

Coin® Segmented Wedge

Flanged with NPT Pressure Taps

DESCRIPTION

The Preso Coin Flanged flow meter with NPT Pressure Taps accommodates most flows, even the most abrasive. This type of differential technology is a proven, consistent measuring technology for media in upstream, midstream and downstream applications. Accuracy and reliability are achieved with rugged construction, practical design, and a simple principle of operation. The Coin wedge flow meter stands alone in its ability to maintain the necessary square root relationship between flow rate and differential pressure for almost any type of flow.

CONFIGURATION

The inlet section is the same diameter as the incoming pipe section and followed by a precise, segmented, angled section equal on both sides for bidirectional flow measurement. The H/ID ratio is determined by the manufacturer according to recognized standards and formulas. The discharge coefficient (Cd) is linear and stable in the operating flow range.

ACCURACY AND REPEATABILITY

The accuracy of the Coin meter is within $\pm 3.0\%$ (uncalibrated) and $\pm 0.5\%$ (calibrated) with a repeatability of $\pm 0.2\%$ and turndown of 10:1 in the corresponding range of Reynolds' Numbers. For custody transfer applications the Coin meter is flow tested by an independent NIST certified laboratory under the design operating conditions and piping configurations.

APPLICATIONS

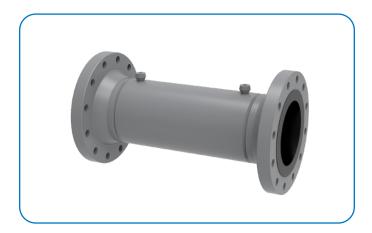
Typical core applications for Wedge meters include high-viscosity fluids, slurries, corrosive fluids, contaminated air/gas, and more.

DIFFERENTIATOR

The wedge meter functions similarly to a segmental orifice. A segmental orifice still has a small restriction in the line around the opening. The wedge design allows solids and particulates to be swept through the opening. It also enables measurements with Reynolds Numbers down in the laminar range to 500 as a minimum. Wedge meters generally have a higher turndown ratio than segmental orifice plates.

BENEFITS

- Abrasive and erosive slurries, viscous and dirty fluids, clean fluids, steam or gasses
- Bi-Directional flow measurement



- Easily installed in any position with minimal straight pipe requirements
- Reduced pumping costs

FEATURES

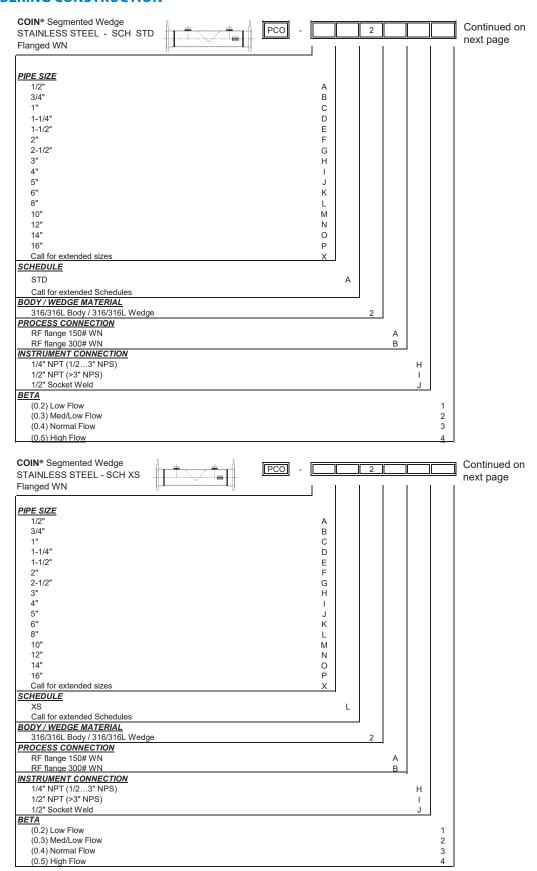
- · Reduced pumping costs
- Turndown ratio: 10:1
- Mass flow output with multivariable transmitter (accuracy ±0.5% calibrated)
- Repeatability: ±0.2% of readings
- Reynolds number measurement down to 300
- High viscosity measurement to 3000 and higher
- Sizes 0.5...16 in.
- Manufactured to ASME, ANSI B31.1, NACE MR-0175, CSA-Z299.3
- ISO-9001 certified design and fabrication

