P310 VAR 00 / VAR 10

Pneumatic Toothed Clutch

Characteristics
- Pneumatically operated
- Toothed clutch
- Functioning under pressure

Utilisation
- Coupling of a pulley or a hub
- Engagement has to be made at standstil or at very low speed, in case of doubt consult the factory

Particularities
- Positive coupling for drive without slipping
- Standard available for random or synchronised operation (one or more position(s)/rev) Multiposition/ rev as option (VAR n0, “n” indicates number of positions)
- Option : detection disc allows the coupling position to be validated
- Stationary compressed air distribution included
- Sealed bearings

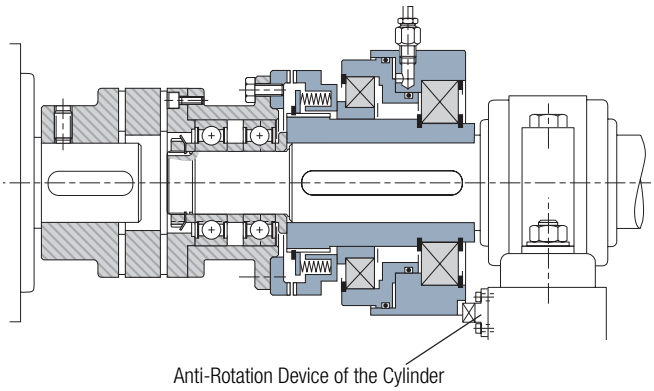
Adjustments
- Verify position of tooth prior to installation
- No wear adjustment required

Maintenance Manual
- SM 319

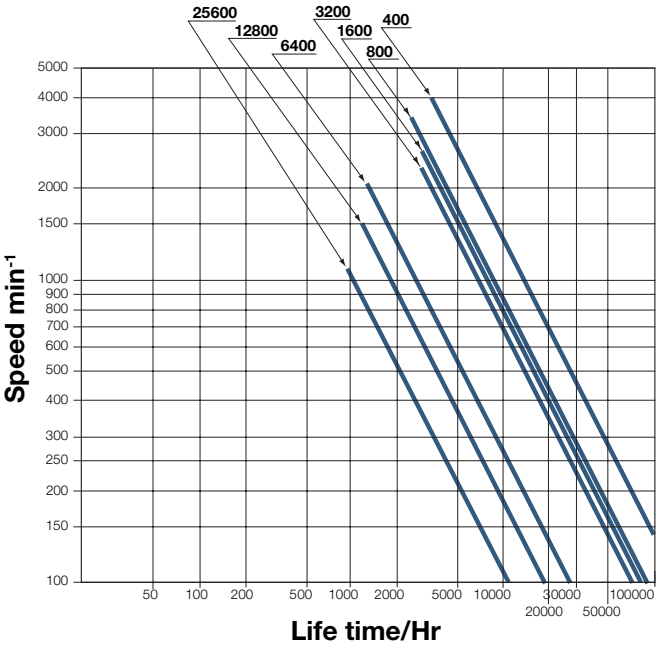
Mounting Precautions
- The ball bearing life is a function of the speed and pressure, refer to curve shown (see diagramm)
- The anti-rotation device of the cylinder shall be inserted in anti rotation slot, with a side play of 0,5 mm and a 1 mm play to the bottom. This avoids a normal stress on the ball-bearings.
- It is forbidden to use in case of vibrations
- The customers mounting method must take into account the axial thrust
- Device intended for horizontal use, for vertical use please consult the factory

Power Supply
- Oiled compressed air. For dry air please consult factory
- Can be operated with hydraulic oil. In that case, please consult the factory

