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Catalog Series	Material	Hardness	Diameter mm	Length mm	Pages
 S40PX0MHG...	416 Stainless Steel, Cond. T, Ground	HRC 26...32	3...10	25...400	3-2
 S40PH0MCHS...	Steel AISI C1060 Case-Hardened and Ground	HRC 60...63	8...20	75...1000	3-3
 S40PX0MCHS...	Stainless Steel AISI 420 Case-Hardened and Ground	HRC 50...55	8...20	75...1000	3-4
 A 7Q 1M...	Chrome Vanadium Alloy DIN 175 Tool Steel Ground and Polished	Dependent on Heat Treatment	2...20	1000	3-5
 A 7X 1M...	303 Stainless Steel Hardened and Ground Under Size Diameters	HRB 84	2...12	25...500	3-6
 S40AW6M...	Aluminum 6061-T6 Hard Anodized Solid and Hollow	HRC 60	8...50	250...1000	3-7
 S40LPSM...	Bearing Steel AISI 52100 Hardened	HRC 58...62	6...25	100...1000	3-8

Other lengths and diameters not listed are available on special request.

For Shaft Related Components, see:

Section 4 - Shaft Collars

Bore Reducers
Tolerance Rings
Shaftloc®
Shaft Support

Section 5 - Bearings

Section 10 - Retaining Rings
Washers

HARDENED PRECISION GROUND SHAFTING



416 STAINLESS STEEL
COND. T (HRC 26...32)

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

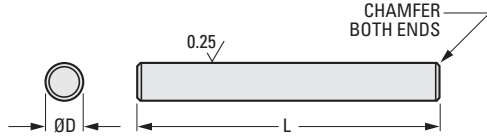
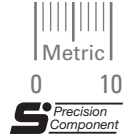
> MATERIAL:

416 Stainless Steel Cond. T (HRC 26...32)

> STRAIGHTNESS:

0.0003 mm/mm

Other lengths and diameters available as special order.
Grooved shafts available as special order.



METRIC COMPONENT CATALOG NUMBER

S 40 P X 0 M H G M -

Diameter Code Length Code

Diameter Code	D Diameter g6	D Tolerance
3	3	-0.002/-0.008
4	4	-0.004/-0.012
5	5	-0.004/-0.012
6	6	-0.004/-0.012
8	8	-0.005/-0.014
A	10	-0.005/-0.014

Length Code	L ± 0.8 Length mm
025	25
030	30
035	35
040	40
045	45
050	50
055	55
060	60
065	65
070	70
075	75
080	80
085	85
090	90
095	95
100	100
110	110
120	120
130	130
140	140
150	150
160	160
170	170
180	180
190	190
200	200
210	210
220	220
230	230
240	240
250	250
260	260
270	270
280	280
290	290
300	300
325	325
350	350
375	375
400	400

HARDENED PRECISION GROUND SHAFTING



C1060 STEEL
CASE HARDENED HRC 60...63

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

> MATERIAL:

Steel AISI C1060 Case-Hardened to HRC 60...63

> STRAIGHTNESS:

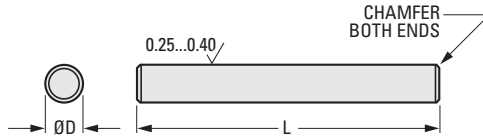
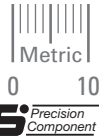
0.0003 mm/mm

> SPECIFICATIONS:

Minimum Depth of Hardness:

8 & 10 mm diameters is 1 mm.
12, 16 & 20 mm diameters is 1.5 mm.

Other lengths and diameters available as special order.



METRIC COMPONENT CATALOG NUMBER

S 4 0 P H O M C H S -

Diameter Code Length Code

Diameter Code	D Diameter h6	D Tolerance
08	8	0/-0.009
10	10	0/-0.009
12	12	0/-0.011
16	16	0/-0.011
20	20	0/-0.013

Length Code	L ± 0.8 Length mm
075	75
100	100
125	125
150	150
175	175
200	200
225	225
250	250
275	275
300	300
325	325
350	350
375	375
400	400
425	425
450	450
475	475
500	500
525	525
550	550
575	575
600	600
625	625
650	650
700	700
750	750
800	800
850	850
900	900
A00	1000

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HARDENED PRECISION GROUND SHAFTING



