

Twin cylinders Series QX

New

Double-acting, magnetic, guided \varnothing 10x2, 16x2, 20x2, 25x2, 32x2

- » High force
- » Precise movement
- » Integrated guide



The Series QX offers a range of actuators covering a great number of applications which require a guided linear movement. The design of the double piston, besides assuring a solid and effective guide, offers double force in compact dimensions.

Where a high force with precise movement is required, along with a non-rotation function and integrated guide, the QX cylinders are the ideal solution. The QX Series offers two guide versions, with sintered bronze bushes or with linear ball bearings.

GENERAL DATA

Type of construction	compact, non magnetic QXT = sintered bronze bushes QXB = linear ball bearings
Operation	double-acting
Materials	anodized aluminium body and flange, seals PU, piston rod stainless steel AISI 303 for QXT and hardened steel C50 for QXB
Operating pressure	P. min 2,5 bar - P. max 8 bar
Operating temperature	0° + 80°C (with dry air - 20°C)
Fluid	clean air, without lubrication if lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.
Bore	\varnothing 6, 10, 16
Stroke	see table
Mounting method	by means of threaded body

STANDARD STROKES FOR TWIN-ROD CYLINDERS SERIES QX

■ = Double-acting

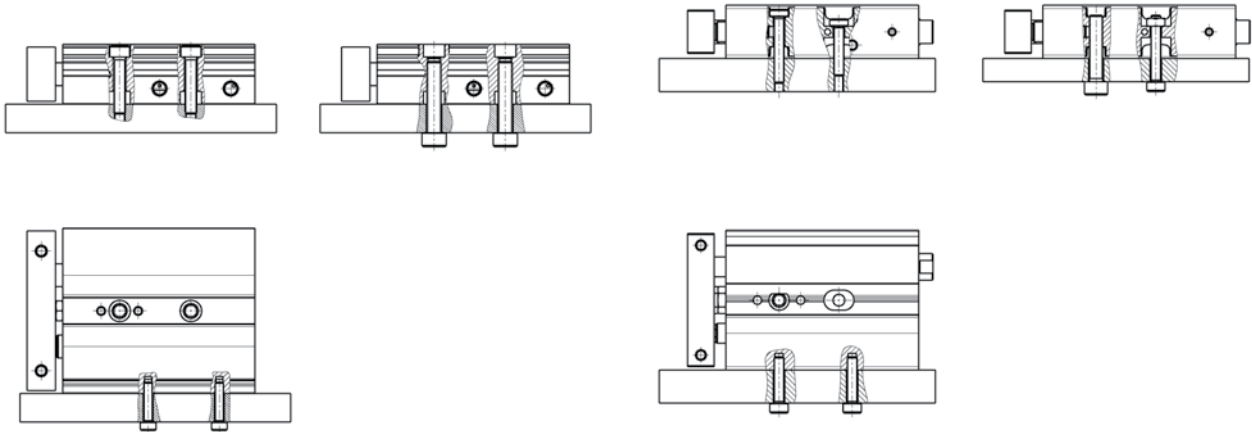
∅	10	20	30	40	50	75	100
10	■	■	■	■	■	■	
16	■	■	■	■	■	■	■
20	■	■	■	■	■	■	■
25	■	■	■	■	■	■	■
32	■	■	■	■	■	■	■

CODING EXAMPLE

QX	T	2	A	020	A	050
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QX	SERIES
2	OPERATION 2 = double-acting (1 flange) radial pressure supply 3 = through-rod (double-flange), radial pressure supply
T	VERSION T = sintered bronze bushes B = linear ball bearings
A	MATERIALS A = anodized aluminium body, rolled stainless steel 303 piston rod
020	BORE 10 mm 16 mm 20 mm 25 mm 32 mm
A	TYPE OF DESIGN A = standard
050	STROKE see table

