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Bell-Mouth

A bell-mouth is a bell-shaped extension at the end of a pipe

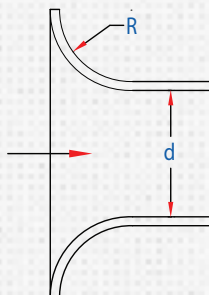
A bell-mouth may also be referred to as a suction bell-mouth. A bell-mouth may be used in gas or liquid applications and is typically placed on the inlet. When placed on the outlet they may be referred to as a diffuser. Bell-mouths are commonly incorporated into a pulsation dampener or anti-surge tank design which contain one or more choke-tubes. The bell-mouth configuration reduces entrance pressure losses as the gas or liquid enters into the pipe in which the bell-mouth is attached. This is accomplished because the shape of the bell-mouth results in a low resistance coefficient which is also called the K factor. The K factor is one of the variables used in determining entrance and exit pressure drops.



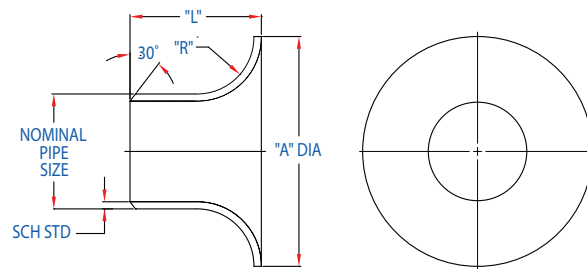
* Special length shown

Applications

- Gas Compressor Protection (Reciprocating)
- Pulsation Dampener
- Air/Gas/Water Intake
- Suction Bellmouth
- Anti-surge Tank



PIPE ENTRANCE RESISTANCE TABLE	
R/d	K
0.00*	0.50
0.02	0.28
0.04	0.24
0.06	0.15
0.10	0.09
0.15 & up	0.04
* Sharp-edged	
K = Resistance Coefficient (unitless)	



SMALL BELL-MOUTHS				
PART NO.	NOMINAL PIPE SIZE	A	R	L
BM-600-S	6"	9	1-1/2"	4"
BM-800-S	8"	12"	2"	4-1/2"
BM-1000-S	10"	15"	2-1/2"	4-1/2"
BM-1200-S	12"	18"	3"	5"
BM-1400-S	14"	18"	3"	5"
BM-1600-S	16"	24"	4"	8"
BM-1800-S	18"	24"	4"	6"
BM-2000-S	20"	30"	5"	10"
BM-2400-S	24"	36"	6"	11"
STANDARD BELL-MOUTHS				
PART NO.	NOMINAL PIPE SIZE	A	R	L
BM-075	3/4"	2-1/2"	11/16"	2-1/2"
BM-100	1"	2-1/2"	11/16"	2-1/2"
BM-125	1-1/4"	3"	13/16"	2-5/8"
BM-150	1-1/2"	4"	1"	3-1/8"
BM-200	2"	5"	1-1/4"	3-3/8"
BM-250	2-1/2"	6"	1-1/2"	3-3/4"
BM-300	3"	7"	1-3/4"	4"
BM-350	3-1/2"	8"	2"	4-1/4"
BM-400	4"	10"	2-1/2"	4-1/4"
BM-500	5"	12"	3"	4-3/8"
BM-600	6"	12"	3"	5"
BM-800	8"	16"	4"	6"
BM-1000	10"	20"	5"	6"
BM-1200	12	24"	6"	7-1/2"
BM-1400	14	28"	6-5/8"	10"
BM-1600	16	32"	7-5/8"	11"
BM-1800	18	36"	8-5/8"	12"
BM-2000	20	40"	9-5/8"	14"
BM-2400	24	48"	11-5/8"	16"

Note: Dimensions subject to change without notice, apply for certified drawings. Custom designs are available, please consult the TM Sales Department or your local sales representative.

Solutions for the New Gas Industry