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FEATURES

- 6mm diameter aperture
- Pt-Ir shutter blade, capable of blocking x-ray energy up to 30 keV.
- Exposure repetition rate continuously variable from DC-50Hz.
- Electronic synchronization system included.
- Activated by an electronic pulse through UNIBLITZ[®] patented shutter drive systems.
- Non-resonant design allows instantaneous changes in repetition rate and duty cycle.
- No optical surface when open provides 100% transmittance

The UNIBLITZ[®] XRS6 series is especially designed for x-ray applications. The innovative blade design allows beam extinction $>10^4$ up to 30 keV x-ray energy. The XRS6 shutter is well suited for specific x-ray applications such as x-ray crystallography and can open within 3.2msec at a maximum rate of 50 exposures per second. Precision control and reliability can be expected as with all UNIBLITZ products.

This shutter is programmable, and is activated by an electronic pulse generated by Vincent's patented UNIBLITZ drive systems. The shutter will follow this pulse, which allows the user to program the exposure duration and frequency.

The XRS6 has a 6mm clear aperture and equipped with the electronic synchronization system. A vacuum compatible version is also available, please consult customer service for further information.

ELECTRICAL

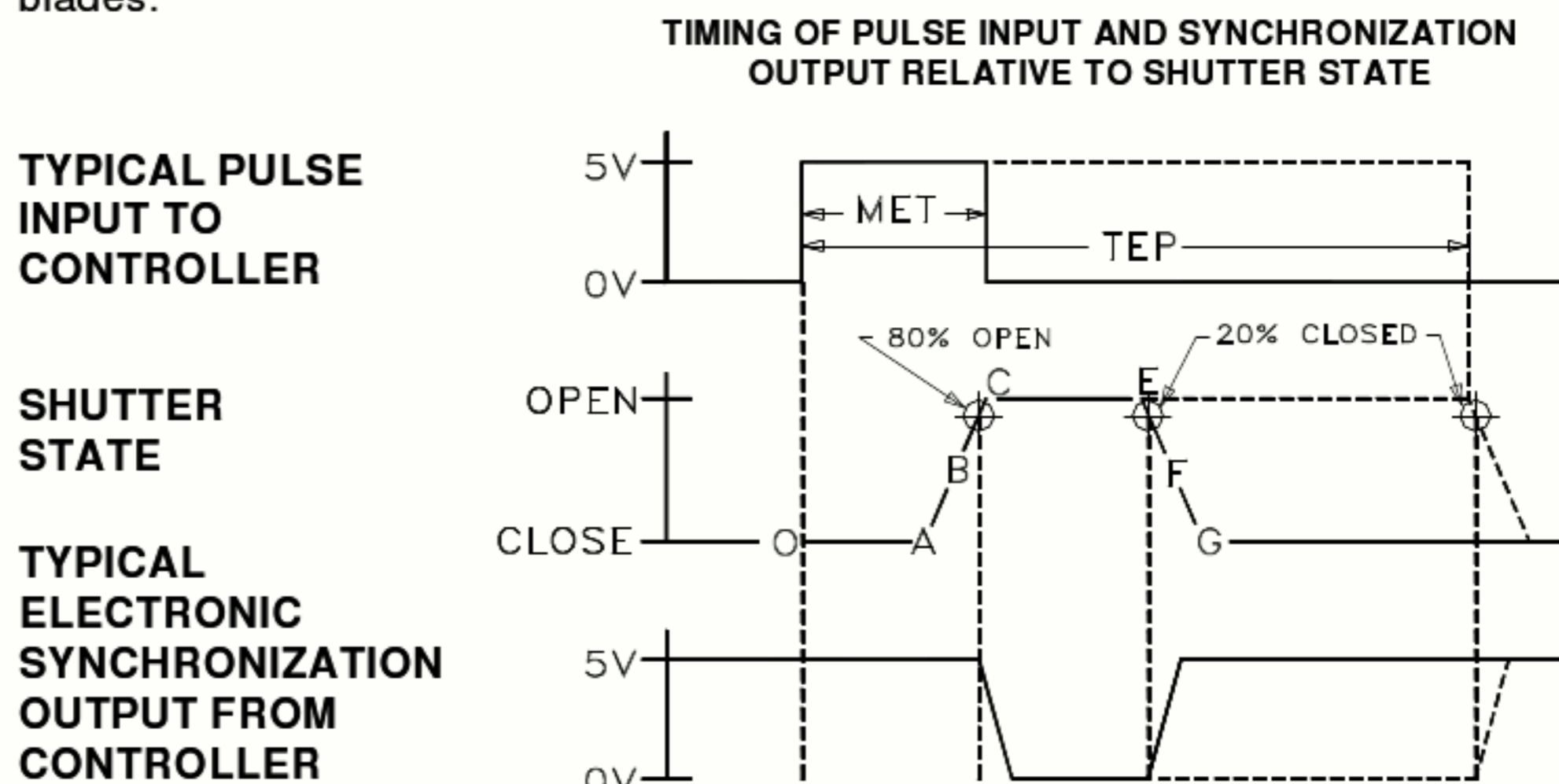
Coil Resistance	12 ohms
Pulse Voltage to Open	+65VDC
Hold Voltage ¹	+5VDC

