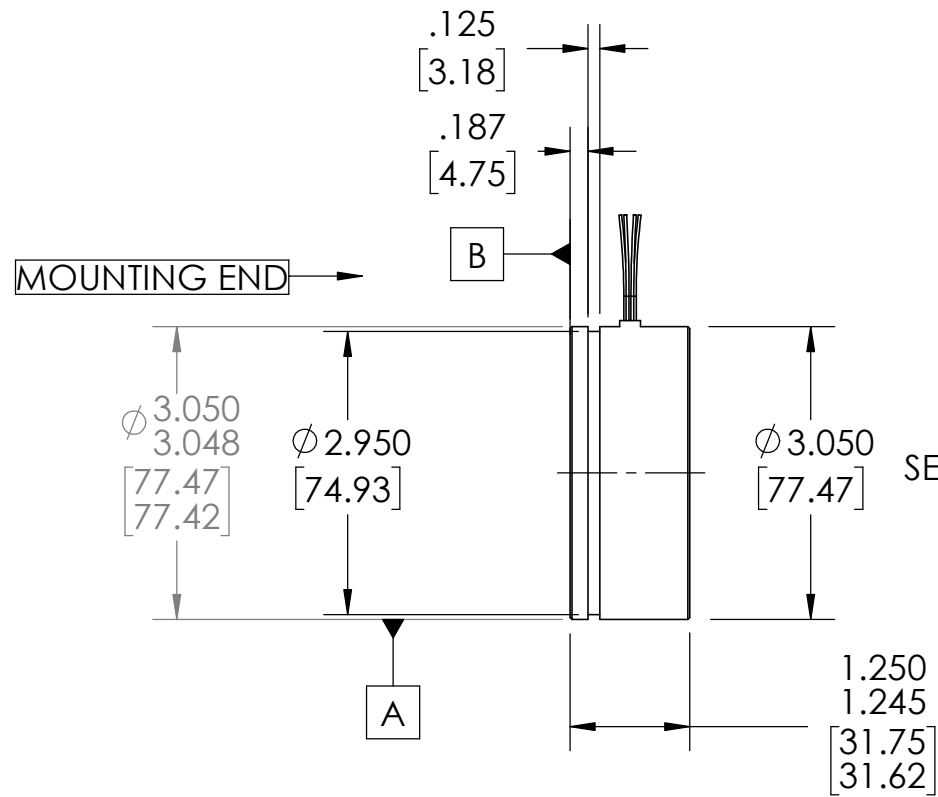


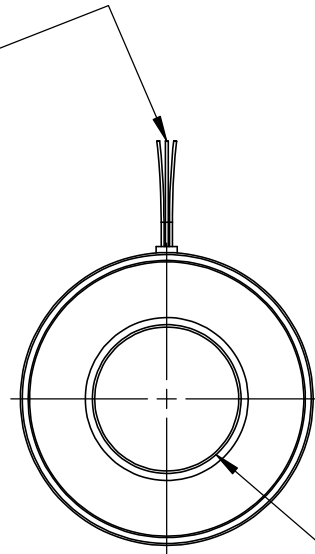
NOTES:

1. ROTOR & STATOR ARE A MATCHED PAIR. DO NOT INTERCHANGE ROTOR OR STATOR BETWEEN RESOLVERS.
2. ROTOR AND STATOR TO BE MOUNTED AXIALLY FLUSH ± .010.
3. CUSTOMER MUST MAINTAIN SHAFT RUNOUT WITH RESPECT TO DATUM 'A' WITHIN .003 T.I.R.

