



High Tonnage Single Acting Cylinders

HG series - Heavy Lifting, Load Return



HG10004

HG15006

HG20002

Capacity:

100 - 1000 Tons

Stroke:

50 - 300 mm

Max. Operating Pressure:

700 BAR

Min. - Max. Height:

182 - 1114 mm



Flow Control Valves

Control the speed of your cylinder by adding a flow control valve.

pg 62



Related Product: Hoses

We offer a variety of hoses, fittings, lengths and materials.

pg 67

Gas/Diesel Engine Pumps

These HDG cylinders pair up well with a Gas or Diesel Engine pump. We offer a variety of different flow rates, motor sizes and reservoir sizes on our gas/diesel engine pumps. Contact your local BVA dealer for more details.



- Gas engine pump will provide 700 BAR hydraulic force at remote locations
- Industrial grade 5.5 hp. (4.1 kN) Honda gas engine or 4.6 hp. (3.5 kN) HATZ diesel engine.
- Ideal for applications where electricity isn't easily accessible.
- Two speed pump designed for rapid cylinder advance
- Gas pump features a sturdy protective roll cage for use in the toughest environments
- Optional electric start with Diesel Engine

Electric Motor Pumps

These HG cylinders pair up well with Electric Motor pumps. We offer a variety of different flow rates and motor sizes. Contact your local BVA dealer for more details.



- Meets OSHA regulations for sound (80dBA)
- Two speed pump designed for rapid cylinder advance
- Internal filter screens contamination to prevent pump damage
- All units are wired as 230 VAC 50 Hz; Optional wiring 120 VAC 50Hz
- 100% Duty Cycle TEFC motors
- All hand pendants are wired at 24VAC for safety
- Full load starting capability

Quick Reference Guide

Cylinder Capacity	Stroke (mm)	Model Number	Collapsed Height (mm)	Oil Capacity (cc)	Weight (kg)
100 Ton 890 kN	50	HG10002	182	664	27.7
	100	HG10004	232	1327	33.6
	150	HG10006	282	1991	39.5
	200	HG10008	332	2655	45.4
	250	HG10010	382	3318	51.7
	300	HG10012	432	3982	57.6
150 Ton 1334 kN	50	HG15002	196	981	46.3
	100	HG15004	246	1963	55.3
	150	HG15006	296	2978	64.4
	200	HG15008	346	3926	73.5
	250	HG15010	396	4907	82.1
	300	HG15012	446	5889	91.6
200 Ton 1779 kN	50	HG20002	216	1322	54.9
	150	HG20006	316	3989	91.2
	200	HG20008	366	5289	109.8
	300	HG20012	466	7977	146.1
300 Ton* 2669 kN	50	HG30002	312	2281	184.2
	150	HG30006	412	6843	231.8
	300	HG30012	562	13685	303.0
400 Ton* 3559 kN	50	HG40002	374	2800	269.9
	150	HG40006	474	8399	330.2
	300	HG40012	625	17077	420.9
500 Ton* 4448 kN	50	HG50002	419	3653	401.0
	150	HG50006	519	10959	479.9
	300	HG50012	669	21919	599.2
600 Ton* 5338 kN	50	HG60002	429	4277	474.0
	150	HG60006	529	12829	565.2
	250	HG60010	457	23088	430.0
	300	HG60012	679	25662	700.8
800 Ton* 7117 kN	50	HG80002	474	5881	741.2
	150	HG80006	574	17649	868.2
	300	HG80012	724	35281	1057.8
1000 Ton* 8896 kN	50	HG100002	564	7329	1061.9
	150	HG100006	664	21991	1212.9
	300	HG100012	814	43966	1438.8

*Available on request: no stock item

See next pages (pg.12-13) to view more detail stats on High Tonnage Single Acting Cylinders.



HG Series



Safety Practices

Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.



