

VWBG-V / VWBG

VIP-load ring thread VARIO / VIP-load ring thread.

FEATURES AND BENEFITS:

- Ball bearing for shock-free and less friction when rotating and turning.
- Optical markings to determine the load angle and wear occurrence.
- Large working load limit range from 0.3 t–50 t.
- Higher working load limits possible thanks to optimized attachment / alignment (WLL X / Y / Z).
- Variable bolt lengths available for use in threaded and through bores.



VWBG-V



VWBG









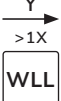


LOAD RING VWBG-V / VWBG.

The VWBG load ring with ball bearing allows vertical rotation under full load. Tipping and flipping actions are therefore possible and safe. Even loading 90° (rectangular) to the ring plane is possible. This load force occurs, for example, when a plate must be pivot from the vertical into a horizontal position. Further advantages are a relatively small contact surface and the larger clearance of the suspension to the bolt-on surface. This means that even with a 90° loading, the attached hooks cannot damage the load.

On the VWBG-V (V = Vario) the threaded part consists of a bolt (ICE-Bolt). This enables a higher WLL and the installation of a bolt of any length with a selectable thread type.



THE VWBG-V / VWBG IN DETAIL.

<p>Ball-bearing.</p>  	<p>Rotatable through 360°.</p>  <p>Extended pivoting area ~230°.</p> 	<p>Patented wear marker.</p> <p>Ready to be discarded.</p>  <p>New.</p>
<p>WLL X</p>  	<p>WLL Y</p>  	<p>WLL Z</p>  



VWBG-V / VWBG

Metric thread.

VWBG-V LOAD RING – METRIC – DESIGN FACTOR 4:1.

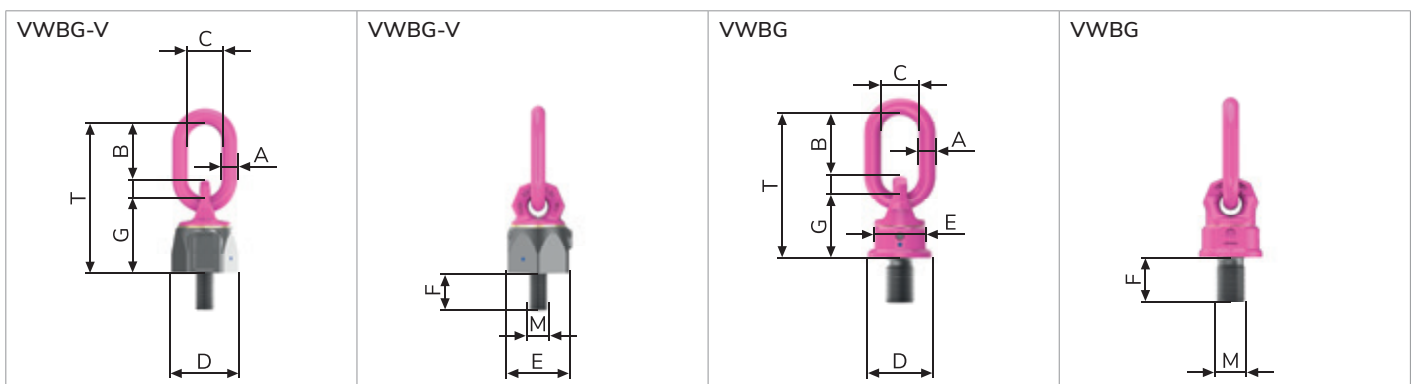
Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	Weight (kg/unit)	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	Tightening torque [Nm]	Order no.
VWBG-V 0.3-M8	0.3	0.4	0.6	0.18	2.99	0.31	1.22	1.14	1.18	1.06	13	1.42	M8	10	7103720
VWBG-V 0.45-M10	0.45	0.6	0.9	0.29	3.07	0.31	1.22	1.14	1.32	1.18	17	1.50	M10	10	7103715
VWBG-V 0.6-M12	0.6	0.75	1.2	0.41	4.21	0.39	1.93	1.38	1.65	1.42	21	1.85	M12	10	7100180
VWBG-V 1-M14 (F = 21)	1	1.25	2	0.63	4.49	0.51	1.81	1.50	1.89	1.61	21	2.20	M14	25	7910221
VWBG-V 1.3-M16	1.3	1.5	2.6	0.59	4.49	0.51	1.81	1.50	1.89	1.61	25	2.20	M16	30	7100430
VWBG-V 1.8-M18 (F = 27)	1.8	2	3.6	1.18	5.39	0.51	2.13	1.38	2.44	2.17	27	2.64	M18	50	8600338
VWBG-V 2-M20	2	2.5	4	1.42	5.39	0.51	2.13	1.38	2.44	2.17	33	2.64	M20	70	7100800
VWBG-V 2-M22 (F = 33)	2	2.5	4	1.45	5.39	0.51	2.13	1.38	2.44	2.17	33	2.64	M22	120	8600334
VWBG-V 3.5-M24	3.5	4	7	2.63	6.81	0.71	2.60	1.57	3.19	2.76	40	3.46	M24	150	7100640
VWBG-V 3.5-M27 (F = 41)	3.5	4	7	2.65	6.81	0.71	2.60	1.57	3.19	2.76	41	3.46	M27	200	8600335
VWBG-V 5-M30	5	6	10	5.09	8.70	0.87	3.54	1.97	3.90	3.35	50	4.17	M30	225	7100650

