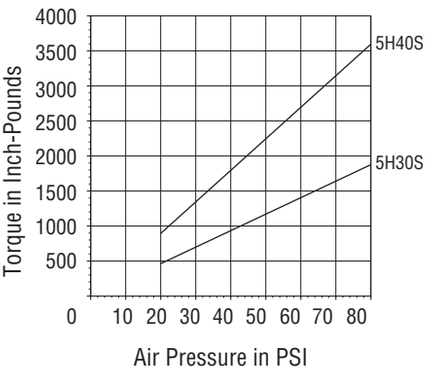
Keys are customer furnished and must be full length.

Torque Vs. Air Pressure

5H20S

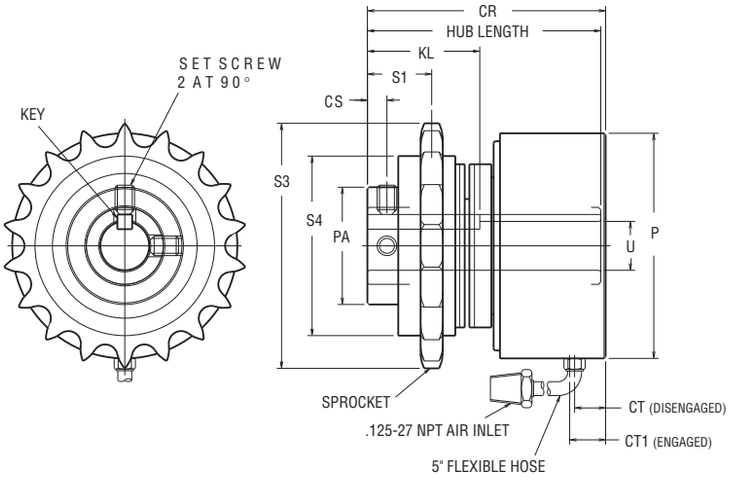


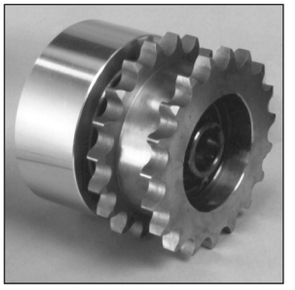
5H30S & 5H40S



5HS SERIES, SPROCKET TOOTH CLUTCHES - APPROXIMATE DIMENSIONS (INCHES)

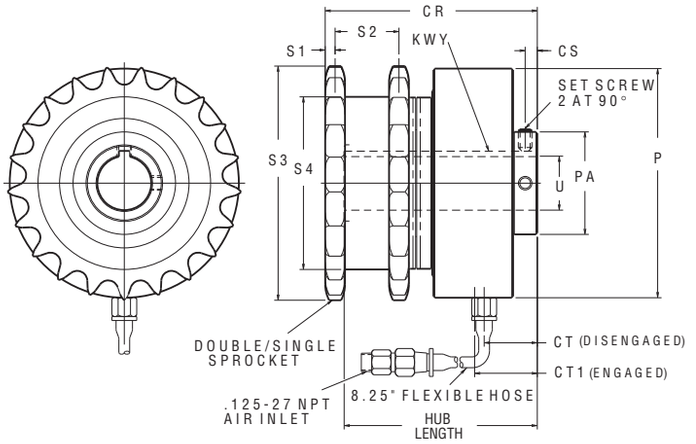
Sprocket Mount
5H20S





MODEL	PRODUCT NUMBER	HUB LENGTH	SPROCKET CHAIN SIZE	SPROCKET PITCH	SPROCKET #OF TEETH	SET SCREW	CR	CS	CT	CT1	KEY (SQ)	KL	P	PA	S1	S3	S4	U +.001 -.000
5H20S	911386	2.99	40	0.500	18	.250-20	3.05	0.25	0.40	0.46	0.188	1.44	2.88	1.50	0.82	3.14	2.30	0.625

Sprocket Mount
5H30S & 5H40S



MODEL	PRODUCT NUMBER	HUB LENGTH	SPROCKET CHAIN SIZE	SPROCKET PITCH	SPROCKET # OF TEETH	SET SCREW	KEYWAY WD	KEYWAY DP	CR	CS	CT	CT1	P	PA	S1	S2	S3	S4	U +.001 -.000
5H30S	911310	4.17	50	0.625	20	.250-20	0.125	0.250	4.53	0.25	1.22	1.30	4.56	1.38	0.17	1.31	4.32	3.12	1.000
5H40S	911320	4.48	60	0.750	21	.312-18	0.125	0.250	4.91	0.28	1.23	1.31	5.31	2.38	0.23	1.48	5.43	4.00	1.250

5HP-SE SERIES, SPRING ENGAGED TOOTH CLUTCHES, PILOT & FLANGE MOUNT MODELS

The 5HP-SE Series provides:

- Spring engaged, Air released
- Instantaneous Torque up to 15,000 In. Lbs.
- Maximum Operating Speed up to 3,200 rpm, Pilot Mount and 3,700 rpm, Flange Mount
- **Bore sizes:** Up to 1.938
- Positive engagements in multiple positions
- Immediate start-up with no slippage
- Versatile mounting capability for bearing supported pulley, sprocket or gear
- For Pilot Mount in-line applications to accommodate misalignment, we recommend use of Nexen Single and Double Flexible Couplings.

16 Models offer design flexibility:

- Designed with tapped mounting holes
- Sealed, radial ball bearings
- Thru-shaft mounting design uses a full-length keyway
- Pilot Mount offers ability to mount a pulley, sprocket or gear on the clutch
- Pilot Mount offers ability to use a Flexible Clutch Coupling for in-line shaft coupling applications
- 8.25 inch hose included.

5HP-SE Series, Pilot Mount Spring Engaged Tooth Clutches

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size WD x DP	# of Teeth	Shipping Wt. (Lbs)	Torque (In. Lbs.)	Disengagement Pressure
5H30PSE	906708	3700	0.875	0.250 x 0.125	91	7	880	55
5H35PSE	910091	3200	1.000	0.250 x 0.125	106	10	1480	45
5H35PSE	910093	3200	.875	0.250 x 0.125	106	10	1480	45
5H35PSE	910094	3200	25mm	8mm x 3,3mm	106	10	1480	45
5H45PSE-E	910204	3000	1.500	0.375 x 0.180	137	16	3650	70
5H45PSE	910224	3000	1.375	0.310 x 0.160	137	16	3650	70
5H50PSE	910304	3000	1.500	0.375 x 0.180	152	19	8230	105
5H60PSE	910404	2400	1.938	0.500 x 0.250	183	30	6790	40
5H60PSE	910407	2400	1.625	0.500 x 0.250	183	30	6790	40
5H60PSE	910419	2400	50 mm	14 x 3,8mm	183	50	6790	40
5H60PSE	910432	2400	1.938	0.500 x 0.250	183	50	10,200	60
5H60PSP-SE	912705	2400	1.938	0.500 x 0.500	183	30	6790	62
5H60PSE-E	910410	2400	1.938	0.500 x 0.250	183	58	15,000	90

Keys are customer furnished and must be full- length.