Optional Tilt-Saddles

Saddles tilt to a 5% maximum to adjust to the load. View our cylinder accessories page to figure out what saddle best fits these cylinders.

pg 41



Related Product: Gauges

Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need.

pg 65



Safety Instructions

Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared.

pg 102



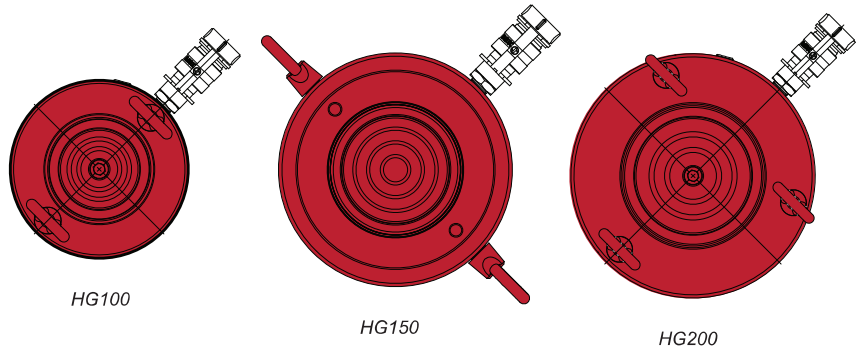
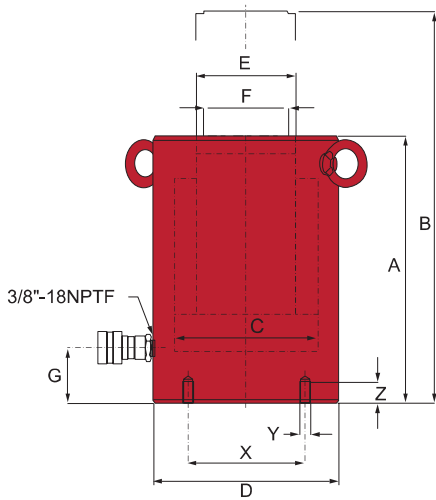
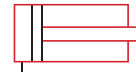
High-Flow Couplers

High-Flow Coupler: CH38F is included on all models (except where specified).



High Tonnage Single Acting Cylinders

HG Series - Heavy Lifting, Load Return



Optional Tilt-Saddles



Saddles tilt to a 5% maximum to adjust to the load. View our cylinder accessories page to figure out what saddle best fits these cylinders.


pg 41

High-Flow Couplers



High-Flow Coupler: CH38F is included on all models (except where specified).


Related Product: Gauges



Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need.

pg 65

Safety Instructions

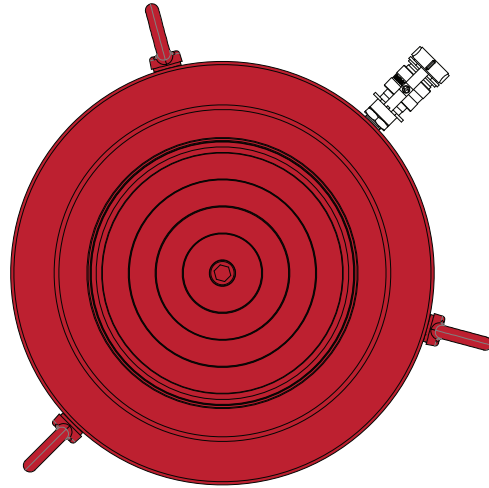


Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared.

pg 102

Cylinder Capacity	Stroke (mm)	Model Number	Cylinder Effective Area (cm ²)	Oil Capacity (cc)	Weight (kg)
100 Ton 890 kN	50	HG10002	132.7	664	27.7
	100	HG10004	132.7	1327	33.6
	150	HG10006	132.7	1991	39.5
	200	HG10008	132.7	2655	45.4
	250	HG10010	132.7	3318	51.7
	300	HG10012	132.7	3982	57.6
150 Ton 1334 kN	50	HG15002	196.3	981	46.3
	100	HG15004	196.3	1963	55.3
	150	HG15006	198.6	2978	64.4
	200	HG15008	196.3	3926	73.5
	250	HG15010	196.3	4907	82.1
	300	HG15012	196.3	5889	91.6
200 Ton 1779 kN	50	HG20002	264.5	1322	54.9
	150	HG20006	265.9	3989	91.2
	200	HG20008	264.5	5289	109.8
	300	HG20012	265.9	7977	146.1
300 Ton* 2669 kN	50	HG30002	456.2	2281	184.2
	150	HG30006	456.2	6843	231.8
	300	HG30012	456.2	13685	303.0
400 Ton* 3559 kN	50	HG40002	559.90	2800	269.9
	150	HG40006	559.9	8399	330.2
	300	HG40012	559.9	17077	420.9
500 Ton* 4448 kN	50	HG50002	730.7	3653	401.0
	150	HG50006	730.7	10959	479.9
	300	HG50012	730.7	21919	599.2
600 Ton* 5338 kN	50	HG60002	855.3	4277	474.0
	150	HG60006	855.3	12829	565.2
	250	HG60010	865.7	23088	430.0
	300	HG60012	855.3	25662	700.8
800 Ton* 7117 kN	50	HG80002	1176	5881	741.2
	150	HG80006	1176	17649	868.2
	300	HG80012	1176	35281	1057.8
1000 Ton* 8896 kN	50	HG100002	1465	7329	1061.9
	150	HG100006	1465	21991	1212.9
	300	HG100012	1465	43966	1438.8

* Available on request: no stock item



HG300 - HG1000



HG Series

Safety Practices
Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.

