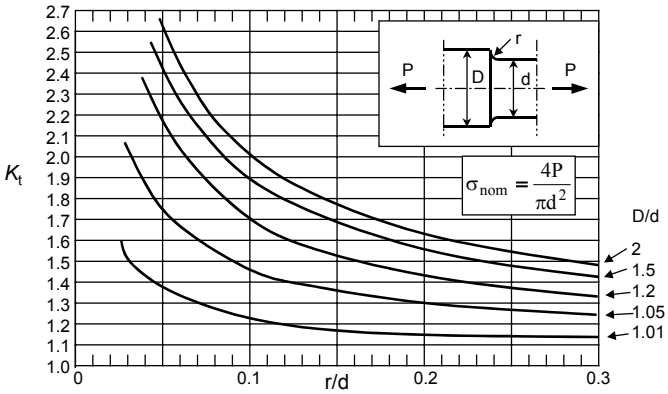
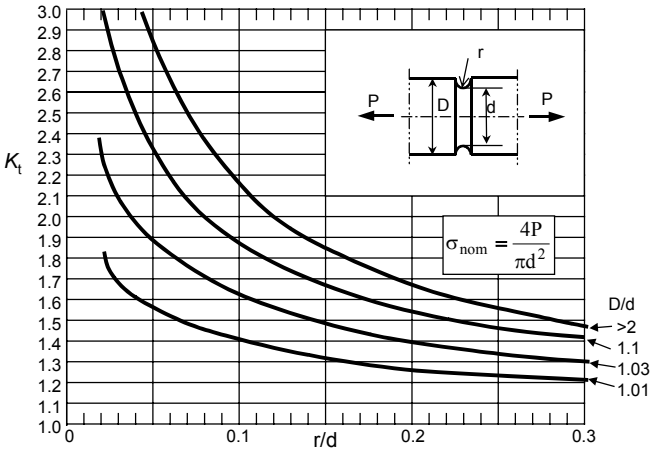
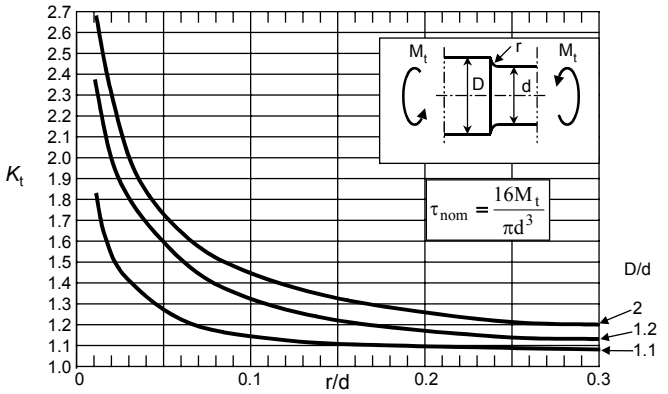
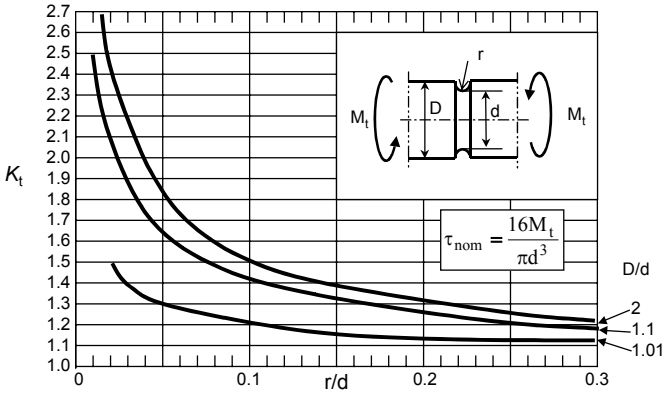
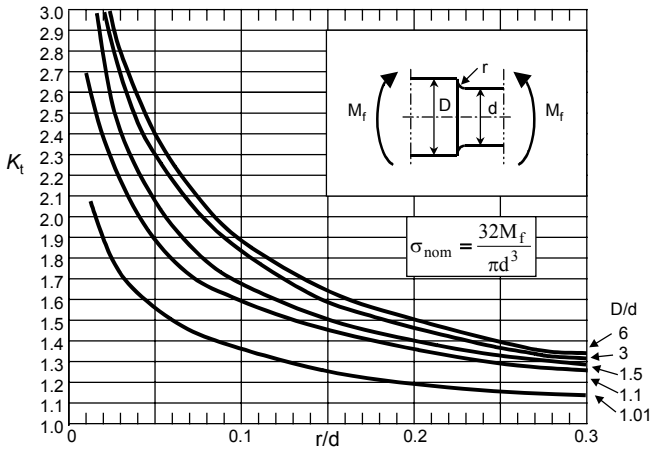
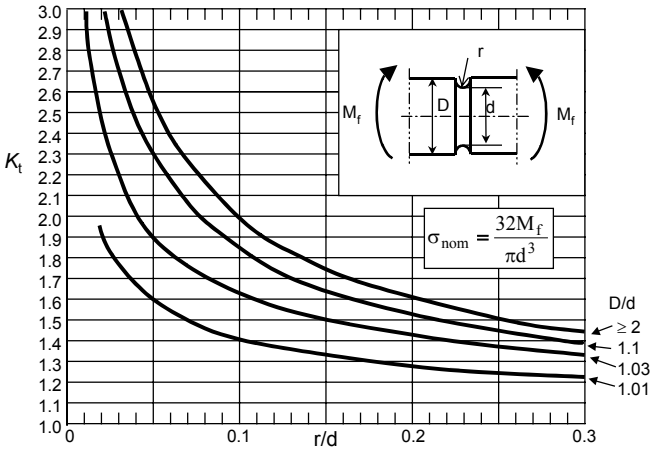

