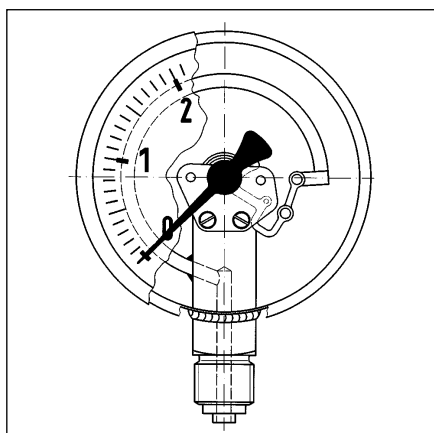


Bourdon tube pressure gauges with glycerine filling, for chemical applications EN 837-1



Application

For aggressive gaseous and liquid media which are not highly viscous and do not crystallize. Suitable for use in corrosive atmospheres.

For measurement in areas subject to high vibration levels and high, dynamic pressure loads.

! When measuring gas or vapour, the instruments must be used in accordance with the safety recommendations of EN 837-2 (see appendix).

Type

D 7

Nominal size

50 - 63

Accuracy class (EN 837-1/6)

1.6

Ranges (EN 837-1/5)

NG 50:

-1/0 to -1/+15 bar

0/0.6 to 0/600 bar

NG 63:

-1/0 to -1/+15 bar

0/0.6 to 0/1,000 bar

Application area

Static load:

$\frac{3}{4}$ x full scale value

Dynamic load:

$\frac{2}{3}$ x full scale value

Short term:

full scale value

Operating temperature range

Medium: $T_{max} = +150\text{ }^{\circ}\text{C}$

Ambient: $T_{min} = -20\text{ }^{\circ}\text{C}$

$T_{max} = +60\text{ }^{\circ}\text{C}$

Temperature performance

Indication error when the temperature of the measuring element deviates from 20 °C:

rising temp. approx. $\pm 0.4\%$ /10K

falling temp. approx. $\pm 0.4\%$ /10K

percentage of full scale value

Protection

IP 65 (EN 60529)

with housing vent (≤ 25 bar)

IP 54

Standard version

Connection

Stainless steel 1.4571

NG 50 bottom or bottom back

NG 63 bottom or centre back

G $\frac{1}{4}$ B - spanner size 14

(EN 837-1/7.3)

Measuring element

Bourdon tube, stainless steel 1.4571

≤ 60 bar „C“ type bourdon tube

> 60 bar helical tube

leak tested (EN 837-1/9.5.6)

