LIVARNA TITAN SLOVENIA

100% MADE IN EUROPE SLOVENIA

Since 1920

# Fitingi
# Fittings
# Raccordi

# O podjetju

Livarna TITAN, d.o.o. nadaljuje dolgoletno tradicijo livarstva na področju Kamnika. Začetki TITANA segajo v leto 1896 s pričetkom obrtniške proizvodnje pribitnih in vdolbenih ključavnic ter nasadil za vrata. Začetki livarske dejavnosti segajo v leto 1920, družba TITAN pa je bila ustanovljena leta 1922. Proizvodnja cevnih spojnih elementov (fitingov) se je pričela leta 1933. Po drugi svetovni vojni je bila livarna posodobljena in je s svojimi kakovostnimi T-fitingi pomembno prispevala k razvoju podjetja. Kmalu po letu 1960 je livarna dosegla intenzivni razvoj. Z letom 2001 je postala samostojno hčerinsko podjetje skupine CIMOS. V tem obdobju je bila izvedena ekološka in tehnološka sanacija ter pridobljeno okoljsko dovoljenje.

Proizvodni program se je vseskozi širil in izpopolnjeval z najnovejšimi tehnološkimi procesi. Danes Livarna TITAN proizvaja kakovostno belo temprano litino za lasten proizvodno prodajni program, kot tudi za ulitke po naročilu kupcev, po standardih GTW 35 do GTW 45 ter GTW S 38, z dobro varljivostjo. Našo kakovost potrjujejo kupci iz Srednje in Zahodne Evrope, kjer prodamo preko 90 % proizvodnje. Z razširitvijo izbora fitingov tržne deleže na novih trgih povečujemo, na tradicionalnih pa utrjujemo. S tržno usmerjeno zasnovo prodaje izdelke v največji možni meri prilagodimo zahtevam kupca in s pristno vezjo z odjemalci gradimo obojestransko zadovoljstvo.

Temeljni cilji družbe Livarna TITAN so:

- zadovoljni kupci
- razvoj in donosna rast
- ustvarjalni sodelavci
- zdravo in varno okolje

# About us

Livarna TITAN, d.o.o. continues with a long-lasting foundry tradition in Kamnik. The beginnings of TITAN can be traced back to 1896, when the craft production of surface mount locks, mortise locks, and door hinges began. First castings were produced in 1920 when foundry was built. Two years later, in 1922, the company TITAN was founded. Production of pipe fittings began in 1933. After the Second World War, the foundry was modernized and has importantly contributed to the development of the company with its T-fittings. Soon after 1960 started an intensive development of the foundry. In 2001, TITAN became an independent subsidiary of the CIMOS Group which invested heavily in the ecological and technological reconstruction as well as in the environmental license for the foundry.

Since then production program has been constantly expanding and implementing the latest technological processes. Today Livarna TITAN produces high quality White-heart malleable cast iron for wide range of castings according to the standards GTW 35 to GTW 45 and GTW S 38, featuring good welding properties. The quality of our products is confirmed by our partners from Central and Western Europe, where over 90% of our products are sold. By increasing the range of fittings, we are improving our position in new markets, and strengthening it in the traditional ones. Through marketing-oriented sales strategy, we are able to adapt our products to the demands of the customers and nurture genuine relationships between us by building mutual satisfaction.

The fundamental goals of the Livarna TITAN, d.o.o. are:

- Satisfied customers
- Development and profitable growth
- Creative employees
- Healthy and safe environment

ilustracija tovarne okoli leta 1910
*illustration of factory, aproxx. 1910*

# Splošna navodila

**NORMATIVNE OZNAKE**

Temprani fitingi za vodovodne, plinske in ostale instalacije, ki so nevedeni v tem katalogu, ustrezajo tako mednarodnim predpisom ISO 49 kot tudi evropskim EN 10242. Paziti je treba na novo označevanje fitingov po ISO 49 in po EN 10242; tako imenovani "Design-Symbol", označuje material in izvedbo priključnih navojev. Z označbo "A" so skrajšano označene naslednje izvedbene podrobnosti:
Vrsta materiala visoko kvalitetna bela temprana litina po EN 1562: EN-GJMW-400-5

"Design-Symbol'' .....A
Vrsta navoja:
zunanji konusni navoj (1:16) .....R
notranji cilindrični navoj: .....Rp

Fitingi LIVARNE TITAN, d.o.o. (Design Symbol ''A'') se naročajo z naslednjimi podatki:
1. oblika oz. slika (oznaka v katalogu)
2. imenska mera priključka
3. površina vroče pocinkana (opcija črni)
4. število kosov

**OZNAČEVANJE BLAGOVNE ZNAMKE**

LIVARNE TITAN, d.o.o. za zaščitni znak uporablja "T", ki je registriran pod mednarodno reg. št. 2R174903 od leta 1954 dalje in je vtisnjen na vsakem fitingu.

**ZAGOTAVLJANJE KAKOVOSTI**

Sistem vodenja kakovosti je certificiran po DIN ISO 9001/2008. Naši fitingi so uporabni do tlaka 40 barov, kar potrjuje tudi poročilo o hidrostatičnem tlačnem preizkusu, ki ga je izdala Fakulteta za strojništvo v Ljubljani.

**TEŽA**

Zaradi tehnoloških in proizvodnih razlogov, se dejanske teže lahko razlikujejo od naved v tem katalogu.

**POVRŠINSKI SLOJ**

Na zahtevo kupcev lahko dobavljamo črne ali vroče pocinkane fitinge. Za začasno zaščito pred nastankom korozijskega filma uporabljamo poseben zaščitni sloj.

**SESTAVLJANJE PRIVIJAL**

**Privijala s ploščatim tesnenjem**

Na privijalih s ploščatim tesnenjem (95, 97, 330 in 331) dosežemo tesnjenje z uporabo tesnila. Livarna Titan privijal ne dobavlja s tesnili, ker se le ta izbira glede na namen uporabe in vrste medija ki ga privijalo prenaša. Pred montažo je potrebno naležne površine očistiti. Privijalo je možno razstaviti in ponovno sestaviti z novim tesnilom.

**Privijala s koničnim tesnenjem**

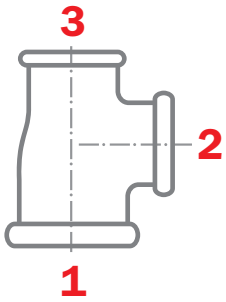
Na privijalih s koničnim tesnenjem (96, 98, 340, 341) dosežemo tesnjenje brez uporabe tesnil. Pred montažo je potrebno konične tesnilne površine očistiti in na njih nanesti tanek sloj maziva (npr. olja, v primeru pitne vode pa mazivo po EN 751-2; npr. Loctite® 8104). Privijalo je možno razstaviti in ponovno sestaviti, vendar pri ponovni uporabi Livarna Titan ne zagotavlja tesnjenja.

**POIMENOVANJE OZNAK FITINGOV**

**Fitingi so označeni:**

- Z enakimi priključnimi dimenzijami ne glede na število priključkov v primeru fitingov z enakimi priključnimi dimenzijami;
- z različnimi dimenzijami od večje proti manjši v primeru fitingov z dvema enakima priključnima dimenzijama;
- z različnimi priključnimi dimenzijami v primeru fitingov z dvema enakima priključnima dimenzijama, ki so na izhodu reducirni, oz. imajo izhode s tremi različnimi dimenzijami.

Ob tem se fitingi z različnimi priključnimi dimenzijami, ki pa niso reducirani, specificirani po naslednji metodi:
1. T-kos B1 z enakimi priključki na izhodu z naraščajočomi ali padajožimi dimenzijami, ki sta specificrani po velikosti izhoda npr. 11/2"- 3/4"
2. Reducirni križ C1: velikost največjega priključka je določena z velikostjo dveh manjših vendar enakih izhodov npr. :1 1/2"-1".".




**Primer:**
Reducirni T-kos s priključkoma 1" in 1/2" in izhodom 3/4", pocinkani T-kos ISO 49 B1 1"-½"-3/4

**PAKIRANJE**

Fitingi so pakirani v kartone. Do vključno dimenzije DN25 (1'') so dodatno pakirani v plastične vrečke po 10 kos, razen dimenzije DN10 (3/8'') po 25 kos. Kartoni in vrečke so opremljene z ustreznimi etiketami s črtno kodo.

**Legenda**

- Č črni fitingi
- P pocinkani fitingi
- Koda koda izdelka Livarne Titan
- ISO simbol ISO 49
- število kosov v kartonu
- število kosov v plastični vreč
- masa izdelka v gramih

# General Instructions

**STANDARD REFERENCES**

The characteristics of malleable cast iron threaded pipe fittings for water, gas and other installations, contained in this catalogue, conform to the international ISO 49 and to the European EN 10242 standards. Please note the most recent specification of fittings according to ISO 49 and EN 10242, the so-called ''Design Symbol.'' This symbol describes the material and the form of the thread. The symbol "A" designates the following product versions.The material used is high quality white heart malleable cast iron according to EN 1562: EN-GJMW-400-5.

''Design-Symbol'' .....A
Type of coil:
Outer tapered thread (1:16) .....R
Inner cylinder thread: .....Rp

LIVARNA TITAN, d.o.o, Fittings (Design Symbol ''A'') can be ordered by specifying the following information:
1. Shape and picture (catalogue number)
2. Nominal size of fitting
3. Hot zinc-coated surface (P) or optional black (Č)
4. Number of pieces

**TRADE MARK MARKINGS**

LIVARNA TITAN, d.o.o, uses the symbol "T" as a logo to identify its products. Since 1954 LIVARNA TITAN, d.o.o, has been registered internationally under number 2R174903 and its logo is engraved on every fitting.

**QUALITY ASSURANCE**

Quality control is ensured by a certificate issued under DIN ISO 9001/2008. Our fittings withstand 40 bar of hydrostatic pressure, as stated in the report of pressure endurance for hydrostatic pressure, issued by the Faculty of Mechanical Engineering in Ljubljana.
Hot-zinc coating protection complies with ISO 49.

**WEIGHT**

The nominal weight, indicated in this catalogue, may vary due to technical reasons of production. Black or galvanised (hot-dip, zinc-coated) fittings can be supplied on request. As a temporary protection against superficial rust, a special protective layer is also applied.

**6. SURFACE LAYER**

Black or galvanised (hot-dip, zinc-coated) fittings can be supplied on request. As a temporary protection against superficial rust, a special protective layer is also applied.

**ASSEMBLY OF UNIONS**

**Flat seat unions**

On flat seat unions (95, 97, 330 in 331) sealing effect is achieved by gasket. Flat seat unions are supplied without gasket, because the choice of the gasket depends on the media and working conditions that union is used for. Prior to the assembly contact surfaces should be cleaned. Flat seat unions can be reused using new gasket.

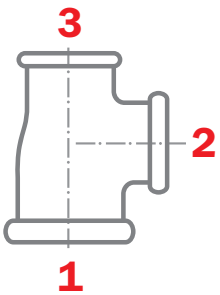
**Taper seat unions**

On taper seat unions (96, 98, 340, 341) sealing effect is achieved without gasket. Prior to the assembly conical seats must be cleaned. A thin film of lubricant (like oil or in case of potable water lubricant in accordance to EN 7512; example: Loctite® 8104) must be applied to the both conical surfaces. Taper seat unions can be reused, but in this case Livarna Titan does not guarantee the sealing performance.

**DESIGNATION OF SIZE**

Fitting size is designated as follows:
- Fittings with all outlets of the same size are referred to by one size regardless of the number of outlets.
- Fittings with two outlets of different size are specified by their outlets in decreasing order (first the larger then the smaller outlet).
- In addition, fittings with more than two different size outlets and a reducing on run, or with three different outlets, are specified as follows.

Additionally, unequal fittings with more than two outlets, but no reducing on run, are specified according to the following method:
1. Tees B1 with equal outlets on run and an increasing or decreasing outlet on the branch are specified by the size of the run followed by the size of the branch, for example:1 1/2'' - 3/4''
2. In reducing crosses C1, the size of the largest run is specified, followed by the size of the two smaller (but equal) branches, for example 1 1/2''-1''.




**Example:**
Reducing tee with 1'' and 1/2'' runs and a ¾'' branch with galvanised finish: TEE ISO 49 B1- 1''-1/2''-3/4''.

**PACKAGING**

Fittings of all sizes are packed in cardboard boxes. Fittings up to DN25 (1'') are additionally packed in plastic bags in sets of 10, except sizes DN10 (3/8'') in sets of 25. Cardboard boxes and bags are equipped with corresponding label with bar code.

## Guide / Introduction

Č black fittings
P galvanised fittings
Koda Livarna Titan Foundry product code
ISO ISO 49 symbol
pieces packed in cardboard box
pieces packed in plastic bag
kg weight in grams

# Informazioni generali

**RIFERIMENTI NORMATIVI DEI PRODOTTI**

I raccordi temperati per installazioni idrauliche, installazioni per gas ed altre installazioni, elencati in questo catalogo, sono conformi ai regolamenti internazionali ISO 49 ed alle normative europee EN 10242. Per l'indicazione dei raccordi, sia secondo le normative ISO 49, sia secondo le EN 10242, é necessario fare riferimento al cosiddetto "Desing-Symbol", che contraddistingue il materiale e il tipo di filettatura. Con la lettera "A" sono indicate abbreviate le seguenti particolarit di fattura. Tipo di materiale e ghisa malleabile a cuore bianco di alta qualita secondo la norma EN 1562: EN-GJMW-400-5.

''Design-Symbol'':.....A
Tipo di filettatura:
filettatura esterna conica (1:16).....R
filettatura interna cilindrica: .....Rp

I raccordi della LIVARNA TITAN, d.o.o (Design Symbol ''A'') vengono ordinati in base ai seguenti dati:
1. forma e/o foto (denotazione nel catalogo)
2. dimensioni nominali del raccordo
3. superficie zincata a caldo (opzione: neri)
4. numero di pezzi

**CONTRASSEGNO DEL MARCHIO**

LIVARNA TITAN, d.o.o ha adottato come marchio di fabbrica la lettera "T", registrata sotto il nr. del registro internazionale 2R174903, sin dall' anno1954. Il marchio é impresso su ogni raccordo.

**GARANZIA DELLA QUALITÁ**

Il sistema di gestione di qualit é certificato in base a DIN ISO 9001/2008. I nostri raccordi possono essere utilizzati fino a una pressione di 40 bar, il che é certificato dal rapporto sul test di tenuta della pressione idrostatica, effettuato dalla Facolt di ingegneria di Lubiana.

**INDICAZIONI DEL PESO**

Per ragioni riconducibili alla tecnologia di produzione i pesi indicati in questo catalogo sono espressi a titolo indicativo e quindi passibili di lievi differenze.

**TRATTAMENTO DELLE SUPERFICI**

Su richiesta degli acquirenti possiamo fornire raccordi neri o raccordi zincati a caldo. Per proteggere i raccordi dalla corrosione viene utilizzato uno strato speciale di protezione.

**ASSEMBLAGO DI BOCCHETTONI**

**Bocchettoni a sede piana**

I bocchettoni a sede piana (95, 97, 330 in 331) necessitano di guarnizioni. Livarna Titan fornisce i bocchettoni senza guarnizioni, poiché le guarnizioni vengono scelte in base allo scopo d' uso e al tipo del fluido di scorrimento. Prima del montaggio bisogna pulire le superfici di posizionamento. Il bocchettone pu essere smontato e ricomposto con una guarnizione nuova.

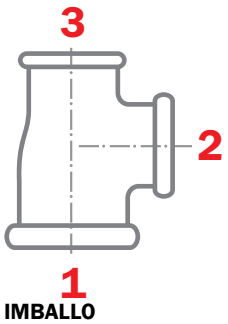
**Bocchettoni a sede conica**

I bocchettoni a sede conica (96, 98, 340, 341) non hanno bisogno di guarnizioni. Prima del montaggio é necessario pulire le superfici coniche di tenuta e rivestirle con uno strato lieve di lubrificante (es. olio, nel caso di acqua potabile lubrificante secondo EN 751-2; per es. Loctite® 8104). Il bocchettone pu essere smontato e ricomposto. Nel caso di riutilizzo Livarna Titan non garantisce la tenuta.

