



Gear Rack Catalog

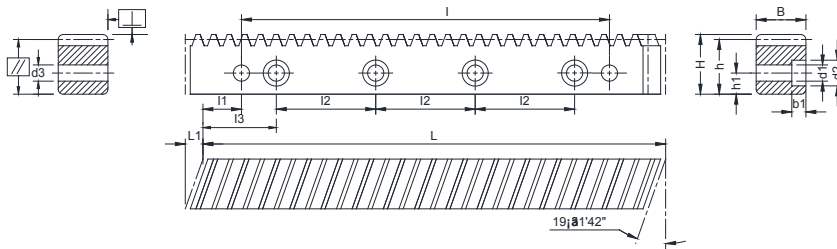
Rack Dictionary

Module System							
Helical Racks							
	SCM440 / 42CrMo	Induction Hardened	Ground Teeth	HRC 50-55	0.036 mm / 1000 mm	DIN 6h25	3
	SCM440 / 42CrMo	Quenched and Tempered	Milled Teeth	HRC 21-24	0.100 mm / 1000 mm	DIN 8e27	4
	SCM440 / 42CrMo	Induction Hardened	Milled Teeth	HRC 50-55	0.200 mm / 1000 mm	DIN 10e27	5
	S45C / C45	Induction Hardened	Ground Teeth	HRC 48-52	0.036 mm / 1000 mm	DIN 6h25	6
	S45C / C45	Quenched and Tempered	Milled Teeth	HRC 18-20	0.100 mm / 1000 mm	DIN 8e27	7
	S45C / C45	Induction Hardened	Milled Teeth	HRC 48-52	0.200 mm / 1000 mm	DIN 10e27	8
Straight Racks							
	SCM440 / 42CrMo	Induction Hardened	Ground Teeth	HRC 50-55	0.036 mm / 1000 mm	DIN 6h25	9
	SCM440 / 42CrMo	Quenched and Tempered	Milled Teeth	HRC 21-24	0.100 mm / 1000 mm	DIN 8e27	10
	SCM440 / 42CrMo	Induction Hardened	Milled Teeth	HRC 50-55	0.200 mm / 1000 mm	DIN 10e27	11
	S45C / C45	Induction Hardened	Ground Teeth	HRC 48-52	0.036 mm / 1000 mm	DIN 6h25	12
	S45C / C45	Quenched and Tempered	Milled Teeth	HRC 18-20	0.100 mm / 1000 mm	DIN 8e27	13
	S45C / C45	Induction Hardened	Milled Teeth	HRC 48-52	0.200 mm / 1000 mm	DIN 10e27	14

Helical Racks

SCM440 / 42CrMo4

0.036 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 50-55
Tooth Surface Finish	Ground
Side Surface Finish	4 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 6h25

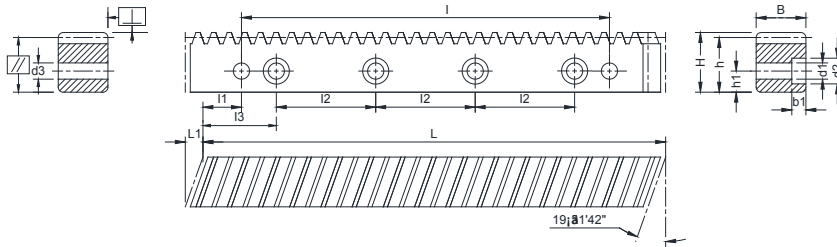
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50RG	1	500.00	5.35	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	36
MR1.5-50RGB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	36
MR1.5-100RGB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	36
MR2-50RGB	2	500.00	8.50	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	36
MR2-100RGB	2	1000.00	8.50	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	36
MR3-50RGB	3	500.00	10.30	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	36
MR3-100RGB	3	1000.00	10.30	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	36
MR4-50RGB	4	506.67	13.80	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	36
MR4-100RGB	4	1000.00	13.80	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	36
MR5-50RGB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	36
MR5-100RGB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	36
MR6-50RGB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	36
MR6-100RGB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	36
MR8-50RGB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	36
MR8-100RGB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	36
MR10-100RGB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	36

