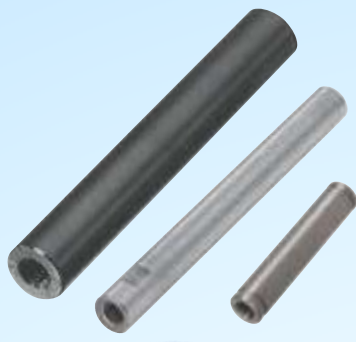
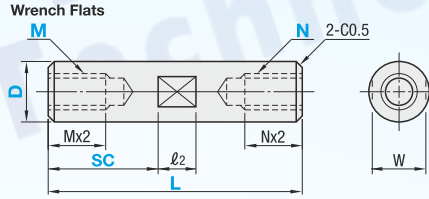
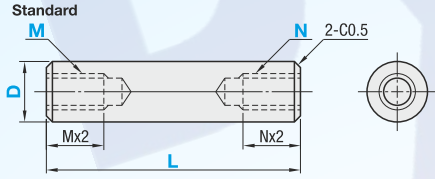


Rotary Shafts - One End Stepped with Retaining Ring Groove / Both Ends Stepped with Retaining Ring Grooves



Type	D		M	S	D	h9 (Cold-drawn)	h7 (Ground)	g6 (Ground)		
	Standard	Wrench Flats							Tolerance	Material
①	DSFMRW	DSFMRWS	h9 (Cold-drawn)	S45C	Black Oxide	4~6	0	0	-0.004	
	DPSFMRW	DPSFMRWS		Equivalent		Electroless Nickel Plating	8, 10	-0.030	-0.012	-0.012
	DSSFMRW	DSSFMRWS		SUS304		—	0	-0.036	-0.015	-0.005
②	DSFHRW	DSFHRWS	h7 (Ground)	S45C	Black Oxide	12~18	0	0	-0.006	
	DPSFHRW	DPSFHRWS		Equivalent		Electroless Nickel Plating	20~30	-0.043	-0.018	-0.017
	DSSFHRW	DSSFHRWS		SUS304		—	0	-0.052	-0.021	-0.020
③	DSFRW	DSFRWS	g6 (Ground)	S45C	Black Oxide	35~50	0	0	-0.009	
	DPSFRW	DPSFRWS		Equivalent						Electroless Nickel Plating
	DSSFRW	DSSFRWS		SUS304	—					
	DHFRW	DHFRWS		SCM435	Black Oxide					
DPHFRW	-	-	Hardness: 30 - 35HRC	Electroless Nickel Plating	-0.025					

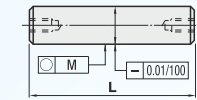
① Surface roughness of Part D for h9 (Cold-drawn) is 1.6. Surface roughness for h7 (Ground) and g6 (Ground) is 6.3.



① Tolerances of L and Other Dimensions

Dimension Over	Dimension or Less	Tolerance
2	6	±0.1
6	30	±0.2
30	120	±0.3
120	400	±0.5
400	1000	—

● Circularity and Straightness



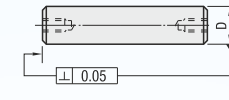
● Not applicable to h9 (Cold-drawn).

● Circularity of Part D

D over	D or Less	Circularity M
3	13	0.004
13	20	0.005
20	40	0.006
40	50	0.007

● Not applicable to h9 (Cold-drawn).

● Perpendicularity



● Not applicable to h9 (Cold-drawn).

① (1)h9 (Cold-drawn)

Part Number		D	L 1mm Increment	M (Coarse) / N (Coarse) Selection										SC 1mm Increment Wrench Flats Type only	W	l ₂
Standard	Wrench Flats															
DSFMRW DPSFMRW DSSFMRW	DSFMRWS DPSFMRWS DSSFMRWS	4	15.0~200.0	2										SC+L ₂ ≤L SC=0 or SC≥1 ● For SC≤Mx3 W-M≥2	—	—
		5	15.0~250.0	2 2.6 3												
		6	15.0~400.0	2.6 3 4												
		8	15.0~500.0	2.6 3 4 5 6												
		10	15.0~600.0	3 4 5 6												
		12	15.0~700.0	4 5 6 8												
		15	15.0~800.0	4 5 6 8 10												
		20	30.0~1000.0	4 5 6 8 10 12 16												
		25	50.0~1000.0	4 5 6 8 10 12 16												
		30	60.0~1000.0	6 8 10 12 16 20												
		35	70.0~1000.0	6 8 10 12 16 20 24												
		40	80.0~1000.0	10 12 16 20 24 30												
		50	100.0~1000.0	12 16 20 24 30												

● For overall length L, Mx2+Nx2≤L is required.