**DENOMINAZIONI DEI RACCORDI**

I raccordi vengono denominati in base a diverse caratteristiche:
- per i raccordi con filettature uguali é sufficinete l' indicazione della dimensione della filettatura;
- per i raccordi con dimensioni di filettature diverse, con due filet tature uguali, indicare prima la dimensione pi grande, poi quella piccola;
- i raccordi con pi di due passaggi che sono di tipo riduttivo e/o hanno tre passaggi diversi, vengono specificati in base al seg uente metodo

1. Pezzo a T, B1 con filettature uguali, di dimensioni in aumento o in diminuzione, le quali vengono specificate in base alla dimensione del passaggio, per es. 11/2 "- 3/4"
2. Tipo riduttivo a croce C1: la dimensione del filetto pi grande viene definita con la dimensione di due filetti pi piccoli, ma Senza passaggi uguali, per es. 11/2 "-1".




**Esempio:**
Il particolare a T con filetto di 1" e ˝", con passaggio di 3/4", zincato Particolare a T ISO 49 B1 1"-˝"-3/4".

**IMBALLO**

I raccordi vengono imballati in cartoni. I raccordi di dimensioni fino a DN25 (1'') vengono imballati aggiuntivamente in sacchetti di plastica da 10 pezzi, tranne i raccordi delle dimensioni di DN10 (3/8'') che vengono imballati in sacchetti di plastica da 25 pezzi. I cartoni e i sacchetti sono provvisti di etichette con codice a barre.

## Leggenda

Č (N) raccordi neri

P (Z) raccordi zincati

Koda codice del prodotto Livarna Titan

ISO simbolo secondo ISO 49

numero di pezzi per ogni cartone

numero di pezzi per ogni saccetto di plastica

kg peso del pezzo espresso in grammi

# Allgemeine Hinweise

**PRODUKTNORMEN**

Die in diesem Katalog enthaltenen Tempergussfittings für Wasserleitungs-, Gas- und andere Installationen entsprechen der internationalen Norm ISO 49 sowie der europäischen Norm EN10242. Es sind die neuen Elemente der Fittingkennzeichnung sowohl nach ISO 49 als auch nach EN 10242 zu beachten: das so genannte Design-Symbol zur Kennzeichnung des Werkstoffs und der Anschlussgewindeausführung. Mit dem Design-Symbol A sind folgende Ausführungsdetails gekennzeichnet: Werkstoffsorte aus hochwertig weißen Temperguss nach EN 1562: EN-GJMW-400-5.

Design-Symbol: .....A
Gewindeart:
konisches Außengewinde (1 : 16): .....R
zylindrisches Innengewinde: .....Rp

Fittings des Herstellers LIVARNA TITAN, d.o.o (Design-Symbol A) sind mit folgenden Daten zu bestellen:
1. Form bzw. Bild (Katalognummer)
2. Nennmaß des Anschlusses
3. Oberfläche heißverzinkt oder schwarz
4. Stückzahl

**KENNZEICHNUNG DER MARKE**

Die Firma LIVARNA TITAN, d.o.o verwendet als Schutzzeichen den Buchstaben. Dieses Zeichen “T” ist unter der internationalen Registernummer 2R174903 registriert (seit 1954) und auf jedem Fitting eingeprägt.

**QUALITÄTSMANAGMENT**

Unser Qualitätsmanagement-System ist zertifiziert nach DIN ISO 9001/2008. Unsere Fittings sind bis zu einem Druck von 40 bar verwendbar, was durch den Bericht eines hydrostatischen Druckversuches der Fakultät für Maschinenbau in Ljubljana bezeugt ist.

**GEWICHT**

Aus technologischen und produktionsbezogenen Gründen können die Gewichte von den in diesem Katalog angeführten Werten abweichen

**OBERFLÄCHENSCHICHT**

Auf Wunsch können schwarze oder heißverzinkte Fittings geliefert werden. Zur temporären Vermeidung von Rostfilmen wird eine spezielle Schutzschicht aufgetragen.

**MONTAGE VON VERSCHRAUBUNGEN**

**Verschraubung Flach dichtend**

Bei flach dichtenden Verschraubungen (95, 97, 330 in 331) wird der Dichtungseffekt durch Dichtungsringe erzielt. Flach dichtende Verschraubungen werden ohne Dichtungsringe geliefert, da die Wahl des Dichtungsrings davon abhängig ist, für welche Medien die Verschraubung benutzt wird. Vor dem einlegen der Dichtung sollte die Oberfläche gereinigt werden. Flach dichtenden Verschraubungen können mit neuen Dichtungen wieder verwendet werden.

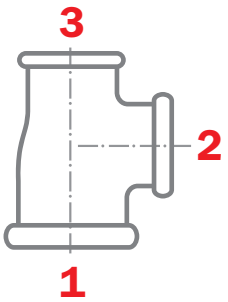
**Verschraubung mit Kegelabdichtung,**

Bei Verschraubungen mit Kegelabdichtung (96, 98, 340, 341) wird der Dichtungseffekt ohne Dichtungsring erzielt. Vor der Montage müssen die konischen Verschraubungen gereinigt werden. Ein dünner Schmiermittelfilm (Öl oder bei Trinkwasser ein Schmiermittel nach EN 751-2; z.B. Loctite® 8104) muss auf beide kegelförmigen Oberflächen aufgetragen werden. Verschraubungen mit Kegeldichtung können wieder verwendet werden, jedoch gibt Livarna Titan in diesem Fall keine Garantie auf die Dichtheitsleistung.

**FITTINGKENNZEICHNUNG**

Die Fittings sind wie folgt gekennzeichnet:
Fittings mit Anschlüssen einheitlicher Größe werden durch einmalige Angabe dieser Größe ungeachtet der Anzahl der Anschlüsse gekennzeichnet. Fittings mit zwei Anschlüssen verschiedener Größe werden durch Angabe dieser Größen in absteigender Reihenfolge gekennzeichnet. Fittings mit mehr als zwei Anschlüssen verschiedener Größe, die am Ausgang reduziert sind oder drei verschiedene Anschlüsse haben, ...

Hierbei werden nicht reduzierte Fittings mit Anschlüssen verschiedener Größe nach folgender Methode gekennzeichnet:
1. T-Stück B1 mit gleichen Anschlüssen am Ausgang mit steigenden oder fallenden Größen, die nach der Größe des Ausgangs spezifiziert sind, z. B. 1 1/2’’ - 3/4’’.
2. Reduziertes Kreuz C1: Angabe der Größe des größten Anschlusses, gefolgt von der Größe der zwei kleineren (aber Gleichen) Anschlüsse, z. B. 1 1/2’’ - 1’’.




**Beispiel:**
Reduziertes T-Stück mit 1’’- und ½’’-Anschluss, verzinktes T-Stück ISO 49 B1 -1’’ - 1/2’’ - 3/4’’.

**VERPACKUNG**

Fittinge aller Größen werden in Pappkartons verpackt. Fittinge bis zu DN25 (1“) werden zusätzlich in Sätzen zu je 10 Stück in Plastikbeutel verpackt, ausgenommen die Größe DN10 (3/8“), welche zu 25 Stück je Beutel verpackt wird. Die Pappkartons und die Beutel sind mit Strichcode-Etiketten (EAN) versehen.

## Zeichenerklärung

- Č Schwartze Fittings
- P Verzinkte Fittings
- Koda Produkcode des Werkes Livarna Titan
- ISO Symbol nach ISO 49
- Stückzahl je Kartonpackung
- Stückzahl je Beutel
- kg Stückgewitch in Gramm

LIVARNA TITAN SLOVENIA

Since 1920

SIQ

ZAG LJUBLJANA

DVGW

## stran/page


**1**
ART.1 ISO G4
ART.2 ISO G1

**2**
ART.40 ISO G4/45°
ART.41 ISO G1/45°
ART.85

**3**
ART.90 ISO A1
ART.90R ISO A1

**4**
ART.92 ISO A4
ART.95 ISO UA1

**5**
ART.96 ISO UA11
ART.97 ISO UA2

**6**
ART.98 ISO UA12
ART.130 ISO B1

**7**
ART.130R ISO B1

**8**
ART.180 ISO C1
ART.240 ISO M2

**9**
ART.241 ISO N4

**10**
ART.245 ISO N8
ART.246 ISO M4

**11**
ART.270 ISO M2
ART.271 D/L ISO M2 R/L

**12**
ART.280 ISO N8
ART.281D/L ISO N8 R/L

**13**
ART.290 ISO T9
ART.291 ISO T8

**14**
ART.294
ART.300 ISO T1

**15**
ART.312 ISO P4
ART.321

**16**
ART.330 ISO U1
ART.331 ISO U2

**17**
ART.340 ISO U11
ART.341 ISO U12

**18**
ART.370
ART.371

**19**
ART.372
ART.372-374

**20**
ART.374 ISO P1
ART.471

**21**
ART.529a ISO M4
ART.620
ART.621

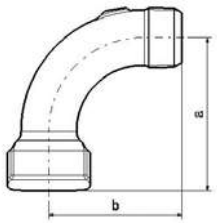
**22**
ART.622
ART.800
ART.802

**23**
ART.820
ART.821

**24**
ART.822
ART.900
ART.90 1"

## ART.1
## ISO G4

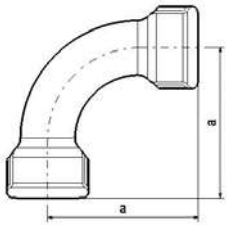
**LOK 90° Z/N NAVOJ**
**LONG SWEEP BEND 90° M/F THREAD**
**CURVA LUNGA 90° M/F FILETTATURA**
**LANGER BOGEN 90° M/F GEWINDE**




| Dim. mm | velikost | koda | a | b | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2" Č | KA10720103 | 55 | 48 | 170 | 10 | 0,110 |
| 15 | 1/2" P | KA10725103 | 55 | 48 | 170 | 10 | 0,116 |
| 20 | 3/4" Č | KA10720104 | 69 | 60 | 100 | 10 | 0,190 |
| 20 | 3/4" P | KA10725104 | 69 | 60 | 100 | 10 | 0,200 |
| 25 | 1" Č | KA10720105 | 85 | 75 | 40 | 10 | 0,310 |
| 25 | 1" P | KA10725105 | 85 | 75 | 40 | 10 | 0,326 |
| 32 | 1 1/4" Č | KA10720206 | 105 | 95 | 25 | | 0,539 |
| 32 | 1 1/4" P | KA10725206 | 105 | 95 | 25 | | 0,566 |
| 40 | 1 1/2" Č | KA10720207 | 116 | 105 | 18 | | 0,772 |
| 40 | 1 1/2" P | KA10725207 | 116 | 105 | 18 | | 0,811 |
| 50 | 2" Č | KA10720208 | 140 | 130 | 9 | | 1,402 |
| 50 | 2" P | KA10725208 | 140 | 130 | 9 | | 1,440 |
| 65 | 2 1/2" Č | KA10720209 | 176 | 165 | 4 | | 2,620 |
| 65 | 2 1/2" P | KA10725209 | 176 | 165 | 4 | | 2,700 |
| 80 | 3" Č | KA10720210 | 205 | 190 | 3 | | 3,860 |
| 80 | 3" P | KA10725210 | 205 | 190 | 3 | | 3,980 |

## ART.2
## ISO G1

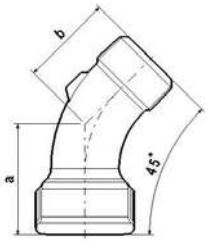
**LOK 90°**
**LONG SWEEP BEND 90°**
**CURVA LUNGA 90°**
**LANGER BOGEN 90°**




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2" Č | KA10700103 | 55 | 140 | 10 | 0,142 |
| 15 | 1/2" P | KA10705103 | 55 | 140 | 10 | 0,149 |
| 20 | 3/4" Č | KA10700104 | 69 | 80 | 10 | 0,235 |
| 20 | 3/4" P | KA10705104 | 69 | 80 | 10 | 0,247 |
| 25 | 1" Č | KA10700105 | 85 | 40 | 10 | 0,368 |
| 25 | 1" P | KA10705105 | 85 | 40 | 10 | 0,386 |
| 32 | 1 1/4" Č | KA10700206 | 105 | 20 | | 0,657 |
| 32 | 1 1/4" P | KA10705206 | 105 | 20 | | 0,690 |
| 40 | 1 1/2" Č | KA10700207 | 116 | 15 | | 0,850 |
| 40 | 1 1/2" P | KA10705207 | 116 | 15 | | 0,893 |
| 50 | 2" Č | KA10700208 | 140 | 8 | | 1,354 |
| 50 | 2" P | KA10705208 | 140 | 8 | | 1,422 |
| 65 | 2 1/2" Č | KA10700209 | 176 | 4 | | 3,060 |
| 65 | 2 1/2" P | KA10705209 | 176 | 4 | | 3,150 |
| 80 | 3" Č | KA10700210 | 205 | 3 | | 4,051 |
| 80 | 3" P | KA10705210 | 205 | 3 | | 4,295 |

## ART.40
## ISO G4/45°

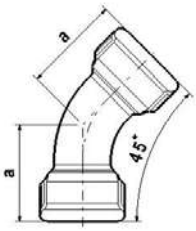
LOK 45° Z/N NAVOJ
LONG SWEEP BEND 45° M/F THREAD
CURVA LUNGA 45° M/F FILETTATURA
LANGER BOGEN 45° M/F GEWINDE




| Dim. mm | velikost | koda | a | b | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10730103 | 22 | 28 | 180 | 10 | 0,105 |
| 15 | 1/2″ P | KA10735103 | 22 | 28 | 180 | 10 | 0,108 |
| 20 | 3/4″ Č | KA10730104 | 25 | 32 | 120 | 10 | 0,160 |
| 20 | 3/4″ P | KA10735104 | 25 | 32 | 120 | 10 | 0,165 |
| 25 | 1″ Č | KA10730105 | 28 | 37 | 70 | 10 | 0,252 |
| 25 | 1″ P | KA10735105 | 28 | 37 | 70 | 10 | 0,260 |
| 32 | 1 1/4″ Č | KA10730206 | 33 | 43 | 40 | | 0,436 |
| 32 | 1 1/4″ P | KA10735206 | 33 | 43 | 40 | | 0,450 |
| 40 | 1 1/2″ Č | KA10730207 | 36 | 46 | 30 | | 0,552 |
| 40 | 1 1/2″ P | KA10735207 | 36 | 46 | 30 | | 0,572 |
| 50 | 2″ Č | KA10730208 | 43 | 55 | 15 | | 0,924 |
| 50 | 2″ P | KA10735208 | 43 | 55 | 15 | | 0,953 |

## ART.41
## ISO G1/45°

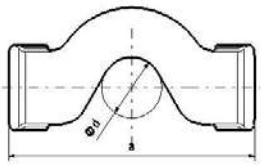
LOK 45°
LONG SWEEP BEND 45°
CURVA LUNGA 45°
LANGER BOGEN 45°




| Dim. mm | velikost | koda | a | | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10770103 | 22 | 180 | 10 | 0,132 |
| 15 | 1/2″ P | KA10775103 | 22 | 180 | 10 | 0,137 |
| 20 | 3/4″ Č | KA10770104 | 25 | 110 | 10 | 0,192 |
| 20 | 3/4″ P | KA10775104 | 25 | 110 | 10 | 0,198 |
| 25 | 1″ Č | KA10770105 | 28 | 60 | 10 | 0,312 |
| 25 | 1″ P | KA10775105 | 28 | 60 | 10 | 0,323 |
| 32 | 1 1/4″ Č | KA10770206 | 33 | 35 | | 0,512 |
| 32 | 1 1/4″ P | KA10775206 | 33 | 35 | | 0,528 |
| 40 | 1 1/2″ Č | KA10770207 | 36 | 25 | | 0,650 |
| 40 | 1 1/2″ P | KA10775207 | 36 | 25 | | 0,673 |
| 50 | 2″ Č | KA10770208 | 43 | 15 | | 1,080 |
| 50 | 2″ P | KA10775208 | 43 | 15 | | 1,120 |

