

Ball Lock Pins

Stainless Steel, Handle Aluminum

SPECIFICATION

Types

- Type **P**: With mushroom shaped handle
- Type **L**: With L-handle
- Type **T**: With T-handle

Pin

- Stainless steel AISI 303 **A**
- Stainless steel AISI 630 **C**
Precipitation hardened

Balls

Stainless steel AISI 420C

Handle

Aluminum
Powder coated
Black, RAL 9005, textured finish

Pressure spring

Stainless steel AISI 631

Operating temperature -30 °C to +150 °C



INFORMATION

Ball lock pins GN 113.20 are used for quick fixing, connecting and locking of various parts and workpieces. A typical application is locating pins which have often to be removed and installed again.

The two balls are unlocked by pressing the spring-loaded button and locked again when released.

The hardened pin of version C has high wear resistance and tensile strength, making it suitable for applications involving heavy elements.

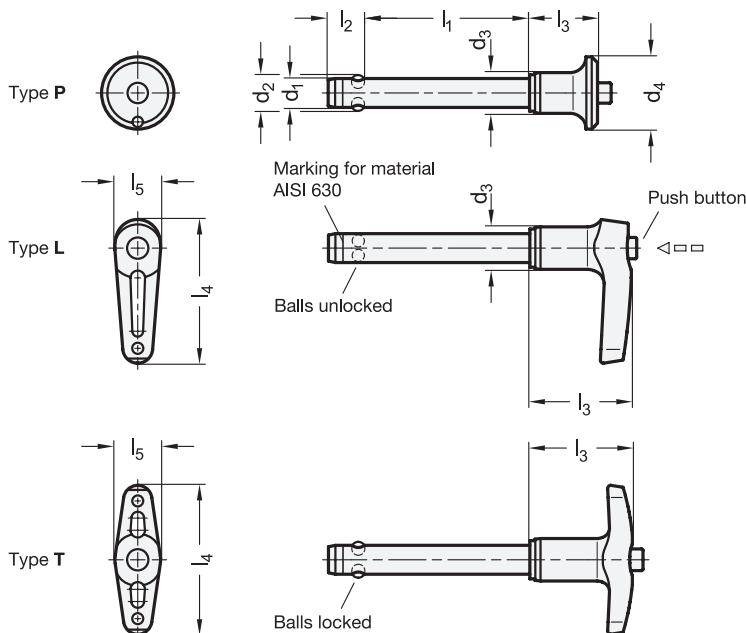
The technical appendix contains the load capacities for the double-sided shearing resistance (breaking strength).

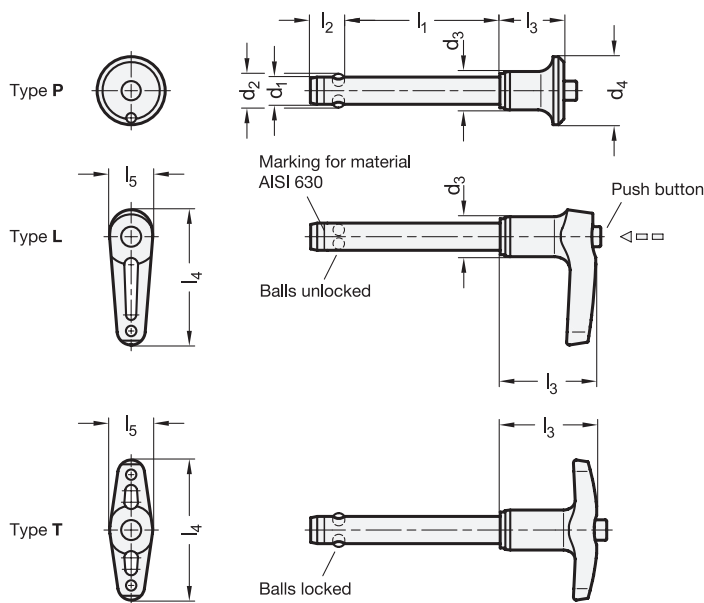
ACCESSORY

- GN 111.8 Retaining Cables (see page)
- DIN 172 Guide Bushings (with Collar) (see page 1006)
- DIN 179 Guide Bushings (without Collar) (see page 1008)
- GN 1140 Holding Bushings (see page)

