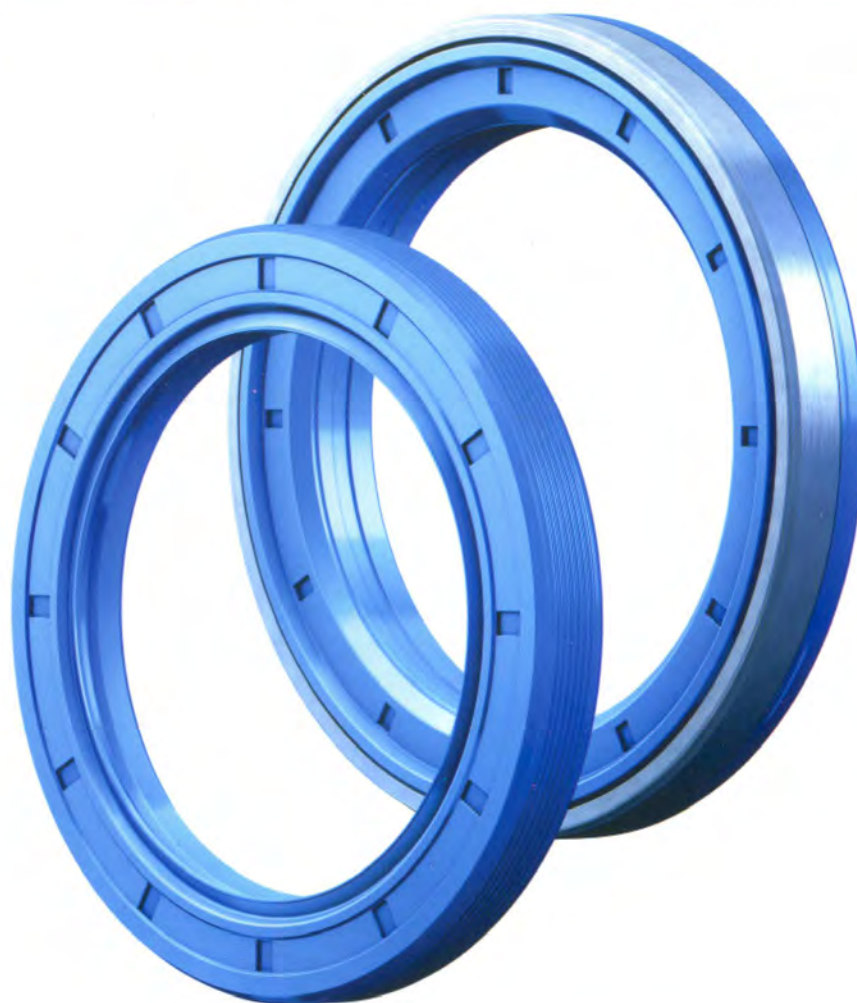




**RADIJALNI OSOVINSKI
ZAPTIVAČI
SEMERINZI**

DIN 3760 ISO 1629



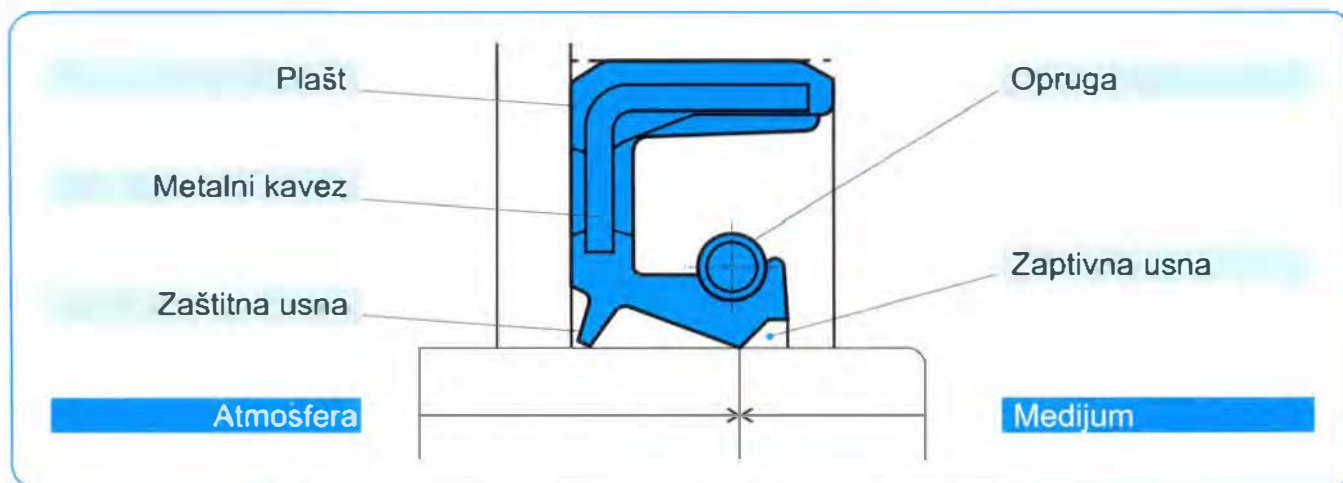
SRPS ISO 9001:2008

www.rubber-products.com.mk

RADIJALNI OSOVINSKI ZAPTIVAČI SEMERINZI

DIN 3760 ISO 1629

Radijalni osovinski zaptivači su zaptivni elementi koji zaptivaju medijum sa unutrašnje strane na rotirajućim mašinskim delovima (osovinama) i sprečavaju ulazak nečistoće sa atmosfere- spoljne strane.



Pravilan izbor odgovarajućeg radijalnog osovinskog zaptivača zavisi od radnih parametara kao što su medijum, radna temperatura, obodna brzina, radni pritisak kao i uticaj sa spoljne atmosfere- strane.

STANDARDNI MATERIJALI

Kada se govori o materijalima od kojih se izrađuju radijalni osovinski zaptivači, prvenstveno se misli na materijal od koga je izrađena zaptivna usna. Pored toga razlikujemo materijale od kojih se prave opruga i metalni kavez. Označavanje elastomera se vrši skraćenicama koje definiše **DIN ISO 1629** i **ASTM D 1418**.

