



GBS

Heavy Duty Clamps - Trunnion Clamps

- 1 Bolt**
– New specially designed bolt with integrated spacer and improved performance. The W5 version has a socket head cap bolt
- 2 Reinforced band loops**
– ability to withstand much higher torques
- 3 Mechanically locked closure**
– no welding spots and no contact corrosion
- 4 Bridge**
– hose protection
- 5 Robust band with rounded edges**
– prevents injuries and damage to hoses
- 6 Hollow trunnions**
– reduces the tensile forces on the bolt and the mechanical lock

Heavy-duty clamps for multiple applications

NORMACLAMP® GBS is designed primarily for use in applications where hose clamps must meet stringent requirements. In particular if suction and pressure hoses - complete with plastic or steel inserts and high shore hardness values - are to be connected and attached. They are particularly suitable for use on commercial and special vehicles. **NORMACLAMP®** GBS clamps' ability to withstand exceptionally high levels of band tensile force is an outstanding feature. They are also extremely easy to install, whether you're using manual, pneumatic or electrical standard tools.



Advantages at a glance

- Failure torques improved by a factor of two
- Band tensile force levels improved by a factor of three

Applications

- Machine building
- Chemical industry
- Irrigation systems
- Ship manufacturing
- Railway industry
- Agricultural machines
- Building machines
- Engine manufacturing
- Pump and filter
- Mining Industry

Materials

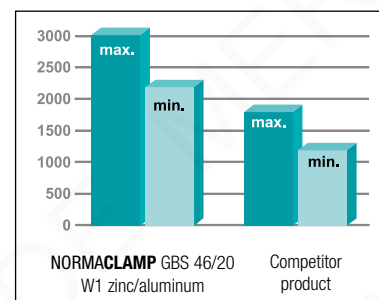
W1	W2	W3	W4	W5
x	x		x	x

Material	Corrosion resistance in salt spray testing
W1	Min. 72 h
W2	Min. 72 h
W4	Min. 240 h
W5	Min. 400 h

NORMACLAMP® GBS						
Band width	Material thickness in mm					
	W1	W2	W4	W5	M	SW
18	0.8	0.6	0.6	0.6	6	8
20	1.0	0.8	0.8	0.8	7	10
25	1.0	1.0	1.0	1.0	8	13
30	1.3	1.0	1.0	1.0	10	17

Band tensile force

Numerous test results underline the technical superiority of **NORMACLAMP®** GBS products over their competitors':







Materials explanation

MATERIALS EXPLANATION	
W1	All parts entirely made from galvanized steel
W2	NORMACLAMP® TORRO®: Band and housing stainless steel AISI 430; Screw: Galvanized mild steel NORMACLAMP® GBS: Band and housing stainless steel AISI 439; Bolt: Galvanized mild steel NORMACONNECT® FGR/DCS: see pages 68 and 96
W2B	Band: stainless steel AISI 430 Screw and housing: galvanized steel
W3	All parts entirely made from stainless steel AISI 430
W4	All parts entirely made from stainless steel AISI 304 (or comparable)
W5	All parts entirely made from stainless steel AISI 316 (or comparable)

Materials International standard designations						
	DIN	AISI/AS	BS	AFNOR NF	SS	SUS
W1	Entirely galvanized steel					
Band and housing						
W2	1.4016	430	430 S 17	Z8 C17	2320	430
Bolt	Galvanized steel					
W3	1.4016	430	430 S 17	Z8 C17	2320	430
W4	1.4301	304	304 S 15	Z6 CN 18-09	2332	304
W5	1.4401	316	316 S 31	Z3 CND 17-11-1	2347	316
Spring insert	1.4310	301	301 S 22	Z12 CN 18-09	2331	301

Bolts

BOLTS	
Bolt type	Meaning
M	Bolt thread diameter in mm
Sk 	Hexagonal-head bolt
Sz 	Slotted hexagonal-head bolt
Zy 	Cylinder-head bolt
Isk 	Inside hexagonal screw

Pictogram explanation

NORMA® offers different tools, kits, assortments and displays to fit the needs of its customers. The drawings below will help you to know, at a quick glance, if the product is available in another packaging type and/or if it has a special tool.