## ART.85

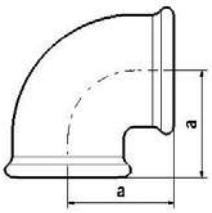
IZMIKALNI LOK
CROSSOVER
SCALVLCATUBA A CURVA
ÜBERSPRINGBOGEN




| Dim. mm | velikost | koda | a | d | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10760103 | 90 | 22 | 100 | 10 | 0,184 |
| 15 | 1/2″ P | KA10765103 | 90 | 22 | 100 | 10 | 0,191 |
| 20 | 3/4″ Č | KA10760104 | 110 | 28 | 50 | 10 | 0,271 |
| 20 | 3/4″ P | KA10765104 | 110 | 28 | 50 | 10 | 0,285 |
| 25 | 1″ Č | KA10760105 | 140 | 34 | 30 | 10 | 0,418 |
| 25 | 1″ P | KA10765105 | 140 | 34 | 30 | 10 | 0,433 |

## ART.90
ISO A1

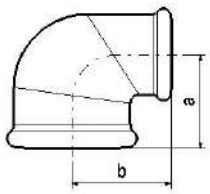
### KOLENO
### ELBOW
### GOMITO
### WINKEL




| Dim. mm | velikost | koda | a | | | |
|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10210102 | 25 | 350 | 25 | 0,070 |
| 10 | 3/8″ P | KA10215102 | 25 | 350 | 25 | 0,074 |
| 15 | 1/2″ Č | KA10210103 | 28 | 230 | 10 | 0,093 |
| 15 | 1/2″ P | KA10215103 | 28 | 230 | 10 | 0,098 |
| 20 | 3/4″ Č | KA10210104 | 33 | 130 | 10 | 0,147 |
| 20 | 3/4″ P | KA10215104 | 33 | 130 | 10 | 0,154 |
| 25 | 1″ Č | KA10210105 | 38 | 80 | 10 | 0,226 |
| 25 | 1″ P | KA10215105 | 38 | 80 | 10 | 0,235 |
| 32 | 1 1/4″ Č | KA10210206 | 45 | 50 | | 0,333 |
| 32 | 1 1/4″ P | KA10215206 | 45 | 50 | | 0,350 |
| 40 | 1 1/2″ Č | KA10210207 | 50 | 30 | | 0,422 |
| 40 | 1 1/2″ P | KA10215207 | 50 | 30 | | 0,443 |
| 50 | 2″ Č | KA10210208 | 58 | 20 | | 0,727 |
| 50 | 2″ P | KA10215208 | 58 | 20 | | 0,750 |
| 65 | 2 1/2″ Č | KA10210209 | 69 | 10 | | 1,231 |
| 65 | 2 1/2″ P | KA10215209 | 69 | 10 | | 1,275 |
| 80 | 3″ Č | KA10210210 | 78 | 6 | | 1,490 |
| 80 | 3″ P | KA10215210 | 78 | 6 | | 1,543 |
| 100 | 4″ Č | KA10210211 | 96 | 3 | | 2,580 |
| 100 | 4″ P | KA10215211 | 96 | 3 | | 2,760 |

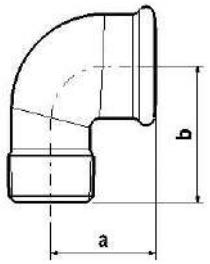
## ART.90R
ISO A1

### KOLENO -RED.
### ELBOW -RED.
### GOMITO -RID.
### WINKEL -RED.




| Dim. mm | velikost | koda | a | b | | | |
|---|---|---|---|---|---|---|---|
| 20-15 | 3/4″ - 1/2″ Č | KA10220105 | 30 | 31 | 150 | 10 | 0,125 |
| 20-15 | 3/4″ - 1/2″ P | KA10225105 | 30 | 31 | 150 | 10 | 0,131 |
| 25-15 | 1″ - 1/2″ Č | KA10220106 | 32 | 34 | 110 | 10 | 0,170 |
| 25-15 | 1″ - 1/2″ P | KA10225106 | 32 | 34 | 110 | 10 | 0,176 |
| 25-20 | 1″ - 3/4″ Č | KA10220107 | 35 | 36 | 100 | 10 | 0,198 |
| 25-20 | 1″ - 3/4″ P | KA10225107 | 35 | 36 | 100 | 10 | 0,204 |
| 32-20 | 1 1/4″ - 3/4″ Č | KA10220208 | 36 | 41 | 75 | | 0,241 |
| 32-20 | 1 1/4″ - 3/4″ P | KA10225208 | 36 | 41 | 75 | | 0,250 |
| 32-25 | 1 1/4″ - 1″ Č | KA10220209 | 40 | 42 | 70 | | 0,294 |
| 32-25 | 1 1/4″ - 1″ P | KA10225209 | 40 | 42 | 70 | | 0,303 |
| 40-20 | 1 1/2″ - 3/4″ Č | KA10220214 | 38 | 44 | 60 | | 0,318 |
| 40-20 | 1 1/2″ - 3/4″ P | KA10225214 | 38 | 44 | 60 | | 0,328 |
| 40-25 | 1 1/2″ - 1″ Č | KA10220215 | 42 | 46 | 45 | | 0,373 |
| 40-25 | 1 1/2″ - 1″ P | KA10225215 | 42 | 46 | 45 | | 0,385 |
| 80-50 | 3″ - 2″ Č | KA10220230 | 64 | 73 | 11 | | 1,241 |
| 80-50 | 3″ - 2″ P | KA10225230 | 64 | 73 | 11 | | 1,286 |
| 80-65 | 3″ - 2 1/2″ Č | KA10220231 | 72 | 73 | 9 | | 1,451 |
| 80-65 | 3″ - 2 1/2″ P | KA10225231 | 72 | 73 | 9 | | 1,503 |

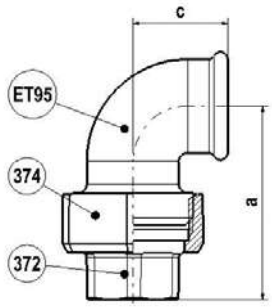
## ART.92
## ISO A4




KOLENO Z/N NAVOJ
ELBOW M/F THREAD
GOMITO M/F FILETTATURA
WINKEL M/F GEWINDE

| Dim. mm | velikost | koda | a | b | | | kg |
|---|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10200101 | 25 | 32 | 400 | 25 | 0,063 |
| 10 | 3/8″ P | KA10205101 | 25 | 32 | 400 | 25 | 0,066 |
| 15 | 1/2″ Č | KA10200102 | 28 | 37 | 250 | 10 | 0,098 |
| 15 | 1/2″ P | KA10205102 | 28 | 37 | 250 | 10 | 0,103 |
| 20 | 3/4″ Č | KA10200103 | 33 | 43 | 150 | 10 | 0,146 |
| 20 | 3/4″ P | KA10205103 | 33 | 43 | 150 | 10 | 0,153 |
| 25 | 1″ Č | KA10200104 | 38 | 52 | 80 | 10 | 0,224 |
| 25 | 1″ P | KA10205104 | 38 | 52 | 80 | 10 | 0,230 |
| 32 | 1 1/4″ Č | KA10200205 | 45 | 60 | 45 | | 0,354 |
| 32 | 1 1/4″ P | KA10205205 | 45 | 60 | 45 | | 0,372 |
| 40 | 1 1/2″ Č | KA10200206 | 50 | 65 | 35 | | 0,450 |
| 40 | 1 1/2″ P | KA10205206 | 50 | 65 | 35 | | 0,473 |
| 50 | 2″ Č | KA10200207 | 58 | 74 | 16 | | 0,740 |
| 50 | 2″ P | KA10205207 | 58 | 74 | 16 | | 0,777 |
| 65 | 2 1/2″ Č | KA10200208 | 69 | 88 | 10 | | 1,509 |
| 65 | 2 1/2″ P | KA10205208 | 69 | 88 | 10 | | 1,540 |
| 80 | 3″ Č | KA10200209 | 78 | 98 | 6 | | 2,265 |
| 80 | 3″ P | KA10205209 | 78 | 98 | 6 | | 2,312 |
| 100 | 4″ Č | KA10200210 | 96 | 118 | 3 | | 3,750 |
| 100 | 4″ P | KA10205210 | 96 | 118 | 3 | | 3,750 |

## ART.95
## ISO UA1

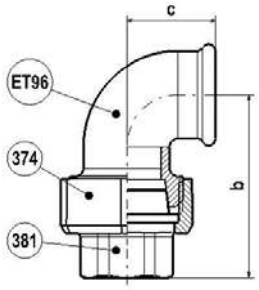



KOLENO S PRIVIJALOM, PLOŠČATO TESNENJE
UNION ELBOW, FLAT SEAT
GOMITO CON BOCCHETONE A SEDE PIANA
WINKELVERSCHRAUBUNG, FLACH DICHTEND

| Dim. mm | velikost | koda | a | c | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10540102 | 58 | 28 | 90 | 10 | 0,268 |
| 15 | 1/2″ P | KA10545102 | 58 | 28 | 90 | 10 | 0,279 |
| 20 | 3/4″ Č | KA10540103 | 62 | 33 | 60 | 10 | 0,361 |
| 20 | 3/4″ P | KA10545103 | 62 | 33 | 60 | 10 | 0,378 |
| 25 | 1″ Č | KA10540104 | 72 | 38 | 40 | 10 | 0,480 |
| 25 | 1″ P | KA10545104 | 72 | 38 | 40 | 10 | 0,512 |
| 32 | 1 1/4″ Č | KA10540205 | 82 | 45 | 24 | | 0,850 |
| 32 | 1 1/4″ P | KA10545205 | 82 | 45 | 24 | | 0,870 |
| 40 | 1 1/2″ Č | KA10540206 | 90 | 50 | 19 | | 1,000 |
| 40 | 1 1/2″ P | KA10545206 | 90 | 50 | 19 | | 1,037 |
| 50 | 2″ Č | KA10540207 | 100 | 58 | 10 | | 1,546 |
| 50 | 2″ P | KA10545207 | 100 | 58 | 10 | | 1,602 |

## ART.96
## ISO UA11

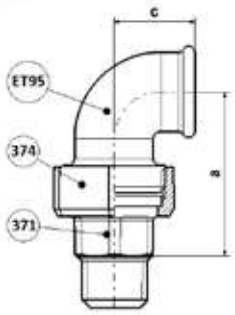
### KOLENO S PRIVIJALOM, KONIČNO TESNENJE
### UNION ELBOW, TAPER SEAT
### GOMITO CON BOCCHETONE A SEDE CONICA
### WINKELVERSCHRAUBUNG MIT KEGELDICHTUNG




| Dim. mm | velikost | koda | b | c | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10550102 | 58 | 28 | 90 | 10 | 0,288 |
| 15 | 1/2″ P | KA10555102 | 58 | 28 | 90 | 10 | 0,300 |
| 20 | 3/4″ Č | KA10550103 | 62 | 33 | 60 | 10 | 0,363 |
| 20 | 3/4″ P | KA10555103 | 62 | 33 | 60 | 10 | 0,378 |
| 25 | 1″ Č | KA10550104 | 72 | 38 | 40 | | 0,473 |
| 25 | 1″ P | KA10555104 | 72 | 38 | 40 | | 0,510 |
| 32 | 1 1/4″ Č | KA10550205 | 82 | 45 | 24 | | 0,835 |
| 32 | 1 1/4″ P | KA10555205 | 82 | 45 | 24 | | 0,883 |
| 40 | 1 1/2″ Č | KA10550206 | 90 | 50 | 19 | | 0,976 |
| 40 | 1 1/2″ P | KA10555206 | 90 | 50 | 19 | | 1,015 |
| 50 | 2″ Č | KA10550207 | 100 | 58 | 10 | | 1,546 |
| 50 | 2″ P | KA10555207 | 100 | 58 | 10 | | 1,602 |

## ART.97
## ISO UA2

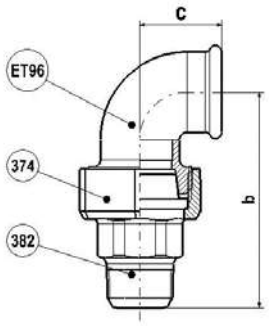
### KOLENO S PRIVIJALOM, PLOŠČATO TESNENJE Z/N NAVOJ
### UNION ELBOW, FLAT SEAT M/F THREAD
### GOMITO CON BOCCHETONE A SEDE PIANA M/F FILETTATURA
### WINKELVERSCHRAUBUNG, FLACH DICHTEND M/F GEWINDE




| Dim. mm | velikost | koda | b | c | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10560102 | 76 | 28 | 70 | 10 | 0,283 |
| 15 | 1/2″ P | KA10565102 | 76 | 28 | 70 | 10 | 0,295 |
| 20 | 3/4″ Č | KA10560103 | 82 | 33 | 50 | 10 | 0,399 |
| 20 | 3/4″ P | KA10565103 | 82 | 33 | 50 | 10 | 0,414 |
| 25 | 1″ Č | KA10560104 | 94 | 38 | 30 | 10 | 0,544 |
| 25 | 1″ P | KA10565104 | 94 | 38 | 30 | 10 | 0,581 |
| 32 | 1 1/4″ Č | KA10560205 | 107 | 45 | 20 | | 0,940 |
| 32 | 1 1/4″ P | KA10565205 | 107 | 45 | 20 | | 0,970 |
| 40 | 1 1/2″ Č | KA10560206 | 115 | 50 | 16 | | 1,466 |
| 40 | 1 1/2″ P | KA10565206 | 115 | 50 | 16 | | 1,513 |
| 50 | 2″ Č | KA10560207 | 128 | 58 | 8 | | 1,813 |
| 50 | 2″ P | KA10565207 | 128 | 58 | 8 | | 1,855 |

## ART.98
## ISO UA12

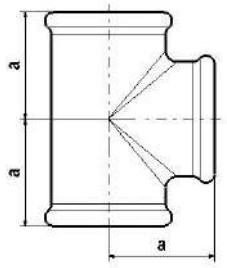
KOLENO S PRIVIJALOM, KONIČNO TESNENJE Z/N NAVOJ
UNION ELBOW, TAPER SEAT M/F THREAD
GOMITO CON BOCCHETONE A SEDE CONICA M/F FILETTATURA
WINKELVERSCHRAUBUNG MIT KEGELDICHTUNG M/F GEWINDE




| Dim. mm | velikost | koda | b | c | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10570102 | 76 | 28 | 70 | 10 | 0,310 |
| 15 | 1/2″ P | KA10575102 | 76 | 28 | 70 | 10 | 0,323 |
| 20 | 3/4″ Č | KA10570103 | 82 | 33 | 50 | 10 | 0,414 |
| 20 | 3/4″ P | KA10575103 | 82 | 33 | 50 | 10 | 0,431 |
| 25 | 1″ Č | KA10570104 | 94 | 38 | 30 | 10 | 0,593 |
| 25 | 1″ P | KA10575104 | 94 | 38 | 30 | 10 | 0,597 |
| 32 | 1 1/4″ Č | KA10570205 | 107 | 45 | 20 | | 0,978 |
| 32 | 1 1/4″ P | KA10575205 | 107 | 45 | 20 | | 0,987 |
| 40 | 1 1/2″ Č | KA10570206 | 115 | 50 | 16 | | 1,456 |
| 40 | 1 1/2″ P | KA10575206 | 115 | 50 | 16 | | 1,478 |
| 50 | 2″ Č | KA10570207 | 128 | 58 | 8 | | 1,873 |
| 50 | 2″ P | KA10575207 | 128 | 58 | 8 | | 1,913 |

