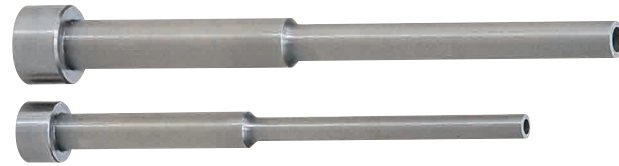


DIN ISO 8405
1.2344 equivalent
+
Nitrided

DIN ISO 8405
1.2344 equivalent
+
Hardened

STEPPED EJECTOR SLEEVES

—◎0.08 DIMENSIONS SPECIFY TYPE—

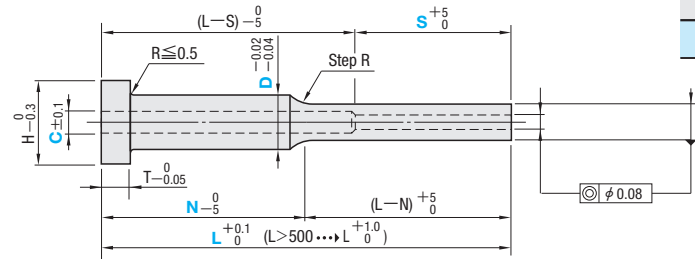


Part No.	M	H	T	V	Applicable center pin shaft diameter tolerance
D-ESNF	1.2344 equivalent+Nitrided	Surface: 900HV Base Material: 40±3HRC	g6	H7	-0.01 -0.02
D-ESDF	1.2344 equivalent	Base Material: 50~55HRC			

*Please note that the ejector sleeve with a V dimension tolerance of H7 has a long precision fitting portion S and is not suitable for use with a center pin with a shaft diameter tolerance of -0.005.

P _{g6}			
P ≤ 6	6.5 ≤ P ≤ 10	12 ≤ P ≤ 16	P = 20
-0.004 -0.012	-0.005 -0.014	-0.006 -0.017	-0.007 -0.020

V _{H7}			
V ≤ 3.0	3.1 ≤ V ≤ 6.0	6.1 ≤ V ≤ 10.0	V ≥ 10.1
+0.010 0	+0.012 0	+0.015 0	+0.018 0



Dimension C remains unchanged

- Nitriding may extend to the head as it is applied after dimension V, D and P machining.
- When the diameter (D) portion of the stepped center pin is inserted into the relief hole (C) of D-ESNF, D-ESDF type, make sure relief hole (C) ≥ pin diameter (D) + 1.0

H	T	Part No. Type	D	L		V		P	C	C _{max}	N	S	
				0.01mm increments	0.1mm increments	0.1mm increments	0.01mm increments	0.1mm increments	1mm increments	5mm increments			
10	3	D-ESNF (1.2344 equivalent + Nitrided)	5	50.00~300.00	-	2.0~3.0	3.50~4.95	C ≥ V+0.5 and C ≤ P-1.0	3.5	4.0	N ≤ L/3	20~100	
			5.5			2.0~3.5	3.50~5.45						4.5
			6			2.0~4.0	4.00~5.95						5.0
			6.5			2.0~4.5	4.00~6.45						5.0
			7			2.0~5.0	4.00~7.45						5.5
12	5	D-ESDF (1.2344 equivalent Hardened)	7.5	70.00~500.00	-	2.5~5.5	5.00~7.95	C ≥ V+0.5 and C ≤ P-1.5	6.0	When L > 300 0.5mm increments	20~100 (L-S) ≥ 50		
			8			3.0~6.5	6.00~8.95					7.0	
			9			3.5~7.5	6.00~9.95					8.0	
14	7	10	4.0~8.5	7.50~11.95	9.0								
16	7	15	5.0~10.5	10.00~14.95	11.0								
18	7	16	5.0~11.5	12.00~15.95	12.0								
22	7	20	7.0~16.0	14.50~19.95	17.0								

Lower limit of P and V

L	D	5 · 5.5	6~7	7.5 · 8	9~20
L ≤ 300		P ≥ V+1.5	P ≥ V+1.5	P ≥ V+1.5	P ≥ V+2
L > 300 and (L-N-10) ≤ S			P ≥ V+3	P ≥ V+4	P ≥ V+4.5
L > 300 and (L-N-10) > S			P ≥ (V+3) and (P-C)/2 ≥ 0.75	P ≥ (V+4) and (P-C)/2 ≥ 0.75	P ≥ (V+4.5) and (P-C)/2 ≥ 0.75

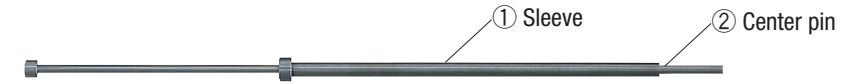
Order Part No. - L - V - P - C - N - S
D-ESNF 12 - 200.05 - V4.5 - P7.55 - C6.0 - N120 - S85