K_t
r/d
D/d
2
1.5
1.2
1.05
1.01
P
D
d
r
$\sigma_{nom} = \frac{4P}{\pi d^2}$

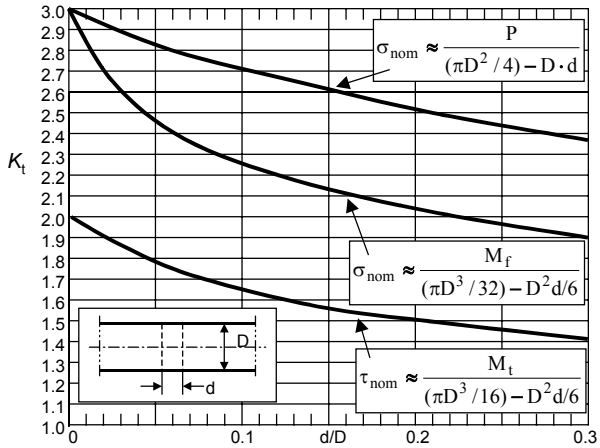

K_t
r/d
D/d
>2
1.1
1.03
1.01
P
D
d
r
$\sigma_{nom} = \frac{4P}{\pi d^2}$

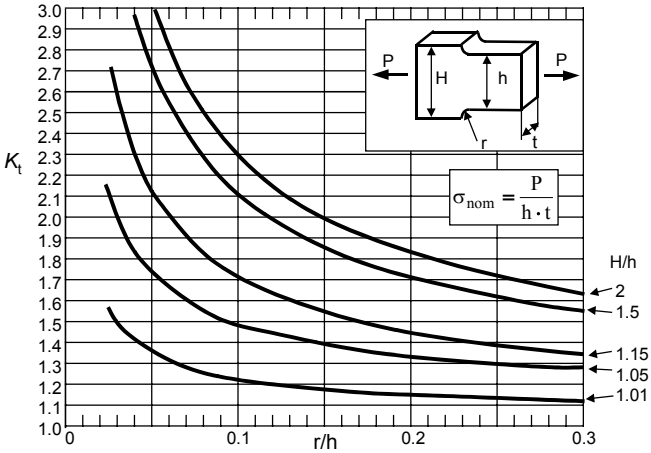

K_t
r/d
D/d
2
1.2
1.1
M_t
D
d
r
$\tau_{nom} = \frac{16M_t}{\pi d^3}$

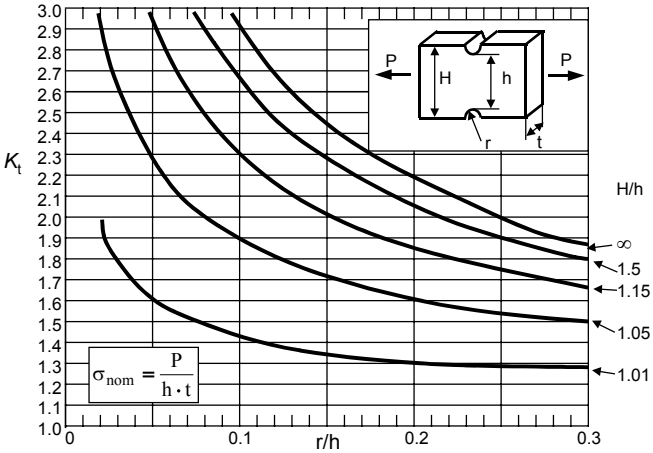

K_t
r/d
D/d
2
1.1
1.01
M_t
D
d
r
$\tau_{nom} = \frac{16M_t}{\pi d^3}$

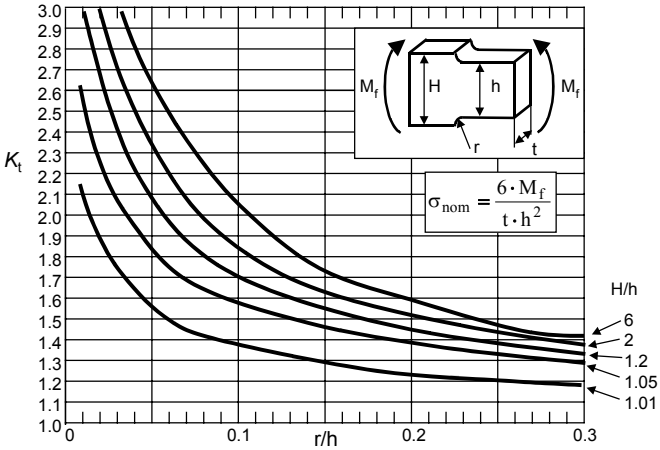

K_t
r/d
D/d
6
3
1.5
1.1
1.01
M_f
D
d
r
$\sigma_{nom} = \frac{32M_f}{\pi d^3}$

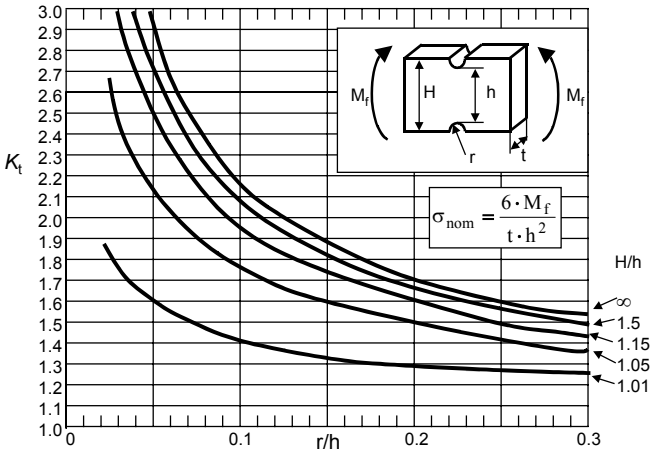

K_t
r/d
D/d
≥ 2
1.1
1.03
1.01
M_f
D
d
r
$\sigma_{nom} = \frac{32M_f}{\pi d^3}$

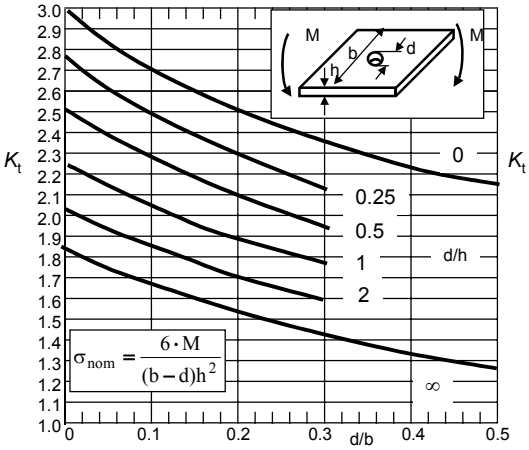

K_t
