

**SUNGMO**

# TUBE EXPANDERS



**SUNGMO IND**

# 标准胀管器

以下资料对成茂胀管器的应用和合适的类型进行说明,并提供了简单快捷的指导。成茂胀管器制作精密,设计强韧耐用,并可依照管板密封将其最大化。使用时的正确选择和正确使用方法对发挥成茂胀管器的优势是至关重要的。

## AS-MB 类胀管器



用于油冷器, 空气冷却器, 预热器和散热器

管内部直径为5.4mm(7/32 in)至10mm(3/8 in)

滚柱长度为25mm(1 in)

可根据管板的厚度范围进行调节

可对滚珠轴承环进行调节以设定其伸长量

## AS-CB 类胀管器



用于油冷器, 空气冷却器, 预热器和散热器

内部直径为9mm(3/8 in)至92mm(3-1/8 in)

标准滚柱长度为38mm(1-1/2 in),57mm(2-1/4 in)

和76mm(3 in),可适用于管板的所有厚度范围

可对滚珠轴承环进行调节以设定其伸长量

## AS-HB 类胀管器



用于冷却器和热交换器

管内部直径为9mm(3/8 in)至92mm(3-5/8 in)

标准滚柱长度为38mm(1-1/2 in),57mm(2-1/4 in)

和76mm(3 in)

用于厚度大于75mm(3 in)的管板和双管板

可对滚珠轴承环进行调节以设定其伸长量

# 特殊类胀管器

为适用于普通范围之外的胀管工作,成茂研发出了这些特殊种类的胀管器。

## AS-BK 类胀管器



用于锅炉, 过热器, 水冷壁和节热器

管内部直径为20mm (13/16 in)

至106mm (4-3/16 in)

心轴铈, 顶盖和短头

平行扩展滚柱和扩口滚柱

## 5滚柱胀管器



用于冷凝器和热交换器

为平滑准确地扩展薄壁管而设计, 如钛管等。

## 切槽工具等





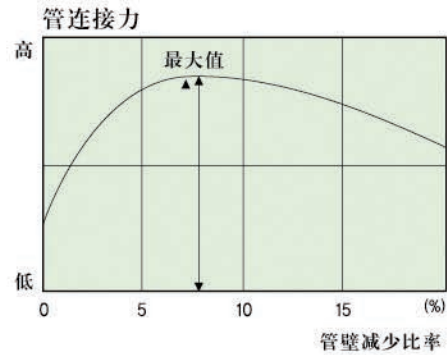
# 胀管基本原理

## 确定膨胀量

通常会使用管壁厚度减少比率作为正确的膨胀量标准以使管和管板之间达到最好的密封效果。但因为管壁的减少比率取决于管板孔的直径，管的外部直径，管壁厚和管板和管的材料，所以它是一个可变量。通常情况下，管壁减少比率在5%到10%之间

管板材料	管材	管壁厚度减少比率
铁	铁	7%
铁	铜	5%
铜	铜	10%

以下表格中显示管壁减少比率随着管板和管的材料不同而变化。



## 管壁厚度减少比率

$$Wt = \frac{(D - d_o) - (H - d_i)}{(D - d_o)} \times 100$$

$$d_i = H - (D - d_o) \times (1 - Wt / 100)$$

Wt = 管壁厚度减少比率(%)

H = 管板孔直径(m.m)

D = 管外部直径(m.m)

d<sub>o</sub> = 管内部直径(m.m)

d<sub>i</sub> = 膨胀后的管内部直径(m.m)

## 管壁内部直径增加比率

$$Wd = \frac{d_i - (d_o + C)}{(d_o + C)} \times 100$$

$$d_i = (d_o + C) \times (1 + Wd / 100)$$

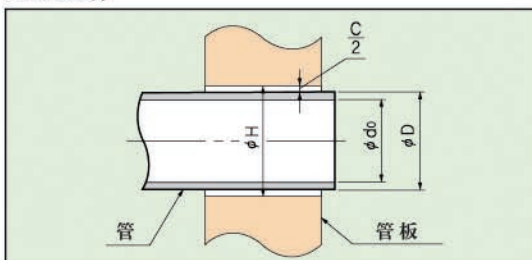
Wd = 管内部直径增加比率(%)

d<sub>o</sub> = 管内部直径(m.m)

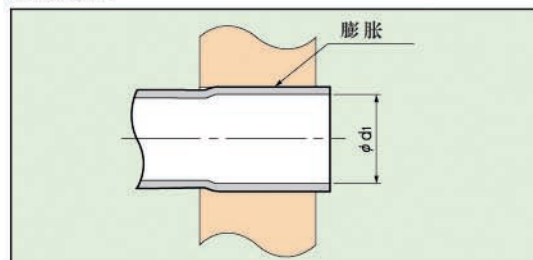
d<sub>i</sub> = 膨胀后管的内部直径(m.m)

C = 管外部直径&管板孔直径之差(m.m)

膨胀之前



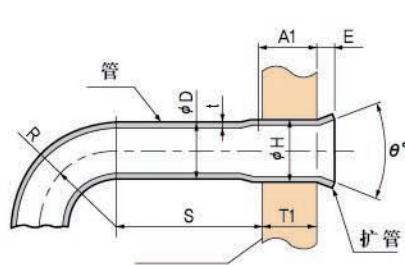
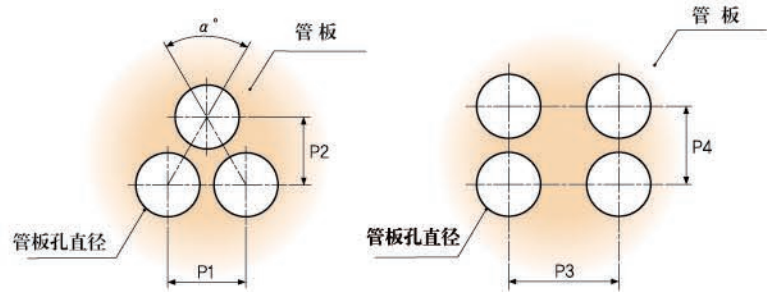
膨胀之后



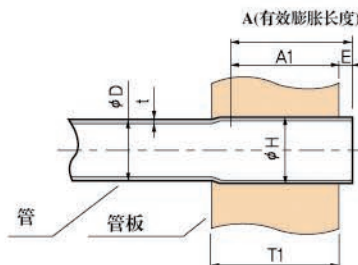
# 标准胀管器

## 下单时请提供以下信息

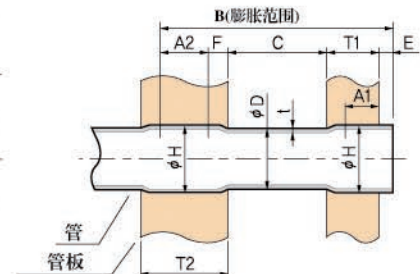
1. 管外径 ( $\phi D$ ), 管厚度 ( $t$ ), 管厚度公差和管材
2. 管板材料和厚度 ( $T_1, T_2$ )
3. 板孔孔径 ( $\phi H$ )
4. 管板孔间距 ( $P_1, P_2, P_3, P_4$ )
5. 有效膨胀长度 ( $A_1, A_2$ )
6. 管突出量 ( $E$ )
7. 膨胀长度 ( $B$ )
8. 需要扩展膨胀时的扩展角 ( $\alpha$ )
9. 直管部分长度 ( $S$ )
10. 弯管部分的曲率半径 ( $R$ )
11. 胀管器种类, (AS-CB, AS-HB类...等)



AS-BK类

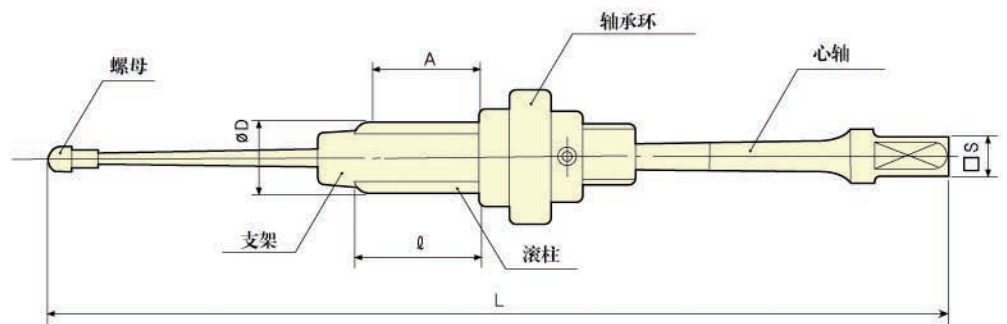


AS-CB类



AS-HB类

## AS-MB类

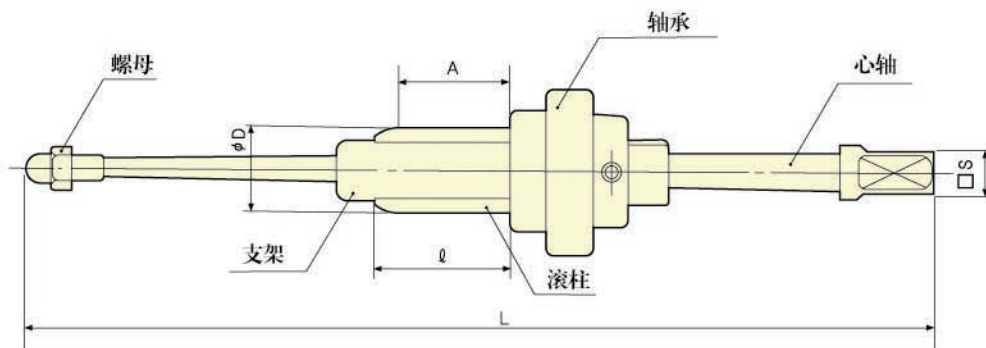


工具编号 滚柱长度 $l$ 25mm (1")	胀管机范围D		有效膨胀长度A		心机		
	最小值 mm (in.)	最大值 mm (in.)	$l$		编号	方形轮轴S mm (in.)	长度L mm (in.)
		最小值 mm (in.)	最大值 mm (in.)				
AS-MB-11	5.4 (0.213)	6.4 (0.252)	13 (0.512)	22 (0.866)	AM-1	6.3 (1/4)	129 (5)
AS-MB-12	5.8 (0.228)	6.8 (0.268)					
AS-MB-13	6.2 (0.244)	7.2 (0.283)					
AS-MB-14	6.6 (0.260)	7.7 (0.303)	13 (0.512)	22 (0.866)	AM-2	6.3 (1/4)	129 (5)
AS-MB-15	7.0 (0.276)	8.1 (0.319)					
AS-MB-16	7.4 (0.291)	8.5 (0.335)					
AS-MB-17	7.8 (0.307)	9.0 (0.354)	13 (0.512)	22 (0.866)	AM-3	6.3 (1/4)	129 (5)
AS-MB-18	8.2 (0.323)	9.4 (0.370)					
AS-MB-19	8.6 (0.339)	9.8 (0.386)					
AS-MB-20	9.0 (0.354)	10.2 (0.402)					