MECHANICAL

Wgt. Un-Cased	1.20 oz (.03 kg)
Wgt. Cased	7.46 oz (.21 kg)
Operating Temp.	0°C to +80°C
Max. Opening Bounce	15%
Max. Closing Bounce	5%
Max. Frequency of Operation (CONT/BURST) ²	10 Hz / 50 Hz
Number of Blades	1

TIMING

Typical timing values (msec.) using UNIBLITZ drive equipment and measured with UNIBLITZ shutters equipped with .010" PtIr shutter blades.



(Timing in msec.)

O-A Delay time on opening after current is applied	1.2
A-C Transfer time on opening	3.2
O-C Total opening time	4.4
B-F Min. equivalent exp. time	6.0
C-E Min. dwell time with min. input pulse	2.0
E-G Transfer time on closing	4.8
A-G Total window time	10.0
MET: Min. exposure time	5.0
TEP: Typical exposure pulse	>6.4

The question regarding enhancement of shutter speed with the application of user supplied lubricants has been repeatedly asked. It is our experience that lubricating the shutter blades will actually slow the shutter down and eventually render the shutter inoperable. UNDER NO CIRCUMSTANCES SHOULD ANY TYPE OF LUBRICANT BE APPLIED TO THE SHUTTER BLADE AREA.