Subject to technical changes!

VWBG LOAD RING – METRIC – DESIGN FACTOR 4:1.

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	Weight (kg/unit)	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	Tightening torque [Nm]	Order no.
VWBG 6(7.5) t-M33 (F = 50)	6	7.5	15	4.7	208	22	86	50	90	80	50	94	M33	350	8600150
VWBG 8(10) t-M36	8	10	15	4.7	208	22	86	50	90	80	54	94	M36	410	7999059
VWBG 12(13) t-M42	12	13	17	6.1	234	26	111	65	98	85	63	95	M42	550	7999044
VWBG 12(15) t-M45	12	15	18	6.2	234	26	111	65	98	85	67	95	M45	550	7900455
VWBG 13(16) t-M48	13	16	18	6.8	234	26	111	65	98	85	68	95	M48	550	7999045
VWBG 14(20) t-M52	14	20	25	10.6	271	32	119	70	120	95	78	120	M52	750	7901081
VWBG 16(22) t-M56	16	22	28	10.7	271	32	119	70	120	95	84	120	M56	800	7999004
VWBG 16(22) t-M60 (F = 90)	16	22	28	11.4	271	32	119	70	120	95	90	120	M60	800	8600454
VWBG 16(25) t-M64	16	25	28	11.4	271	32	119	70	120	95	94	120	M64	800	7999043
VWBG 31.5(40) t-M72	31.5	40	50	30	338	46	130	90	170	145	108	159	M72	1,200	7900097
VWBG 35(48) t-M80	35	48	50	31	338	46	130	90	170	145	120	159	M80	1,500	7900100
VWBG 40(50) t-M90	40	50	50	35	378	46	168	110	170	145	135	159	M90	2,000	7903408
VWBG 40(50) t-M100 (F = 150)	40	50	50	37	378	46	168	110	170	145	150	159	M100	2,000	8600458

Subject to technical changes!



VWBG-V / VWBG

Metric thread in variable length.

VWBG-V LOAD RING – METRIC IN VARIABLE LENGTH – DESIGN FACTOR 4:1.