SPECIFICATIONS

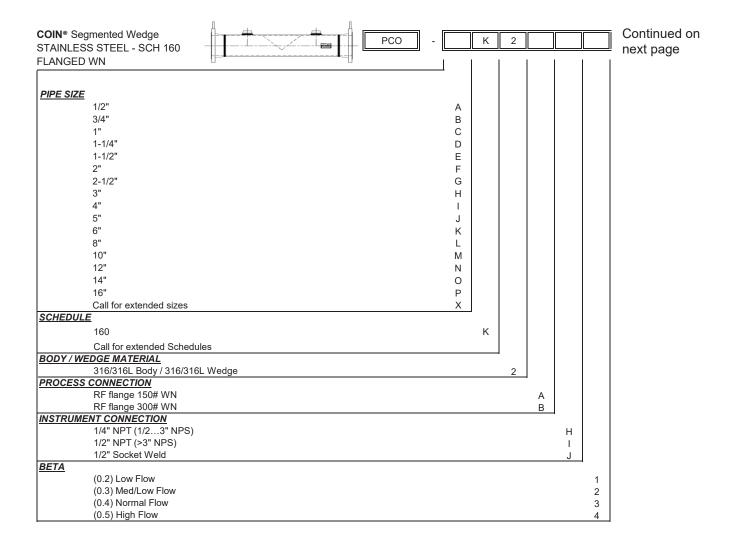
Water, oil, steam, air/gas, other liquids.
0.516 in. (12.70406.40 mm)
Up to 800° F (426.67° C)
Depends on flange rating
±3.0% uncalibrated; up to 0.5% calibrated
±0.2%
10:1



