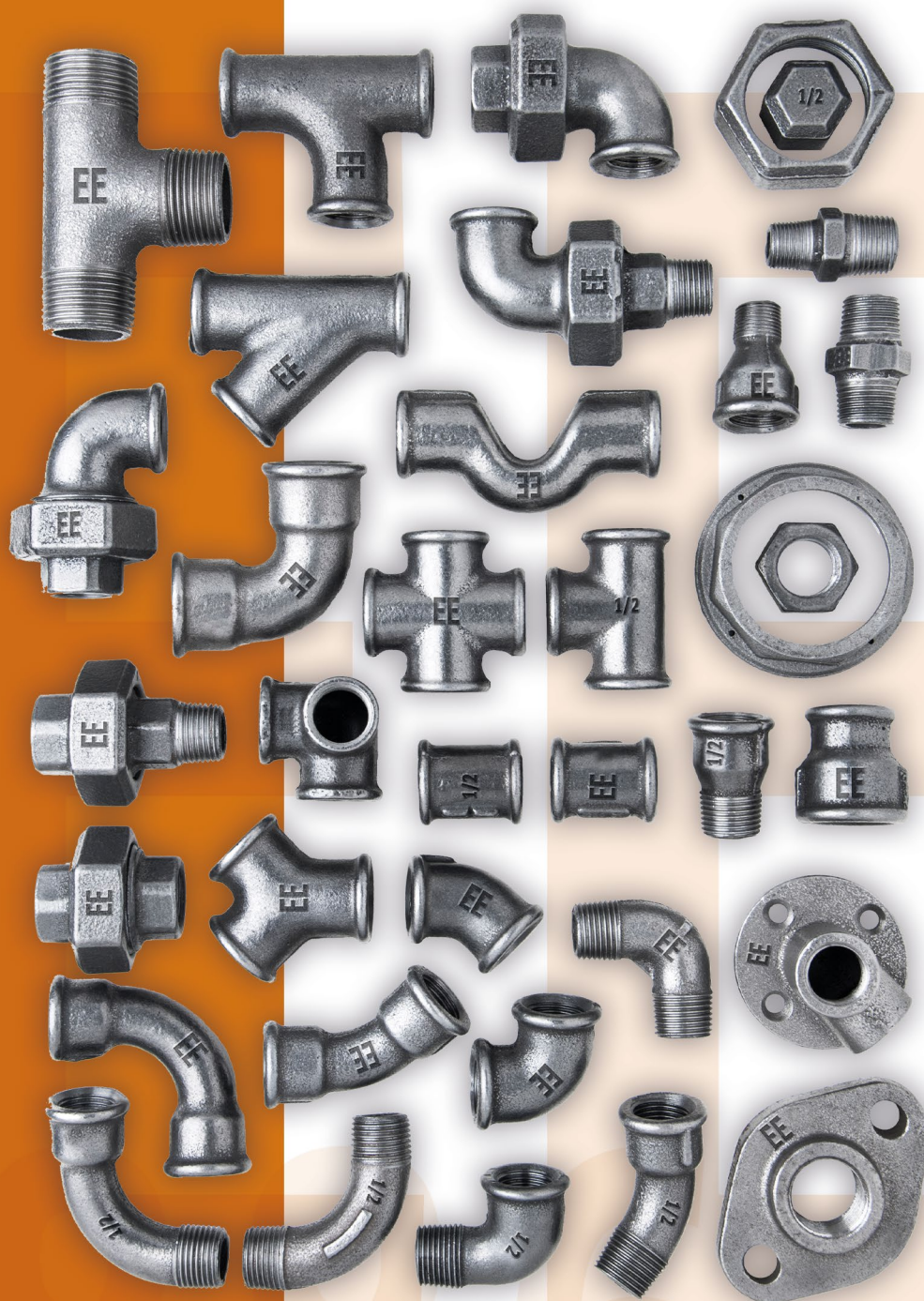


EE

1886

FITTINGS



EN 10242

Odlewnia Zawiercie S.A.