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	Weight (kg/unit)	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F vario [mm]	G [mm]	M	Tightening torque [Nm]	Order no.
VWBG-V 0.3-M8	0.3	0.4	0.6	¹	76	8	31	29	30	27	8-102	36	M8	10	8600330
VWBG-V 0.45-M10	0.45	0.6	0.9	¹	78	8	31	29	33.5	30	10-122	38	M10	10	8600331
VWBG-V 0.6-M12	0.6	0.75	1.2	¹	107	10	49	35	42	36	12-140	47	M12	10	8600332
VWBG-V 1-M14	1	1.25	2	¹	114	13	46	38	48	41	14-160	56	M14	25	8600337
VWBG-V 1.3-M16	1.3	1.5	2.6	¹	114	13	46	38	48	41	16-225	56	M16	30	8600333
VWBG-V 1.8-M18	1.8	2	3.6	¹	137	13	54	35	62	55	18-83	67	M18	50	8600338
VWBG-V 2-M20	2	2.5	4	¹	137	13	54	35	62	55	20-223	67	M20	70	8600334
VWBG-V 2-M22	2	2.5	4	¹	137	13	54	35	62	55	22-94	67	M22	120	8600334
VWBG-V 3.5-M24	3.5	4	7	¹	173	18	66	40	81	70	24-257	88	M24	150	8600335
VWBG-V 3.5-M27	3.5	4	7	¹	173	18	66	40	81	70	27-92	88	M27	200	8600335
VWBG-V 5-M30	5	6	10	¹	221	22	90	50	99	85	30-330	106	M30	225	8600336

¹ Weight depends on the design.

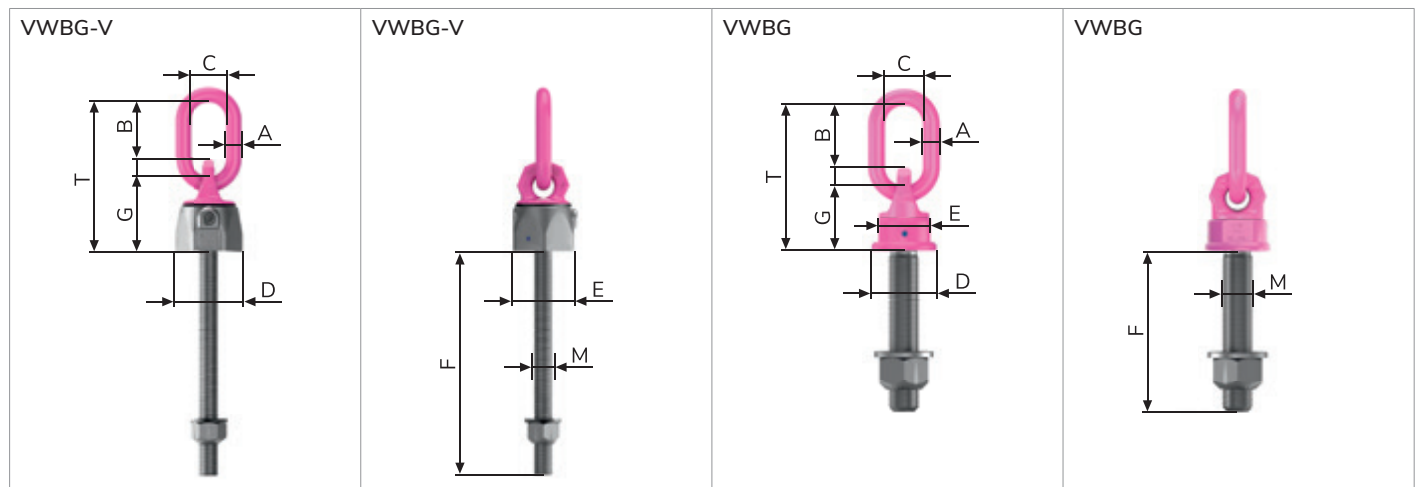
Subject to technical changes!

VWBG LOAD RING – METRIC IN VARIABLE LENGTH – DESIGN FACTOR 4:1.