# 胀管器尺寸表

## AS-CB类

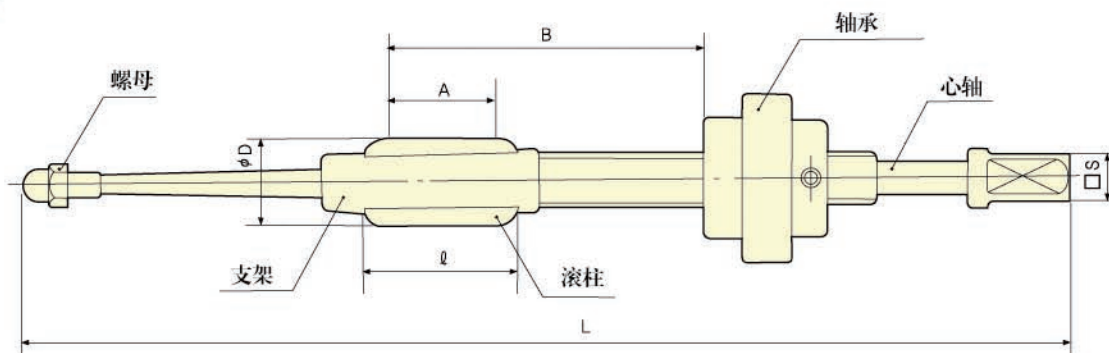


工具编号			膨胀范围D				心轴		
滚柱长度 l			最小值 mm (in.)	最大值			编号	轮轴 方形 mm (in.)	长度 L mm (in.)
38mm (1-1/2")	57mm (2-1/4")	76mm (3")		滚柱长度					
				38mm(1-1/2") mm (in.)	57mm(2-1/4") mm (in.)	76mm(3") mm (in.)			
CB-101	-	-	9.2 (0.362)	10.9 (0.429)	-	-	AC-1		
CB-103	-	-	10.0 (0.394)	11.7 (0.461)	-	-	AC-2	9.5 (3/8)	222 (8.7)
CB-105	-	-	10.8 (0.425)	12.5 (0.492)	-	-			
CB-107	CB-207	-	11.6 (0.457)	13.5 (0.531)	13.2 (0.520)	-	AC-4	9.5 (3/8)	222 (8.7)
CB-109	CB-209	-	12.4 (0.488)	14.3 (0.563)	14.0 (0.551)	-			
CB-111	CB-211	-	13.2 (0.520)	15.1 (0.594)	14.8 (0.583)	-			
CB-113	CB-213	CB-313	14.0 (0.551)	16.2 (0.638)	15.8 (0.622)	15.4 (0.606)	AC-6	9.5 (3/8)	222 (8.7)
CB-115	CB-215	CB-315	14.8 (0.583)	17.0 (0.669)	16.6 (0.654)	16.2 (0.638)			
CB-117	CB-217	CB-317	15.6 (0.614)	17.8 (0.701)	17.4 (0.685)	17.0 (0.669)			
CB-119	CB-219	CB-319	16.4 (0.646)	18.9 (0.744)	18.4 (0.724)	18.0 (0.709)	AC-8	9.5 (3/8)	226 (8.9)
CB-121	CB-221	CB-321	17.1 (0.673)	19.7 (0.776)	19.2 (0.756)	18.8 (0.740)			
CB-123	CB-223	CB-323	17.9 (0.705)	20.5 (0.807)	20.0 (0.787)	19.6 (0.771)			
CB-125	CB-225	CB-325	18.7 (0.736)	21.5 (0.846)	21.1 (0.831)	20.6 (0.811)	AC-10	9.5 (3/8)	226 (8.9)
CB-127	CB-227	CB-327	19.5 (0.768)	22.3 (0.878)	21.9 (0.862)	21.4 (0.843)			
CB-129	CB-229	CB-329	20.3 (0.799)	23.1 (0.909)	22.6 (0.890)	22.1 (0.870)			
CB-131	CB-231	CB-331	21.3 (0.831)	23.9 (0.941)	23.4 (0.921)	22.9 (0.902)			
CB-132	CB-232	CB-332	21.5 (0.846)	25.0 (0.984)	24.4 (0.961)	23.8 (0.937)	AC-11	12.7 (1/2)	236 (9.3)
CB-134	CB-234	CB-334	22.3 (0.878)	25.8 (1.016)	25.2 (0.992)	24.6 (0.969)			
CB-136	CB-236	CB-336	23.1 (0.909)	26.5 (1.043)	26.0 (1.024)	25.4 (1.000)			
CB-138	CB-238	CB-338	23.9 (0.941)	27.3 (1.075)	26.8 (1.055)	26.2 (1.031)			
CB-140	CB-240	CB-340	24.7 (0.972)	28.1 (1.106)	27.6 (1.087)	27.0 (1.063)			
CB-142	CB-242	CB-342	25.5 (1.004)	29.5 (1.161)	28.8 (1.134)	28.2 (1.110)	AC-12	12.7 (1/2)	236 (9.3)
CB-144	CB-244	CB-344	26.3 (1.035)	30.3 (1.193)	29.6 (1.165)	29.0 (1.142)			
CB-146	CB-246	CB-346	27.1 (1.067)	31.1 (1.224)	30.4 (1.197)	29.8 (1.173)			
CB-148	CB-248	CB-348	27.9 (1.098)	31.9 (1.256)	31.2 (1.229)	30.6 (1.205)			
CB-150	CB-250	CB-350	28.7 (1.130)	32.7 (1.287)	32.0 (1.260)	31.4 (1.236)			
CB-152	CB-252	CB-352	29.5 (1.161)	34.1 (1.343)	33.3 (1.311)	32.6 (1.283)	AC-13	12.7 (1/2)	241 (9.5)
CB-154	CB-254	CB-354	30.3 (1.193)	34.9 (1.374)	34.1 (1.343)	33.4 (1.315)			
CB-156	CB-256	CB-356	31.1 (1.224)	35.7 (1.406)	34.9 (1.374)	34.2 (1.346)			
CB-158	CB-258	CB-358	31.9 (1.256)	36.5 (1.437)	35.7 (1.406)	35.0 (1.378)			
CB-160	CB-260	CB-360	32.6 (1.283)	37.2 (1.465)	36.5 (1.437)	35.7 (1.406)			
CB-162	CB-262	CB-362	33.4 (1.315)	38.0 (1.496)	37.3 (1.469)	36.5 (1.437)			
-	CB-264	CB-364	35.1 (1.382)	-	39.7 (1.563)	38.9 (1.531)	AC-14	19.0 (3/4)	273 (10.7)
-	CB-266	CB-366	36.6 (1.441)	-	41.3 (1.626)	40.5 (1.594)			
-	CB-268	CB-368	38.2 (1.504)	-	42.9 (1.689)	42.1 (1.657)			
-	CB-270	CB-370	40.7 (1.602)	-	46.1 (1.815)	45.3 (1.783)	AC-15	19.0 (3/4)	293 (11.5)
-	CB-272	CB-372	43.9 (1.728)	-	49.2 (1.937)	48.4 (1.906)			
-	CB-274	CB-374	47.0 (1.850)	-	52.4 (2.063)	51.6 (2.031)			
-	CB-276	CB-376	49.5 (1.949)	-	55.6 (2.189)	54.8 (2.157)	AC-16	19.0 (3/4)	312 (12.3)
-	CB-278	CB-378	52.7 (2.075)	-	58.8 (2.315)	58.0 (2.283)			
-	CB-280	CB-380	55.9 (2.201)	-	61.9 (2.437)	61.1 (2.406)			
-	CB-282	CB-382	58.2 (2.291)	-	65.1 (2.563)	64.3 (2.531)	AC-17	19.0 (3/4)	331 (13.0)
-	CB-284	CB-384	61.4 (2.417)	-	68.3 (2.689)	67.5 (2.657)			
-	CB-286	CB-386	64.6 (2.543)	-	71.5 (2.815)	70.7 (2.783)			
-	CB-288	CB-388	67.1 (2.642)	-	75.4 (2.969)	74.5 (2.933)	AC-18	25.4 (1)	375 (14.8)
-	CB-290	CB-390	70.3 (2.768)	-	78.6 (3.094)	77.7 (3.059)			
-	CB-292	CB-392	73.5 (2.894)	-	81.8 (3.220)	80.9 (3.185)			
-	CB-294	CB-394	76.6 (3.016)	-	84.9 (3.343)	84.0 (3.307)	AC-19	25.4 (1)	375 (14.8)
-	CB-296	CB-396	79.8 (3.142)	-	88.1 (3.469)	87.3 (3.437)			
-	CB-298	CB-398	84.6 (3.331)	-	94.5 (3.720)	93.7 (3.689)	AC-20	25.4 (1)	413 (16.3)
-	CB-300	CB-400	90.9 (3.579)	-	100.8 (3.969)	100.0 (3.937)			



# 胀管器尺寸表

## AS-HB类

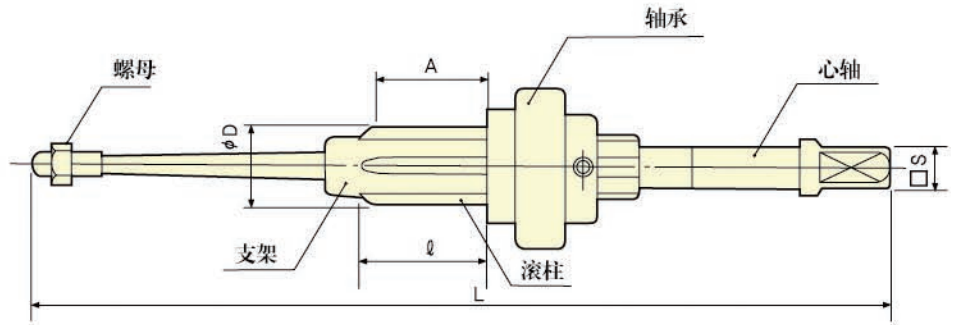


工具编号			膨胀范围D				心轴		
滚柱长度 $l$			最小值 mm (in.)	最大值			编号	方形 轮轴(S) mm (in.)	最小值 mm (in.)
38mm (1-1/2")	57mm (2-1/4")	76mm (3")		滚柱长度					
				38mm(1-1/2") mm (in.)	57mm(2-1/4") mm (in.)	76mm(3") mm (in.)			
HB-101	-	-	9.2 (0.362)	10.9 (0.429)	-	-	AH-1		
HB-103	-	-	10.0 (0.394)	11.7 (0.461)	-	-	AH-2	9.5 (3/8)	336 (13.3)
HB-105	-	-	10.8 (0.425)	12.5 (0.492)	-	-			
HB-107	HB-207	-	11.6 (0.457)	13.5 (0.531)	13.2 (0.520)	-	AH-4	9.5 (3/8)	336 (13.3)
HB-109	HB-209	-	12.4 (0.488)	14.3 (0.563)	14.0 (0.551)	-			
HB-111	HB-211	-	13.2 (0.520)	15.1 (0.594)	14.8 (0.583)	-			
HB-113	HB-213	HB-313	14.0 (0.551)	16.2 (0.638)	15.8 (0.622)	15.4 (0.606)	AH-6	9.5 (3/8)	336 (13.3)
HB-115	HB-215	HB-315	14.8 (0.583)	17.0 (0.669)	16.6 (0.654)	16.2 (0.638)			
HB-117	HB-217	HB-317	15.6 (0.614)	17.8 (0.701)	17.4 (0.685)	17.0 (0.669)			
HB-119	HB-219	HB-319	16.4 (0.646)	18.9 (0.744)	18.4 (0.724)	18.0 (0.709)	AH-8	9.5 (3/8)	340 (13.4)
HB-121	HB-221	HB-321	17.1 (0.673)	19.7 (0.776)	19.2 (0.756)	18.8 (0.740)			
HB-123	HB-223	HB-323	17.9 (0.705)	20.5 (0.807)	20.0 (0.787)	19.6 (0.771)			
HB-125	HB-225	HB-325	18.7 (0.736)	21.5 (0.846)	21.1 (0.831)	20.6 (0.811)	AH-10	9.5 (3/8)	340 (13.4)
HB-127	HB-227	HB-327	19.5 (0.768)	22.3 (0.878)	21.9 (0.862)	21.4 (0.843)			
HB-129	HB-229	HB-329	20.3 (0.799)	23.1 (0.909)	22.6 (0.890)	22.1 (0.870)			
HB-131	HB-231	HB-331	21.3 (0.831)	23.9 (0.941)	23.4 (0.921)	22.9 (0.902)			
HB-132	HB-232	HB-332	21.5 (0.846)	25.0 (0.984)	24.4 (0.961)	23.8 (0.937)	AH-11	12.7 (1/2)	350 (13.8)
HB-134	HB-234	HB-334	22.3 (0.878)	25.8 (1.016)	25.2 (0.992)	24.6 (0.969)			
HB-136	HB-236	HB-336	23.1 (0.909)	26.5 (1.043)	26.0 (1.024)	25.4 (1.000)			
HB-138	HB-238	HB-338	23.9 (0.941)	27.3 (1.075)	26.8 (1.055)	26.2 (1.031)			
HB-140	HB-240	HB-340	24.7 (0.972)	28.1 (1.106)	27.6 (1.087)	27.0 (1.063)			
HB-142	HB-242	HB-342	25.5 (1.004)	29.5 (1.161)	28.8 (1.134)	28.2 (1.110)	AH-12	12.7 (1/2)	350 (13.8)
HB-144	HB-244	HB-344	26.3 (1.035)	30.3 (1.193)	29.6 (1.165)	29.0 (1.142)			
HB-146	HB-246	HB-346	27.1 (1.067)	31.1 (1.224)	30.4 (1.197)	29.8 (1.173)			
HB-148	HB-248	HB-348	27.9 (1.098)	31.9 (1.256)	31.2 (1.229)	30.6 (1.205)			
HB-150	HB-250	HB-350	28.7 (1.130)	32.7 (1.287)	32.0 (1.260)	31.4 (1.236)			
HB-152	HB-252	HB-352	29.5 (1.161)	34.1 (1.343)	33.3 (1.311)	32.6 (1.283)	AH-13	12.7 (1/2)	355 (14.0)
HB-154	HB-254	HB-354	30.3 (1.193)	34.9 (1.374)	34.1 (1.343)	33.4 (1.315)			
HB-156	HB-256	HB-356	31.1 (1.224)	35.7 (1.406)	34.9 (1.374)	34.2 (1.346)			
HB-158	HB-258	HB-358	31.9 (1.256)	36.5 (1.437)	35.7 (1.406)	35.0 (1.378)			
HB-160	HB-260	HB-360	32.6 (1.283)	37.2 (1.465)	36.5 (1.437)	35.7 (1.406)			
HB-162	HB-262	HB-362	33.4 (1.315)	38.0 (1.496)	37.3 (1.469)	36.5 (1.437)			
-	HB-264	HB-364	35.1 (1.382)	-	39.7 (1.563)	38.9 (1.531)	AH-14	19.0 (3/4)	388 (15.3)
-	HB-266	HB-366	36.6 (1.441)	-	41.3 (1.626)	40.5 (1.594)			
-	HB-268	HB-368	38.2 (1.504)	-	42.9 (1.689)	42.1 (1.657)			
-	HB-270	HB-370	40.7 (1.602)	-	46.1 (1.815)	45.3 (1.783)	AH-15	19.0 (3/4)	408 (16.1)
-	HB-272	HB-372	43.9 (1.728)	-	49.2 (1.937)	48.4 (1.906)			
-	HB-274	HB-374	47.0 (1.850)	-	52.4 (2.063)	51.6 (2.031)			
-	HB-276	HB-376	49.5 (1.949)	-	55.6 (2.189)	54.8 (2.157)	AH-16	19.0 (3/4)	427 (16.8)
-	HB-278	HB-378	52.7 (2.075)	-	58.8 (2.315)	58.0 (2.283)			
-	HB-280	HB-380	55.9 (2.201)	-	61.9 (2.437)	61.1 (2.406)			
-	HB-282	HB-382	58.2 (2.291)	-	65.1 (2.563)	64.3 (2.531)	AH-17	19.0 (3/4)	446 (17.6)
-	HB-284	HB-384	61.4 (2.417)	-	68.3 (2.689)	67.5 (2.657)			
-	HB-286	HB-386	64.6 (2.543)	-	71.5 (2.815)	70.7 (2.783)			
-	HB-288	HB-388	67.1 (2.642)	-	75.4 (2.969)	74.5 (2.933)	AH-18	25.4 (1)	489 (19.3)
-	HB-290	HB-390	70.3 (2.768)	-	78.6 (3.094)	77.7 (3.059)			
-	HB-292	HB-392	73.5 (2.894)	-	81.8 (3.220)	80.9 (3.185)			
-	HB-294	HB-394	76.6 (3.016)	-	84.9 (3.343)	84.0 (3.307)	AH-19	25.4 (1)	489 (19.3)
-	HB-296	HB-396	79.8 (3.142)	-	88.1 (3.469)	87.3 (3.437)			
-	HB-298	HB-398	84.6 (3.331)	-	94.5 (3.720)	93.7 (3.689)	AH-20	25.4 (1)	527 (20.7)
-	HB-300	HB-400	90.9 (3.579)	-	100.8 (3.969)	100.0 (3.937)			