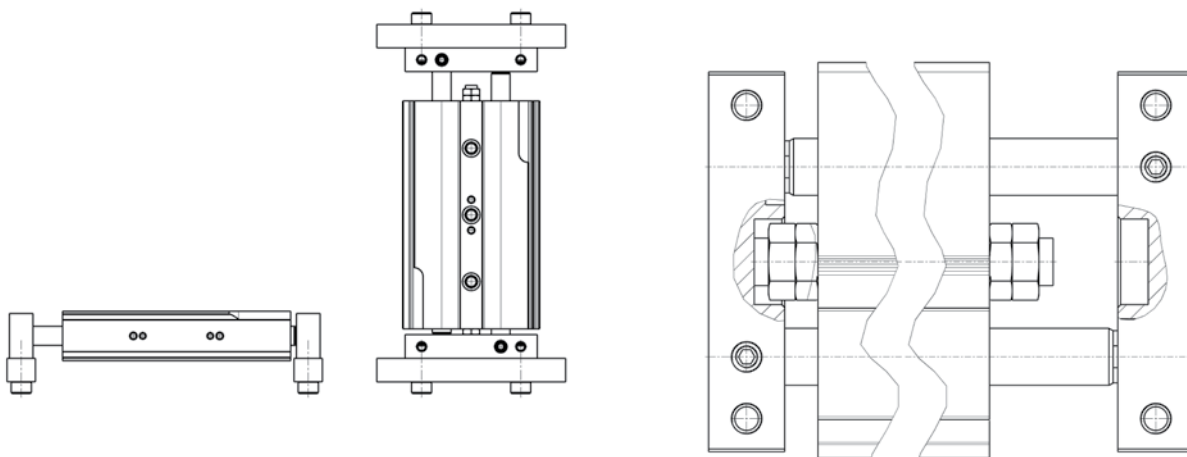
Fixing examples with the flange in motion



For $\varnothing 16 \div 32$

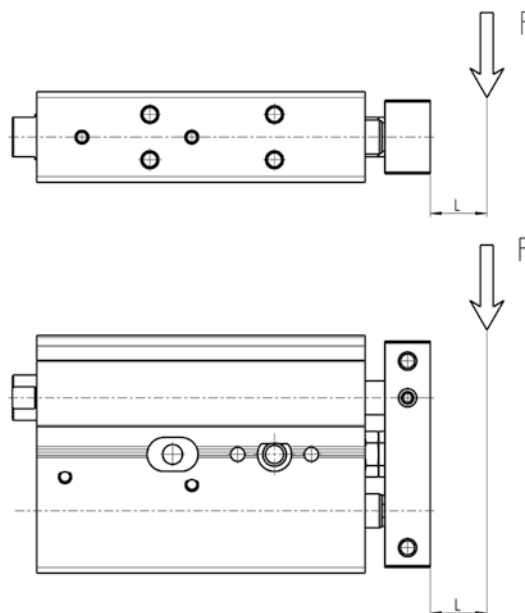
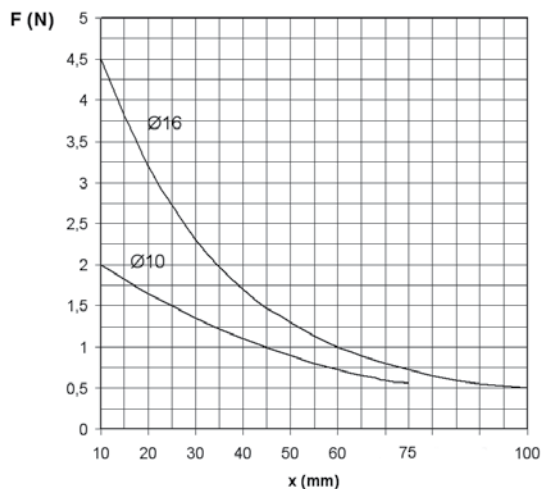
To mount the sensors of QX cylinders $\varnothing 10$ in the middle grooves, it is advisable to use M3 screws UNI 9327 and nuts M3 UNI 5589.