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Helical Racks

SCM440 / 42CrMo4

0.1 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	-
Tooth Surface Hardness	HRC 21-24
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 8e27

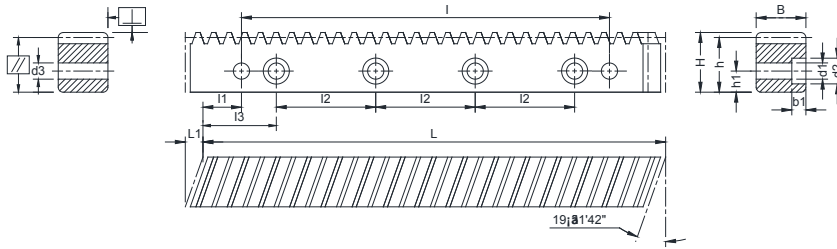
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50RQ	1	500.00	5.35	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	100
MR1.5-50RQB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	100
MR1.5-100RQB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	100
MR2-50RQB	2	500.00	8.90	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	100
MR2-100RQB	2	1000.00	8.90	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	100
MR3-50RQB	3	500.00	10.60	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	100
MR3-100RQB	3	1000.00	10.60	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	100
MR4-50RQB	4	506.67	14.20	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	100
MR4-100RQB	4	1000.00	14.20	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	100
MR5-50RQB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	100
MR5-100RQB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	100
MR6-50RQB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	100
MR6-100RQB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	100
MR8-50RQB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	100
MR8-100RQB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	100
MR10-100RQB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	100

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Helical Racks

SCM440 / 42CrMo4

0.2 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 50-55
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 10e27

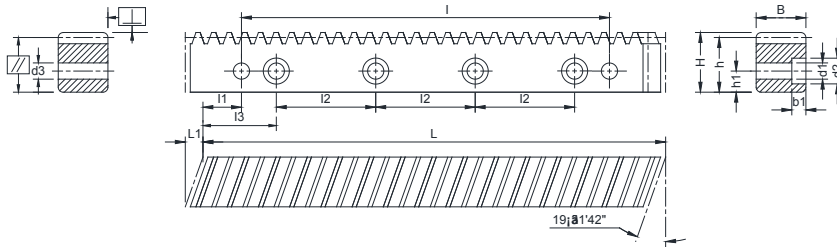
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50RH	1	500.00	5.35	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	200
MR1.5-50RHB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	200
MR1.5-100RHB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	200
MR2-50RHB	2	500.00	8.50	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	200
MR2-100RHB	2	1000.00	8.50	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	200
MR3-50RHB	3	500.00	10.30	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	200
MR3-100RHB	3	1000.00	10.30	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	200
MR4-50RHB	4	506.67	13.80	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	200
MR4-100RHB	4	1000.00	13.80	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	200
MR5-50RHB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	200
MR5-100RHB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	200
MR6-50RHB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	200
MR6-100RHB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	200
MR8-50RHB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	200
MR8-100RHB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	200
MR10-100RHB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	200
MR12-100RHB	12	1000.00	42.56	120	120	108.0	25	750.0	125.0	125	40.0	38	40	39	58	19.7	8	200

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L1000.

Helical Racks

S45C / C45

0.036 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 48-52
Tooth Surface Finish	Ground
Side Surface Finish	4 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 6h25