Model Number	Collapsed Height A (mm)	Extended Height B (mm)	Cylinder Bore Dia. C (mm)	Outside Dia. D (mm)	Plunger Dia. E (mm)	Saddle Dia. F (mm)	Base To Adv. Port G (mm)	Base Mounting Holes		
								Bolt Circle (mm) X	Thread Size (mm)	Thread Depth (mm) Z
HG10002	182	232	130	89	95	75	54	95	M12	22
HG10004	232	332	130	89	95	75	54	95	M12	22
HG10006	282	432	130	89	95	75	54	95	M12	22
HG10008	332	532	130	89	95	75	54	95	M12	22
HG10010	382	632	130	89	95	75	54	95	M12	22
HG10012	432	732	130	89	95	75	54	95	M12	22
HG15002	196	246	158	205	110	94	61	130	M12	22
HG15004	246	346	158	205	110	94	61	130	M12	22
HG15006	296	446	158	205	110	94	61	130	M12	22
HG15008	346	546	158	205	110	94	61	130	M12	22
HG15010	396	646	158	205	110	94	61	130	M12	22
HG15012	446	746	158	205	110	94	61	130	M12	22
HG20002	216	266	183	235	135	113	67	165	M12	20
HG20006	316	466	184	235	135	113	67	165	M12	20
HG20008	366	566	183	235	135	113	67	165	M12	20
HG20012	466	766	184	235	135	113	67	165	M12	20
HG30002	312	362	241	310	197	177	101	180	M16	36
HG30006	412	562	241	310	197	177	101	180	M16	36
HG30012	562	862	241	310	197	177	101	180	M16	36
HG40002	374	424	267	350	216	196	114	205	M16	36
HG40006	474	625	267	350	216	196	114	205	M16	36
HG40012	625	930	267	350	216	196	114	205	M16	36
HG50002	419	469	305	400	248	228	114	250	M24	38
HG50006	519	669	305	400	248	228	114	250	M24	38
HG50012	669	969	305	400	248	228	114	250	M24	38
HG60002	429	479	330	430	267	247	114	275	M24	38
HG60006	529	679	330	430	267	247	114	275	M24	38
HG60010	457	724	332	433	229	200	114	275	M24	38
HG60012	679	979	330	430	267	247	114	275	M24	38
HG80002	474	524	387	505	317	297	149	330	M24	38
HG80006	574	724	387	505	317	297	149	330	M24	38
HG80012	724	1024	387	505	317	297	149	330	M24	38
HG100002	564	614	432	560	343	323	174	375	M24	38
HG100006	664	814	432	560	343	323	174	375	M24	38
HG100012	814	1114	432	560	343	323	174	375	M24	38



High Tonnage Double Acting Cylinders

HDG Series - Heavy Lifting



Capacity:

100 - 1000 Tons

Stroke:

50 - 300 mm

Max. Operating Pressure:

700 BAR

Min. - Max. Height:

182 - 1114 mm



Flow Control Valves

Control the speed of your cylinder by adding a flow control valve.

pg 62



Related Product: Hoses

We offer a variety of hoses, fittings, lengths and materials.

pg 67



Safety Instructions

Visit our DO'S and DON'TS section to review the best methods of operation. Always be prepared.

pg 102

- Cylinders are burnish rolled creating a smoother finish than honing
- Industrial hard chrome plated plunger prevents scratching and corrosion
- Base mounting holes standard on all models
- Plunger wiper seals out dirt and contamination
- High strength steel construction from gun drilled solid bar
- High flow 3/8" NPTF couplers
- Maximum working pressure: 10,000 psi / 700 bar
- Custom sizes are available upon request

Gas/Diesel Engine Pumps

These HDG cylinders pair up well with a Gas or Diesel Engine pump. We offer a variety of different flow rates, motor sizes and reservoir sizes on our gas/diesel engine pumps. Contact your local BVA dealer for more details.