Movement

Stainless steel

Dial

Aluminium, white

Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 1.4301

with pressure relief port

Crimped bezel

Stainless steel 1.4301

Front glass

NG 50 plastic

NG 63 laminated safety glass

Filling liquid

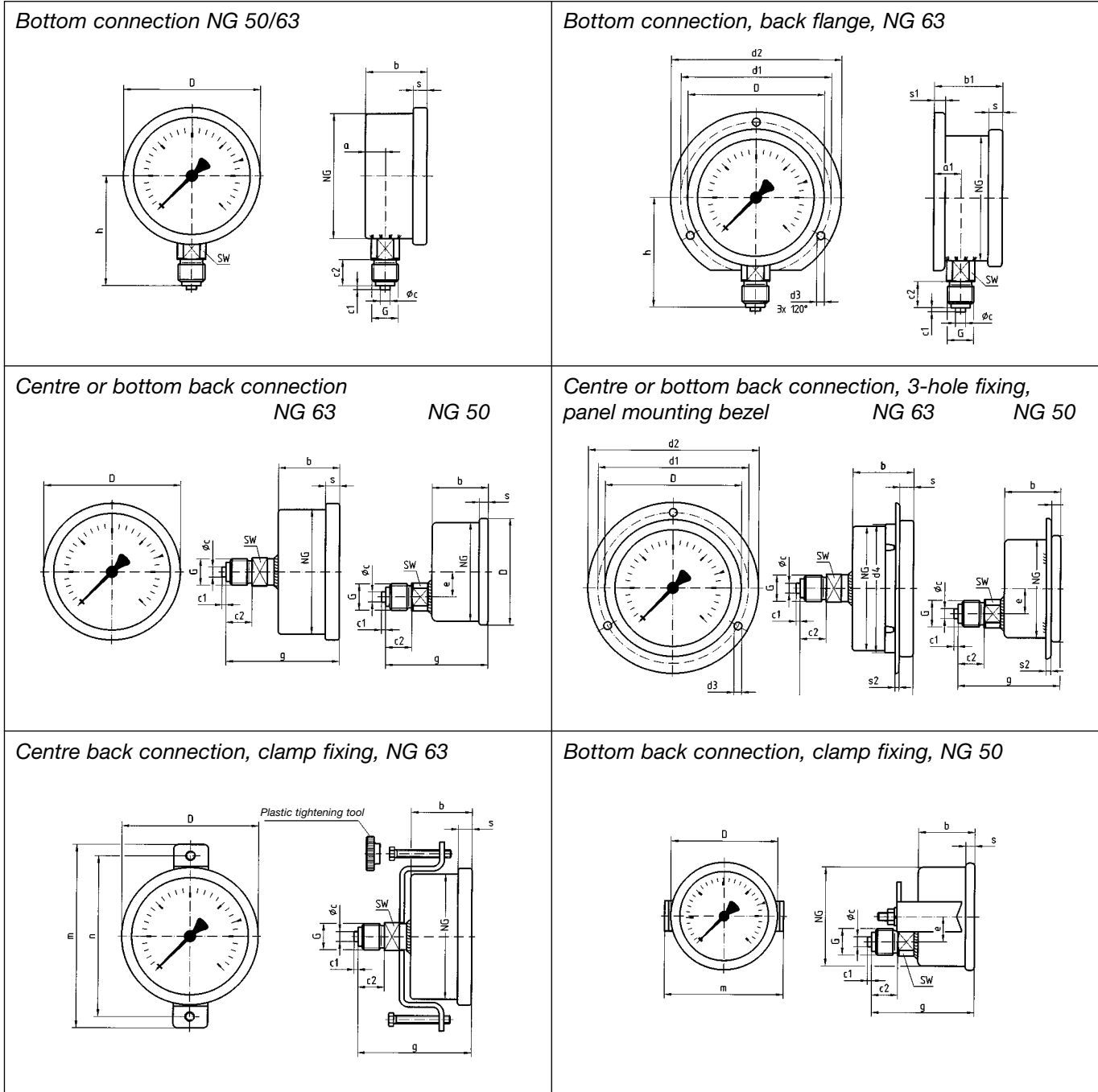
Glycerine (99.5 %)

Options

- Filling liquid silicone oil
- Plastic front glass (NG 63)
- Brass movement
- Back flange (NG 63)
- Clamp fixing
- 3-hole fixing, panel mounting bezel, (NG 63)
- Crimped bezel, polished
- Special scales

Bourdon tube pressure gauges with glycerine filling, for chemical applications Type D 7 - NG 50/63

Housing types and dimensions










Dimensions (mm)

Nominal size (NG)	a	a1	b	b1	Øc	c1	c2	d1*	d2*	ds*	d4	D	e	G	g	h	m	n	s	s1	s2
50	10.5	-	28	-	5	2	13	60	70	3.6	-	53	12.5	G1/4B	51	46	59	-	4.5	-	2.5
63	9.5	13	30.5	34	5	2	13	75	85	3.6	64	68	-	G1/4B	56	53	94	82	7	5.5	2
Nominal size (NG)	SW																				
50	14																				
63	14																				

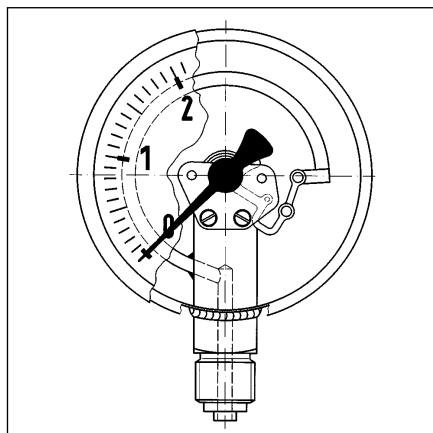
* Dimensions according to DIN EN 837-1

Bourdon tube pressure gauges with glycerine filling, for chemical applications EN 837-1