Fixing examples with the cylinder body in motion



The front and rear regulation screw allows the adjustment of the stroke up to -10mm .

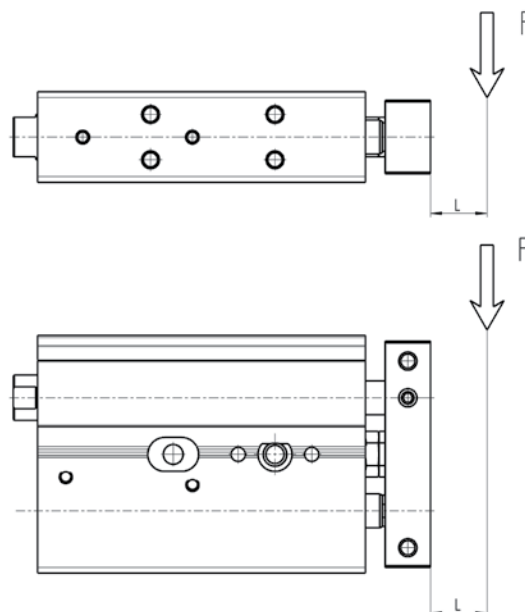
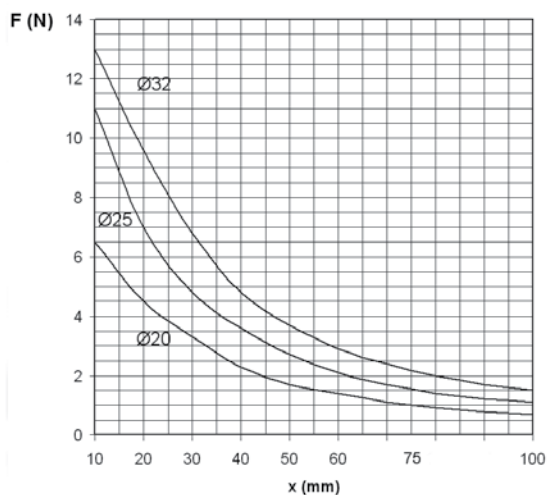
DIAGRAM MAX APPLICABLE LOADS DEPENDING ON THE STROKE (X)



X = cylinder stroke mm.
F = load applied on the flange in N.

Load " F " should be considered fixed on the flange of the cylinder and with a theoretical projection of L = 0 mm.

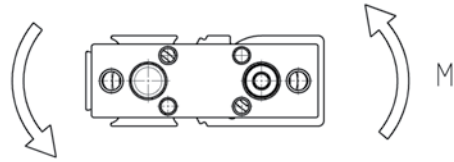
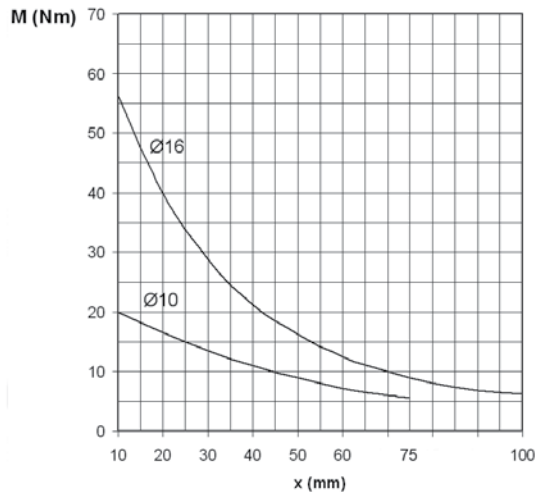
DIAGRAM MAX APPLICABLE LOADS DEPENDING ON THE STROKE (X)



X = cylinder stroke mm.
F = load applied on the flange in N.