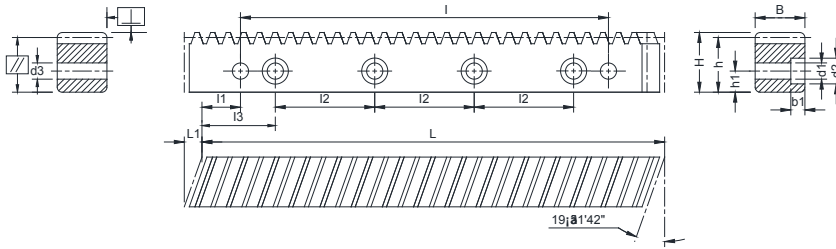
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
SR1-50RG	1	500.00	3.14	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	36
SR1.5-50RGB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	36
SR1.5-100RGB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	36
SR2-50RGB	2	500.00	8.50	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	36
SR2-100RGB	2	1000.00	8.50	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	36
SR3-50RGB	3	500.00	10.30	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	36
SR3-100RGB	3	1000.00	10.30	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	36
SR4-50RGB	4	506.67	13.80	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	36
SR4-100RGB	4	1000.00	13.80	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	36
SR5-50RGB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	36
SR5-100RGB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	36
SR6-50RGB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	36
SR6-100RGB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	36
SR8-50RGB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	36
SR8-100RGB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	36
SR10-100RGB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	36
SR12-100RGB	12	1000.00	42.56	120	120	108.0	25	750.0	125.0	125	40.0	38	40	39	58	19.7	8	36

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L1000.

Helical Racks

S45C / C45

0.1 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	-
Tooth Surface Hardness	HRC 18-20
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 8e27

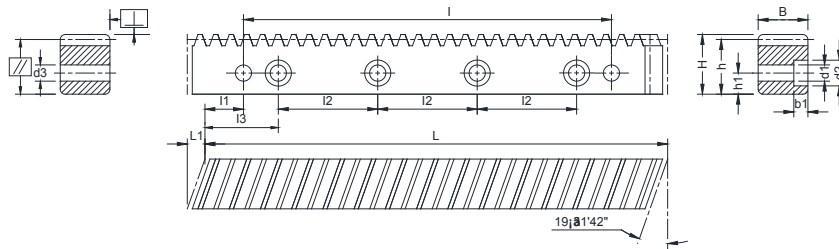
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
SR1-50RQ	1	500.00	3.14	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	100
SR1.5-50RQB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	100
SR1.5-100RQB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	100
SR2-50RQB	2	500.00	8.90	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	100
SR2-100RQB	2	1000.00	8.90	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	100
SR3-50RQB	3	500.00	10.60	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	100
SR3-100RQB	3	1000.00	10.60	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	100
SR4-50RQB	4	506.67	14.20	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	100
SR4-100RQB	4	1000.00	14.20	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	100
SR5-50RQB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	100
SR5-100RQB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	100
SR6-50RQB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	100
SR6-100RQB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	100
SR8-50RQB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	100
SR8-100RQB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	100
SR10-100RQB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	100

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Helical Racks

S45C / C45

0.2 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	Right
Helix Angle	19°31'42"
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 48-52
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 10e27

