



- 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 therefore particularly suitable for use on commercial and special vehicles. Their standout feature is the exceptionally high levels of band tensile force they demonstrate. NORMACLAMP® GBS clamps 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

The results of numerous series of tests have underlined the technical superiority of NORMACLAMP® GBS products over their competitors:

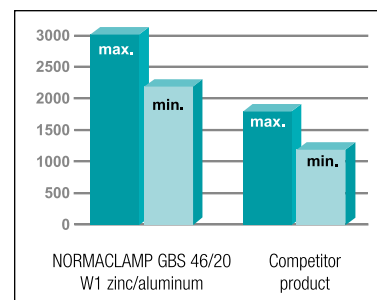


Table of torques

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

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

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	1 1/16-3/4	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
25	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
	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
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, but are instead spot-welded.



Refer to page 187.