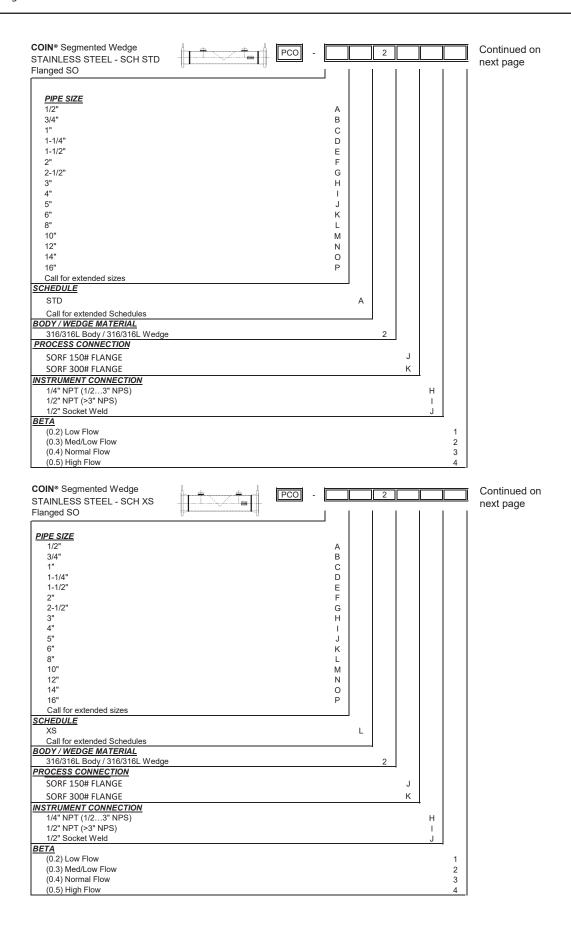
PART NUMBERING CONSTRUCTION



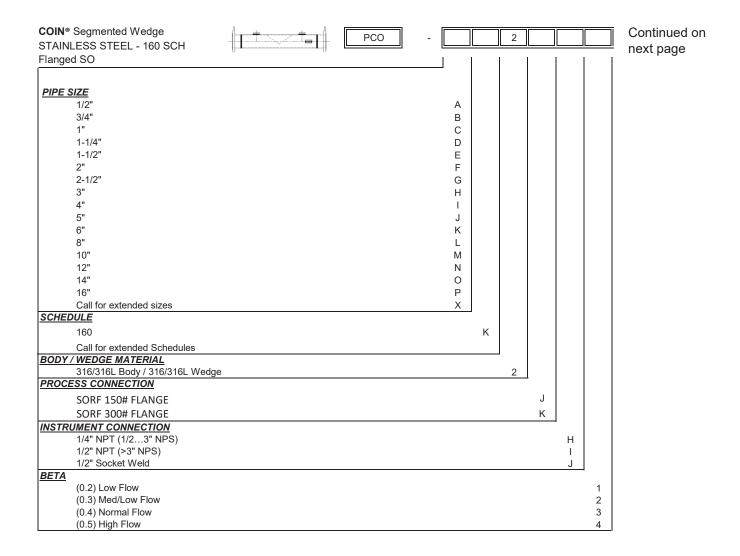
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NSTRUMENT VALVE	_	.						
Not Required 1/4" Needle CS	Z							
1/2" Needle CS	E							
1/4" Needle SS	Ċ							
1/2" Needle SS	Č							
1/2" Gate w/Cross CS (Steam)	Е	.						
1/2" Gate w/Cross SS (Steam)	F	:						
CALIBRATION		-						
Not Required		Z 1						
Factory Calibration (6 point)		2						
Special Factory Calibration External Calibration		3						
RANSMITTER MOUNTING								
Remote Mount			Z					
Mounting Bracket Tee (only)			2					
Manifold Mounting Plate- Meter Mount (Does not include manifold)			3					
ERTIFICATIONS				J				
None				Z				1
Tracable Material Certifications				1				1
NACE MR0-103				2				
NACE MR0-175				3				
Items 1 and 2				4				
Items 1 and 3				5				
Other				Χ				
ANDARD NDE TESTING					4			
None					Z			
Hydrostatic Test Only (1/212" NPS 150# to 900# flange - Others CF)					1			
5% Radiography of Butt Welds					2			
100% Radiography of Butt Welds					3			
5% Magnetic particle/dye penetrant					4			
100% magnetic particle/dye penetrant					5			
Items 2 and 4 (1/212" NPS - Others CF)					6			
Items 3 and 4 (1/212" NPS - Others CF)					7			
Items 3 and 5 (1/212" NPS - Others CF)					8			
Other					Χ			
Note: Items 2-8 also include hydrostatic testing						J		
None						Z		
100% Visual Inspection with Report						1		
PMI (Positive Material Identification)						2		
Post-Weld Harness Testing						3		
Items 1 and 2						4		
Items 3 and 4						5		
Items 1, 2 and 3						6		
ARDCOATING							1	
None							Z	
Tungsten Carbide (WC) on wedge							1	
Tungsten Carbide (WC) on center 1/3 of meter							2	
Chromium Carbode (CrC) on wedge							3	1
Chromium Carbode (CrC) on center 1/3 of meter							4	1
Other							Χ	
ERTIARY TAP								_
None								Z
3/4" Standard RTD Temperature with Thermowell (-200 450° F)								Α
3/4" High Temperature RTD Temperature (-2001000° F)								В
1/2" Pressure Tap w/o transmitter								С
1/2" Pressure Absolute with transmitter								D
1/2" Pressure Gauge with transmitter								Ε