NBR - ACRYLONITRILE - BUTADIENE RUBBER / NBR 70 t = -40...100°C

NBR je materijal od koga se, zbog njegovih odličnih mehaničkih svojstava kao i hemijske otpornosti na većinu medijuma, najčešće prave radijalni osovinski zaptivači. NBR je otporan na sredstva za podmazivanje i masti koje imaju mineralnu bazu, hidraulična ulja HFA, HFB i HFC, silikonska ulja, masti i vodu do 80°C

FKM - FLUORO RUBBER (VITON) / FKM 80 t = - 30...200°C

VITON kvalitet odlikuje visoka temperatura i hemijska otpornost. Otporan je na mineralne i sintetske masti i ulja, većinu ugljovodonika, goriva uključujući i bezolovni benzin, hidraulično ulje HFD kao i na mnoge organske rastvarače i druge hemikalije. Takođe je otporan i na uticaj ozona a ima i odlična zaptivna svojstva kada je medijum gas, pa je pogodan za korišćenje u uslovima vakuma.

PTFE - POLYTETRAFLUORETHYLENE (TEFLON) / t = - 90...250°C

TEFLON odlikuje odlična, skoro univerzalna hemijska otpornost, visoka termo- otpornost - 90 do 250°C. veoma niski koeficijent trenja, otporan je na starenje i uticaj ozona, najčešće se za proizvodnju semeringa koriste PTFE kvaliteti sa puniocima kao što su ugljenik / grafit ili staklo / molidbendisulfid.

METALNI KAVEZ se standardno izrađuje od nelegiranog čelika ili po zahtevu može da se izrađuje od nerđajućeg kiselo otpornog čelika.

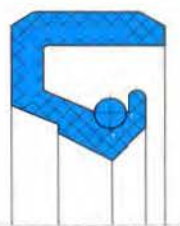
OPRUGA - FEDER na radijalnom zaptivaču se standardno izrađuje od opružnog čelika. Zaptivači od vitona imaju u sebi oprugu od nerđajućeg kiselo otpornog čelika.

OSNOVNI TIPOVI RADIJALNIH OSOVINSKIH ZAPTIVAČA

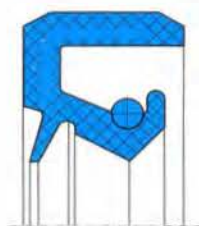
DIN 3760/3761

TIP

A



AS

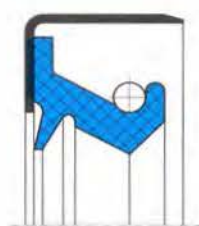


Osnovni tip radijalnog osovinskog zaptivača - tip **A** i sa dodatnom usnom za otprašivanje tip **AS**. Metalni kavez je presvučen elastomerom čime se premošćuje toplotna dilatacija, eventualne neravnine u samom žljebu, nastale zbog mehaničkih oštećenja i sprečava koroziju.

B



BS



Ovaj tip ima metalni kavez koji nije presvučen elastomerom koji zapravo omogućava bolje fiksiranje semeringa. Sa druge strane zahtevaju se manje tolerancije u kućištu da bi se osigurala zaptivnost na spoljašnjem statičkom delu semeringa.

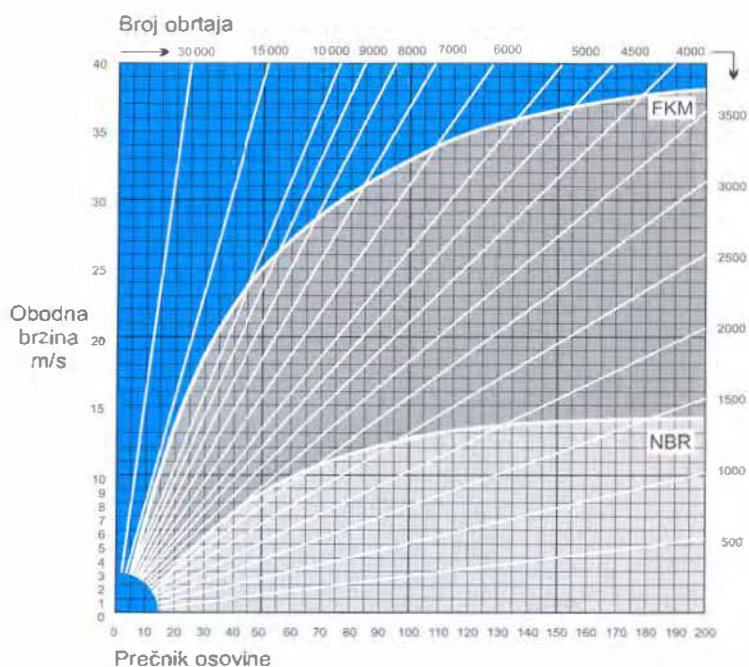
C



CS



Ova izvedba je slična izvedbi **WB** ali je metalni kavez dodatno ojačan čime se postiže još bolje fiksiranje semeringa u uslovima otežane ugradnje semeringa, teških uslova rada i kod semeringa velikih dimenzija.



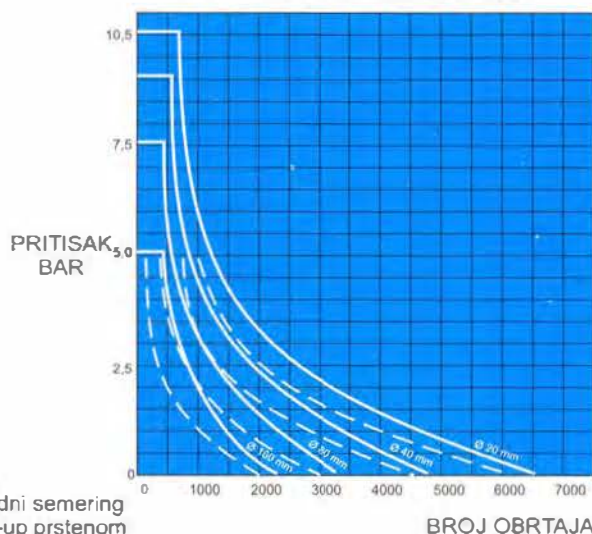
Dozvoljena obodna brzina za radijalne osovinske zaptivače izrađene u kvalitetu NBR i FKM.

