

These top quality Taps are made in Switzerland, by DC-Swiss, one of the leading Tap Manufacturers in Europe. All the Taps are made of HSSE-PM (Powder Metal). This material has proven to be the best solution for the manufacture of Taps and provides excellent shock and wear resistant properties.

This DC-Swiss series of Taps has been designed to work in Inox/Stainless Steels which are found in many components today that must be resistant to steam, heat and also corrosive fluids. These components tend to be of high value. So many users still have reservations regarding the tapping in these tough materials. So DC-Swiss developed the "Z & V" series of Taps to overcome these concerns. With its specific cutting geometry, which has been perfected for the use in these tough Stainless materials, which have a high percentage of elongation (elasticity). You are now assured of success when tapping these valuable materials. We have had a number of customers tell us they have achieved over five to ten times the tap life over other competitor taps on 304 and 420 modified stainless steel.



Z2_62V-3 TAP



Our Spiral Fluted Taps in UNC and Metric coarse pitch threads have another added design feature. DC-Swiss has developed a unique tap, which has part of its back thread form truncated. This truncation reduces the torque on the tap, which is generated by the contraction of the material.

The taps come with DC-Swiss "V" surface treatment process as standard which gives the Taps excellent properties to reduce cold welding. If you wish to get higher performance DC-Swiss has available as an option their "VS" surface treatment process. This coating is more wear protective and has a low coefficient of friction, which reduces torque and eliminates cold welding.

Type Z2320V-4 & Z2420V-4 are designed for through holes, and the spiral point geometry on the Tap will push the swarf through the hole.

Type Z2360V-3 & Z2460V-3 have a 40 degree spiral flute, which will bring the swarf back up the flute of the tap and ejects it away from the hole. This can be used up to a depth of about 2.5 times the diameter of the hole.

Type Z2362V-3 & Z2462V-3 have a 40 degree spiral flute, that brings the swarf back up the flute of the tap and ejects it away from the hole. This can be used up to a depth of about 2.5 times the diameter of the hole.

CHARACTERISTICS

Pictographs



For material groups as per DC application chart

- Straight flutes with spiral point
- 40° right hand spiral flutes
- HSSE-PM
- Through holes, for long chipping materials
- Blind holes, as far as the core depth is 2x the threading depth
- Blind holes, for long chipping materials < 2.5 x D
- 2 - 3 chamfered threads, form C
- 4 chamfered threads, form B
- Tolerance class 2B
- Truncated thread
- DC "V" surface treatment

APPLICATION CHART FOR THREAD TAP

		Hardness BHN/HRC	Tensile Strength N/mm ²	Elongation A ₅ %	SPEED SFM <Ø20mm guide line			
					Standard V treated		Coated TN/TC/VS	
20 Stainless steels	21 Free Machining Stainless Steels	<250	<850	<25	35	50	65	100
	22 Austenitic Steels	<250	<850	>20	15	25	25	50
	23 Ferritic + Martensitic SS <950N/mm ²	<280 / <30	<950	>20	15	25	25	50
40 Titanium	41 Pure Titanium	<250	<850	>20	15	25		
	42 Titanium Alloys	>250	>850	<20			10	15

MATERIALS TO BE TAPPED

Free Machining Stainless Steels	Austenitic Stainless Steels	Ferritic + Martensitic <950N/mm ²	Pure Titanium	Titanium Alloys
21	22	23	41	42
303	304 316TI	420	Gr. 1	Gr. 5
403	304H 317	431	Gr. 2	
430F	310 321	501	Gr. 3	
416	316 347	17-4 PH <250BHN	Gr. 4	
	316L	15-5 PH <250BHN		

*also available in metric sizes



Z2362V-3



Z2462V-3



Z2360V-3

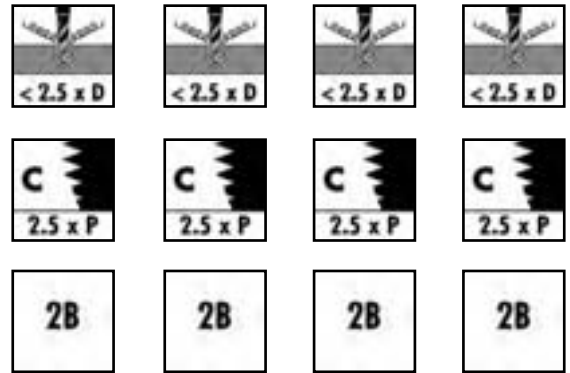
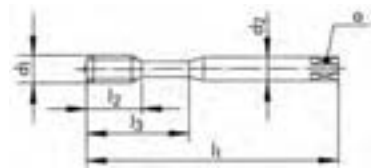


