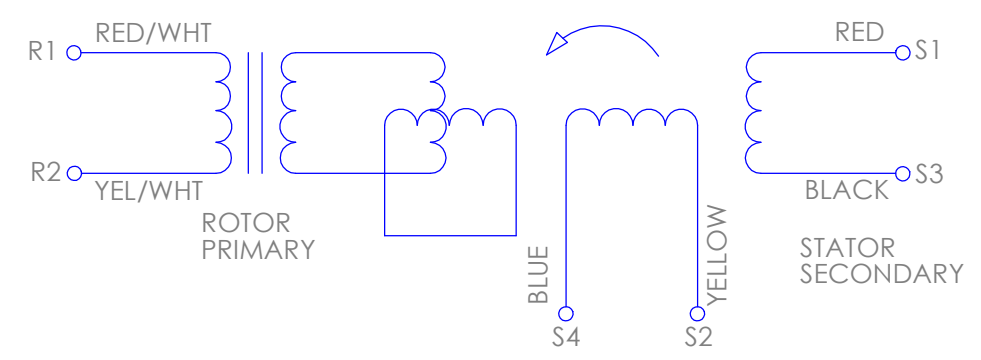


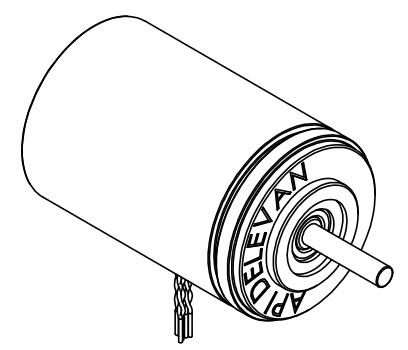
NOTES:
 1 MEASURED IN A VERTICAL POSITION.
 2 ACCURACY DATA (+ & -) MARKED ON HOUSING OD IN AREA INDICATED.

6X #28 AWG (ET) LEADS
 10" MIN. LENGTH

SCHEMATIC



PHASING EQUATION
 INCREASING ANGLE FOR
 CCW ROTATION OF SHAFT
 FACING SHAFT END
 $E(S1-S3) = KE(R1-R2) \cos \phi$
 $E(S2-S4) = KE(R1-R2) \sin \phi$



TECHNICAL INFORMATION		
HIPOT, LEADS TO CASE, 500VAC	Max. mArms	2
HIPOT, INTERPHASE, 250VAC	Max. mArms	2
TEMPERATURE RANGE	°C	-55 TO +125
WEIGHT, APPROX	GRAMS	116

<p>THIRD ANGLE PROJECTION</p>	<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm] DIAMETERS CONCENTRIC .003 [.076] TIR FACES PERPENDICULAR -.003 [.076] INSIDE CORNERS R .015 [.381] MAX INTERPRETATION PER ASME Y14.5M-1994</p>	<p>UNLESS OTHERWISE SPECIFIED: REMOVE ALL BURRS AND BREAK SHARP EDGES -.005/.010[.127/.254]</p>	<p>API DELEVAN http://www.delevan.com</p>
	<p>MATERIAL</p> <p>FINISH</p>	<p>MACHINE SURFACES $\sqrt{63}$</p> <p>APPROVALS DATE</p> <p>CHECKED</p> <p>DES ENG</p>	
<p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF API DELEVAN. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF API DELEVAN IS PROHIBITED.</p>			<p>R11 OUTLINE</p>
<p>SCALE</p>		<p>SHEET 1 OF 2</p>	<p>CODE IDENT: 99800</p>

**PART, ASSEMBLY AND ALL COMPONENTS
 MEET EU ROHS DIRECTIVE**

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	CHECKED
-	-	NEW DRAWING			

NUMBERING R11-XXXXXXXX

PLEASE CONTACT FACTORY FOR OTHER ELECTRICAL AND MECHANICAL OPTIONS.