● When L dimension is less than the pilot hole depth of tapped hole, the pilot hole might go through.

② (2)h7 (Ground)

Part Number		D	L 1mm Increment	M (Coarse) / N (Coarse) Selection										SC 1mm Increment Wrench Flats Type only	W	l ₂
Standard	Wrench Flats															
DSFHRW DPSFHRW DSSFHRW	DSFHRWS DPSFHRWS DSSFHRWS	4	15.0~200.0	2										SC+l ₂ ≤L SC=0 or SC≥1 ● For SC≤Mx3 W-M≥2	—	—
		5	15.0~250.0	2 2.6 3												
		6	15.0~400.0	2.6 3 4												
		8	15.0~500.0	2.6 3 4 5 6												
		10	15.0~600.0	3 4 5 6												
		12	15.0~700.0	4 5 6 8												
		15	15.0~800.0	4 5 6 8 10												
		17	30.0~900.0	4 5 6 8 10 12												
		20	30.0~900.0	4 5 6 8 10 12 16												
		25	50.0~900.0	4 5 6 8 10 12 16												
		30	60.0~900.0	6 8 10 12 16 20												
		35	70.0~1000.0	6 8 10 12 16 20 24												
		40	80.0~1000.0	10 12 16 20 24 30												
50	100.0~1000.0	12 16 20 24 30														

● For overall length L, Mx2+Nx2≤L is required

● When L dimension is less than the pilot hole depth of tapped hole, the pilot hole might go through.

③ (3)g6 (Ground)

Part Number		D	L 1mm Increment	M (Coarse) / N (Coarse) Selection										SC 1mm Increment Wrench Flats Type only	W	l ₂
Standard	Wrench Flats															
SFRW PSFRW SSFRW *HFRW *PHFRW	DSFRWS DPSFRWS DSSFRRWS *HFRWS (Wrench flats are not available for D4 and D5.)	4	15.0~200.0	2										C+l ₂ ≤L SC=0 or SC≥1 ● For SC≤Mx3 W-M≥2	—	—
		5	15.0~250.0	2.6 3												
		6	15.0~400.0	2.6 3 4												
		8	15.0~500.0	2.6 3 4 5												
		10	15.0~600.0	3 4 5 6												
		12	15.0~700.0	4 5 6												
		13	15.0~700.0	4 5 6 8												
		15	15.0~800.0	4 5 6 8 10												
		16	30.0~900.0	4 5 6 8 10												
		17	30.0~900.0	4 5 6 8 10												
		18	30.0~900.0	4 5 6 8 10 12												
		20	30.0~1000.0	4 5 6 8 10 12												
		22	40.0~1000.0	4 5 6 8 10 12 16												
		25	50.0~1000.0	4 5 6 8 10 12 16												
		30	60.0~1000.0	6 8 10 12 16												
		35	70.0~1000.0	6 8 10 12 16 20 24												
		40	80.0~1000.0	8 10 12 16 20 24 30												
		50	100.0~1000.0	12 16 20 24 30												

For overall length L, Mx2+Nx2≤L is required

When L dimension is less than the pilot hole depth of tapped hole, the pilot hole might go through.

For DHFRW, DHFRWS, DPHFRW, the upper limit for L dim. is 800.0.

