



Hydraulic Stage Collar

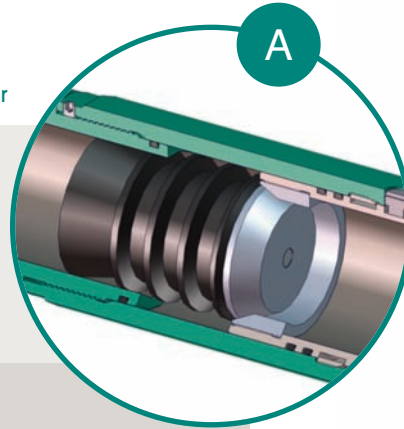
FEATURES

- » Constructed with alloy grade steel
- » Easy to change shear pins

BENEFITS

- » Aluminum internal parts are easily drilled out.
- » Effective in blocking the Migration of Gas when used with ECP
- » Effective in preventing cement loss to thief zones when used with ECP

DETAIL A
Stage Collar



Landing Collar

BENEFITS

- » Catches opening plug

Cup Tool

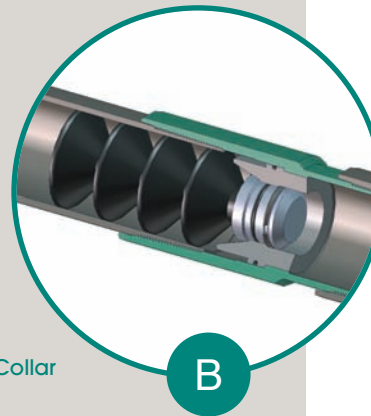
BENEFITS

- » Allows users to set multiple ECPs in a single trip into the well.
- » Allows reverse circulations after setting which reduces the chance of blowouts.
- » Dual opposing cups ensure positive zone isolation downhole.

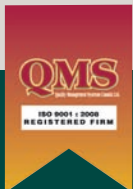
APPLICATIONS

- » Setting ECPs
- » Inflating Packers with cement
- » Cementing slotted liner

DETAIL B
Landing Collar



DETAIL C
(right)
Cup Tool



External Casing Packer Accessories

DATA SHEET

5100-000000-DA Hydraulic Stage Collar				
Casing O.D.	Casing Weight	Maximum O.D.	Maximum I.D.	Overall Length
in	lb/ft	in	in	in
mm	kg/m	mm	mm	mm
4-1/2	9.5 to 13.5	5.593	3.985	37.18
114.3	14.14 to 20.00	142.1	101.2	944.4
5	11.5 to 15	6.090	4.455	37.07
127	17.11 to 22.32	154.7	113.2	941.06
5-1/2	14 to 17	6.665	4.907	36.55
	20.63 to 25.30		124.6	
139.7	17 to 23	169.3	4.800	928.4
	25.30 to 34.23		121.9	
7	20 to 23	8.290	6.351	46.82
	29.76 to 34.23	210.6	161.3	
177.8	26 to 32	8.062	6.171	1189.2
	38.69 to 47.62	204.6	156.7	
7-5/8	24 to 26.4	8.940	6.920	47.32
	35.72 to 39.29		175.8	
193.7	29.7 to 39	227.1	6.770	1201.9
	44.20 to 58.04		172.0	
8-5/8	24 to 36	10.125	7.992	47.70
219.1	35.72 to 53.57	257.2	203.0	1211.6
9-5/8	32.3 to 40	11.040	8.865	50.27
	48.07 to 59.53		225.2	
244.5	43.5 to 53.5	280.4	8.619	1276.9
	64.74 to 79.62		218.9	
10-3/4	55.5 to 65.7	12.250	9.624	48.90
273.1	82.59 to 97.77	311.2	244.4	1242.1
13-3/8	61 to 72	15.000	12.359	50.77
339.7	90.78 to 107.15	381.0	313.9	1289.6
16	75 to 84	17.750	14.956	51.77
406.4	111.61 to 125.01	450.9	379.9	1315.0
18-5/8	87.5	22	17.76	53.75
473.1	130.22	558.4	451.1	1365