420 STAINLESS STEEL
CASE HARDENED HRC 50...55

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

> MATERIAL:

Stainless Steel AISI 420 Case-Hardened
to HRC 50...55

> STRAIGHTNESS:

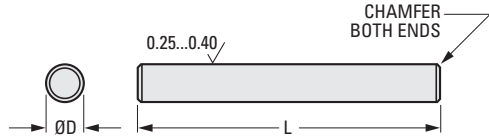
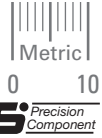
0.0003 mm/mm

> SPECIFICATIONS:

Minimum Depth of Hardness:

8 mm diameters is 1 mm.
12, 16 & 20 mm diameters is 1.5 mm.

Other lengths and diameters available
as special order.



METRIC COMPONENT CATALOG NUMBER

S 4 0 P X 0 M C H S -

Diameter Code Length Code

Diameter Code	D Diameter h6	D Tolerance
08	8	0/-0.009
12	12	0/-0.011
16	16	0/-0.011
20	20	0/-0.013

Length Code	L ± 0.8 Length mm
075	75
100	100
125	125
150	150
175	175
200	200
225	225
250	250
275	275
300	300
325	325
350	350
375	375
400	400
425	425
450	450
475	475
500	500
525	525
550	550
575	575
600	600
625	625
650	650
700	700
750	750
800	800
850	850
900	900
A00	1000

DRILL RODS

SDP/SI

TOOL STEEL
DIN 175

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

> MATERIAL:

Chrome Vanadium Alloy

> FINISH:

Ground & Polished

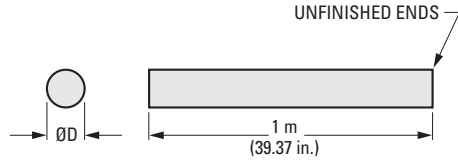
> RECOMMENDED HEAT TREATMENT:

Oil Quench 810°C – 860°C

For HRC 62, 204°C (Draw Temp.)

For HRC 60, 252°C (Draw Temp.)

For HRC 56, 299°C (Draw Temp.)



METRIC COMPONENT

Catalog Number	D Diameter h9	D Tolerance	Length
A 7Q 1M020	2	0/-0.025	Sold in 1 Meter Pieces Only
A 7Q 1M030	3	0/-0.025	
A 7Q 1M040	4	0/-0.030	
A 7Q 1M050	5	0/-0.030	
A 7Q 1M060	6	0/-0.030	
A 7Q 1M080	8	0/-0.036	
A 7Q 1M100	10	0/-0.036	
A 7Q 1M120	12	0/-0.043	
A 7Q 1M140	14	0/-0.043	
A 7Q 1M160	16	0/-0.043	
A 7Q 1M180	18	0/-0.043	
A 7Q 1M200	20	0/-0.052	

UNDERSIZE DIAMETERS

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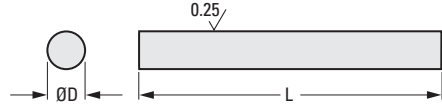
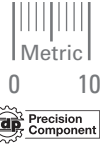
> MATERIAL:

303 Stainless Steel

> STRAIGHTNESS:

0.0004 mm/mm

Grooving and other modifications available on special order.



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METRIC COMPONENT CATALOG NUMBER

A 7 X 1 M

Diameter Code Length Code

Diameter Code	D Diameter g6	D Tolerance
020	2	-0.002/-0.008
025	2.5	
030	3	
040	4	
050	5	-0.004/-0.012
060	6	
070	7	
080	8	
090	9	-0.005/-0.014
100	10	
120	12	
		-0.006/-0.017

Length Code	L ± 0.4 Length mm
025	25
050	50
075	75
100	100
150	150
200	200
300	300
400	400
500	500

SOLID AND HOLLOW SHAFTS

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› **MATERIAL:**

Aluminum 6061-T6
Hard Anodized, HRC 60

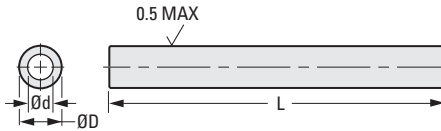
› **STRAIGHTNESS:**

DIN 1798

Recommended for use with:
S99GSPM..., **S99GLPM...** and
S99GLZM... series linear
bearings

DryLin® is a registered trademark
of the Iigus Corporation.