PICTOGRAM	
Pictogram	Meaning
	A tool exists for this product, please refer to the Assortment chapter
	This product is available in a kit, please refer to the Assortment chapter
	This product is available in an assortment box, please refer to the Assortment chapter
	This product is available in display, please refer to the Assortment chapter

Table of torques

NORMACLAMP® GBS						NORMACLAMP® GBS RUBBER INSERT			
Band width	Failure torque (minimum) Nm				Recommended tightening torque Nm	Band width	Failure torque (minimum) Nm		Recommended tightening torque Nm
	W1	W2	W4	W5			W1	W2	
18	15	15	15	15	8	18	10	10	6
20	25	20	20	20	10	20	15	15	8
25	35	30	30	30	20	25	25	25	18
30	50	45	45	45	25	30	40	40	22

* the recommended tightening speed should not exceed 250 rpm

Technical data & Ordering information

NORMACLAMP® GBS HOLLOW TRUNNION								
Width	Designation	Clamping ranges		W1 Product No.	W2 Product No.	W4 Product No.	W5** Product No.	
		in mm	in inches					
18	GBS M17-19/18 Sk*	17-19	11/16-3/4"	0591 7181 018	0591 7182 018	0591 7184 018	0591 7185 018	
	GBS M19-21/18 Sk*	19-21	3/4-13/16"	0591 7181 020	0591 7182 020	0591 7184 020	0591 7185 020	
	GBS M21-23/18 Sk*	21-23	13/16-15/16"	0591 7181 022	0591 7182 022	0591 7184 022	0591 7185 022	
	GBS M23-25/18 Sk*	23-25	15/16-1"	0591 7181 024	0591 7182 024	0591 7184 024	0591 7185 024	
	GBS M25-27/18 Sk	25-27	1-1 1/16"	0591 7181 026	0591 7182 026	0591 7184 026	0591 7185 026	
	GBS M27-29/18 Sk	27-29	1 1/16-1 1/8"	0591 7181 028	0591 7182 028	0591 7184 028	0591 7185 028	
	GBS M29-31/18 Sk	29-31	1 1/8-1 1/4"	0591 7181 030	0591 7182 030	0591 7184 030	0591 7185 030	
	GBS M31-34/18 Sk	31-34	1 1/4-1 5/16"	0591 7181 033	0591 7182 033	0591 7184 033	0591 7185 033	
	GBS M34-37/18 Sk	34-37	1 5/16-1 7/16"	0591 7181 036	0591 7182 036	0591 7184 036	0591 7185 036	
	GBS M37-40/18 Sk	37-40	1 7/16-1 9/16"	0591 7181 039	0591 7182 039	0591 7184 039	0591 7185 039	
GBS M40-43/18 Sk	40-43	1 9/16-1 11/16"	0591 7181 042	0591 7182 042	0591 7184 042	0591 7185 042		
20	GBS M43-47/20 Sk	43-47	1 11/16-1 7/8"	0591 7201 045	0591 7202 045	0591 7204 045	0591 7205 045	
	GBS M47-51/20 Sk	47-51	1 7/8-2"	0591 7201 049	0591 7202 049	0591 7204 049	0591 7205 049	
	GBS M51-55/20 Sk	51-55	2-2 3/16"	0591 7201 053	0591 7202 053	0591 7204 053	0591 7205 053	
	GBS M55-59/20 Sk	55-59	2 3/16-2 5/16"	0591 7201 057	0591 7202 057	0591 7204 057	0591 7205 057	