TECHNICAL INFORMATION

- List of Lock Pin Types (see page 868)
- Load Capacity (see page)
- ISO-Fundamental Tolerances (see page A21)
- Stainless Steel Characteristics (see page A26)





GN 113.20-P

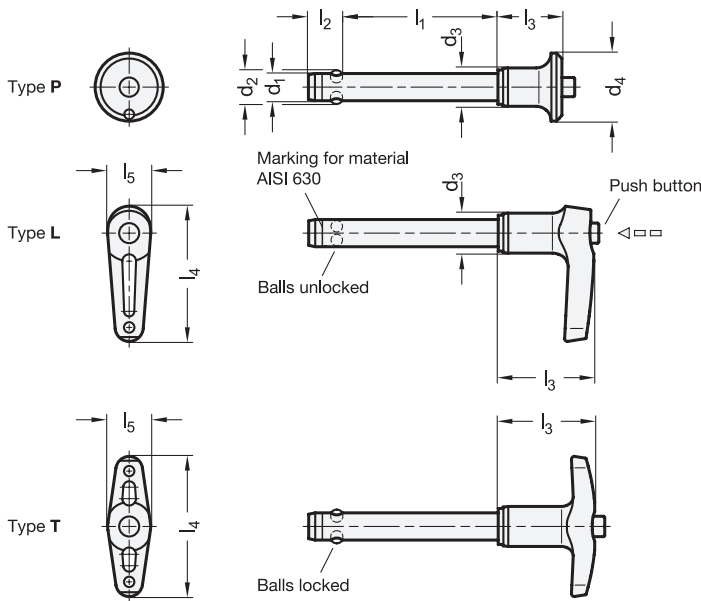
STAINLESS STEEL

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	d4	l2 ±1	l3	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-5-10-P-A	5	10	5.5	11.3	20	6	176	5	14	12
GN 113.20-5-10-P-C	5	10	5.5	11.3	20	6	176	5	24	12
GN 113.20-5-15-P-A	5	15	5.5	11.3	20	6	176	5	14	12
GN 113.20-5-15-P-C	5	15	5.5	11.3	20	6	176	5	24	12
GN 113.20-5-20-P-A	5	20	5.5	11.3	20	6	176	5	14	13
GN 113.20-5-20-P-C	5	20	5.5	11.3	20	6	176	5	24	13
GN 113.20-5-25-P-A	5	25	5.5	11.3	20	6	176	5	14	14
GN 113.20-5-25-P-C	5	25	5.5	11.3	20	6	176	5	24	14
GN 113.20-5-30-P-A	5	30	5.5	11.3	20	6	176	5	14	15
GN 113.20-5-30-P-C	5	30	5.5	11.3	20	6	176	5	24	15
GN 113.20-6-10-P-A	6	10	7	11.3	20	7	176	6	21	13
GN 113.20-6-10-P-C	6	10	7	11.3	20	7	176	6	35	13
GN 113.20-6-15-P-A	6	15	7	11.3	20	7	176	6	21	14
GN 113.20-6-15-P-C	6	15	7	11.3	20	7	176	6	35	14
GN 113.20-6-20-P-A	6	20	7	11.3	20	7	176	6	21	15
GN 113.20-6-20-P-C	6	20	7	11.3	20	7	176	6	35	15
GN 113.20-6-25-P-A	6	25	7	11.3	20	7	176	6	21	16
GN 113.20-6-25-P-C	6	25	7	11.3	20	7	176	6	35	16
GN 113.20-6-30-P-A	6	30	7	11.3	20	7	176	6	21	17
GN 113.20-6-30-P-C	6	30	7	11.3	20	7	176	6	35	17
GN 113.20-6-35-P-A	6	35	7	11.3	20	7	176	6	21	18
GN 113.20-6-35-P-C	6	35	7	11.3	20	7	176	6	35	18
GN 113.20-6-40-P-A	6	40	7	11.3	20	7	176	6	21	19
GN 113.20-6-40-P-C	6	40	7	11.3	20	7	176	6	35	19
GN 113.20-6-45-P-A	6	45	7	11.3	20	7	176	6	21	20
GN 113.20-6-45-P-C	6	45	7	11.3	20	7	176	6	35	20
GN 113.20-6-50-P-A	6	50	7	11.3	20	7	176	6	21	21
GN 113.20-6-50-P-C	6	50	7	11.3	20	7	176	6	35	21
GN 113.20-8-20-P-A	8	20	9.5	14.1	25	8.2	226	8	38	29
GN 113.20-8-20-P-C	8	20	9.5	14.1	25	8.2	226	8	63	29
GN 113.20-8-25-P-A	8	25	9.5	14.1	25	8.2	226	8	38	31
GN 113.20-8-25-P-C	8	25	9.5	14.1	25	8.2	226	8	63	31
GN 113.20-8-30-P-A	8	30	9.5	14.1	25	8.2	226	8	38	33
GN 113.20-8-30-P-C	8	30	9.5	14.1	25	8.2	226	8	63	33
GN 113.20-8-35-P-A	8	35	9.5	14.1	25	8.2	226	8	38	35
GN 113.20-8-35-P-C	8	35	9.5	14.1	25	8.2	226	8	63	35
GN 113.20-8-40-P-A	8	40	9.5	14.1	25	8.2	226	8	38	36
GN 113.20-8-40-P-C	8	40	9.5	14.1	25	8.2	226	8	63	36