# 五滚柱胀管器

## AS-CB R5 类



工具编号			膨胀范围D				有效滚柱长度A						心轴		
滚柱长度 $\ell$			最小值	最大值			$\ell = 38$		$\ell = 57$		$\ell = 76$		编号	轮轴 S	长度 L mm (in.)
38mm	57mm	76mm		$\ell = 38$	$\ell = 57$	$\ell = 76$	最小值	最大值	最小值	最大值	最小值	最大值			
CB107R5	-	-	11.5	13.3	-	-	14	33	-	-	-	-	RC5-2	9.5	232
CB109R5	-	-	12.3	14.1	-	-							RC5-3	9.5	216
CB111R5	-	-	13.1	14.9	-	-							RC5-4	9.5	236
CB113R5	CB213R5	-	13.9	16.0	15.7	-							RC5-5	9.5	244
CB115R5	CB215R5	-	14.7	16.8	16.5	-							RC5-6	9.5	233
CB117R5	CB217R5	-	15.5	17.8	17.5	-			32	51			RC5-7	9.5	230
CB119R5	CB219R5	CB319R5	16.3	18.7	18.3	17.9					51	70	RC5-8	9.5	241
CB121R5	CB221R5	CB321R5	17.1	19.5	19.1	18.7							RC5-9	9.5	237
CB123R5	CB223R5	CB323R5	17.9	20.5	20.1	19.6							RC5-10	12.7	250
CB125R5	CB225R5	CB325R5	18.7	21.5	21.1	20.6	11	30	30	49	49	68	RC5-11	12.7	256
CB127R5	CB227R5	CB327R5	19.5	22.3	21.9	21.4							RC5-12	12.7	248
CB129R5	CB229R5	CB329R5	20.2	23.2	22.7	22.2							RC5-13	12.7	241
CB131R5	CB231R5	CB331R5	21.0	24.0	23.5	23.0	10	29					RC5-14	12.7	249
-	CB232R5	CB332R5	21.4	-	24.1	23.6			29	48	48	67	RC5-15	12.7	261
-	CB234R5	CB334R5	22.2	-	24.9	24.4	-	-					RC5-16	12.7	246
-	CB236R5	CB336R5	23.0	-	25.9	25.4							RC5-17	12.7	262
-	CB238R5	CB338R5	23.8	-	26.9	26.3							RC5-18	19.0	284
-	CB240R5	CB340R5	24.6	-	27.6	27.1							RC5-19	19.0	299
-	CB242R5	CB342R5	25.4	-	28.6	28.0							RC5-20	19.0	318
-	CB244R5	CB344R5	26.2	-	29.4	28.8	-	-	29	46	48	65	RC5-21	19.0	342
-	CB246R5	CB346R5	27.0	-	30.4	29.9									
-	CB248R5	CB348R5	27.8	-	31.2	30.7									
-	CB250R5	CB350R5	28.6	-	32.0	31.5									
-	CB252R5	CB352R5	29.4	-	33.2	32.7									
-	CB254R5	CB354R5	30.2	-	34.1	33.5									
-	CB256R5	CB356R5	31.0	-	34.9	34.3									
-	CB258R5	CB358R5	31.8	-	35.7	35.1	-	-	27	44	46	63			
-	CB260R5	CB360R5	32.5	-	36.8	36.1									
-	CB262R5	CB362R5	33.3	-	37.6	36.9									
-	CB264R5	CB364R5	34.9	-	39.7	39.0									
-	CB266R5	CB366R5	36.5	-	41.3	40.6									
-	CB268R5	CB368R5	38.1	-	42.9	42.1	-	-	26	43	45	62			
-	CB270R5	CB370R5	40.5	-	46.0	45.2									
-	CB272R5	CB372R5	43.7	-	49.2	48.4									
-	CB274R5	CB374R5	46.9	-	52.4	51.6			24	41					
-	-	CB376R5	49.3	-	-	54.8									
-	-	CB378R5	52.4	-	-	58.0									
-	-	CB380R5	55.6	-	-	61.1	-	-	-	-	43	60			
-	-	CB382R5	57.9	-	-	64.3									
-	-	CB384R5	61.1	-	-	67.5									
-	-	CB386R5	64.3	-	-	70.7									







# 胀管器尺寸表

## AS-CB 类

### 有效滚柱长度A

工具编号	有效滚柱长度A		工具编号	有效滚柱长度A		工具编号	有效滚柱长度A	
	最小值 mm (in.)	最大值 mm (in.)		最小值 mm (in.)	最大值 mm (in.)		最小值 mm (in.)	最大值 mm (in.)
CB-101-CB-105	14 (0.551)	33 (1.299)	-	-	-	-	-	-
CB-107-CB-111	13 (0.551)	32 (1.260)	CB-207-CB-211	32 (1.260)	51 (2.008)	-	-	-
CB-113-CB-117	13 (0.551)	32 (1.260)	CB-213-CB-217	32 (1.260)	51 (2.008)	CB-313-CB-317	51 (2.008)	70 (2.756)
CB-119-CB-123	11 (0.551)	30 (1.181)	CB-219-CB-223	30 (1.181)	49 (1.929)	CB-319-CB-323	49 (1.929)	68 (2.677)
CB-125-CB-131	10 (0.551)	29 (1.142)	CB-225-CB-231	29 (1.142)	48 (1.890)	CB-325-CB-331	48 (1.890)	67 (2.638)
CB-132-CB-140	10 (0.551)	27 (1.063)	CB-232-CB-240	29 (1.142)	46 (1.811)	CB-332-CB-340	48 (1.890)	65 (2.560)
CB-142-CB-150	8 (0.551)	25 (1.984)	CB-242-CB-250	27 (1.063)	44 (1.732)	CB-342-CB-350	46 (1.811)	63 (2.480)
CB-152-CB-162	7 (0.551)	24 (1.945)	CB-252-CB-262	26 (1.024)	43 (1.693)	CB-352-CB-362	45 (1.772)	62 (2.441)
-	-	-	CB-264-CB-268	26 (1.024)	43 (1.693)	CB-364-CB-368	45 (1.772)	62 (2.441)
-	-	-	CB-270-CB-274	24 (1.945)	41 (1.614)	CB-370-CB-374	43 (1.693)	60 (2.362)
-	-	-	CB-276-CB-280	24 (1.945)	41 (1.614)	CB-376-CB-380	43 (1.693)	60 (2.362)
-	-	-	CB-282-CB-286	24 (1.945)	41 (1.614)	CB-382-CB-386	43 (1.693)	60 (2.362)
-	-	-	CB-288-CB-292	21 (1.827)	38 (1.496)	CB-388-CB-392	40 (1.575)	57 (2.244)
-	-	-	CB-294-CB-296	21 (1.827)	38 (1.496)	CB-394-CB-396	40 (1.575)	57 (2.244)
-	-	-	CB-298-CB-300	21 (1.827)	38 (1.496)	CB-398-CB-400	40 (1.575)	57 (2.244)