5H-SE Series, Flange Mount Spring Engaged Tooth Clutches

Model	Product Number	Speeds Up to RPM	Bore (In)	Key Size WD x DP	# of Teeth	Shipping Wt.(Lbs)	Torque (In. Lbs.)	Disengagement Pressure
5H30SE	906701	3700	0.875	0.188 x 0.188	91	7	880	60
5H35SE	910089	3200	25 mm	8 x 3,3mm	106	16	1480	45
5H50SE	907101	3000	1.750	0.375 x 0.375	152	18	8230	105

Bearing life is optimized at lower speeds and air pressure. For higher speeds consult factory.
Keys are customer furnished and must be full-length.

Attachment Options (Pilot Mount Series)

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.

SINGLE AND DOUBLE FLEXIBLE COUPLING ASSEMBLIES

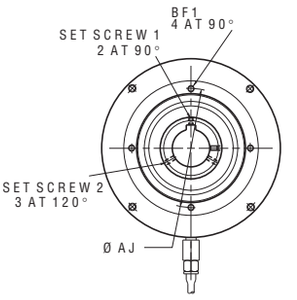
Both Single and Double Flexible Couplings are available for the 5HP Pilot Mount Tooth Clutch. See the following pages for details.

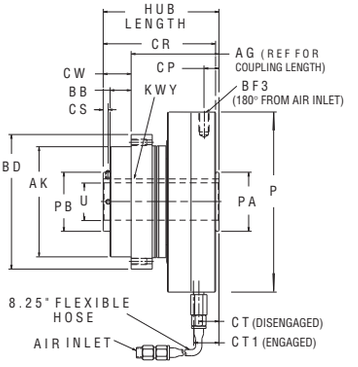
5HP-SE SERIES, SPRING ENGAGED TOOTH CLUTCHES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount

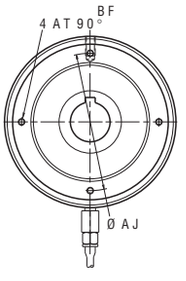
MODEL	PRODUCT NUMBER	AIR INLET NPT	HUB LENGTH	AG	AJ	AK ±.001	BB	BD	BF1	CR	CS	CT	CT1	CW	P	PA
5H30PSE	906708	.125	3.90	3.00	3.437	2.874	0.69	4.56	.190-24	3.90	0.20	1.59	1.68	0.91	5.31	1.38
5H35PSE	910091	.125	4.37	3.16	4.062	3.499	0.69	4.50	.250-20	4.06	0.20	0.72	0.80	0.96	6.13	1.77
5H35PSE	910093	.125	4.37	3.16	4.062	3.499	0.69	4.50	.250-20	4.06	0.20	0.72	0.80	0.96	6.13	1.77
5H35PSE	910094	.125	4.37	3.16	4.062	3.499	0.69	4.50	.250-20	4.06	0.20	0.72	0.80	0.96	6.13	1.77
5H45PSE	910224	.125	4.65	3.59	4.750	4.124	0.84	5.38	.250-20	4.72	0.20	1.45	1.53	1.13	7.25	2.36
5H45PSE-E	910204	.125	5.40	3.51	4.750	4.124	0.84	5.38	.250-20	4.49	0.20	0.81	0.88	1.12	7.25	2.36
5H50PSE	910304	.125	5.39	3.60	5.250	4.499	0.78	6.00	.312-18	4.61	0.26	1.57	0.88	1.16	7.75	2.56
5H60PSE	910404 910432	.125	5.39	4.13	6.125	5.249	0.88	7.00	.312-18	5.18	0.26	1.75	1.08	1.26	9.31	2.95
5H60PSE	910407	.250	5.39	4.13	6.125	5.249	0.88	7.00	.312-18	5.18	0.26	1.00	1.08	1.26	9.31	2.95
5H60PSE	910419	.250	5.39	4.13	6.102	5.196	0.88	7.00	M8 x.125	5.18	0.29	1.75	1.08	1.27	9.31	2.95
5H60PSP-SE	912705	.250	5.39	4.13	6.125	5.249	0.88	7.00	.312-18	5.18	0.62	1.00	1.08	1.26	9.31	2.95

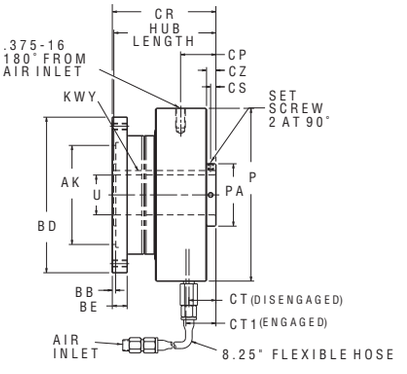
MODEL	PRODUCT NUMBER	PB	SET SCREW	KEYWAY WD ±.001	KEYWAY DP ±.005	U +.001 -.000
5H30PSE	906708	1.38	.190-24	0.188	.094	0.875
5H35PSE	910091	1.77	.190-24	0.250	.125	1.000
5H35PSE	910093	1.77	.190-24	0.250	.125	0.875
5H35PSE	910094	1.77	.190-24	8mm	3,3mm	25mm
5H45PSE	910224	2.36	.190-24	0.375	.188	1.375
5H45PSE-E	910204	2.36	.190-24	0.375	.188	1.500
5H50PSE	910304	2.56	.250-20	0.375	.188	1.500
5H60PSE	910404 910432	2.95	.250-20	0.500	.250	1.938
5H60PSE	910407	2.95	.250-20	0.500	.250	1.625
5H60PSE	910419	2.95	.250-20	14mm	3,8mm	50mm
5H60PSP-SE	912705	2.95	.250-20	1.000	.250	1.938