Z2460V-3



Tap Material: HSSE - PM

Material Groups to be Tapped:



DIN Length / ANSI Shanks

d ₁ Nominal Size	UNC (TPI)	UNF (TPI)	l ₁ inch	l ₂ inch	l ₃ inch	d ₂ inch	a inch		order no.	order no.	order no.	order no.
2	56		1.772	0.315	-	0.141	0.110	2			235-145047	
4	40		2.205	0.216	0.709	0.141	0.110	3			235-145048	
6	32		2.205	0.256	0.787	0.141	0.110	3	235-145049			
8	32		2.480	0.295	0.828	0.168	0.131	3	235-145050			
10	24		2.756	0.354	0.984	0.194	0.152	3	235-145051			
10		32	2.756	0.354	0.984	0.194	0.152	3			235-145085	
1/4	20		3.150	0.433	1.181	0.255	0.191	3	235-145052			
1/4		28	3.150	0.433	1.181	0.255	0.191	3			235-145086	
5/16	18		3.543	0.492	1.378	0.318	0.238	3	235-145053			
5/16		24	3.543	0.492	1.378	0.318	0.238	3			235-145087	
3/8	16		3.937	0.551	1.535	0.381	0.286	3	235-145054			
3/8		24	3.937	0.551	1.535	0.381	0.286	3			235-145088	
7/16	14		3.937	0.551	-	0.323	0.242	3		235-145055		
7/16		20	3.937	0.551	-	0.323	0.242	3			235-145089	
1/2	13		4.331	0.551	-	0.367	0.275	3		235-145056		
1/2		20	3.937	0.551	-	0.367	0.275	3			235-145090	
5/8	11		4.331	0.709	-	0.480	0.360	3		235-145057		
5/8		18	3.937	0.551	-	0.480	0.360	3			235-145091	
3/4	10		4.921	0.827	-	0.590	0.442	3		235-145058		
3/4		16	4.921	0.709	-	0.590	0.442	4			235-145092	
1	8		6.299	1.063	-	0.800	0.600	4		235-145059		

*also available in metric sizes



Z2320V-4

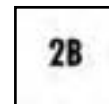
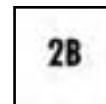
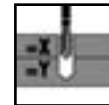
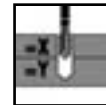
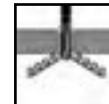
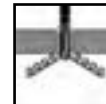
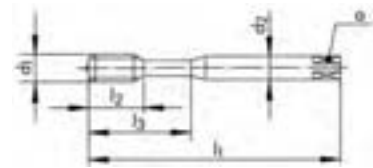


Z2420V-4



Tap Material: HSSE - PM

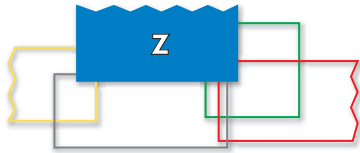
Material Groups to be Tapped:



DIN Length / ANSI Shanks

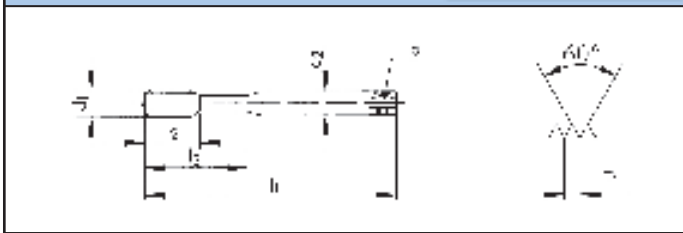
d ₁ Nominal Size	UNC (TPI)	UNF (TPI)	l ₁ inch	l ₂ inch	l ₃ inch	d ₂ inch	a inch		order no.
2	56		1.772	0.354	-	0.141	0.110	2	235-145035
4	40		2.205	0.472	0.709	0.141	0.110	3	235-145036
6	32		2.205	0.511	0.787	0.141	0.110	3	235-145037
8	32		2.480	0.551	0.828	0.168	0.131	3	235-145038
10	24		2.756	0.590	0.984	0.194	0.152	3	235-145039
10		32	2.756	0.590	0.984	0.194	0.152	3	235-145077
1/4	20		3.150	0.669	1.181	0.255	0.191	3	235-145040
1/4		28	3.150	0.669	1.181	0.255	0.191	3	235-145078
5/16	18		3.543	0.787	1.378	0.318	0.238	3	235-145041
5/16		24	3.543	0.787	1.378	0.318	0.238	3	235-145079
3/8	16		3.937	0.866	1.535	0.381	0.286	3	235-145042
3/8		24	3.937	0.866	-	0.381	0.286	3	235-145080
7/16	14		3.937	0.748	-	0.323	0.242	3	235-145043
7/16		20	3.937	0.748	-	0.323	0.242	3	235-145081
1/2	13		4.331	0.945	-	0.367	0.275	3	235-145044
1/2		20	3.937	0.945	-	0.367	0.275	3	235-145082
5/8	11		4.331	1.181	-	0.480	0.360	3	235-145045
5/8		18	3.937	1.181	-	0.480	0.360	3	235-145083
3/4	10		4.921	1.299	-	0.590	0.442	4	235-145046
3/4		16	4.921	1.299	-	0.590	0.442	4	235-145084

