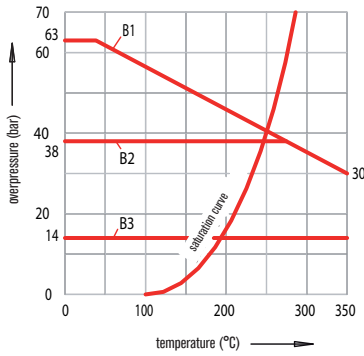


# CHARGE DIAGRAMS OF PROTECTING TUBES



## LOADING CAPACITY OF PROTECTING TUBES FORM B

**material: St 35.8**  
**(mat. no. 1.0305)**

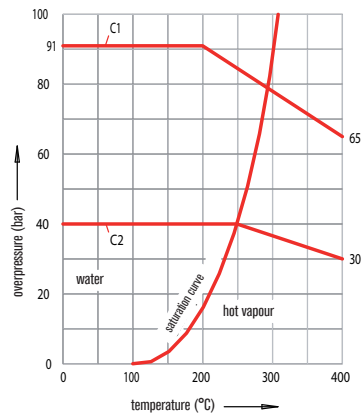
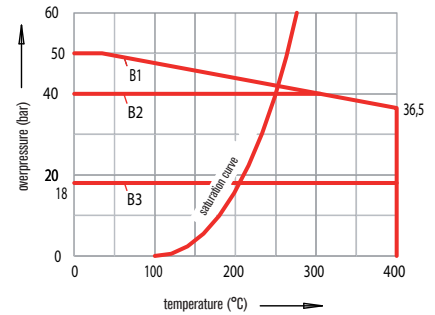
- allowed flow velocity for air and hot vapour: 25 m/s  
for water: 3 m/s
- allowed clamping torque of the screwed plug: 50 Nm

## LOADING CAPACITY OF PROTECTING TUBES FORM B

**material: X 6 CrNiMoTi 17 122**  
**(mat. no. 1.4571)**

**material: X 6 CrNiTi 1810**  
**(mat. no. 1.4541)**

- allowed flow velocity for air and hot vapour: 25 m/s  
for water: 3 m/s
- allowed clamping torque of the screwed plug: 50 Nm



## LOADING CAPACITY OF PROTECTING TUBES FORM C

**material: St 35.8**  
**(mat. no. 1.0305)**

- allowed flow velocity for air and hot vapour: 40 m/s  
for water: 5 m/s
- allowed clamping torque of the screwed plug: 100 Nm

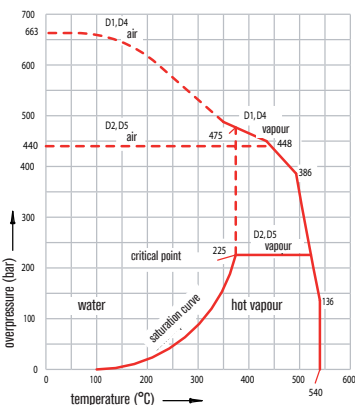
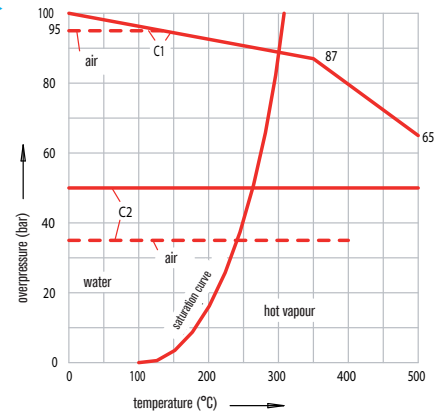
## LOADING CAPACITY OF PROTECTING TUBES FORM C

**material: 13 CrMo 44**  
**(mat. no. 1.7335)**

**material: X 6 CrNiMoTi 17 122**  
**(mat. no. 1.4571)**

**material: X 6 CrNiTi 1810**  
**(mat. no. 1.4541)**

- allowed flow velocity for air and hot vapour: 40 m/s  
for water: 5 m/s
- allowed clamping torque of the screwed plug: 100 Nm
- temperature limits for mat. no. 1.4571 and 1.4541: 400°C