## AS-HB 类

### 可调整范围B和有效滚柱长度A

工具编号	可调整范围B		有效滚柱长度A mm (in.)	工具编号	可调整范围B		有效滚柱长度A mm (in.)	工具编号	可调整范围B		有效滚柱长度A mm (in.)
	最小值 mm (in.)	最大值 mm (in.)			最小值 mm (in.)	最大值 mm (in.)			最小值 mm (in.)	最大值 mm (in.)	
HB-101~ HB-105	14 (0.551)	147 (5.787)	30 (1.181)	-	-	-	-	-	-	-	-
HB-107~ HB-111	13 (0.512)	146 (5.748)	27 (1.063)	HB-207~ HB-211	32 (1.260)	165 (6.496)	46 (1.811)	-	-	-	-
HB-113~ HB-117	13 (0.512)	146 (5.748)	27 (1.063)	HB-213~ HB-217	32 (1.260)	165 (6.496)	46 (1.811)	HB-313~ HB-317	51 (2.008)	184 (7.244)	65 (2.560)
HB-119~ HB-123	11 (0.433)	144 (5.669)	24 (0.945)	HB-219~ HB-223	30 (1.181)	163 (6.417)	43 (1.693)	HB-319~ HB-323	49 (1.929)	182 (7.165)	62 (2.441)
HB-125~ HB-131	10 (0.394)	143 (5.630)	22 (0.866)	HB-225~ HB-231	29 (1.142)	162 (6.378)	41 (1.614)	HB-325~ HB-331	48 (1.890)	181 (7.126)	60 (2.362)
HB-132~ HB-140	10 (0.394)	141 (5.551)	19 (0.748)	HB-232~ HB-240	29 (1.142)	160 (6.299)	38 (1.496)	HB-332~ HB-340	48 (1.890)	179 (7.047)	57 (2.244)
HB-142~ HB-150	8 (0.315)	139 (5.472)	16 (0.630)	HB-242~ HB-250	27 (1.063)	158 (6.220)	35 (1.378)	HB-342~ HB-350	46 (1.811)	177 (6.969)	54 (2.126)
HB-152~ HB-162	7 (0.276)	138 (5.433)	14 (0.551)	HB-252~ HB-262	26 (1.024)	157 (6.181)	33 (1.299)	HB-352~ HB-362	45 (1.772)	176 (6.929)	52 (2.047)
-	-	-	-	HB-264~ HB-268	26 (1.024)	157 (6.181)	33 (1.299)	HB-364~ HB-368	45 (1.772)	176 (6.929)	52 (2.047)
-	-	-	-	HB-270~ HB-274	24 (0.945)	155 (6.102)	30 (1.181)	HB-370~ HB-374	43 (1.693)	174 (6.850)	49 (1.929)
-	-	-	-	HB-276~ HB-280	24 (0.945)	155 (6.102)	30 (1.181)	HB-376~ HB-380	43 (1.693)	174 (6.850)	49 (1.929)
-	-	-	-	HB-282~ HB-286	24 (0.945)	155 (6.102)	30 (1.181)	HB-382~ HB-386	43 (1.693)	174 (6.850)	49 (1.929)
-	-	-	-	HB-288~ HB-292	21 (0.827)	152 (5.984)	25 (0.984)	HB-388~ HB-392	40 (1.575)	171 (6.732)	44 (1.732)
-	-	-	-	HB-294~ HB-296	21 (0.827)	152 (5.984)	25 (0.984)	HB-394~ HB-396	40 (1.575)	171 (6.732)	44 (1.732)
-	-	-	-	HB-298~ HB-300	21 (0.827)	152 (5.984)	25 (0.984)	HB-398~ HB-400	40 (1.575)	171 (6.732)	44 (1.732)



# 快捷选择表

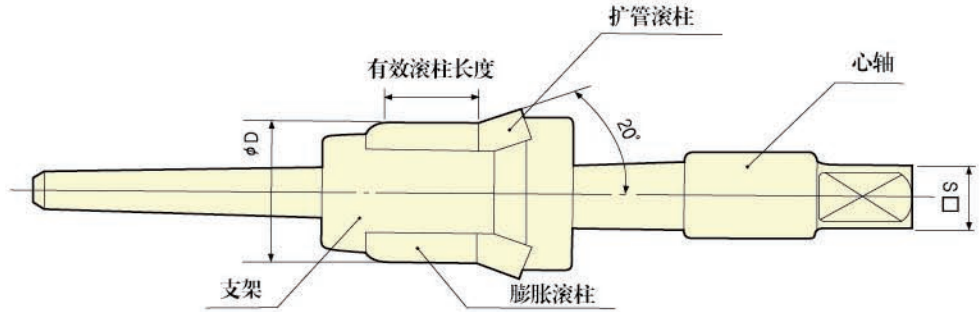
## AS-CB & AS-HB 类

管尺寸			最小入口直径	滚柱长度						轴心编号		
				38mm(1-1/2")		57mm(2-1/4")		76mm(3")				
O.D. mm (in.)	厚度		mm (in.)	最大膨胀直径 mm (in.)	工具编号	最大膨胀直径 mm (in.)	工具编号	最大膨胀直径 mm (in.)	工具编号	CB	HB	方形 轴S mm (in.)
	mm	B.W.G										
12.7 (1/2)	1.24	18	9.2 (0.362)	10.9 (0.429)	AS-CB(HB)-101	-	-	-	-	AC-1	AH-1	9.5 (3/8)
	1.07	19	10.0 (0.394)	11.7 (0.461)	AS-CB(HB)-103					AC-2	AH-2	
	0.89	20	10.0 (0.394)	11.7 (0.461)	AS-CB(HB)-103					AC-2	AH-2	
	0.71	22	10.8 (0.425)	12.5 (0.492)	AS-CB(HB)-105					AC-2	AH-2	
	0.64	23	10.8 (0.425)	12.5 (0.492)	AS-CB(HB)-105					AC-2	AH-2	
	0.56	24	10.8 (0.425)	12.5 (0.492)	AS-CB(HB)-105					AC-2	AH-2	
	0.51	25	10.8 (0.425)	12.5 (0.492)	AS-CB(HB)-105					AC-2	AH-2	
15.9 (5/8)	1.47	17	12.4 (0.488)	14.3 (0.563)	AS-CB(HB)-109	14.0 (0.551)	AS-CB(HB)-209	-	-	AC-4	AH-4	9.5 (3/8)
	1.24	18	12.4 (0.488)	14.3 (0.563)	AS-CB(HB)-109	14.0 (0.551)	AS-CB(HB)-209			AC-4	AH-4	
	1.07	19	13.2 (0.520)	15.1 (0.594)	AS-CB(HB)-111	14.8 (0.583)	AS-CB(HB)-211			AC-4	AH-4	
	0.89	20	13.2 (0.520)	15.1 (0.594)	AS-CB(HB)-111	14.8 (0.583)	AS-CB(HB)-211			AC-4	AH-4	
	0.81	21	14.0 (0.551)	16.2 (0.638)	AS-CB(HB)-113	15.8 (0.662)	AS-CB(HB)-213			AC-6	AH-6	
	0.71	22	14.0 (0.551)	16.2 (0.638)	AS-CB(HB)-113	15.8 (0.662)	AS-CB(HB)-213			AC-6	AH-6	
	0.64	23	14.0 (0.551)	16.2 (0.638)	AS-CB(HB)-113	15.8 (0.662)	AS-CB(HB)-213			AC-6	AH-6	
19.0 (3/4)	1.65	16	14.8 (0.583)	17.0 (0.669)	AS-CB(HB)-115	16.6 (0.654)	AS-CB(HB)-215	18.0 (0.709)	AS-CB(HB)-319	AC-6	AH-6	9.5 (3/8)
	1.47	17	14.8 (0.583)	17.0 (0.669)	AS-CB(HB)-115	16.6 (0.654)	AS-CB(HB)-215			AC-6	AH-6	
	1.24	18	15.6 (0.614)	17.8 (0.701)	AS-CB(HB)-117	17.4 (0.685)	AS-CB(HB)-217			AC-6	AH-6	
	1.07	19	15.6 (0.614)	17.8 (0.701)	AS-CB(HB)-117	17.4 (0.685)	AS-CB(HB)-217			AC-6	AH-6	
	0.89	20	16.4 (0.646)	18.9 (0.744)	AS-CB(HB)-119	18.4 (0.724)	AS-CB(HB)-219			AC-8	AH-8	
	0.81	21	16.4 (0.646)	18.9 (0.744)	AS-CB(HB)-119	18.4 (0.724)	AS-CB(HB)-219			-	-	
	-	-	-	-	-	-	-			-	-	
22.2 (7/8)	2.41	13	16.4 (0.646)	18.9 (0.744)	AS-CB(HB)-119	18.4 (0.724)	AS-CB(HB)-219	20.6 (0.811)	AS-CB(HB)-325	AC-8	AH-8	9.5 (3/8)
	2.11	14	17.1 (0.673)	19.7 (0.776)	AS-CB(HB)-121	19.2 (0.756)	AS-CB(HB)-221			AC-8	AH-8	
	1.83	15	17.1 (0.673)	19.7 (0.776)	AS-CB(HB)-121	-	-			AC-8	AH-8	
	1.65	16	17.9 (0.705)	20.5 (0.807)	AS-CB(HB)-123	20.2 (0.787)	AS-CB(HB)-223			AC-8	AH-8	
	1.47	17	17.9 (0.705)	20.5 (0.807)	AS-CB(HB)-123	20.2 (0.787)	AS-CB(HB)-223			AC-8	AH-8	
	1.24	18	18.7 (0.736)	21.5 (0.846)	AS-CB(HB)-125	21.1 (0.831)	AS-CB(HB)-225			AC-10	AH-10	
	1.07	19	19.5 (0.768)	22.3 (0.878)	AS-CB(HB)-127	21.9 (0.862)	AS-CB(HB)-227			AC-10	AH-10	
25.4 (1)	0.89	20	19.5 (0.768)	22.3 (0.878)	AS-CB(HB)-127	21.9 (0.862)	AS-CB(HB)-227	21.4 (0.843)	AS-CB(HB)-327	AC-10	AH-10	9.5 (3/8)
	2.77	12	18.7 (0.736)	21.5 (0.846)	AS-CB(HB)-125	21.1 (0.831)	AS-CB(HB)-225	23.8 (0.937)	AS-CB(HB)-332	AC-10	AH-10	
	2.41	13	19.5 (0.768)	22.3 (0.878)	AS-CB(HB)-127	21.9 (0.862)	AS-CB(HB)-227			AC-10	AH-10	
	2.11	14	20.3 (0.799)	23.1 (0.909)	AS-CB(HB)-129	22.6 (0.890)	AS-CB(HB)-229			-	-	
	1.83	15	20.3 (0.799)	23.1 (0.909)	AS-CB(HB)-129	22.6 (0.890)	AS-CB(HB)-229			AC-10	AH-10	
	1.65	16	21.1 (0.831)	23.9 (0.941)	AS-CB(HB)-131	23.4 (0.921)	AS-CB(HB)-231			AC-10	AH-10	
	1.47	17	21.5 (0.846)	25.0 (0.984)	AS-CB(HB)-132	24.4 (0.961)	AS-CB(HB)-232			AC-11	AH-11	
1.24	18	22.3 (0.878)	25.8 (1.016)	AS-CB(HB)-134	25.2 (0.992)	AS-CB(HB)-234	AC-11			AH-11		
28.6 (1-1/8)	1.07	19	22.3 (0.878)	25.8 (1.016)	AS-CB(HB)-134	25.2 (0.992)	AS-CB(HB)-234	24.6 (0.969)	AS-CB(HB)-334	AC-11	AH-11	12.7 (1/2)
	3.05	11	21.1 (0.831)	23.9 (0.941)	AS-CB(HB)-131	-	-	24.6 (0.969)	AS-CB(HB)-334	AC-10	AH-10	
	2.77	12	21.5 (0.846)	25.0 (0.984)	AS-CB(HB)-132	24.4 (0.961)	AS-CB(HB)-232	-	-	AC-11	AH-11	
	2.41	13	22.3 (0.878)	25.8 (1.016)	AS-CB(HB)-134	25.2 (0.992)	AS-CB(HB)-234	-	-	AC-11	AH-11	
	2.11	14	23.1 (0.909)	26.5 (1.043)	AS-CB(HB)-136	26.0 (1.024)	AS-CB(HB)-236	25.4 (1.000)	AS-CB(HB)-336	AC-11	AH-11	
	1.83	15	23.9 (0.941)	27.3 (1.075)	AS-CB(HB)-138	26.8 (1.055)	AS-CB(HB)-238	26.2 (1.031)	AS-CB(HB)-338	AC-11	AH-11	
	1.65	16	23.9 (0.941)	27.3 (1.075)	AS-CB(HB)-138	26.8 (1.055)	AS-CB(HB)-238	-	-	AC-11	AH-11	
31.8 (1-1/4)	1.47	17	24.7 (0.972)	28.1 (1.106)	AS-CB(HB)-140	27.6 (1.087)	AS-CB(HB)-240	27.0 (1.063)	AS-CB(HB)-340	AC-11	AH-11	12.7 (1/2)
	1.24	18	24.7 (0.972)	28.1 (1.106)	AS-CB(HB)-140	27.6 (1.087)	AS-CB(HB)-240	27.0 (1.063)	AS-CB(HB)-340	AC-11	AH-11	
	1.07	19	25.5 (1.004)	29.5 (1.161)	AS-CB(HB)-142	28.8 (1.134)	AS-CB(HB)-242	28.2 (1.110)	AS-CB(HB)-342	AC-12	AH-12	
	3.40	10	23.1 (0.909)	26.5 (1.043)	AS-CB(HB)-136	-	-	-	-	AC-11	AH-11	
	3.05	11	23.9 (0.941)	27.3 (1.075)	AS-CB(HB)-138	-	-	-	-	AC-11	AH-11	
	2.77	12	24.7 (0.972)	28.1 (1.106)	AS-CB(HB)-140	27.6 (1.087)	AS-CB(HB)-240	-	-	AC-11	AH-11	
	2.41	13	25.5 (1.004)	29.5 (1.161)	AS-CB(HB)-142	28.8 (1.134)	AS-CB(HB)-242	28.2 (1.110)	AS-CB(HB)-342	AC-12	AH-12	
34.9 (1-3/8)	2.11	14	26.3 (1.035)	30.3 (1.193)	AS-CB(HB)-144	29.6 (1.165)	AS-CB(HB)-244	29.0 (1.142)	AS-CB(HB)-344	AC-12	AH-12	12.7 (1/2)
	1.83	15	27.1 (1.067)	31.1 (1.224)	AS-CB(HB)-146	30.4 (1.197)	AS-CB(HB)-246	29.8 (1.173)	AS-CB(HB)-346	AC-12	AH-12	
	1.65	16	27.1 (1.067)	31.1 (1.224)	AS-CB(HB)-146	30.4 (1.197)	AS-CB(HB)-246	29.8 (1.173)	AS-CB(HB)-346	AC-12	AH-12	
	1.47	17	27.9 (1.098)	31.9 (1.256)	AS-CB(HB)-148	31.2 (1.228)	AS-CB(HB)-248	30.6 (1.205)	AS-CB(HB)-348	AC-12	AH-12	
	1.24	18	27.9 (1.098)	31.9 (1.256)	AS-CB(HB)-148	31.2 (1.228)	AS-CB(HB)-248	30.6 (1.205)	AS-CB(HB)-348	AC-12	AH-12	
	3.76	9	25.5 (1.004)	29.5 (1.161)	AS-CB(HB)-142	28.8 (1.134)	AS-CB(HB)-242	-	-	AC-12	AH-12	
	3.40	10	26.3 (1.035)	30.3 (1.193)	AS-CB(HB)-144	29.6 (1.165)	AS-CB(HB)-244	-	-	AC-12	AH-12	
38.1 (1-1/2)	3.05	11	27.1 (1.067)	31.1 (1.224)	AS-CB(HB)-146	30.4 (1.197)	AS-CB(HB)-246	-	-	AC-12	AH-12	12.7 (1/2)
	2.77	12	27.9 (1.098)	31.9 (1.256)	AS-CB(HB)-148	31.2 (1.228)	AS-CB(HB)-248	30.6 (1.205)	AS-CB(HB)-348	AC-12	AH-12	
	2.41	13	28.7 (1.130)	32.7 (1.287)	AS-CB(HB)-150	32.0 (1.260)	AS-CB(HB)-250	31.4 (1.236)	AS-CB(HB)-350	AC-12	AH-12	
	2.11	14	29.5 (1.161)	34.1 (1.343)	AS-CB(HB)-152	33.3 (1.311)	AS-CB(HB)-252	32.6 (1.283)	AS-CB(HB)-352	AC-13	AH-13	
	1.83	15	30.3 (1.193)	34.9 (1.374)	AS-CB(HB)-154	34.1 (1.343)	AS-CB(HB)-254	33.4 (1.315)	AS-CB(HB)-354	AC-13	AH-13	
	1.65	16	30.3 (1.193)	34.9 (1.374)	AS-CB(HB)-154	34.1 (1.343)	AS-CB(HB)-254	33.4 (1.315)	AS-CB(HB)-354	AC-13	AH-13	
	1.47	17	31.1 (1.224)	35.7 (1.406)	AS-CB(HB)-156	34.9 (1.374)	AS-CB(HB)-256	34.2 (1.346)	AS-CB(HB)-356	AC-13	AH-13	
38.1 (1-1/2)	1.24	18	31.1 (1.224)	35.7 (1.406)	AS-CB(HB)-156	34.9 (1.374)	AS-CB(HB)-256	34.2 (1.346)	AS-CB(HB)-356	AC-13	AH-13	12.7 (1/2)
	4.19	8	27.9 (1.098)	31.9 (1.256)	AS-CB(HB)-148	31.2 (1.228)	AS-CB(HB)-248	-	-	AC-12	AH-12	
	3.76	9	28.7 (1.130)	32.7 (1.287)	AS-CB(HB)-150	32.0 (1.260)	AS-CB(HB)-250	-	-	AC-12	AH-12	
	3.40	10	29.5 (1.161)	34.1 (1.343)	AS-CB(HB)-152	33.0 (1.299)	AS-CB(HB)-252	-	-	AC-13	AH-13	
	3.05	11	30.3 (1.193)	34.9 (1.374)	AS-CB(HB)-154	34.1 (1.343)	AS-CB(HB)-254	33.4 (1.315)	AS-CB(HB)-354	AC-13	AH-13	
	2.77	12	31.1 (1.224)	35.7 (1.406)	AS-CB(HB)-156	34.9 (1.374)	AS-CB(HB)-256	34.2 (1.346)	AS-CB(HB)-356	AC-13	AH-13	
	2.41	13	31.9 (1.256)	36.5 (1.437)	AS-CB(HB)-158	35.7 (1.406)	AS-CB(HB)-258	35.0 (1.378)	AS-CB(HB)-358	AC-13	AH-13	
2.11	14	32.6 (1.283)	37.2 (1.465)	AS-CB(HB)-160	36.5 (1.437)	AS-CB(HB)-260	35.7 (1.406)	AS-CB(HB)-360	AC-13	AH-13		
1.83	15	33.4 (1.315)	38.0 (1.496)	AS-CB(HB)-162	37.3 (1.469)	AS-CB(HB)-262	36.5 (1.437)	AS-CB(HB)-362	AC-13	AH-13		
1.65	16	33.4 (1.315)	38.0 (1.496)	AS-CB(HB)-162	37.3 (1.469)	AS-CB(HB)-262	36.5 (1.437)	AS-CB(HB)-362	AC-13	AH-13		



