Overview of the spark plugs used

First a piece of news (2023): NGK becomes NITERRA

NGK spark plugs used

engine type	spark plug used	tightening torque with cold engine
275	NGK B8ES	27 Nm
447	NGK B8ES	27 Nm
462	NGK B8ES	27 Nm
501	NGK B8ES	27 Nm
503	NGK B8ES	27 Nm
505	NGK B8ES	27 Nm
532	NGK B8ES	27 Nm
535	NGK B8ES	27 Nm
582	NGK B8ES	27 Nm
912 (80 hp)	NGK DCPR7	20 Nm
912 S (100 hp)	NGK DCPR8	20 Nm
912 iS injection	NGK DCPR8E	20 Nm
914 Turbo	NGK DPR9EA-9	20 Nm

The designation of the spark plug connectors on 912 and 914 is VD05FMH.
These are still available from motorcycle dealers.

The 915 and 916 are not listed here because the engines were launched after the introduction of the Rotax spark plugs and there is no information about other spark plugs.

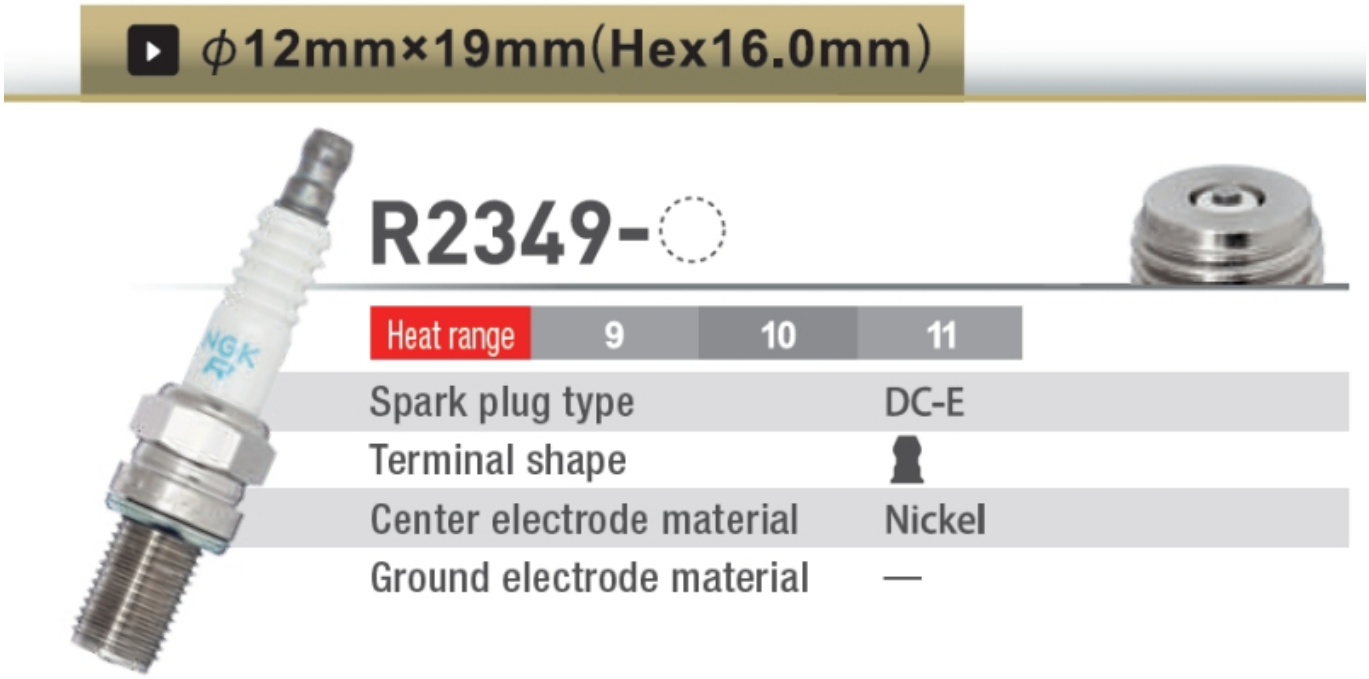
Introduction of new spark plugs in March 2017 for all Rotax engines

With the SI-912-027,SI-912 i-013,SI-914-028, a standardized spark plug was introduced for all Rotax aircraft engines.
A cylinder head with a modified spark plug thread was introduced for the 582. See: SI-2ST-010 .

This is a spark plug with 2 ground electrodes.
The **tightening torque** of the spark plugs is **16 Nm** for all engines.