- Gas engine pump will provide 700 BAR hydraulic force at remote locations
- Industrial grade 5.5 hp. (4.1 kN) Honda gas engine or 4.6 hp. (3.5 kN) HATZ diesel engine.
- Ideal for applications where electricity isn't easily accessible.
- Two speed pump designed for rapid cylinder advance
- Gas pump features a sturdy protective roll cage for use in the toughest environments
- Optional electric start with Diesel Engine

Electric Motor Pumps

These HDG cylinders pair up well with Electric Motor pumps. We offer a variety of different flow rates and motor sizes on our electric motor pumps. Contact your local BVA dealer for more details.



- Meets OSHA regulations for sound (80dBA)
- Two speed pump designed for rapid cylinder advance
- Internal filter screens contamination to prevent pump damage
- All units are wired as 240 VAC 50 Hz; Optional wiring: 115VAC 50Hz
- 100% Duty Cycle TEFC motors
- All hand pendants are wired at 24VAC for safety
- Full load starting capability

Quick Reference Guide

Cylinder Capacity	Stroke (mm)	Model Number	Collapsed Height (mm)	Oil Capacity (cc)	Weight (kg)
100 Ton 890 kN	50	HDG10002	182	664	27.7
	100	HDG10004	232	1327	33.6
	150	HDG10006	282	1991	39.5
	200	HDG10008	332	2655	45.4
	250	HDG10010	382	3318	51.7
	300	HDG10012	432	3982	57.6
150 Ton 1334 kN	50	HDG15002	196	981	46.3
	100	HDG15004	246	1963	55.3
	150	HDG15006	296	2978	64.4
	200	HDG15008	346	3926	73.5
	250	HDG15010	396	4907	82.1
	300	HDG15012	446	5889	91.6
200 Ton 1779 kN	50	HDG20002	216	1322	54.9
	150	HDG20006	316	3989	91.2
	200	HDG20008	366	5289	109.8
	300	HDG20012	466	7977	146.1
300 Ton* 2669 kN	50	HDG30002	312	2281	184.2
	150	HDG30006	412	6843	231.8
	300	HDG30012	562	13685	303.0
400 Ton* 3559 kN	50	HDG40002	374	2800	269.9
	150	HDG40006	474	8399	330.2
	305	HDG40012	625	17077	420.9
500 Ton* 4448 kN	50	HDG50002	419	3653	401.0
	150	HDG50006	519	10959	479.9
	300	HDG50012	669	21919	599.2
600 Ton* 5338 kN	50	HDG60002	429	4277	474.0
	150	HDG60006	529	12829	565.2
	250	HDG60010	505	23088	430.0
	300	HDG60012	679	25662	700.8
800 Ton* 7117 kN	50	HDG80002	474	5881	741.2
	150	HDG80006	574	17649	868.2
	300	HDG80012	724	35281	1057.8
1000 Ton* 8896 kN	50	HDG100002	564	7329	1061.9
	150	HDG100006	664	21991	1212.9
	300	HDG100012	814	43966	1438.8

* Available on request

See next pages (pg.34-35) to view more detailed stats on High Tonnage Double Acting Cylinders.



HDG Series



Safety Practices

Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.

Optional Tilt-Saddles



Saddles tilt to a 5% maximum to adjust to the load. View our cylinder accessories page to figure out what saddle best fits these cylinders.

pg 41



Related Product: Gauges

Reduce the risk of overloading your product by using a gauge. A variety of graduations and types to suit any need.

pg 65



High-Flow Couplers

High-Flow Coupler: CH38F is included on all models (except where specified).

Relief Valve

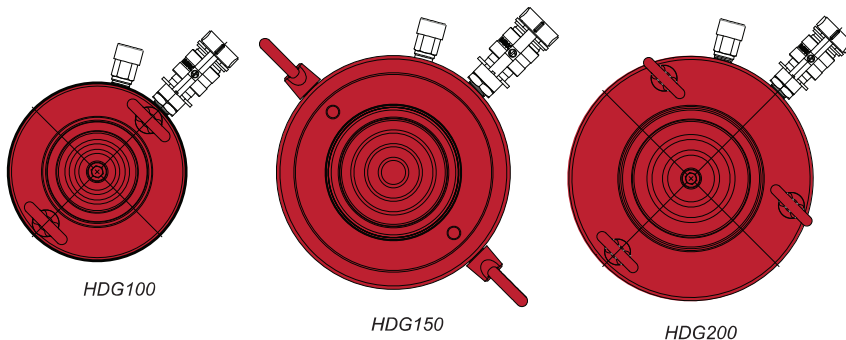
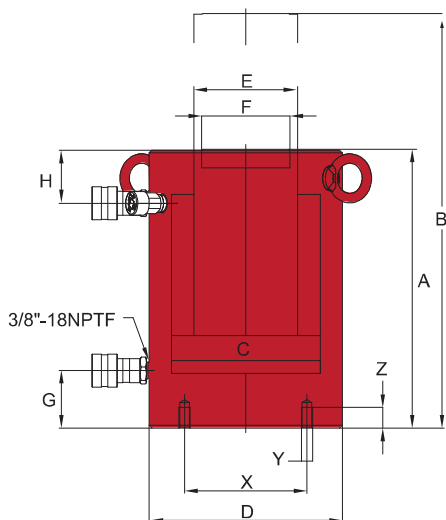
All double acting cylinders are equipped with a pressure relief valve located next to the retract port. These pressure relief valves help prevent cylinder over pressurization on the return port side of the cylinder.