Alterations Part No. - L - V - P - C - N - S - (KC · WKC...etc.) Alterations details P.14
D-ESDF 6 - 150.00 - V3.0 - P5.50 - C4.0 - N80 - S85 - KC3.5

DIN ISO 8405
1.2344 equivalent
+
Nitrided

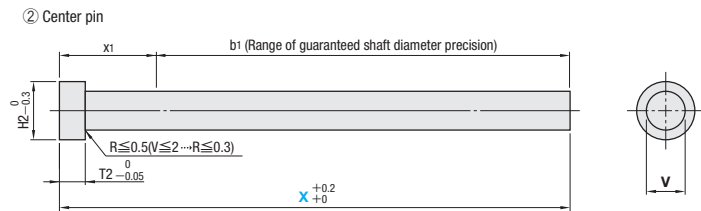
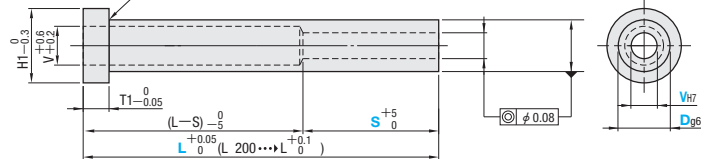
DIN ISO 8405
1.2344 equivalent
+
Hardened

STRAIGHT EJECTOR SLEEVES & STRAIGHT CENTER PIN SETS

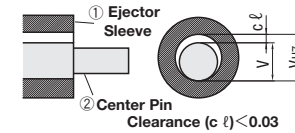


Part No.	M	H	
D-ESNP	①	1.2344 equivalent+Nitrided	Surface: 900HV Base Material: 40±3HRC
	②	1.2344 equivalent+Nitrided	Surface: 900HV Base Material: 40±3HRC
D-ESDP	①	1.2344 equivalent	Base Material: 50~55HRC
	②	1.2344 equivalent	Base Material: 50~55HRC

- Nitriding may extend to the head as it is applied after dimension V and D machining.
- To add fitting processing, not applicable to combination with other than sets.



Clearance (c) between the ejector sleeve's internal diameter (V_{H7}) and the center pin's shaft diameter (V).



V_{H7} Dimension

V (sleeve)	Tolerance
2.0~3.0	+0.010 0
3.1~6.0	+0.012 0
6.1~10.0	+0.015 0
10.1~16.0	+0.018 0

Range of guaranteed shaft diameter precision (b1=L-x1)
x1 max.40

H1	T1	Part No. Type	D	L		V 0.1mm increments	S 1mm increments	X 5mm increments
				0.01mm increments	0.1mm increments			
8	3	D-ESNP (1.2344 equivalent + Nitrided)	4	40.00~200.00	-	1.5~2.5	20~100 (D4, D4.5 When V1.5~V1.9 20~40)	X ≥ L+20 and X ≤ L+100
			4.5			1.5~3.0		
10	5	D-ESDF (1.2344 equivalent Hardened)	5	40.00~300.00	-	2.0~3.5	20~100 (L-S) ≥ 50	X ≥ L+20 and X ≤ L+100
			5.5			2.0~4.0		
			6			2.0~4.5		
			6.5			2.0~5.0		
			7			2.0~5.5		
12	7	D-ESNP (1.2344 equivalent + Nitrided)	7.5	40.00~450.00	-	2.0~4.5	20~100 (L-S) ≥ 50	X ≥ L+20 and X ≤ L+100
			8			2.0~5.0		
			9			2.0~5.5		
14	7	D-ESDF (1.2344 equivalent Hardened)	10	70.00~500.00	500.1~800.0	2.0~6.0	20~100 (L-S) ≥ 50	X ≥ L+20 and X ≤ L+100
			12			2.5~8.0		
16	7	D-ESNP (1.2344 equivalent + Nitrided)	15	40.00~300.00	-	2.5~10.0	20~100 (L-S) ≥ 50	X ≥ L+20 and X ≤ L+100
			16			2.5~12.0		
18	7	D-ESDF (1.2344 equivalent Hardened)	16	70.00~500.00	500.1~800.0	3.0~13.0	20~100 (L-S) ≥ 50	X ≥ L+20 and X ≤ L+100
			20			3.0~16.0		

Head diameter/thickness of center pin		V (Center pin)
H2	T2	V
3	1.5	1.5
4	2	1.6~2.0
5		2.1~2.5
6	3	2.6~3.0
7		3.1~3.5
8		3.6~4.5
10	5	4.6~5.5
12		5.6~6.5
14	7	6.6~8.0
16		8.1~10.0
18		10.1~12.0
22		12.1~16.0

Order Part No. - L - V - S - X
D-ESNP10 - 250.00 - 6.5 - S80 - X360

Alterations Part No. - L - V - S - X - (KC · WKC...etc.)
D-ESNP10 - 150.3 - 2.5 - S60 - X215 - HC14