PRODUCT OPTIONS

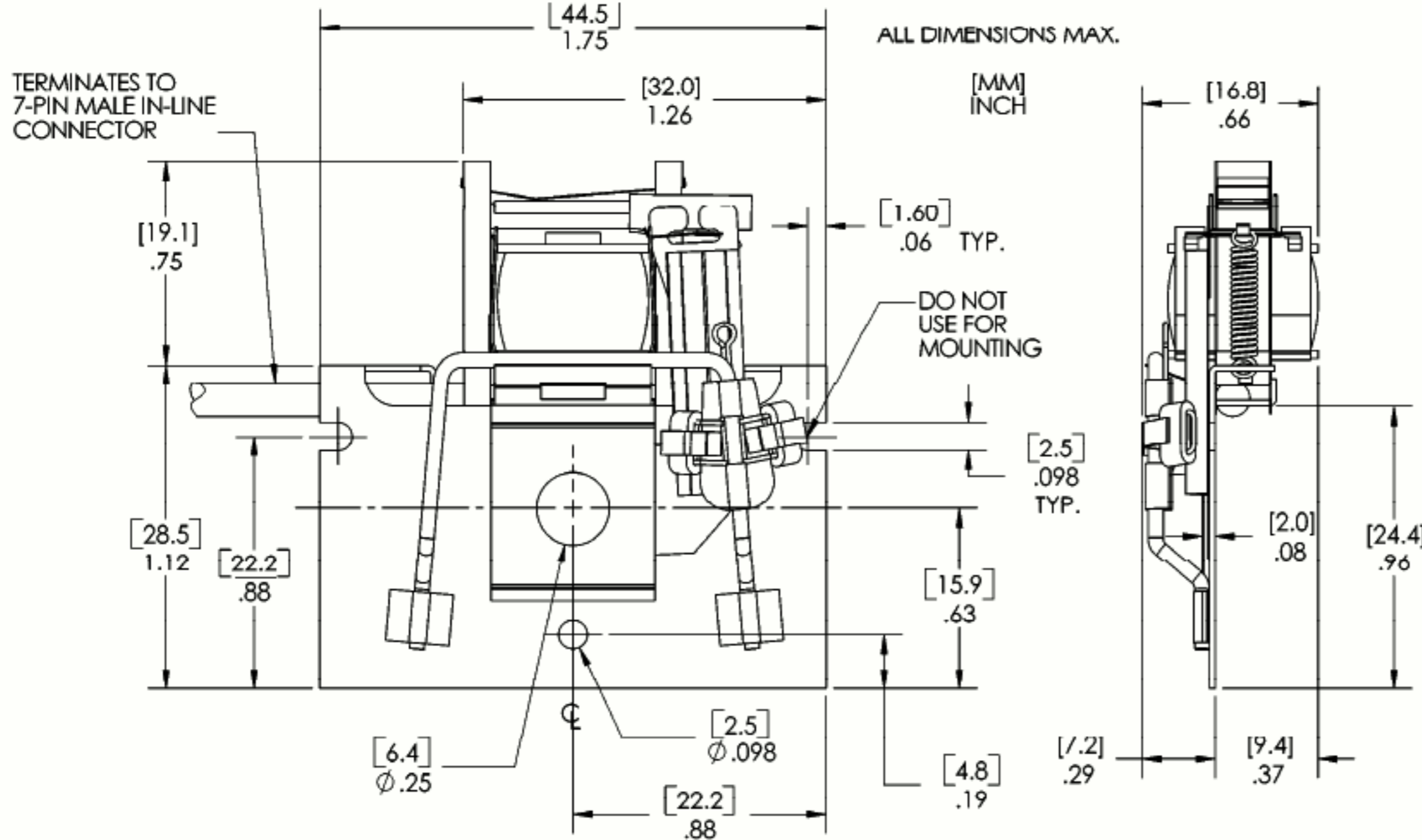
XRS6S 2 P 0 -100

Aperture Size	Housing	Blade Finish	Electronic Sync.	Mounting Options
XRS6S - 6mm	1 - Un-housed 2 - #3 Housing	P - .010" Thick PtIr (10% Iridium, 90% Platinum)	0 - Omit Sync. 1 - Electronic Sync. Included	-21 Zeiss Axiovert Type -22 Nikon SBX type -23 Olympus BH/IMT type -24 Olympus BX/IX type -26 Leica Type -27 Nikon Type -28 Olympus IX Transmitted Type -29 Nikon TE Type -30 Leica DM/DMIR/DMIRB Type -31 Nikon Confocal Type -32 Nikon 80i Type -100 Mounting Ring -105 C-Mount Adapter (Male) -106 C-Mount Adapter (Female) -110 T-Mount Adapter

¹Voltage level required across actuator coil when being held in the open position.
²CONTinuous frequency rating specified at shutter's minimum exposure pulse. BURST frequency rating specified for (4) four seconds maximum with (1) one minute minimum between bursts. Frequency measurements are taken in free air, 25° C ambient, actuator coil equipped with heat sink. For additional information on maximum sustained frequencies obtainable, please contact one of our technical represen-