Flange Mount





MODEL	PRODUCT NUMBER	AIR INLET NPT	HUB LENGTH	AJ	AK +.001 -.000	BB	BD ±.001	BE	BF	CR	CS	CT	CT1	CZ	P	PA
5H30SE	906701	.125	3.28	3.687	2.441	0.14	4.374	0.50	.250-20	3.35	0.20	0.92	0.99	0.25	5.31	1.38
5H35SE	910089	.250	3.05	4.331	2.953	0.08	4.881	0.56	M6	3.52	0.20	--	--	0.47	6.12	1.77
5H50SE	907101	.125	3.99	5.687	3.937	0.14	6.374	0.69	.375-16	4.07	0.26	1.15	1.22	0.49	7.75	2.56

MODEL	PRODUCT NUMBER	SET SCREW	KEYWAY WD	KEYWAY DP	U +.001 -.000
5H30SE	906701	.190-24	0.188	.094	0.875
5H35SE	910089	M5	8 mm	3,3 mm	25 mm
5H50SE	907101	.250-20	0.375	.188	1.750

METRIC 5H SERIES, FLANGE MOUNT TOOTH CLUTCHES

The Metric 5H Series provides:

- Instantaneous Torque up to 2,000 Nm
- Maximum Operating Speed up to 3700 rpm
- **7 Standard Bore** sizes ranging from 20 to 55 millimeters
- **7 Minimum Bore** sizes ranging from 12,7 to 47,6 millimeters–you machine and assemble
- Positive engagement in multiple positions
- Immediate start-up with no slippage
- Versatile Mounting Capability for bearing supported pulley, sprocket or gear.

7 Models offer design flexibility:

- Sealed, radial ball bearings
- **Pilot Mount** design with tapped mounting holes
- Thru-shaft mounting design uses a full-length keyway
- 222 millimeter hose included.

METRIC 5H SERIES, FLANGE MOUNT TOOTH CLUTCHES—MULTIPOSITION

Standard Bore Clutch:

Model	Product Number	Speeds Up to RPM	Bore (mm)	KEYWAY WD x DP	# of Teeth	Shipping Wt. (kg)
5H30	906703	3700	20	6 x 2,8	91	3,2
5H35	906802	3200	25	8 x 3,3	106	4,1
5H40	906902	3000	30	8 x 3,3	122	5
5H45	907002	3000	35	10 x 3,3	137	7
5H50	907103	3000	40	12 x 3,3	152	8,1
5H60	907202	2400	45	14 x 3,8	183	13
5H70	907302	2000	55	16 x 4,3	214	18

Keys are customer furnished and must be full-length.
Bearing life is optimized at lower speeds and air pressure.

Minimum Bore Clutch:

Minimum bore clutches are supplied unassembled with machinable hubs.

Model	Product Number	Speeds Up to RPM	Bore (mm)	# of Teeth	Shipping Wt. (kg)
5H30	906704	3700	12,7	91	3,2
5H35	906803	3200	15,9	106	4,1
5H40	906903	3000	19,1	122	5
5H45	907003	3000	22,2	137	7
5H50	907104	3000	25,4	152	8,1
5H60	907203	2400	31,8	183	13
5H70	907303	2000	47,6	214	18

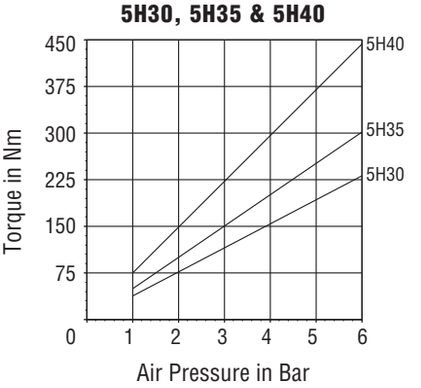
Keys are customer furnished and must be full-length.

CAUTION!

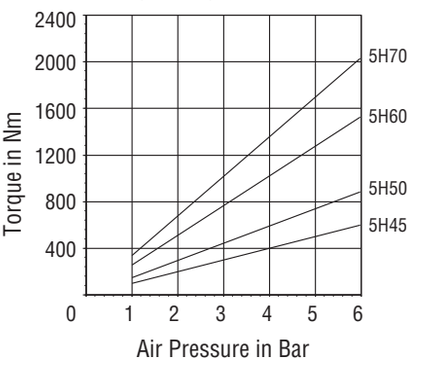
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

TORQUE VS. AIR PRESSURE

5H30, 5H35 & 5H40

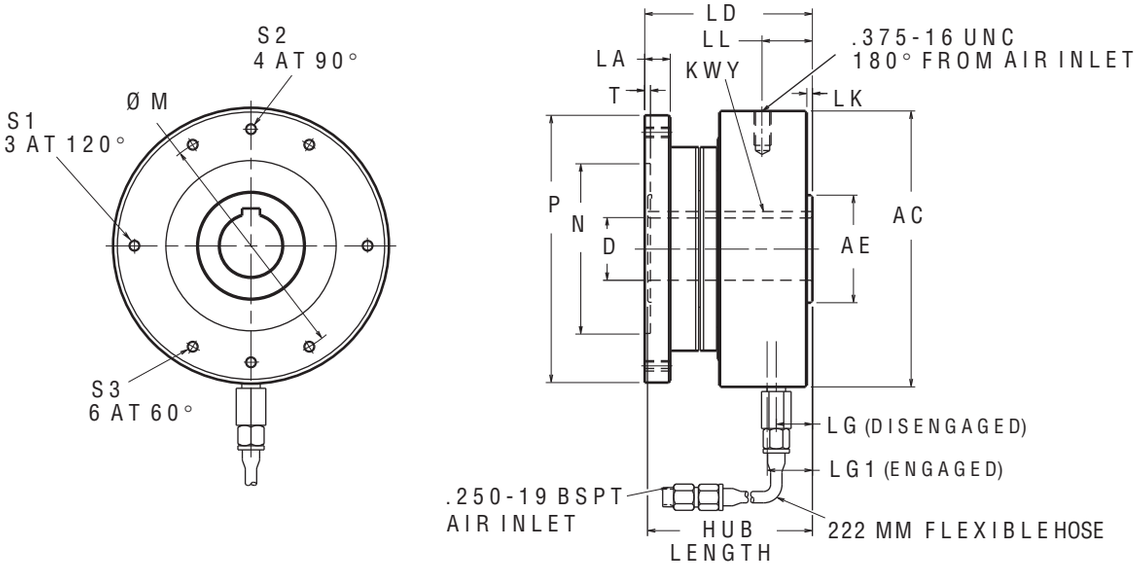


5H45, 5H50, 5H60 & 5H70



Torque (In. Lbs.) = Nm x 8.849
PSI = Bar ÷ .0689

METRIC 5H SERIES, FLANGE MOUNT CLUTCH - APPROXIMATE DIMENSIONS (MILLIMETERS)



