


















































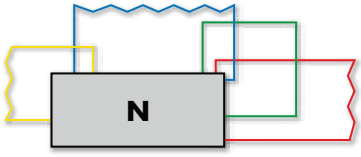







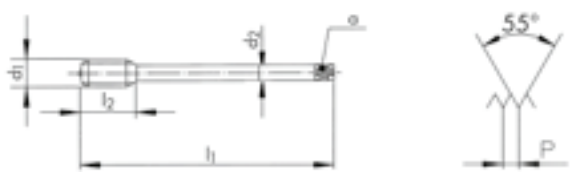





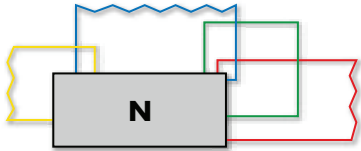










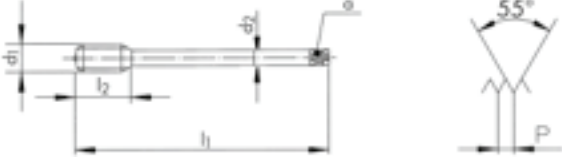



	N						
Характеристики Cechy charakterystyczne		 V	 TiN	 R40	 V	 R40	 TiN
Типы отверстий Typ otworu							
							
	N410-3	N420-4 N420V-4	N420TN-4	N460-3	N460V-3	N462V-3	N460TN-3
Длинный по DIN DIN 5156	156	157	157	158	158	158	158
Короткий по ISO DIN 5157							
Левая резьба LH Gwint lewy	156						

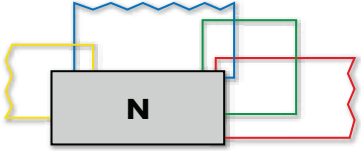

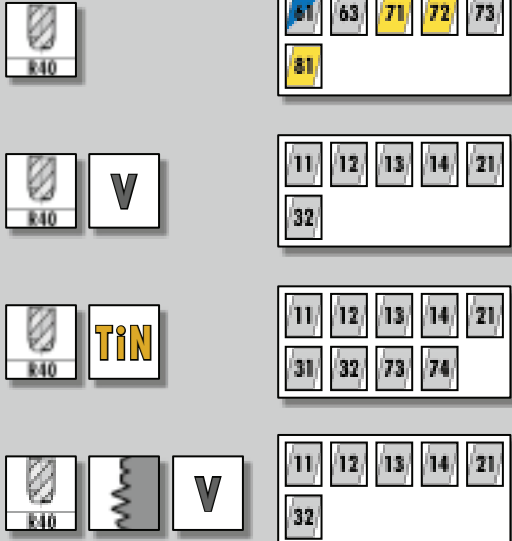

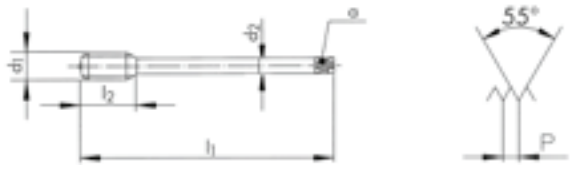



	H	GG	RTS	RTS	FPS	FAS	
Характеристики Cechy charakterystyczne		 NV	 VS	 E 1.5 x P VS	 VS	 VS	
							
Типы отверстий Typ otworu							
							
	H450-3	GG450NV-3	RTS462VS-3	RTS462VS-5	FPS481VS-3	FAS481VS-3	
Длинный по DIN DIN 5156 DIN długi	159	159					
Длинный по DIN ~DIN 376 DIN długi			161	161			
Длинный по DIN ~DIN 2189 DIN długi					162	162	

	N						
Характеристики Cechy charakterystyczne		 		 		 	
Типы отверстий Typ otworu							
				N1110-3	N1120-4	N5120	
Короткий по ISO ISO krótki	ISO 529			166	166		
W	ISO 529			166/167	166		
SV	ISO 529			167			
	N420-3	N410-3	D5800	N1210-3	N1220-4		
Длинный по DIN DIN długi	DIN 5156	164					
Длинный по DIN DIN długi	DC		164	165			
Короткий по ISO ISO krótki	ISO 529			166	166		
Rp	DIN 5156	164					
Rc	DC		164	165			
W	ISO 529			166	166		
SV	ISO 529/DC			167		167	