High Tonnage Double Acting Cylinders

HDG Series - Heavy Lifting



Relief Valve

All double acting cylinders are equipped with a pressure relief valve located next to the retract port. These pressure relief valves help prevent cylinder over pressurization on the return port side of the cylinder.



Optional Tilt-Saddles

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pg 41

Safety Instructions


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pg 102

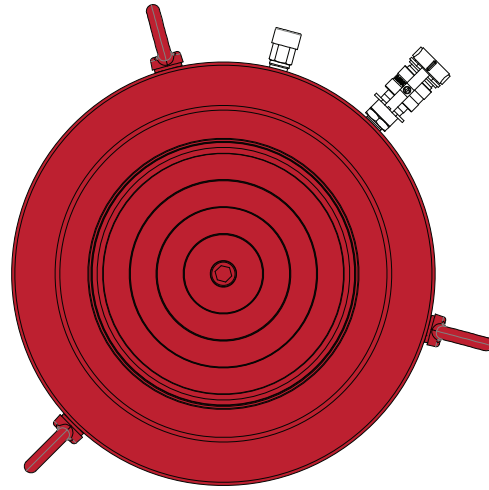
High-Flow Couplers

High-Flow Coupler: CH38F is included on all models (except where specified).



Cylinder Capacity	Stroke (mm)	Model Number	Maximum Cylinder Capacity (ton)		Cylinder Effective Area (cm ²)		Oil Capacity (cc)		Weight (kg)
			Push	Pull	Push	Pull	Push	Pull	
100 Ton 890 kN	50	HDG10002	102.9	47.9	132.7	61.9	664	309	27.7
	100	HDG10004	102.9	47.9	132.7	61.9	1327	618	33.6
	150	HDG10006	102.9	47.9	132.7	61.9	1991	928	39.5
	200	HDG10008	102.9	47.9	132.7	61.9	2655	1237	45.4
	250	HDG10010	102.9	47.9	132.7	61.9	3318	1546	51.7
	300	HDG10012	102.9	47.9	132.7	61.9	3982	1856	57.6
150 Ton 1334 kN	50	HDG15002	152.2	78.5	196.3	101.3	981	506	46.3
	100	HDG15004	152.2	78.5	196.3	101.3	1963	1013	55.3
	150	HDG15006	152.2	78.5	196.3	101.3	2978	1447	64.4
	200	HDG15008	152.2	78.5	196.3	101.3	3926	2025	73.5
	250	HDG15010	152.2	78.5	196.3	101.3	4907	2531	82.1
	300	HDG15012	152.2	78.5	196.3	101.3	5889	3038	91.6
200 Ton 1779 kN	50	HDG20002	205.0	94.0	264.5	121.3	1322	606	54.9
	150	HDG20006	205.0	94.0	264.5	121.3	3989	1905	91.2
	200	HDG20008	205.0	94.0	264.5	121.3	5289	2426	109.8
	300	HDG20012	205.0	94.0	264.5	121.3	7977	3809	146.1
300 Ton* 2669 kN	50	HDG30002	353.6	117.0	456.2	151.4	2281	757	184.2
	150	HDG30006	353.6	117.0	456.2	151.4	6843	2270	231.8
	300	HDG30012	353.6	117.0	456.2	151.4	13685	4541	303.0
400 Ton* 3559 kN	50	HDG40002	433.9	152.6	559.9	196.9	2800	967	269.9
	150	HDG40006	433.9	152.6	559.9	196.9	8399	2902	330.2
	305	HDG40012	433.9	152.6	559.9	196.9	17077	6004	420.9
500 Ton* 4448 kN	50	HDG50002	566.3	192.0	730.7	247.7	3653	1238	401.0
	150	HDG50006	566.3	192.0	730.7	247.7	10959	3713	479.9
	300	HDG50012	566.3	192.0	730.7	247.6	21919	7427	599.2
600 Ton* 5338 kN	50	HDG60002	662.9	229.0	855.3	295.4	4277	1477	474.0
	150	HDG60006	662.9	229.0	855.3	295.4	12829	4431	565.2
	250	HDG60010	670.9	352.9	865.7	455.3	23088	12142	430.0
	300	HDG60012	662.9	229.0	855.3	295.4	25662	8862	700.8
800 Ton* 7117 kN	50	HDG80002	911.6	300.0	1176	387.1	5881	1935	741.2
	150	HDG80006	911.6	300.0	1176	387.1	17649	5806	868.2
	300	HDG80012	911.6	300.0	1176	387.1	35281	11611	1057.8
1000 Ton* 8896 kN	50	HDG100002	1136.0	420.0	1465	541.8	7329	2709	1061.9
	150	HDG100006	1136.0	420.0	1465	541.8	21991	8126	1212.9
	300	HDG100012	1136.0	420.0	1465	541.8	43966	16252	1438.8