MODEL	PRODUCT NUMBER	AC	AE	D H7	LA	LD	LG	LG1	LK	LL	M	N H6	P h8	S1	S2	S3	T	HUB LENGTH	KWY WD x DP
5H30	906703	116	35	20	13	79	17	19	0	--	90	62	111	M6	M6	--	3,4	77	6 x 2,8
5H35	906802	129	45	25	14	83	18	20	1,5	--	110	75	124	M6	M6	--	2,8	81	8 x 3,3
5H40	906902	135	45	30	14	85	17	19	0,3	--	120	75	136	M6	M6	--	3,2	83	8 x 3,3
5H45	907002	154	60	35	14	94	20	22	3,0	--	130	95	149	--	M6	M6	3,2	92	10 x 3,3
5H50	907103	167	65	40	18	96	22	24	5,0	--	140	100	162	--	M8	M8	3,5	94	12 x 3,3
5H60	907202	192	75	45	18	108	26	28	6,0	--	170	115	194	--	M8	M8	4,4	106	14 x 3,8
5H70	907302	211	85	55	21	124	28	30	8,1	28	190	130	213	--	M10	M10	9,4	122	16 x 4,3

NOTE: Drawings are expressed in third angle projection.

METRIC 5HP SERIES, PILOT MOUNT TOOTH CLUTCHES

The Metric 5HP Series provides:

- Instantaneous Torque up to 3,705 Nm
- Maximum Operating Speed up to 3700 rpm
- **8 Standard Bore** sizes ranging from 20 to 75 millimeters
- **8 Minimum Bore** sizes ranging from 12,7 to 47,6 millimeters–you machine and assemble
- Positive engagement in random positions.

8 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
- 222 millimeter hose included.

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 (In. Lbs.) = Nm x 8.849
PSI = Bar ÷ .0689

METRIC 5HP SERIES, PILOT MOUNT TOOTH CLUTCHES—MULTIPOSITION

Standard Bore Clutch:

Model	Product Number	Speeds Up to RPM	Bore (mm)	KEYWAY WD x DP	# of Teeth	Shipping Wt. (kg)
5H30-P	909902	3700	20	6 x 2,8	91	3,2
5H35-P	910002	3200	25	8 x 3,3	106	4,5
5H40-P	910102	3000	30	8 x 3,3	122	5,6
5H45-P	910202	3000	35	10 x 3,3	137	7,1
5H50-P	910302	3000	40	12 x 3,3	152	8,8
5H60-P	910402	2400	45	14 x 3,8	183	13,5
5H70-P	910503	2000	55	16 x 4,3	214	21
5H80-P	911702	2000	75	20 x 4,9	244	32

Keys are customer furnished and must be full-length.

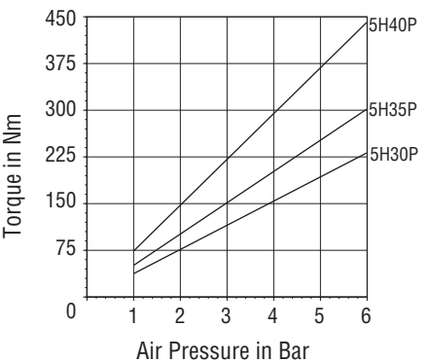
Minimum Bore Clutch:
Minimum bore clutches are supplied unassembled with machinable hubs.

Model	Product Number	Speeds Up to RPM	Bore (mm)	# of Teeth	Shipping Wt. (kg)
5H30-P	909903	3700	12,7	91	3,2
5H35-P	910003	3200	15,9	106	4,5
5H40-P	910103	3000	19,1	122	5,6
5H45-P	910203	3000	22,2	137	7,1
5H50-P	910303	3000	25,4	152	8,8
5H60-P	910403	2400	31,8	183	13,5
5H70-P	910504	2000	38,1	214	21
5H80-P	911703	2000	47,6	244	32

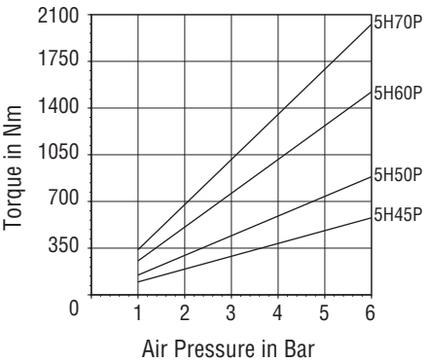
Keys are customer furnished and must be full-length.