*also available in metric sizes



Z320V-4		V	
Z420V-4		V	
Z320VS-4		VS	
Z420VS-4		VS	

Z320V-4	Z420V-4	Z320VS-4	Z420VS-4

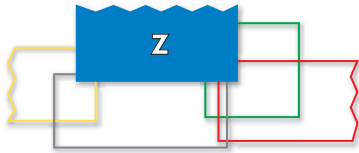


ISO 2 6H	ISO 2 6H	ISO 2 6H	ISO 2 6H

Ø d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm			ID	ID	ID	ID
* 1.6	0.35	40	8.0		2.5	2.1	2	1.25	142671			
* 2	0.40	45	8.0		2.8	2.1	2	1.60	111613			
2.5	0.45	50	10.0		2.8	2.1	3	2.05	111455		143683	
2.6	0.45	50	10.0		2.8	2.1	3	2.15	142672			
3	0.50	56	12.0	18	3.5	2.7	3	2.50	104669		104830	
4	0.70	63	14.0	21	4.5	3.4	3	3.30	104670		104831	
5	0.80	70	15.0	25	6.0	4.9	3	4.20	104671		104832	
6	1.00	80	17.0	30	6.0	4.9	3	5.00	104672		104833	
8	1.25	90	20.0	35	8.0	6.2	3	6.80	104673		104834	
10	1.50	100	22.0	39	10.0	8.0	3	8.50	104668		104835	
12	1.75	110	24.0		9.0	7.0	3	10.20		104723		104836
14	2.00	110	28.0		11.0	9.0	3	12.00		142673		143684
16	2.00	110	30.0		12.0	9.0	3	14.00		105068		111569
18	2.50	125	33.0		14.0	11.0	4	15.50		142674		
20	2.50	140	36.0		16.0	12.0	4	17.50		105069		111570
24	3.00	160	39.0		18.0	14.5	4	21.00		142675		
30	3.50	180	45.0		22.0	18.0	4	26.50		142676		

* Z320V-3





Z362V-3

Z462V-3

Z362V-3

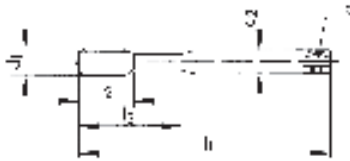


Z462V-3



**ISO 2
6H**

**ISO 2
6H**



Ø d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	α mm		
* 2	0.40	45	7.0		2.8	2.1	2	1.60
* 2.5	0.45	50	9.0		2.8	2.1	2	2.05
* 2.6	0.45	50	9.0		2.8	2.1	2	2.15
* 3	0.50	56	5.5	18	3.5	2.7	3	2.50
3.5	0.60	56	6.5	20	4.0	3.0	3	2.90
4	0.70	63	7.5	21	4.5	3.4	3	3.30
5	0.80	70	9.0	25	6.0	4.9	3	4.20
6	1.00	80	11.0	30	6.0	4.9	3	5.00
8	1.25	90	12.5	35	8.0	6.2	3	6.80
10	1.50	100	14.0	39	10.0	8.0	3	8.50
12	1.75	110	14.0		9.0	7.0	3	10.20
14	2.00	110	14.0		11.0	9.0	3	12.00
16	2.00	110	18.0		12.0	9.0	3	14.00
18	2.50	125	21.0		14.0	11.0	3	15.50
20	2.50	140	24.0		16.0	12.0	3	17.50
22	2.50	140	24.0		18.0	14.5	3	19.50
24	3.00	160	27.0		18.0	14.5	4	21.00
27	3.00	160	27.0		20.0	16.0	4	24.00
30	3.50	180	30.0		22.0	18.0	4	26.50
36	4.00	200	36.0		28.0	22.0	4	32.00
42	4.50	200	40.0		32.0	24.0	4	37.50