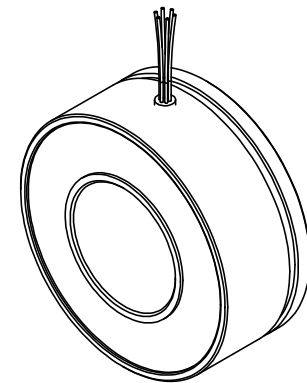


SEE SHEET TWO FOR LEAD OPTIONS

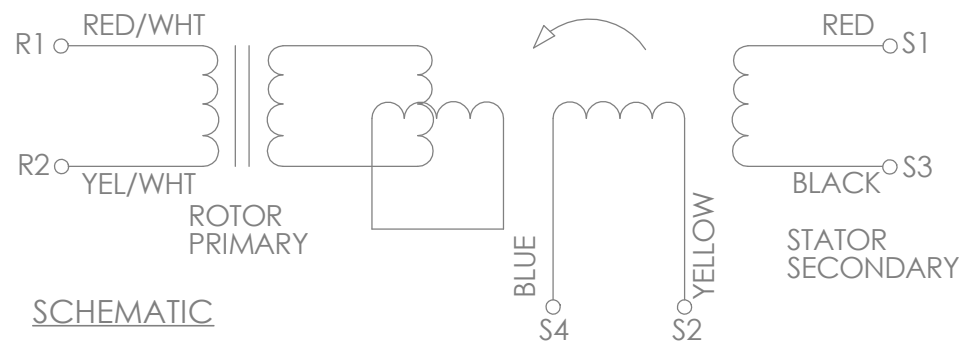
PILOT 500 SHOWN SEE SHEET TWO AND THREE FOR OTHER OPTIONS



Ø"B" SEE SHEET TWO FOR BORE SIZES



SCHEMATIC



SCHEMATIC

PHASING EQUATION FOR CCW ROTATION OF ROTOR FACING TRANSFORMER MOUNTING FLANGE END.

$$E(S1-S3) = KE(R1-R2) \cos \theta$$

$$E(S2-S4) = -KE(R1-R2) \sin \theta$$

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

<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>TOLERANCES: DECIMAL .00±.01[.254] .000±.005[.127] ANGLE ±0.5° CHAMFER ANGLE ±10°</p>	<p><b>API Delevan</b></p>	
	<p>MATERIAL -</p> <p>FINISH -</p>	<p>MACHINE SURFACES 63√</p> <p>APPROVALS - DATE -</p> <p>CHECKED -</p> <p>DES ENG -</p>	<p><b>31BRCX</b></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 HAROWE IS PROHIBITED.</p>			<p>SIZE B</p>	<p>DWG. NO.</p>
			<p>SCALE</p>	<p>SHEET 1 OF 3</p>
			<p>CODE IDENT: 99800</p>	

REVISIONS				
REV	ECO	DESCRIPTION	DATE	CHECKED
-	-	NEW DRAWING		

# NUMBERING

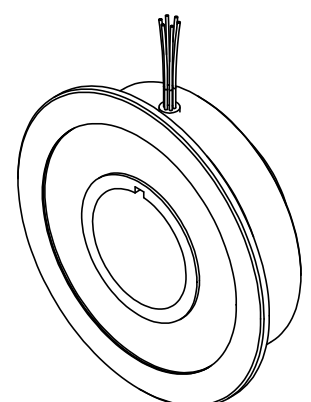
## 31BRCX-XXX-XXXX-XXXX

SIZE  
31

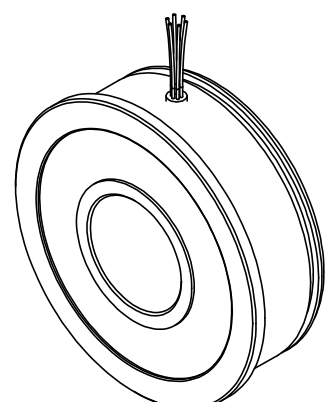
STYLE OF RESOLVER:  
FRAMELESS

PILOT NUMBER	STYLE	WINDING NUMBER	Vrms	KHz	ma Arms	Tr	SPEED	ACCURACY ±arcmin	BORE LETTER	BORE	"B" DIAMETER	CABLE DESIGNATION	CABLE	LEAD	LENGTH
500	SERVO MOUNT 3.05 [77.47] OD 1.25 [31.75] LONG	002	4	5	30	.50	1	10	A	1.5 INCH	1.5000/1.5015 [38.1/38.14]	05	26 AWG FLYING LEADS	01	12[305]
		004	7	4	30	.50	1	10	Q	25m m	.9843/.9851 [25.0/25.02]	06	28 AWG 3 TWISTED PAIRS	02	16[406]
		006	8	6.5	75	.50	1	20	R	30m m	1.1811/1.1819 [30.0/30.02]	07	24 AWG FLYING LEADS W/TUBING	03	24[609]
502	FLANGE MOUNT 3.62 [91.95] OD .875 [22.23] LONG	009	4.25	7	55	.47	1	10	W	34m m	1.3386/1.3395 [34.0/34.02]	08	28 AWG HIGH TEMP FLYING LEADS	04	60[1524]
									C	1.37 INCH W/KEY YWAY	1.3750/1.3755 [34.93/34.94] .125 [3.18] WIDE KEYWAY	09	24 AWG 3 TWISTED PAIRS W/TUBING	05	80[2032]
503	FLANGE MOUNT 3.54 [89.92] OD 1.181 [30] LONG								G	1.56 INCH	1.5607/1.5617 [39.64/39.67]	11	22 AWG 4 TWISTED PAIRS W/TUBING	06	120[3048]
												12	AWG 24 FLYING LEADS		
												20	RADIATION HARDEN 26 AWG FLYING LEADS		