	GBS M59-63/20 Sk	59-63	2 5/16-2 1/2"	0591 7201 061	0591 7202 061	0591 7204 061	0591 7205 061	
	GBS M63-68/20 Sk	63-68	2 1/2-2 11/16"	0591 7201 066	0591 7202 066	0591 7204 066	0591 7205 066	
	GBS M68-73/25 Sk	68-73	2 11/16-2 7/8"	0591 7251 071	0591 7252 071	0591 7254 071	0591 7255 071	
25	GBS M73-79/25 Sk	73-79	2 7/8-3 1/8"	0591 7251 076	0591 7252 076	0591 7254 076	0591 7255 076	
	GBS M79-85/25 Sk	79-85	3 1/8-3 3/8"	0591 7251 082	0591 7252 082	0591 7254 082	0591 7255 082	
	GBS M85-91/25 Sk	85-91	3 3/8-3 9/16"	0591 7251 088	0591 7252 088	0591 7254 088	0591 7255 088	
	GBS M91-97/25 Sk	91-97	3 9/16-3 13/16"	0591 7251 094	0591 7252 094	0591 7254 094	0591 7255 094	
	GBS M97-104/25 Sk	97-104	3 13/16-4 1/6"	0591 7251 101	0591 7252 101	0591 7254 101	0591 7255 101	
	GBS M104-112/25 Sk	104-112	4 1/16-4 7/16"	0591 7251 108	0591 7252 108	0591 7254 108	0591 7255 108	
	GBS M112-121/25 Sk	112-121	4 7/16-4 3/4"	0591 7251 117	0591 7252 117	0591 7254 117	0591 7255 117	
	GBS M121-130/25 Sk	121-130	4 3/4-5 1/8"	0591 7251 126	0591 7252 126	0591 7254 126	0591 7255 126	
	30	GBS M130-140/30 Sk	130-140	5 1/8-5 1/2"	0591 7301 135	0591 7302 135	0591 7304 135	0591 7305 135
		GBS M140-150/30 Sk	140-150	5 1/2-5 15/16"	0591 7301 145	0591 7302 145	0591 7304 145	0591 7305 145
GBS M150-162/30 Sk		150-162	5 15/16-6 3/8"	0591 7301 156	0591 7302 156	0591 7304 156	0591 7305 156	
GBS M162-174/30 Sk		162-174	6 3/8-6 7/8"	0591 7301 168	0591 7302 168	0591 7304 168	0591 7305 168	
GBS M174-187/30 Sk		174-187	6 7/8-7 3/8"	0591 7301 181	0591 7302 181	0591 7304 181	0591 7305 181	
GBS M187-200/30 Sk		187-200	7 3/8-7 7/8"	0591 7301 194	0591 7302 194	0591 7304 194	0591 7305 194	
GBS M200-213/30 Sk		200-213	7 7/8-8 3/8"	0591 7301 207	0591 7302 207	0591 7304 207	0591 7305 207	
GBS M213-226/30 Sk		213-226	8 3/8-8 7/8"	0591 7301 220	0591 7302 220	0591 7304 220	0591 7305 220	
GBS M226-239/30 Sk		226-239	8 7/8-9 7/16"	0591 7301 233	0591 7302 233	0591 7304 233	0591 7305 233	
GBS M239-252/30 Sk		239-252	9 7/16-9 15/16"	0591 7301 246	0591 7302 246	0591 7304 246	0591 7305 246	
GBS M252-265/30 Sk		252-265	9 15/16-10 7/16"	0591 7301 259	0591 7302 259	0591 7304 259	0591 7305 259	
GBS M265-278/30 Sk		265-278	10 7/16-10 15/16"	0591 7301 272	0591 7302 272	0591 7304 272	0591 7305 272	
GBS M279-291/30 Sk		279-291	11-11 7/16"	0591 7301 285	0591 7302 285	0591 7304 285	0591 7305 285	
GBS M292-304/30 Sk		292-304	11 1/2-12"	0591 7301 298	0591 7302 298	0591 7304 298	0591 7305 298	