* Available on request: no stock item



HDG300 - HDG1000



HDG Series

80%

Safety Practices

Good industry practice recommends not exceeding 80% of maximum rated capacities of all our products.

Model Number	Collapsed Height A (mm)	Extended Height B (mm)	Cylinder Bore Dia. C (mm)	Outside Dia. D (mm)	Plunger Dia. E (mm)	Saddle Dia. F (mm)	Base To Adv. Port G (mm)	Top To Retract Port H (mm)	Base Mounting Holes		
									Bolt Circle X (mm)	Thread Size (mm)	Thread Depth Z (mm)
HDG10002	182	232	130	89	95	75	54	48	95	M12	22
HDG10004	232	332	130	89	95	75	54	48	95	M12	22
HDG10006	282	432	130	89	95	75	54	48	95	M12	22
HDG10008	332	532	130	89	95	75	54	48	95	M12	22
HDG10010	382	632	130	89	95	75	54	48	95	M12	22
HDG10012	432	732	130	89	95	75	54	48	95	M12	22
HDG15002	196	246	158	205	110	94	61	56	130	M12	22
HDG15004	246	346	158	205	110	94	61	56	130	M12	22
HDG15006	296	446	158	205	110	94	61	56	130	M12	22
HDG15008	346	546	158	205	110	94	61	56	130	M12	22
HDG15010	396	646	158	205	110	94	61	56	130	M12	22
HDG15012	446	746	158	205	110	94	61	56	130	M12	22
HDG20002	216	266	183	235	135	113	67	56	165	M12	20
HDG20006	316	466	184	235	135	113	67	56	165	M12	20
HDG20008	366	566	183	235	135	113	67	56	165	M12	20
HDG20012	466	766	184	235	135	113	67	56	165	M12	20
HDG30002	312	362	241	310	197	177	101	75	180	M16	36
HDG30006	412	562	241	310	197	177	101	75	180	M16	36
HDG30012	562	862	241	310	197	177	101	75	180	M16	36
HDG40002	374	424	267	350	216	196	114	105	205	M16	36
HDG40006	474	625	267	350	216	196	114	105	205	M16	36
HDG40012	625	925	267	350	216	196	114	105	205	M16	36
HDG50002	419	469	305	400	248	228	114	135	250	M24	38
HDG50006	519	669	305	400	248	228	114	135	250	M24	38
HDG50012	669	969	305	400	248	228	114	135	250	M24	38
HDG60002	429	479	330	430	267	247	114	135	275	M24	38
HDG60006	529	679	330	430	267	247	114	135	275	M24	38
HDG60010	457	724	332	433	229	200	114	135	275	M24	38
HDG60012	679	979	330	430	267	247	114	135	275	M24	38
HDG80002	474	524	387	505	317	297	149	135	330	M24	38
HDG80006	574	724	387	505	317	297	149	135	330	M24	38
HDG80012	724	1024	387	505	317	297	149	135	330	M24	38
HDG100002	564	614	432	560	343	323	174	170	375	M24	38
HDG100006	664	814	432	560	343	323	174	170	375	M24	38
HDG100012	814	1114	432	560	343	323	174	170	375	M24	38