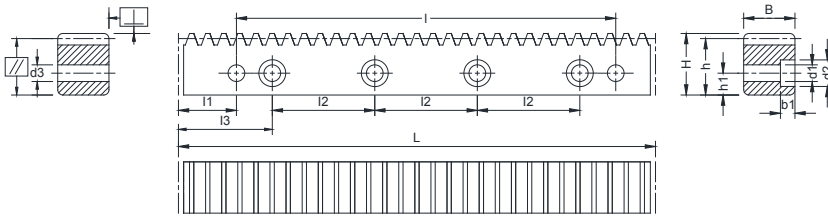
Racks #	Module	L	L1	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
SR1-50RH	1	500.00	5.35	15	15	14.0	150	-	-	-	-	-	-	-	-	-	-	200
SR1.5-50RHB	1.5	500.00	6.70	19	19	17.5	100	436.6	31.7	125	62.5	7	8	7	11	5.7	4	200
SR1.5-100RHB	1.5	1000.00	6.70	19	19	17.5	200	936.6	31.7	125	62.5	7	8	7	11	5.7	8	200
SR2-50RHB	2	500.00	8.50	24	24	22.0	75	436.6	31.7	125	62.5	7	8	7	11	5.7	4	200
SR2-100RHB	2	1000.00	8.50	24	24	22.0	150	936.6	31.7	125	62.5	7	8	7	11	5.7	8	200
SR3-50RHB	3	500.00	10.30	29	29	26.0	50	430.0	35.0	125	62.5	9	9	10	15	7.7	4	200
SR3-100RHB	3	1000.00	10.30	29	29	26.0	100	930.0	35.0	125	62.5	9	9	10	15	7.7	8	200
SR4-50RHB	4	506.67	13.80	39	39	35.0	38	433.0	33.3	125	62.5	9	12	10	15	7.7	4	200
SR4-100RHB	4	1000.00	13.80	39	39	35.0	75	933.4	33.3	125	62.5	9	12	10	15	7.7	8	200
SR5-50RHB	5	500.00	17.40	49	49	34.0	30	425.0	37.5	125	62.5	13	12	14	20	11.7	4	200
SR5-100RHB	5	1000.00	17.40	49	49	34.0	60	925.0	37.5	125	62.5	13	12	14	20	11.7	8	200
SR6-50RHB	6	500.00	20.90	59	59	43.0	25	425.0	37.5	125	62.5	17	16	18	26	15.7	4	200
SR6-100RHB	6	1000.00	20.90	59	59	43.0	50	925.0	37.5	125	62.5	17	16	18	26	15.7	8	200
SR8-50RHB	8	480.00	28.00	79	79	71.0	18	240.0	120.0	120	60.0	21	25	22	33	19.7	4	200
SR8-100RHB	8	960.00	28.00	79	79	71.0	36	720.0	120.0	120	60.0	21	25	22	33	19.7	8	200
SR10-100RHB	10	1000.00	35.11	99	99	89.0	30	750.0	125.0	125	62.5	32	32	33	48	19.7	8	200
SR12-100RHB	12	1000.00	42.56	120	120	108.0	25	750.0	125.0	125	40.0	38	40	39	58	19.7	8	200

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L1000.

Straight Racks

SCM440 / 42CrMo4

0.036 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 50-55
Tooth Surface Finish	Ground
Side Surface Finish	4 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 6h25

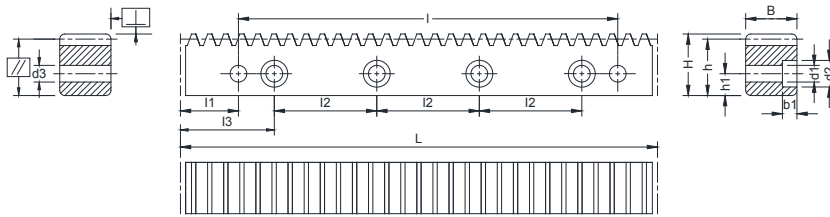
Racks #	Module	L	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50G	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	36
MR1.5-50GB	1.5	499.51	19	19	17.5	106	441.5	29.0	124.88	62.44	7	8	7	11	5.7	4	36
MR1.5-100GB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	36
MR2-50GB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	36
MR2-100GB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	36
MR3-50GB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	36
MR3-100GB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	36
MR4-50GB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	36
MR4-100GB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	36
MR5-50GB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	36
MR5-100GB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	36
MR6-50GB	6	508.94	59	59	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	36
MR6-100GB	6	1017.88	59	59	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	36
MR8-50GB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	36
MR8-100GB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	36
MR10-100GB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	36

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Straight Racks

SCM440 / 42CrMo4

0.1 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	-
Tooth Surface Hardness	HRC 21-24
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 8e27

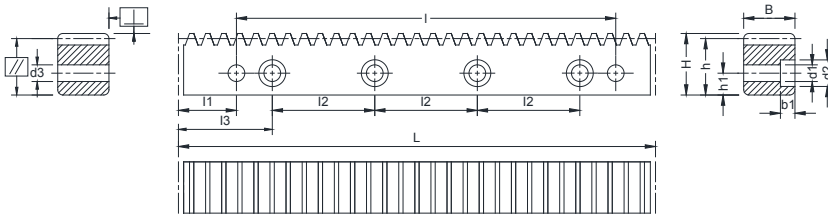
Racks #	Module	L	B	H	h	No.of Teeth	I	I1	I2	I3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50Q	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	100
MR1.5-50QB	1.5	499.51	19	19	17.5	106	441.5	29.0	124.88	62.44	7	8	7	11	5.7	4	100
MR1.5-100QB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	100
MR2-50QB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	100
MR2-100QB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	100
MR3-50QB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	100
MR3-100QB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	100
MR4-50QB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	100
MR4-100QB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	100
MR5-50QB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	100
MR5-100QB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	100
MR6-50QB	6	508.94	59	59	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	100
MR6-100QB	6	1017.88	59	59	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	100
MR8-50QB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	100
MR8-100QB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	100
MR10-100QB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	100