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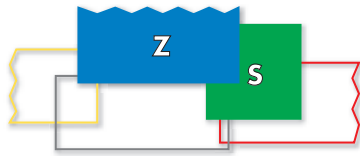
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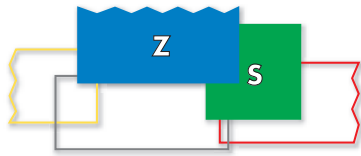
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* Z360V-3



	Z362VS-3	Z370VS-3	Z370VS-3	Z373VS-3																																																																																				
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Coating																																																																																								
6HX	6HX	6HX	4HX	6HX																																																																																				
Dimensions Table 1	<table border="1"> <thead> <tr> <th>∅ d₁ M</th> <th>P mm</th> <th>l₁ mm</th> <th>l₂ mm</th> <th>l₃ mm</th> <th>d₂ mm</th> <th>a mm</th> <th></th> <th></th> <th>ID</th> </tr> </thead> <tbody> <tr><td>* 3</td><td>0.50</td><td>56</td><td>5.5</td><td>18</td><td>3.5</td><td>2.7</td><td>3</td><td>2.50</td><td>111504</td></tr> <tr><td>4</td><td>0.70</td><td>63</td><td>7.5</td><td>21</td><td>4.5</td><td>3.4</td><td>3</td><td>3.30</td><td>111505</td></tr> <tr><td>5</td><td>0.80</td><td>70</td><td>9.0</td><td>25</td><td>6.0</td><td>4.9</td><td>3</td><td>4.20</td><td>111506</td></tr> <tr><td>6</td><td>1.00</td><td>80</td><td>11.0</td><td>30</td><td>6.0</td><td>4.9</td><td>3</td><td>5.00</td><td>111507</td></tr> <tr><td>8</td><td>1.25</td><td>90</td><td>12.5</td><td>35</td><td>8.0</td><td>6.2</td><td>3</td><td>6.80</td><td>111508</td></tr> <tr><td>10</td><td>1.50</td><td>100</td><td>14.0</td><td>39</td><td>10.0</td><td>8.0</td><td>3</td><td>8.50</td><td>111509</td></tr> </tbody> </table>				∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm			ID	* 3	0.50	56	5.5	18	3.5	2.7	3	2.50	111504	4	0.70	63	7.5	21	4.5	3.4	3	3.30	111505	5	0.80	70	9.0	25	6.0	4.9	3	4.20	111506	6	1.00	80	11.0	30	6.0	4.9	3	5.00	111507	8	1.25	90	12.5	35	8.0	6.2	3	6.80	111508	10	1.50	100	14.0	39	10.0	8.0	3	8.50	111509														
∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm			ID																																																																															
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4	0.70	63	7.5	21	4.5	3.4	3	3.30	111505																																																																															
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10	1.50	100	14.0	39	10.0	8.0	3	8.50	111509																																																																															
* Z360VS-3																																																																																								
Dimensions Table 2	<table border="1"> <thead> <tr> <th>∅ d₁ M</th> <th>P mm</th> <th>l₁ mm</th> <th>l₂ mm</th> <th>l₃ mm</th> <th>d₂ h6 mm</th> <th>a mm</th> <th></th> <th></th> <th>ID</th> <th>ID</th> <th>ID</th> </tr> </thead> <tbody> <tr><td>3</td><td>0.50</td><td>56</td><td>5.5</td><td>18</td><td>3.5(h9)</td><td>2.7</td><td>3</td><td>2.50</td><td>162776</td><td>165324</td><td>165236</td></tr> <tr><td>4</td><td>0.70</td><td>63</td><td>7.5</td><td>21</td><td>4.5(h9)</td><td>3.4</td><td>3</td><td>3.30</td><td>162777</td><td>165325</td><td>165237</td></tr> <tr><td>5</td><td>0.80</td><td>70</td><td>9.0</td><td>25</td><td>6.0</td><td>4.9</td><td>3</td><td>4.20</td><td>162778</td><td>165326</td><td>165238</td></tr> <tr><td>6</td><td>1.00</td><td>80</td><td>11.0</td><td>30</td><td>6.0</td><td>4.9</td><td>3</td><td>5.00</td><td>162779</td><td>165327</td><td>165239</td></tr> <tr><td>8</td><td>1.25</td><td>90</td><td>12.5</td><td>35</td><td>8.0</td><td>6.2</td><td>3</td><td>6.80</td><td>162780</td><td>165328</td><td>165240</td></tr> <tr><td>10</td><td>1.50</td><td>100</td><td>14.0</td><td>39</td><td>10.0</td><td>8.0</td><td>3</td><td>8.50</td><td>162781</td><td>165438</td><td>165241</td></tr> </tbody> </table>				∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm			ID	ID	ID	3	0.50	56	5.5	18	3.5(h9)	2.7	3	2.50	162776	165324	165236	4	0.70	63	7.5	21	4.5(h9)	3.4	3	3.30	162777	165325	165237	5	0.80	70	9.0	25	6.0	4.9	3	4.20	162778	165326	165238	6	1.00	80	11.0	30	6.0	4.9	3	5.00	162779	165327	165239	8	1.25	90	12.5	35	8.0	6.2	3	6.80	162780	165328	165240	10	1.50	100	14.0	39	10.0	8.0	3	8.50	162781	165438	165241
∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm			ID	ID	ID																																																																													
3	0.50	56	5.5	18	3.5(h9)	2.7	3	2.50	162776	165324	165236																																																																													
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5	0.80	70	9.0	25	6.0	4.9	3	4.20	162778	165326	165238																																																																													
6	1.00	80	11.0	30	6.0	4.9	3	5.00	162779	165327	165239																																																																													
8	1.25	90	12.5	35	8.0	6.2	3	6.80	162780	165328	165240																																																																													
10	1.50	100	14.0	39	10.0	8.0	3	8.50	162781	165438	165241																																																																													
4HX	= 6.70																																																																																							