R11
SERIES

ELECTRICAL DATA

HOUSING STYLE	STYLE	SHAFT STYLE	STYLE	CONNECTOR	TYPE	1A06		1A20		1B06		1B20		SPECIAL OPTIONS	LENGTH					
						ELECTRICAL & MECHANICAL DATA AT 25°C		ELECTRICAL & MECHANICAL DATA AT 25°C		ELECTRICAL & MECHANICAL DATA AT 25°C		ELECTRICAL & MECHANICAL DATA AT 25°C								
VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION						VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION		VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION		VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION		VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION								
S	SERVO GROOVE STYLE	01	ROUND	F	FLYING LEADS	ELEC CYC / MECH CYC	deg/deg	1	ELEC CYC / MECH CYC	deg/deg	1	ELEC CYC / MECH CYC	deg/deg	1	ELEC CYC / MECH CYC	deg/deg	1			
						EXCITATION FREQUENCY	±1% kHz	2.25	EXCITATION FREQUENCY	±1% kHz	2.25	EXCITATION FREQUENCY	±1% kHz	2.0	EXCITATION FREQUENCY	±1% kHz	2.0	EXCITATION FREQUENCY	±1% kHz	2.0
						INPUT VOLTAGE	±5% Vrms	1.88	INPUT VOLTAGE	±5% Vrms	1.88	INPUT VOLTAGE	±5% Vrms	6.0	INPUT VOLTAGE	±5% Vrms	6.0	INPUT VOLTAGE	±5% Vrms	6.0
						INPUT CURRENT	Max. mAmps	21	INPUT CURRENT	Max. mAmps	21	INPUT CURRENT	Max. mAmps	12	INPUT CURRENT	Max. mAmps	12	INPUT CURRENT	Max. mAmps	12
						INPUT POWER	Watts	.015	INPUT POWER	Watts	.015	INPUT POWER	Watts	.035	INPUT POWER	Watts	.035	INPUT POWER	Watts	.035
						IMPEDANCE [ZRO]	Ohms	57 +J104	IMPEDANCE [ZRO]	Ohms	57 +J104	IMPEDANCE [ZRO]	Ohms	644	IMPEDANCE [ZRO]	Ohms	644	IMPEDANCE [ZRO]	Ohms	644
						IMPEDANCE [ZRS]	Ohms	54 +J77	IMPEDANCE [ZRS]	Ohms	54 +J77	IMPEDANCE [ZRS]	Ohms	511	IMPEDANCE [ZRS]	Ohms	511	IMPEDANCE [ZRS]	Ohms	511
						IMPEDANCE [ZSO]	Ohms	480 +J850	IMPEDANCE [ZSO]	Ohms	480 +J850	IMPEDANCE [ZSO]	Ohms	634	IMPEDANCE [ZSO]	Ohms	634	IMPEDANCE [ZSO]	Ohms	634
						IMPEDANCE [ZSS]	Ohms	475 +J635	IMPEDANCE [ZSS]	Ohms	475 +J635	IMPEDANCE [ZSS]	Ohms	527	IMPEDANCE [ZSS]	Ohms	527	IMPEDANCE [ZSS]	Ohms	527
						TRANSFORMATION RATIO	±5%	1.4	TRANSFORMATION RATIO	±5%	1.4	TRANSFORMATION RATIO	±5%	.454	TRANSFORMATION RATIO	±5%	.454	TRANSFORMATION RATIO	±5%	.454
						DC RESISTANCE (R1-R2)	±15% Ohms	17	DC RESISTANCE (R1-R2)	±15% Ohms	17	DC RESISTANCE (R1-R2)	Ohms	74	DC RESISTANCE (R1-R2)	Ohms	74	DC RESISTANCE (R1-R2)	Ohms	74
						DC RESISTANCE (S1-S3, S2-S4)	±15% Ohms	207	DC RESISTANCE (S1-S3, S2-S4)	±15% Ohms	207	DC RESISTANCE (S1-S3, S2-S4)	Ohms	159	DC RESISTANCE (S1-S3, S2-S4)	Ohms	159	DC RESISTANCE (S1-S3, S2-S4)	Ohms	159