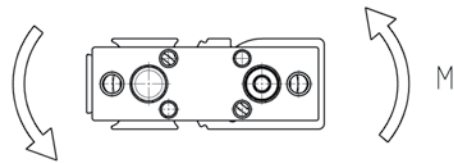
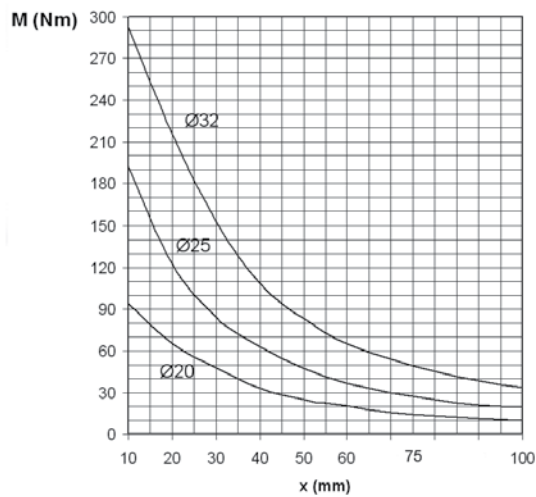
Load " F " should be considered fixed on the flange of the cylinder and with a theoretical projection of L = 0 mm.

DIAGRAM MAX TORQUE MOMENT DEPENDING ON THE STROKE (X)



X = cylinder stroke in mm.
M = torque moment applied on the flange in Nm.

DIAGRAM MAX TORQUE MOMENT DEPENDING ON THE STROKE (X)



X = cylinder stroke in mm.
M = torque moment applied on the flange in Nm.