Z462VS-3 Z470VS-3 Z473VS-3



NEW

Z462VS-3



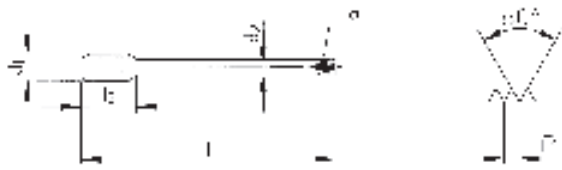
Z470VS-3



Z473VS-3



PM **PM**



6HX **6HX** **6HX**

$\varnothing d_1$ M	P mm	l_1 mm	l_2 mm	d_2 mm	a mm			ID
12	1.75	110	14.0	9.0	7.0	4	10.20	111510
14	2.00	110	14.0	11.0	9.0	4	12.00	148169
16	2.00	110	18.0	12.0	9.0	4	14.00	111511
20	2.50	140	24.0	16.0	12.0	4	17.50	111512
24	3.00	160	27.0	18.0	14.5	4	21.00	111620

$\varnothing d_1$ M	P mm	l_1 mm	l_2 mm	d_2 h ₆ mm	a mm			ID	ID
12	1.75	110	14.0	*10.0	*8.0	4	10.20	162782	165242
14	2.00	110	14.0	*12.0	*9.0	4	12.00	162783	165243
16	2.00	110	18.0	12.0	9.0	4	14.00	162784	165244
18	2.50	125	21.0	14.0	11.0	4	15.50	170643	
20	2.50	140	24.0	16.0	12.0	4	17.50	162785	165234
24	3.00	160	27.0	16.0	12.0	4	21.00	162786	165235

* Norme DC / * DC Norm / * Norma DC

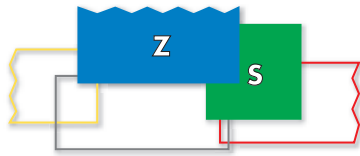
MF ISO DIN 13

Z320

Z360

PM

HSSE



Z320V-4

Z360V-3

Z360VS-3

Z370VS-3



NEW



PM

Z320V-4



Z360V-3



Z360VS-3



Z370VS-3



ISO 2
6H

ISO 2
6H

6HX

6HX

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm		
* 2	0.20	45	8.0		2.8	2.1	2	1.80
* 2	0.25	45	8.0		2.8	2.1	2	1.75
* 2.2	0.25	45	9.0		2.8	2.1	2	1.95
2.5	0.20	50	10.0		2.8	2.1	3	2.30
2.5	0.25	50	10.0		2.8	2.1	3	2.25
3	0.35	56	12.0	18	3.5	2.7	3	2.65
6	0.75	80	17.0	30	6.0	4.9	3	5.25
8	1.00	90	20.0	35	8.0	6.2	3	7.00
10	1.00	100	22.0	39	10.0	8.0	3	9.00

ID

146487
114715
115462
115578
115887
115468
142726
142727
142728

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm		
4	0.50	63	7.5	21	4.5	3.4	3	3.50
5	0.50	70	9.0	25	6.0	4.9	3	4.50
6	0.75	80	11.0	30	6.0	4.9	3	5.25
8	1.00	90	12.5	35	8.0	6.2	3	7.00
10	1.00	100	14.0	39	10.0	8.0	3	9.00