										N410-3	N410-3 LH								
																			
<p>N410-3  </p> <p>N410-3 LH   </p>																			
																			
\varnothing G d_1	P	d_1	l_1	l_2	d_2	α			ID	ID									
1/8	28	9.72	90	22.0	7.0	5.5	3	8.75	101855										
1/4	19	13.15	100	20.0	11.0	9.0	3	11.60	101853	101854									
3/8	19	16.66	100	20.0	12.0	9.0	4	15.20	101861	101862									
1/2	14	20.95	125	22.0	16.0	12.0	4	18.90	101851	101852									
3/4	14	26.44	140	28.0	20.0	16.0	4	24.40	101859	* 101860									
1	11	33.24	160	32.0	25.0	20.0	4	30.70	101857	* 101858									
1 1/4	11	41.91	170	32.0	32.0	24.0	5	39.30	101850										
1 1/2	11	47.80	190	32.0	36.0	29.0	5	45.20	101849										

G DIN ISO 228 (BSP)

										N420-4	N420V-4	N420TN-4			
															
N420-4															
N420V-4	 V														
N420TN-4	 TiN														
															
$\varnothing'' d_1$ G	P TPI	d_1 mm	l_1 mm	l_2 mm	d_2 mm	α mm			ID	ID	ID				
1/16	28	7.72	90	18.0	6.0	4.9	3	6.75	102045						
1/8	28	9.72	90	22.0	7.0	5.5	3	8.75	102048	102258	102236				
1/4	19	13.15	100	20.0	11.0	9.0	3	11.60	102047	102257	102235				
3/8	19	16.66	100	20.0	12.0	9.0	3	15.20	102053	102261	102238				
1/2	14	20.95	125	22.0	16.0	12.0	4	18.90	102046	102256	102234				
5/8	14	22.91	125	25.0	18.0	14.5	4	20.90	102054	144722					
3/4	14	26.44	140	28.0	20.0	16.0	4	24.40	102052	102260	102237				
1	11	33.24	160	32.0	25.0	20.0	4	30.70	102049	102259					
1 1/4	11	41.91	170	32.0	32.0	24.0	5	39.30	102043						
1 1/2	11	47.80	190	32.0	36.0	29.0	5	45.20	102042						
2	11	59.61	220	36.0	45.0	35.0	5	57.00	102051						
2 1/2	11	75.18	280	36.0	50.0	39.0	6	72.60	102050						

										N460-3	N460V-3	N460TN-3	N462V-3
													
													
													
Ø" d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ mm	α mm			ID	ID	ID	ID	
1/16	28	7.72	90	12.5	6.0	4.9	3	6.75	102341				
1/8	28	9.72	90	14.0	7.0	5.5	3	8.75	102344	102457	102444	143687	
1/4	19	13.15	100	14.0	11.0	9.0	3	11.60	102343	102456	102443	143600	
3/8	19	16.66	100	14.0	12.0	9.0	4	15.20	102348	102460	102446	143431	
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90	102342	102455	102442	143921	
5/8	14	22.91	125	20.0	18.0	14.5	4	20.90	102349	143711			
3/4	14	26.44	140	22.0	20.0	16.0	4	24.40	102347	102459	102445	143688	
1	11	33.24	160	26.0	25.0	20.0	4	30.70	102345	102458			
1 1/4	11	41.91	170	30.0	32.0	24.0	5	39.30	102340	111608			
1 1/2	11	47.80	190	35.0	36.0	29.0	5	45.20	102339	111609			
2	11	59.61	220	41.0	45.0	35.0	6	57.00	102346	111503			

G DIN ISO 228 (BSP)

≤ Ø 25.4 > Ø 25.4

PM
H/GG

HSSE
H/GG

HSSE
W



										W460-5	W460DL-5	H450-3	GG450NV-3
W460-5 													
W460DL-5 													
H450-3 													
GG450NV-3 													
Ø" d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ mm	α mm				ID	ID	ID	ID
1/8	28	9.72	90	14.0	7.0	5.5	3	8.75		119350	176728	101298	
1/4	19	13.15	100	14.0	11.0	9.0	*4	11.60		119300	176729	101297	
3/8	19	16.66	100	14.0	12.0	9.0	4	15.20		119682	176730	101301	
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90		119199	176731	101296	
3/4	14	26.44	140	22.0	20.0	16.0	4	24.40				101300	
1	11	33.24	160	26.0	25.0	20.0	4	30.70				101299	
* W460-5 = 3													
Ø" d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ mm	α mm				ID			
1/8	28	9.72	90	22.0	7.0	5.5	4	8.75		102309			
1/4	19	13.15	100	20.0	11.0	9.0	4	11.60		102308			
3/8	19	16.66	100	20.0	12.0	9.0	4	15.20		102312			
1/2	14	20.95	125	22.0	16.0	12.0	4	18.90		102307			
3/4	14	26.44	140	28.0	20.0	16.0	4	24.40		102311			
1	11	33.24	160	32.0	25.0	20.0	4	30.70		102310			