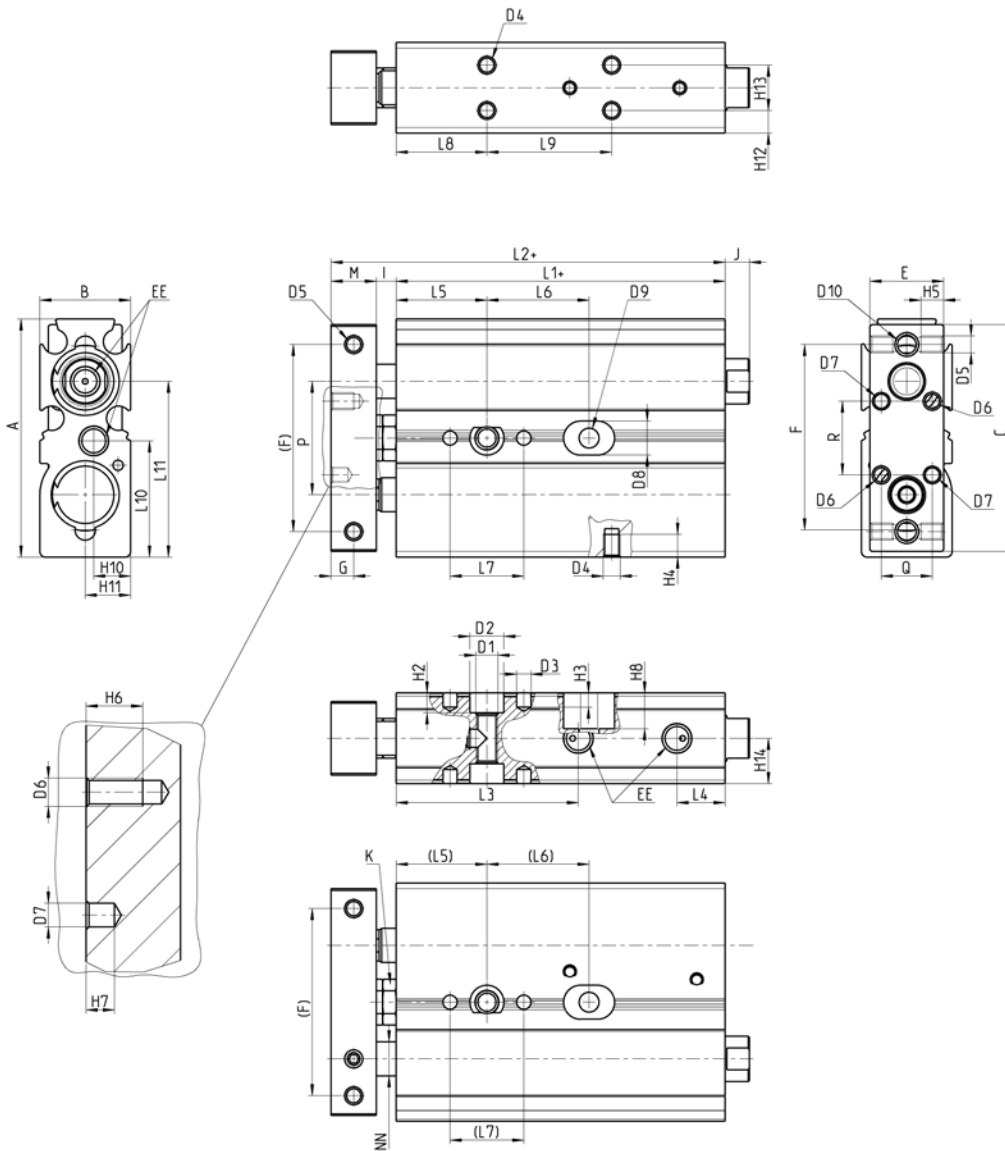
Cylinders Series QX

New

1



+ = add the stroke



Dimensions for Series QX with single flange

+ = add the stroke

DIMENSIONS					
	Ø 10	Ø 16	Ø 20	Ø 25	Ø 32
A	42	58	62	76	94
B	16	21	25	30	37
C	40	56	60	71	92
E	13	19	22	27	35
F	33	42	50	60	45
G	4	5	6	6	8
I	3,5	2,5	4,5	4,5	4
M	8	10	12	12	16
Q	9	11	16	16	16
R	13	13	18	18	18
L1+	48	57,5	67,5	70,5	80,5
L2+	59,5	70	84	87	100,5
L3	32,1	34	39,5	44,0	46,5
L4	8,5	8,5	9	8,5	12
L5	16	20	25	30	30
L6 Stroke 10	18	25	30	30	40
L6 Stroke 20	28	25	30	30	40
L6 Stroke 30	38	35	40	40	50
L6 Stroke 40	48	35	40	40	50
L6 Stroke 50	58	35	40	40	50
L6 Stroke 75	83	45	60	60	70
L6 Stroke 100	-	55	60	60	70
L7	13	13	20	20	20
L8	16	30	30	30	30
L9 Stroke 10	22	25	30	30	40
L9 Stroke 20	32	25	30	30	40
L9 Stroke 30	42	35	40	40	50
L9 Stroke 40	52	35	40	40	50
L9 Stroke 50	62	35	40	40	50
L9 Stroke 75	87	45	60	60	70
L9 Stroke 100	-	55	60	60	70
L10	20,5	6,0	4,8	4,5	47,0
L11	31	29	31	38	47
H2	6,3	4,5	5,5	6,5	6,5
H3	2,5	4,0	4,0	4,0	4,0
H4	4,0	5,0	4,5	5,0	7,5
H5	6,5	6,0	6,0	6,0	7,5
H6	8,0	6,0	8,0	8,0	8,0
H7	3,0	3,0	4,0	4,0	4,0
H8	6,3	-	-	-	-
H10	6,5	4,5	4,8	8,5	8,5
H11	8	10,5	10,5	15,0	28,5
H12	4	10,5	8,00	8,5	8,5
H13	8	-	9,0	13,0	20,0
H14	8	5,5	12,5	15,0	18,5
D1	M4	M5	M6	M8	M8
D2	6	7,5	9,5	10,5	10,5
D3	2,5	2,5	4	4	4
D4	M3	M3	M4	M5	M5
D5	M3	M4	M4	M5	M5
D6	M3	M3	M4	M4	M4
D7	2,5	2,5	4,0	4,0	4,0
D8	6,0	-	-	-	-
D9	3,5	-	-	-	-
D10	M4	M5	M5	M6	M6
NN	6	8	10	12	16
EE	M5	M5	M5	M5	G1/8
J	4,3	-	-	-	-
K	7	7	8	8	10
P	20	25	29	35	40