ID

ID

104675
104676
104677
104678
104674

* 111552
* 111553
* 111554

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h ₆ mm	a mm		
6	0.75	80	11.0	30	6.0	4.9	3	5.25
8	1.00	90	12.5	35	8.0	6.2	3	7.00
10	1.00	100	14.0	39	10.0	8.0	3	9.00

ID

166117
166118
166119

* Z320V-3



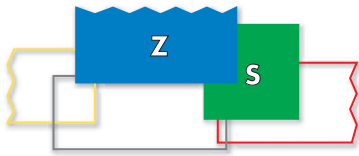
P ≤ 0.25

ISO 1
4H

MF ISO DIN 13

Z420 Z460

PM HSSE



Z420V-4 Z460V-3 Z460VS-3 Z470VS-3



NEW



PM



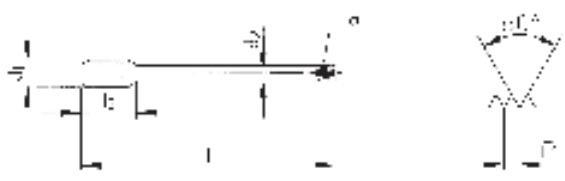
ISO 2 6H ISO 2 6H 6HX 6HX

Z420V-4

Z460V-3

Z460VS-3

Z470VS-3



∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	d ₂ mm	a mm		
12	1.00	100	24.0	9.0	7.0	3	11.00
12	1.50	100	24.0	9.0	7.0	3	10.50
14	1.50	100	24.0	11.0	9.0	3	12.50
16	1.50	100	26.0	12.0	9.0	3	14.50

ID
142729
142730
142731
142732

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	d ₂ mm	a mm		
12	1.00	100	14.0	9.0	7.0	3	11.00
12	1.50	100	14.0	9.0	7.0	* 3	10.50
14	1.50	100	14.0	11.0	9.0	* 3	12.50
16	1.50	100	14.0	12.0	9.0	4	14.50
18	1.50	110	18.0	14.0	11.0	4	16.50
20	1.50	125	20.0	16.0	12.0	4	18.50
22	1.50	125	20.0	18.0	14.5	4	20.50
24	1.50	140	22.0	18.0	14.5	4	22.50
24	2.00	140	22.0	18.0	14.5	4	22.00

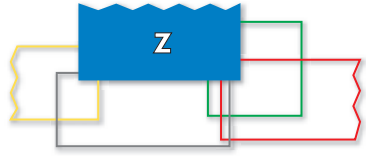
ID	ID
104729	
104730	* 111555
104731	* 111556
104732	* 111557
104733	
104734	
104735	
104736	
104737	

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	d ₂ h ₆ mm	a mm		
12	1.50	110	14.0	*10.0	*8.0	4	10.50
14	1.50	110	14.0	*12.0	*9.0	4	12.50
16	1.50	110	18.0	12.0	9.0	4	14.50

ID
166120
166121
166122

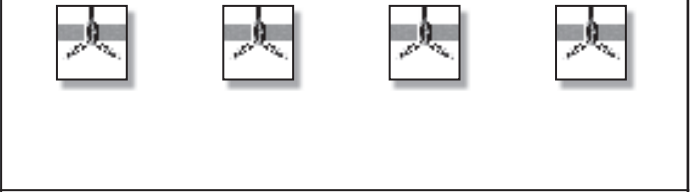
* Norme DC / * DC Norm / * Norma DC

* Z460VS-3 = 4



Z320V-4		V	
Z320VS-4		VS	
Z420V-4		V	
Z420VS-4		VS	

Z320V-4	Z320VS-4	Z420V-4	Z420VS-4
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2B	2B	2B	2B

Ø" d ₁ UNC	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm		
*2	56	2.18	45	9.0		2.8	2.1	2	1.75
4	40	2.84	56	12.0	18	3.5	2.7	3	2.25
6	32	3.50	56	13.0	20	4.0	3.0	3	2.75
8	32	4.16	63	14.0	21	4.5	3.4	3	3.40
10	24	4.82	70	15.0	25	6.0	4.9	3	3.80
1/4	20	6.35	80	17.0	30	7.0	5.5	3	5.10
5/16	18	7.93	90	20.0	35	8.0	6.2	3	6.50
3/8	16	9.52	100	22.0	39	10.0	8.0	3	8.00
1/2	13	12.70	110	24.0		9.0	7.0	3	10.80
5/8	11	15.87	110	30.0		12.0	9.0	3	13.60
3/4	10	19.05	125	33.0		14.0	11.0	4	16.60
7/8	9	22.22	140	36.0		18.0	14.5	4	19.50
1	8	25.40	160	39.0		18.0	14.5	4	22.30