# 胀管器尺寸表

## AS-BK 类



有效滚柱长度	19mm (3/4")	25.4mm (1")	32mm (1-1/4")	38mm (1-1/2")	44.5mm (1-3/4")	51mm (2")	57mm (2-1/4")	63.5mm (2-1/2")	70mm (2-3/4")	76mm (3")	83mm (3-1/4")	89mm (3-1/2")	95mm (3-3/4")	BK-6812 示例							
有效滚柱长度 编号	0	1	2	3	4	5	6	7	8	9	10	11	12	有效滚柱长度编号	工具编号	胀管器种类					
工具 编号	膨胀范围D													心轴编号			方形 轴头S mm(in.)				
	最小值 .mm (in.)	最大值 mm (in.)												鼓轮	盖	短头					
28	20.6 (0.811)	24.2 (0.953)	4.0 (0.945)	23.8 (0.937)	23.6 (0.929)	23.4 (0.921)											DM-0S	HM-0S		12.7 (1/2)	
29	21.4 (0.843)	25.2 (0.992)	25.0 (0.984)	24.8 (0.976)	24.6 (0.969)	24.4 (0.961)															
30	22.2 (0.874)	26.0 (1.024)	25.8 (1.016)	25.6 (1.008)	25.4 (1.0)	25.2 (0.992)	25.0 (0.984)														
31	23.0 (0.906)	26.8 (1.055)	26.6 (1.047)	26.4 (1.039)	26.2 (1.031)	26.0 (1.024)	25.8 (1.016)											DM-1S	HM-1S		12.7 (1/2)
32	23.8 (0.937)	27.6 (1.087)	27.4 (1.079)	27.2 (1.071)	27.0 (1.063)	26.8 (1.055)	26.6 (1.047)	26.3 (1.035)													
33	24.6 (0.969)	28.4 (1.118)	28.2 (1.110)	28.0 (1.102)	27.8 (1.094)	27.6 (1.087)	27.4 (1.079)	27.1 (1.067)	26.9 (1.059)												
34	25.4 (1.0)	30.0 (1.181)	29.8 (1.173)	29.6 (1.165)	29.4 (1.157)	29.2 (1.150)	29.0 (1.142)	28.7 (1.130)	28.5 (1.122)												
35	26.2 (1.031)	30.8 (1.213)	30.6 (1.205)	30.4 (1.197)	30.2 (1.189)	30.0 (1.181)	29.8 (1.173)	29.5 (1.161)	29.3 (1.154)	29.1 (1.146)											
36	27.0 (1.063)	31.6 (1.244)	31.4 (1.236)	31.2 (1.228)	30.9 (1.217)	30.7 (1.209)	30.5 (1.201)	30.3 (1.193)	30.1 (1.185)	29.9 (1.177)								DM-2S	HM-2S		12.7 (1/2)
37	27.8 (1.094)	32.4 (1.276)	32.2 (1.268)	32.0 (1.260)	31.7 (1.248)	31.5 (1.240)	31.3 (1.232)	31.1 (1.244)	30.9 (1.217)	30.7 (1.209)	30.5 (1.201)										
38	28.6 (1.126)	33.2 (1.307)	33.0 (1.299)	32.8 (1.291)	32.5 (1.280)	32.3 (1.272)	32.1 (1.264)	31.9 (1.256)	31.7 (1.248)	31.5 (1.240)	31.3 (1.232)										
39	29.4 (1.157)	34.6 (1.362)	34.4 (1.354)	34.2 (1.346)	33.9 (1.335)	33.7 (1.327)	33.5 (1.319)	33.3 (1.311)	33.1 (1.303)	32.9 (1.295)	32.7 (1.287)	32.5 (1.280)									
40	30.2 (1.189)	35.4 (1.394)	35.2 (1.386)	35.0 (1.378)	34.7 (1.366)	34.5 (1.358)	34.3 (1.350)	34.1 (1.343)	33.9 (1.335)	33.7 (1.327)	33.5 (1.319)	33.3 (1.311)									
41	31.0 (1.220)	36.2 (1.425)	36.0 (1.417)	35.8 (1.409)	35.5 (1.398)	35.3 (1.390)	35.1 (1.382)	34.9 (1.374)	34.7 (1.366)	34.5 (1.358)	34.3 (1.350)	34.1 (1.343)	33.8 (1.331)								
42	31.8 (1.252)	37.0 (1.457)	36.8 (1.449)	36.6 (1.441)	36.3 (1.429)	36.1 (1.421)	35.9 (1.413)	35.7 (1.406)	35.5 (1.398)	35.3 (1.390)	35.1 (1.382)	34.9 (1.374)	34.6 (1.362)					DM-3	HM-3	S-3 4,5,6	12.7 (1/2)
43	32.5 (1.280)	37.7 (1.484)	37.5 (1.476)	37.3 (1.469)	37.1 (1.461)	36.9 (1.453)	36.7 (1.445)	36.5 (1.437)	36.3 (1.429)	36.0 (1.421)	35.8 (1.413)	35.6 (1.405)	35.4 (1.397)	35.2 (1.389)							
44	33.3 (1.311)	38.5 (1.516)	38.3 (1.508)	38.1 (1.5)	37.9 (1.492)	37.7 (1.484)	37.5 (1.476)	37.3 (1.469)	37.1 (1.461)	36.8 (1.449)	36.6 (1.441)	36.4 (1.433)	36.2 (1.425)	36.0 (1.417)							
45	34.1 (1.343)	40.1 (1.579)	39.9 (1.571)	39.7 (1.563)	39.5 (1.555)	39.3 (1.547)	39.1 (1.539)	38.9 (1.531)	38.7 (1.524)	38.4 (1.512)	38.2 (1.504)	38.0 (1.496)	37.8 (1.488)	37.6 (1.480)				DM-4	HM-4	S-4,5 6,7	12.7 (1/2)
48	34.9 (1.374)	41.0 (1.614)	40.8 (1.606)	40.6 (1.598)	40.4 (1.591)	40.2 (1.583)	40.0 (1.575)	39.8 (1.567)	39.6 (1.559)	39.3 (1.547)	39.1 (1.539)	38.9 (1.531)	38.7 (1.524)	38.5 (1.516)							
49	36.5 (1.437)	42.6 (1.677)	42.4 (1.669)	42.2 (1.661)	42.0 (1.654)	41.8 (1.646)	41.6 (1.638)	41.4 (1.630)	41.1 (1.618)	40.9 (1.610)	40.7 (1.602)	40.5 (1.594)	40.3 (1.587)	40.1 (1.579)				DM-10	HM-10	SM-10 11	19.0 (3/4)
50	38.1 (1.5)	45.8 (1.803)	45.6 (1.795)	45.4 (1.787)	45.2 (1.780)	45.0 (1.772)	44.8 (1.764)	44.6 (1.756)	44.3 (1.744)	44.1 (1.736)	43.9 (1.728)	43.7 (1.720)	43.5 (1.713)	43.3 (1.705)							
51	39.7 (1.563)	47.4 (1.866)	47.2 (1.858)	47.0 (1.850)	46.8 (1.843)	46.6 (1.835)	46.4 (1.827)	46.2 (1.819)	45.9 (1.807)	45.7 (1.799)	45.5 (1.791)	45.3 (1.783)	45.1 (1.776)	44.9 (1.768)							
52	41.3 (1.626)	49.0 (1.929)	48.8 (1.921)	48.6 (1.913)	48.4 (1.906)	48.2 (1.898)	47.9 (1.886)	47.7 (1.878)	47.5 (1.870)	47.3 (1.862)	47.1 (1.854)	46.9 (1.846)	46.7 (1.839)	46.5 (1.831)							
53	42.9 (1.689)	50.6 (1.992)	50.4 (1.984)	50.2 (1.976)	50.0 (1.969)	49.8 (1.961)	49.5 (1.949)	49.3 (1.941)	49.1 (1.933)	48.9 (1.925)	48.7 (1.917)	48.5 (1.909)	48.3 (1.902)	48.1 (1.894)							
54	44.5 (1.752)	52.2 (2.055)	52.0 (2.047)	51.9 (2.039)	51.6 (2.031)	51.4 (2.024)	51.1 (2.012)	50.9 (2.004)	50.7 (1.996)	50.5 (1.988)	50.3 (1.980)	50.1 (1.972)	49.9 (1.965)	49.7 (1.957)							
55	46.0 (1.811)	53.8 (2.118)	53.6 (2.110)	53.4 (2.102)	53.1 (2.091)	52.9 (2.083)	52.7 (2.075)	52.5 (2.067)	52.3 (2.059)	52.1 (2.051)	51.9 (2.043)	51.7 (2.035)	51.5 (2.028)	51.3 (2.020)							
55	47.6 (1.874)	55.3 (2.177)	55.1 (2.169)	54.9 (2.161)	54.7 (2.154)	54.5 (2.146)	54.3 (2.138)	54.1 (2.130)	53.9 (2.122)	53.7 (2.114)	53.5 (2.106)	53.2 (2.094)	53.0 (2.087)	52.8 (2.079)							
57	49.2 (1.937)	56.9 (2.240)	56.7 (2.232)	56.5 (2.224)	56.3 (2.217)	56.1 (2.209)	55.9 (2.201)	55.7 (2.193)	55.5 (2.185)	55.3 (2.177)	55.1 (2.169)	54.8 (2.157)	54.6 (2.150)	54.4 (2.142)							