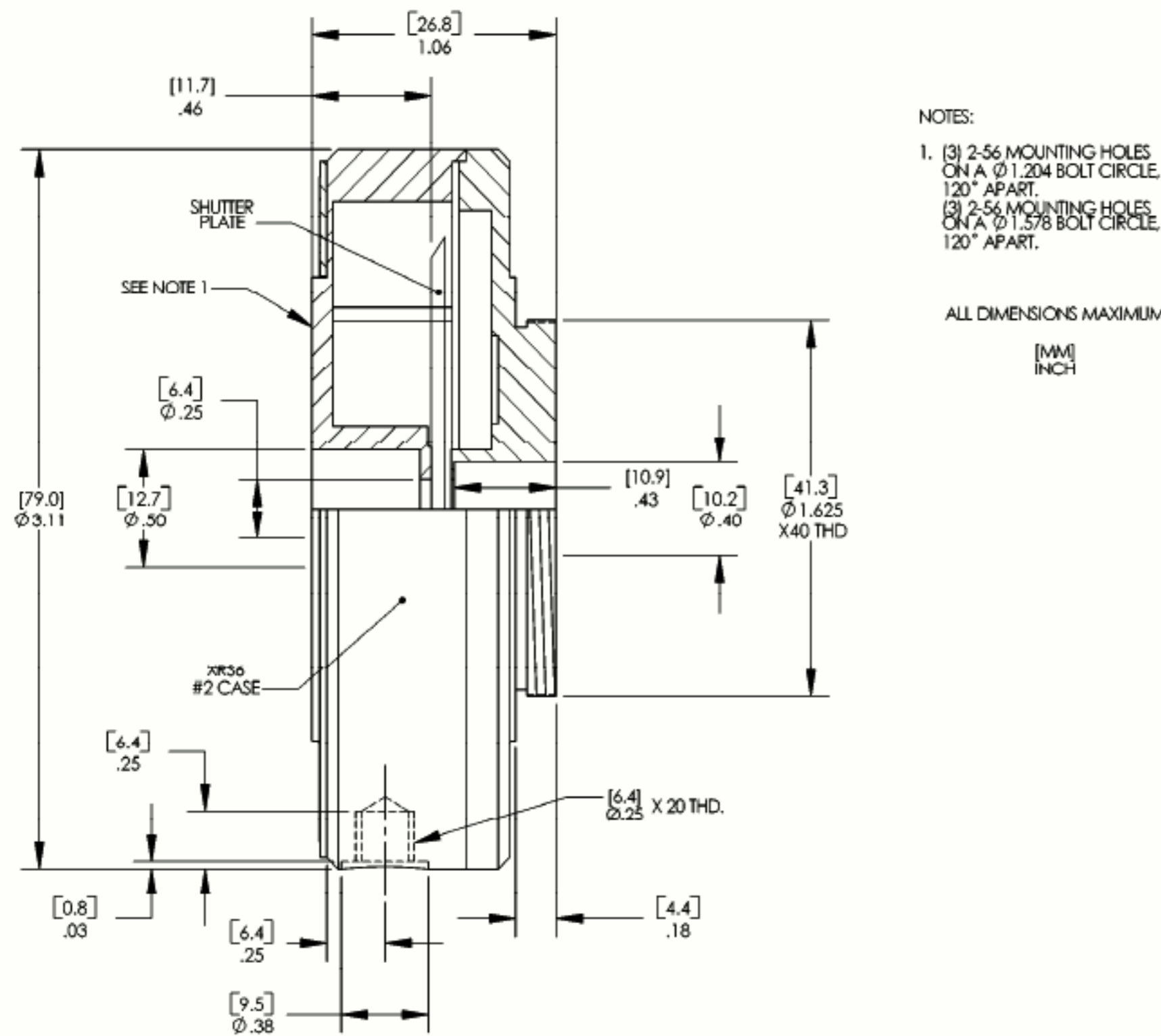
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UN - HOUSED STYLE