ID	ID	ID	ID
142750			
142751			
142752	111560		
142753	111561		
142754	111562		
142755	111563		
142756	111564		
142757	111565		
		142758	111566
		142759	111567
		142760	111568
		142761	
		142762	

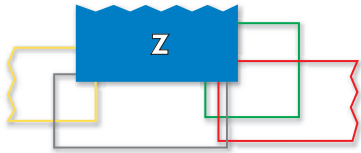
* Z320V-3



UNC ANSI B1.1

≤ Ø 2.8 > Ø 2.8

PM HSSE



Z362V-3 Z362VS-3 Z462V-3 Z462VS-3



Z362V-3



Z362VS-3



Z462V-3



Z462VS-3



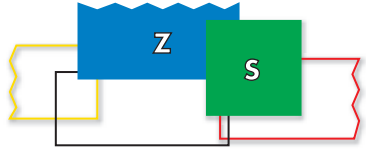
2B 2BX 2B 2BX

Ø" d ₁ UNC	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ mm	a mm		
*2	56	2.18	45	8.0		2.8	2.1	2	1.75
*4	40	2.84	56	5.5	18	3.5	2.7	3	2.25
6	32	3.50	56	6.5	20	4.0	3.0	3	2.75
8	32	4.16	63	7.5	21	4.5	3.4	3	3.40
10	24	4.82	70	9.0	25	6.0	4.9	3	3.80
1/4	20	6.35	80	11.0	30	7.0	5.5	3	5.10
5/16	18	7.93	90	12.5	35	8.0	6.2	3	6.50
3/8	16	9.52	100	14.0	39	10.0	8.0	3	8.00
7/16	14	11.11	100	14.0		8.0	6.2	3	9.30
1/2	13	12.70	110	14.0		9.0	7.0	*3	10.80
5/8	11	15.87	110	18.0		12.0	9.0	*3	13.60
3/4	10	19.05	125	21.0		14.0	11.0	*3	16.60
7/8	9	22.22	140	24.0		18.0	14.5	3	19.50
1	8	25.40	160	27.0		18.0	14.5	4	22.30

ID	ID	ID	ID
104695			
104697			
104699	* 111543		
104700	* 111544		
104694	* 111545		
104693	* 111546		
104698	* 111547		
104696	* 111548		
		104757	* 111549
		104753	* 111550
		104756	* 111551
		104755	* 111559
		104758	
		104754	

* Z360V-3

* Z462VS-3 = 4



Z370VS-3 Z470VS-3

Z370VS-3

Z470VS-3



NEW **NEW**



2BX **2BX**

Ø" d ₁ UNC	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
6	32	3.50	56	6.5	20	4.0 (h9)	3.0	3	2.75
8	32	4.16	63	7.5	21	4.5 (h9)	3.4	3	3.40
10	24	4.82	70	9.0	25	6.0	4.9	3	3.80
1/4	20	6.35	80	11.0	30	* 6.0	* 4.9	3	5.10
5/16	18	7.93	90	12.5	35	8.0	6.2	3	6.50
3/8	16	9.52	100	14.0	39	10.0	8.0	3	8.00
7/16	14	11.11	100	14.0		8.0	6.2	3	9.30
1/2	13	12.70	110	14.0		* 10.0	* 8.0	4	10.80
5/8	11	15.87	110	18.0		12.0	9.0	4	13.60
3/4	10	19.05	125	21.0		14.0	11.0	4	16.60

ID	ID
166123	
166124	
166125	
166126	
166127	
166128	
	166129
	166130
	166131
	166132

* Norme DC / * DC Norm / * Norma DC

**3B
UNC(J)**

Ø" d ₁ UNC	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
4	40	2.84	56	5.5	18	3.5 (h9)	2.7	3	2.30
6	32	3.50	56	6.5	20	4.0 (h9)	3.0	3	2.80
8	32	4.16	63	7.5	21	4.5 (h9)	3.4	3	3.45
1/4	20	6.35	80	11.0	30	* 6.0	* 4.9	3	5.20
5/16	18	7.93	90	12.5	35	8.0	6.2	3	6.70