DG: M

Type	RF50ChGly,D702	RF50ChGly,D712	RF50ChGly,D752		RF63ChGly,D702	RF63ChGly,D712	RF63ChGly,D732	RF63ChGly,D752
Version								
Housing-Ø	50	50	50		63	63	63	63
Housing	Stainless steel 1.4301 with crimped bezel 1.4301							
Meas. elem.	Bourdon tube, stainless steel 1.4571							
Accuracy class	1.6	1.6	1.6		1.6	1.6	1.6	1.6
Connection	G ¹ / ₄ B	G ¹ / ₄ B	G ¹ / ₄ B		G ¹ / ₄ B	G ¹ / ₄ B	G ¹ / ₄ B	G ¹ / ₄ B
			Clamp fixing				3-hole fixing, panel mounting bezel, 1.4301, bare metal surface	Clamp fixing
Range (bar)	Part no.	Part no.	Part no.		Part no.	Part no.	Part no.	Part no.
Price €								
-1/0	85051702	85051712	85051752		85101702	85101712	85101732	85101752
-1/+0,6	85052702	85052712	85052752		85102702	85102712	85102732	85102752
-1/+1,5	85053702	85053712	85053752		85103702	85103712	85103732	85103752
-1/+3	85054702	85054712	85054752		85104702	85104712	85104732	85104752
-1/+5	85055702	85055712	85055752		85105702	85105712	85105732	85105752
-1/+9	85056702	85056712	85056752		85106702	85106712	85106732	85106752
-1/+15	85057702	85057712	85057752		85107702	85107712	85107732	85107752
Price €								
0/0,6	85059702	85059712	85059752		85109702	85109712	85109732	85109752
0/1	85060702	85060712	85060752		85110702	85110712	85110732	85110752
0/1,6	85061702	85061712	85061752		85111702	85111712	85111732	85111752
0/2,5	85062702	85062712	85062752		85112702	85112712	85112732	85112752
0/4	85063702	85063712	85063752		85113702	85113712	85113732	85113752
0/6	85064702	85064712	85064752		85114702	85114712	85114732	85114752
0/10	85065702	85065712	85065752		85115702	85115712	85115732	85115752
0/16	85066702	85066712	85066752		85116702	85116712	85116732	85116752
0/25	85067702	85067712	85067752		85117702	85117712	85117732	85117752
0/40	85068702	85068712	85068752		85118702	85118712	85118732	85118752
Price €								
0/60	85069702	85069712	85069752		85119702	85119712	85119732	85119752
0/100	85070702	85070712	85070752		85120702	85120712	85120732	85120752
0/160	85071702	85071712	85071752		85121702	85121712	85121732	85121752
0/250	85072702	85072712	85072752		85122702	85122712	85122732	85122752
0/400	85073702	85073712	85073752		85123702	85123712	85123732	85123752
Price €								
0/600	85074702	85074712	85074752		85124702	85124712	85124732	85124752
0/1000	---	---	---		85125702	85125712	85125732	85125752

Bourdon tube pressure gauges with glycerine filling, for chemical applications EN 837-1



Application

For aggressive gaseous and liquid media which are not highly viscous and do not crystallize. Suitable for use in corrosive atmospheres.

For measurement in areas with high vibration levels and high, dynamic pressure loads.

! When measuring gas or vapour, the instruments must be used in accordance with the safety recommendations of EN 837-2 (see appendix).

Type

D 8

Nominal size

100 - 160

Accuracy class (EN 837-1/6)

1.0

Ranges (EN 837-1/5)

-1/0 to -1/+15 bar

NG 100 0/0.6 to 0/1,000 bar

NG 160 0/0.6 to 0/1,600 bar

Application area

Static load:

≤ 600 bar = full scale value

> 600 bar = $\frac{3}{4}$ x full scale value

Dynamic load:

≤ 600 bar = 0.9 x full scale value

> 600 bar = $\frac{2}{3}$ x full scale value

Short term:

≤ 600 bar = 1.3 x full scale value

> 600 bar = full scale value

Operating temperature range

Medium: $T_{max} = +150\text{ °C}$

Ambient: $T_{min} = -20\text{ °C}$

$T_{max} = +60\text{ °C}$

Temperature performance

Indication error when the temperature of the measuring element deviates from 20 °C:

rising temp. approx. $\pm 0.4\%$ /10K

falling temp. approx. $\pm 0.4\%$ /10K

percentage of full scale value

Protection

IP 65 (EN 60529)

with housing vent (≤ 25 bar)

IP 54

Standard version

Connection

Stainless steel 1.4571, bottom or bottom back

G $\frac{1}{2}$ B- spanner size 22

(EN 837-1/7.3)