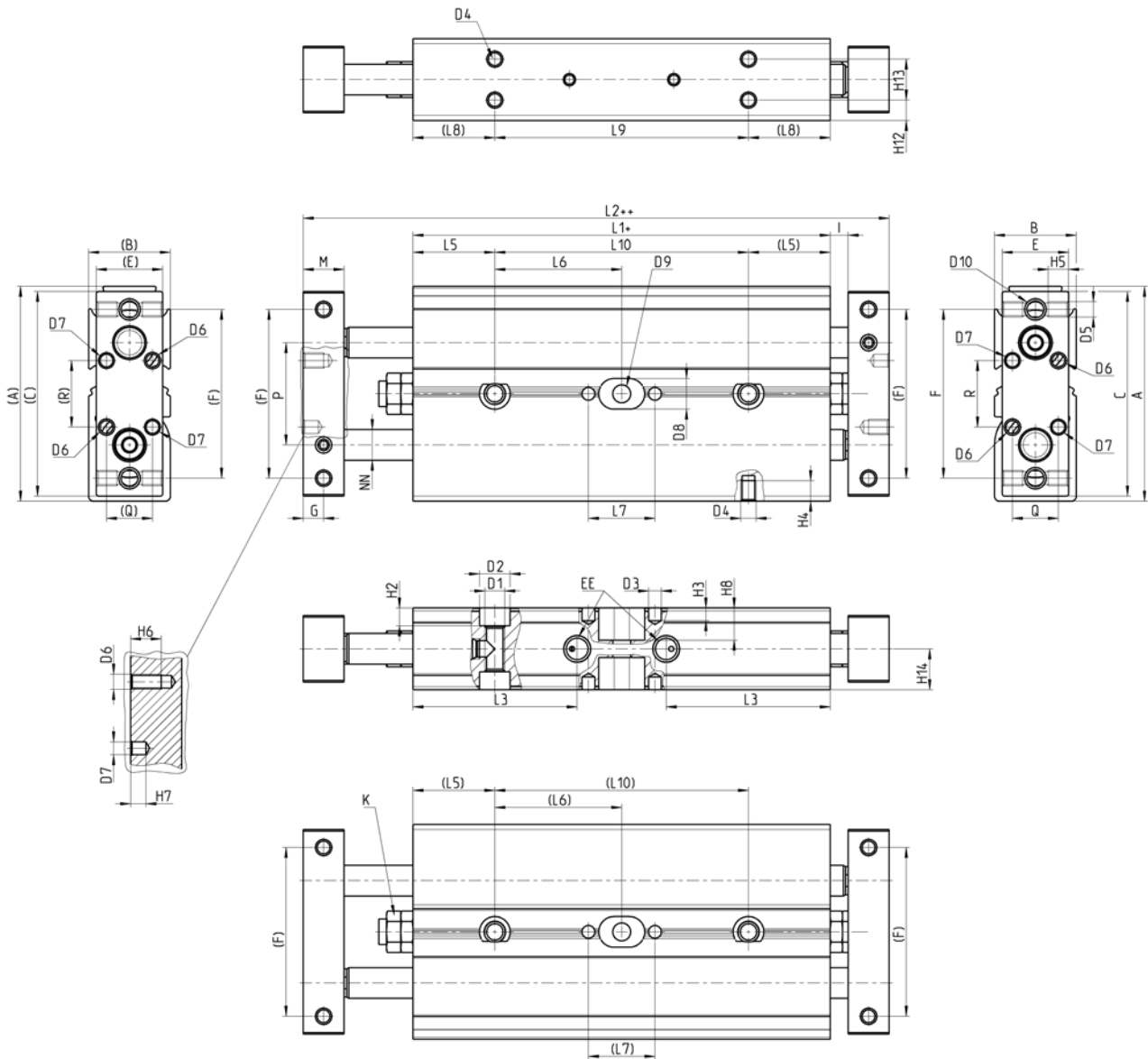
Cylinders Series QX (double flange)