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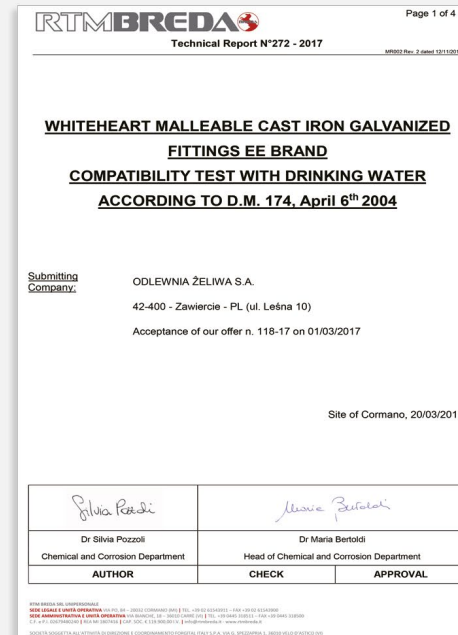
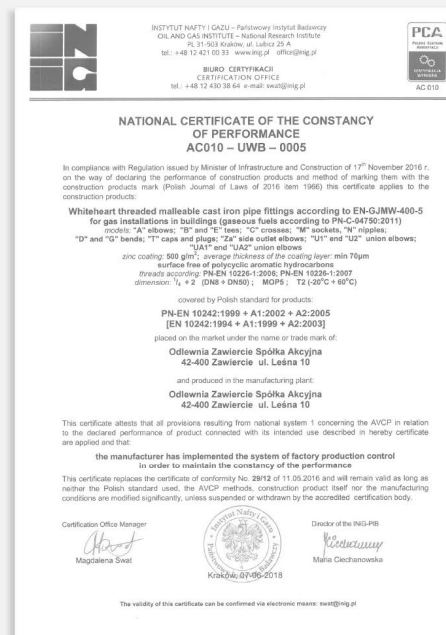
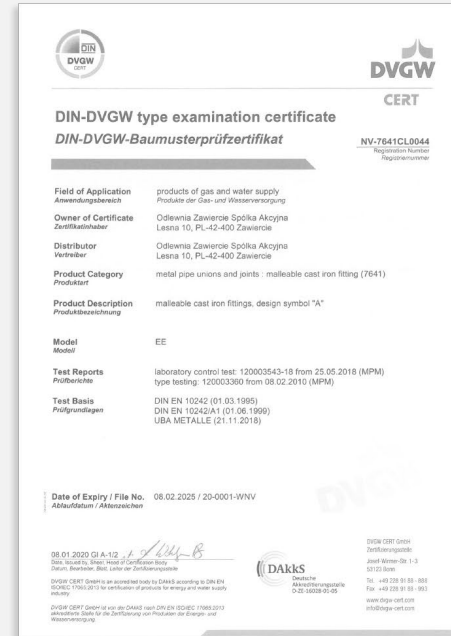
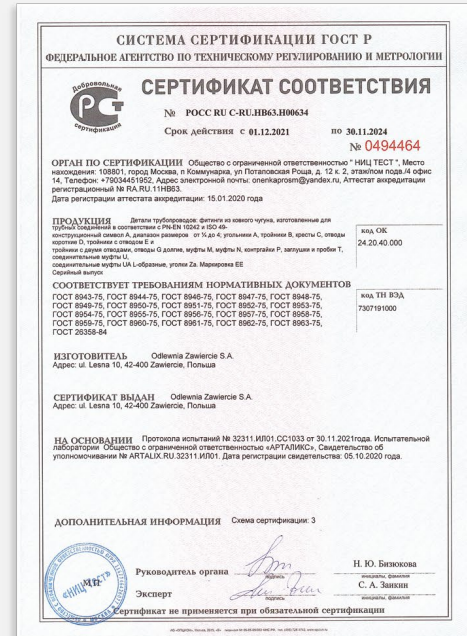
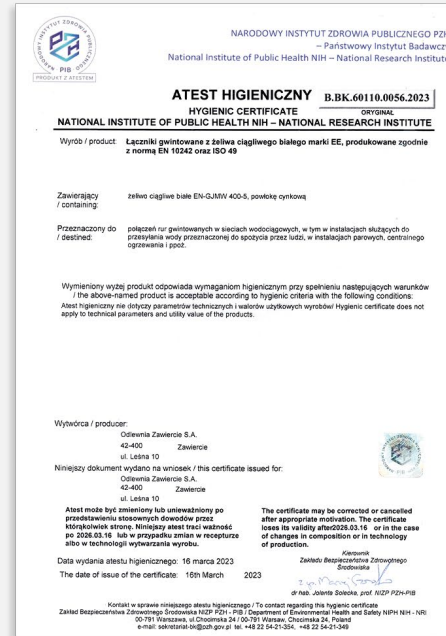


About us

Based on 138 years tradition, Odlewnia Zawiercie Spółka Akcyjna in Zawiercie has developed a rich experience in the production of whiteheart malleable cast iron fittings and castings. The plant, which has been and continues to be systematically developed and equipped, is constantly updated with the most modern machinery available.