Other lengths available
upon request.



**METRIC COMPONENT
CATALOG NUMBER**

S 4 0 A W 6 M

Diameter Length
Code Code

Diameter Code	D Diameter h8	D Tolerance	d Diameter	Weight kg/m
08	8	0/-0.022	—	0.7
10	10	0/-0.022	—	1.061
12	12	0/-0.027	—	1.566
16	16	0/-0.027	—	2.779
20	20	0/-0.033	—	4.345
25	25	0/-0.033	—	6.843
30	30	0/-0.033	15	9.78
40	40	0/-0.039	20	13.1
50	50	0/-0.039	28	18.622

Length Code	L Length ± 1 mm
025	250
050	500
100	1000

PIPE SHAFTS



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BEARINGS STEEL
WEIGHT REDUCTION
DESIGN FLEXIBILITY



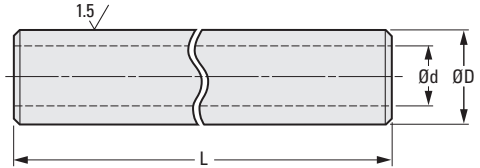
> MATERIAL:

AISI 52100 Steel, Hardened
to HRC 58...62

> STRAIGHTNESS:

0.0003 mm/mm

Other lengths available
upon request.



METRIC COMPONENT

Catalog Number	d Bore ± 0.5	D Diameter g6	D Tolerance	L Length	Case Depth
S40LPSM02060100	2	6	-0.004/-0.012	100	1
S40LPSM02060150	2	6	-0.004/-0.012	150	1
S40LPSM02060200	2	6	-0.004/-0.012	200	1
S40LPSM02060300	2	6	-0.004/-0.012	300	1
S40LPSM03080100	3	8	-0.005/-0.014	100	1
S40LPSM03080150	3	8	-0.005/-0.014	150	1
S40LPSM03080200	3	8	-0.005/-0.014	200	1
S40LPSM03080300	3	8	-0.005/-0.014	300	1
S40LPSM03080400	3	8	-0.005/-0.014	400	1
S40LPSM04100100	4	10	-0.005/-0.014	100	1
S40LPSM04100150	4	10	-0.005/-0.014	150	1
S40LPSM04100200	4	10	-0.005/-0.014	200	1
S40LPSM04100300	4	10	-0.005/-0.014	300	1
S40LPSM04100400	4	10	-0.005/-0.014	400	1
S40LPSM04100500	4	10	-0.005/-0.014	500	1
S40LPSM04100600	4	10	-0.005/-0.014	600	1
S40LPSM06120200	6	12	-0.006/-0.017	200	1
S40LPSM06120300	6	12	-0.006/-0.017	300	1
S40LPSM06120400	6	12	-0.006/-0.017	400	1
S40LPSM06120500	6	12	-0.006/-0.017	500	1
S40LPSM06120600	6	12	-0.006/-0.017	600	1
S40LPSM06120800	6	12	-0.006/-0.017	800	1
S40LPSM10160300	10	16	-0.006/-0.017	300	1.5
S40LPSM10160400	10	16	-0.006/-0.017	400	1.5
S40LPSM10160500	10	16	-0.006/-0.017	500	1.5
S40LPSM10160600	10	16	-0.006/-0.017	600	1.5
S40LPSM10160800	10	16	-0.006/-0.017	800	1.5
S40LPSM10161000	10	16	-0.006/-0.017	1000	1.5
S40LPSM14200300	14	20	-0.007/-0.020	300	1.5
S40LPSM14200400	14	20	-0.007/-0.020	400	1.5
S40LPSM14200500	14	20	-0.007/-0.020	500	1.5
S40LPSM14200600	14	20	-0.007/-0.020	600	1.5
S40LPSM14200800	14	20	-0.007/-0.020	800	1.5
S40LPSM14201000	14	20	-0.007/-0.020	1000	1.5
S40LPSM17250300	17	25	-0.007/-0.020	300	1.5
S40LPSM17250400	17	25	-0.007/-0.020	400	1.5
S40LPSM17250500	17	25	-0.007/-0.020	500	1.5
S40LPSM17250600	17	25	-0.007/-0.020	600	1.5
S40LPSM17250800	17	25	-0.007/-0.020	800	1.5
S40LPSM17251000	17	25	-0.007/-0.020	1000	1.5