New

1



+ = add the stroke



Dimensions for Series QX with double flange

+ = add the stroke
 ++ = add the stroke 2 times

DIMENSIONS					
	Ø 10	Ø 16	Ø 20	Ø 25	Ø 32
A	42	58	62	76	94
B	16	21	25	30	37
C	40	56	60	71	92
E	13	19	22	27	35
F	33	42	50	60	45
G	4	5	6	6	6
I	3,5	2,5	4,5	4,5	4
M	8	10	12	12	16
Q	9	11	16	16	16
R	13	13	18	18	18
L1+	72	86,6	98	104,2	115,6
L2++	95	111,6	131	137,2	155,6
L3	37,1	34	39,5	44	46,5
L5	16	20	25	30	30
L6 Stroke 10	25	28,3	29,0	27,1	32,8
L6 Stroke 20	30	33,3	34,0	32,1	37,8
L6 Stroke 30	35	38,3	39,0	37,1	42,8
L6 Stroke 40	40	43,3	44,0	42,1	47,8
L6 Stroke 50	45	48,3	49,0	47,1	52,8
L6 Stroke 75	57,3	60,8	61,5	59,6	65,3
L6 Stroke 100	-	73,3	74,0	72,1	77,8
L7	13	13	20	20	20
L8	16	30	30	30	30
L9 Stroke 10	49,7	28,3	29,0	27,1	32,8
L9 Stroke 20	59,6	33,3	34,0	32,1	37,8
L9 Stroke 30	69,6	38,3	39,0	37,1	42,8
L9 Stroke 40	79,6	43,3	44,0	42,1	47,8
L9 Stroke 50	89,6	48,3	49,0	47,1	52,8
L9 Stroke 75	114,6	60,8	61,5	59,6	65,3
L9 Stroke 100	-	73,3	74,0	72,1	77,8
L10 Stroke 10	49,7	56,6	58,0	54,2	65,6
L10 Stroke 20	59,6	66,6	68,0	64,2	75,6
L10 Stroke 30	69,6	76,6	78,0	74,2	85,6
L10 Stroke 40	79,6	86,6	88,0	84,2	95,6
L10 Stroke 50	89,6	96,6	98,0	94,2	105,6
L10 Stroke 75	114,6	121,6	123,0	119,2	130,6
L10 Stroke 100	-	146,6	148,0	144,2	155,6
H2	6,3	4,5	5,50	6,5	6,5
H3	2,5	4,0	4,00	4	4
H4	4	5,0	4,50	5	7,5
H5	6,5	6,0	6,00	6	7,5
H6	8	6,0	8,00	8	8
H7	3	3,0	4,00	4	4
H8	6,3	-	-	-	-
D1	M4	M5	M6	M8	M8
D2	6	7,5	9,5	10,5	10,5
D3	2,5	2,5	4	4	4
D4	M3	M4	M4	M5	M5
D5	M4	M5	M5	M6	M6
D6	M3	M3	M4	M5	M5
D7	2,5	2,5	4	4	4
D8	6	-	-	-	-
D9	3,5	-	-	-	-
D10	M4	M5	M5	M6	M6
NN	6	8	10	12	16
EE	M5	M5	M5	M5	G1/8
K	7	7	8	8	10
P	20	25	29	35	40