# 胀管器尺寸表

有效滚柱长度 编号	19mm (3/4")	25.4mm (1")	32mm (1-1/4")	38mm (1-1/2")	44.5mm (1-3/4")	51mm (2")	57mm (2-1/4")	63.5mm (2-1/2")	70mm (2-3/4")	76mm (3")	83mm (3-1/4")	89mm (3-1/2")	95mm (3-3/4")					
	0	1	2	3	4	5	6	7	8	9	10	11	12					
工具 编号	膨胀范围D													心轴编号			方形 轴轮 mm (in.)	
	最小值 mm (in.)	最大值Max. mm (in.)												拨轮	盖	短头		
58	50.8 (2.0)	58.5 (2.303)	58.3 (2.295)	58.1 (2.287)	57.9 (2.280)	57.7 (2.272)	57.5 (2.264)	57.3 (2.256)	57.1 (2.248)	56.8 (2.236)	56.6 (2.228)	56.4 (2.220)	56.2 (2.213)	56.0 (2.205)	DM-13	HM-13	SM-13 14,15	19.0 (3/4)
59	52.4 (2.063)	60.1 (2.366)	59.9 (2.358)	59.7 (2.350)	59.5 (2.343)	59.3 (2.335)	59.1 (2.327)	58.9 (2.319)	58.6 (2.307)	58.4 (2.299)	58.2 (2.291)	58.0 (2.283)	57.8 (2.276)	57.6 (2.268)				
60	54.0 (2.126)	61.7 (2.429)	61.5 (2.421)	61.3 (2.413)	61.1 (2.406)	60.9 (2.398)	60.6 (2.386)	60.4 (2.378)	60.2 (2.370)	60.0 (2.362)	59.8 (2.354)	59.6 (2.346)	59.4 (2.339)	59.2 (2.331)				
61	55.6 (2.189)	63.3 (2.492)	63.1 (2.484)	62.9 (2.476)	62.7 (2.469)	62.5 (2.461)	62.2 (2.449)	62.0 (2.441)	61.8 (2.433)	61.6 (2.425)	61.4 (2.417)	61.2 (2.409)	61.0 (2.402)	60.8 (2.394)				
62	57.2 (2.252)	66.0 (2.598)	65.8 (2.591)	65.5 (2.579)	65.3 (2.571)	65.1 (2.563)	64.8 (2.551)	64.6 (2.543)	64.4 (2.535)	64.1 (2.524)	63.9 (2.516)	63.7 (2.508)	63.5 (2.5)	DM-14	HM-14	SM-14 15,16,17	19.0 (3/4)	
63	58.7 (2.311)	67.6 (2.661)	67.4 (2.654)	67.1 (2.642)	66.9 (2.634)	66.7 (2.626)	66.4 (2.614)	66.2 (2.606)	65.9 (2.594)	65.7 (2.587)	65.5 (2.579)	65.2 (2.567)	65.0 (2.559)					
64	60.3 (2.374)	69.2 (2.724)	69.0 (2.717)	68.7 (2.705)	68.5 (2.697)	68.3 (2.689)	68.0 (2.677)	67.8 (2.669)	67.5 (2.657)	67.3 (2.650)	67.1 (2.642)	66.8 (2.630)	66.6 (2.622)					
65	61.9 (2.437)	70.8 (2.787)	70.5 (2.776)	70.3 (2.768)	70.1 (2.760)	69.8 (2.748)	69.6 (2.740)	69.4 (2.732)	69.1 (2.720)	68.9 (2.713)	68.7 (2.705)	68.4 (2.693)	68.2 (2.685)					
66	63.5 (2.5)	72.3 (2.846)	72.1 (2.839)	71.9 (2.831)	71.6 (2.819)	71.4 (2.811)	71.2 (2.803)	70.9 (2.791)	70.7 (2.783)	70.5 (2.776)	70.2 (2.764)	70.0 (2.756)	69.8 (2.748)					
67	65.1 (2.563)	73.9 (2.909)	73.7 (2.902)	73.5 (2.894)	73.2 (2.882)	73.0 (2.874)	72.8 (2.866)	72.5 (2.854)	72.3 (2.846)	72.0 (2.835)	71.8 (2.827)	71.6 (2.819)	71.4 (2.811)					
68	66.7 (2.626)	75.5 (2.972)	75.3 (2.965)	75.0 (2.953)	74.8 (2.945)	74.6 (2.937)	74.3 (2.925)	74.1 (2.917)	73.9 (2.909)	73.6 (2.898)	73.4 (2.890)	73.2 (2.882)	73.0 (2.874)	DM-16	HM-16	SS-16 17,18,19	25.4 (1)	
69	68.3 (2.689)	77.1 (3.035)	76.9 (3.028)	76.6 (3.016)	76.4 (3.008)	76.2 (3.0)	75.9 (2.988)	75.7 (2.980)	75.5 (2.972)	75.2 (2.961)	75.0 (2.953)	74.8 (2.945)	74.6 (2.937)					
70	69.9 (2.752)	78.7 (3.098)	78.5 (3.091)	78.2 (3.079)	78.0 (3.071)	77.8 (3.063)	77.5 (3.051)	77.3 (3.043)	77.0 (3.031)	76.8 (3.024)	76.6 (3.016)	76.3 (3.004)	76.1 (2.996)					
71	71.4 (2.811)	80.3 (3.161)	80.1 (3.154)	79.8 (3.142)	79.6 (3.134)	79.4 (3.126)	79.1 (3.114)	78.9 (3.106)	78.6 (3.094)	78.4 (3.087)	78.2 (3.079)	77.9 (3.067)	77.7 (3.059)					
72	73.0 (2.874)	81.9 (3.224)	81.6 (3.213)	81.4 (3.205)	81.2 (3.197)	80.9 (3.185)	80.7 (3.177)	80.5 (3.169)	80.2 (3.157)	80.0 (3.150)	79.8 (3.142)	79.5 (3.130)	79.3 (3.122)					
73	74.6 (2.937)	83.5 (3.287)	83.2 (3.276)	83.0 (3.268)	82.8 (3.260)	82.5 (3.248)	82.3 (3.240)	82.1 (3.232)	81.8 (3.220)	81.6 (3.213)	81.4 (3.205)	81.1 (3.193)	80.9 (3.185)					
74	76.2 (3.0)	86.3 (3.398)	86.1 (3.390)	85.8 (3.378)	85.5 (3.366)	85.3 (3.358)	85.0 (3.346)	84.7 (3.335)	84.5 (3.327)	84.2 (3.315)	84.0 (3.307)	83.7 (3.295)	83.5 (3.287)	DM-18	HM-18	SS-18,19 20,21,22	25.4 (1)	
75	77.8 (3.063)	87.9 (3.461)	87.6 (3.449)	87.4 (3.441)	87.1 (3.430)	86.9 (3.421)	86.6 (3.409)	86.3 (3.398)	86.1 (3.390)	85.8 (3.378)	85.5 (3.366)	85.3 (3.358)	85.0 (3.346)					
76	79.4 (3.126)	89.5 (3.524)	89.2 (3.512)	89.0 (3.504)	88.7 (3.492)	88.5 (3.484)	88.2 (3.472)	87.9 (3.461)	87.7 (3.453)	87.4 (3.441)	87.1 (3.429)	86.9 (3.421)	86.6 (3.409)					
77	81.0 (3.189)	91.0 (3.583)	90.8 (3.575)	90.6 (3.567)	90.3 (3.555)	90.0 (3.543)	89.8 (3.535)	89.5 (3.524)	89.2 (3.512)	89.0 (3.504)	88.7 (3.492)	88.4 (3.480)	88.2 (3.472)					
78	82.6 (3.252)	92.7 (3.650)	92.4 (3.638)	92.1 (3.626)	91.9 (3.618)	91.6 (3.606)	91.4 (3.598)	91.1 (3.587)	90.8 (3.575)	90.6 (3.567)	90.3 (3.555)	90.0 (3.543)	89.8 (3.535)					
79	84.1 (3.311)	94.3 (3.713)	94.0 (3.701)	93.7 (3.689)	93.5 (3.681)	93.2 (3.669)	92.9 (3.657)	92.7 (3.650)	92.4 (3.638)	92.2 (3.626)	91.9 (3.618)	91.6 (3.606)	91.3 (3.594)					
80	85.7 (3.374)	95.9 (3.776)	95.6 (3.764)	95.3 (3.752)	95.1 (3.744)	94.8 (3.732)	94.5 (3.720)	94.3 (3.713)	94.0 (3.701)	93.7 (3.689)	93.5 (3.681)	93.2 (3.669)	93.0 (3.661)	DM-20	HM-20	SS-20,21 22,23,24	25.4 (1)	
81	87.3 (3.437)	97.4 (3.835)	97.2 (3.827)	96.9 (3.815)	96.6 (3.803)	96.4 (3.795)	96.1 (3.783)	95.8 (3.772)	95.6 (3.764)	95.3 (3.752)	95.1 (3.744)	94.8 (3.732)	94.6 (3.724)					
82	88.9 (3.5)	99.0 (3.898)	98.8 (3.890)	98.5 (3.878)	98.2 (3.866)	98.0 (3.858)	97.7 (3.846)	97.4 (3.835)	97.2 (3.827)	96.9 (3.815)	96.7 (3.807)	96.4 (3.795)	96.2 (3.787)					
83	90.5 (3.563)	100.6 (3.961)	100.3 (3.949)	100.1 (3.941)	99.8 (3.929)	99.6 (3.921)	99.3 (3.909)	99.0 (3.898)	98.8 (3.890)	98.5 (3.878)	98.2 (3.866)	98.0 (3.858)	97.7 (3.846)					
84	92.1 (3.626)	102.2 (4.024)	101.9 (4.012)	101.7 (4.004)	101.4 (3.992)	101.2 (3.984)	100.9 (3.972)	100.6 (3.961)	100.4 (3.953)	100.1 (3.941)	99.8 (3.929)	99.6 (3.921)	99.4 (3.913)					
85	93.7 (3.689)	103.8 (4.087)	103.5 (4.075)	103.3 (4.067)	103.0 (4.055)	102.7 (4.043)	102.5 (4.035)	102.2 (4.024)	101.9 (4.012)	101.7 (4.004)	101.4 (3.992)	101.1 (3.980)	100.8 (3.969)					
86	95.3 (3.752)	105.4 (4.150)	105.1 (4.138)	104.9 (4.130)	104.6 (4.118)	104.3 (4.106)	104.1 (4.098)	103.8 (4.087)	103.5 (4.075)	103.3 (4.067)	103.0 (4.055)	102.7 (4.043)	102.4 (4.031)	DM-22	HM-22	SS-22,23 24,25,26	25.4 (1)	
87	96.8 (3.811)	107.0 (4.213)	106.7 (4.201)	106.4 (4.189)	106.2 (4.181)	105.9 (4.169)	105.7 (4.161)	105.4 (4.150)	105.1 (4.138)	104.9 (4.130)	104.6 (4.118)	104.3 (4.106)	104.0 (4.094)					
88	98.4 (3.874)	108.6 (4.276)	108.3 (4.264)	108.0 (4.252)	107.8 (4.244)	107.5 (4.232)	107.3 (4.224)	107.0 (4.213)	106.7 (4.201)	106.5 (4.193)	106.2 (4.181)	105.9 (4.169)	105.6 (4.157)					
89	100.0 (3.937)	110.2 (4.339)	109.9 (4.327)	109.6 (4.315)	109.4 (4.307)	109.1 (4.295)	108.8 (4.283)	108.6 (4.276)	108.3 (4.264)	108.0 (4.252)	107.8 (4.244)	107.5 (4.232)	107.2 (4.220)					
90	101.6 (4.000)	111.7 (4.398)	111.5 (4.390)	111.2 (4.378)	110.9 (4.366)	110.7 (4.358)	110.4 (4.346)	110.1 (4.335)	109.9 (4.327)	109.6 (4.315)	109.4 (4.307)	109.1 (4.295)	108.8 (4.283)					
91	103.2 (4.063)	113.3 (4.461)	113.1 (4.453)	112.8 (4.441)	112.5 (4.429)	112.3 (4.421)	112.0 (4.409)	111.8 (4.402)	111.5 (4.390)	111.2 (4.378)	111.0 (4.331)	110.7 (4.358)	110.4 (4.346)					DM-23
92	104.8 (4.126)	114.9 (4.524)	114.7 (4.516)	114.4 (4.504)	114.1 (4.492)	113.9 (4.484)	113.6 (4.472)	113.4 (4.465)	113.1 (4.453)	112.8 (4.441)	112.6 (4.433)	112.3 (4.421)	112.0 (4.409)	DM-24	HM-24	SS-24,25 26,27,28	25.4 (1)	