I personally
have the following concerns when using Rotax spark plugs in engines with such different outputs:
A lack of adaptation of the Rotax spark plugs to the thermal conditions by selecting appropriate heat values for the individual Rotax engines.
It is not possible for a spark plug in the 912 80 PS (NGK heat value 7) to reach its self-cleaning temperature in the same way as in the 914 (NGK heat value 9) or in the 912iS and 915/916iS injectors. As far as I know, there is no spark plug that covers such a wide range as the Rotax plug

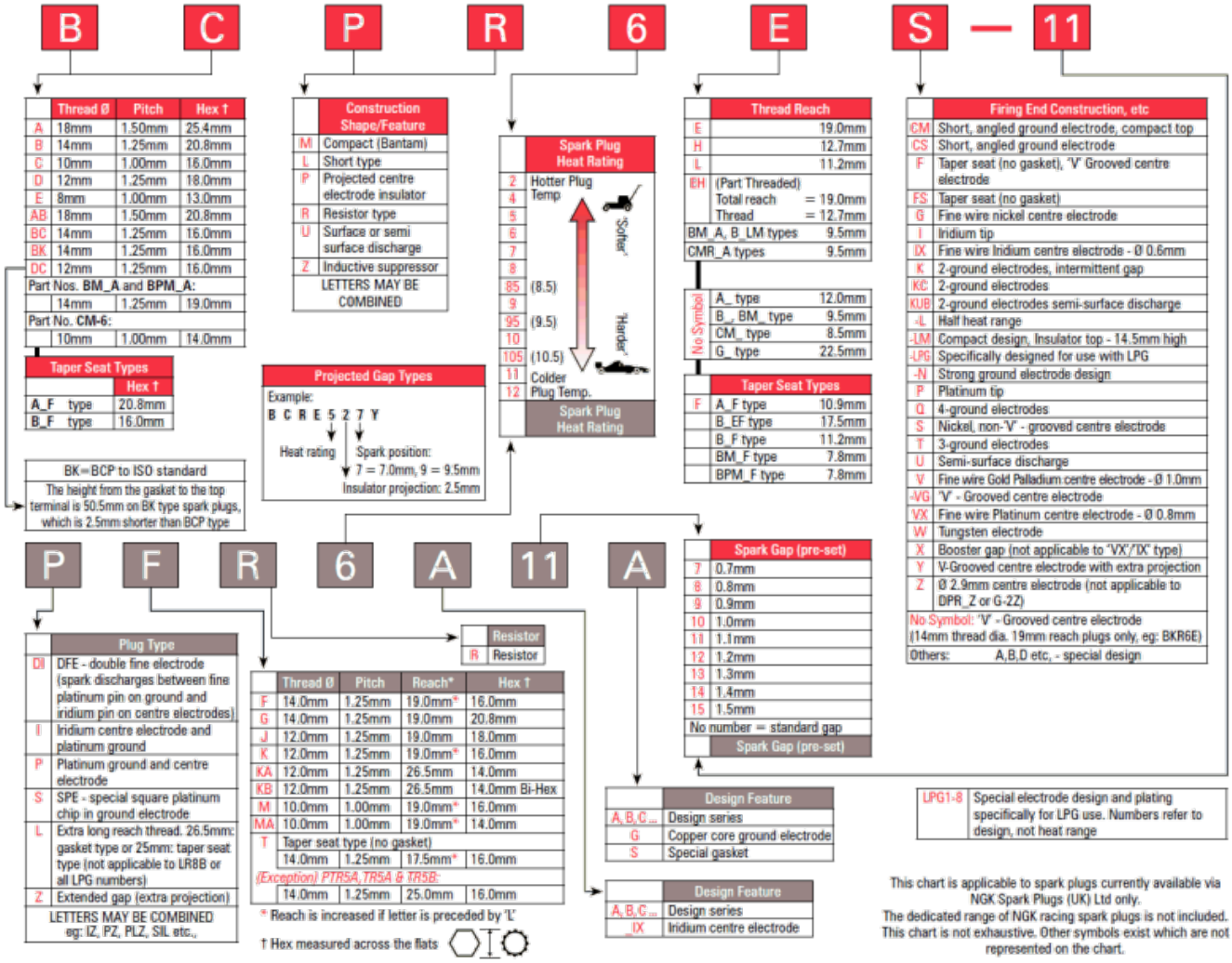
does.
Not even sliding spark plugs, which are mainly used in racing, are available with only one heat value.
Here is an example from the NGK catalog. Heat value 9 - 11.



**In order to be able to continue to install NGK spark plugs, I recommend visiting the nearest competent motorcycle dealer.

Designations of NGK spark plugs

Again and again, the designations on the NGK spark plugs give rise to wild speculation.
Here is the overview table to shed some light on the subject.



not for flight



... In the long term, this imprint on the NGK spark plug packaging was the reason why other spark plugs have been available since 2017.

From:
https://www.kleinjung.de/rotax/ - **Ralle's ROTAX FAQ**

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