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	d4	l2 ±1	l3	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-8-45-P-A	8	45	9.5	14.1	25	8.2	226	8	38	38
GN 113.20-8-45-P-C	8	45	9.5	14.1	25	8.2	226	8	63	38
GN 113.20-8-50-P-A	8	50	9.5	14.1	25	8.2	226	8	38	40
GN 113.20-8-50-P-C	8	50	9.5	14.1	25	8.2	226	8	63	40
GN 113.20-10-20-P-A	10	20	12	14.1	25	9.6	226	10	60	36
GN 113.20-10-20-P-C	10	20	12	14.1	25	9.6	226	10	100	36
GN 113.20-10-25-P-A	10	25	12	14.1	25	9.6	226	10	60	38
GN 113.20-10-25-P-C	10	25	12	14.1	25	9.6	226	10	100	38
GN 113.20-10-30-P-A	10	30	12	14.1	25	9.6	226	10	60	42
GN 113.20-10-30-P-C	10	30	12	14.1	25	9.6	226	10	100	42
GN 113.20-10-35-P-A	10	35	12	14.1	25	9.6	226	10	60	44
GN 113.20-10-35-P-C	10	35	12	14.1	25	9.6	226	10	100	44
GN 113.20-10-40-P-A	10	40	12	14.1	25	9.6	226	10	60	47
GN 113.20-10-40-P-C	10	40	12	14.1	25	9.6	226	10	100	47
GN 113.20-10-45-P-A	10	45	12	14.1	25	9.6	226	10	60	50
GN 113.20-10-45-P-C	10	45	12	14.1	25	9.6	226	10	100	50
GN 113.20-10-50-P-A	10	50	12	14.1	25	9.6	226	10	60	53
GN 113.20-10-50-P-C	10	50	12	14.1	25	9.6	226	10	100	53
GN 113.20-10-60-P-A	10	60	12	14.1	25	9.6	226	10	60	59
GN 113.20-10-60-P-C	10	60	12	14.1	25	9.6	226	10	100	59
GN 113.20-12-25-P-A	12	25	14.5	17.7	35	10.6	273	12	87	70
GN 113.20-12-25-P-C	12	25	14.5	17.7	35	10.6	273	12	144	70
GN 113.20-12-30-P-A	12	30	14.5	17.7	35	10.6	273	12	87	75
GN 113.20-12-30-P-C	12	30	14.5	17.7	35	10.6	273	12	144	75
GN 113.20-12-35-P-A	12	35	14.5	17.7	35	10.6	273	12	87	79
GN 113.20-12-35-P-C	12	35	14.5	17.7	35	10.6	273	12	144	79
GN 113.20-12-40-P-A	12	40	14.5	17.7	35	10.6	273	12	87	83
GN 113.20-12-40-P-C	12	40	14.5	17.7	35	10.6	273	12	144	83
GN 113.20-12-45-P-A	12	45	14.5	17.7	35	10.6	273	12	87	88
GN 113.20-12-45-P-C	12	45	14.5	17.7	35	10.6	273	12	144	88
GN 113.20-12-50-P-A	12	50	14.5	17.7	35	10.6	273	12	87	92
GN 113.20-12-50-P-C	12	50	14.5	17.7	35	10.6	273	12	144	92
GN 113.20-12-60-P-A	12	60	14.5	17.7	35	10.6	273	12	87	100
GN 113.20-12-60-P-C	12	60	14.5	17.7	35	10.6	273	12	144	100
GN 113.20-12-70-P-A	12	70	14.5	17.7	35	10.6	273	12	87	109
GN 113.20-12-70-P-C	12	70	14.5	17.7	35	10.6	273	12	144	109
GN 113.20-12-80-P-A	12	80	14.5	17.7	35	10.6	273	12	87	117
GN 113.20-12-80-P-C	12	80	14.5	17.7	35	10.6	273	12	144	117