SEE SHEET 3 FOR DIMENSIONAL DIFFERENCES



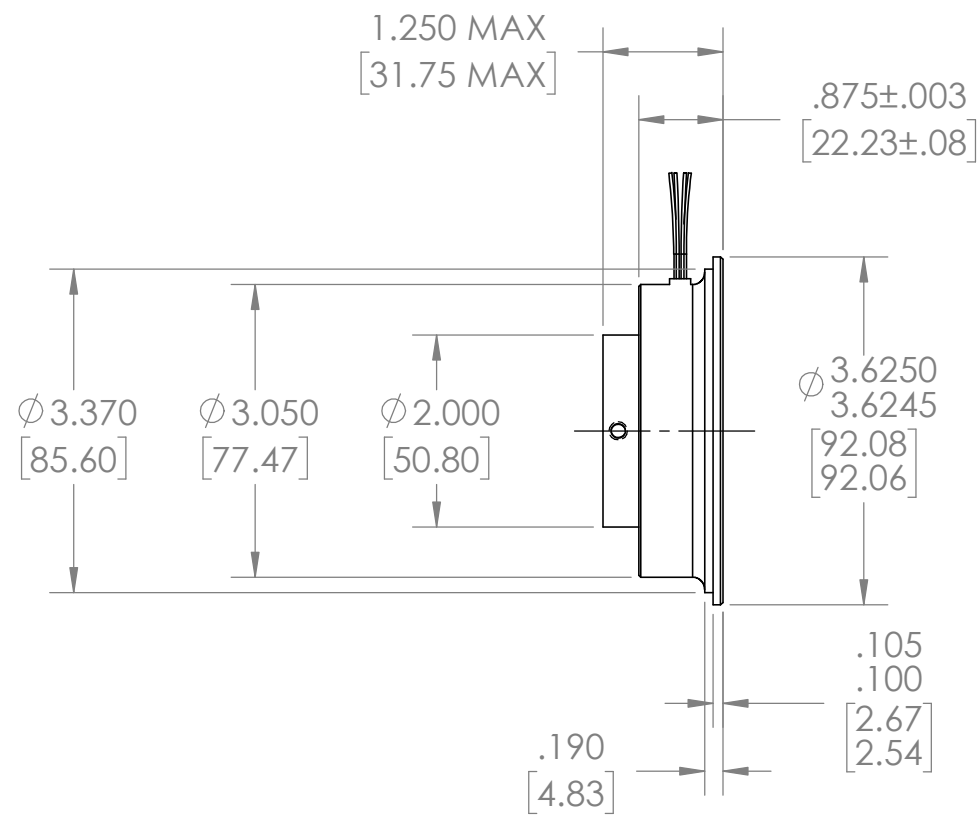
PILOT 502



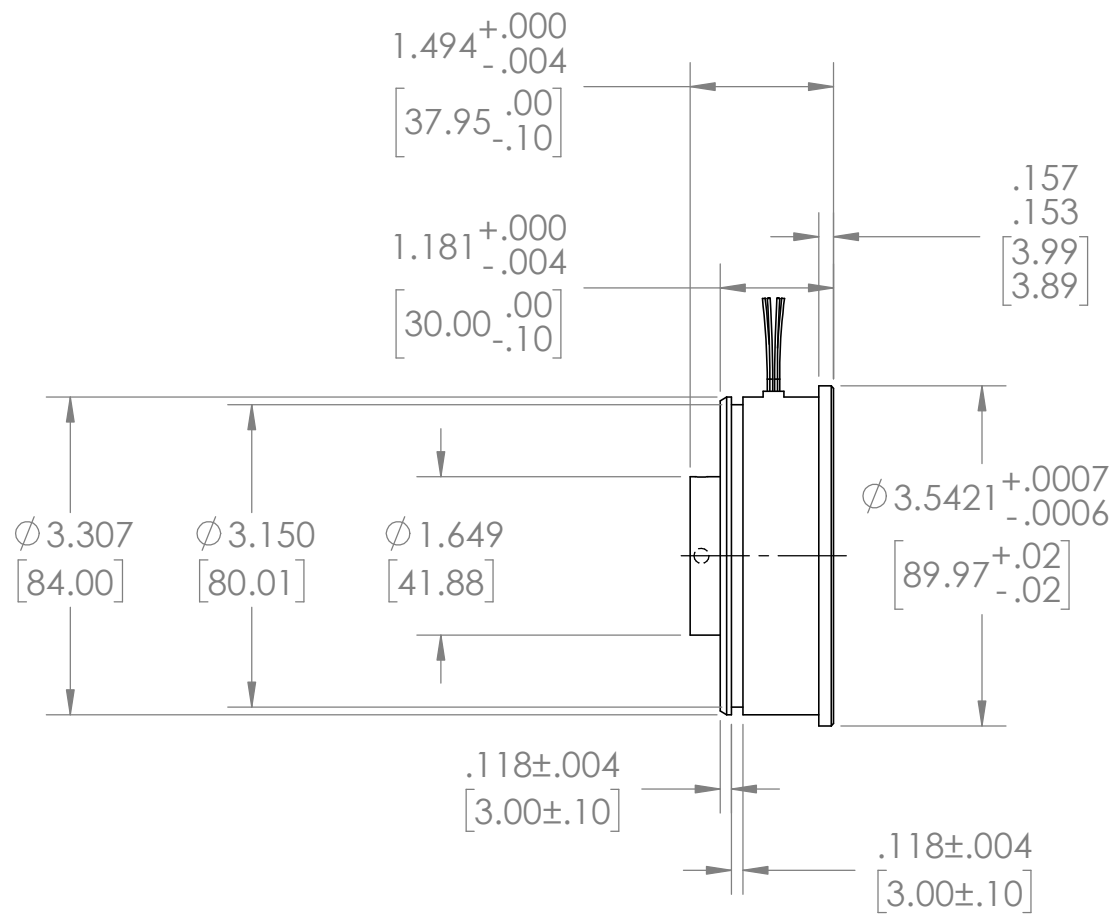
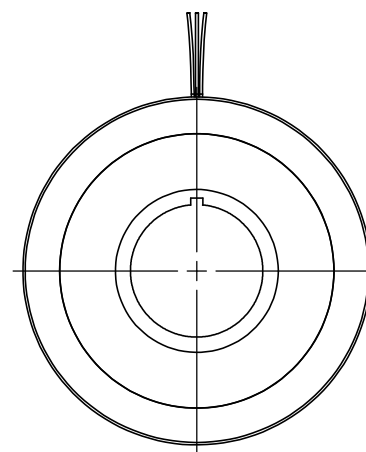
PILOT 503