## ART.130
## ISO B1

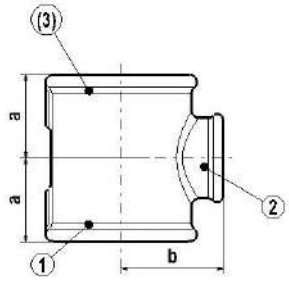
T KOS
T PIECE
TI
T STÜCK

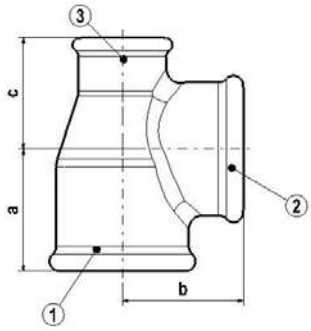



| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10100102 | 25 | 225 | 25 | 0,098 |
| 10 | 3/8″ P | KA10105102 | 25 | 225 | 25 | 0,103 |
| 15 | 1/2″ Č | KA10100103 | 28 | 140 | 10 | 0,132 |
| 15 | 1/2″ P | KA10105103 | 28 | 140 | 10 | 0,139 |
| 20 | 3/4″ Č | KA10100104 | 33 | 90 | 10 | 0,196 |
| 20 | 3/4″ P | KA10105104 | 33 | 90 | 10 | 0,206 |
| 25 | 1″ Č | KA10100105 | 38 | 50 | 10 | 0,294 |
| 25 | 1″ P | KA10105105 | 38 | 50 | 10 | 0,309 |
| 32 | 1 1/4″ Č | KA10100206 | 45 | 30 | | 0,502 |
| 32 | 1 1/4″ P | KA10105206 | 45 | 30 | | 0,527 |
| 40 | 1 1/2″ Č | KA10100207 | 50 | 28 | | 0,605 |
| 40 | 1 1/2″ P | KA10105207 | 50 | 28 | | 0,635 |
| 50 | 2″ Č | KA10100208 | 58 | 15 | | 1,000 |
| 50 | 2″ P | KA10105208 | 58 | 15 | | 1,035 |
| 65 | 2 1/2″ Č | KA10100209 | 69 | 8 | | 1,580 |
| 65 | 2 1/2″ P | KA10105209 | 69 | 8 | | 1,640 |
| 80 | 3″ Č | KA10100210 | 78 | 5 | | 1,885 |
| 80 | 3″ P | KA10105210 | 78 | 5 | | 1,979 |
| 100 | 4″ Č | KA10100211 | 96 | 3 | | 3,513 |
| 100 | 4″ P | KA10105211 | 96 | 3 | | 3,660 |

## ART.130R
## ISO B1

**T KOS RED.**
**T PIECE RED.**
**TI RID.**
**T STÜCK RED.**

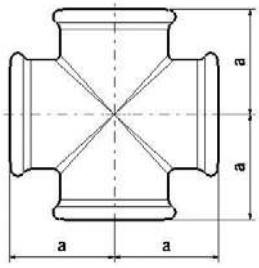



| Dim. mm | velikost | koda | a | b | c | | | kg |
|---|---|---|---|---|---|---|---|---|
| 20 - 15 | 3/4″ - 1/2″ - 3/4″ Č | KA10110109 | 30 | 31 | 30 | 90 | 10 | 0,178 |
| 20 - 15 | 3/4″ - 1/2″ - 3/4″ P | KA10115109 | 30 | 31 | 30 | 90 | 10 | 0,187 |
| 25 - 15 | 1″ - 1/2″ - 1″ Č | KA10110114 | 32 | 34 | 32 | 60 | 10 | 0,239 |
| 25 - 15 | 1″ - 1/2″ - 1″ P | KA10115114 | 32 | 34 | 32 | 60 | 10 | 0,251 |
| 25 - 20 | 1″ - 3/4″ - 1″ Č | KA10110115 | 35 | 36 | 35 | 50 | 10 | 0,262 |
| 25 - 20 | 1″ - 3/4″ - 1″ P | KA10115115 | 35 | 36 | 35 | 50 | 10 | 0,275 |
| 32 - 15 | 1 1/4″ - 1/2″ - 1 1/4″ Č | KA10110219 | 36 | 41 | 36 | 55 | | 0,333 |
| 32 - 15 | 1 1/4″ - 1/2″ - 1 1/4″ P | KA10115219 | 36 | 41 | 36 | 55 | | 0,347 |
| 32 - 20 | 1 1/4″ - 3/4″ - 1 1/4″ Č | KA10110220 | 36 | 41 | 36 | 50 | | 0,354 |
| 32 - 20 | 1 1/4″ - 3/4″ - 1 1/4″ P | KA10115220 | 36 | 41 | 36 | 50 | | 0,365 |
| 32 - 25 | 1 1/4″ - 1″ - 1 1/4″ Č | KA10110221 | 40 | 42 | 40 | 35 | | 0,412 |
| 32 - 25 | 1 1/4″ - 1″ - 1 1/4″ P | KA10115221 | 40 | 42 | 40 | 35 | | 0,433 |
| 40 - 15 | 1 1/2″ - 1/2″ - 1 1/2″ Č | KA10110224 | 36 | 42 | 36 | 35 | | 0,500 |
| 40 - 15 | 1 1/2″ - 1/2″ - 1 1/2″ P | KA10115224 | 36 | 42 | 36 | 35 | | 0,517 |
| 40 - 25 | 1 1/2″ - 1″ - 1 1/2″ Č | KA10110226 | 42 | 46 | 42 | 25 | | 0,478 |
| 40 - 25 | 1 1/2″ - 1″ - 1 1/2″ P | KA10115226 | 42 | 46 | 42 | 25 | | 0,502 |
| 50 - 15 | 2″ - 1/2″ - 2″ Č | KA10110229 | 38 | 48 | 38 | 24 | | 0,620 |
| 50 - 15 | 2″ - 1/2″ - 2″ P | KA10115229 | 38 | 48 | 38 | 24 | | 0,643 |
| 50 - 20 | 2″ - 3/4″ - 2″ Č | KA10110230 | 40 | 50 | 40 | 24 | | 0,640 |
| 50 - 20 | 2″ - 3/4″ - 2″ P | KA10115230 | 40 | 50 | 40 | 24 | | 0,670 |
| 50 - 25 | 2″ - 1″ - 2″ Č | KA10110231 | 44 | 52 | 44 | 18 | | 0,705 |
| 50 - 25 | 2″ - 1″ - 2″ P | KA10115231 | 44 | 52 | 44 | 18 | | 0,725 |
| 50 - 32 | 2″ - 1 1/4″ - 2″ Č | KA10110232 | 48 | 54 | 48 | 20 | | 0,820 |
| 50 - 32 | 2″ - 1 1/4″ - 2″ P | KA10115232 | 48 | 54 | 48 | 20 | | 0,845 |
| 50 - 40 | 2″ - 1 1/2″ - 2″ Č | KA10110233 | 52 | 55 | 52 | 18 | | 0,880 |
| 50 - 40 | 2″ - 1 1/2″ - 2″ P | KA10115233 | 52 | 55 | 52 | 18 | | 0,916 |
| 80 - 65 | 3″ - 2 1/2″ - 3″ Č | KA10110242 | 72 | 76 | 72 | 6 | | 1,930 |
| 80 - 65 | 3″ - 2 1/2″ - 3″ P | KA10115242 | 72 | 76 | 72 | 6 | | 1,990 |
| 32 - 40 - 32 | 1 1/4″ - 1 1/2″ - 1 1/4″ Č | KA10110250 | 48 | 46 | 48 | 28 | | 0,615 |
| 32 - 40 - 32 | 1 1/4″ - 1 1/2″ - 1 1/4″ P | KA10115250 | 48 | 46 | 48 | 28 | | 0,63 |
| 80 - 50 - 80 | 3″ - 2″ - 3″ P | KA10115241 | 64 | 73 | 64 | 6 | | 1,720 |
| 80 - 50 - 80 | 3″ - 2″ - 3″ Č | KA10110241 | 64 | 73 | 64 | 6 | | 1,663 |
| 20 - 20 - 15 | 3/4″ - 3/4″ - 1/2″ Č | KA10110170 | 33 | 33 | 31 | 90 | 10 | 0,190 |
| 20 - 20 - 15 | 3/4″ - 3/4″ - 1/2″ P | KA10115170 | 33 | 33 | 31 | 90 | 10 | 0,208 |
| 25 - 25 - 15 | 1″ - 1″ - 1/2″ Č | KA10110159 | 38 | 38 | 34 | 50 | 10 | 0,263 |
| 25 - 25 - 15 | 1″ - 1″ - 1/2″ P | KA10115159 | 38 | 38 | 34 | 50 | 10 | 0,288 |
| 25 - 25 - 20 | 1″ - 1″ - 3/4″ Č | KA10110160 | 38 | 38 | 36 | 50 | 10 | 0,278 |
| 25 - 25 - 20 | 1″ - 1″ - 3/4″ P | KA10115160 | 38 | 38 | 36 | 50 | 10 | 0,286 |
| 32 - 32 - 15 | 1 1/4″ - 1 1/4″ - 1/2″ Č | KA10110263 | 45 | 45 | 38 | 35 | | 0,400 |
| 32 - 32 - 15 | 1 1/4″ - 1 1/4″ - 1/2″ P | KA10115263 | 45 | 45 | 38 | 35 | | 0,420 |
| 32 - 32 - 20 | 1 1/4″ - 1 1/4″ - 3/4″ Č | KA10110264 | 45 | 45 | 41 | 35 | | 0,440 |
| 32 - 32 - 20 | 1 1/4″ - 1 1/4″ - 3/4″ P | KA10115264 | 45 | 45 | 41 | 35 | | 0,460 |
| 32 - 32 - 25 | 1 1/4″ - 1 1/4″ - 1″ Č | KA10110265 | 45 | 45 | 42 | 35 | | 0,432 |
| 32 - 32 - 25 | 1 1/4″ - 1 1/4″ - 1″ P | KA10115265 | 45 | 45 | 42 | 35 | | 0,445 |
| 20 - 15 - 15 | 3/4″ - 1/2″ - 1/2″ Č | KA10110148 | 30 | 31 | 28 | 120 | 10 | 0,158 |
| 20 - 15 - 15 | 3/4″ - 1/2″ - 1/2″ P | KA10115148 | 30 | 31 | 28 | 120 | 10 | 0,166 |

## ART.180
## ISO C1

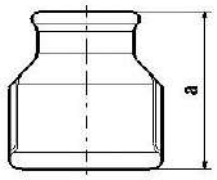
### KRIŽNI KOS
### CROSSE
### CROCE
### KREUZ




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10150103 | 28 | 110 | 10 | 0,182 |
| 15 | 1/2″ P | KA10155103 | 28 | 110 | 10 | 0,191 |
| 20 | 3/4″ Č | KA10150104 | 33 | 70 | 10 | 0,257 |
| 20 | 3/4″ P | KA10155104 | 33 | 70 | 10 | 0,270 |
| 25 | 1″ Č | KA10150105 | 38 | 30 | 10 | 0,363 |
| 25 | 1″ P | KA10155105 | 38 | 30 | 10 | 0,381 |
| 32 | 1 1/4″ Č | KA10150206 | 45 | 23 | | 0,540 |
| 32 | 1 1/4″ P | KA10155206 | 45 | 23 | | 0,567 |
| 40 | 1 1/2″ Č | KA10150207 | 50 | 15 | | 0,730 |
| 40 | 1 1/2″ P | KA10155207 | 50 | 15 | | 0,758 |
| 50 | 2″ Č | KA10150208 | 58 | 10 | | 1,148 |
| 50 | 2″ P | KA10155208 | 58 | 10 | | 1,178 |

## ART.240
## ISO M2

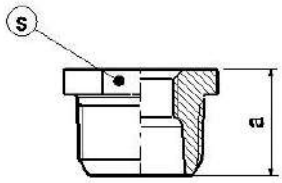
### OBJEMKA RED.
### SOCKET RED.
### MANICOTTO RID.
### MUFFE RED.

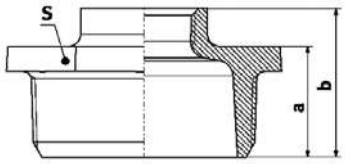



| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 - 10 | 1/2″ - 3/8″ Č | KA10320103 | 36 | 280 | 10 | 0,076 |
| 15 - 10 | 1/2″ - 3/8″ P | KA10325103 | 36 | 280 | 10 | 0,078 |
| 20 - 15 | 3/4″ - 1/2″ Č | KA10320106 | 39 | 220 | 10 | 0,103 |
| 20 - 15 | 3/4″ - 1/2″ P | KA10325106 | 39 | 220 | 10 | 0,107 |
| 25 - 15 | 1″ - 1/2″ Č | KA10320108 | 45 | 130 | 10 | 0,165 |
| 25 - 15 | 1″ - 1/2″ P | KA10325108 | 45 | 130 | 10 | 0,170 |
| 25 - 20 | 1″ - 3/4″ Č | KA10320110 | 45 | 130 | 10 | 0,156 |
| 25 - 20 | 1″ - 3/4″ P | KA10325110 | 45 | 130 | 10 | 0,162 |
| 32 - 25 | 1 1/4″ - 1″ Č | KA10320215 | 50 | 90 | | 0,243 |
| 32 - 25 | 1 1/4″ - 1″ P | KA10325215 | 50 | 90 | | 0,250 |
| 40 - 20 | 1 1/2″ - 3/4″ Č | KA10320219 | 55 | 70 | | 0,294 |
| 40 - 20 | 1 1/2″ - 3/4″ P | KA10325219 | 55 | 70 | | 0,306 |
| 40 - 25 | 1 1/2″ - 1″ Č | KA10320220 | 55 | 70 | | 0,285 |
| 40 - 25 | 1 1/2″ - 1″ P | KA10325220 | 55 | 70 | | 0,293 |
| 40 - 32 | 1 1/2″ - 1 1/4″ Č | KA10320221 | 55 | 60 | | 0,307 |
| 40 - 32 | 1 1/2″ - 1 1/4″ P | KA10325221 | 55 | 60 | | 0,316 |
| 50 - 25 | 2″ - 1″ Č | KA10320226 | 65 | 38 | | 0,472 |
| 50 - 25 | 2″ - 1″ P | KA10325226 | 65 | 38 | | 0,487 |
| 50 - 40 | 2″ - 1 1/2″ Č | KA10320228 | 65 | 35 | | 0,475 |
| 50 - 40 | 2″ - 1 1/2″ P | KA10325228 | 65 | 35 | | 0,491 |