						POSITION ERROR	Max. arcminutes	±6	POSITION ERROR	Max. arcminutes	±20	POSITION ERROR	Max. arcminutes	±6	POSITION ERROR	Max. arcminutes	±20	POSITION ERROR	Max. arcminutes	±20
						PK-PK VELOCITY ERROR	Max. %	-	PK-PK VELOCITY ERROR	Max. %	-	PK-PK VELOCITY ERROR	Max. %	-	PK-PK VELOCITY ERROR	Max. %	-	PK-PK VELOCITY ERROR	Max. %	-
PHASE SHIFT, OPEN CIRCUIT	degrees	+11	PHASE SHIFT, OPEN CIRCUIT	degrees	+11	PHASE SHIFT, OPEN CIRCUIT	degrees	+8.5	PHASE SHIFT, OPEN CIRCUIT	degrees	+8.5	PHASE SHIFT, OPEN CIRCUIT	degrees	+8.5						
NULL VOLTAGE	Max. mVrms	15	NULL VOLTAGE	Max. mVrms	15	NULL VOLTAGE	Max. mVrms	15	NULL VOLTAGE	Max. mVrms	15	NULL VOLTAGE	Max. mVrms	15						
HIPOT, LEADS TO CASE, 500VAC	Max. mAmps	2	HIPOT, LEADS TO CASE, 500VAC	Max. mAmps	2	HIPOT, LEADS TO CASE, 500VAC	Max. mAmps	2	HIPOT, LEADS TO CASE, 500VAC	Max. mAmps	2	HIPOT, LEADS TO CASE, 500VAC	Max. mAmps	2						
HIPOT, INTERPHASE, 250VAC	Max. mAmps	2	HIPOT, INTERPHASE, 250VAC	Max. mAmps	2	HIPOT, INTERPHASE, 250VAC	Max. mAmps	2	HIPOT, INTERPHASE, 250VAC	Max. mAmps	2	HIPOT, INTERPHASE, 250VAC	Max. mAmps	2						
TEMPERATURE RANGE	°C	-55 TO +125	TEMPERATURE RANGE	°C	-55 TO +125	TEMPERATURE RANGE	°C	-55 TO +125	TEMPERATURE RANGE	°C	-55 TO +125	TEMPERATURE RANGE	°C	-55 TO +125						
SHAFT END PLAY	MAX	.005	SHAFT END PLAY	MAX	.005	SHAFT END PLAY	MAX	.005	SHAFT END PLAY	MAX	.005	SHAFT END PLAY	MAX	.005						
SHAFT RADIAL PLAY	MAX	0.0015	SHAFT RADIAL PLAY	MAX	0.0015	SHAFT RADIAL PLAY	MAX	0.0015	SHAFT RADIAL PLAY	MAX	0.0015	SHAFT RADIAL PLAY	MAX	0.0015						
SHAFT RUNOUT	MAX F.I.R.	0.001	SHAFT RUNOUT	MAX F.I.R.	0.001	SHAFT RUNOUT	MAX F.I.R.	0.001	SHAFT RUNOUT	MAX F.I.R.	0.001	SHAFT RUNOUT	MAX F.I.R.	0.001						

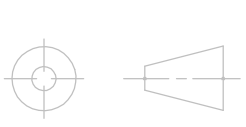
1

2

NOTES:

1 SHAFT END PLAY MEASURED WITH A 1LB. REVERSE GAGE LOAD.

2 RADIAL PLAY MEASURED WITH A 1 LB. REVERSE GAGE LOAD.



THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES [mm]
DIAMETERS CONCENTRIC .003 [.076] TIR
FACES PERPENDICULAR .003 [.076]
INSIDE CORNERS R .015 [.381] MAX

INTERPRETATION PER ASME
Y14.5M-1994

UNLESS OTHERWISE SPECIFIED:
REMOVE ALL BURRS AND BREAK
SHARP EDGES -.005/.010

TOLERANCES:
DECIMAL .00±0.01 [.254] .000 ±.005 [.127]
ANGLE ±0.5°
CHAMFER ANGLE ±10°

MACHINE SURFACES $\sqrt{63}$

API DELEVAN
<http://www.delevan.com>

R11 OUTLINE

MATERIAL	-	APPROVALS	DATE
FINISH	-	CHECKED	-
		DES ENG	-

SIZE	DWG. NO.
B	
SCALE	SHEET 2 OF 2
	CODE IDENT: 99800