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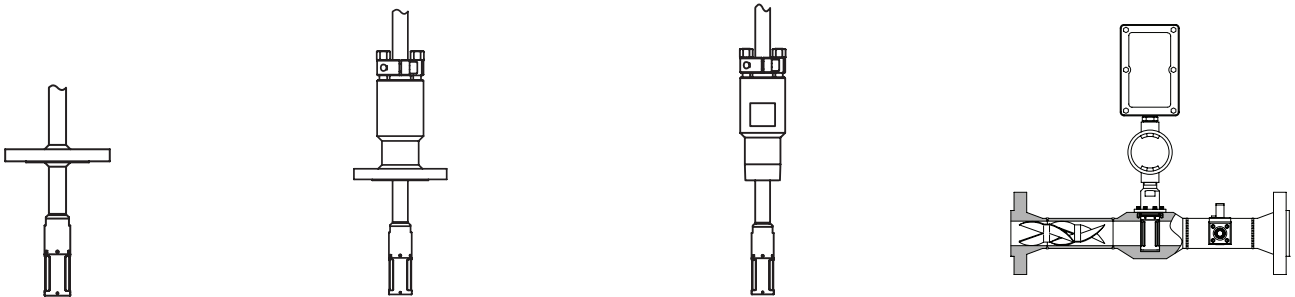
OWD Application Data Sheet

Customer Information

Date: _____
 Name: _____ Company: _____
 Street address: _____
 City: _____ State: _____ Postal code: _____
 Country: _____ Telephone: _____
 Email: _____
 End user name and location: _____
 Project name: _____

Pipeline and installation type (please specify units)

Pipeline Diameter: _____ Pipeline schedule: _____ ANSI rating:



Fixed Insertion
 Flange size:
 Flange type:
 Shaft Length*:

Flanged Insertable
 Flange size:
 Flange type:
 Shaft Length*:

2" Threaded Insertable
 Shaft Length*:

Flow Through
 Flange size:
 Flange type:

* See Shaft Length Calculator on page 3 of this document to determine appropriate length.

Water Cut Range (%):

Additions:

Wetted parts material:
 High temp: Y N
 (fluid above 300F / 149C)

HART protocol: Y N

Local display: Y N

AC power adapter: Y N

Density pass through: Y N

Temp pass through: Y N



Flow Conditions

Please note: proper mixing in accordance with API Chapter 8.2 is required for accurate OWD performance. In order for KAM to properly quote an OWD, please fill out all flow conditions fields to the best of your ability. Should pipeline mixing be required, the quote will include an appropriate solution to fulfill this requirement (SMS, SMP, or ML).

Is there gas in the process? Y N

If Yes, is it of a consistent volume? Y N

Table with 4 columns: Minimum, Normal, Maximum, Units. Rows include: Water cut range, Flow rate, Oil density or gravity range, Viscosity, Temperature, Operating pressure, Salinity.

Max. pressure drop allowed (If applicable): _____

Pipe flow:

Please list all devices which will interface with the OWD:

Installed under process above 110 PSI? Y [] N []

(If yes, a KAM IT Insertion Tool will be required for installation and included in quote)

Additional Notes:

Shaft Calculator

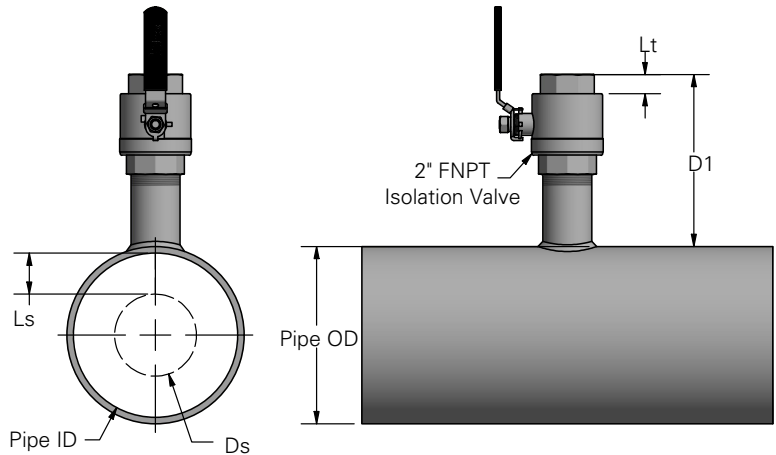
Determine the minimum shaft length for proper insertion in the pipeline.
Off-the-shelf lengths are 20", 24", 30", 36" for insertable models. Fixed insertion models are 7" and 12".