## ART.241
ISO N4

## ZMANJŠEVALNI KOS
## REDUCING BUSH
## NIPPLO DI RIDUZIONE
## REDUZIERNIPPEL

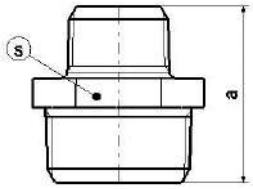



| Dim. mm | velikost | koda | a | b | s | | | kg |
|---|---|---|---|---|---|---|---|---|
| 15 - 10 | 1/2″ - 3/8″ Č | KA10490103 | 24 | | 22 | 700 | 10 | 0,025 |
| 15 - 10 | 1/2″ - 3/8″ P | KA10495103 | 24 | | 22 | 700 | 10 | 0,026 |
| 20 - 15 | 3/4″ - 1/2″ Č | KA10490106 | 26 | | 30 | 330 | 10 | 0,048 |
| 20 - 15 | 3/4″ - 1/2″ P | KA10495106 | 26 | | 30 | 330 | 10 | 0,050 |
| 25 - 20 | 1″ - 3/4″ Č | KA10490110 | 29 | | 36 | 220 | 10 | 0,078 |
| 25 - 20 | 1″ - 3/4″ P | KA10495110 | 29 | | 36 | 220 | 10 | 0,082 |
| 32 - 25 | 1 1/4″ - 1″ Č | KA10490215 | 31 | | 46 | 170 | | 0,137 |
| 32 - 25 | 1 1/4″ - 1″ P | KA10495215 | 31 | | 46 | 170 | | 0,144 |
| 40 - 32 | 1 1/2″ - 1 1/4″ Č | KA10490221 | 31 | | 50 | 130 | | 0,121 |
| 40 - 32 | 1 1/2″ - 1 1/4″ P | KA10495221 | 31 | | 50 | 130 | | 0,127 |
| 20-10 | 3/4″ - 3/8″ Č | KA10490105 | 26 | | 30 | 330 | 10 | 0,058 |
| 20-10 | 3/4″ - 3/8″ P | KA10495105 | 26 | | 30 | 330 | 10 | 0,061 |
| 25-15 | 1″ - 1/2″ Č | KA10490109 | 29 | | 36 | 220 | 10 | 0,095 |
| 25-15 | 1″ - 1/2″ P | KA10495109 | 29 | | 36 | 220 | 10 | 0,100 |
| 32-15 | 1 1/4″ - 1/2″ Č | KA10490213 | 31 | | 46 | 150 | | 0,191 |
| 32-15 | 1 1/4″ - 1/2″ P | KA10495213 | 31 | | 46 | 150 | | 0,201 |
| 32-20 | 1 1/4″ - 3/4″ Č | KA10490214 | 31 | | 46 | 150 | | 0,175 |
| 32-20 | 1 1/4″ - 3/4″ P | KA10495214 | 31 | | 46 | 150 | | 0,184 |
| 40-15 | 1 1/2″ - 1/2″ Č | KA10490218 | 31 | | 50 | 120 | | 0,240 |
| 40-15 | 1 1/2″ - 1/2″ P | KA10495218 | 31 | | 50 | 120 | | 0,252 |
| 40-20 | 1 1/2″ - 3/4″ Č | KA10490219 | 31 | | 50 | 120 | | 0,236 |
| 40-20 | 1 1/2″ - 3/4″ P | KA10495219 | 31 | | 50 | 120 | | 0,248 |
| 40-25 | 1 1/2″- 1″ Č | KA10490220 | 31 | | 50 | 120 | | 0,202 |
| 40-25 | 1 1/2″- 1″ P | KA10495220 | 31 | | 50 | 120 | | 0,212 |
| 50-25 | 2″ - 1″ Č | KA10490226 | 35 | | 65 | 60 | | 0,427 |
| 50-25 | 2″ - 1″ P | KA10495226 | 35 | | 65 | 60 | | 0,448 |
| 50-32 | 2″ - 1 1/4″ Č | KA10490227 | 35 | | 65 | 60 | | 0,330 |
| 50-32 | 2″ - 1 1/4″ P | KA10495227 | 35 | | 65 | 60 | | 0,347 |
| 50-40 | 2″ - 1 1/2″ Č | KA10490228 | 35 | | 65 | 70 | | 0,295 |
| 50-40 | 2″ - 1 1/2″ P | KA10495228 | 35 | | 65 | 70 | | 0,310 |
| 65-40 | 2 1/2″ -1 1/2″ Č | KA10490234 | 40 | | 80 | 40 | | 0,615 |
| 65-40 | 2 1/2″ -1 1/2″ P | KA10495234 | 40 | | 80 | 40 | | 0,646 |
| 65-50 | 2 1/2″ - 2″ Č | KA10490235 | 40 | | 80 | 40 | | 0,483 |
| 65-50 | 2 1/2″ - 2″ P | KA10495235 | 40 | | 80 | 40 | | 0,507 |
| 80-50 | 3″ - 2″ Č | KA10490239 | 44 | | 95 | 24 | | 0,800 |
| 80-50 | 3″ - 2″ P | KA10495239 | 44 | | 95 | 24 | | 0,840 |
| 80-65 | 3″ - 2 1/2″ Č | KA10490240 | 44 | | 95 | 25 | | 0,650 |
| 80-65 | 3″ - 2 1/2″ P | KA10495240 | 44 | | 95 | 25 | | 0,683 |
| 100-80 | 4″ - 3″ Č | KA10490247 | 57 | | 120 | 12 | | 1,750 |
| 100-80 | 4″ - 3″ P | KA10495247 | 57 | | 120 | 12 | | 1,800 |
| 50-15 | 2″ - 1/2″ Č | KA10490224 | 35 | 48 | 65 | 50 | | 0,338 |
| 50-15 | 2″ - 1/2″ P | KA10495224 | 35 | 48 | 65 | 50 | | 0,355 |
| 50-20 | 2″ - 3/4″ Č | KA10490225 | 35 | 48 | 65 | 50 | | 0,350 |
| 50-20 | 2″ - 3/4″ P | KA10495225 | 35 | 48 | 65 | 50 | | 0,368 |
| 65-25 | 2 1/2″ - 1″ Č | KA10490232 | 40 | 54 | 80 | 30 | | 0,562 |
| 65-25 | 2 1/2″ - 1″ P | KA10495232 | 40 | 54 | 80 | 30 | | 0,590 |
| 65-32 | 2 1/2″ - 1 1/4″ Č | KA10490233 | 40 | 54 | 80 | 30 | | 0,610 |
| 65-32 | 2 1/2″ - 1 1/4″ P | KA10495233 | 40 | 54 | 80 | 30 | | 0,641 |
| 80-32 | 3″ - 1 1/4″ Č | KA10490237 | 44 | 59 | 95 | 20 | | 0,880 |
| 80-32 | 3″ - 1 1/4″ P | KA10495237 | 44 | 59 | 95 | 20 | | 0,924 |
| 80-40 | 3″ - 1 1/2″ Č | KA10490238 | 44 | 59 | 95 | 20 | | 0,870 |
| 80-40 | 3″ - 1 1/2″ P | KA10495238 | 44 | 59 | 95 | 20 | | 0,914 |
| 100-50 | 4″ - 2″ Č | KA10490245 | 57 | 69 | 120 | 12 | | 1,750 |
| 100-50 | 4″ - 2″ P | KA10495245 | 57 | 69 | 120 | 12 | | 1,800 |

## ART.245
## ISO N8

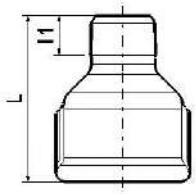
**DVOJNA SPOJKA RED.**
**HEXAGON NIPPLE RED.**
**NIPPLO DOPIO RID.**
**DOPPELNIPPEL RED.**




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 - 10 | 1/2″ - 3/8″ Č | KA10480103 | 44 | 22 | 350 | 10 | 0,054 |
| 15 - 10 | 1/2″ - 3/8″ P | KA10485103 | 44 | 22 | 350 | 10 | 0,056 |
| 20 - 15 | 3/4″ - 1/2″ Č | KA10480105 | 47 | 30 | 230 | 10 | 0,095 |
| 20 - 15 | 3/4″ - 1/2″ P | KA10485105 | 47 | 30 | 230 | 10 | 0,098 |
| 25 - 15 | 1″ - 1/2″ Č | KA10480106 | 53 | 36 | 160 | 10 | 0,148 |
| 25 - 15 | 1″ - 1/2″ P | KA10485106 | 53 | 36 | 160 | 10 | 0,155 |
| 25 - 20 | 1″ - 3/4″ Č | KA10480107 | 53 | 36 | 150 | 10 | 0,146 |
| 25 - 20 | 1″ - 3/4″ P | KA10485107 | 53 | 36 | 150 | 10 | 0,151 |
| 32 - 25 | 1 1/4″ - 1″ Č | KA10480210 | 57 | 46 | 100 | | 0,238 |
| 32 - 25 | 1 1/4″ - 1″ P | KA10485210 | 57 | 46 | 100 | | 0,245 |
| 40 - 25 | 1 1/2″ - 1″ Č | KA10480211 | 59 | 50 | 80 | | 0,260 |
| 40 - 25 | 1 1/2″ - 1″ P | KA10485211 | 59 | 50 | 80 | | 0,268 |
| 40 - 32 | 1 1/2″ - 1 1/4″ Č | KA10480212 | 59 | 50 | 75 | | 0,295 |
| 40 - 32 | 1 1/2″ - 1 1/4″ P | KA10485212 | 59 | 50 | 75 | | 0,300 |
| 50 - 25 | 2″ - 1″ Č | KA10480214 | 68 | 65 | 45 | | 0,436 |
| 50 - 25 | 2″ - 1″ P | KA10485214 | 68 | 65 | 45 | | 0,450 |
| 50 - 40 | 2″ - 1 1/2″ Č | KA10480215 | 68 | 65 | 40 | | 0,456 |
| 50 - 40 | 2″ - 1 1/2″ P | KA10485215 | 68 | 65 | 40 | | 0,470 |

## ART.246
## ISO M4

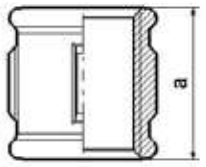
**OBJEMKA RED. Z/N NAVOJ**
**SOCKET RED. M/F THREAD**
**MANICOTTO RID. M/F FILETTATURA**
**MUFFE RED. M/F GEWINDE**




| Dim. mm | velikost | koda | L | L1 | | | kg |
|---|---|---|---|---|---|---|---|
| 15 - 10 | 1/2 ″ - 3/8″ Č | KA10350103 | 43 | 30 | 300 | 10 | 0,070 |
| 15 - 10 | 1/2″ - 3/8″ P | KA10355103 | 43 | 30 | 300 | 10 | 0,072 |
| 20 - 15 | 3/4″ - 1/2″ Č | KA10350106 | 48 | 33 | 200 | 10 | 0,102 |
| 20 - 15 | 3/4″ - 1/2″ P | KA10355106 | 48 | 33 | 200 | 10 | 0,107 |
| 25 - 15 | 1″ - 1/2″ Č | KA10350108 | 55 | 38 | 140 | 10 | 0,145 |
| 25 - 15 | 1″ - 1/2″ P | KA10355108 | 55 | 38 | 140 | 10 | 0,149 |
| 25 - 20 | 1″ - 3/4″ Č | KA10350110 | 55 | 38 | 120 | 10 | 0,156 |
| 25 - 20 | 1″ - 3/4″ P | KA10355110 | 55 | 38 | 120 | 10 | 0,163 |
| 32 - 25 | 1 1/4″ - 1″ Č | KA10350215 | 60 | 41 | 90 | | 0,222 |
| 32 - 25 | 1 1/4″ - 1″ P | KA10355215 | 60 | 41 | 90 | | 0,232 |
| 40 - 25 | 1 1/2″ - 1″ Č | KA10350220 | 63 | 44 | 70 | | 0,272 |
| 40 - 25 | 1 1/2″ - 1″ P | KA10355220 | 63 | 44 | 70 | | 0,281 |
| 40 - 32 | 1 1/2″ - 1 1/4″ Č | KA10350221 | 63 | 44 | 60 | | 0,298 |
| 40 - 32 | 1 1/2″ - 1 1/4″ P | KA10355221 | 63 | 44 | 60 | | 0,312 |
| 50 - 25 | 2″ - 1″ Č | KA10350226 | 70 | 46 | 45 | | 0,413 |
| 50 - 25 | 2″ - 1″ P | KA10355226 | 70 | 46 | 45 | | 0,430 |
| 50 - 32 | 2″ - 1 1/4″ Č | KA10350227 | 70 | 46 | 35 | | 0,421 |
| 50 - 32 | 2″ - 1 1/4″ P | KA10355227 | 70 | 46 | 35 | | 0,439 |
| 50 - 40 | 2″ - 1 1/2″ Č | KA10350228 | 70 | 46 | 35 | | 0,444 |
| 50 - 40 | 2″ - 1 1/2″ P | KA10355228 | 70 | 46 | 35 | | 0,463 |

## ART.270
ISO M2

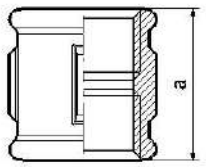
### OBJEMKA
### SOCKET
### MANICOTTO
### MUFFE




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10300102 | 30 | 450 | 25 | 0,054 |
| 10 | 3/8″ P | KA10305102 | 30 | 450 | 25 | 0,057 |
| 15 | 1/2″ Č | KA10300103 | 36 | 300 | 10 | 0,077 |
| 15 | 1/2″ P | KA10305103 | 36 | 300 | 10 | 0,081 |
| 20 | 3/4″ Č | KA10300104 | 39 | 190 | 10 | 0,110 |
| 20 | 3/4″ P | KA10305104 | 39 | 190 | 10 | 0,116 |
| 25 | 1″ Č | KA10300105 | 45 | 120 | 10 | 0,163 |
| 25 | 1″ P | KA10305105 | 45 | 120 | 10 | 0,171 |
| 32 | 1 1/4″ Č | KA10300206 | 50 | 80 | | 0,248 |
| 32 | 1 1/4″ P | KA10305206 | 50 | 80 | | 0,260 |
| 40 | 1 1/2″ Č | KA10300207 | 55 | 55 | | 0,290 |
| 40 | 1 1/2″ P | KA10305207 | 55 | 55 | | 0,305 |
| 50 | 2″ Č | KA10300208 | 65 | 30 | | 0,488 |
| 50 | 2″ P | KA10305208 | 65 | 30 | | 0,512 |
| 65 | 2 1/2″ Č | KA10300209 | 74 | 16 | | 0,676 |
| 65 | 2 1/2″ P | KA10305209 | 74 | 16 | | 0,710 |
| 80 | 3″ Č | KA10300210 | 80 | 14 | | 0,960 |
| 80 | 3″ P | KA10305210 | 80 | 14 | | 1,008 |
| 100 | 4″ Č | KA10300211 | 94 | 6 | | 1,600 |
| 100 | 4″ P | KA10305211 | 94 | 6 | | 1,650 |

## ART.271 D/L
ISO M2 R/L

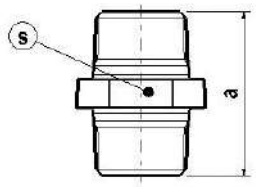
### OBJEMKA Z DESNIM IN LEVIM NAVOJEM
### SOCKET - RIGHT AND LEFT THREAD
### MANICOTTO CON FILETTATURA DESTRA / SINISTRA
### MUFFE MIT RECHTS UND LINKSGEWINDE




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10310103 | 36 | 300 | 10 | 0,077 |
| 15 | 1/2″ P | KA10315103 | 36 | 300 | 10 | 0,081 |
| 20 | 3/4″ Č | KA10310104 | 39 | 190 | 10 | 0,110 |
| 20 | 3/4″ P | KA10315104 | 39 | 190 | 10 | 0,116 |
| 25 | 1″ Č | KA10310105 | 45 | 120 | 10 | 0,163 |
| 25 | 1″ P | KA10315105 | 45 | 120 | 10 | 0,171 |
| 32 | 1 1/4″ Č | KA10310206 | 50 | 80 | | 0,248 |
| 32 | 1 1/4″ P | KA10315206 | 50 | 80 | | 0,260 |
| 40 | 1 1/2″ Č | KA10310207 | 55 | 55 | | 0,290 |
| 40 | 1 1/2″ P | KA10315207 | 55 | 55 | | 0,305 |
| 50 | 2″ Č | KA10310208 | 65 | 30 | | 0,488 |
| 50 | 2″ P | KA10315208 | 65 | 30 | | 0,512 |