Indexing elements

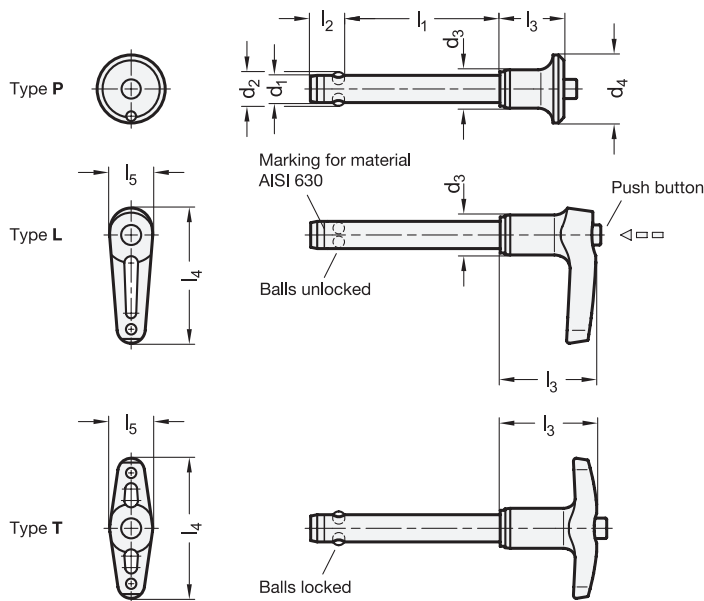


GN 113.20-L

STAINLESS STEEL

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	l2 ±1	l3	l4	l5	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-5-10-L-A	5	10	5.5	11.8	6	31	43.8	12.6	5	14	20
GN 113.20-5-10-L-C	5	10	5.5	11.8	6	31	43.8	12.6	5	24	20
GN 113.20-5-15-L-A	5	15	5.5	11.8	6	31	43.8	12.6	5	14	21
GN 113.20-5-15-L-C	5	15	5.5	11.8	6	31	43.8	12.6	5	24	21
GN 113.20-5-20-L-A	5	20	5.5	11.8	6	31	43.8	12.6	5	14	22
GN 113.20-5-20-L-C	5	20	5.5	11.8	6	31	43.8	12.6	5	24	22
GN 113.20-5-25-L-A	5	25	5.5	11.8	6	31	43.8	12.6	5	14	22
GN 113.20-5-25-L-C	5	25	5.5	11.8	6	31	43.8	12.6	5	24	22
GN 113.20-5-30-L-A	5	30	5.5	11.8	6	31	43.8	12.6	5	14	23
GN 113.20-5-30-L-C	5	30	5.5	11.8	6	31	43.8	12.6	5	24	23
GN 113.20-6-10-L-A	6	10	7	11.8	7	31	43.8	12.6	6	21	21
GN 113.20-6-10-L-C	6	10	7	11.8	7	31	43.8	12.6	6	35	21
GN 113.20-6-15-L-A	6	15	7	11.8	7	31	43.8	12.6	6	21	22
GN 113.20-6-15-L-C	6	15	7	11.8	7	31	43.8	12.6	6	35	22
GN 113.20-6-20-L-A	6	20	7	11.8	7	31	43.8	12.6	6	21	22
GN 113.20-6-20-L-C	6	20	7	11.8	7	31	43.8	12.6	6	35	22
GN 113.20-6-25-L-A	6	25	7	11.8	7	31	43.8	12.6	6	21	24