ID
165114
165115
165116
165117
165118

* Norme DC / * DC Norm / * Norma DC

UNF ANSI B1.1

Z .20

Z .60

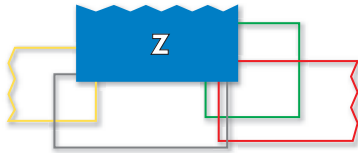
PM


















HSSE



DIN 371

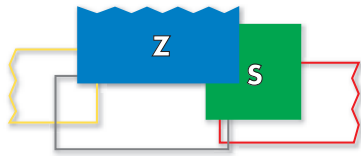
DIN 374



										Z320V-4	Z420V-4	Z360V-3	Z460V-3	
<p>Z320V-4   </p> <p>Z420V-4   </p> <p>Z360V-3   </p> <p>Z460V-3   </p>														
														
														
														
$\varnothing'' d_1$ UNF	P TPI	d_1 mm	l_1 mm	l_2 mm	l_3 mm	d_2 mm	a mm	α	α	α	ID	ID	ID	ID
10	32	4.82	70	15.0	25	6.0	4.9	3	4.05		142783			
1/4	28	6.35	80	17.0	30	7.0	5.5	3	5.50		142784			
5/16	24	7.93	90	20.0	35	8.0	6.2	3	6.90		142785			
3/8	24	9.52	100	22.0	39	10.0	8.0	3	8.50		142786			
7/16	20	11.11	100	19.0		8.0	6.2	3	9.80			142787		
1/2	20	12.70	100	24.0		9.0	7.0	3	11.40			142788		
$\varnothing'' d_1$ UNF	P TPI	d_1 mm	l_1 mm	l_2 mm	l_3 mm	d_2 mm	a mm	α	α	α	ID	ID	ID	ID
10	32	4.82	70	9.0	25	6.0	4.9	3	4.05		104680			
1/4	28	6.35	80	11.0	30	7.0	5.5	3	5.50		104679			
5/16	24	7.93	90	12.5	35	8.0	6.2	3	6.90		104682			
3/8	24	9.52	100	14.0	39	10.0	8.0	3	8.50		104681			
7/16	20	11.11	100	14.0		8.0	6.2	3	9.80			104741		
1/2	20	12.70	100	14.0		9.0	7.0	3	11.40			104738		
5/8	18	15.87	100	14.0		12.0	9.0	3	14.50			104740		
3/4	16	19.05	125	18.0		14.0	11.0	4	17.50			104739		

UNF ANSI B1.1

HSSE



Z360VS-3 Z460VS-3 Z370VS-3 Z470VS-3



NEW

NEW

Z360VS-3



Z460VS-3



Z370VS-3



Z470VS-3



PM

PM



2BX

2BX

2BX

2BX

\varnothing " d ₁	P	d ₁	l ₁	l ₂	l ₃	d ₂	a		
UNF	TPI	mm	mm	mm	mm	mm	mm		
10	32	4.82	70	9.0	25	6.0	4.9	3	4.05
1/4	28	6.35	80	11.0	30	7.0	5.5	3	5.50
5/16	24	7.93	90	12.5	35	8.0	6.2	3	6.90
3/8	24	9.52	100	14.0	39	10.0	8.0	3	8.50
7/16	20	11.11	100	14.0		8.0	6.2	3	9.80
1/2	20	12.70	100	14.0		9.0	7.0	4	11.40

ID

ID

* 111576

* 111575

* 111574

* 111573

* 111572

* 111571

\varnothing " d ₁	P	d ₁	l ₁	l ₂	l ₃	d ₂ h6	a		
UNF	TPI	mm	mm	mm	mm	mm	mm		
10	32	4.82	70	9.0	25	6.0	4.9	3	4.05
1/4	28	6.35	80	11.0	30	*6.0	*4.9	3	5.50
5/16	24	7.93	90	12.5	35	8.0	6.2	3	6.90
3/8	24	9.52	100	14.0	39	10.0	8.0	3	8.50
7/16	20	11.11	100	14.0		8.0	6.2	3	9.80
1/2	20	12.70	110	14.0		*10.0	*8.0	4	11.40

ID

ID

166136

166135

166134

166133

166138

166137

* Norme DC / * DC Norm / * Norma DC

**3B
UNF(J)**

\varnothing " d ₁	P	d ₁	l ₁	l ₂	l ₃	d ₂ h6	a		
UNF	TPI	mm	mm	mm	mm	mm	mm		
10	32	4.82	70	9.0	25	6.0	4.9	3	4.10
1/4	28	6.35	80	11.0	30	*6.0	*4.9	3	5.55
5/16	24	7.93	90	12.5	35	8.0	6.2	3	7.00
3/8	24	9.52	100	14.0	39	10.0	8.0	3	8.60

ID

165121

165122

165123

165124

* Norme DC / * DC Norm / * Norma DC