Advanced technological and ecological processes and highly-skilled engineering staff ensure a worldwide appreciation for high quality products which comply with Polish and International Standards. For the over 138 years of its existence, EE brand has build and maintained an excellent reputation and trust with satisfied customers throughout the world.

Cetificates



GENERAL INFORMATION

USE

EE brand cast iron fittings are used in threaded pipe joints, particularly in water supply, gas, steam, central heating, sprinkler system networks, etc., transporting non-corrosive liquids and gases.

RANGE OF DIMENSIONS

1/4" do 4"

DN (MM)	8	10	15	20	25	32	40	50	65	80	100
THREAD	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4

MANUFACTURING

According to EN 10242 and ISO 49, construction symbol „A”.

MATERIAL

Fittings: whiteheart malleable EN-GJM^W-400-5 cast iron, according to EN 1562, equivalent to W 40-05, according to ISO 5922.W`

Tensile strenght [MPa]	Elongation [%]	Hardness HB
min 400	min 5,0	max. 220

THREADS

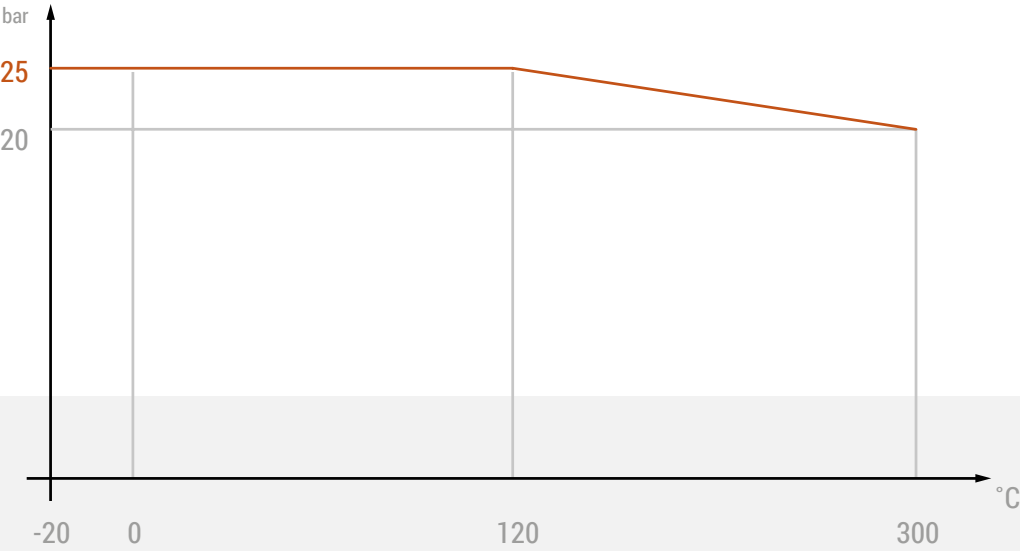
Threads: acc. to EN 10226-1 (ISO 7/1) - R tapered external threads, internal cylindrical Rp threads and acc. to EN ISO 228-1 - G connecting threads

SURFACE/
ZINC PLATING

EE brand fittings can be supplied in accordance to order: with black or galvanized surfaces. According to EN 10242, zinc coating weight relative to the surface exceeds 500 g./m², which corresponds to an average layer thickness of 70 µm. Both black and galvanized surfaces are protected against corrosion. Corrosion protection substance does not contain polycyclic aromatic hydrocarbons.