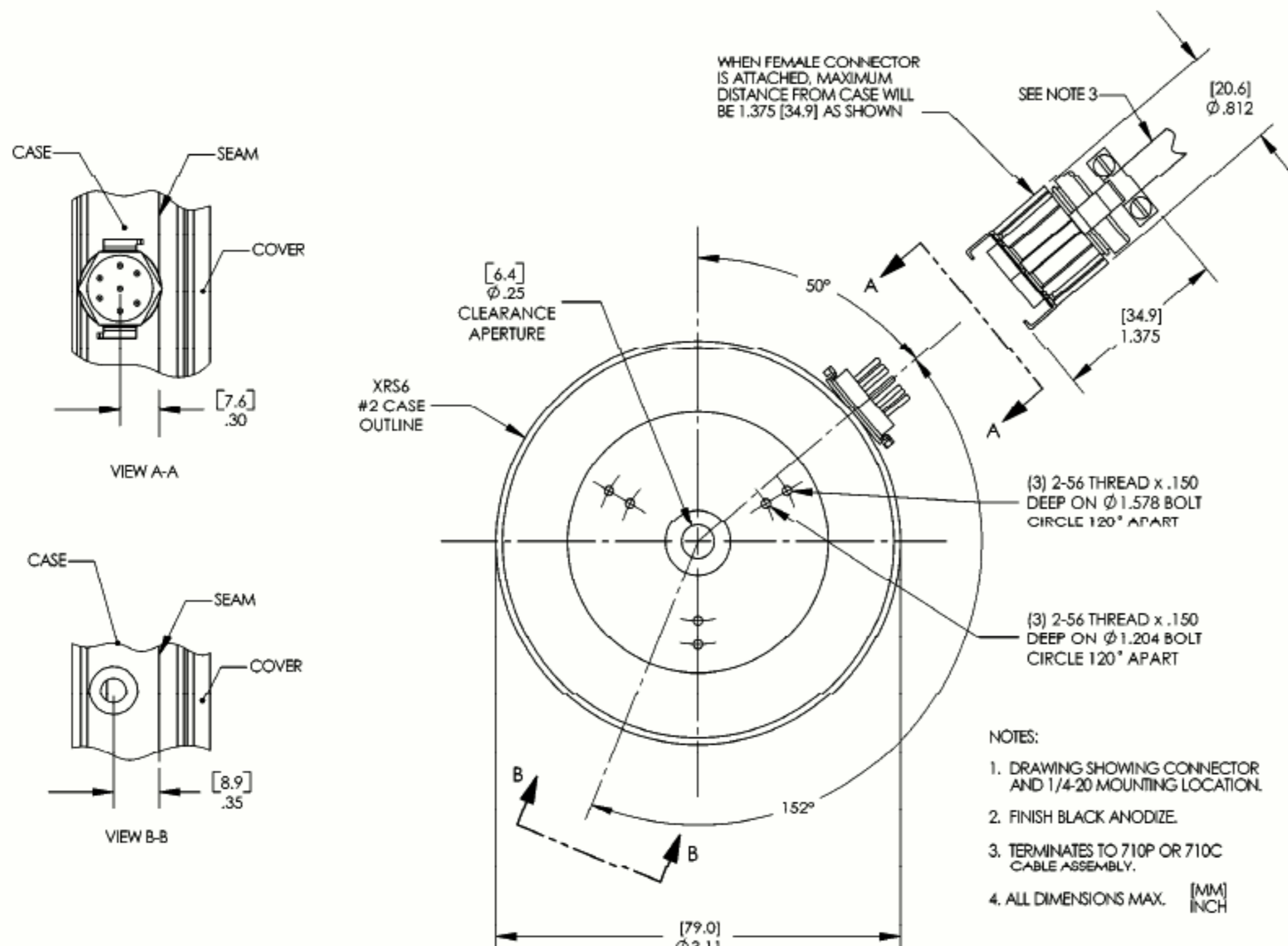
The XRS6 uncased style is the basic configuration of this series and is best suited for OEM applications. Mounting can be accomplished through one 2.5mm slot and one 2.5mm hole below the aperture. The unit terminates to a 7-pin male in-line connector through a six-inch cable assembly.

HOUSED STYLE



The XRS6 #2 housing style allows a number of mounting configurations. A 1/4-20 threaded hole is provided for post mounting. The 1.625 inch x 40TPI external thread located on the rear side, and the six 2-56 threaded holes located on the front side (see Figure #2 and Figure #3) can be interfaced directly into your application or fitted with a variety of specific mounting options. See "MICROSCOPE, VIDEO and UNIVERSAL MOUNTING SYSTEMS" data sheets for additional information. The unit terminates with a 7-pin male connector.

HOUSING/CONNECTOR LAYOUT



This drawing illustrates 7-pin connector and 1/4-20 threaded hole layout for the XRS6 series #2 housed style.