d/D
$\sigma_{nom} \approx \frac{P}{(\pi D^2/4) - D \cdot d}$
$\sigma_{nom} \approx \frac{M_f}{(\pi D^3/32) - D^2 d/6}$
$\tau_{nom} \approx \frac{M_t}{(\pi D^3/16) - D^2 d/6}$
D
d

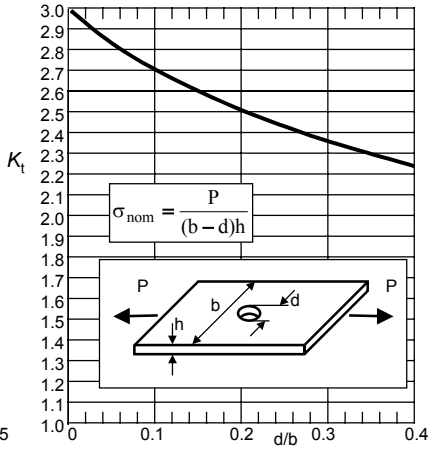

K_t
r/h
H/h
2
1.5
1.15
1.05
1.01
P
H
h
r
t
$\sigma_{nom} = \frac{P}{h \cdot t}$


K_t
r/h
H/h
∞
1.5
1.15
1.05
1.01
P
H
h
r
t
$\sigma_{nom} = \frac{P}{h \cdot t}$


K_t
r/h
H/h
6
2
1.2
1.05
1.01
M_f
H
h
r
t
$\sigma_{nom} = \frac{6 \cdot M_f}{t \cdot h^2}$


K_t
r/h
H/h
∞
1.5
1.15
1.05
1.01
M_f
H
h
r
t
$\sigma_{nom} = \frac{6 \cdot M_f}{t \cdot h^2}$


K_t
d/b
d/h
0
0.25
0.5
1
2
∞
M
b
d
h
$\sigma_{nom} = \frac{6 \cdot M}{(b-d)h^2}$


K_t
d/b
P
b
d
h
$\sigma_{nom} = \frac{P}{(b-d)h}$