TORQUE VS. AIR PRESSURE

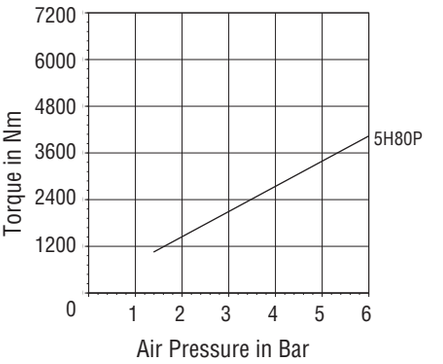
5H30P, 5H35P & 5H40P



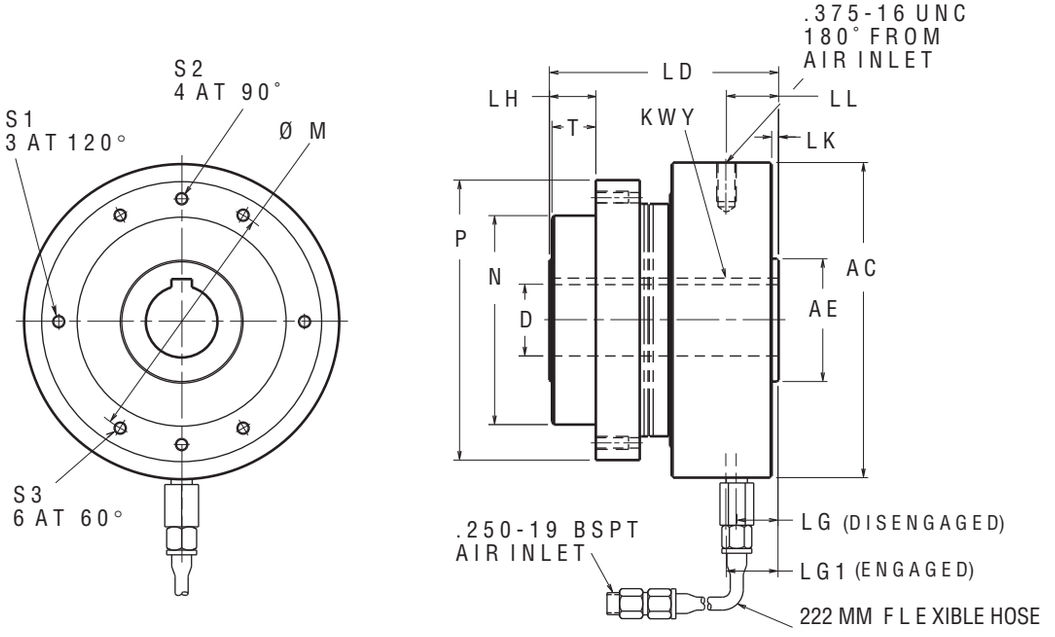
5H45P, 5H50P,5H60P & 5H70P



5H80P



METRIC 5HP PILOT MOUNT CLUTCH - APPROXIMATE DIMENSIONS (MILLIMETERS)



MODEL	PRODUCT NUMBER	AC	AE	D H7	LD	LG	LG1	LH	LK	LL	M	N h8	P	S1	S2	S3	T	KWY WD x DP
5H30-P	909902	116	35	20	93	18	20	18	1	--	88	73	98	M6	M6	--	17,5	6 x 2,8
5H35-P	910002	129	45	25	98	18	20	18	1	--	102	88	114	M6	M6	--	17,5	8 x 3,3
5H40-P	910102	135	45	30	101	18	20	19	1	--	108	88	124	M6	M6	--	17,5	8 x 3,3
5H45-P	910202	154	60	35	112	20	22	23	3	--	120	102	137	--	M6	M6	21,4	10 x 3,3
5H50-P	910302	167	65	40	113	21	23	22	4	--	135	112	152	--	M8	M8	19,8	12 x 3,3
5H60-P	910402	192	75	45	129	25	27	24	5	--	155	132	178	--	M8	M8	22,2	14 x 3,8
5H70-P	910503	211	85	55	151	25	27	40	5	30	180	145	210	--	M10	M10	30,2	16 x 4,3
5H80-P	911702	235	95	75	191	38	61	46	8	38	216	187	241	--	--	M12	47,6	20 x 4,9

NOTE: Drawings are expressed in third angle projection.

METRIC 5HP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCHES

The Metric 5HP-E Series provides:

- Water protection per NEMA standard 1.26.5 (Water-proof machine)
- Instantaneous Torque up to 1,300 Nm
- Maximum Operating Speed up to 1650 rpm
- **6 Standard Bore** sizes ranging from 20 to 45 millimeters
- Positive engagement in random positions.

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
- 222 millimeter hose included.
- Nickel-plated exterior
- For additional corrosion

METRIC 5HP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCHES—MULTIPOSITION

Standard Bore Units:

Model	Product Number	Speeds Up to RPM	Bore (mm)	KEYWAY WD x DP	# of Teeth	Shipping Wt. (kg)
5H30P-E	913005	1650	20	6 x 2,8	91	3,3
5H35P-E	913015	1350	25	8 x 3,3	106	4,6
5H40P-E	913025	1350	30	8 x 3,3	122	5,5
5H45P-E	913035	1200	35	10 x 3,3	137	7,4
5H50P-E	913045	1100	40	12 x 3,3	152	9
5H60P-E	913055	1000	45	14 x 3,8	183	13,5

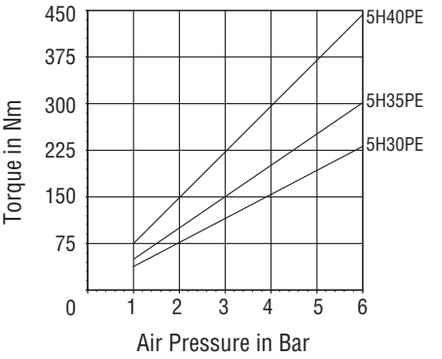
Keys are customer furnished and must be full-length.

CAUTION!

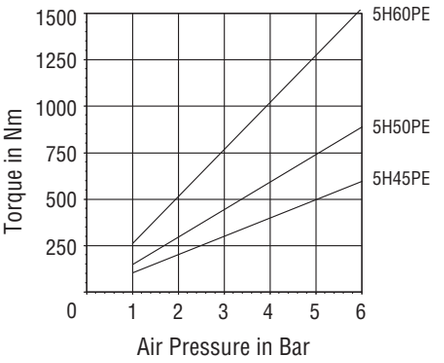
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