GN 113.20-6-25-L-C	6	25	7	11.8	7	31	43.8	12.6	6	35	24
GN 113.20-6-30-L-A	6	30	7	11.8	7	31	43.8	12.6	6	21	25
GN 113.20-6-30-L-C	6	30	7	11.8	7	31	43.8	12.6	6	35	25
GN 113.20-6-35-L-A	6	35	7	11.8	7	31	43.8	12.6	6	21	26
GN 113.20-6-35-L-C	6	35	7	11.8	7	31	43.8	12.6	6	35	26
GN 113.20-6-40-L-A	6	40	7	11.8	7	31	43.8	12.6	6	21	27
GN 113.20-6-40-L-C	6	40	7	11.8	7	31	43.8	12.6	6	35	27
GN 113.20-6-45-L-A	6	45	7	11.8	7	31	43.8	12.6	6	21	28
GN 113.20-6-45-L-C	6	45	7	11.8	7	31	43.8	12.6	6	35	28
GN 113.20-6-50-L-A	6	50	7	11.8	7	31	43.8	12.6	6	21	29
GN 113.20-6-50-L-C	6	50	7	11.8	7	31	43.8	12.6	6	35	29
GN 113.20-8-20-L-A	8	20	9.5	14.7	8.2	35.1	49.7	15.8	8	38	37
GN 113.20-8-20-L-C	8	20	9.5	14.7	8.2	35.1	49.7	15.8	8	63	37
GN 113.20-8-25-L-A	8	25	9.5	14.7	8.2	35.1	49.7	15.8	8	38	39
GN 113.20-8-25-L-C	8	25	9.5	14.7	8.2	35.1	49.7	15.8	8	63	39
GN 113.20-8-30-L-A	8	30	9.5	14.7	8.2	35.1	49.7	15.8	8	38	41
GN 113.20-8-30-L-C	8	30	9.5	14.7	8.2	35.1	49.7	15.8	8	63	41
GN 113.20-8-35-L-A	8	35	9.5	14.7	8.2	35.1	49.7	15.8	8	38	43
GN 113.20-8-35-L-C	8	35	9.5	14.7	8.2	35.1	49.7	15.8	8	63	43
GN 113.20-8-40-L-A	8	40	9.5	14.7	8.2	35.1	49.7	15.8	8	38	45
GN 113.20-8-40-L-C	8	40	9.5	14.7	8.2	35.1	49.7	15.8	8	63	45