* These diameters are full trunnions and do not feature a mechanically locked closure, they are spot-welded.

** ISK bolt for W5 material



GBS – Solid Trunnions - STC Heavy Duty Clamps - Trunnion Clamps

To suit the requirements of all markets, **NORMACLAMP®** GBS is also available with solid trunnions.

Main advantage

Strong robustness

Materials

W1, W4

NORMACLAMP® GBS STC					
Width	Description	Clamping range		W1 Product No.	W4 Product No.
		in mm	in inches		
18	GBS M17-19/18 STC	17 - 19	11/16-3/4"	0591 7001 018	0591 7009 018
	GBS M19-21/18 STC	19 - 21	3/4-13/16"	0591 7001 020	0591 7009 020
	GBS M21-23/18 STC	21 - 23	13/16-15/16"	0591 7001 022	0591 7009 022
	GBS M23-25/18 STC	23 - 25	15/16-1"	0591 7001 024	0591 7009 024
	GBS M25-27/18 STC	25 - 27	1-1 1/16"	0591 7001 026	0591 7009 026
	GBS M27-29/18 STC	27 - 29	1 1/16-1 1/8"	0591 7001 028	0591 7009 028
	GBS M29-31/18 STC	29 - 31	1 1/8-1 1/4"	0591 7001 030	0591 7009 030
	GBS M31-34/18 STC	31 - 34	1 1/4-1 5/16"	0591 7001 033	0591 7009 033
	GBS M34-37/18 STC	34 - 37	1 5/16-1 7/16"	0591 7001 036	0591 7009 036
	GBS M37-40/18 STC	37 - 40	1 7/16-1 9/16"	0591 7001 039	0591 7009 039
GBS M40-43/18 STC	40 - 43	1 9/16-1 11/16"	0591 7001 042	0591 7009 042	
20	GBS M43-47/20 STC	43 - 47	1 11/16-1 7/8"	0591 7002 045	0591 7010 045
	GBS M47-51/20 STC	47 - 51	1 7/8-2"	0591 7002 049	0591 7010 049
	GBS M51-55/20 STC	51 - 55	2-2 3/16"	0591 7002 053	0591 7010 053
	GBS M55-59/20 STC	55 - 59	2 3/16-2 5/16"	0591 7002 057	0591 7010 057
	GBS M59-63/20 STC	59 - 63	2 5/16-2 1/2"	0591 7002 061	0591 7010 061
	GBS M63-68/20 STC	63 - 68	2 1/2-2 11/16"	0591 7002 066	0591 7010 066
25	GBS M68-73/25 STC	68 - 63	2 11/16-2 7/8"	0591 7003 071	0591 7011 071
	GBS M73-79/25 STC	73 - 79	2 7/8-3 1/8"	0591 7003 076	0591 7011 076
	GBS M79-85/25 STC	79 - 85	3 1/8-3 3/8"	0591 7003 082	0591 7011 082
	GBS M85-91/25 STC	85 - 91	3 3/8-3 9/16"	0591 7003 088	0591 7011 088
	GBS M91-97/25 STC	91 - 97	3 9/16-3 13/16"	0591 7003 094	0591 7011 094
	GBS M97-104/25 STC	97 - 104	3 13/16-4 1/8"	0591 7003 101	0591 7011 101
	GBS M104-112/25 STC	104 - 112	4 1/16-4 7/16"	0591 7003 108	0591 7011 108
	GBS M112-121/25 STC	112 - 121	4 7/16-4 3/4"	0591 7003 117	0591 7011 117
GBS M121-130/25 STC	121 - 130	4 3/4-5 1/8"	0591 7003 126	0591 7011 126	
30	GBS M130-140/30 STC	130 - 140	5 1/8-5 1/2"	0591 7004 135	0591 7012 135
	GBS M140-150/30 STC	140 - 150	5 1/2-5 15/16"	0591 7004 145	0591 7012 145
	GBS M150-162/30 STC	150 - 162	5 15/16-6 3/8"	0591 7004 156	0591 7012 156
	GBS M162-174/30 STC	162 - 174	6 3/8-6 7/8"	0591 7004 168	0591 7012 168
	GBS M174-187/30 STC	174 - 187	6 7/8-7 3/8"	0591 7004 181	0591 7012 181
	GBS M187-200/30 STC	187 - 200	7 3/8-7 7/8"	0591 7004 194	0591 7012 194
	GBS M200-213/30 STC	200 - 213	7 7/8-8 3/8"	0591 7004 207	0591 7012 207
	GBS M213-226/30 STC	213 - 226	8 3/8-8 7/8"	0591 7004 220	0591 7012 220
	GBS M226-239/30 STC	226 - 239	8 7/8-9 7/16"	0591 7004 233	0591 7012 233
	GBS M239-252/30 STC	239 - 252	9 7/16-9 15/16"	0591 7004 246	0591 7012 246
	GBS M252-265/30 STC	252 - 265	9 15/16-10 7/16"	0591 7004 259	0591 7012 259
	GBS M265-278/30 STC	265 - 278	10 7/16-10 15/16"	0591 7004 272	0591 7012 272
	GBS M278-291/30 STC	278 - 291	10 15/16-11 7/16"	0591 7004 285	0591 7012 285
	GBS M291-304/30 STC	291 - 304	11 7/16-12"	0591 7004 298	0591 7012 298
	GBS M304-317/30 STC	304 - 317	12-12 1/2"	0591 7004 311	0591 7012 311
GBS M317-330/30 STC	317 - 330	12 1/2-13"	0591 7004 324	0591 7012 324	



GBS – QRC closure

Heavy Duty Clamps - Trunnion Clamps

NORMACLAMP® GBS is also available with a Quick Release Closure. The bolt on the closure is easy to release, ensuring straightforward installation and removal.