## ART.280
## ISO N8

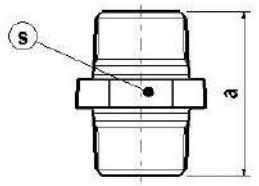
### DVOJNA SPOJKA
### HEXAGON NIPPLE
### NIPPLO DOPIO
### DOPPELNIPPEL




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10470102 | 38 | 22 | 550 | 25 | 0,045 |
| 10 | 3/8″ P | KA10475102 | 38 | 22 | 550 | 25 | 0,047 |
| 15 | 1/2″ Č | KA10470103 | 44 | 27 | 330 | 10 | 0,070 |
| 15 | 1/2″ P | KA10475103 | 44 | 27 | 330 | 10 | 0,074 |
| 20 | 3/4″ Č | KA10470104 | 47 | 32 | 190 | | 0,103 |
| 20 | 3/4″ P | KA10475104 | 47 | 32 | 190 | | 0,108 |
| 25 | 1″ Č | KA10470105 | 53 | 41 | 120 | | 0,161 |
| 25 | 1″ P | KA10475105 | 53 | 41 | 120 | | 0,168 |
| 32 | 1 1/4″ Č | KA10470206 | 57 | 50 | 80 | | 0,281 |
| 32 | 1 1/4″ P | KA10475206 | 57 | 50 | 80 | | 0,290 |
| 40 | 1 1/2″ Č | KA10470207 | 59 | 55 | 60 | | 0,282 |
| 40 | 1 1/2″ P | KA10475207 | 59 | 55 | 60 | | 0,296 |
| 50 | 2″ Č | KA10470208 | 68 | 70 | 30 | | 0,442 |
| 50 | 2″ P | KA10475208 | 68 | 70 | 30 | | 0,464 |
| 65 | 2 1/2″ Č | KA10470209 | 75 | 85 | 16 | | 0,656 |
| 65 | 2 1/2″ P | KA10475209 | 75 | 85 | 16 | | 0,689 |
| 80 | 3″ Č | KA10470210 | 83 | 100 | 12 | | 0,872 |
| 80 | 3″ P | KA10475210 | 83 | 100 | 12 | | 0,916 |
| 100 | 4″ Č | KA10470211 | 95 | 130 | 6 | | 1,396 |
| 100 | 4″ P | KA10475211 | 95 | 130 | 6 | | 1,438 |

## ART.281 D/L
## ISO N8 R/L

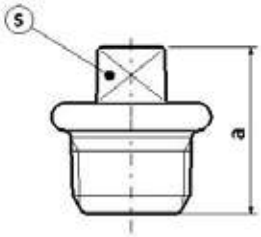
### DVOJNA SPOJKA Z DESNIM IN LEVIM NAVOJEM
### HEXAGON NIPPLE - RIGHT AND LEFT THREAD
### NIPPLO DOPIO CON FILETTATURA DESTRA / SINISTRA
### DOPPELNIPPEL MIT RECHTS UND LINKSGEWINDE




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10380103 | 44 | 27 | 330 | 10 | 0,070 |
| 15 | 1/2″ P | KA10385103 | 44 | 27 | 330 | 10 | 0,074 |
| 20 | 3/4″ Č | KA10380104 | 47 | 32 | 190 | 10 | 0,103 |
| 20 | 3/4″ P | KA10385104 | 47 | 32 | 190 | 10 | 0,108 |
| 25 | 1″ Č | KA10380105 | 53 | 41 | 120 | 10 | 0,165 |
| 25 | 1″ P | KA10385105 | 53 | 41 | 120 | 10 | 0,173 |
| 32 | 1 1/4″ Č | KA10380206 | 57 | 50 | 80 | | 0,273 |
| 32 | 1 1/4″ P | KA10385206 | 57 | 50 | 80 | | 0,287 |
| 40 | 1 1/2″ Č | KA10380207 | 59 | 55 | 60 | | 0,282 |
| 40 | 1 1/2″ P | KA10385207 | 59 | 55 | 60 | | 0,296 |
| 50 | 2″ Č | KA10380208 | 68 | 70 | 30 | | 0,442 |
| 50 | 2″ P | KA10385208 | 68 | 70 | 30 | | 0,464 |

## ART.290
## ISO T9

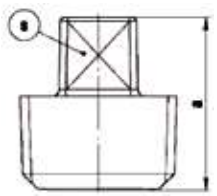
### ČEP
### PLUG, BEADED
### TAPPO CON BORDO
### STOPFEN MIT RAND




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 10 | 3/8″ Č | KA10400102 | 24 | 10 | 1000 | 25 | 0,034 |
| 10 | 3/8″ P | KA10405102 | 24 | 10 | 1000 | 25 | 0,036 |
| 15 | 1/2″ Č | KA10400103 | 26 | 11 | 600 | 10 | 0,053 |
| 15 | 1/2″ P | KA10405103 | 26 | 11 | 600 | 10 | 0,055 |
| 20 | 3/4″ Č | KA10400104 | 32 | 17 | 300 | 10 | 0,086 |
| 20 | 3/4″ P | KA10405104 | 32 | 17 | 300 | 10 | 0,090 |
| 25 | 1″ Č | KA10400105 | 36 | 19 | 200 | 10 | 0,132 |
| 25 | 1″ P | KA10405105 | 36 | 19 | 200 | 10 | 0,139 |
| 32 | 1 1/4″ Č | KA10400206 | 39 | 22 | 140 | | 0,206 |
| 32 | 1 1/4″ P | KA10405206 | 39 | 22 | 140 | | 0,216 |
| 40 | 1 1/2″ Č | KA10400207 | 41 | 22 | 100 | | 0,257 |
| 40 | 1 1/2″ P | KA10405207 | 41 | 22 | 100 | | 0,270 |
| 50 | 2″ Č | KA10400208 | 48 | 27 | 65 | | 0,371 |
| 50 | 2″ P | KA10405208 | 48 | 27 | 65 | | 0,390 |
| 65 | 2 1/2″ Č | KA10400209 | 54 | 32 | 40 | | 0,638 |
| 65 | 2 1/2″ P | KA10405209 | 54 | 32 | 40 | | 0,670 |
| 80 | 3″ Č | KA10400210 | 60 | 36 | 25 | | 0,926 |
| 80 | 3″ P | KA10405210 | 60 | 36 | 25 | | 0,972 |

## ART.291
## ISO T8

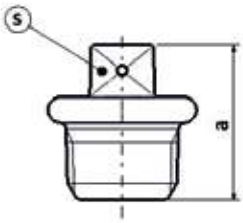
### ČEP
### PLUG, BEADED
### TAPPO CON BORDO
### STOPFEN MIT RAND




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10410103 | 24 | 11 | 600 | 10 | 0,034 |
| 15 | 1/2″ P | KA10415103 | 24 | 11 | 600 | 10 | 0,036 |
| 20 | 3/4″ Č | KA10410104 | 28 | 15 | 300 | 10 | 0,060 |
| 20 | 3/4″ P | KA10415104 | 28 | 15 | 300 | 10 | 0,062 |
| 25 | 1″ Č | KA10410105 | 30 | 19 | 200 | 10 | 0,106 |
| 25 | 1″ P | KA10415105 | 30 | 19 | 200 | 10 | 0,109 |

## ART.294

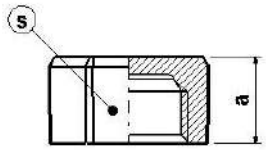
### ČEP Z LUKNJO
### PLUG, BEADED
### TAPPO CON BORDO
### STOPFEN MIT RAND




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2" Č | KA10430103 | 26 | 11 | 600 | 10 | 0,053 |
| 15 | 1/2" P | KA10435103 | 26 | 11 | 600 | 10 | 0,055 |
| 20 | 3/4" Č | KA10430104 | 32 | 17 | 300 | 10 | 0,086 |
| 20 | 3/4" P | KA10435104 | 32 | 17 | 300 | 10 | 0,09 |
| 25 | 1" Č | KA10430105 | 36 | 19 | 200 | 10 | 0,132 |
| 25 | 1" P | KA10435105 | 36 | 19 | 200 | 10 | 0,139 |
| 32 | 1 1/4" Č | KA10430206 | 39 | 22 | 140 | | 0,206 |
| 32 | 1 1/4" P | KA10435206 | 39 | 22 | 140 | | 0,216 |
| 40 | 1 1/2" Č | KA10430207 | 41 | 22 | 100 | | 0,257 |
| 40 | 1 1/2" P | KA10435207 | 41 | 22 | 100 | | 0,27 |
| 50 | 2" Č | KA10430208 | 48 | 27 | 65 | | 0,371 |
| 50 | 2" P | KA10435208 | 48 | 27 | 65 | | 0,39 |

## ART.300
## ISO T1

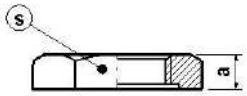
### KAPA
### CAP
### CALLOTTA
### KAPPE




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10390103 | 19 | 26 | 500 | 10 | 0,051 |
| 15 | 1/2″ P | KA10395103 | 19 | 26 | 500 | 10 | 0,053 |
| 20 | 3/4″ Č | KA10390104 | 22 | 32 | 330 | 10 | 0,073 |
| 20 | 3/4″ P | KA10395104 | 22 | 32 | 330 | 10 | 0,076 |
| 25 | 1″ Č | KA10390105 | 24 | 39 | 200 | 10 | 0,140 |
| 25 | 1″ P | KA10395105 | 24 | 39 | 200 | 10 | 0,145 |
| 32 | 1 1/4″ Č | KA10390206 | 27 | 48 | 140 | | 0,208 |
| 32 | 1 1/4″ P | KA10395206 | 27 | 48 | 140 | | 0,215 |
| 40 | 1 1/2″ Č | KA10390207 | 27 | 54 | 110 | | 0,233 |
| 40 | 1 1/2″ P | KA10395207 | 27 | 54 | 110 | | 0,240 |
| 50 | 2″ Č | KA10390208 | 32 | 66 | 55 | | 0,476 |
| 50 | 2″ P | KA10395208 | 32 | 66 | 55 | | 0,493 |
| 65 | 2 1/2″ Č | KA10390209 | 41 | 85 | 30 | | 0,739 |
| 65 | 2 1/2″ P | KA10395209 | 41 | 85 | 30 | | 0,762 |
| 80 | 3″ Č | KA10390210 | 44 | 95 | 25 | | 0,834 |
| 80 | 3″ P | KA10395210 | 44 | 95 | 25 | | 0,860 |
| 100 | 4″ Č | KA10390211 | 46 | 130 | 10 | | 1,930 |
| 100 | 4″ P | KA10395211 | 46 | 130 | 10 | | 2,020 |

## ART.312
ISO P4

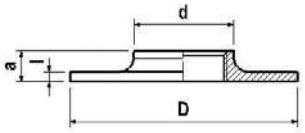
PROTIMATICA
BACKNUT, RECESESSED
CONTODADO CON SCANALATURA
GEGENMUTER MIT AUSSPARUNG




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10830117 | 8 | 32 | 800 | 10 | 0,029 |
| 15 | 1/2″ P | KA10835117 | 8 | 32 | 800 | 10 | 0,030 |
| 20 | 3/4″ Č | KA10830118 | 10 | 36 | 550 | 10 | 0,043 |
| 20 | 3/4″ P | KA10835118 | 10 | 36 | 550 | 10 | 0,045 |
| 25 | 1″ Č | KA10830119 | 11 | 46 | 340 | 10 | 0,080 |
| 25 | 1″ P | KA10835119 | 11 | 46 | 340 | 10 | 0,084 |
| 32 | 1 1/4″ Č | KA10830220 | 13 | 55 | 200 | | 0,120 |
| 32 | 1 1/4″ P | KA10835220 | 13 | 55 | 200 | | 0,126 |
| 40 | 1 1/2″ Č | KA10830221 | 13 | 60 | 180 | | 0,130 |
| 40 | 1 1/2″ P | KA10835221 | 13 | 60 | 180 | | 0,137 |
| 50 | 2″ Č | KA10830222 | 14 | 75 | 100 | | 0,214 |
| 50 | 2″ P | KA10835222 | 14 | 75 | 100 | | 0,225 |

## ART.321

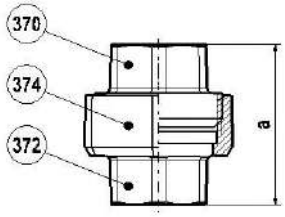
PRIROBNICA
FLANGES
FLANGES
FLANSCH




| Dim. mm | velikost | koda | a | d | D | l | | | kg |
|---|---|---|---|---|---|---|---|---|---|
| 50 | 2″ Č | KA10800208 | 22 | 71 | 160 | 7 | 20 | | 1,111 |
| 50 | 2″ P | KA10805208 | 22 | 71 | 160 | 7 | 20 | | 1,145 |

## ART.330
## ISO U1

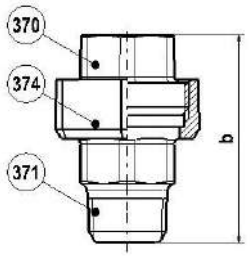
**PRIVIJALO, PLOŠČATO TESNENJE**
**UNION, FLAT SEAT**
**BOCCHETTONE A SEDE PIANA**
**VERSCHRAUBUNG MIT FLACH DICHTEND**




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10500103 | 48 | 110 | 10 | 0,245 |
| 15 | 1/2″ P | KA10505103 | 48 | 110 | 10 | 0,257 |
| 20 | 3/4″ Č | KA10500104 | 52 | 90 | 10 | 0,275 |
| 20 | 3/4″ P | KA10505104 | 52 | 90 | 10 | 0,289 |
| 25 | 1″ Č | KA10500105 | 58 | 60 | 10 | 0,327 |
| 25 | 1″ P | KA10505105 | 58 | 60 | 10 | 0,341 |
| 32 | 1 1/4″ Č | KA10500206 | 65 | 35 | | 0,617 |
| 32 | 1 1/4″ P | KA10505206 | 65 | 35 | | 0,648 |
| 40 | 1 1/2″ Č | KA10500207 | 70 | 25 | | 0,770 |
| 40 | 1 1/2″ P | KA10505207 | 70 | 25 | | 0,809 |
| 50 | 2″ Č | KA10500208 | 78 | 15 | | 1,120 |
| 50 | 2″ P | KA10505208 | 78 | 15 | | 1,176 |
| 65 | 2 1/2″ Č | KA10500209 | 85 | 12 | | 1,879 |
| 65 | 2 1/2″ P | KA10505209 | 85 | 12 | | 1,937 |
| 80 | 3″ Č | KA10500210 | 95 | 6 | | 2,850 |
| 80 | 3″ P | KA10505210 | 95 | 6 | | 3,000 |

## ART.331
## ISO U2

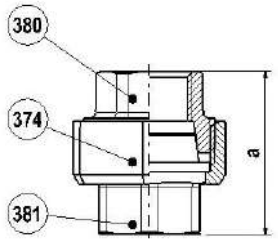
**PRIVIJALO, PLOŠČATO TESNENJE Z/N NAVOJ**
**UNION, FLAT SEAT M/F THREAD**
**BOCCHETTONE A SEDE PIANA M/F FILETTATURA**
**VERSCHRAUBUNG MIT FLACH DICHTEND M/F GEWINDE**




| Dim. mm | velikost | koda | b | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10520102 | 66 | 90 | 10 | 0,256 |
| 15 | 1/2″ P | KA10525102 | 66 | 90 | 10 | 0,269 |
| 20 | 3/4″ Č | KA10520103 | 72 | 70 | 10 | 0,320 |
| 20 | 3/4″ P | KA10525103 | 72 | 70 | 10 | 0,336 |
| 25 | 1″ Č | KA10520104 | 80 | 50 | 10 | 0,403 |
| 25 | 1″ P | KA10525104 | 80 | 50 | 10 | 0,418 |
| 32 | 1 1/4″ Č | KA10520205 | 90 | 30 | | 0,700 |
| 32 | 1 1/4″ P | KA10525205 | 90 | 30 | | 0,735 |
| 40 | 1 1/2″ Č | KA10520206 | 95 | 21 | | 0,800 |
| 40 | 1 1/2″ P | KA10525206 | 95 | 21 | | 0,830 |
| 50 | 2″ Č | KA10520207 | 106 | 13 | | 1,250 |
| 50 | 2″ P | KA10525207 | 106 | 13 | | 1,280 |
| 65 | 2 1/2″ Č | KA10520208 | 118 | 8 | | 2,260 |
| 65 | 2 1/2″ P | KA10525208 | 118 | 8 | | 2,330 |
| 80 | 3″ Č | KA10520209 | 130 | 5 | | 3,070 |
| 80 | 3″ P | KA10525209 | 130 | 5 | | 3,170 |