Measuring element

Bourdon tube, stainless steel

1.4571

≤ 60 bar „C“ type bourdon tube

> 60 bar helical tube

leak tested (EN 837-1/9.5.6)

Movement

Stainless steel

Dial

Aluminium, white

Dial marking black

Pointer

Aluminium, black

Housing

Stainless steel 1.4301

with blow-out

Bayonet type bezel

Stainless steel 1.4301

Front glass

Laminated safety glass

Filling liquid

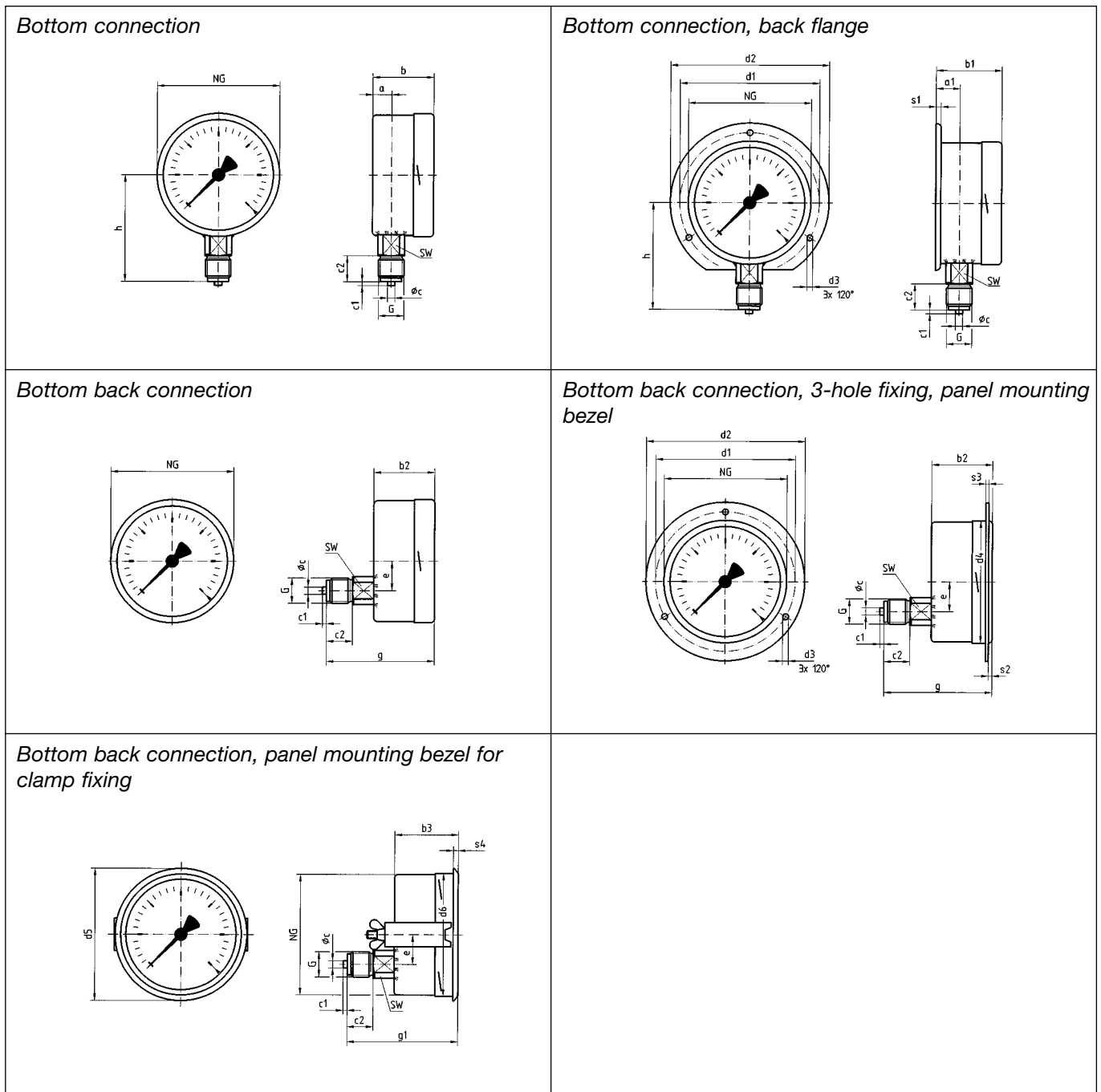
Glycerine (99.5 %)