<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</p> <p>TOLERANCES: DECIMAL .00±.01 [.254] .000 ±.005 [.127] ANGLE ±0.5° CHAMFER ANGLE ±10°</p>	<p><b>API Delevan</b></p> <p><b>31BRCX</b></p>		
					<p>MATERIAL</p> <p>-</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 HAROWE IS PROHIBITED.</p>	<p>FINISH</p> <p>-</p>	<p>CHECKED</p> <p>-</p>	<p>DES ENG</p> <p>-</p>	<p>SIZE</p> <p>B</p>	<p>DWG. NO.</p>
	<p>SCALE</p>		<p>SHEET 2 OF 3</p>	<p>CODE IDENT: 58655</p>	

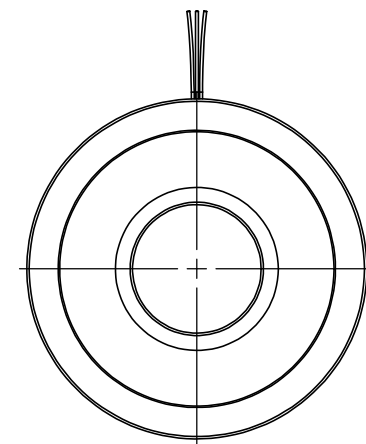
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	CHECKED
-	-	NEW DRAWING			



PILOT 502  
DIFFERENCES FROM 500



PILOT 503  
DIFFERENCES FROM 500



<p>THIRD ANGLE PROJECTION</p>	<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [mm] DIAMETERS CONCENTRIC <math>.003</math> [0.076] TIR FACES PERPENDICULAR <math>-.003</math> [0.076] INSIDE CORNERS R <math>.015</math> [3.81] MAX</p> <p>INTERPRETATION PER ASME Y14.5M-1994</p>	<p>UNLESS OTHERWISE SPECIFIED: REMOVE ALL BURRS AND BREAK SHARP EDGES <math>-.005</math> / <math>.010</math></p> <p>TOLERANCES: DECIMAL <math>.00 \pm .01</math> [254] <math>.000</math> <math>\pm</math> <math>.005</math> [127] ANGLE <math>\pm 0.5^\circ</math> CHAMFER ANGLE <math>\pm 10^\circ</math></p>	<h1>API Delevan</h1>	
	<p>MATERIAL</p> <p>-</p>	<p>MACHINE SURFACES <math>\sqrt{63}</math></p>	<h1>31BRCX</h1>	
<p>FINISH</p> <p>-</p>	<p>APPROVALS</p> <p>DRAWN</p> <p>-</p>	<p>DATE</p> <p>-</p>	<p>SIZE</p> <p>B</p>	<p>DWG. NO.</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 HAROWE IS PROHIBITED.</p>			<p>CHECKED</p> <p>-</p>	<p>DES ENG</p> <p>-</p>
<p>SCALE</p>		<p>SHEET 3 OF 3</p>	<p>CODE IDENT: 58655</p>	