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Straight Racks

SCM440 / 42CrMo4

0.2 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	SCM440/42CrMo4
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 50-55
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 10e27

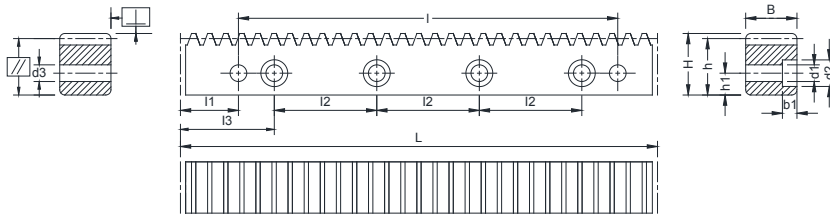
Racks #	Module	L	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
MR1-50H	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	200
MR1.5-50HB	1.5	499.51	19	19	17.5	106	441.5	29.0	124.88	62.44	7	8	7	11	5.7	4	200
MR1.5-100HB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	200
MR2-50HB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	200
MR2-100HB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	200
MR3-50HB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	200
MR3-100HB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	200
MR4-50HB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	200
MR4-100HB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	200
MR5-50HB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	200
MR5-100HB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	200
MR6-50HB	6	508.94	59	59	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	200
MR6-100HB	6	1017.88	59	59	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	200
MR8-50HB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	200
MR8-100HB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	200
MR10-100HB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	200

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Straight Racks

S45C / C45

0.036 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 48-52
Tooth Surface Finish	Ground
Side Surface Finish	4 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 6h25

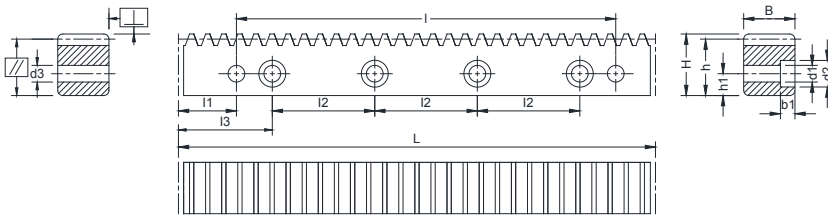
Racks #	Module	L	B	H	h	No.of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No.of Holes	Fp 1000 (μm)
SR1-50G	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	36
SR1.5-50GB	1.5	499.51	19	19	17.5	106	440.5	29.0	124.88	62.44	7	8	7	11	5.7	4	36
SR1.5-100GB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	36
SR2-50GB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	36
SR2-100GB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	36
SR3-50GB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	36
SR3-100GB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	36
SR4-50GB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	36
SR4-100GB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	36
SR5-50GB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	36
SR5-100GB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	36
SR6-50GB	6	508.94	59	59	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	36
SR6-100GB	6	1017.88	59	59	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	36
SR8-50GB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	36
SR8-100GB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	36
SR10-100GB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	36
SR12-100GB	12	1017.90	120	120	108.0	27	763.40	127.23	127.23	63.60	38	40	39	58	19.7	8	36

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Straight Racks

S45C / C45

0.1 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	-
Tooth Surface Hardness	HRC 18-20
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 8e27

