

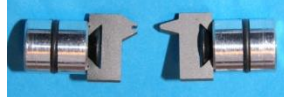
## FMS THREAD PITCH DIAMETER INSERTS & CALIBRATION PLATES

All types of external and internal thread type pitch diameters can be measured using FMS thread inserts:  
**M, UNC, UNF, UN, UNS, G, Rp, Pg, Tr, Acme, Stub Acme, Rd, NPT, R, Rc and many more.**

The thread inserts shown below are for measuring pitch diameter of threads with a 50° to 80° flank angle.



21AA



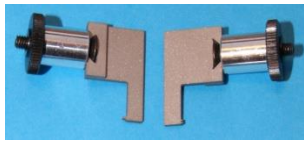
21A



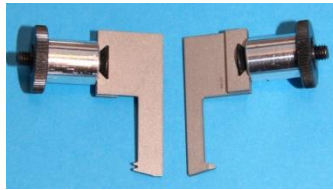
21B



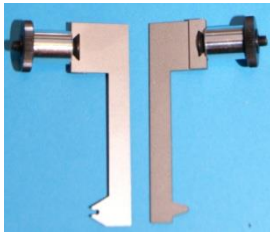
21C



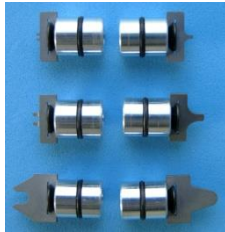
22AA



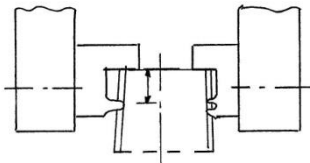
22A



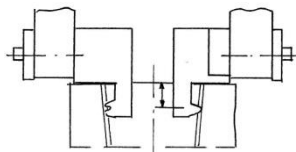
22B



23A, B & C



24A



25A

### PITCH SCOPE (P)

#### External pitch diameter inserts

**21AA** 0,5 - 1 mm / 48 - 24 TPI

**21A** 1 - 2 mm / 24 - 13 TPI

**21B** 2 - 4 mm / 13 - 6 TPI

**21C** 4 - 8 mm / 6 - 3 TPI

The off-set measurement points on 21AA & 21A allows measurement on very short thread lengths.

#### Internal pitch diameter inserts

**22AA** 0,5 - 1 mm / 48 - 24 TPI

(max depth 6.5mm / 1/4ins.)

**22A** 1 - 2 mm / 24 - 13 TPI

(max depth 12.5mm / 1/2ins.)

**22B** 2 - 4 mm / 13 - 6 TPI

(max depth 20mm / 3/4ins.)

**22C** 4 - 8 mm / 6 - 3 TPI

(max depth 25.5mm / 1ins.)

**23AA** 0,5 - 1 mm / 48 - 24 TPI

(min. diameter Ø34mm/1.35ins.)

**23A** 1 - 2 mm / 24 - 13 TPI

(min. diameter Ø35mm/1.38ins.)

**23B** 2 - 4 mm / 13 - 6 TPI

(min. diameter Ø36mm/1.42ins.)

**23C** 4 - 8 mm / 6 - 3 TPI

(min. diameter Ø40mm/1.58ins.)

#### Thread inserts for R, Rc & NPT etc.

**24A** for external tapered threads.

These inserts can measure pitch diameter on external tapered threads with pitches from 20 - 8 TPI

**25A** for internal tapered threads.

These inserts can measure pitch diameter on internal tapered threads with pitches from 20 - 8 TPI

These inserts are supplied with thread tolerance tables.

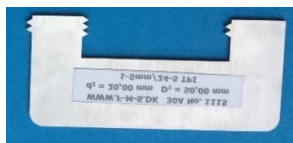
**N.B. These inserts require calibration plates. Both FMS calibration plate no. 30AB and 30A are suitable for this.**

### FMS THREAD INSERTS - Type No. 26, 27 & 28 (very similar to types 21, 22 & 23)

**Type 26 is for external threads and types 27 and 28 are for internal threads.**

These FMS thread inserts are suitable for pitch diameter measurement of all threads with a flank angle between 29° and 30°. The following thread types are within this criteria

**Tr, ACME, Stub ACME and Rd etc. Types 26, 27 & 28 are made to order as are their calibration plates, but the most common pitches are usually in stock.**



30A



30AB

Calibration Plate 30A covers pitches from 1mm to 4mm / 24 TPI to 6 TPI

Calibration Plate 30AB covers pitches from 0.5mm to 8mm / 48 TPI to 3 TPI

These are suitable for FMS thread inserts for threads with a flank angle between 50° and 80°. This also includes FMS thread inserts 24A and 25A for tapered threads.