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	l2 ±1	l3	l4	l5	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-8-45-L-A	8	45	9.5	14.7	8.2	35.1	49.7	15.8	8	38	46
GN 113.20-8-45-L-C	8	45	9.5	14.7	8.2	35.1	49.7	15.8	8	63	46
GN 113.20-8-50-L-A	8	50	9.5	14.7	8.2	35.1	49.7	15.8	8	38	48
GN 113.20-8-50-L-C	8	50	9.5	14.7	8.2	35.1	49.7	15.8	8	63	48
GN 113.20-10-20-L-A	10	20	12	14.7	9.6	35.1	49.7	15.8	10	60	44
GN 113.20-10-20-L-C	10	20	12	14.7	9.6	35.1	49.7	15.8	10	100	44
GN 113.20-10-25-L-A	10	25	12	14.7	9.6	35.1	49.7	15.8	10	60	47
GN 113.20-10-25-L-C	10	25	12	14.7	9.6	35.1	49.7	15.8	10	100	47
GN 113.20-10-30-L-A	10	30	12	14.7	9.6	35.1	49.7	15.8	10	60	50
GN 113.20-10-30-L-C	10	30	12	14.7	9.6	35.1	49.7	15.8	10	100	50
GN 113.20-10-35-L-A	10	35	12	14.7	9.6	35.1	49.7	15.8	10	60	53
GN 113.20-10-35-L-C	10	35	12	14.7	9.6	35.1	49.7	15.8	10	100	53
GN 113.20-10-40-L-A	10	40	12	14.7	9.6	35.1	49.7	15.8	10	60	56
GN 113.20-10-40-L-C	10	40	12	14.7	9.6	35.1	49.7	15.8	10	100	56
GN 113.20-10-45-L-A	10	45	12	14.7	9.6	35.1	49.7	15.8	10	60	58
GN 113.20-10-45-L-C	10	45	12	14.7	9.6	35.1	49.7	15.8	10	100	58
GN 113.20-10-50-L-A	10	50	12	14.7	9.6	35.1	49.7	15.8	10	60	62
GN 113.20-10-50-L-C	10	50	12	14.7	9.6	35.1	49.7	15.8	10	100	62
GN 113.20-10-60-L-A	10	60	12	14.7	9.6	35.1	49.7	15.8	10	60	67
GN 113.20-10-60-L-C	10	60	12	14.7	9.6	35.1	49.7	15.8	10	100	67
GN 113.20-12-25-L-A	12	25	14.5	18.2	10.6	34.4	57.1	20.2	12	87	73
GN 113.20-12-25-L-C	12	25	14.5	18.2	10.6	34.4	57.1	20.2	12	144	73
GN 113.20-12-30-L-A	12	30	14.5	18.2	10.6	34.4	57.1	20.2	12	87	78
GN 113.20-12-30-L-C	12	30	14.5	18.2	10.6	34.4	57.1	20.2	12	144	78
GN 113.20-12-35-L-A	12	35	14.5	18.2	10.6	34.4	57.1	20.2	12	87	82
GN 113.20-12-35-L-C	12	35	14.5	18.2	10.6	34.4	57.1	20.2	12	144	82
GN 113.20-12-40-L-A	12	40	14.5	18.2	10.6	34.4	57.1	20.2	12	87	86
GN 113.20-12-40-L-C	12	40	14.5	18.2	10.6	34.4	57.1	20.2	12	144	86
GN 113.20-12-45-L-A	12	45	14.5	18.2	10.6	34.4	57.1	20.2	12	87	90
GN 113.20-12-45-L-C	12	45	14.5	18.2	10.6	34.4	57.1	20.2	12	144	90
GN 113.20-12-50-L-A	12	50	14.5	18.2	10.6	34.4	57.1	20.2	12	87	94
GN 113.20-12-50-L-C	12	50	14.5	18.2	10.6	34.4	57.1	20.2	12	144	94
GN 113.20-12-60-L-A	12	60	14.5	18.2	10.6	34.4	57.1	20.2	12	87	103
GN 113.20-12-60-L-C	12	60	14.5	18.2	10.6	34.4	57.1	20.2	12	144	103
GN 113.20-12-70-L-A	12	70	14.5	18.2	10.6	34.4	57.1	20.2	12	87	112
GN 113.20-12-70-L-C	12	70	14.5	18.2	10.6	34.4	57.1	20.2	12	144	112
GN 113.20-12-80-L-A	12	80	14.5	18.2	10.6	34.4	57.1	20.2	12	87	120
GN 113.20-12-80-L-C	12	80	14.5	18.2	10.6	34.4	57.1	20.2	12	144	120