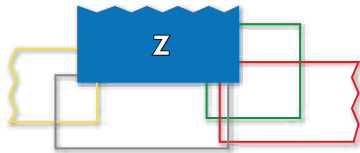
G DIN ISO 228 (BSP)

< Ø 25.4 > Ø 25.4

PM
Z420

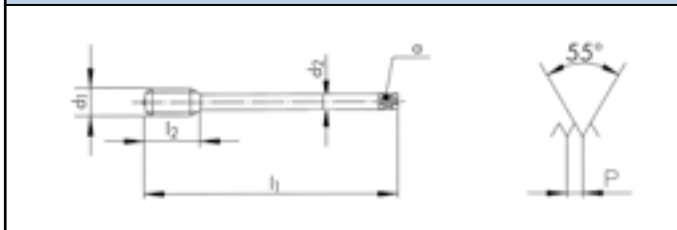
HSSE
Z420

HSSE
Z460



Z420V-4		V	21 22 23 41 42 51
Z420VS-4		VS	21 22 23 24 51 51
Z460V-3		V	22 23 51

Z420V-4	Z420VS-4	Z460V-3	
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Ø" d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ mm	α mm		
1/8	28	9.72	90	22.0	7.0	5.5	3	8.75
1/4	19	13.15	100	20.0	11.0	9.0	3	11.60
3/8	19	16.66	100	20.0	12.0	9.0	3	15.20
1/2	14	20.95	125	22.0	16.0	12.0	4	18.90
3/4	14	26.44	140	28.0	20.0	16.0	4	24.40
1	11	33.24	160	32.0	25.0	20.0	4	30.70

ID	ID
142794	142800
142795	119303
142796	142802
142797	142803
142798	
142799	

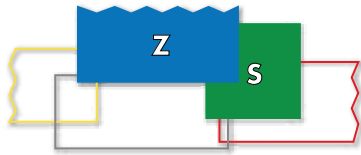
Ø" d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ mm	α mm		
1/8	28	9.72	90	14.0	7.0	5.5	3	8.75
1/4	19	13.15	100	14.0	11.0	9.0	3	11.60
3/8	19	16.66	100	14.0	12.0	9.0	4	15.20
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90
3/4	14	26.44	140	22.0	20.0	16.0	4	24.40
1	11	33.24	160	26.0	25.0	20.0	4	30.70

ID
104726
104725
104728
104724
104727
105142

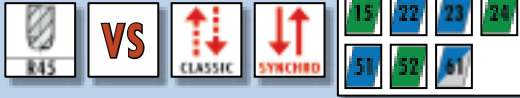


Uniquement pour taraudage synchrone
Nur für Synchrobearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado

PM



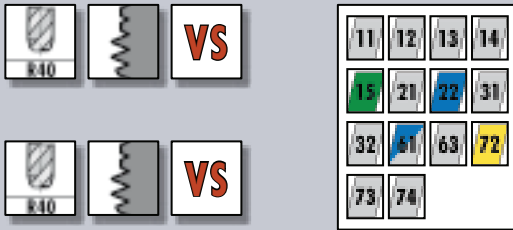
Z470VS-3



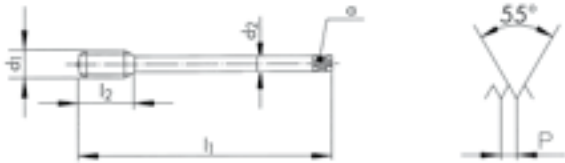
RTS

Rigid Tapping Synchro

RTS462VS-3



RTS462VS-5



Z470VS-3



RTS462VS-3



RTS462VS-5



$\varnothing'' d_1$ G	P TPI	d_1 mm	l_1 mm	l_2 mm	$d_2 h6$ mm	α mm			ID
1/8	28	9.72	100	14.0	*8.0	*6.2	3	8.75	165198
1/4	19	13.15	110	14.0	*12.0	*9.0	4	11.60	165199
3/8	19	16.66	110	18.0	12.0	9.0	4	15.20	165200
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90	165201