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	Weight (kg/unit)	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F vario [mm]	G [mm]	M	Tightening torque [Nm]	Order no.
VWBG 6(7.5) t	6	7.5	15	¹	208	22	86	50	90	80	33-300	94	M33	350	8600150
VWBG 8(10) t	8	10	15	¹	208	22	86	50	90	80	36-300	94	M36-M39	410	8600451
VWBG 12(13) t	12	13	17	¹	234	26	111	65	98	85	42-300	95	M42-M45	550	8600452
VWBG 13(16) t	13	16	18	¹	234	26	111	65	98	85	48-300	95	M48-M52	550	8600453
VWBG 14(20) t	14	20	25	¹	271	32	119	70	120	95	52-300	120	M52	750	8600158
VWBG 16(22) t	16	22	28	¹	271	32	119	70	120	95	56-300	120	M56-M60	800	8600454
VWBG 16(25) t	16	25	28	¹	271	32	119	70	120	95	64-300	120	M64-M76	800	8600455
VWBG 31.5(40) t	31.5	40	50	¹	338	46	130	90	170	145	72-300	159	M72-M76	1,200	8600456
VWBG 35(48) t	35	48	50	¹	338	46	130	90	170	145	80-300	159	M80-M85	1,500	8600457
VWBG 40(50) t	40	50	50	¹	378	46	168	110	170	145	90-300	159	M90-M150	2,000	8600458

¹ Weight depends on the design.

Subject to technical changes!



VWBG-V

UNC inch thread.

VWBG-V LOAD RING – UNC INCH THREAD – DESIGN FACTOR 5:1.

Type	WLL-X [lbs]	WLL-Y [lbs]	WLL-Z [lbs]	Weight (lbs/unit)	T [inch]	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	F [inch]	G [inch]	M	Tightening torque [ft-lbs]	Order no.
VWBG-V 0.3-5/16"-18UNC	520	700	1,050	0.4	2.99	0.31	1.22	1.14	1.18	1.06	0.31	1.42	5/16"-18UNC	7.4	7991090
VWBG-V 0.45-3/8"-16UNC	790	1,050	1,580	0.64	3.07	0.31	1.22	1.14	1.32	1.18	0.39	1.50	3/8"-16UNC	10	7991091
VWBG-V 0.6-1/2"-13UNC	1,050	1,320	2,110	0.9	4.21	0.39	1.93	1.38	1.65	1.42	0.47	1.85	1/2"-13UNC	10	7991092
VWBG-V 1.3-5/8"-11UNC	2,280	2,640	4,580	1.14	4.49	0.51	1.81	1.50	1.89	1.61	0.63	2.20	5/8"-11UNC	22	7991093
VWBG-V 2-3/4"-10UNC	3,520	4,400	7,040	3.12	5.39	0.51	2.13	1.38	2.44	2.17	0.71	2.64	3/4"-10UNC	52	7991094
VWBG-V 3.5-1"-8UNC	6,170	7,040	12,340	5.79	5.39	0.51	2.13	1.38	2.44	2.17	0.79	2.64	1"-8UNC	111	7991095
VWBG-V 5-1 1/4"-7UNC	8,810	10,580	17,630	11.20	6.81	0.71	2.60	1.57	3.19	2.76	0.94	3.46	1 1/4"-7UNC	166	7991096

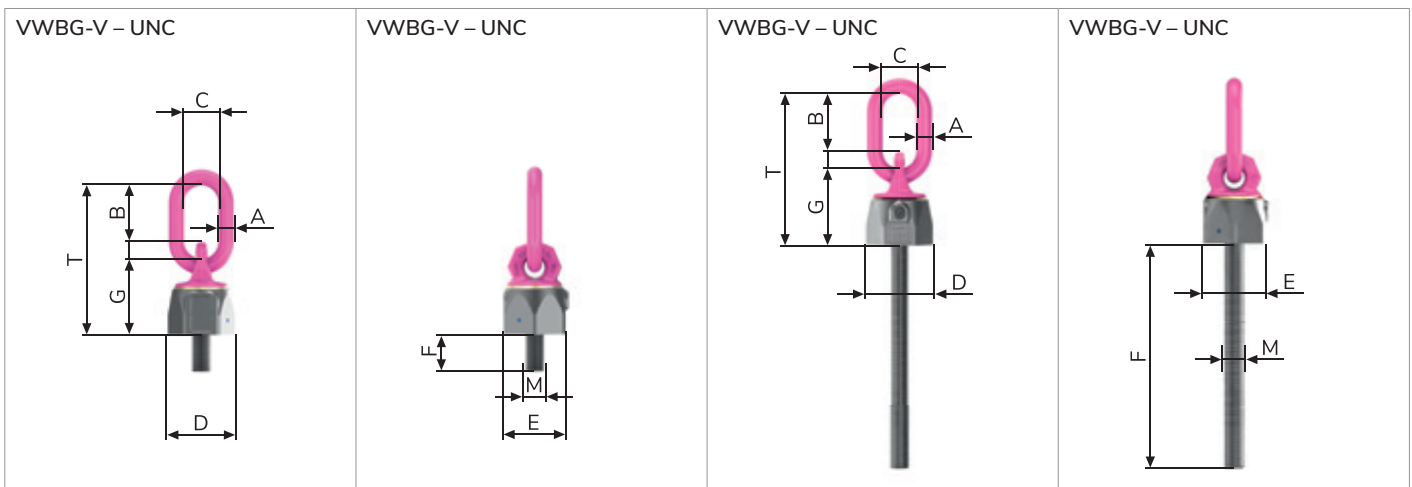
Subject to technical changes!