Options

- Filling liquid silicone oil
- Brass movement
- Back flange
- Panel mounting bezel for clamp fixing
- 3-hole fixing, panel mounting bezel
- Special scales

Bourdon tube pressure gauges with glycerine filling, for chemical applications Type D 8 - NG 100/160

Housing types and dimensions



Dimensions (mm)

Nominal size (NG)	a	a1	b	b1	b2	b3	Øc	c1	c2	d1*	d2*	d3*	d4	d5	d6	e	G	g	g1	h	s1
100	15.6	19.1	49	52.5	49	49	6	3	20	116	132	4.8	104	107	101	34.5	G ¹ / ₂ B	83	83	86	5.5
160	17.5	20.5	50	53	50	52	6	3	20	178	196	5.8	164	167	161	34.5	G ¹ / ₂ B	84	86	116	6
Nominal size (NG)	s2	s3	s4	SW																	
100	4	2	4	22																	
160	4	2	4.5	22																	

* Dimensions according to DIN EN 837-1

Bourdon tube pressure gauges with glycerine filling, for chemical applications EN 837-1

DG: M

Type	RF100ChGly, D802	RF100ChGly, D812	RF100ChGly, D832	RF100ChGly, D852	RF160ChGly, D802	RF160ChGly, D812	RF160ChGly, D832	RF160ChGly, D852
Version								
Housing-Ø	100	100	100	100	160	160	160	160
Housing	Stainless steel 1.4301 with bayonet type bezel, laminated safety front glass							
Meas. elem.	Bourdon tube, stainless steel 1.4571							
Accuracy class	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Connection	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B	G ¹ / ₂ B
			3-hole fixing, panel mounting bezel, 1.4301 polished	Panel mounting bezel, 1.4301 polished clamp fixing			3-hole fixing, panel mounting bezel, 1.4301 polished	Panel mounting bezel, 1.4301 polished clamp fixing
Range (bar)	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
Price €								
-1/0	85201802	85201812	85201832	85201852	85251802	85251812	85251832	85251852
-1/+0,6	85202802	85202812	85202832	85202852	85252802	85252812	85252832	85252852
-1/+1,5	85203802	85203812	85203832	85203852	85253802	85253812	85253832	85253852
-1/+3	85204802	85204812	85204832	85204852	85254802	85254812	85254832	85254852
-1/+5	85205802	85205812	85205832	85205852	85255802	85255812	85255832	85255852
-1/+9	85206802	85206812	85206832	85206852	85256802	85256812	85256832	85256852
-1/+15	85207802	85207812	85207832	85207852	85257802	85257812	85257832	85257852
Price €								
0/0,6	85209802	85209812	85209832	85209852	85259802	85259812	85259832	85259852
0/1	85210802	85210812	85210832	85210852	85260802	85260812	85260832	85260852
0/1,6	85211802	85211812	85211832	85211852	85261802	85261812	85261832	85261852
0/2,5	85212802	85212812	85212832	85212852	85262802	85262812	85262832	85262852
0/4	85213802	85213812	85213832	85213852	85263802	85263812	85263832	85263852
0/6	85214802	85214812	85214832	85214852	85264802	85264812	85264832	85264852
0/10	85215802	85215812	85215832	85215852	85265802	85265812	85265832	85265852
0/16	85216802	85216812	85216832	85216852	85266802	85266812	85266832	85266852
0/25	85217802	85217812	85217832	85217852	85267802	85267812	85267832	85267852
0/40	85218802	85218812	85218832	85218852	85268802	85268812	85268832	85268852
Price €								
0/60	85219802	85219812	85219832	85219852	85269802	85269812	85269832	85269852
0/100	85220802	85220812	85220832	85220852	85270802	85270812	85270832	85270852
0/160	85221802	85221812	85221832	85221852	85271802	85271812	85271832	85271852
0/250	85222802	85222812	85222832	85222852	85272802	85272812	85272832	85272852
0/400	85223802	85223812	85223832	85223852	85273802	85273812	85273832	85273852
Price €								
0/600	85224802	85224812	85224832	85224852	85274802	85274812	85274832	85274852
0/1000	85225802	85225812	85225832	85225852	85275802	85275812	85275832	85275852
0/1600	---	---	---	---	85276802	85276812	85276832	85276852