Mounting Example



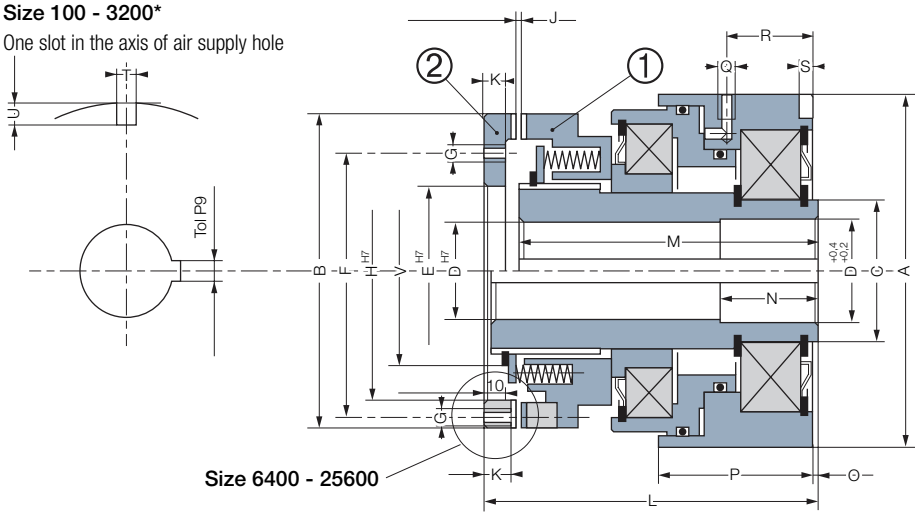
Ball Bearing Life for Nominal Pressure



Pneumatic Toothed Clutch

Indirect Drive

Size 100 - 3200*
One slot in the axis of air supply hole



Sizes			100	200	400	800	1600	3200	6400	12800	25600
Nom. Torque		[Nm]	100	200	400	800	1600	3200	6400	12800	25600
Max. Speed		[min^{-1}]	4300	3600	3300	2700	2100	1800	1450	1200	1000
Operating Pressure		[bar]	5	5	5	5	5	5	5	5	5
	A		118	132	149	166	198	234	270	324	398
	B		105	115	115	140	185	215	265	320	385
	C		50	55	65	80	95	110	130	150	180
	D* min		25	25	35	35	40	40	50	65	80
	D* max		35	40	50	60	75	90	105	120	140
	E min		45	50	50	65	105	110	-	-	-
	E max		70	80	80	95	130	155	-	-	-
	F**		82	92	92	110	148	175	240	290	355
	G**		4xM6	4xM6	8xM6	8xM8	8xM10	8xM12	12xM12	12xM14	12xM16
	H		0,5	0,6	0,6	0,6	0,6	0,8	0,8	0,8	0,9
	J		6	6	6	7	8	12	15	18	24
	K		98	110	114	128	158	195	215	255	315
	L		89,5	101	105	118	147	180	210	250	310
	M		89,5	101	105	118	147	180	210	250	310
	N		30	30	35	38	52	62	80	80	92
	O		-	-	-	0,5	3	5	5	5	10
	P		52	62	64	69,5	86	104	118	129	144
	Q		Rp1/8	Rp1/8	Rp1/8	Rp1/4	Rp1/4	Rp1/4	Rp3/8	Rp3/8	Rp3/8
	R		30	35	37	41	52	63	70	77	83
	S		5,5	5,5	4,5	6	7,5	8,5	8,5	9	12
	T		8	8	8	10	12	12	16	16	20
	U		12	12	12,5	11	11	14	17	23	22
	V		-	-	-	-	-	-	172	192	224
Axial Load on Drive Cup 2		[daN]	152	204	250	380	585	760	1270	2000	3100
Stroke Volume	max	[cm^3]	7	11	12,5	19	27	48	90	155	280
Inertia	❶	[kgm^2]	0,0019	0,0032	0,0047	0,0114	0,0309	0,0770	0,1741	0,511	1,304
Inertia	❷	[kgm^2]	0,00073	0,0010	0,0010	0,0025	0,0095	0,0220	0,0364	0,091	0,252
Weight		[kg]	5,3	8	9,7	14	24	43	70	118	215
Connection						**Radial**					

Keyways according to
ISO R773 / BS 4235 / DIN 6885-1 / NF E 22-175, tolerance P9
* Mandatory delivered with finished bores
** Drive cup is supplied undrilled for sizes 100 to 3200. Fixing holes are shown for information only