TORQUE VS. AIR PRESSURE

5H30PE, 5H35PE & 5H40PE

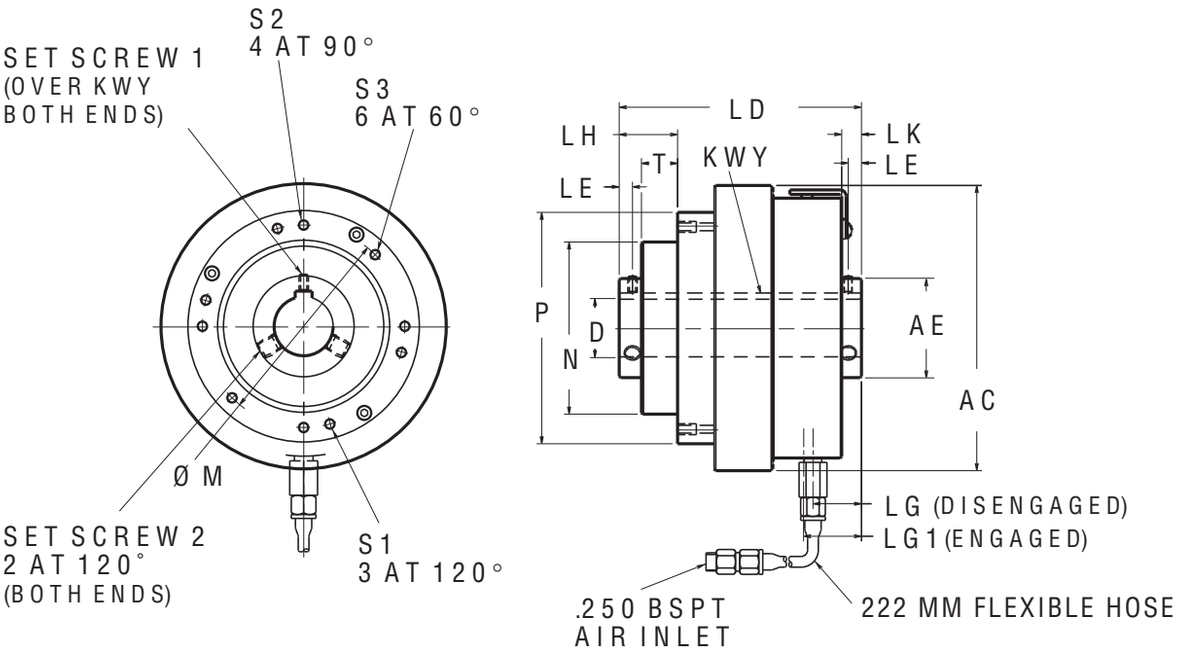


5H45PE, 5H50PE & 5H60PE



Torque (In. Lbs.) = Nm x 8.849
PSI = Bar ÷ .0689

METRIC 5HP-E ENCLOSED PILOT MOUNT CLUTCH - APPROXIMATE DIMENSIONS (MILLIMETERS)



MODEL	PRODUCT NUMBER	AC	AE	D H7	LD	LE	LG	LG1	LH	LK	M	N h8	P	S1	S2	S3	T	SET SCREW 1	SET SCREW 2	KWY WD x DP
5H30P-E	913005	128	34	20	123	6	27	29	26	10	88	72	105	M6	M6	--	17,5	M5	M6	6 x 2,8
5H35P-E	913015	156	44	25	129	6	27	29	29	10	102	88	114	M6	M6	--	17,5	M5	M6	8 x 3,3
5H40P-E	913025	156	44	30	126	7	28	30	29	11	108	88	124	M6	M6	--	17,5	M5	M6	8 x 3,3
5H45P-E	913035	169	59	35	144	8	29	31	35	12	120	102	137	--	M6	M6	21,4	M5	M10	10 x 3,3
5H50P-E	913045	195	64	40	152	8	31	34	32	13	135	112	155	--	M8	M8	19,8	M6	M10	12 x 3,3
5H60P-E	913055	214	73	45	163	9	37	39	37	17	155	132	178	--	M8	M8	22,2	M6	M12	14 x 3,8

NOTE: Drawings are expressed in third angle projection.

METRIC 5HP-SP SERIES, PILOT MOUNT TOOTH CLUTCHES

The Metric 5HP-SP Series provides:

- Instantaneous Torque up to 3,705 Nm
- Maximum Operating Speed up to 3700 rpm
- **8 Standard Bore** sizes ranging from 20 to 75 millimeters
- **8 Minimum Bore** sizes ranging from 12,7 to 47,6 millimeters– you machine and assemble
- Positive engagement for accurate positions and perfect registration
- Accurate timing between two shafts

8 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
- 222 millimeter hose included.

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.

NOTE: Proper Single Position Tooth Clutch engagement depends upon 1) the allowable engagement speed with specific inertia loads and air pressure, and 2) the acceptable speed and air pressure which allow the clutch to engage in one position.

Torque (In. Lbs.) = Nm x 8.849
PSI = Bar ÷ .0689

METRIC 5HP-SP SERIES, PILOT MOUNT TOOTH CLUTCHES - SINGLE POSITION

Standard Bore Clutch:

Model	Product Number	Speeds Up to RPM	Bore (mm)	KEYWAY WD x DP	# of Teeth	Shipping Wt. (kg)
5H30P-SP	912102	3700	20	6 x 2,8	91	3,2
5H35P-SP	912202	3200	25	8 x 3,3	106	4,5
5H40P-SP	912302	3000	30	8 x 3,3	122	5,6
5H45P-SP	912402	3000	35	10 x 3,3	137	7,1
5H50P-SP	912502	3000	40	12 x 3,3	152	9
5H60P-SP	912703	2400	45	14 x 3,8	183	13,5
5H70P-SP	912802	2000	55	16 x 4,3	214	21
5H80P-SP	912902	2000	75	20 x 4,9	244	32

Keys are customer furnished and must be full-length.

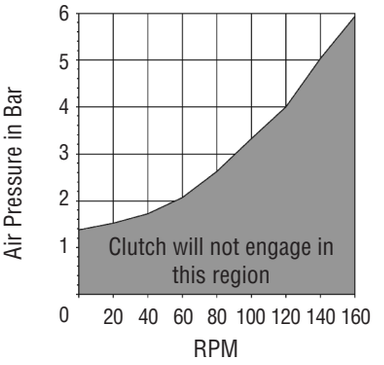
Minimum Bore Clutch:

Minimum bore clutches are supplied unassembled with machinable hubs.

Model	Product Number	Speeds Up to RPM	Bore (mm)	# of Teeth	Shipping Wt. (kg)
5H30P-SP	912103	3700	12,7	91	3,2
5H35P-SP	912203	3200	15,9	106	4,5
5H40P-SP	912303	3000	19,1	122	5,6
5H45P-SP	912403	3000	22,2	137	7,1
5H50P-SP	912503	3000	25,4	152	9
5H60P-SP	912704	2400	31,8	183	13,5
5H70P-SP	912803	2000	38,1	214	21
5H80P-SP	912903	2000	47,6	244	32

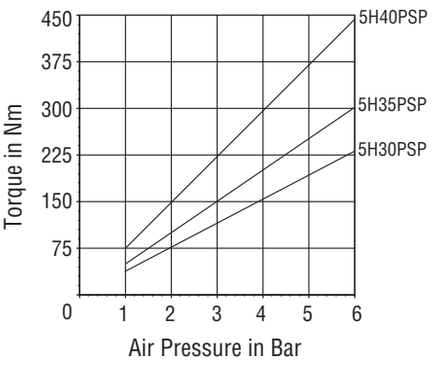
Keys are customer furnished and must be full-length.