GN 113.20-T

STAINLESS STEEL

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	l2 ±1	l3	l4	l5	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-5-10-T-A	5	10	5.5	11.8	6	31.3	45.2	12.6	5	14	19
GN 113.20-5-10-T-C	5	10	5.5	11.8	6	31.3	45.2	12.6	5	24	19
GN 113.20-5-15-T-A	5	15	5.5	11.8	6	31.3	45.2	12.6	5	14	20
GN 113.20-5-15-T-C	5	15	5.5	11.8	6	31.3	45.2	12.6	5	24	20
GN 113.20-5-20-T-A	5	20	5.5	11.8	6	31.3	45.2	12.6	5	14	21
GN 113.20-5-20-T-C	5	20	5.5	11.8	6	31.3	45.2	12.6	5	24	21
GN 113.20-5-25-T-A	5	25	5.5	11.8	6	31.3	45.2	12.6	5	14	22
GN 113.20-5-25-T-C	5	25	5.5	11.8	6	31.3	45.2	12.6	5	24	22
GN 113.20-5-30-T-A	5	30	5.5	11.8	6	31.3	45.2	12.6	5	14	22
GN 113.20-5-30-T-C	5	30	5.5	11.8	6	31.3	45.2	12.6	5	24	22
GN 113.20-6-10-T-A	6	10	7	11.8	7	31.3	45.2	12.6	6	21	21
GN 113.20-6-10-T-C	6	10	7	11.8	7	31.3	45.2	12.6	6	35	21
GN 113.20-6-15-T-A	6	15	7	11.8	7	31.3	45.2	12.6	6	21	21
GN 113.20-6-15-T-C	6	15	7	11.8	7	31.3	45.2	12.6	6	35	21
GN 113.20-6-20-T-A	6	20	7	11.8	7	31.3	45.2	12.6	6	21	23
GN 113.20-6-20-T-C	6	20	7	11.8	7	31.3	45.2	12.6	6	35	23
GN 113.20-6-25-T-A	6	25	7	11.8	7	31.3	45.2	12.6	6	21	23
GN 113.20-6-25-T-C	6	25	7	11.8	7	31.3	45.2	12.6	6	35	23
GN 113.20-6-30-T-A	6	30	7	11.8	7	31.3	45.2	12.6	6	21	24
GN 113.20-6-30-T-C	6	30	7	11.8	7	31.3	45.2	12.6	6	35	24
GN 113.20-6-35-T-A	6	35	7	11.8	7	31.3	45.2	12.6	6	21	26
GN 113.20-6-35-T-C	6	35	7	11.8	7	31.3	45.2	12.6	6	35	26
GN 113.20-6-40-T-A	6	40	7	11.8	7	31.3	45.2	12.6	6	21	26
GN 113.20-6-40-T-C	6	40	7	11.8	7	31.3	45.2	12.6	6	35	26
GN 113.20-6-45-T-A	6	45	7	11.8	7	31.3	45.2	12.6	6	21	27
GN 113.20-6-45-T-C	6	45	7	11.8	7	31.3	45.2	12.6	6	35	27
GN 113.20-6-50-T-A	6	50	7	11.8	7	31.3	45.2	12.6	6	21	29
GN 113.20-6-50-T-C	6	50	7	11.8	7	31.3	45.2	12.6	6	35	29
GN 113.20-8-20-T-A	8	20	9.5	14.7	8.2	35.4	51.5	15.8	8	38	38
GN 113.20-8-20-T-C	8	20	9.5	14.7	8.2	35.4	51.5	15.8	8	63	38
GN 113.20-8-25-T-A	8	25	9.5	14.7	8.2	35.4	51.5	15.8	8	38	39
GN 113.20-8-25-T-C	8	25	9.5	14.7	8.2	35.4	51.5	15.8	8	63	39
GN 113.20-8-30-T-A	8	30	9.5	14.7	8.2	35.4	51.5	15.8	8	38	41
GN 113.20-8-30-T-C	8	30	9.5	14.7	8.2	35.4	51.5	15.8	8	63	41
GN 113.20-8-35-T-A	8	35	9.5	14.7	8.2	35.4	51.5	15.8	8	38	43
GN 113.20-8-35-T-C	8	35	9.5	14.7	8.2	35.4	51.5	15.8	8	63	43
GN 113.20-8-40-T-A	8	40	9.5	14.7	8.2	35.4	51.5	15.8	8	38	45
GN 113.20-8-40-T-C	8	40	9.5	14.7	8.2	35.4	51.5	15.8	8	63	45