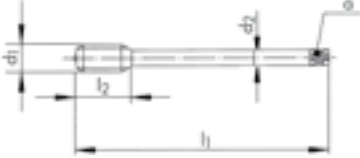



* Norme DC / * DC Norm / * Norma DC

$\varnothing'' d_1$ G	P TPI	d_1 mm	l_1 mm	l_2 mm	$d_2 h6$ mm	α mm			ID	ID
1/8	28	9.72	100	14.0	*8.0	*6.2	3	8.75	151861	170629
1/4	19	13.15	110	14.0	*12.0	*9.0	3	11.60	151868	170631
3/8	19	16.66	110	18.0	12.0	9.0	4	15.20	151872	170633
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90	150685	170635

* Norme DC / * DC Norm / * Norma DC



sur demande
auf Anfrage
on request
su richiesta
sobre pedido

FPS FAS		FORMING		FPS481VS-3	FAS481VS-3												
FPS481VS-3		VS	<table border="1"> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>21</td><td>24</td><td>63</td><td></td><td></td></tr> </table>	11	12	13	14	15	21	24	63						
11	12	13	14	15													
21	24	63															
FAS481VS-3		VS	<table border="1"> <tr><td>12</td><td>13</td><td>14</td><td>15</td><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td><td>41</td><td>51</td><td>61</td><td>63</td></tr> </table>	12	13	14	15	21	22	23	24	41	51	61	63		
12	13	14	15	21	22												
23	24	41	51	61	63												
 																	
$\varnothing d_1$ G	P TPI	d_1 mm	l_1 mm	l_2 mm	d_2 mm	α mm	\downarrow \rightarrow \leftarrow	Tol.	ID	ID							
1/8	28	9.72	90	22.0	7.0	5.5	9.25	+ 0.05	166721	166733							
1/4	19	13.15	100	20.0	11.0	9.0	12.50	+ 0.05	166722	166734							
3/8	19	16.66	100	20.0	12.0	9.0	16.00	+ 0.05	166723	166735							
1/2	14	20.95	125	22.0	16.0	12.0	20.00	+ 0.05	166724	166736							

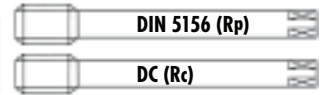
G DIN ISO 228 (BSP)



										N210-1	N210-3	N210-S	
N210-1													
N210-3													
N210-S													
$\varnothing^{\prime\prime} d_1$ G	P TPI	d_1 mm	l_1 mm	l_2 mm	d_2 mm	a mm				ID	ID	ID	
1/16	28	7.72	63	18.0	6.0	4.9	3	6.75			101418		
1/8	28	9.72	63	22.0	7.0	5.5	3	8.75	101404	101421	119386		
1/4	19	13.15	70	20.0	11.0	9.0	3	11.60	101403	101420	119336		
3/8	19	16.66	70	20.0	12.0	9.0	4	15.20	101409	101427	110938		
1/2	14	20.95	80	22.0	16.0	12.0	4	18.90	101402	101419	119264		
5/8	14	22.91	80	25.0	18.0	14.5	4	20.90	101411	105140	110940		
3/4	14	26.44	90	28.0	20.0	16.0	4	24.40	101408	101426	110937		
7/8	14	30.20	90	28.0	22.0	18.0	4	28.20	* 101412	* 101429			
1	11	33.24	100	32.0	25.0	20.0	4	30.70	101405	101422	110933		
1 1/8	11	37.89	125	32.0	28.0	22.0	4	35.30		101415			
1 1/4	11	41.91	125	32.0	32.0	24.0	5	39.30	101400	101414	111425		
1 3/8	11	44.32	125	32.0	36.0	29.0	5	41.80		* 101417			
1 1/2	11	47.80	140	32.0	36.0	29.0	5	45.20	101399	101413	110934		
1 3/4	11	53.74	140	36.0	40.0	32.0	5	51.20		* 101416			
2	11	59.61	160	36.0	45.0	35.0	5	57.00	101407	101425	110935		
2 1/2	11	75.18	160	36.0	50.0	39.0	6	72.60		101423			
3	11	87.88	160	40.0	50.0	39.0	6	85.30		* 101428			