VWBG-V LOAD RING – UNC INCH THREAD IN VARIABLE LENGTH – DESIGN FACTOR 5:1.

Type	WLL-X [lbs]	WLL-Y [lbs]	WLL-Z [lbs]	Weight (lbs/unit)	T [inch]	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	F vario [inch]	G [inch]	M	Tightening torque [ft-lbs]	Order no.
VWBG-V 0.45-3/8"-16UNC	790	1,050	1,580	¹	3.07	0.31	1.22	1.14	1.32	1.18	0.39-0.67	1.50	3/8"-16UNC	10	8600331
VWBG-V 0.6-1/2"-13UNC	1,050	1,320	2,110	¹	4.21	0.39	1.93	1.38	1.65	1.42	0.47-0.83	1.85	1/2"-13UNC	10	8600332
VWBG-V 1.3-5/8"-11UNC	2,280	2,640	4,580	¹	4.49	0.51	1.81	1.50	1.89	1.61	0.63-1.14	2.20	5/8"-11UNC	22	8600333
VWBG-V 2-3/4"-10UNC	3,520	4,400	7,040	¹	5.39	0.51	2.13	1.38	2.44	2.17	0.71-1.10	2.64	3/4"-10UNC	52	8600334
VWBG-V 3.5-1"-8UNC	6,170	7,040	12,340	¹	5.39	0.51	2.13	1.38	2.44	2.17	0.79-1.50	2.64	1"-8UNC	111	8600335
VWBG-V 5-1 1/4"-7UNC	8,810	10,580	17,630	¹	6.81	0.71	2.60	1.57	3.19	2.76	0.94-1.85	3.46	1 1/4"-7UNC	166	8600336

¹ Weight depends on the design.

Subject to technical changes!



VWBG

UNC inch thread / BSW-Whitworth inch thread.

VWBG LOAD RING – UNC INCH THREAD IN VARIABLE LENGTH – DESIGN FACTOR 5:1.

