

HEAVY DUTY CLAMPS



NORMA GBS Hollow Trunnions

Heavy Duty Clamps | Hollow Trunnions Clamps



Heavy duty clamps for diverse applications

- ✓ Bolt with integrated spacer and improved performance
- ✓ Mechanically locked closure with no welding spots and no contact corrosion
- ✓ Bridge design provides hose protection
- ✓ Excellent band tensile force
- ✓ Reinforced band loops with ability to withstand much higher torques
- ✓ Hollow trunnions reduces the tensile forces on the bolt and the mechanical lock
- ✓ Rounded band edges prevents damage to hoses
- ✓ Easy installation

Applications

NORMACLAMP™ GBS is designed primarily for use in applications where hose clamps must meet stringent requirements, in particular for the connection of suction and pressure hoses with plastic or steel inserts and high shore hardness values. It is therefore particularly suitable for use on commercial and special vehicles.

Electrical and mechanical characteristics

• Material

W1: All parts entirely made from galvanized steel. Passing min. 72 hours of salt spray test.

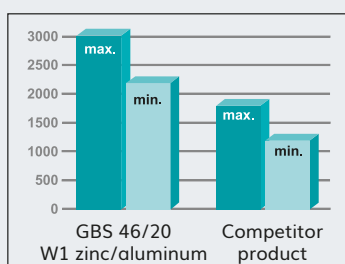
W2: Band and housing are made from stainless steel 439; Bolt is made from galvanized mild steel. Passing min. 72 hours of salt spray test.

W4: All parts entirely made from stainless steel 304 (or comparable). Passing min. 240 hours of salt spray test.

W5: All parts entirely made from stainless steel 316 (or comparable). Passing min. 400 hours of salt spray test.

• Band tensile force

Numerous test results underline the technical superiority of NORMACLAMP™ GBS products:



• 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

Note: The recommended tightening speed should not exceed 250 rpm.

Material Thickness

NORMACLAMP™ GBS				
Band width	Material thickness in mm			
	W1	W2	W4	W5
18	0.8	0.6	0.6	0.6
20	1.0	0.8	0.8	0.8
25	1.0	1.0	1.0	1.0
30	1.3	1.0	1.0	1.0

NORMACLAMP™ GBS HOLLOW TRUNNIONS								
Product Picture	Band width	Designation	Clamping ranges		W1 Product No.	W2 Product No.	W4 Product No.	W5** Product No.
			(mm)	(in.)				
	18	GBS M17-19/18 Sk*	17-19	11/16-3/4"	0591 7181 018	0591 7182 018	0591 7184 018	0591 7185 018
	18	GBS M19-21/18 Sk*	19-21	3/4-13/16"	0591 7181 020	0591 7182 020	0591 7184 020	0591 7185 020
	18	GBS M21-23/18 Sk*	21-23	13/16-15/16"	0591 7181 022	0591 7182 022	0591 7184 022	0591 7185 022
	18	GBS M23-25/18 Sk*	23-25	15/16-1"	0591 7181 024	0591 7182 024	0591 7184 024	0591 7185 024
	18	GBS M25-27/18 Sk	25-27	1-1 1/16"	0591 7181 026	0591 7182 026	0591 7184 026	0591 7185 026
	18	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
	18	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
	18	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
	18	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
	18	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
	18	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
	20	GBS M47-51/20 Sk	47-51	1 7/8-2"	0591 7201 049	0591 7202 049	0591 7204 049	0591 7205 049
	20	GBS M51-55/20 Sk	51-55	2-2 3/16"	0591 7201 053	0591 7202 053	0591 7204 053	0591 7205 053
	20	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
	20	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
	20	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
	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
	25	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
	25	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
	25	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
	25	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
	25	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
	25	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
	25	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

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

** ISK bolt for W5 material

NORMACLAMP™ GBS HOLLOW TRUNNIONS

Product Picture	Band width	Designation	Clamping ranges		W1 Product No.	W2 Product No.	W4 Product No.	W5** Product No.
			(mm)	(in.)				
	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	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
	30	GBS M279-291/30 Sk	279-291	11-11 7/16"	0591 7301 285	0591 7302 285	0591 7304 285	0591 7305 285
	30	GBS M292-304/30 Sk	292-304	11 1/2-12"	0591 7301 298	0591 7302 298	0591 7304 298	0591 7305 298

** ISK bolt for W5 material

GBS - Other versions



**GBS
Solid Trunnions**

Strong robustness.



**GBS
QRC Closure**

With Quick Release Closure.



**GBS
Multi-parts**

Suitable for big diameter hoses.