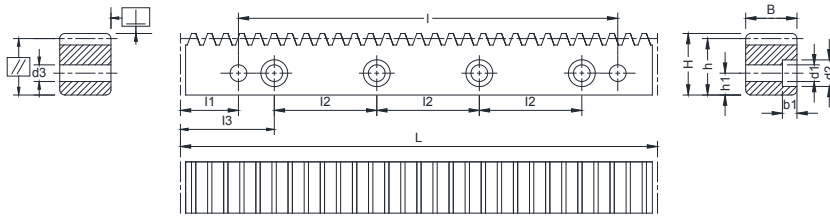
Racks #	Module	L	B	H	h	No. of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No. of Holes	Fp 1000 (μm)
SR1-50Q	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	100
SR1.5-50QB	1.5	499.51	19	19	17.5	106	441.5	29.0	124.88	62.44	7	8	7	11	5.7	4	100
SR1.5-100QB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	100
SR2-50QB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	100
SR2-100QB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	100
SR3-50QB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	100
SR3-100QB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	100
SR4-50QB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	100
SR4-100QB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	100
SR5-50QB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	100
SR5-100QB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	100
SR6-50QB	6	508.94	59	59	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	100
SR6-100QB	6	1017.88	59	59	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	100
SR8-50QB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	100
SR8-100QB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	100
SR10-100QB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	100

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.

Straight Racks

S45C / C45

0.2 mm / 1000 mm Fp



Specifications

Pressure Angle	20°
Hand of Helix	-
Helix Angle	-
Material	C45
Heat Treatment	Quenched and Tempered
Tooth Surface Treatment	Induction Hardened
Tooth Surface Hardness	HRC 48-52
Tooth Surface Finish	Milled
Side Surface Finish	3 Sides Ground
End Surface Finish	Milled for Linking
Precision Grade	DIN 10e27

Racks #	Module	L	B	H	h	No. of Teeth	l	l1	l2	l3	b1	h1	d1	d2	d3	No. of Holes	Fp 1000 (μm)
SR1-50H	1	499.51	15	15	14.0	159	-	-	-	-	-	-	-	-	-	-	200
SR1.5-50HB	1.5	499.51	19	19	17.5	106	441.5	29.0	124.88	62.44	7	8	7	11	5.7	4	200
SR1.5-100HB	1.5	999.03	19	19	17.5	212	941.0	29.0	124.88	62.44	7	8	7	11	5.7	8	200
SR2-50HB	2	502.65	24	24	22.0	80	440.1	31.3	125.66	62.83	7	8	7	11	5.7	4	200
SR2-100HB	2	1005.31	24	24	22.0	160	942.7	31.3	125.66	62.83	7	8	7	11	5.7	8	200
SR3-50HB	3	508.94	29	29	26.0	54	440.1	34.4	127.23	63.62	9	9	10	15	7.7	4	200
SR3-100HB	3	1017.88	29	29	26.0	108	949.1	34.4	127.23	63.62	9	9	10	15	7.7	8	200
SR4-50HB	4	502.65	39	39	35.0	40	427.7	37.5	125.66	62.83	9	12	10	15	7.7	4	200
SR4-100HB	4	1005.31	39	39	35.0	80	930.3	37.5	125.66	62.83	9	12	10	15	7.7	8	200
SR5-50HB	5	502.65	49	49	34.0	32	442.4	30.1	125.66	62.83	13	12	14	20	11.7	4	200
SR5-100HB	5	1005.31	49	49	34.0	64	945.0	30.1	125.66	62.83	13	12	14	20	11.7	8	200
SR6-50HB	6	508.94	59	49	43.0	27	446.1	31.4	127.23	63.62	17	16	18	26	15.7	4	200
SR6-100HB	6	1017.88	59	49	43.0	54	955.0	31.4	127.23	63.62	17	16	18	26	15.7	8	200
SR8-50HB	8	502.65	79	79	71.0	20	449.5	26.6	125.66	62.83	21	25	22	33	19.7	4	200
SR8-100HB	8	1005.31	79	79	71.0	40	952.0	26.6	125.66	62.83	21	25	22	33	19.7	8	200
SR10-100HB	10	1005.31	99	99	89.0	32	753.96	125.7	125.66	62.83	32	32	33	48	19.7	8	200

Note: 1. Fp1000: Total Pitch Error, i.e. The maximum permissible deviation (per 1000mm) of measured length of the rack compared to the theoretical length L₁₀₀₀.