Type	WLL-X [lbs]	WLL-Y [lbs]	WLL-Z [lbs]	T [inch]	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	F vario [inch]	G [inch]	M	Tightening torque [ft-lbs]	Order no.
VWBG 8(10) t – 1 1/2"-6UNC (F = 57)	14,080	17,630	26,450	8.19	0.87	3.39	1.97	3.54	3.15	1.42-11.81	94	1 1/2"-6UNC	410	8600451
VWBG 12(13) t – 1 3/4"-5UNC (F = 66)	21,160	22,920	29,980	9.21	1.02	4.37	2.56	3.86	3.35	1.65-11.81	95	1 3/4"-5UNC	550	8600452
VWBG 13(16) t – 2"-4.5UNC (F = 76)	22,920	28,220	31,740	9.21	1.02	4.37	2.56	3.86	3.35	1.89-11.81	95	2"-4.5UNC	550	8600453
VWBG 16(22) t – 2 1/4"-4.5UNC (F = 85)	28,220	38,800	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.20-11.81	120	2 1/4"-4.5UNC	800	8600454
VWBG 16(22) t – 2 1/2"-4UNC (F = 95)	28,220	38,800	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.20-11.81	120	2 1/2"-4UNC	800	8600454
VWBG 16(25) t – 2 3/4"-4UNC (F = 104)	28,220	44,090	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.52-11.81	120	2 3/4"-4UNC	800	8600455
VWBG 31.5(40) t – 3"-4UNC (F = 114)	55,550	70,540	88,185	13.31	1.81	5.12	3.54	6.69	5.71	2.83-11.81	159	3"-4UNC	1,200	8600456
VWBG 35(48) t – 3 1/2"-4UNC (F = 133)	61,720	84,650	88,185	13.31	1.81	5.12	3.54	6.69	5.71	3.15-11.81	159	3 1/2"-4UNC	1,500	8600457
VWBG 40(50) t – 4"-4UNC (F = 150)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	4"-4UNC	2,000	8600458
VWBG 40(50) t – 4 1/2"-4UNC (F = 170)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	4 1/2"-4UNC	2,000	8600458
VWBG 40(50) t – 5"-4UNC (F = 190)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	5"-4UNC	2,000	8600458

Weight depends on the design.

Subject to technical changes!

VWBG LOAD RING – BSW-WHITWORTH INCH THREAD IN VARIABLE LENGTH – DESIGN FACTOR 5:1.

Type	WLL-X [lbs]	WLL-Y [lbs]	WLL-Z [lbs]	T [inch]	A [inch]	B [inch]	C [inch]	D [inch]	E [inch]	F vario [inch]	G [inch]	M	Tightening torque [ft-lbs]	Order no.
VWBG 8(10) t – 1 1/2"-BSW (F = 57)	14,080	17,630	26,450	8.19	0.87	3.39	1.97	3.54	3.15	1.42-11.81	94	1 1/2"-6BSW	410	8600451
VWBG 12(13) t – 1 3/4"-BSW (F = 66)	21,160	22,920	29,980	9.21	1.02	4.37	2.56	3.86	3.35	1.65-11.81	95	1 3/4"-5BSW	550	8600452
VWBG 13(16) t – 2"-BSW (F = 76)	22,920	28,220	31,740	9.21	1.02	4.37	2.56	3.86	3.35	1.89-11.81	95	2"-4.5BSW	550	8600453
VWBG 16(22) t – 2 1/4"-BSW (F = 85)	28,220	38,800	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.20-11.81	120	2 1/4"-4BSW	800	8600454
VWBG 16(22) t – 2 1/2"-BSW (F = 95)	28,220	38,800	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.20-11.81	120	2 1/2"-4BSW	800	8600454
VWBG 16(25) t – 2 3/4"-BSW (F = 104)	28,220	44,090	49,380	10.67	1.26	4.69	2.76	4.72	3.74	2.52-11.81	120	2 3/4"-3.5BSW	800	8600455
VWBG 31.5(40) t – 3"-BSW (F = 114)	55,550	70,540	88,185	13.31	1.81	5.12	3.54	6.69	5.71	2.83-11.81	159	3"-3.5BSW	1,200	8600456
VWBG 35(48) t – 3 1/2"-BSW (F = 133)	61,720	84,650	88,185	13.31	1.81	5.12	3.54	6.69	5.71	3.15-11.81	159	3 1/2"-3.25BSW	1,500	8600457
VWBG 40(50) t – 4"-BSW (F = 150)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	4"-3BSW	2,000	8600458
VWBG 40(50) t – 4 1/2"-BSW (F = 170)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	4 1/2"-2.875BSW	2,000	8600458
VWBG 40(50) t – 5"-BSW (F = 190)	70,540	88,185	88,185	14.88	1.81	6.61	4.33	6.69	5.71	3.54-11.81	159	5"-2.75BSW	2,000	8600458

Weight depends on the design.

Subject to technical changes!