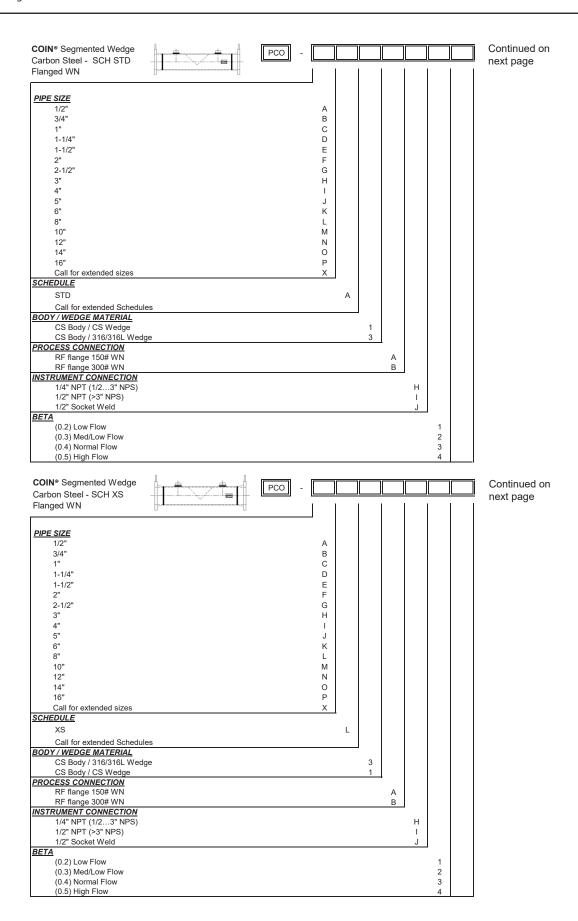
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1/4" Needle SS	C							
1/2" Needle SS	D							
1/2" Gate w/Cross CS (Steam)	E							
1/2" Gate w/Cross SS (Steam)	F							
CALIBRATION		-						
Not Required Factory Calibration (6 point)		Z 1						
Special Factory Calibration		2						
External Calibration		3						
TRANSMITTER MOUNTING			ı					
Remote Mount			Z					
Mounting Bracket Tee (only)			2					
Manifold Mounting Plate- Meter Mount (Does not include manifold)			3					
CERTIFICATIONS				-				
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Tracable Material Certifications				1				
NACE MR0-103				2				
NACE MR0-175				3				
Items 1 and 2				4				
Items 1 and 3				5				
Other				Х				
STANDARD NDE TESTING								
None					Z			
Hydrostatic Test Only (1/212" NPS 150# to 900# flange - Others CF)					1 2			
5% Radiography of Butt Welds 100% Radiography of Butt Welds					3			
5% Magnetic particle/dye penetrant					3 4			
100% magnetic particle/dye penetrant					5			
Items 2 and 4 (1/212" NPS - Others CF)					6			
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Items 3 and 5 (1/212" NPS - Others CF)					8			
Other					X			
Note: Items 2-8 also include hydrostatic testing								
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None						Z		
100% Visual Inspection with Report						1		
PMI (Positive Material Identification)						2		
Post-Weld Harness Testing						3		
Items 1 and 2						4		
Items 3 and 4						5		
Items 1, 2 and 3								
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HARDCOATING None							Z	
Tungsten Carbide (WC) on wedge							1	
Tungsten Carbide (WC) on center 1/3 of meter							2	
Chromium Carbode (CrC) on wedge							3	
Chromium Carbode (CrC) on center 1/3 of meter							4	
Other							Χ	
TERTIARY TAP								_
None								Z
								Α
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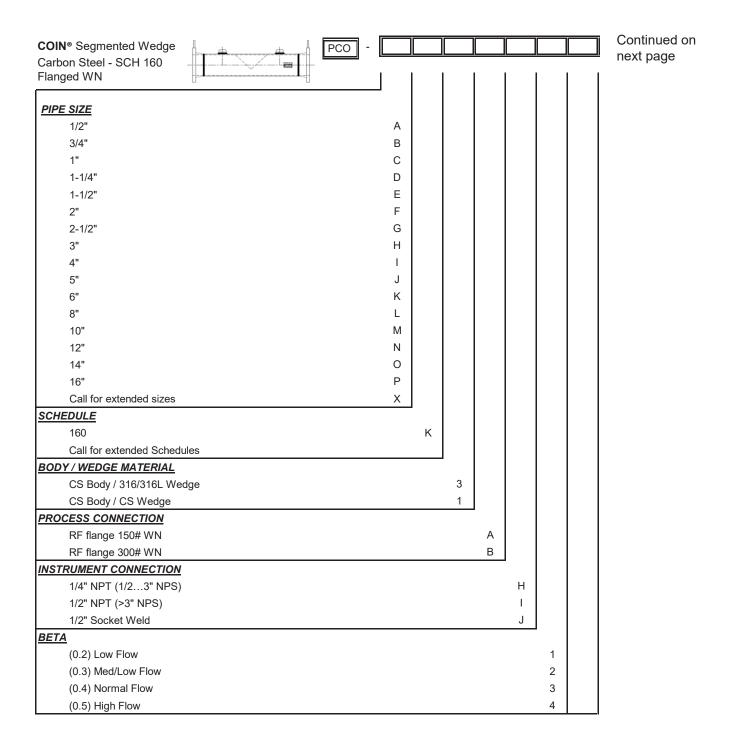
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1/4" Needle CS	Ā							
1/2" Needle CS	В							
1/4" Needle SS	С							
1/2" Needle SS	D							
1/2" Gate w/Cross CS (Steam)	E							
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CALIBRATION Not Required		7						
Factory Calibration (6 point)		Z 1						
Special Factory Calibration		2						
External Calibration		3						
TRANSMITTER MOUNTING			, i					
Remote Mount			Z					
Mounting Bracket Tee (only)			2					
Manifold Mounting Plate- Meter Mount (Does not include manifold)			3					
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None				Z				
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Other CTANDARD NRS TESTING				Х				
STANDARD NDE TESTING					7			
None Hydrostatic Test Only (1/212" NPS 150# to 900# flange - Others CF)					Z 1			
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Note: Items 2-8 also include hydrostatic testing						1		
OTHER NDE TESTING								
None						Z		
100% Visual Inspection with Report						1		
PMI (Positive Material Identification)						2		
Post-Weld Harness Testing						3		
Items 1 and 2						4		
Items 3 and 4						5		
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Tungsten Carbide (WC) on wedge							1	
Tungsten Carbide (WC) on center 1/3 of meter							2	
Chromium Carbode (CrC) on wedge							3	
Chromium Carbode (CrC) on center 1/3 of meter							4	
Other							Χ	
TERTIARY TAP								-
None								Z
3/4" Standard RTD Temperature with Thermowell (-200… 450° F)								Α
3/4" High Temperature RTD Temperature (-2001000° F)								В
1/2" Pressure Tap w/o transmitter								С
1/2" Pressure Absolute with transmitter								D
1/2" Pressure Gauge with transmitter								E
1/2 1 1699ure Gauge with transmitter								



