Set of teeth		H
Standard or Basic rack tooth profile		STD 5083,01
Number of teeth	z	21
Normal module	m_n	3,175 / 1,5875
Normal diametral pitch	p_n	(8 / 16)
Nominal pressure angle	α_{on}	30 °
Helix angle	β	0°
Hand of helix		-
Normal profile shift coefficient	x_n	(0)
Tool addendum / radius	h_{a0}/r_0	- / -
Tip chamfer diameter	d_{aY}	68,7±0,15
Reference diameter	d	(66,6750)
Form diameter	D_F	63,37
Root diameter	d_f	62,6±0,15
Base diameter	d_b	(57,7422)
Base helix angle	β_b	0°
Controlled profile (roll distance)	SCP - ECP	-
Tolerance class / type of fit		SP / Side fit
Cirkular space width actual	E	- - -
Cirkular space width effective	E_v	- - -
Circular tooth thickness effective	S_v	$4,987^{+0,048[3]}_{(+0,012)}$
Circular tooth thickness actual	S	$4,987^{(0)}_{-0,036[3]}$
Span measurement w over k teeth	W / k	- - - / -
Measurement over balls	M	(75,902) 75,847[3]
Ball diameter	d_M	6.096 ±0,001
Mating part no		17251354

Tooth thickness eff. max / Space width eff. min to be checked with go composite gauge [3]

Gear data GLEASON HYPOID		J
Summary no.		17265754
Shaft angle		90°
No. of teeth		13
Module		11,081
Pinion offset		38,1
Pressure angle concave/convex		21° 44' / 23° 16'
Mean spiral angle/direction		43°13'/LH
Pitch diameter		-
Normal chordal thickness		-
Working depth		20,19
Addendum		15,83
Dedendum		6,79
Chordal addendum		-
Tooth tolerances [µm]		
Datum		A - B
Transverse pitch deviation	f_{pt}	45 [3]
Transverse tooth-to-tooth pitch deviation	Δf_{pt}	50 [3]
Total cumulative pitch deviation	F_p	110 [3]
Radial run-out	F_r	80 [3]
Circumferential backlash		0,30 - 0,46
Mating part no./No. of teeth		17240328 / 37

Cleanliness requirment STD 107-0002					
Max number of particles/cm2		1500	192	12	Nc/Ac
Particle size ranges	µm	5 ≤ x < 15	15 ≤ x < 100	100 ≤ x < 200	
Max number of particles/cm2		1	0,01 1)		Nc/Ac
Particle size ranges	µm	200 ≤ x < 500	500 ≤ x		
Wetted surface	cm²	1213			Ac

1) Non metallic particles allowed [3]

C 2:1

D

E 5:1

F 5:1

G 5:1

H 5:1

THE DIFFERENCE BETWEEN 210 NOM AND THE CORRESPONDING DIMENSION OF OPTIMAL TOOTH CONTACT IS MARKED ON THIS SURFACE AS A VALUE COMBINED WITH THE SIGN + OR -

PART AND SERIAL NO. (IN PAIR WITH CROWN WHEEL) MARKED ON THIS SURFACE

STD 102-0007 A 6,3/13,2
ALT: R 3,15/6,7

ASSEMBLY DIMENSION FOR OPTIMAL TOOTH CONTACT

(210 NOM)

91,6 + GIVEN DIFFERENCE

Fig.1

CORE HARDNESS CHECKED WITHIN THIS AREA

CHECKING POINTS FOR CASE HARDENING DEPTH

Spline H

SMOOTH TRANSITION

(2:1)

MARKED ACC. TO STD: 5051,16 MET 2.1.3-6,5

CRITICAL CHARECTERISTICS STD 105-0001

COMPLEMENTING INFORMATION REGARDING MOUNTING DISTANCE SEE TB11103381

GEAR TOOTH ROOT CORE HARDNESS 350-420 HV [3] See fig.1

DC GEAR TOOTH MIN 1,2 [2] See fig.1
DC OTHER SURFACES 1,6±0,3 [3]
STD 1094.1 [3]

PHOSPHATED ACC. TO Y104-3 REG STD 5742,104 AFTER LAPPING [3]

DIMENSIONS, TOLERANCES AND SURFACE REQUIREMENTS ARE VALID PRIOR TO PHOSPHATING

MATERIAL V-2525-95 S=0,015-0,035 STD 1125,251 [3]

ALT.MATERIAL SEE TECHNICAL REGULATION 766083

STD 1006,501 FORGING CLASS III

DRIVE GEAR SET 17246478

Refer to the Part Version Report for the correct document issue

Symbols, designations and general drawing methods STD 101-0005 | View placement Reference arrow method ISO 128-30:2001

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