● Basic Specifications

- End Shape (Left) - Tapped
- Keyway - Keyway alteration
- Basic Shape - Straight
- End Shape (Right) - Tapped

ORDERING GUIDE



L M N SC

DSFMRW30 - 250 - M12 - N10 - -
DSFHRWS25 - 200 - M8 - N12 - SC20

www.dymextech.com
india@dymextech.com

Rotary Shafts - One End Stepped with Retaining Ring Groove / Both Ends Stepped with Retaining Ring Grooves



(1)h9 (Cold-drawn)

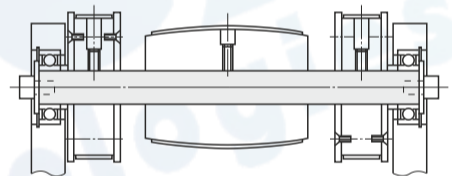
Type	DSFMRW (S45C Equivalent, Black Oxide)									DPSFMRW (S45C Equivalent, Electroless Nickel Plating)									DSSFMRW (S45C Equivalent, Electroless Nickel Plating)								
	DSFMRWS • With wrench flats, add relevant surcharge to the prices shown below.									PDSFMRWS • With wrench flats, add relevant surcharge to the prices shown below.									DSSFMRWS EWith wrench flats, add relevant surcharge to the prices shown below.								
D	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1
4	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0
5																											
6																											
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40																											
50																											

(2)h7 (Ground) (3)g6 (Ground)

Type	DSFHRW, DSFRW (S45C Equivalent, Black Oxide)									DPSFHRW, DPSFRW (S45C Equivalent, Electroless Nickel Plating)									DSSFHRW, DSSFRW (SUS304)								
	DSFHRWS, DSFRWS • With wrench flats, add relevant surcharge to the prices shown below.									DPSFHRWS, DPSFRWS • With wrench flats, add relevant surcharge to the prices shown below.									DSSFHRWS, DSSFRWS • With wrench flats, add relevant surcharge to the prices shown below.								
D	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	L800.1
4	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	1000.0
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45																											

Type	DHFRW (SCM435 Hardness 30-35HRC, Black Oxide) (S45C Equivalent, Black Oxide)								PHFRW							
	DHFRWS EWith wrench flats, add JPY400 to the prices shown below.								(SCM435 Hardness 30-35HRC, Electroless Nickel Plating)							
D	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1	Min. L	L50.1	L100.1	L150.1	L200.1	L300.1	L400.1	L600.1
15	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0	50.0	100.0	150.0	200.0	300.0	400.0	600.0	800.0
20																
25																
30																
35																
40																
50																

Example



L - M - N - SC - (KC, WKC, FC ... etc.)

DSSFRW10 - 150 - M4 - N6 - SC30 - LKC

Alterations	Keyway			Set Screw Flat		
	1	2	1 (for 4th keyway)	1	2	2 Set Screw Flats (Angle Specified)
Code	KC	WKC	KZ	FC	WFC	SFC
Dimension Increment	KC, A = 0.1mm Increment	WKC, C, E, K = 0.1mm Increment	KZ, Z = 0.1mm Increment	FC, G = 1mm Increment	WFC, J, V, W = 1mm Increment	SFC, SG = 1mm Increment AG = 15° Increment
Ordering Example	KC50-A10	WKC5-C20-K5-E10	KC5-A10-WKC20-C10-K60-E10-KZ100-Z10	FC10-G3	WFC10-J15-W10-V20	SFC10-SG3-AG120
Conditions	Not applicable when Shaft Dia. ≤ O5. Key Length ≤ 100.*1, *2			For H dim., G, J, V, SG ≤ 70		

Alterations	Slit Cam Groove	Retaining Ring Groove	L Dimension Tolerance	Tapped Depth
	Code	UC	TA, TB	LKC
Dimension Increment	UC = 1mm Increment	TA, TB = 0.1mm Increment	-	FC, G = 1mm Increment
Ordering Example	UC10	TA10	LKC	MD6
Conditions	Not applicable when Shaft Dia. ≥ O13.	2 ≤ TA, TB ≤ 150 For m dim.	Not applicable when L ≥ 800.	Not applicable when M = 2, 2.6, 24 or 30.

- For details about Alterations
- When combined with other alterations, ±2 degree phase difference may occur. Provide 2mm or more clearance between this alteration and others.
- When multiple keyways or set screw flats are specified, they are added in the same plane. When the distance of the alterations are over 500mm, ±2 degree phase difference may occur.
- *1. When multiple keyways are added with 2mm or less clearance between them, keyways will interfere.
- *2. When the keyway position is less than 1mm away from the end face, R is not applied