## ART.340
## ISO U11

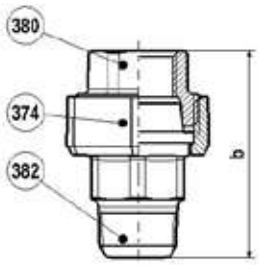
### PRIVIJALO, KONIČNO TESNENJE
### UNION, TAPER SEAT
### BOCCHETTONE A SEDE CONICA
### VERSCHRAUBUNG MIT KEGELDICHTUNG




| Dim. mm | velikost | koda | a | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10510103 | 48 | 110 | 10 | 0,255 |
| 15 | 1/2″ P | KA10515103 | 48 | 110 | 10 | 0,268 |
| 20 | 3/4″ Č | KA10510104 | 52 | 90 | 10 | 0,290 |
| 20 | 3/4″ P | KA10515104 | 52 | 90 | 10 | 0,305 |
| 25 | 1″ Č | KA10510105 | 58 | 60 | 10 | 0,347 |
| 25 | 1″ P | KA10515105 | 58 | 60 | 10 | 0,356 |
| 32 | 1 1/4″ Č | KA10510206 | 65 | 35 | | 0,620 |
| 32 | 1 1/4″ P | KA10515206 | 65 | 35 | | 0,651 |
| 40 | 1 1/2″ Č | KA10510207 | 70 | 25 | | 0,720 |
| 40 | 1 1/2″ P | KA10515207 | 70 | 25 | | 0,756 |
| 50 | 2″ Č | KA10510208 | 78 | 15 | | 1,200 |
| 50 | 2″ P | KA10515208 | 78 | 15 | | 1,260 |
| 65 | 2 1/2″ Č | KA10510209 | 85 | 12 | | 2,060 |
| 65 | 2 1/2″ P | KA10515209 | 85 | 12 | | 2,136 |
| 80 | 3″ Č | KA10510210 | 95 | 6 | | 2,490 |
| 80 | 3″ P | KA10515210 | 95 | 6 | | 2,594 |

## ART.341
## ISO U12

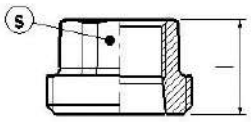
### PRIVIJALO, KONIČNO TESNENJE Z/N NAVOJ
### UNION, TAPER SEAT M/F THREAD
### BOCCHETTONE A SEDE CONICA M/F FILETTATURA
### VERSCHRAUBUNG MIT KEGELDICHTUNG M/F GEWINDE




| Dim. mm | velikost | koda | b | | | kg |
|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10530102 | 66 | 90 | 10 | 0,260 |
| 15 | 1/2″ P | KA10535102 | 66 | 90 | 10 | 0,273 |
| 20 | 3/4″ Č | KA10530103 | 72 | 70 | 10 | 0,320 |
| 20 | 3/4″ P | KA10535103 | 72 | 70 | 10 | 0,336 |
| 25 | 1″ Č | KA10530104 | 80 | 50 | 10 | 0,410 |
| 25 | 1″ P | KA10535104 | 80 | 50 | 10 | 0,430 |
| 32 | 1 1/4″ Č | KA10530205 | 90 | 30 | | 0,775 |
| 32 | 1 1/4″ P | KA10535205 | 90 | 30 | | 0,790 |
| 40 | 1 1/2″ Č | KA10530206 | 95 | 21 | | 0,890 |
| 40 | 1 1/2″ P | KA10535206 | 95 | 21 | | 0,900 |
| 50 | 2″ Č | KA10530207 | 106 | 13 | | 1,281 |
| 50 | 2″ P | KA10535207 | 106 | 13 | | 1,316 |
| 65 | 2 1/2″ Č | KA10530208 | 118 | 8 | | 2,375 |
| 65 | 2 1/2″ P | KA10535208 | 118 | 8 | | 2,460 |
| 80 | 3″ Č | KA10530209 | 130 | 5 | | 3,074 |
| 80 | 3″ P | KA10535209 | 130 | 5 | | 3,170 |

## ART.370

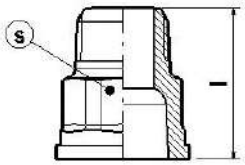
### UVIJAČNI DEL, PLOŠČATO TESNENJE
### UNION BUSH, FLAT SEAT
### PEZZO FILETTATO, SEDE PIANA
### ENISHRAUBTEILE, FLACH DICHTEND




| Dim. mm | velikost | koda | l | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA12930003 | 24,5 | 27 | 380 | 10 | 0,075 |
| 15 | 1/2″ P | KA12935003 | 24,5 | 27 | 380 | 10 | 0,079 |
| 20 | 3/4″ Č | KA12930004 | 26,5 | 32 | 320 | 10 | 0,083 |
| 20 | 3/4″ P | KA12935004 | 26,5 | 32 | 320 | 10 | 0,087 |
| 25 | 1″ Č | KA12930005 | 29,0 | 38 | 200 | 10 | 0,116 |
| 25 | 1″ P | KA12935005 | 29,0 | 38 | 200 | 10 | 0,122 |
| 32 | 1 1/4″ Č | KA12930006 | 33,0 | 47 | 110 | | 0,165 |
| 32 | 1 1/4″ P | KA12935006 | 33,0 | 47 | 110 | | 0,173 |
| 40 | 1 1/2″ Č | KA12930007 | 36,0 | 53 | 70 | | 0,280 |
| 40 | 1 1/2″ P | KA12935007 | 36,0 | 53 | 70 | | 0,294 |
| 50 | 2″ Č | KA12930008 | 40,0 | 66 | 40 | | 0,440 |
| 50 | 2″ P | KA12935008 | 40,0 | 66 | 40 | | 0,462 |

## ART.371

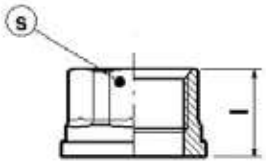
### VLOŽNI DEL, PLOŠČATO TESNENJE /Z NAVOJ
### UNION END, FLAT SEAT /M THREAD
### PEZZO FOLLE, A SEDE PIANA /M FILETTATURA
### EINLEGTEIL, FLACH DIHTEND /M GEWINDE




| Dim. mm | velikost | koda | l | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA12890002 | 39,5 | 27 | 370 | 10 | 0,072 |
| 15 | 1/2″ P | KA12895002 | 39,5 | 27 | 370 | 10 | 0,076 |
| 20 | 3/4″ Č | KA12890003 | 43,5 | 32 | 240 | 10 | 0,108 |
| 20 | 3/4″ P | KA12895003 | 43,5 | 32 | 240 | 10 | 0,113 |
| 25 | 1″ Č | KA12890004 | 48,5 | 38 | 150 | 10 | 0,152 |
| 25 | 1″ P | KA12895004 | 48,5 | 38 | 150 | 10 | 0,160 |
| 32 | 1 1/4″ Č | KA12890005 | 55,0 | 47 | 100 | | 0,300 |
| 32 | 1 1/4″ P | KA12895005 | 55,0 | 47 | 100 | | 0,315 |
| 40 | 1 1/2″ Č | KA12890006 | 57,0 | 53 | 70 | | 0,380 |
| 40 | 1 1/2″ P | KA12895006 | 57,0 | 53 | 70 | | 0,398 |
| 50 | 2″ Č | KA12890007 | 64,0 | 66 | 35 | | 0,490 |
| 50 | 2″ P | KA12895007 | 64,0 | 66 | 35 | | 0,500 |

## ART.372

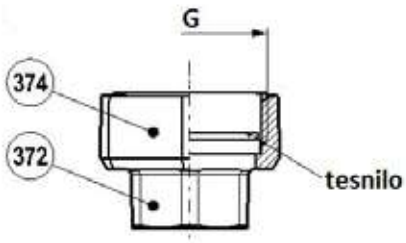
### VLOŽNI DEL, PLOŠČATO TESNENJE
### UNION END, FLAT SEAT
### PEZZO FOLLE, A SEDE PIANA
### EINLEGTEIL MIT FLACH DIHTEND




| Dim. mm | velikost | koda | l | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA12870003 | 22,5 | 27 | 460 | 10 | 0,057 |
| 15 | 1/2″ P | KA12875003 | 22,5 | 27 | 460 | 10 | 0,060 |
| 20 | 3/4″ Č | KA12870004 | 24,0 | 32 | 400 | 10 | 0,070 |
| 20 | 3/4″ P | KA12875004 | 24,0 | 32 | 400 | 10 | 0,074 |
| 25 | 1″ Č | KA12870005 | 27,5 | 38 | 240 | | 0,090 |
| 25 | 1″ P | KA12875005 | 27,5 | 38 | 240 | | 0,095 |
| 32 | 1 1/4″ Č | KA12870006 | 30,5 | 47 | 120 | | 0,160 |
| 32 | 1 1/4″ P | KA12875006 | 30,5 | 47 | 120 | | 0,168 |
| 40 | 1 1/2″ Č | KA12870007 | 32,5 | 53 | 90 | | 0,202 |
| 40 | 1 1/2″ P | KA12875007 | 32,5 | 53 | 90 | | 0,212 |
| 50 | 2″ Č | KA12870008 | 36,5 | 66 | 50 | | 0,360 |
| 50 | 2″ P | KA12875008 | 36,5 | 66 | 50 | | 0,378 |
| 65 | 2 1/2″ Č | KA12870009 | 40,0 | 85 | 25 | | 0,575 |
| 65 | 2 1/2″ P | KA12875009 | 40,0 | 85 | 25 | | 0,599 |
| 80 | 3″ Č | KA12870010 | 44,0 | 97 | 20 | | 0,720 |
| 80 | 3″ P | KA12875010 | 44,0 | 97 | 20 | | 0,740 |

## ART.372-374

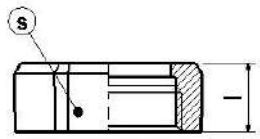
### KOMPLET ZA ČRPALKO
### KIT FOR THE PUMP
### KIT PER LA POMPA
### KIT FÜR DIE PUMPE




| Dim. mm | velikost | koda | navoj v matici | | | kg |
|---|---|---|---|---|---|---|
| 20 | 3/4″ Č | KA10900224 | G 1 1/4″ | 65 | 2 | 0,370 |
| 25 | 1″ Č | KA10900225 | G 1 1/2″ | 65 | 2 | 0,430 |
| 32 | 1 1/4″ Č | KA10900226 | G 2″ | 37 | 2 | 0,760 |
| 40 | 1 1/2″ Č | KA10900227 | G 2 1/4″ | 25 | 2 | 0,986 |
| 50 | 2″ Č | KA10900228 | G 2 3/4″ | 18 | 2 | 1,360 |

## ART.374
ISO P1

### MATICA PRIVIJALA
### UNION NUT
### DADO
### ÜBERWURFMUTTER

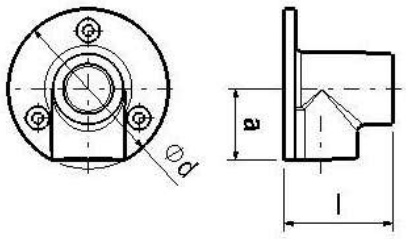



| Dim. mm | velikost | koda | navoj | l | s | | | kg |
|---|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA12860003 | G 1 1/8″ | 19 | 46 | 240 | 10 | 0,107 |
| 15 | 1/2″ P | KA12865003 | G 1 1/8″ | 19 | 46 | 240 | 10 | 0,112 |
| 20 | 3/4″ Č | KA12860004 | G 1 1/4″ | 20 | 50 | 200 | 10 | 0,127 |
| 20 | 3/4″ P | KA12865004 | G 1 1/4″ | 20 | 50 | 200 | 10 | 0,133 |
| 25 | 1″ Č | KA12860005 | G 1 1/2″ | 22 | 55 | 160 | 10 | 0,143 |
| 25 | 1″ P | KA12865005 | G 1 1/2″ | 22 | 55 | 160 | 10 | 0,150 |
| 32 | 1 1/4″ Č | KA12860006 | G 2″ | 24 | 70 | 80 | | 0,268 |
| 32 | 1 1/4″ P | KA12865006 | G 2″ | 24 | 70 | 80 | | 0,275 |
| 40 | 1 1/2″ Č | KA12860007 | G 2 1/4″ | 25 | 75 | 70 | | 0,286 |
| 40 | 1 1/2″ P | KA12865007 | G 2 1/4″ | 25 | 75 | 70 | | 0,295 |
| 50 | 2″ Č | KA12860008 | G 2 3/4″ | 27 | 90 | 50 | | 0,361 |
| 50 | 2″ P | KA12865008 | G 2 3/4″ | 27 | 90 | 50 | | 0,374 |
| 65 | 2 1/2″ Č | KA12860009 | G 3 1/2″ | 30 | 110 | 26 | | 0,557 |
| 65 | 2 1/2″ P | KA12865009 | G 3 1/2″ | 30 | 110 | 26 | | 0,586 |
| 80 | 3″ Č | KA12860010 | G 4″ | 31 | 129 | 18 | | 1,030 |
| 80 | 3″ P | KA12865010 | G 4″ | 31 | 129 | 18 | | 1,076 |

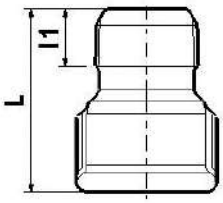
## ART.471

### ZIDNO KOLENO
### BRACKET ELBOW
### GOMITO PER SOFFITO
### DECKENWINKEL

| Dim. mm | velikost | koda | a | d | l | | | kg |
|---|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10250103 | 28 | 65 | 42 | 110 | 10 | 0,209 |
| 15 | 1/2″ P | KA10255103 | 28 | 65 | 42 | 110 | 10 | 0,219 |
| 20 | 3/4″ Č | KA10250104 | 33 | 70 | 50 | 70 | 10 | 0,274 |
| 20 | 3/4″ P | KA10255104 | 33 | 70 | 50 | 70 | 10 | 0,288 |



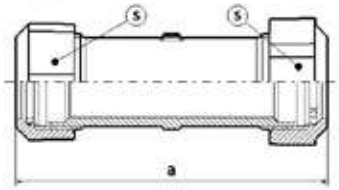
## ART.529a
ISO M4




PODALJŠEK Z/N NAVOJ
EXTENSION TUBE M/F THREAD
PROLUNGAMENTO M/F FILETTATURA
VERLAINGERUNG M/F GEWINDE

| Dim. mm | velikost | koda | L | L1 | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ - 43 Č | KA10330103 | 43 | 13 | 300 | 10 | 0,075 |
| 15 | 1/2″ - 43 P | KA10335103 | 43 | 13 | 300 | 10 | 0,078 |
| 20 | 3/4″ - 48 Č | KA10330104 | 48 | 15 | 170 | 10 | 0,105 |
| 20 | 3/4″ - 48 P | KA10335104 | 48 | 15 | 170 | 10 | 0,110 |
| 25 | 1″ - 55 Č | KA10330105 | 55 | 17 | 110 | 10 | 0,168 |
| 25 | 1″ - 55 P | KA10335105 | 55 | 17 | 110 | 10 | 0,175 |