Main advantage

Easy to install

Materials

W1, W2

NORMACLAMP® GBS QRC

Width	Description	Clamping range		W1 Product No.	W2 Product No.
		in mm	in inches		
18	GBS M17-19/18 Zy QRC*	17 - 19	11/16-3/4"	0592 7181 018	0592 7182 018
	GBS M19-21/18 Zy QRC*	19 - 21	3/4-13/16"	0592 7181 020	0592 7182 020
	GBS M21-23/18 Zy QRC*	21 - 23	13/16-15/16"	0592 7181 022	0592 7182 022
	GBS M23-25/18 Zy QRC*	23 - 25	15/16-1"	0592 7181 024	0592 7182 024
	GBS M25-27/18 Zy QRC	25 - 27	1-1 1/16"	0592 7181 026	0592 7182 026
	GBS M27-29/18 Zy QRC	27 - 29	1 1/16-1 1/8"	0592 7181 028	0592 7182 028
	GBS M29-31/18 Zy QRC	29 - 31	1 1/8-1 1/4"	0592 7181 030	0592 7182 030
	GBS M31-34/18 Zy QRC	31 - 34	1 1/4-1 5/16"	0592 7181 033	0592 7182 033
	GBS M34-37/18 Zy QRC	34 - 37	1 5/16-1 7/16"	0592 7181 036	0592 7182 036
	GBS M37-40/18 Zy QRC	37 - 40	1 7/16-1 9/16"	0592 7181 039	0592 7182 039
20	GBS M40-43/18 Zy QRC	40 - 43	1 9/16-1 11/16"	0592 7181 042	0592 7182 042
	GBS M43-47/20 Zy QRC	43 - 47	1 11/16-1 7/8"	0592 7201 045	0592 7202 045
	GBS M47-51/20 Zy QRC	47 - 51	1 7/8-2"	0592 7201 049	0592 7202 049
	GBS M51-55/20 Zy QRC	51 - 55	2-2 3/16"	0592 7201 053	0592 7202 053
	GBS M55-59/20 Zy QRC	55 - 59	2 3/16-2 5/16"	0592 7201 057	0592 7202 057
	GBS M59-63/20 Zy QRC	59 - 63	2 5/16-2 1/2"	0592 7201 061	0592 7202 061
	GBS M63-68/20 Zy QRC	63 - 68	2 1/2-2 11/16"	0592 7201 066	0592 7202 066
25	GBS M68-73/25 Zy QRC	68 - 73	2 11/16-2 7/8"	0592 7251 071	0592 7252 071
	GBS M73-79/25 Zy QRC	73 - 79	2 7/8-3 1/8"	0592 7251 076	0592 7252 076
	GBS M79-85/25 Zy QRC	79 - 85	3 1/8-3 3/8"	0592 7251 082	0592 7252 082
	GBS M85-91/25 Zy QRC	85 - 91	3 3/8-3 9/16"	0592 7251 088	0592 7252 088
	GBS M91-97/25 Zy QRC	91 - 97	3 9/16-3 13/16"	0592 7251 094	0592 7252 094
	GBS M97-104/25 Zy QRC	97 - 104	3 13/16-4 1/6"	0592 7251 101	0592 7252 101
	GBS M104-112/25 Zy QRC	104 - 112	4 1/16-4 7/16"	0592 7251 108	0592 7252 108
	GBS M112-121/25 Zy QRC	112 - 121	4 7/16-4 3/4"	0592 7251 117	0592 7252 117
30	GBS M121-130/25 Zy QRC	121 - 130	4 3/4-5 1/8"	0592 7251 126	0592 7252 126
	GBS M130-140/30 Zy QRC	130 - 140	5 1/8-5 1/2"	0592 7301 135	0592 7302 135
	GBS M140-150/30 Zy QRC	140 - 150	5 1/2-5 15/16"	0592 7301 145	0592 7302 145
	GBS M150-162/30 Zy QRC	150 - 162	5 15/16-6 3/8"	0592 7301 156	0592 7302 156
	GBS M162-174/30 Zy QRC	162 - 174	6 3/8-6 7/8"	0592 7301 168	0592 7302 168
	GBS M174-187/30 Zy QRC	174 - 187	6 7/8-7 3/8"	0592 7301 181	0592 7302 181
	GBS M187-200/30 Zy QRC	187 - 200	7 3/8-7 7/8"	0592 7301 194	0592 7302 194
	GBS M200-213/30 Zy QRC	200 - 213	7 7/8-8 3/8"	0592 7301 207	0592 7302 207
	GBS M213-226/30 Zy QRC	213 - 226	8 3/8-8 7/8"	0592 7301 220	0592 7302 220
	GBS M226-239/30 Zy QRC	226 - 239	8 7/8-9 7/16"	0592 7301 233	0592 7302 233
GBS M239-252/30 Zy QRC	239 - 252	9 7/16-9 15/16"	0592 7301 246	0592 7302 246	