TIP BABSL SIMRIT - Semering za primenu kod povišenih pritisaka



Tip BABSL (SIMRIT) je semering za rad u uslovima povišenih pritisaka $> 0,5$ bara, pulsirajućeg pritiska i vakuma. Ova izvedba je sa skraćenom ojačanom zaptivnom usnom i metalnim kavezom koji je spušten skoro do osovine. Time se izbegava oštećenje zaptivne usne usled povećanog naleganja na osovinu koje nastaje zbog povećanog pritiska. Robusna izvedba ovog tipa sprečava i uvrtnje usne usled povišenog pritiska. **(BABSL semering u zavisnosti od obodne brzine može da bude opterećen pritiskom do max. 10 bara.)**

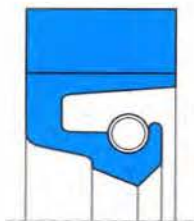
T = - 40 ... +100°C (Materijal 72 NBR)
T = - 25 ... +160°C (Materijal 75 FKM)



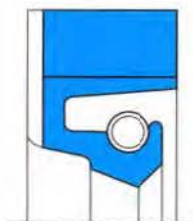
Maksimalni dozvoljeni pritisak za tip BABSL-SIMRIT, odnosno standardni semering sa potpornim prstenom u korelaciji sa brojem obrtaja i dimenzijom osovine

TIPOVI RADIAMATIC

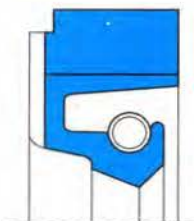
R35



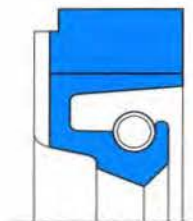
R36



R37

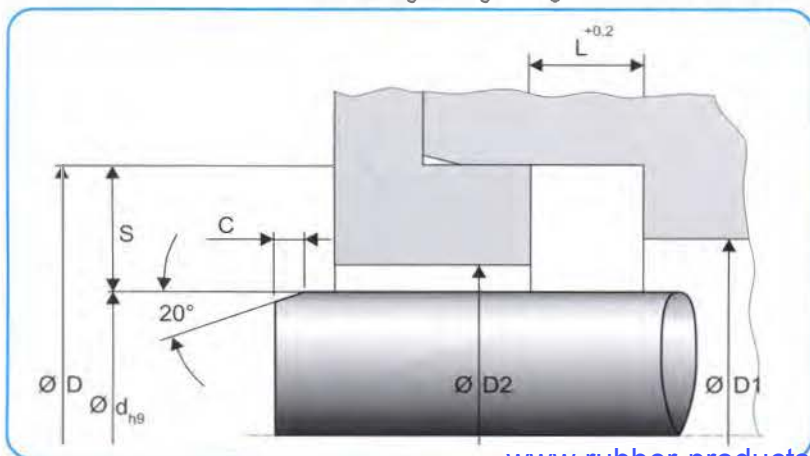


R58



RADIAMATIC (SIMRIT-MERKEL) grupa semeringa ima spoljni plašt izrađen od tehničkog platna (potpuno bez metalnog kaveza) koji je spojen sa zaptivnom usnom od elastomera (NBR ili FKM) i oprugom. **Izrađuju se i u rasečenom stanju radi ugradnje gde nije moguć aksijalni pristup kućištu.** Ovaj tip semeringa podrazumeva postojanje ugradne čaure kojom se preko vijaka aksijalno upresuju u ugradni prostor (dovode se na dimenziju L-videti tabelu)

Primer izgleda ugradnog mesta za radiamatic R35



Parametri primene:

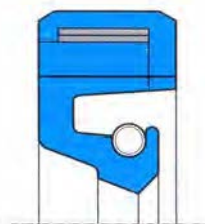
za NBR T = -30 ... +100°C

P = 0,5 bara, V = 20m/s

za FKM T = -20 ... +180°C

P = 0,5 bara, V = 25m/s

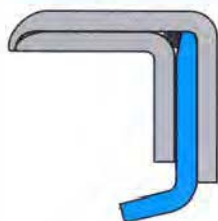
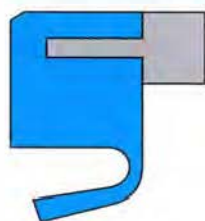
Primena: reduktori, građevinske mašine, valjački stanovi...

RS85**RHS51**

Semering RS85 je za razliku od ostalih iz ove familije "samostojećih" tj. nije mu potrebna ugradna čaura dok je tip RHS51 predviđen tamo gde su velike obodne brzine ($< 35\text{m/sec}$) kao i tamo gde postoji ekcentritet osovine do 3 mm.

SPECIJALNI TIPOVI RADIJALNIH OSOVINSKIH ZAPTIVAČA

PTFE SEMERING

B2PT**HTS II**

PTFE / METAL semerinzi koji se prvenstveno koriste u hemijskoj industriji. Kavez im je izradjen od čelika 1.4571, O-Prsten od vitona a zaptivna usta od PTFE / UGLJENIK compounda.

Parametri primene:

B2PT

$T = -80 \dots +200^{\circ}\text{C}$, $P_{\text{max}} = 10 \text{ BARA}$, $V = 30\text{m/sec}$.

HTS II

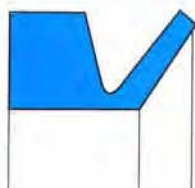
$T = -20 \dots +200^{\circ}\text{C}$, $P_{\text{max}} = 6 \text{ BARA}$, $V = 18\text{m/sec}$.

KASETNI SEMERING



Kasetni semering se koristi na traktorima (npr. kod traktora IMT), drugim poljoprivrednim mašinama, građevinskim mašinama, viljuškama, mikserima, i na komercijalnim vozilima kao što su autobusi, kamioni, prikolice... Ukoliko je stari žljeb, gde je bio ugrađen klasični semering, neoštećen, može se ugraditi kasetni jer dimenziono je prilagođen standardnim ugradnim prostorima. Labirintni sistem zaptivanja višestruko produžuje životni vek! !! Isporučivo u NBR i FKM materijalu.

V - PRSTENOVİ



Ugrađuju se najčešće u kombinaciji sa klasičnim semeringom ispred semeringa, gledano sa atmosferske strane, i služe kao zaštita od prljavštine, prašine, mlaza vode itd. Primjenjuju se kod elektromotora (njima se postiže visok stepen zaštite motora), reduktora, pumpi, na valjačkim stanovima u poljoprivrednim mašinama. Mogu biti izrađeni od NBR-a i od FPM-a. V prsten se ugrađuje navlačenjem na osovinu, na tačno definisanom odstojanju od metalne površine do koje usna rotira, da bi se osigurao optimalni prednapon usne.

TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija
A	5 x 15 x 6	AS	12 x 30 x 7	AS	15 x 32 x 7	A	19 x 30 x 8
A	6 x 16 x 7	A	12 x 30 x 7	A	15 x 35 x 7	A	19 x 32 x 7
A	6 x 19 x 7	A	12 x 30 x 10	AS	15 x 35 x 7	AS	19 x 32 x 7
A	6 x 22 x 7	A	12 x 32 x 7	AS	15 x 35 x 10	A	19 x 35 x 8
A	7 x 16 x 7	AS	12 x 32 x 7	A	15 x 42 x 8	A	19,05x31,75x6,35
A	7 x 22 x 7	A	12,7x25,4x4,76	AS	15 x 42 x 8	A	20 x 28 x 7
A	8 x 14 x 4	A	12,7x25,4x6,35	A	15,87x28,57x6,35	A	20 x 30 x 5
A	8 x 16 x 7	A	12,7x28,57x7,94	A	15,88x28,58x7,9	A	20 x 30 x 7
AS	8 x 16 x 7	A	13, x 22 x 5	AO	16 x 22 x 3	AS	20 x 30 x 7
B	8 x 16 x 7	A	13 x 25 x 7	AO	16 x 24 x 3	A	20 x 30 x 8
A	8 x 22 x 6	AS	13 x 25 x 7	A	16 x 24 x 5	A	20 x 30 x 10
A	8 x 22 x 7	A	13 x 26 x 7	AS	16 x 24 x 6,5	A	20 x 32 x 6
B	8 x 22 x 8	AS	13 x 26 x 7	A	16 x 24 x 7	A	20 x 32 x 7
A	8 x 24 x 7	AS	13 x 30 x 7	AS	16 x 26 x 7	AS	24 x 52 x 7
AS	8 x 25 x 8	A	14 x 22 x 4	A	16 x 26 x 7	AS	25 x 32 x 6
A	8 x 30 x 7	A	14 x 24 x 7	A	16 x 28 x 7	A	25 x 33 x 6
B	9 x 17 x 4,5	B	14 x 24 x 7	A	16 x 30 x 4,5	A	25 x 35 x 6
A	9 x 18 x 7	BS	14 x 24 x 7	AS	16 x 28 x 7	AS	25 x 35 x 7
A	9 x 24 x 7	AS	14 x 24 x 8	B	16 x 30 x 7	A	25 x 35 x 8
A	9 x 26 x 7	A	14 x 26 x 7	A	16 x 30 x 7	A	25 x 36 x 7
A	9,52x22,22x6,35	AS	14 x 26 x 7	A	16 x 32 x 7	A	25 x 37 x 6
A	10 x 16 x 4	AS	14 x 28 x 7	A	16 x 32 x 10	A	25 x 37 x 7
A	10 x 18 x 6	AS	14 x 28 x 7	A	16 x 35 x 7	A	25 x 38 x 7
AS	10 x 18 x 6	A	14 x 30 x 7	A	16 x 40 x 10	AS	25 x 38 x 7
A	10 x 19 x 7	AS	14 x 30 x 7	A	17 x 25 x 4	AS	25 x 40 x 7
A	10 x 20 x 5	A	14 x 30 x 10	A	17 x 26 x 7	A	25 x 40 x 7
AS	10 x 20 x 5	A	14 x 32 x 7	A	17 x 28 x 7	C	25 x 40 x 8
AS	10 x 20 x 6	A	14 x 32 x 10	A	17 x 30 x 7	A	25 x 42 x 6
AS	10 x 22 x 7	A	14 x 35 x 7	A	17 x 32 x 7	A	25 x 42 x 10
AS	10 x 22 x 7	A	14,28x28,57x6,35	AS	17 x 32 x 7	AS	25 x 42 x 10
A	10 x 22 x 7	A	14,2 x 28,5 x 9,5	A	17 x 35 x 7	C	25 x 42 x 10
B	10 x 22 x 8	A	15 x 21 x 4	AS	17 x 35 x 7	A	25 x 45 x 7
A	10 x 24 x 7	A	15 x 22 x 7	A	17 x 35 x 8	AS	25 x 45 x 8
AS	10 x 25 x 7	B	15 x 24 x 3	C	17 x 35 x 10	AS	25 x 45 x 10
A	10 x 26 x 7	A	15 x 24 x 5	A	17 x 37 x 7	C	25 x 45 x 10
A	10 x 30 x 7	A	15 x 24 x 7	A	17 x 37 x 10	A	25 x 45 x 7
A	11 x 17 x 4	B	15 x 24 x 7	A	17 x 38 x 7	AS	25 x 46 x 7
A	11 x 22 x 7	AS	15 x 24 x 7	A	17 x 40 x 7	A	25 x 46 x 7
A	11 x 22 x 8	A	15 x 25 x 6	AS	17 x 40 x 7	A	25 x 47 x 7
AS	12 x 19 x 5	AS	15 x 25,5 x 7	WC	17 x 40 x 10	AS	25 x 47 x 7
A	12 x 20 x 5	AS	15 x 25 x 7	WA	17 x 47 x 10	A	25 x 47 x 8
A	12 x 22 x 7	A	15 x 26 x 7	A	17,47x28,57x6,35	AS	25 x 47 x 10
AS	12 x 22 x 7	AS	15 x 26 x 7	A	18 x 28 x 7	C	25 x 47 x 10
B	12 x 22 x 7	A	15 x 27 x 7	AS	18 x 28 x 7	AS	25 x 48 x 8
AS	12 x 24 x 7	A	15 x 28 x 7	A	18 x 30 x 7	A	25 x 48 x 8
A	12 x 24 x 7	AS	15 x 28 x 7	AS	18 x 30 x 7	C	25 x 50 x 10
A	12 x 25 x 5	B	15 x 30 x 7	A	18 x 32 x 7	AS	25 x 50 x 10
A	12 x 25 x 7	A	15 x 30 x 7	AS	18 x 32 x 7	A	25 x 50 x 10
A	12 x 25 x 8	AS	15 x 30 x 7	A	18 x 35 x 7	A	25 x 52 x 7
A	12 x 26 x 7	A	15 x 30 x 8	A	18 x 40 x 7	AS	25 x 52 x 7
A	12 x 28 x 7	A	15 x 30 x 10	A	18 x 42 x 8	A	25 x 52 x 10
A	12 x 28 x 8	A	15 x 32 x 5,5	A	19 x 27 x 6	AS	25 x 52 x 10

TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija
C	25 x 52 x 10	C	30 x 50 x 10	A	35 x 52 x 9	AS	35 x 55 x 8
AS	25 x 62 x 8	AS	30 x 52 x 7	AS	35 x 52 x 9	A	35 x 55 x 10
A	25 x 62 x 8	A	30 x 52 x 9	B	35 x 52 x 10	AS	35 x 55 x 10
C	25 x 62 x 10	C	30 x 52 x 10	C	35 x 52 x 10	B	35 x 55 x 12
A	26 x 35 x 7	AS	30 x 52 x 10	A	35 x 52 x 10	A	35 x 56 x 10
AS	26 x 36 x 7	A	30 x 55 x 7	A	35 x 55 x 8	A	35 x 58 x 10
AS	26 x 37 x 7	A	30 x 55 x 10	AS	35 x 55 x 8	A	35 x 60 x 10
A	26 x 37 x 7	A	30 x 56 x 10	A	35 x 55 x 10	A	35 x 60 x 12
AS	26 x 38 x 7	A	30 x 60 x 10	AS	35 x 55 x 10	A	35 x 62 x 7
AS	26 x 38 x 8	A	30 x 62 x 7	B	35 x 55 x 12	AS	35 x 62 x 7
A	26 x 42 x 7	AS	30 x 62 x 7	A	35 x 56 x 10	A	35 x 62 x 10
AS	26 x 42 x 8	C	30 x 62 x 10	A	35 x 58 x 10	AS	35 x 62 x 10
A	26 x 47 x 7	AS	30 x 62 x 10	A	35 x 60 x 10	C	35 x 62 x 10
A	26 x 47 x 10	A	30 x 62 x 10	A	35 x 60 x 12	C	35 x 62 x 12
A	27 x 35 x 4	A	30 x 62 x 12	A	35 x 62 x 7	A	35 x 65 x 10
A	27 x 37 x 7	AS	30 x 72 x 8	AS	35 x 62 x 7	AS	35 x 68 x 10
A	27 x 40 x 6	A	30 x 72 x 10	A	35 x 62 x 10	A	35 x 72 x 10
AS	27 x 40 x 8	C	30 x 72 x 10	AS	35 x 62 x 10	AS	35 x 72 x 10
A	27 x 42 x 10	BABSL	31,75x44,65x5,3	C	35 x 62 x 10	C	35 x 72 x 10
A	27 x 47 x 10	A	32 x 42 x 7	C	35 x 62 x 12	C	35 x 72 x 12
AS	28 x 38 x 7	A	32 x 45 x 7	A	35 x 65 x 10	C	35 x 80 x 13
BABSL	28 x 40 x 6	AS	32 x 45 x 7	AS	35 x 68 x 10	A	36 x 47 x 7
AS	28 x 40 x 7	BABSL	32 x 47 x 6	A	35 x 72 x 10	A	36 x 50 x 7
A	28 x 40 x 7	NBR	32 x 47 x 7	AS	35 x 72 x 10	AS	36 x 50 x 7
AS	28 x 40 x 8	C	32 x 47 x 8	C	35 x 72 x 10	A	36 x 52 x 7
A	28 x 40 x 10	AS	32 x 48 x 8	C	35 x 72 x 12	A	36 x 58 x 10
A	28 x 42 x 7	A	32 x 50 x 8	C	35 x 80 x 13	AS	36 x 58 x 10
AS	28 x 42 x 7	A	32 x 50 x 10	A	36 x 47 x 7	C	37 x 62 x 9
A	28 x 42 x 8	BABSL	32 x 52 x 6	A	36 x 50 x 7	A	38 x 50 x 7
A	28 x 45 x 8	AS	32 x 52 x 7	AS	36 x 50 x 7	A	38 x 52 x 7
A	28 x 47 x 7	A	32 x 52 x 7	A	36 x 52 x 7	A	38 x 52 x 8
AS	28 x 47 x 7	A	32 x 52 x 10	A	36 x 58 x 10	A	38 x 52 x 10
A	28 x 47 x 8	C	32 x 52 x 10	AS	36 x 58 x 10	A	38 x 54 x 10
AS	28 x 48 x 8	A	32 x 55 x 10	C	37 x 62 x 9	A	38 x 55 x 7
A	28 x 50 x 8	A	32 x 56 x 10	A	38 x 50 x 7	AS	38 x 55 x 10
A	28 x 52 x 7	A	33 x 50 x 10	A	38 x 52 x 7	C	38 x 55 x 12
A	30 x 40 x 7	A	33 x 62 x 10	A	38 x 52 x 8	A	38 x 60 x 10
AS	30 x 40 x 7	A	34 x 48 x 8	A	38 x 52 x 10	A	38 x 62 x 7
BABSL	30 x 42 x 6	A	34 x 50 x 10	A	38 x 54 x 10	A	38 x 62 x 10
A	30 x 42 x 6	A	34 x 52 x 8	A	38 x 55 x 7	C	38 x 62 x 12
BABSL	30 x 42 x 7	A	34,92x53,97x9,52	A	35 x 47 x 10	A	38 x 65 x 10
A	30 x 42 x 7	A	35 x 45 x 7	A	35 x 50 x 7	A	38 x 72 x 10
AS	30 x 42 x 7	AS	35 x 45 x 7	A	35 x 50 x 10	BABSL	38,10x57,15x7,93
A	30 x 45 x 8	BABSL	35 x 47 x 6	BABSL	35 x 52 x 6	AS	40 x 50 x 7
AS	30 x 45 x 8	AS	35 x 47 x 7	A	35 x 52 x 7	A	40 x 52 x 7
C	30 x 46 x 10	C	35 x 47 x 10	AS	35 x 52 x 7	AS	40 x 52 x 7
AS	30 x 47 x 8	A	35 x 47 x 10	A	35 x 52 x 9	BABSL	40 x 55 x 6
AS	30 x 47 x 10	A	35 x 50 x 7	AS	35 x 52 x 9	A	40 x 55 x 7
C	30 x 47 x 10	A	35 x 50 x 10	B	35 x 52 x 10	C	40 x 55 x 8
A	30 x 48 x 8	BABSL	35 x 52 x 6	C	35 x 52 x 10	C	40 x 55 x 9
AS	30 x 48 x 8	A	35 x 52 x 7	A	35 x 52 x 10	A	40 x 55 x 10
A	30 x 50 x 7	AS	35 x 52 x 7	A	35 x 55 x 8	A	40 x 56 x 10

TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija
A	40 x 56 x 12	AS	45 x 57 x 5,5	A	48 x 62 x 8	A	52 x 72 x 10
A	40 x 58 x 7	A	45 x 58 x 7	A	48 x 68 x 10	C	52 x 72 x 10
A	40 x 58 x 10	AS	45 x 60 x 7	A	48 x 70 x 10	AS	52 x 72 x 10
A	40 x 60 x 7	A	45 x 60 x 7	AS	48 x 72 x 7	C	52 x 72 x 12
C	40 x 60 x 10	BABSL	45 x 60 x 7	A	48 x 72 x 7	A	52 x 75 x 10
A	40 x 60 x 10	A	45 x 60 x 8	AS	48 x 72 x 10	A	52 x 75 x 12
A	40 x 60 x 12	AS	45 x 60 x 8	A	48 x 72 x 10	A	52 x 80 x 10
BABSL	40 x 62 x 6	A	45 x 60 x 10	A	48 x 80 x 8	A	53 x 68 x 10
A	40 x 62 x 7	AS	45 x 60 x 10	A	48 x 80 x 10	A	53,975 x 76,2 x 9,52
C	40 x 62 x 10	C	45 x 60 x 10	A	48 x 90 x 10	A	53,98 x 73,03 x 9,5
A	40 x 62 x 12	AS	45 x 62 x 7	A	50 x 62 x 7	AS	53,98 x 82,5 x 9,5
C	40 x 62 x 12	BABSL	45 x 62 x 7	AS	50 x 62 x 7	A	54 x 70 x 10
A	40 x 65 x 10	A	45 x 62 x 8	A	50 x 65 x 7	A	54 x 72 x 10
C	40 x 65 x 12	C	45 x 62 x 10	BABSL	50 x 65 x 7	AS	54 x 72 x 10
C	40 x 68 x 12	A	45 x 62 x 10	AS	50 x 65 x 8	C	54 x 80 x 10
A	40 x 70 x 10	AS	45 x 62 x 10	A	50 x 65 x 8	AS	54 x 80 x 13
AS	40 x 72 x 10	A	45 x 62 x 12	C	50 x 65 x 10	A	55 x 68 x 8
A	40 x 72 x 10	C	45 x 62 x 12	BABSL	50 x 68 x 7	BS	55 x 70 x 6
C	40 x 72 x 12	BABSL	45 x 65 x 7	AS	50 x 68 x 8	A	55 x 70 x 7
A	40 x 80 x 8	A	45 x 65 x 8	A	50 x 68 x 8	AS	55 x 70 x 8
A	40 x 80 x 10	AS	45 x 65 x 8	C	50 x 68 x 10	A	55 x 70 x 8
C	40 x 80 x 13	A	45 x 65 x 10	A	50 x 70 x 8	AS	55 x 70 x 10
A	40 x 85 x 10	AS	45 x 65 x 10	AS	50 x 70 x 10	A	55 x 70 x 10
A	42 x 55 x 7	C	45 x 65 x 10	A	50 x 70 x 10	BABSL	55 x 72 x 7
AS	42 x 55 x 7	A	45 x 65 x 12	C	50 x 70 x 10	AS	55 x 72 x 8
A	42 x 55 x 10	C	45 x 65 x 12	BABSL	50 x 72 x 7	A	55 x 72 x 8
AS	42 x 55 x 10	AS	45 x 68 x 9	AS	50 x 72 x 8	AS	55 x 72 x 10
A	42 x 56 x 7	A	45 x 68 x 10	A	50 x 72 x 8	A	55 x 72 x 10
AS	42 x 56 x 7	A	45 x 68 x 12	A	50 x 72 x 10	C	55 x 72 x 10
AS	42 x 58 x 7	AS	45 x 68 x 12	A	50 x 72 x 12	A	55 x 72 x 12
A	42 x 58 x 10	A	45 x 70 x 10	AS	50 x 72 x 10	AS	55 x 72 x 12
A	42 x 58 x 10	A	45 x 70 x 12	C	50 x 72 x 10	A	55 x 75 x 8
A	42 x 60 x 10	AS	45 x 72 x 8	AS	50 x 72 x 12	A	55 x 75 x 10
A	42 x 62 x 7	A	45 x 72 x 8	A	50 x 75 x 10	C	55 x 75 x 10
BABSL	42 x 62 x 7	C	45 x 72 x 10	A	50 x 75 x 12	C	55 x 75 x 12
AS	42 x 62 x 7	A	45 x 72 x 10	A	50 x 80 x 8	A	55 x 78 x 10
A	42 x 62 x 8	AS	45 x 75 x 10	AS	50 x 80 x 8	C	55 x 78 x 12
A	42 x 65 x 10	A	45 x 75 x 10	AS	50 x 80 x 10	A	55 x 80 x 8
AS	42 x 65 x 12	C	45 x 75 x 10	A	50 x 80 x 10	C	55 x 80 x 10
A	42 x 70 x 10	AS	45 x 80 x 10	C	50 x 80 x 10	AS	55 x 80 x 10
A	42 x 72 x 8	A	45 x 80 x 10	A	50 x 85 x 8	A	55 x 80 x 12
A	42 x 72 x 10	C	45 x 80 x 13	AS	50 x 90 x 10	C	55 x 80 x 12
C	42 x 72 x 10	AS	45 x 85 x 10	A	50 x 90 x 10	A	55 x 80 x 13
A	43 x 58 x 7	A	45 x 85 x 10	A	50,8 x 69,85 x 9,52	C	55 x 85 x 8
A	43 x 62 x 10	A	45 x 90 x 10	AS	52 x 68 x 8	A	55 x 85 x 10
A	43 x 66 x 10	A	46 x 60 x 7	A	52 x 68 x 8	AS	55 x 85 x 10
A	44 x 55 x 7	AS	46 x 62 x 8	C	52 x 68 x 10	A	55 x 85 x 13
A	44 x 60 x 10	A	47 x 62 x 8	AS	52 x 70 x 9	A	55 x 88 x 10
AS	44 x 62 x 8	A	47 x 65 x 8	C	52 x 70 x 10	A	55 x 90 x 10
AS	44 x 62 x 10	A	47 x 65 x 10	AS	52 x 72 x 8	AS	55 x 90 x 10
A	44 x 62 x 10	A	47,62 x 63,5 x 9,52	A	52 x 72 x 8	A	55 x 90 x 13
A	45 x 55 x 8	AS	48 x 62 x 8	AS	52 x 72 x 9	A	55 x 100 x 10

TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija
A	55 x 100 x 13	A	60 x 100 x 13	A	70 x 90 x 10	B	85 x 105 x 10
A	56 x 70 x 8	AS	60 x 110 x 13	C	70 x 90 x 10	C	85 x 105 x 13
A	56 x 72 x 8	A	60,32x79,37x9,52	AS	70 x 90 x 10	B	85 x 105 x 13
A	56 x 80 x 8	A	61,91x82,55x9,5	C	70 x 90 x 12	A	85 x 105 x 13
A	56 x 85 x 8	B	62 x 75 x 10	A	70 x 95 x 10	BABSL	85 x 110 x 8
A	58 x 72 x 8	A	62 x 80 x 10	AS	70 x 95 x 13	C	85 x 110 x 12
A	58 x 75 x 9	C	62 x 80 x 10	A	70 x 95 x 13	AS	85 x 110 x 12
C	58 x 75 x 12	BABSL	62 x 85 x 7	AS	70 x 100 x 10	A	85 x 110 x 12
A	58 x 78 x 13	A	62 x 85 x 10	A	70 x 100 x 10	A	85 x 110 x 13
A	58 x 80 x 8	A	62 x 85 x 12	C	70 x 100 x 12	A	85 x 115 x 13
A	58 x 80 x 10	A	62 x 90 x 10	A	70 x 105 x 13	BABSL	85 x 120 x 8
A	58 x 80 x 12	A	62 x 90 x 13	A	70 x 110 x 8	AS	85 x 120 x 10
A	58 x 85 x 10	A	62 x 100 x 10	A	70 x 110 x 12	C	85 x 125 x 13
A	58 x 90 x 10	AS	63 x 80 x 9	A	72 x 95 x 10	AS	85 x 130 x 12
A	60 x 70 x 7	A	63,5 x 82,55 x 12,7	A	72 x 100 x 10	A	85 x 130 x 12
C	60 x 70 x 7	A	63,5 x 85,72 x 12,7	A	73,02 x 95,27 x 12,07	A	88 x 110 x 12
A	60 x 72 x 8	A	63,5 x 88,9 x 12,7	A	75 x 90 x 8	BABSL	90 x 110 x 7,5
B	60 x 72 x 8	A	63 x 90 x 10	A	75 x 90 x 10	C	90 x 110 x 8
BABSL	60 x 75 x 8	A	64 x 80 x 8	AS	75 x 90 x 10	A	90 x 110 x 8
AS	60 x 75 x 8	BS	64 x 80 x 8	C	75 x 90 x 12	A	90 x 110 x 12
A	60 x 75 x 8	C	64 x 90 x 10	BABSL	75 x 95 x 7	AS	90 x 110 x 12
A	60 x 75 x 10	AS	64 x 90 x 13	AS	75 x 95 x 8	A	90 x 110 x 13
A	60,32 x 76,2 x 9,5	AS	65 x 80 x 8	A	75 x 95 x 10	C	90 x 110 x 13
A	60 x 78 x 9	A	65 x 80 x 8	AS	75 x 95 x 12	A	90 x 115 x 9
A	60 x 78 x 10	B	65 x 80 x 8	A	75 x 95 x 12	A	90 x 115 x 13
A	60 x 78 x 13	A	65 x 80 x 10	C	75 x 95 x 13	A	90 x 120 x 12
BABSL	60 x 80 x 7	A	65 x 80 x 12	A	75 x 100 x 10	C	90 x 120 x 13
A	60 x 80 x 7	A	65 x 80 x 13	C	75 x 100 x 10	A	90 x 125 x 13
A	60 x 80 x 8	AS	65 x 80 x 12	AS	75 x 100 x 10	A	90 x 130 x 12
AS	60 x 80 x 10	A	65 x 85 x 8	A	75 x 100 x 12	A	90 x 130 x 13
C	60 x 80 x 10	AS	65 x 85 x 10	C	75 x 100 x 12	A	90 x 140 x 13
A	60 x 80 x 10	C	65 x 85 x 10	A	75 x 100 x 13	AS	95 x 110 x 10
BS	60 x 80 x 10	A	65 x 85 x 12	C	75 x 105 x 13	C	95 x 115 x 10
A	60 x 80 x 12	AS	65 x 85 x 12	A	75 x 115 x 10	AS	95 x 115 x 12
AS	60 x 80 x 12	C	65 x 85 x 12	C	75 x 115 x 13	A	95 x 115 x 13
C	60 x 80 x 12	A	65 x 85 x 13	A	78 x 100 x 10	A	95 x 120 x 12
A	60 x 80 x 13	BABSL	65 x 90 x 7	A	78 x 105 x 13	A	95 x 120 x 13
A	60 x 85 x 8	C	65 x 90 x 10	C	80 x 100 x 10	C	95 x 125 x 10
AS	60 x 85 x 8	A	65 x 90 x 10	AS	80 x 100 x 10	AS	95 x 120 x 10
AS	60 x 85 x 10	AS	65 x 90 x 10	A	80 x 100 x 13	C	95 x 120 x 12
A	60 x 85 x 10	A	65 x 90 x 12	AS	80 x 100 x 13	AS	95 x 120 x 13
C	60 x 85 x 10	C	65 x 90 x 12	AS	80 x 105 x 10	A	95 x 125 x 12
A	60 x 85 x 12	A	65 x 90 x 13	A	80 x 105 x 10	C	95 x 125 x 13
A	60 x 85 x 13	A	65 x 95 x 12	C	80 x 105 x 13	A	95 x 130 x 12
A	60 x 90 x 8	A	65 x 100 x 10	AS	80 x 105 x 13	A	100 x 115 x 9
A	60 x 90 x 10	AS	65 x 100 x 10	A	80 x 110 x 10	B	100 x 120 x 8
AS	60 x 90 x 10	C	65 x 100 x 12	C	80 x 110 x 10	A	100 x 120 x 10
C	60 x 90 x 10	A	68 x 95 x 10	A	80 x 110 x 12	C	100 x 120 x 10
A	60 x 90 x 13	AS	70 x 85 x 8	A	82 x 105 x 12	AS	100 x 120 x 12
AS	60 x 90 x 13	A	70 x 85 x 8	A	82 x 105 x 12	C	100 x 120 x 12
A	60 x 95 x 10	AS	70 x 90 x 7	A	82,55 x 107,95 x 12	AS	100 x 120 x 12
A	60 x 100 x 10	BABSL	70 x 90 x 7	A	85 x 105 x 10	A	100 x 120 x 13

TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija	TIP	Dimenzija
C	100 x 120 x 13	A	112 x 140 x 13	AS	135 x 165 x 12	AS	165 x 190 x 13
A	100 x 125 x 12	A	114 x 140 x 13	A	135 x 170 x 12	A	170 x 190 x 15
AS	100 x 125 x 12	A	115 x 130 x 12	AS	135 x 170 x 12	C	170 x 190 x 15
AS	100 x 125 x 13	A	115 x 140 x 10	AS	135 x 170 x 15	A	170 x 200 x 14
C	100 x 125 x 13	A	115 x 140 x 12	C	135 x 170 x 15	A	170 x 200 x 15
A	100 x 130 x 12	C	115 x 140 x 12	A	135 x 180 x 15	C	170 x 200 x 15
AS	100 x 130 x 12	A	115 x 140 x 13	A	139,70 x 171,45 x 12	AS	170 x 210 x 15
A	100 x 130 x 13	C	115 x 140 x 13	A	140 x 160 x 13	A	175 x 200 x 15
C	100 x 130 x 13	C	115 x 140 x 15	AS	140 x 160 x 13	C	180 x 200 x 15
AS	100 x 130 x 13	A	115 x 145 x 13	C	140 x 160 x 13	A	180 x 200 x 15
A	100 x 130 x 14	A	115 x 150 x 13	C	140 x 165 x 12	A	180 x 210 x 15
A	100 x 140 x 12	AS	115 x 150 x 13	A	140 x 170 x 12	AS	180 x 215 x 15
A	100 x 140 x 13	AS	115 x 150 x 15	AS	140 x 170 x 12	A	180 x 215 x 16
C	100 x 140 x 13	C	115 x 150 x 15	C	140 x 170 x 14	C	180 x 215 x 16
A	100 x 127 x 12	A	120 x 140 x 10	A	140 x 170 x 14	A	180 x 220 x 15
A	105 x 110 x 13	A	120 x 140 x 12	A	140 x 170 x 15	A	185 x 210 x 13
B	105 x 125 x 12	C	120 x 140 x 13	C	140 x 170 x 15	C	185 x 215 x 15
C	105 x 125 x 13	A	120 x 145 x 12	A	140 x 175 x 15	A	185 x 215 x 15
A	105 x 125 x 13	A	120 x 150 x 12	A	140 x 180 x 12	A	190 x 215 x 15
AS	105 x 125 x 13	C	120 x 150 x 12	A	140 x 180 x 15	A	190 x 220 x 15
A	105 x 130 x 12	A	120 x 150 x 13	C	140 x 180 x 15	A	190 x 230 x 15
AS	105 x 130 x 12	C	120 x 150 x 13	AS	140 x 180 x 15	AS	190 x 250 x 15
A	105 x 130 x 13	A	120 x 150 x 15	BS	145 x 170 x 13	A	195 x 230 x 16
C	105 x 130 x 13	A	120 x 160 x 12	A	145 x 170 x 15	A	200 x 230 x 15
C	105 x 130 x 15	A	120 x 160 x 13	C	145 x 170 x 15	C	200 x 230 x 15
A	105 x 140 x 12	AS	125 x 150 x 12	C	145 x 175 x 13	A	200 x 235 x 18
A	105 x 140 x 13	A	125 x 150 x 13	AS	145 x 175 x 14	A	210 x 240 x 15
C	105 x 140 x 13	A	125 x 150 x 15	A	145 x 175 x 15	C	210 x 240 x 15
AS	105 x 140 x 13	A	125 x 160 x 12	A	145 x 180 x 12	A	210 x 250 x 15
A	105 x 145 x 16	C	125 x 160 x 13	A	150 x 170 x 12	A	220 x 250 x 15
A	107,95x133,35x12,7	AS	125 x 160 x 15	A	150 x 170 x 15	C	220 x 250 x 15
A	110 x 125 x 13	C	125 x 160 x 15	C	150 x 170 x 15	A	220 x 255 x 18
A	110 x 130 x 10	A	127 x 152,4 x 12	A	150 x 180 x 12	A	230 x 310 x 16
A	110 x 130 x 12	A	128 x 150 x 13	A	150 x 180 x 13	A	240 x 270 x 15
AS	110 x 130 x 12	AS	130 x 150 x 12	C	150 x 180 x 13	C	240 x 270 x 15
C	110 x 130 x 12	C	130 x 150 x 14	C	150 x 180 x 15	A	240 x 280 x 16
A	110 x 130 x 13	C	130 x 155 x 12	NBR	152 x 190 x 17	A	250 x 290 x 15
C	110 x 130 x 13	AS	130 x 160 x 12	A	155 x 180 x 15	C	260 x 290 x 16
C	110 x 130 x 15	A	130 x 160 x 13	C	155 x 180 x 15	A	260 x 300 x 15
A	110 x 135 x 12	C	130 x 160 x 13	A	155 x 190 x 15	A	280 x 310 x 15
A	110 x 140 x 10	A	130 x 160 x 14	A	158 x 180 x 15	C	280 x 310 x 16
A	110 x 140 x 12	A	130 x 160 x 15	A	160 x 180 x 15	A	280 x 320 x 10
AS	110 x 140 x 12	AS	130 x 160 x 15	A	160 x 185 x 10	A	280 x 320 x 20
C	110 x 140 x 12	C	130 x 160 x 15	C	160 x 185 x 10	C	290 x 330 x 18
A	110 x 140 x 13	A	130 x 170 x 12	B	160 x 185 x 10	C	300 x 332 x 16
C	110 x 140 x 13	A	130 x 170 x 15	A	160 x 185 x 15	A	320 x 360 x 20
AS	110 x 140 x 14	C	130 x 170 x 15	C	160 x 190 x 13	C	340 x 372 x 16
C	110 x 140 x 15	A	135 x 160 x 12	A	160 x 190 x 15	C	340 x 380 x 20
A	110 x 145 x 15	A	135 x 160 x 13	C	160 x 190 x 15	A	380 x 420 x 20
A	110 x 150 x 13	C	135 x 160 x 13	AS	160 x 190 x 16	C	390 x 430 x 18
AS	110 x 150 x 13	A	135 x 160 x 15	A	160 x 200 x 15	C	400 x 440 x 20
C	110 x 150 x 13	C	135 x 160 x 15	C	160 x 200 x 15	A	400 x 444 x 20