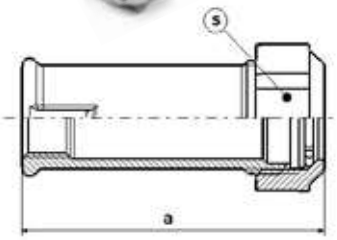
## ART.620




DVOJNI HITRO SPOJNI FITING Z VZMETNIM OBROČEM
DOUBLE FAST UNION WITH ELASTIC BAND
DOPPIO BOCCHETTONE RAPIDO CON ANELLO ELASTICO
DOPPEL SCHNELLE SCHELLE MIT GUMMIBAND

| Dim. mm | velikost | | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | /PLIN/ | KA10230103 | 88 | 41 | 50 | 10 | 0,347 |
| 15 | 1/2″ P | /PLIN/ | KA10235103 | 88 | 41 | 50 | 10 | 0,358 |
| 20 | 3/4″ Č | /PLIN/ | KA10230104 | 96 | 46 | 40 | 10 | 0,440 |
| 20 | 3/4″ P | /PLIN/ | KA10235104 | 96 | 46 | 40 | 10 | 0,454 |
| 25 | 1″ Č | /PLIN/ | KA10230105 | 130 | 55 | 20 | 10 | 0,700 |
| 25 | 1″ P | /PLIN/ | KA10235105 | 130 | 55 | 20 | 10 | 0,733 |

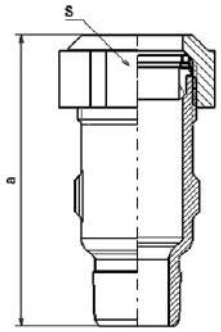
## ART.621




HITRO SPOJNI FITING Z VZMETNIM OBROČEM
FAST UNION WITH ELASTIC BAND
BOCCHETTONE RAPIDO CON ANELLO ELASTICO
SCHNELLE SCHELLE MIT GUMMIBAND

| Dim. mm | velikost | | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | /PLIN/ | KA10240103 | 88 | 41 | 70 | 10 | 0,261 |
| 15 | 1/2″ P | /PLIN/ | KA10245103 | 88 | 41 | 70 | 10 | 0,287 |
| 20 | 3/4″ Č | /PLIN/ | KA10240104 | 96 | 46 | 50 | 10 | 0,337 |
| 20 | 3/4″ P | /PLIN/ | KA10245104 | 96 | 46 | 50 | 10 | 0,375 |
| 25 | 1″ Č | /PLIN/ | KA10240105 | 120 | 55 | 30 | 10 | 0,480 |
| 25 | 1″ P | /PLIN/ | KA10245105 | 120 | 55 | 30 | 10 | 0,500 |

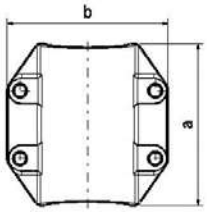
## ART.622




### DVOJNA SPOJKA, PREFABRIKAT
### DOUBLE UNION, PREFABRICATE
### DOPPIO BOCCHETTONE, PREFABBRICATI
### DOPPEL VERSCHRAUBUNG, VORFABRIZIERET

| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 20 | 3/4″ Č | KA10280104 | 96 | 46 | 40 | 10 | 0,270 |
| 20 | 3/4″ P | KA10285104 | 96 | 46 | 40 | 10 | 0,280 |
| 25 | 1″ Č | KA10280105 | 106 | 55 | 20 | 10 | 0,430 |
| 25 | 1″ P | KA10285105 | 106 | 55 | 20 | 10 | 0,440 |

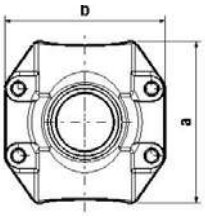
## ART.800




### HITRA OBJEMKA
### REPARATION CLAMP
### COPRIBUCO
### REPARUTURSCHELE

| Dim. mm | velikost | koda | a | b | | kg |
|---|---|---|---|---|---|---|
| 20 | 3/4″ Č | KA10910214 | 90 | 78 | 40 | 0,520 |
| 20 | 3/4″ P | KA10915214 | 90 | 78 | 40 | 0,560 |

## ART.802

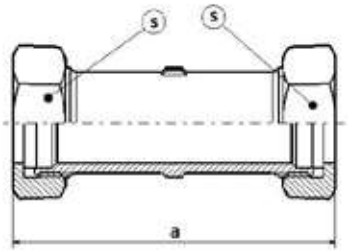



### HIRA OBJEMKA Z NASTAVKOM
### INTAKE CLAMP
### COLLARE DI DERIVAZIONE
### REPARATURSCHELLE FÜR NEBENANCHLUSS

| Dim. mm | velikost | koda | a | b | | kg |
|---|---|---|---|---|---|---|
| 20-15 | 3/4″ - 1/2″ Č | KA10910204 | 90 | 78 | 40 | 0,570 |
| 20-15 | 3/4″ - 1/2″ P | KA10915204 | 90 | 78 | 40 | 0,610 |

## ART.820

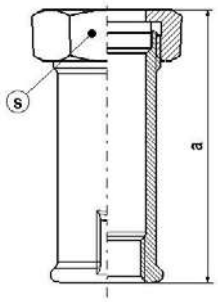
### DVOJNA SPOJKA, PREFABRIKAT
### DOUBLE UNION, PREFABRICATE
### DOPPIO BOCCHETTONE, PREFABBRICATI
### DOPPEL VERSCHRAUBUNG, VORFABRIZIERET




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10590103 | 88 | 41 | 50 | 10 | 0,347 |
| 15 | 1/2″ P | KA10595103 | 88 | 41 | 50 | 10 | 0,358 |
| 20 | 3/4″ Č | KA10590104 | 96 | 46 | 40 | 10 | 0,440 |
| 20 | 3/4″ P | KA10595104 | 96 | 46 | 40 | 10 | 0,454 |
| 25 | 1″ Č | KA10590105 | 106 | 55 | 20 | 10 | 0,659 |
| 25 | 1″ P | KA10595105 | 106 | 55 | 20 | 10 | 0,680 |
| 32 | 1 1/4″ Č | KA10590206 | 118 | 70 | 16 | | 1,110 |
| 32 | 1 1/4″ P | KA10595206 | 118 | 70 | 16 | | 1,130 |
| 40 | 1 1/2″ Č | KA10590207 | 122 | 75 | 15 | | 1,210 |
| 40 | 1 1/2″ P | KA10595207 | 122 | 75 | 15 | | 1,230 |
| 50 | 2″ Č | KA10590208 | 175 | 90 | 8 | | 1,910 |
| 50 | 2″ P | KA10595208 | 175 | 90 | 8 | | 1,940 |
| 65 | 2 1/2″ Č | KA10590209 | 190 | 110 | 4 | | 3,280 |
| 65 | 2 1/2″ P | KA10595209 | 190 | 110 | 4 | | 3,330 |
| 80 | 3″ Č | KA10590210 | 205 | 130 | 3 | | 4,920 |
| 80 | 3″ P | KA10595210 | 205 | 130 | 3 | | 4,950 |

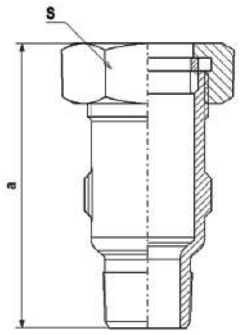
## ART.821

### SPOJKA, PREFABRIKAT
### UNION, PREFABRICATE
### BOCCHETTONE, PREFABBRICATI
### VERSCHRAUBUNG, VORFABRIZIERET




| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2″ Č | KA10580103 | 88 | 41 | 70 | 10 | 0,261 |
| 15 | 1/2″ P | KA10585103 | 88 | 41 | 70 | 10 | 0,269 |
| 20 | 3/4″ Č | KA10580104 | 96 | 46 | 50 | 10 | 0,337 |
| 20 | 3/4″ P | KA10585104 | 96 | 46 | 50 | 10 | 0,347 |
| 25 | 1″ Č | KA10580105 | 106 | 55 | 30 | 10 | 0,474 |
| 25 | 1″ P | KA10585105 | 106 | 55 | 30 | 10 | 0,489 |
| 32 | 1 1/4″ Č | KA10580206 | 118 | 70 | 20 | | 0,801 |
| 32 | 1 1/4″ P | KA10585206 | 118 | 70 | 20 | | 0,826 |
| 40 | 1 1/2″ Č | KA10580207 | 122 | 75 | 18 | | 0,876 |
| 40 | 1 1/2″ P | KA10585207 | 122 | 75 | 18 | | 0,903 |
| 50 | 2″ Č | KA10580208 | 155 | 90 | 10 | | 1,441 |
| 50 | 2″ P | KA10585208 | 155 | 90 | 10 | | 1,486 |
| 65 | 2 1/2″ Č | KA10580209 | 170 | 105 | 6 | | 2,493 |
| 65 | 2 1/2″ P | KA10585209 | 170 | 105 | 6 | | 2,580 |
| 80 | 3″ Č | KA10580210 | 170 | 130 | 4 | | 3,254 |
| 80 | 3″ P | KA10585210 | 170 | 130 | 4 | | 3,355 |

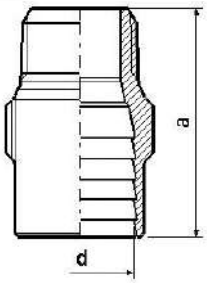
## ART.822




SPOJKA, PREFABRIKAT ZUNAJNI NAVOJ
UNION, PREFABRICATE
BOCCHETTONE, PREFABBRICATI
VERSCHRAUBUNG, VORFABRIZIERET

| Dim. mm | velikost | koda | a | s | | | kg |
|---|---|---|---|---|---|---|---|
| 20 | 3/4" Č | KA10850104 | 96 | 46 | 70 | 10 | 0,271 |
| 20 | 3/4" P | KA10855104 | 96 | 46 | 70 | 10 | 0,280 |
| 25 | 1" Č | KA10850105 | 106 | 55 | 40 | 10 | 0,397 |
| 25 | 1" P | KA10855105 | 106 | 55 | 40 | 10 | 0,410 |

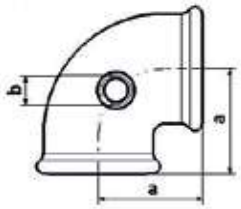
## ART.900




SPOJKA ZA PVC CEVI
NIPPLE FOR PLASTIC TUBES
NIPPLI PER TUBI IN PLASTICA
NIPPEL FUER PLASTIC ROEHRE

| Dim. mm | velikost | koda | a | d | | | kg |
|---|---|---|---|---|---|---|---|
| 15 | 1/2" Č | KA10600103 | 45 | 20 | 300 | 10 | 0,086 |
| 15 | 1/2" P | KA10605103 | 45 | 20 | 300 | 10 | 0,089 |
| 20 | 3/4" Č | KA10600104 | 55 | 25 | 180 | 10 | 0,130 |
| 20 | 3/4" P | KA10605104 | 55 | 25 | 180 | 10 | 0,127 |
| 25 | 1" Č | KA10600105 | 65 | 32 | 100 | 10 | 0,189 |
| 25 | 1" P | KA10605105 | 65 | 32 | 100 | 10 | 0,195 |
| 32 | 1 1/4" Č | KA10600206 | 75 | 40 | 70 | | 0,298 |
| 32 | 1 1/4" P | KA10605206 | 75 | 40 | 70 | | 0,307 |
| 40 | 1 1/2" Č | KA10600207 | 80 | 50 | 50 | | 0,372 |
| 40 | 1 1/2" P | KA10605207 | 80 | 50 | 50 | | 0,383 |
| 50 | 2" Č | KA10600208 | 100 | 63 | 25 | | 0,669 |
| 50 | 2" P | KA10605208 | 100 | 63 | 25 | | 0,690 |

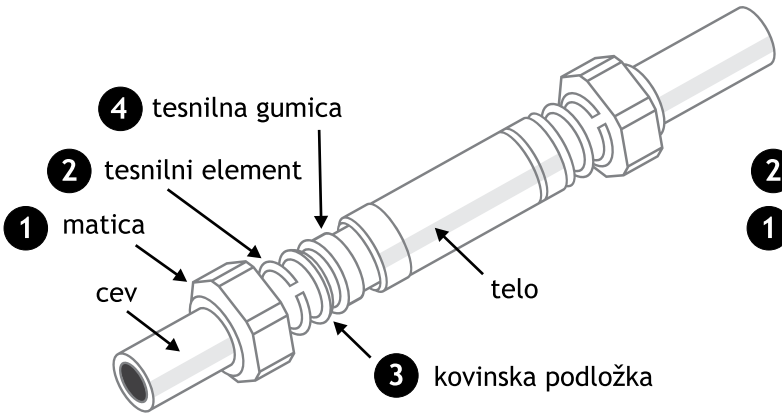
## ART.90 1"



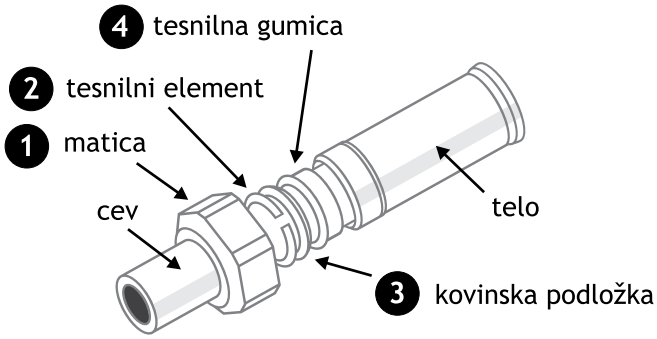

KOLENO Z NASTAVKOM
ELBOW
GOMITO
WINKEL

| Dim. mm | velikost | koda | a | b | | | kg |
|---|---|---|---|---|---|---|---|
| 25 | 1" Č | KA10210105NAST | 38 | G1/8" | 80 | 10 | 0,240 |

ART.620
ISO U1




ART.621
ISO U1




## Navodilo za montažo hitro spojnih fitingov z vzmetnimi obroči

Na kovinsko cev, ki mora biti na mestu spoja čvrsta in gladka, nataknemo sestavne elemente v sledečem vrstnem redu in orientaciji:
1.) matica z navojem v smeri telesa
2.) vzmetni obroč
3.) kovinska podložka
4.) tesnilo s koničnim delom v smeri telesa
Cev nastavimo v telo tako, da je dolžina vstavljene cevi enaka najmanj njenemu premeru, nato v telo vtisnemo še tesnilo. Matico skupaj s podložko in vzmetnim obročem najprej privijemo z roko, nato pa s ključem do končnega položaja.

## Montage für schnelle Schelle mit Gummiband

Auf stählernen auf Folgende Reihenfolge und Orientierung:
1.) Mutter mit Faden, der zum Schelle Körper
2.) Gummiband geleitet wird, verbident
3.) Metall kligent
4.) Koniche Gummiunterlegscheibe mit Kegel, der zum Körper geleitet wird
Zuerst einfügt das Rohr in den Körper. Nehmen Sie Sorge, die die eingefügte. Länge Mindest der Rohrdurchmesser ist, als beeindruckt die konische Gummiunterlegscheibe. Mutter mit dem Metallring und das Gummiband erst Schraube mit der Hand, als mit dem Schrauben-schlüssel zur endgülitigen Position.

## Assebmbly instruction for fast unions with elastic band

On steel tube, which sholud be clean and smooth, put the elements on following order orientation:
1.) Nut with thread directed to the union body
2.) elastic band
3.) metal ring
4.) conical rubber washer with cone directed to the body
First insert the tube into the body. Take care that inserted lenght is minimum the rubber diameter, than impress the conical rubber washer. Nut with the metal ring and elastic band firstly screw by hand, than with the wrench to the final position.

## Istrucioni per montaggio di bocchettoni rapidi con anello elastico

Collocare gli elementi sul tubo d'acciaio (pulito e levigato) nel seguente ordine e orientazione:
1.) Dado con filetto orientato verso il corpo del bocchettone
2.) Anello elastico
3.) Rondella
4.) Guarnizione conica; la parte conica orientata verso il corpo
Prima inserire il tubo nel corpo. La lunghezza del tubo inserito deve essere uguale, almeno, al suo diametro. Piantare la guarnizone sul corpo. Avvitare a mano il dado con rondella e anello elastico. Completare l'avvitamento com chiave fino a posizione finale.

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