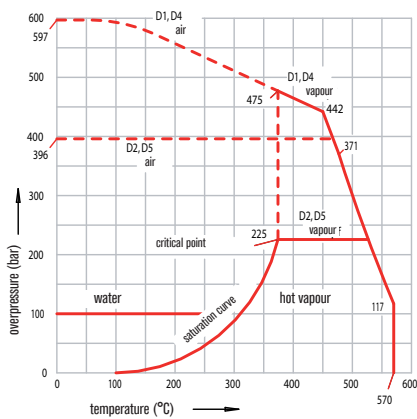


## LOADING CAPACITY OF PROTECTING TUBES FORM D

**material: 13 CrMo 44**  
**(mat. no. 1.7335)**

- allowed flow velocity for air and hot vapour: 60 m/s  
for water: up to 450 bar and up to 5 m/s

# CHARGE DIAGRAMS OF PROTECTING TUBES



## LOADING CAPACITY OF PROTECTING TUBES FORM D

material: 10 CrMo 910  
(mat. no. 1.7380)

- allowed flow velocity for air and hot vapour: 60 m/s
- loading capacity in water: up to 450 bar and up to 5 m/s

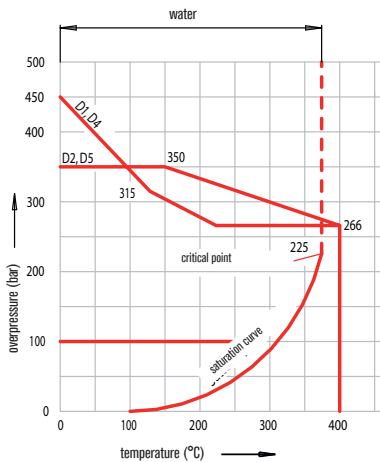
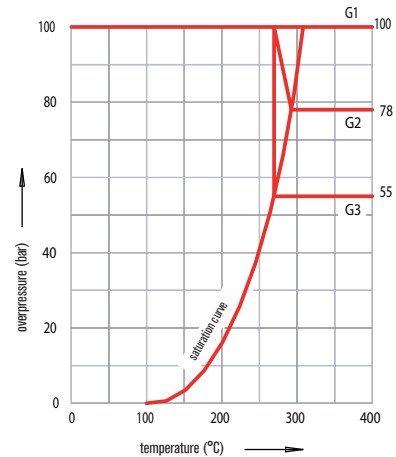
## LOADING CAPACITY OF PROTECTING TUBES FORM G

material: X 6 CrNiMoTi 17 122  
(mat. no. 1.4571)  
material: X 6 CrNiTi 1810  
(mat. no. 1.4541)

- allowed flow velocity for hot vapour: 40 m/s
- for water: 5 m/s
- for air: bis 400 °C

form	10	20	30	40	m/s
G1	100	100	100	100	} bar
G2	100	100	98	58	
G3	100	100	58	38	

\*due to flange PN 40  
For the use of flanges PN 100  
the charge values of form E are valid.



## LOADING CAPACITY OF PROTECTING TUBES FORM D

material: X 6 CrNiMoTi 17 122  
(mat. no. 1.4571)  
material: X 6 CrNiTi 1810  
(mat. no. 1.4541)

- protecting tubes D1 and D4:  
allowed flow velocity for air, water and hot vapour: 60 m/s
- protecting tubes D2 and D5:  
allowed flow velocity for air: up to 60 m/s  
for water and hot vapour: up to 30 m/s

## LOADING CAPACITY OF PROTECTING TUBES FORM E+F

material: X 6 CrNiMoTi 17 122  
(mat. no. 1.4571)  
material: X 6 CrNiTi 1810  
(mat. no. 1.4541)

- allowed flow velocity for hot vapour: 40 m/s
- for water: 5 m/s
- for air: up to 400 °C

form	10	20	30	40	m/s
F1 (E1)	40*(100)	40*(100)	40*(68)	40*(42)	} bar
F2 (E2)	40* (75)	40* (65)	40*(45)	25*(25)	
F3 (E3)	40* (58)	40* (45)	30*(30)	18*(18)	

\*due to flange PN 40  
For the use of flanges PN 100  
the charge values of form E are valid.