MIN. STATIC AIR PRESSURE FOR ENGAGEMENT VS. RPM



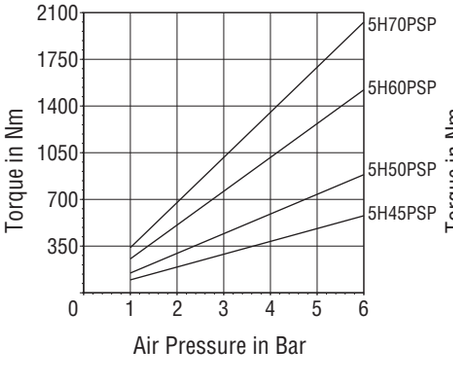
TORQUE VS. AIR PRESSURE

5H30PSP, 5H35PSP & 5H40PSP

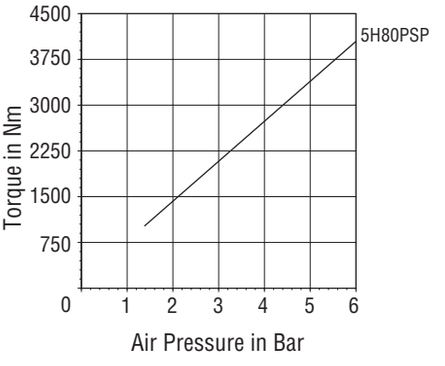


TORQUE VS. AIR PRESSURE

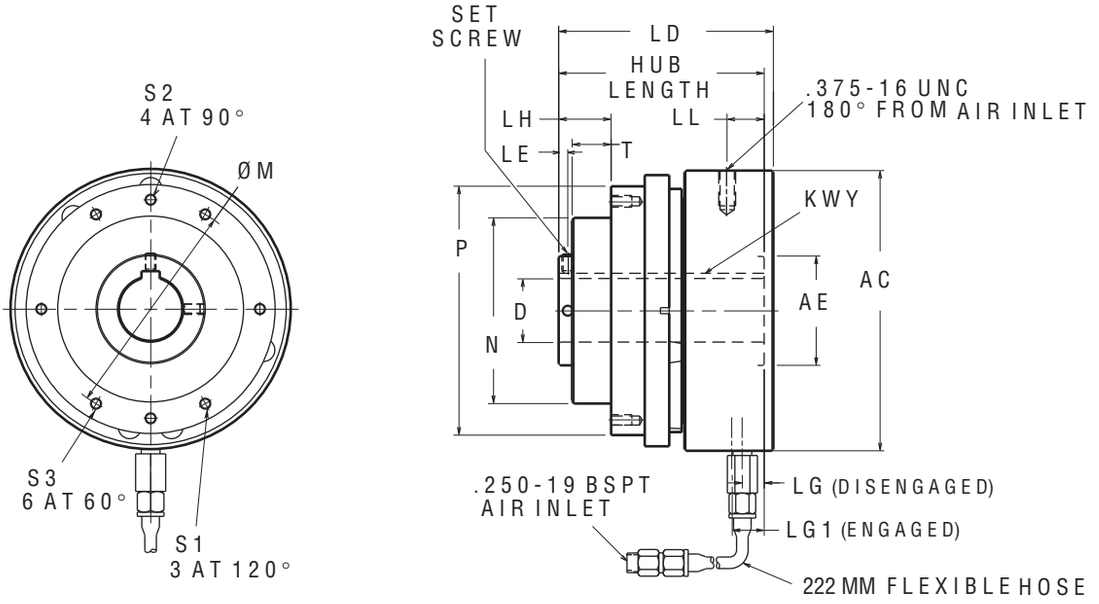
5H45PSP, 5H50PSP, 5H60PSP & 5H70PSP



5H80PSP



METRIC 5HP-SP PILOT MOUNT CLUTCH - APPROXIMATE DIMENSIONS (MILLIMETERS)



MODEL	PRODUCT NUMBER	AC	AE	D H7	LD	LE	LG	LG1	LH	LL	M	N h8	P	S1	S2	S3	T	HUB LENGTH	KWY WD x DP
5H30P-SP	912102	116	35	20	102	5	14	20	23	--	88	72	98	M6	M6	--	17,5	99	6 x 2,8
5H35P-SP	912202	129	45	25	107	5	14	20	25	--	102	88	114	M6	M6	--	17,5	105	8 x 3,3
5H40P-SP	912302	135	45	30	110	5	14	20	25	--	108	88	124	M6	M6	--	17,5	107	8 x 3,3
5H45P-SP	912402	154	60	35	118	5	17	22	29	--	120	102	137	--	M6	M6	21,4	118	10 x 3,3
5H50P-SP	912502	167	65	40	121	6	17	22	29	--	135	112	152	--	M8	M8	19,8	121	12 x 3,3
5H60P-SP	912703	192	75	45	136	7,5	21	27	32	--	155	132	178	--	M8	M8	22,2	137	14 x 3,8
5H70P-SP	912802	211	85	55	149	10	22	28	36	30	180	145	210	--	--	M10	25,4	151	16 x 4,3
5H80P-SP	912902	235	95	75	219	16	55	61	73	55	216	187	241	--	--	M12	47,6	219	20 x 4,9

MODEL	SET SCREW
5H30P-SP	M6, 2 @ 90°
5H35P-SP	M6, 2 @ 90°
5H40P-SP	M6, 2 @ 90°
5H45P-SP	M6, 2 @ 90°
5H50P-SP	M8, 2 @ 90°
5H60P-SP	M10, 2 @ 90°
5H70P-2P	M12, 2 @ 90°
5H80P-SP	M20,3 @ 120°

NOTE: Drawings are expressed in third angle projection.

METRIC 5HP-SP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCHES

The Metric 5HP-SP-E Series provides:

- Water protection per NEMA standard 1.26.5 (Water-proof machine)
- Instantaneous Torque up to 1,300 Nm
- Maximum Operating Speed up to 1650 rpm
- **6 Standard Bore** sizes ranging from 20 to 45 millimeters
- Positive engagement for accurate position and registration
- Accurate timing between two shafts.

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
- 222 millimeter hose included.
- Nickel-plated exterior
- For additional corrosion protection, contact the factory

METRIC 5HP-SP-E SERIES, ENCLOSED PILOT MOUNT TOOTH CLUTCHES—SINGLE POSITION

Standard Bore Units:

Model	Product Number	Speeds Up to RPM	Bore (mm)	KEYWAY WD x DP	# of Teeth	Shipping Wt. (kg)
5H30P-SP-E	913004	1650	20	6 x 2,8	91	3,3
5H35P-SP-E	913014	1350	25	8 x 3,3	106	4,7
5H40P-SP-E	913024	1350	30	8 x 3,3	122	5,4
5H45P-SP-E	913034	1200	35	10 x 3,3	137	7,4
5H50P-SP-E	913044	1100	40	12 x 3,3	152	9
5H60P-SP-E	913054	1000	45	14 x 3,8	183	13,5

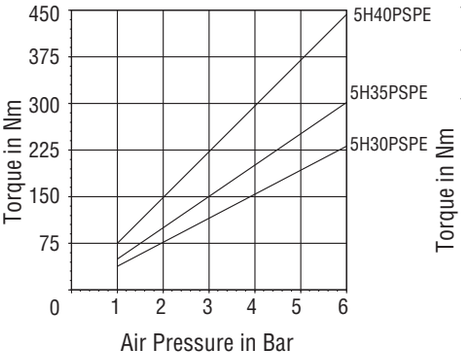
Keys are customer furnished and must be full-length.