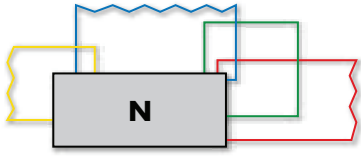



G, Rp, Rc

Rp, Rc DIN EN 10226

HSSE


		N420-3		N410-3																																																																																	
N420-3 																																																																																					
N410-3 																																																																																					
<table border="1"> <thead> <tr> <th>Ø" d₁</th> <th>P</th> <th>d₁</th> <th>l₁</th> <th>l₂</th> <th>d₂</th> <th>α</th> <th colspan="2"> </th> <th>ID</th> </tr> <tr> <th>Rp</th> <th>TPI</th> <th>mm</th> <th>mm</th> <th>mm</th> <th>mm</th> <th>mm</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>1/8</td><td>28</td><td>9.72</td><td>90</td><td>22.0</td><td>7.0</td><td>5.5</td><td>3</td><td>8.60</td><td>104911</td></tr> <tr><td>1/4</td><td>19</td><td>13.15</td><td>100</td><td>20.0</td><td>11.0</td><td>9.0</td><td>3</td><td>11.50</td><td>104912</td></tr> <tr><td>3/8</td><td>19</td><td>16.66</td><td>100</td><td>20.0</td><td>12.0</td><td>9.0</td><td>3</td><td>15.00</td><td>104913</td></tr> <tr><td>1/2</td><td>14</td><td>20.95</td><td>125</td><td>22.0</td><td>16.0</td><td>12.0</td><td>4</td><td>18.50</td><td>104914</td></tr> <tr><td>3/4</td><td>14</td><td>26.44</td><td>140</td><td>28.0</td><td>20.0</td><td>16.0</td><td>4</td><td>24.00</td><td>104915</td></tr> <tr><td>1</td><td>11</td><td>33.24</td><td>160</td><td>32.0</td><td>25.0</td><td>20.0</td><td>4</td><td>30.25</td><td>104916</td></tr> </tbody> </table>		Ø" d ₁	P	d ₁	l ₁	l ₂	d ₂	α			ID	Rp	TPI	mm	mm	mm	mm	mm				1/8	28	9.72	90	22.0	7.0	5.5	3	8.60	104911	1/4	19	13.15	100	20.0	11.0	9.0	3	11.50	104912	3/8	19	16.66	100	20.0	12.0	9.0	3	15.00	104913	1/2	14	20.95	125	22.0	16.0	12.0	4	18.50	104914	3/4	14	26.44	140	28.0	20.0	16.0	4	24.00	104915	1	11	33.24	160	32.0	25.0	20.0	4	30.25	104916				
Ø" d ₁	P	d ₁	l ₁	l ₂	d ₂	α			ID																																																																												
Rp	TPI	mm	mm	mm	mm	mm																																																																															
1/8	28	9.72	90	22.0	7.0	5.5	3	8.60	104911																																																																												
1/4	19	13.15	100	20.0	11.0	9.0	3	11.50	104912																																																																												
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3/4	14	26.44	140	28.0	20.0	16.0	4	24.00	104915																																																																												
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1	11	33.24	125	32.0	25.0	20.0	5		104922																																																																												

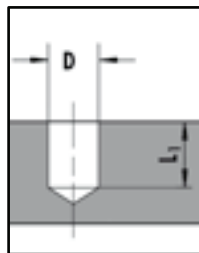
Rc	Vc (m/min) Ø d1			
	1/16" - 1/4"	3/8" - 1/2"	3/4" - 1"	1.1/4" - 2"
	10	8	7	5
	18	15	13	10

					D5800			
D5800 								
								
\varnothing'' Rc	l_1 mm	l_2 mm	d_2 mm	α mm	ID			
1/16	70	17.0	6.0	4.9	118701			
1/8	70	17.0	8.0	6.2	110531			
1/4	80	27.0	10.0	8.0	110530			
3/8	85	27.0	12.0	9.0	110535			
1/2	95	35.0	16.0	12.0	110529			
3/4	105	35.0	20.0	16.0	110534			
1	130	43.0	25.0	20.0	110532			

Диаметр отверстия под коническую трубную резьбу по DIN EN 10226 Średnice otworów pod gwinty stożkowe rurowe wg DIN EN 10226

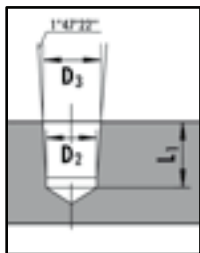
Отверстие с параллельными стенками
Повышенный износ, не рекомендуется

