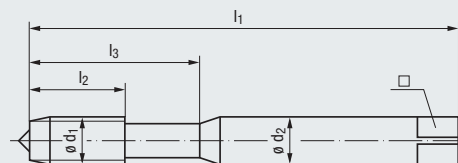
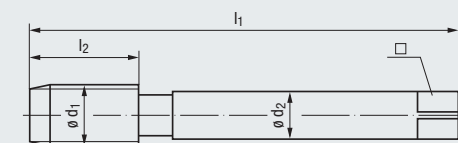


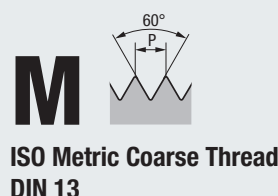
DIN Length • DIN Shank



Reinforced Shank
(M2 - M10)



Reduced Shank
(M12 - M20)



Class of Fit
Coating
Cutting Material
Technical Characteristics



Thread Depth
and Hole Shape

Applications – Material

Z
CNC-Controlled
Machines

new



new



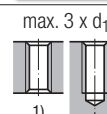
new



6HX
TIN-80
HSSE-PM
E / 1.5-2
E / 0

6HX
TIN-80
Carbide
C / 2-3
E / 0

6HX
TIN-80
Carbide
E / 1.5-2
E / 0



P 1.1-5.1
M 1.1-3.1 2)
K 2.1
N 2.1-2, 2.4-5
S 1.1-2.2 2)
S 2.4 2)

P 2.1-5.1
N 1.4-5, 2.4-5

P 2.1-5.1
N 1.4-5, 2.4-5

Reinforced Shank

Nominal Size ø d ₁	P	l ₁	l ₂	l ₃	ø d ₂	□
M 2	0.4	45	4	12	2.8	2.1
M 2.5	0.45	50	5	14	2.8	2.1
M 3	0.5	56	6	18	3.5	2.7
M 3.5	0.6	56	7	20	4	3
M 4	0.7	63	7	21	4.5	3.4
M 4.5	0.75	70	8	25	6	4.9
M 5	0.8	70	8	25	6	4.9
M 6	1	80	10	30	6	4.9
M 8	1.25	90	14	35	8	6.2
M 10	1.5	100	16	39	10	8

Tool Identification

Dimens. ID	B531Z700	B523Z800	B531Z800
InnoForm 1-Z/E-SN-IKZ PM-TIN-80		VHM InnoForm 1-Z-SN-IKZ TIN-80	VHM InnoForm 1-Z/E-SN-IKZ TIN-80

Reduced Shank

Nominal Size ø d ₁	P	l ₁	l ₂	l ₃	ø d ₂	□
M 12	1.75	110	18	—	9	7
M 14	2	110	20	—	11	9
M 16	2	110	22	—	12	9
M 18	2.5	125	25	—	14	11
M 20	2.5	140	25	—	16	12

Tool Identification

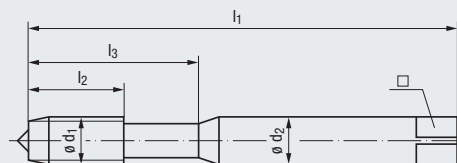
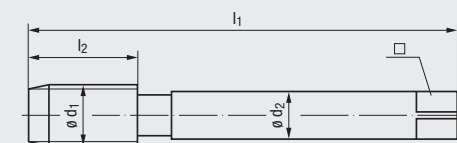
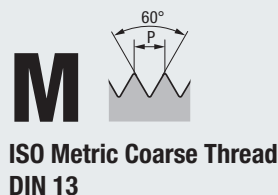
Dimens. ID	C531Z700
InnoForm 2-Z/E-SN-IKZ PM-TIN-80	

1) Cold-forming in through holes is possible only with external cooling/lubrication
2) Restricted application possibilities with emulsion



We recommend a smaller preparatory diameter by 0.05 mm for difficult to form materials (such as aluminum cast alloys) for P ≥ 1 mm.
For further information regarding the recommended preparatory diameters, see page 208 - 209.

DIN Length • DIN Shank

Reinforced Shank
(M2 - M10)Reduced Shank
(M12 - M20)

Class of Fit
Coating
Cutting Material
Technical Characteristics



Thread Depth
and Hole Shape

Applications – Material

SPEED
High-Speed
Cutting



$l_2 = 10 \times P$

6HX

TICN

HSS Extra

Technical Characteristics

E / 1.5-2

E / 0

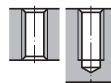
6HX

TICN

Carbide

E / 1.5-2

E / 0

max. $3 \times d_1$ 

N 1.4-5

N 1.4-5

Reinforced Shank

Tool Identification

Nominal
Size
 $\varnothing d_1$

P

l_1

mm
 l_2

l_3

$\varnothing d_2$

$\square$



Dimens.
ID

B5059500

Druck
1-GAL
SPEED/E-SN
IKZN-TICN

B505Q800

VHM-Druck
1-GAL
SPEED/E-SN
IKZN-TICN

M 2	0.4	45	4	12	2.8	2.1	1.85	.0020				
M 2.5	0.45	50	5	14	2.8	2.1	2.33	.0025				
M 3	0.5	56	6	18	3.5	2.7	2.8	.0030				
M 3.5	0.6	56	7	20	4	3	3.25	.0035				
M 4	0.7	63	7	21	4.5	3.4	3.7	.0040				
M 4.5	0.75	70	8	25	6	4.9	4.2	.0045				
M 5	0.8	70	8	25	6	4.9	4.65	.0050				
M 6	1	80	10	30	6	4.9	5.6	.0060	★	★		
M 8	1.25	90	14	35	8	6.2	7.45	.0080	★	★		
M 10	1.5	100	16	39	10	8	9.35	.0100	★	★		

Reduced Shank

Tool Identification

Nominal
Size
 $\varnothing d_1$

P

l_1

mm
 l_2

l_3

$\varnothing d_2$

$\square$



Dimens.
ID

C5059500

Druck
2-GAL
SPEED/E-SN
IKZN-TICN

C505Q800

VHM-Druck
2-GAL
SPEED/E-SN
IKZN-TICN

M 12	1.75	110	18	—	9	7	11.25	.0112	★	★		
M 14	2	110	20	—	11	9	13.1	.0114				
M 16	2	110	22	—	12	9	15.1	.0116				
M 18	2.5	125	25	—	14	11	16.85	.0118				
M 20	2.5	140	25	—	16	12	18.85	.0120				



We recommend a smaller preparatory diameter by 0.05 mm for difficult to form materials (such as aluminum cast alloys) for $P \geq 1$ mm.
For further information regarding the recommended preparatory diameters, see page 208 - 209.