注意：工具编号为39号以及39号以上尺寸的胀管器有护圈固定，工具编号为38号以及38号以下尺寸的胀管器无护圈固定。



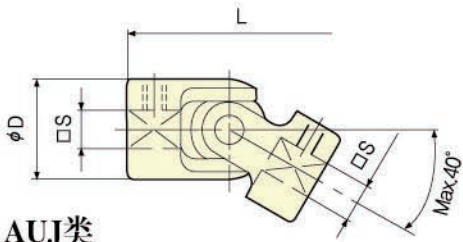
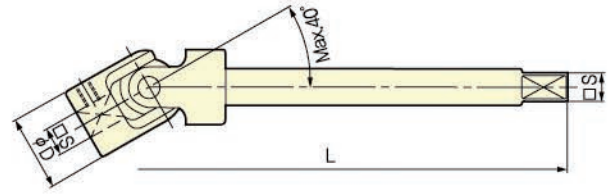
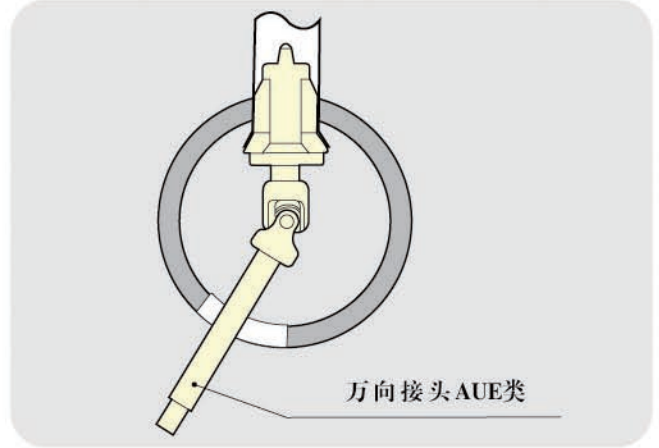
# 配件和管操作工具

成茂提供整套的配件和管操作工具。  
每个配件和工具具备相同的高标准成茂质量。

## 万向接头

### AUE类

工具编号	S	L	D
AUE-308	9.5 (3/8)	203 (8.0)	29 (1.142)
AUE-312		305 (12.0)	
AUE-408	12.7 (1/2)	203 (8.0)	33 (1.099)
AUE-412		305 (12.0)	
AUE-416		406 (16.0)	
AUE-612	19.0 (3/4)	305 (12.0)	43 (1.693)
AUE-616		406 (16.0)	
AUE-620		508 (20.0)	
AUE-812	25.4 (1)	305 (12.0)	54 (2.126)
AUE-816		406 (16.0)	
AUE-820		508 (20.0)	



### AUJ类

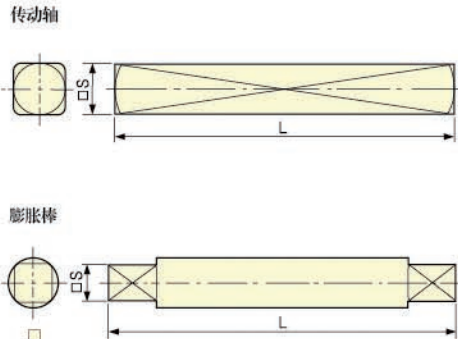
工具编号	S	L	D
AUJ-33	9.5 (3/8)	62 (2.441)	29 (1.142)
AUJ-44	12.7 (1/2)	67 (2.638)	33 (1.299)
AUJ-66	19.0 (3/4)	95 (3.740)	43 (1.693)
AUJ-88	25.4 (1)	106 (4.173)	54 (2.126)

### AUC类

工具编号	S	L	D
AUC-33	9.5 (3/8)	69 (2.717)	29 (1.142)
AUC-44	12.7 (1/2)	74 (2.913)	33 (1.299)
AUC-66	19.0 (3/4)	106 (4.173)	43 (1.693)
AUC-88	25.4 (1)	118 (4.646)	54 (2.126)

## 传动轴

工具编号	S	L
ASD-34	9.5 (3/8)	102 (4.0)
ASD-312		305 (12.0)
ASD-44	12.7 (1/2)	102 (4.0)
ASD-412		305 (12.0)
ASD-64	19.0 (3/4)	102 (4.0)
ASD-612		305 (12.0)
ASD-84	25.4 (1)	102 (4.0)
ASD-812		305 (12.0)



## 膨胀棒

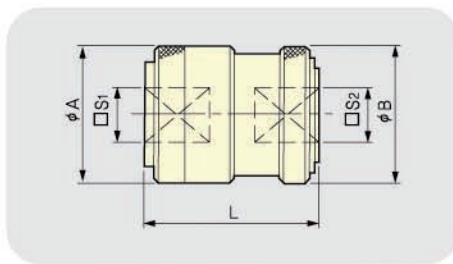
工具编号	S	L
AEB-38	9.5 (3/8)	203 (8.0)
AEB-312		305 (12.0)
AEB-48	12.7 (1/2)	203 (8.0)
AEB-412		305 (12.0)
AEB-68	19.0 (3/4)	203 (8.0)
AEB-612		305 (12.0)
AEB-88	25.4 (1)	203 (8.0)
AEB-812		305 (12.0)



## 心轴接头

这些接头是将胀管器快速接到滚柱上或从滚柱上断开而设计。

‘全自动’设计可更快速，正确的连接。



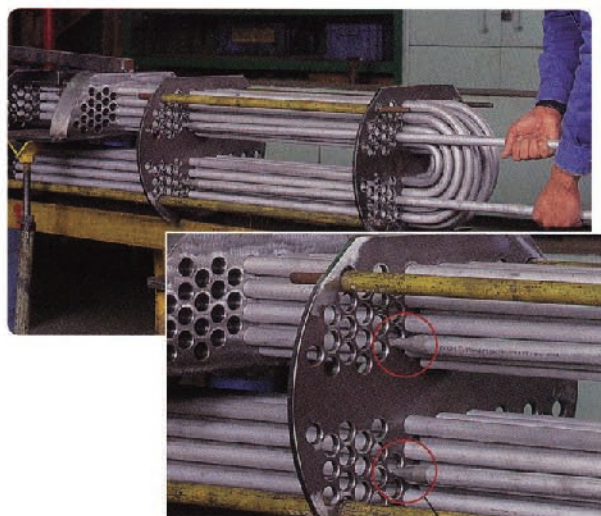
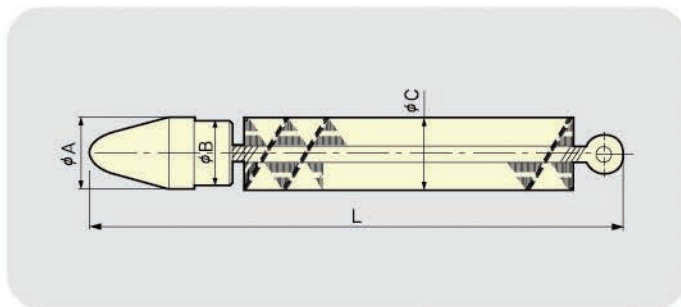
编号	AMC-32	AMC-33	AMC-43	AMC-44	AMC-63	AMC-64	AMC-66	AMC-86
□ S1	6.3	9.5	9.5	12.7	9.5	12.7	19	19
□ S2	9.5	9.5	12.7	12.7	19	19	19	25.4
A	26	29	29	32	43	43	48	48
B	29	29	32	32	48	48	48	60
L	37	41	41	41	53	53	66	88

mm

## 导管

导管带有锥形导向杆，导向杆上带有可更换尼龙刷，用来将管导向管板并支撑板孔。

加速组装操作并在组装过程中防止损坏管头。尼龙刷安装在管端，紧紧地固定导向杆。尼龙刷还对其滚过的管进行清理。轻轻一拧，就可快速取下导向杆。



导管

编号	管外径 O.D	厚度		A	B	C	L
		m.m	B.W.G				
1	25.4	0.8	21	25.4	23.7	25	205
2		1.24	18				
3		1.65	16				
4		2.11	14				
5	22.2	0.8	21	22.2	19.1	22	205
6		1.24	18				
7		1.65	16				
8		2.11	14				
9	19.0	0.8	21	19.0	17.1	20	205
10		1.24	18				
11		1.65	16				
12		2.11	14				
13	15.9	0.6	23	15.9	14.2	16	200
14		0.8	21				
15		1.24	18				
16		1.65	16				
17		2.11	14				

mm



# 配件和管操作工具

## 管尖



mm

工具编号		管内径	长度	工具编号		管内径	长度
SPM-0914	I.D 9	9 ~ 10	223	SPM-1823	I.D 18	18 ~ 19	223
SPM-1015	I.D 10	10 ~ 11	223	SPM-1924	I.D 19	19 ~ 20	223
SPM-1116	I.D 11	11 ~ 12	223	SPM-2025	I.D 20	20 ~ 21	223
SPM-1217	I.D 12	12 ~ 13	223	SPM-2126	I.D 21	21 ~ 22	223
SPM-1318	I.D 13	13 ~ 14	223	SPM-2227	I.D 22	22 ~ 23	223
SPM-1419	I.D 14	14 ~ 15	223	SPM-2328	I.D 23	23 ~ 25	223
SPM-1520	I.D 15	15 ~ 16	223	SPM-2429	I.D 24	24 ~ 26	223
SPM-1621	I.D 16	16 ~ 17	223	SPM-2530	I.D 25	25 ~ 27	223
SPM-1722	I.D 17	17 ~ 18	223	SPM-2631	I.D 26	26 ~ 28	223

Note : Shank. 3/4" × 10G

## 切管器



mm (in.)