Отwór walcowy
Zwiększone zużycie gwintownika, nie zalecane



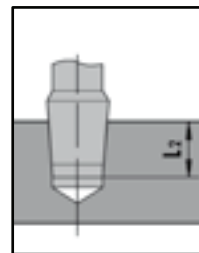
Коническое отверстие 1:16
Предварительное отв. D_2 и развертывание до D_3

Отwór stożkowy 1:16
Nawierć na $\varnothing D_2$ i rozwić stożkowo na $\varnothing D_3$



Коническое отверстие
Заход метчика на глубину $L_2 = \varnothing$ номинальный диаметр

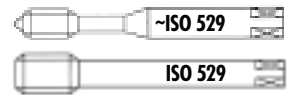
Отwór gwintowany
Gwintuj otwór na głębokość $L_2 = \varnothing$ nominalna



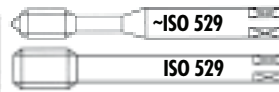
\varnothing'' Rc	L_1 min. mm	D_1 mm	D_2 mm	D_3 mm	L_2 mm
1/16	11.90	6.20	6.10	6.56	10.60
1/8	11.90	8.20	8.10	8.57	10.60
1/4	17.70	11.00	10.75	11.45	15.70
3/8	18.10	14.50	14.25	14.95	16.10
1/2	24.00	18.00	17.75	18.63	21.40
3/4	25.30	23.50	23.00	24.12	21.50
1	30.60	29.50	29.00	30.29	26.30

W BS 84 (BSW)

HSS



										N1110-3	N1210-3	N1120-4	N1220-4	
N1110-3														
N1210-3														
N1120-4														
N1220-4														
\varnothing W	d_1	P	d_1	l_1	l_2	l_3	d_2	a			ID	ID	ID	ID
		TPI	mm	mm	mm	mm	mm	mm						
1/8	40	3.17	48	11.0	18	3.15	2.50	3	2.50		103025		103126	
5/32	32	3.96	53	13.0	21	4.00	3.15	3	3.10		103031		103130	
3/16	24	4.76	58	16.0	25	5.00	4.00	3	3.60		103026		103127	
1/4	20	6.35	66	19.0	30	6.30	5.00	3	4.90		103024		103125	
5/16	18	7.93	72	22.0	35	8.00	6.30	3	6.40		103030		103129	
3/8	16	9.52	80	24.0	39	10.00	8.00	3	7.70		103028		103128	
7/16	14	11.11	85	22.0		8.00	6.30	3	9.10			103642		103771
1/2	12	12.70	89	24.0		9.00	7.10	3	10.30			103634		103767
9/16	12	14.28	95	24.0		11.20	9.00	3	11.90			* 103644		
5/8	11	15.87	102	32.0		12.50	10.00	3	13.30			103641		103770
3/4	10	19.05	112	33.0		14.00	11.20	3	16.20			103640		103769
1	8	25.40	130	45.0		18.00	14.00	4	21.90			* 103635		



		N1110-3	N1210-3	N5120						
N1110-3										
N1210-3										
N5120										
<p>W = 55° SV = 45°/5°</p>										
\varnothing d ₁ W P TPI/mm l ₁ mm l ₂ mm l ₃ mm d ₂ mm a mm 	ID									
5	36 TPI/1"	B6	58	16.0	25	5.0	4.0	3	4.20*	103029
6.82	0.625	B8	66	19.0	30	7.1	5.6	3	6.15*	111143
\varnothing d ₁ SV P mm l ₁ mm l ₂ mm l ₃ mm d ₂ mm a mm 	ID				ID					
10	0.833	W10	80	24.0	39	10.0	8.0	3	8.80*	130429
12	1.250	W12	89	24.0		9.0	7.1	3	10.50*	103591
15	1.250	W15	90	23.0		11.2	9.0	3	13.50*	103592
20	1.666	W20	112	37.0		14.0	11.2	4	17.80*	103593
25	1.693	W25	120	30.0		18.0	14.0	4	22.70*	103594
<p>*Tol. $\begin{matrix} +0.1 \text{ mm} \\ 0 \end{matrix}$</p>										
\varnothing d ₁ W P mm d ₂ mm l ₁ mm 	ID									
6.82	0.625	B6	25.0	9.0	4	6.77	130215			

W, SV