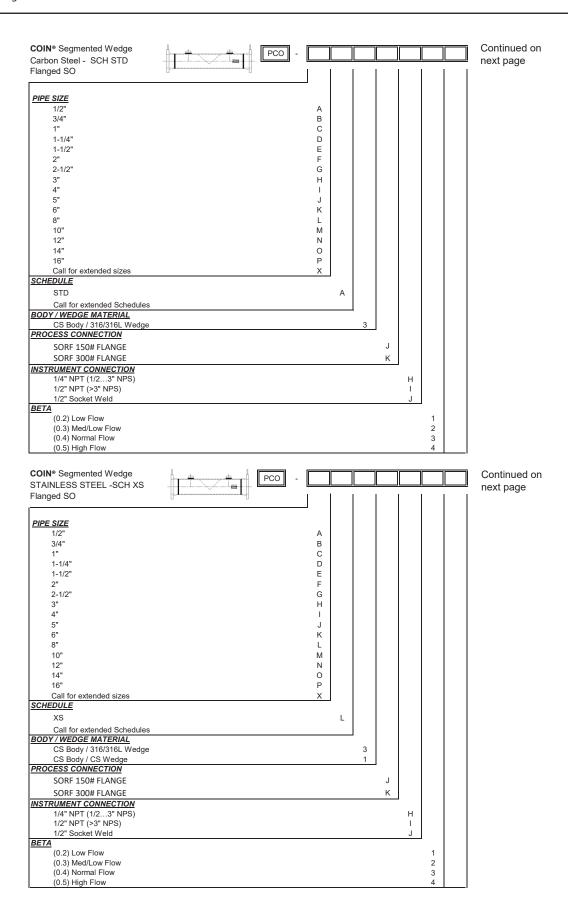
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1/2" Gate w/Cross CS (Steam) 1/2" Gate w/Cross SS (Steam)	E F							
CALIBRATION		ı						
Not Required		Z						
Factory Calibration (6 point) Special Factory Calibration		1 2						
External Calibration		3						
TRANSMITTER MOUNTING			,					
Remote Mount			Z					
Mounting Bracket Tee (only)			2					
Manifold Mounting Plate- Meter Mount (Does not include manifold)			3					
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NACE MR0-103				2				
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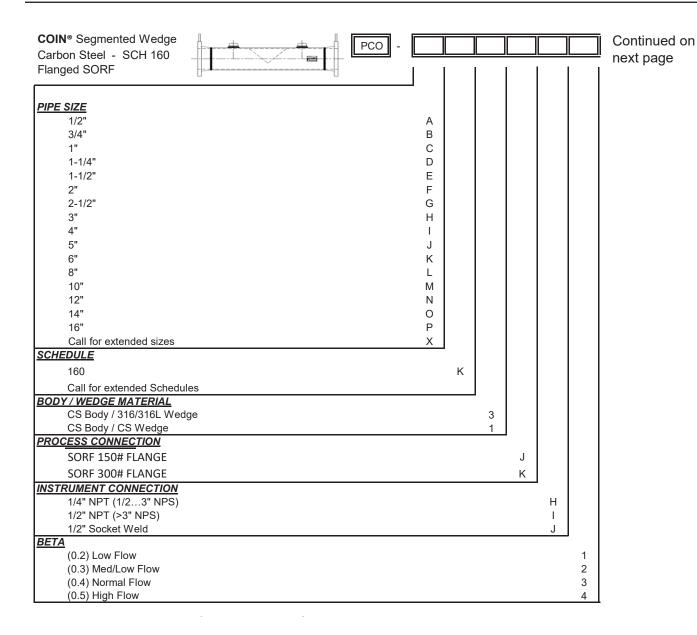
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1/2" Pressure Gauge with transmitter								Ε



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1/2" Pressure Absolute with transmitter								D
1/2" Pressure Gauge with transmitter								Ε

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