OWD 2" MNPT Insertable

- ___ D1 (See drawing)
- + ___ Pipe Wall Thickness
- + ___ Ls (See drawing)
- + ___ Probe Factor (See below)
- + ___ Seal housing Factor (See below)
- ___ Lt (See drawing)
- = Total / min. shaft length

OWD High Range Factors	
Description	Length
2" Probe	1.65
Seal Housing	7.04

OWD Low Range Factors	
Description	Length
4" Probe	4.95
Seal Housing	6.99



Legend:

- D1: Port Length + Valve Length
- Lt: 2-NPT Thread Engagement (Range: 0.436 to 0.756")
- Ls: Pipe ID x 0.25 (Sampling Area Length)
- Ds: Pipe ID x 0.5 (Sampling Diameter)

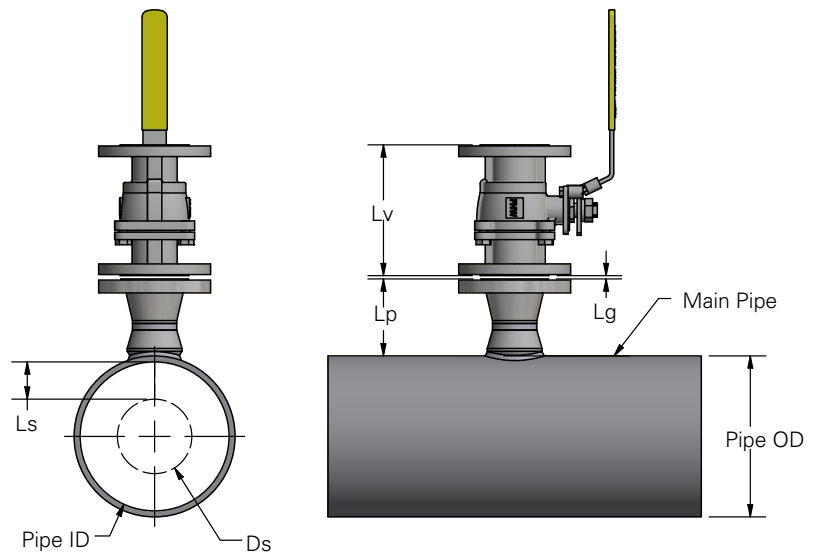
For NPT, thread engagement needs to be considered in length measurement.

OWD Flanged Insertable

- ___ Lp (See drawing)
- + ___ Lv (See drawing)
- + ___ Lg x 2 (See drawing)
- + ___ Pipe Wall Thickness
- + ___ Ls (See drawing)
- + ___ OWD Factor (See below)
- + ___ Seal Housing Factor
- = Total / min. shaft length

Seal Housing Factors	
Description	Length
OWD High Range	7.54"
OWD Low Range	10.84"

OWD Factor		
Class Rating	2" Size	3" Size
150#	1.00"	1.20"
300#	1.12"	1.37"
600#	1.50"	1.75"
900#	2.00"	2.00"



Legend:

- Lp: Port Length
- Lv: Valve Length
- Lg: Gasket Width (Typical 0.175")
- Ls: Pipe ID x 0.25 (Sampling Area Length)
- Ds: Pipe ID x 0.5 (Sampling Diameter)
- *For 4" Connection Contact Kam

Typical Valve Lengths (Lv)		
Class Rating	2" Valve	3" Valve
150#	7.00"	8.00"
300#	8.50"	11.12"
600#	11.0"	14.00"
900#	14.50"	15.25"