Description	d1 -0.04/ -0.08	l1 +0.6	d2	d3	l2 ±1	l3	l4	l5	Locating bore H11	Load capacity F in kN ≈	
GN 113.20-8-45-T-A	8	45	9.5	14.7	8.2	35.4	51.5	15.8	8	38	47
GN 113.20-8-45-T-C	8	45	9.5	14.7	8.2	35.4	51.5	15.8	8	63	47
GN 113.20-8-50-T-A	8	50	9.5	14.7	8.2	35.4	51.5	15.8	8	38	49
GN 113.20-8-50-T-C	8	50	9.5	14.7	8.2	35.4	51.5	15.8	8	63	49
GN 113.20-10-20-T-A	10	20	12	14.7	9.6	35.4	51.5	15.8	10	60	44
GN 113.20-10-20-T-C	10	20	12	14.7	9.6	35.4	51.5	15.8	10	100	44
GN 113.20-10-25-T-A	10	25	12	14.7	9.6	35.4	51.5	15.8	10	60	47
GN 113.20-10-25-T-C	10	25	12	14.7	9.6	35.4	51.5	15.8	10	100	47
GN 113.20-10-30-T-A	10	30	12	14.7	9.6	35.4	51.5	15.8	10	60	50
GN 113.20-10-30-T-C	10	30	12	14.7	9.6	35.4	51.5	15.8	10	100	50
GN 113.20-10-35-T-A	10	35	12	14.7	9.6	35.4	51.5	15.8	10	60	53
GN 113.20-10-35-T-C	10	35	12	14.7	9.6	35.4	51.5	15.8	10	100	53
GN 113.20-10-40-T-A	10	40	12	14.7	9.6	35.4	51.5	15.8	10	60	56
GN 113.20-10-40-T-C	10	40	12	14.7	9.6	35.4	51.5	15.8	10	100	56
GN 113.20-10-45-T-A	10	45	12	14.7	9.6	35.4	51.5	15.8	10	60	59
GN 113.20-10-45-T-C	10	45	12	14.7	9.6	35.4	51.5	15.8	10	100	59
GN 113.20-10-50-T-A	10	50	12	14.7	9.6	35.4	51.5	15.8	10	60	62
GN 113.20-10-50-T-C	10	50	12	14.7	9.6	35.4	51.5	15.8	10	100	62
GN 113.20-10-60-T-A	10	60	12	14.7	9.6	35.4	51.5	15.8	10	60	68
GN 113.20-10-60-T-C	10	60	12	14.7	9.6	35.4	51.5	15.8	10	100	68
GN 113.20-12-25-T-A	12	25	14.5	18.2	10.6	34.7	59.1	20.2	12	87	72
GN 113.20-12-25-T-C	12	25	14.5	18.2	10.6	34.7	59.1	20.2	12	144	72
GN 113.20-12-30-T-A	12	30	14.5	18.2	10.6	34.7	59.1	20.2	12	87	77
GN 113.20-12-30-T-C	12	30	14.5	18.2	10.6	34.7	59.1	20.2	12	144	77
GN 113.20-12-35-T-A	12	35	14.5	18.2	10.6	34.7	59.1	20.2	12	87	81
GN 113.20-12-35-T-C	12	35	14.5	18.2	10.6	34.7	59.1	20.2	12	144	81
GN 113.20-12-40-T-A	12	40	14.5	18.2	10.6	34.7	59.1	20.2	12	87	85
GN 113.20-12-40-T-C	12	40	14.5	18.2	10.6	34.7	59.1	20.2	12	144	85
GN 113.20-12-45-T-A	12	45	14.5	18.2	10.6	34.7	59.1	20.2	12	87	89
GN 113.20-12-45-T-C	12	45	14.5	18.2	10.6	34.7	59.1	20.2	12	144	89
GN 113.20-12-50-T-A	12	50	14.5	18.2	10.6	34.7	59.1	20.2	12	87	94
GN 113.20-12-50-T-C	12	50	14.5	18.2	10.6	34.7	59.1	20.2	12	144	94
GN 113.20-12-60-T-A	12	60	14.5	18.2	10.6	34.7	59.1	20.2	12	87	102
GN 113.20-12-60-T-C	12	60	14.5	18.2	10.6	34.7	59.1	20.2	12	144	102
GN 113.20-12-70-T-A	12	70	14.5	18.2	10.6	34.7	59.1	20.2	12	87	111
GN 113.20-12-70-T-C	12	70	14.5	18.2	10.6	34.7	59.1	20.2	12	144	111
GN 113.20-12-80-T-A	12	80	14.5	18.2	10.6	34.7	59.1	20.2	12	87	119
GN 113.20-12-80-T-C	12	80	14.5	18.2	10.6	34.7	59.1	20.2	12	144	119