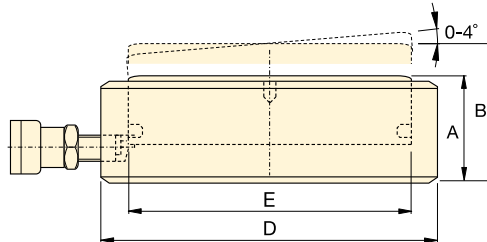


# High-Tonnage, Ultra-Flat Cylinders

▼ CUSP-Series, Ultra-Flat High-Tonnage Cylinders, integrated tilting function



- Up to 4% side load of maximum capacity
- Extremely low collapsed height
- Integrated tilting function up to 4 degrees to evenly distribute the load
- Nitrocarburized surface treatment for harsh conditions
- “Red Line” for visual maximum stroke indication.



## CUSP Series



Capacity:

**10 - 1000 ton**

Stroke Straight / Tilted Stroke:

**7 - 17 mm / 6 - 10 mm**

Integrated:

**Tilting Function**

Maximum Operating Pressure:

**700 bar**



**IMPORTANT!**

CUSP-Cylinders DO NOT have a Stop Ring for stroke limitation!




**IMPORTANT!**

All Ultra-Flat Cylinders require a solid lifting surface for correct support. The use of these flat cylinders on surfaces such as sand, mud or dirt, may result in cylinder damage.

See instructions on page 28 or more safety instructions in our Yellow Pages.

Page: 400

Cylinder Capacity @ 700 bar	Tilted Stroke	Straight Stroke	Model Number	Tilting +/-	Cylinder Effective Area	Oil Capacity	Collapsed Height	Extended Height	Cylinder Outside Diameter	Cylinder Bore Diameter	
ton (kN)	(mm)	(mm)		(degree)	(cm <sup>2</sup> )	(cm <sup>3</sup> )	A (mm)	B (mm)	D (mm)	E (mm)	(kg)
10 (97)	6	6,7	CUSP10 <sup>1)</sup>	2	13,9	9,3	35,5	41,5	72	42	1,2
20 (198)	6	7,0	CUSP20 <sup>1)</sup>	2	28,3	19,8	40,5	46,5	90	60	1,9
30 (310)	6	7,3	CUSP30 <sup>1)</sup>	2	44,2	32,1	42,5	48,5	105	75	2,7
50 (550)	10	13,3	CUSP50 <sup>1)</sup>	4	78,5	104	57,0	67,0	130	100	5,6
75 (792)	10	14,0	CUSP75 <sup>1)</sup>	4	113,1	158	60,5	70,5	150	120	8,0
100 (1078)	10	14,7	CUSP100 <sup>2)</sup>	4	153,9	226	63,5	73,5	170	140	10,8
150 (1589)	10	14,3	CUSP150 <sup>2)</sup>	3	227,0	324	65,0	75,0	200	170	15,3
200 (2090)	10	14,9	CUSP200 <sup>2)</sup>	3	298,6	446	69,0	79,0	229	195	21,5
250 (2542)	10	15,5	CUSP250 <sup>2)</sup>	3	363,1	569	72,5	82,5	252	215	27,3
300 (3167)	10	14,1	CUSP300 <sup>2)</sup>	2	452,4	637	72,5	82,5	282	240	34,4
400 (4008)	10	14,6	CUSP400 <sup>2)</sup>	2	572,6	837	77,5	87,5	316	270	46,2
500 (5115)	10	15,2	CUSP500 <sup>2)</sup>	2	730,6	1111	82,5	92,5	356	305	62,7
600 (5987)	10	15,6	CUSP600 <sup>2)</sup>	2	855,3	1334	87,5	97,5	386	330	78,4
750 (7527)	10	16,3	CUSP750 <sup>2)</sup>	2	1075,2	1757	93,5	103,5	432	370	105,2
1000 (10.165)	10	17,4	CUSP1000 <sup>2)</sup>	2	1452,2	2531	103,0	113,0	502	430	157,0

<sup>1)</sup> Coupler AR630 including dust cap: Use HB7206 hose including AH630 coupler to connect to your pump.

<sup>2)</sup> Coupler CR400 including dust cap: Use HC-Series hose including CH604 coupler to connect to your pump.