工具编号	切割直径		最大切割长度 (in.)	切割器编号	轮轴 S□	L
	最小值 mm (in.)	最大值 mm (in.)				
AS-TCV 10	10 (0.394)	14 (0.551)	75 (2.952)	TC-10	9.5 (3/8)	230 (9.05)
AS-TCV 11	11 (0.433)	15 (0.591)	75 (2.952)	TC-10	9.5 (3/8)	230 (9.05)
AS-TCV 12	12 (0.472)	16 (0.630)	75 (2.952)	TC-10	9.5 (3/8)	230 (9.05)
AS-TCV 13	13 (0.512)	17 (0.669)	75 (2.952)	TC-10	9.5 (3/8)	230 (9.05)
AS-TCV 14	14 (0.551)	18 (0.709)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 15	15 (0.591)	19 (0.748)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 16	16 (0.630)	20 (0.787)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 17	17 (0.669)	21 (0.827)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 18	18 (0.709)	22 (0.866)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 19	19 (0.748)	23 (0.906)	75 (2.952)	TC-14	9.5 (3/8)	230 (9.05)
AS-TCV 20	20 (0.787)	25 (0.984)	100 (3.937)	TC-20	12.7 (1/2)	270 (10.63)
AS-TCV 21	21 (0.827)	26 (1.024)	100 (3.937)	TC-20	12.7 (1/2)	270 (10.63)
AS-TCV 22	22 (0.866)	27 (1.063)	100 (3.937)	TC-20	12.7 (1/2)	270 (10.63)
AS-TCV 23	23 (0.906)	28 (1.102)	100 (3.937)	TC-23	12.7 (1/2)	270 (10.63)
AS-TCV 24	24 (0.945)	29 (1.142)	100 (3.937)	TC-23	12.7 (1/2)	270 (10.63)
AS-TCV 25	25 (0.984)	30 (1.181)	100 (3.937)	TC-23	12.7 (1/2)	270 (10.63)



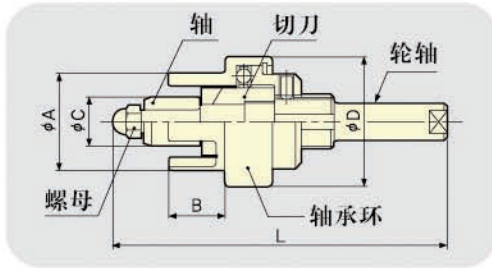


## 端面车刀

用于外部直径(标准范围)12.7mm(5/8in.)至57.1mm(2-1/4in.)的管端的平端面。位于管板表面的环可使管端从管板中不断伸出,电动或气动的均可使用。

除非特别说明,外径达25.4mm(1in.)的直圆轮轴一起供应。外径达31.8mm(1-1/4in.)的与莫尔斯锥度轮轴一起供应。

对于外径大于57.1mm(2-1/4in.)的管的端面,成茂乐于做出设计并满足您特别要求的特殊工具报价。



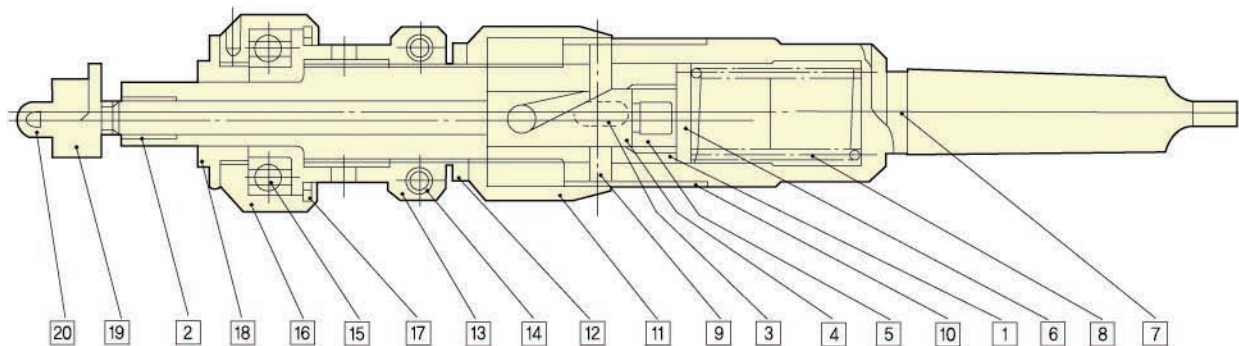
mm (in.)

管尺寸			工具编号	切割器种类	D	L	A	B	轮轴
外径	厚度	B.W.G.							
12.7 (1/2)	1.6	16	FC-4	FF-4	38(1.496)	111(4.370)	26(1.024)	19(0.748)	φ 9.5(3/8)
	1.5	17							
	1.2	18							
15.9 (5/8)	1.8	15	FC-5	FF-5	41(1.614)	111(4.370)	30(1.181)	19(0.748)	φ 12.7(1/2)
	1.6	16							
	1.5	17							
19.0 (3/4)	2.4	13	FC-6	FF-6	44(1.732)	113(4.449)	33(1.299)	19(0.748)	φ 12.7(1/2)
	2.1	14							
	1.8	15							
	1.6	16							
	1.5	17							
22.2 (7/8)	2.1	14	FC-7	FF-7	52(2.047)	113(4.449)	38(1.496)	19(0.748)	φ 12.7(1/2)
	1.8	15							
	1.6	16							
	1.5	17							
25.4 (1)	3.4	10	FC-8	FF-8	57(2.244)	131(5.157)	44(1.732)	25(0.984)	φ 12.7(1/2)
	3.0	11							
	2.8	12							
	2.4	13							
	2.1	14							
	1.8	15							
	1.6	16							
	1.5	17							
1.2	18								
31.8 (1 1/4)	3.4	10	FC-10	FF-10	62(2.441)	175(6.890)	49(1.929)	25(0.984)	MT2
	3.0	11							
	2.8	12							
	2.4	13							
38.1 (1 1/2)	3.4	10	FC-12	FF-12	71(2.795)	182(7.165)	55(2.165)	27.5(1.083)	MT2
	3.0	11							
	2.8	12							
44.5 (1 3/4)	3.4	10	FC-14	FF-14	81(3.189)	203(7.992)	65(2.559)	28(1.102)	MT3
	3.0	11							
	2.8	12							
50.8 (2)	4.2	8	FC-16	FF-16	91(3.583)	206(8.110)	71(2.795)	28(1.102)	MT3
	3.8	9							
	3.4	10							
57.1 (2 1/4)	4.2	8	FC-18	FF-18	100(3.937)	206(8.110)	80(3.150)	28(1.102)	MT3
	3.8	9							
	3.4	10							

注意: 下单时请详细说明工具编号, 切割器种类, 管规格, 管间距, 管布局。



# 切槽工具



## ❖ 部件名称

1轴	6轴承压盖	11套管	16侧头
2前轴承	7主体	12防松螺母	17止动环
3键	8弹簧	13套管保持器	18导套
4切割轴	9编心销	14内六角螺栓	19切割器
5后轴承	10垢管	15径向滚柱轴承	20帽形螺母

## ❖ 工具规格

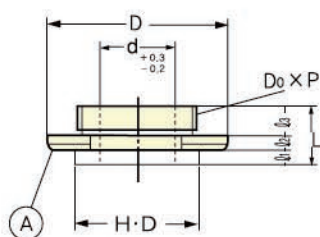
规格	工具编号					
	GT-102	GT-122	GT-162	GT-193	GT-303	GT-504
孔径	10 ~ 14	12.7 ~ 17	16 ~ 21	19 ~ 32	30 ~ 54	50 ~ 78
可调范围 (面向切槽)	4 ~ 20	4 ~ 20	4 ~ 20	6 ~ 30	6 ~ 40	6 ~ 60
重量(kgf)	1.1	1.1	1.2	2.2	3.7	8.6

mm.

## ❖ 导套

导套可以将工具准确的放入工件孔中。套管工具与工件规格相匹配是至关重要的。下单时请说明准确的孔径。  
客户还可订购套管胚料来进行加工或热处理。

加工公差应该在0.5mm以内，打磨公差应在-0.05至-0.01mm  
套管金属(碳钢)热处理后的硬度为HRC-35。



工具编号	孔径	$\ell_1$	$\ell_2$	$\ell_3$	L	d	D	$D_o \times P$
GT-102	10~11.5 11.5~14	3	3	7.5	13.5	8.5 8.8	28	M22. P1.5
GT-122	12.7~14 14~17	3	3	7.5	13.5	11.0 11.3	28	M22. P1.5
GT-162	16~17 17~21	3	3	7.5	13.5	14.2 14.4	44	M22. P1.5
GT-193	19~20 20~32	4	3	7.5	14.5	17.2 17.4	44	M28. P1.5
GT-303	30~52	5	3	9.5	17.5	27.5	59	M35. P1.5
GT-504	50~64 64~78	5	3	12.5	20.5	44.5	78 88	M50. P1.5

mm.

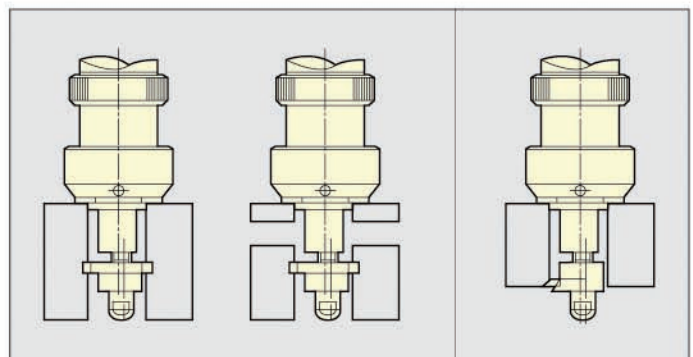
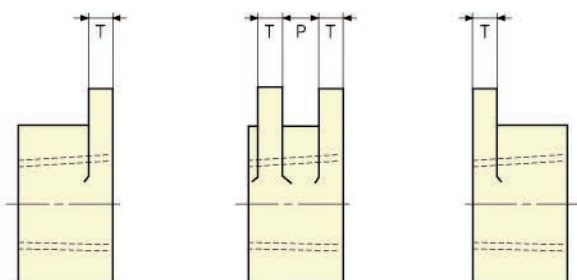


# 开槽刀

mm.

工具编号	切割器编号	通用孔径 最小-最大	最大深槽		刀片类型	
			最小孔径	最大孔径	单	双
					T	T+P+T
GT-102	H.D 10 ~ 11	10~11	1.0	0.5	3	3+3+3
	H.D 11 ~ 12	11~12				
	H.D 12 ~ 13	12~13				
	H.D 13 ~ 14	13~14				
GT-122	H.D 12.7 ~ 14	12.7~14	1.5	0.8	3	3+5+3
	H.D 14 ~ 15	14~15	1.5	1.0		3+6+3
	H.D 15 ~ 16	15~16				
	H.D 16 ~ 17	16~17				
GT-162	H.D 16 ~ 17	16~17	1.5	1.0	3	3+5+3
	H.D 17 ~ 18	17~18				
	H.D 18 ~ 19	18~19				
	H.D 19 ~ 20	19~20				
GT-193	H.D 19 ~ 20	19~20	2.5	2.0	3	3+6+3
	H.D 20 ~ 22	20~22	2.5	1.5		
	H.D 22 ~ 24	22~24				
	H.D 24 ~ 26	24~26				
	H.D 26 ~ 28	26~28				
	H.D 28 ~ 30	28~30				
GT-303	H.D 30 ~ 34	30~34			4.0	2.0
	H.D 34 ~ 38	34~38				
	H.D 38 ~ 42	38~42				
	H.D 42 ~ 46	42~46				
	H.D 46 ~ 50	46~50				
	H.D 50 ~ 54	50~54				
GT-504	H.D 50 ~ 58	50~58	6.5	2.5	3	3+6+3
	H.D 58 ~ 66	58~66	3.5	2.5	4	4+6+4
	H.D 64 ~ 70	64~70				
	H.D 70 ~ 76	70~76				
	H.D 76 ~ 78	76~78				

## ▶ 切割器标准





Specifications in this catalogue may be subject to change without prior notice