These diameters do not feature a mechanically locked closure, they are spot-welded.



GBS – Multi-parts

Heavy Duty Clamps - Trunnion Clamps

NORMACLAMP® GBS is also available in a multi-part version for bigger diameters.

Main advantage

Suitable for big diameter hoses

Materials

W1, W2, W4, W5

NORMACLAMP® GBS MULTI-PARTS

Width	Description	Clamping range		W1 Product No.	W2 Product No.	W4 Product No.	W5 Product No.
		in mm	in inches				
18	GBS M59-67/18 SK 2T	59-67	2 5/16-2 5/8"	0591 7191 063	0591 7192 063	0591 7194 063	0591 7195 063
	GBS M67-75/18 SK 2T	67-75	2 5/8-2 15/16"	0591 7191 071	0591 7192 071	0591 7194 071	0591 7195 071
20	GBS M67-75/20 SK 2T	67-75	2 5/8-2 15/16"	0591 7221 071	0591 7222 071	0591 7224 071	0591 7225 071
	GBS M75-83/20 SK 2T	75-83	2 15/16-3 1/4"	0591 7221 079	0591 7222 079	0591 7224 079	0591 7225 079
	GBS M83-91/20 SK 2T	83-91	3 1/4-3 9/16"	0591 7221 087	0591 7222 087	0591 7224 087	0591 7225 087
25	GBS M88-100/25 SK 2T	88-100	3 9/16-4"	0591 7271 094	0591 7272 094	0591 7274 094	0591 7275 094
	GBS M100-116/25 SK 2T	100-116	3 7/16-4 9/16"	0591 7271 108	0591 7272 108	0591 7274 108	0591 7275 108
	GBS M116-136/25 SK 2T	116-136	4 9/16-5 3/8"	0591 7271 126	0591 7272 126	0591 7274 126	0591 7275 126
	GBS M136-156/25 SK 2T	136-156	5 3/8-6 1/8"	0591 7271 146	0591 7272 146	0591 7274 146	0591 7275 146
	GBS M156-176/25 SK 2T	156-176	6 1/8-6 15/16"	0591 7271 168	0591 7272 168	0591 7274 168	0591 7275 168
30	GBS M125-145/30 SK 2T	125-145	4 15/16-5 11/16"	0591 7321 135	0591 7322 135	0591 7324 135	0591 7325 135
	GBS M145-168/30 SK 2T	145-168	5 11/16-6 5/8"	0591 7321 156	0591 7322 156	0591 7324 156	0591 7325 156
	GBS M168-193/30 SK 2T	168-193	6 5/8-7 5/8"	0591 7321 181	0591 7322 181	0591 7324 181	0591 7325 181
	GBS M193-220/30 SK 2T	193-220	7 5/8-8 11/16"	0591 7321 207	0591 7322 207	0591 7324 207	0591 7325 207
	GBS M220-245/30 SK 2T	220-245	8 11/16-9 5/8"	0591 7321 233	0591 7322 233	0591 7324 233	0591 7325 233
	GBS M245-270/30 SK 2T	245-270	9 5/8-10 5/8"	0591 7321 258	0591 7322 258	0591 7324 258	0591 7325 258
	GBS M270-295/30 SK 2T	270-295	10 5/8-11 5/8"	0591 7321 283	0591 7322 283	0591 7324 283	0591 7325 283
	GBS M295-320/30 SK 2T	295-320	11 5/8-12 5/8"	0591 7321 308	0591 7322 308	0591 7324 308	0591 7325 308
	GBS M320-345/30 SK 2T	320-345	12 5/8-13 9/16"	0591 7321 333	0591 7322 333	0591 7324 333	0591 7325 333