CAUTION!

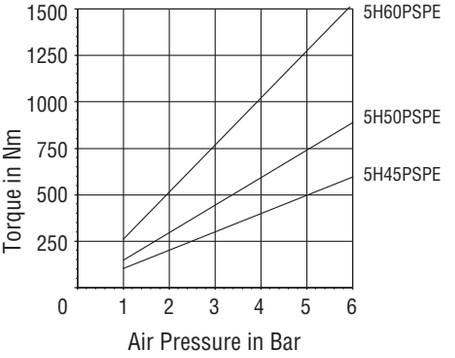
Tooth clutches are normally engaged when stationary. They are not intended for use in most cyclic applications or high speed engagement. In certain circumstances, tooth clutches can be engaged at differential speeds. Please consult Nexen if you are considering an application involving engagement at differential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

TORQUE VS. AIR PRESSURE

5H30PSPE, 5H35PSPE & 5H40PSPE

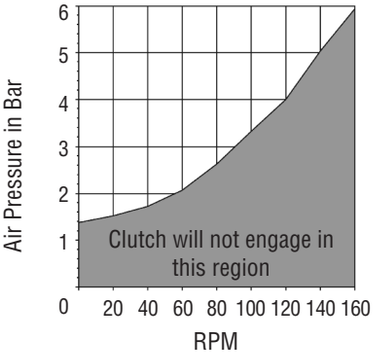


5H45PSPE, 5H50PSPE & 5H60PSPE



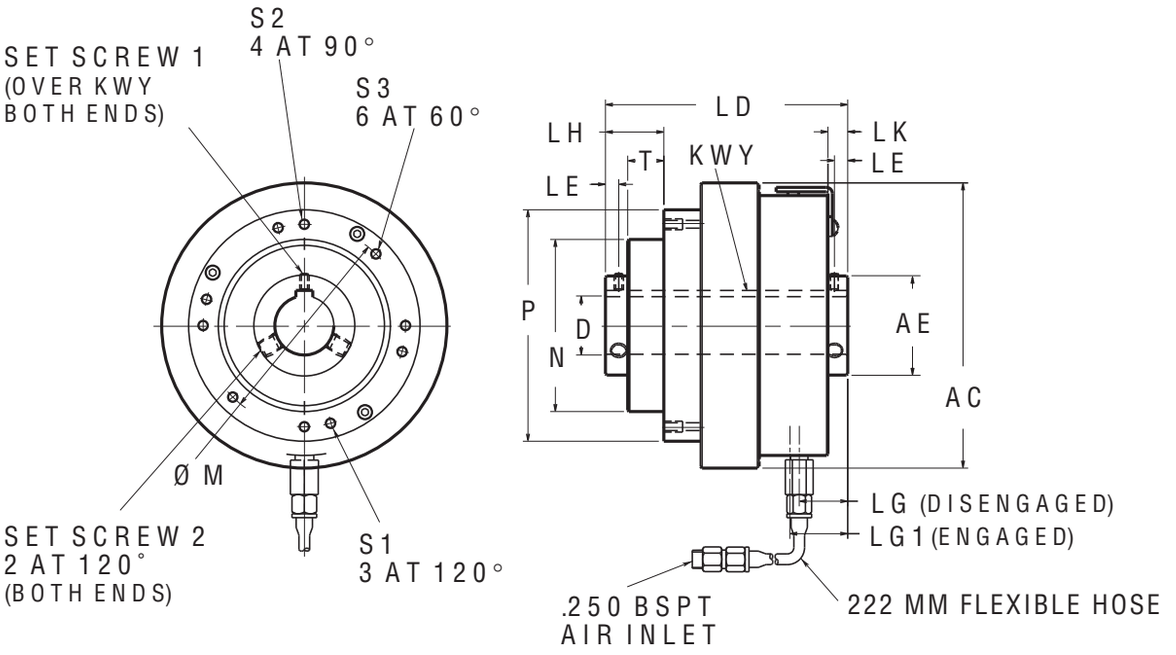
Torque (In. Lbs.) = Nm x 8.849
PSI = Bar ÷ .0689

MIN. STATIC AIR PRESSURE FOR ENGAGEMENT VS. RPM



NOTE: Proper Single Position Tooth Clutch engagement depends upon 1) The allowable engagement speed with specific inertia loads and air pressure, and 2) The acceptable speed and air pressure which allow the clutch to engage in one position.

METRIC 5HPSP-E ENCLOSED PILOT MOUNT CLUTCH - APPROXIMATE DIMENSIONS (MILLIMETERS)



MODEL	PRODUCT NUMBER	AC	AE	D H7	LD	LE	LG	LG1	LH	LK	M	N h8	P	S1	S2	S3	T	SET SCREW 1	SET SCREW 2	KWY WD x DP
5H30P-SP-E	913004	128	34	20	123	6	27	32	26	10	88	72	105	M6	M6	--	17,5	M5	M6	6 x 2,8
5H35P-SP-E	913014	156	44	25	129	6	27	32	29	10	102	88	114	M6	M6	--	17,5	M5	M6	8 x 3,3
5H40P-SP-E	913024	156	44	30	126	7	28	34	29	11	108	88	124	M6	M6	--	17,5	M5	M6	8 x 3,3
5H45P-SP-E	913034	169	59	35	144	8	29	34	35	12	120	102	137	--	M6	M6	21,4	M5	M10	10 x 3,3
5H50P-SP-E	913044	195	64	40	152	8	31	38	32	13	135	112	155	--	M8	M8	19,8	M6	M10	12 x 3,3
5H60P-SP-E	913054	214	73	45	163	9	37	43	37	17	155	132	178	--	M8	M8	22,2	M6	M12	14 x 3,8

NOTE: Drawings are expressed in third angle projection.