OPERATING
PRESSURE

2.5 MPa / 25 bar / at the temp. from -20°C to 120°C
2.0 MPa / 20 bar / at the temp. of 300°C



LEAK TEST

According to EN 10242, each EE brand fitting is subjected to a leak test at air pressure of at least 0.5 MPa / 5 bar /, which is equivalent to a minimum hydrostatic pressure of 2.0 MPa / 20 bar /.

DESIGN

Technical aspects, appearance, and other characteristics of fittings can be modified to match the technical advances and changes in accordance with the applicable standards.

ALLGEMEINE INFORMATIONEN

VERWENDUNGSZWEK

Tempergussfittings der Marke EE werden bei den Rohrverbindungen mit Gewinden verwendet, vor allem bei der Wasser-, Gas-, Dampfleitungen, Heizungs-, Sprinkleranlagen usw. für Flüssigkeiten und nicht aggressiven Gasen.

DIMENSIONEN

1/4 bis 4

DN (MM)	8	10	15	20	25	32	40	50	65	80	100
THREAD	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4

AUSFÜHRUNG

Gemäß En 10242 und ISO 49 - Designsymbol „A“

WERKSTOFF

Tempergussfittings aus weißen Temperguss EN-GJMW-400-5 nach EN 1562 bzw. W 40-05 nach ISO 5922.

UGFESTIGKEIT[MPa]	VERLÄNGERUNG [%]	Hardness HB
min 400	min 5,0	max. 220

GEWINDE

Gewinde: nach EN 10226-1 - kegeliges Außengewinde R, zylindrisches Innengewinde Rp und EN ISO 228-1 - Gewinde G.

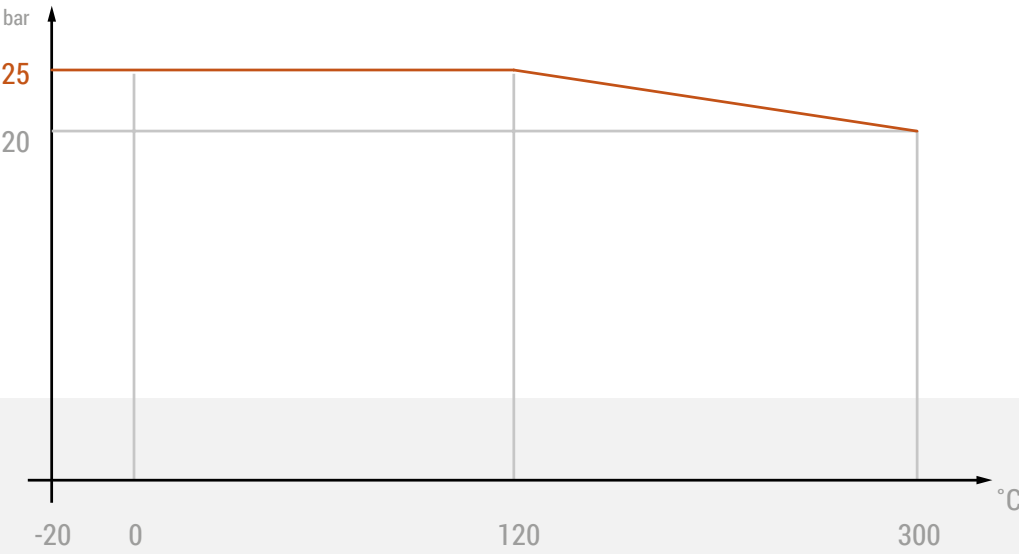
OBERFLÄCHE / VERZINKUNG

Die Fittings der Marke EE können gemäß der Bestellung mit einer schwarzen oder verzinkten Oberfläche geliefert werden. Die Schichtdicke der Verzinkung entspricht der EN 10242 und beträgt ca. 70 µm. Das Gewicht der verzinkten Ausführung ist um ca. 5% höher als das Gewicht der schwarzen Ausführung. Sowohl die schwarze als auch die verzinkte Oberfläche ist mit einem Antikorrosionsschutz versehen. Der Antikorrosionsschutz beinhaltet keine aromatischen Kohlenwasserstoffe.

BETRIEBSDRUCK

Maximum 2,5 MPa / 25 bar / bei einer Temp. von -20°C bis 120°C

Maximum 2,0 MPa / 20 bar / bei einer Temp. 300°C



DICHTHEITSPRÜFUNG

Gemäß der Norm En 10242 werden alle Tempergussfittings der Marke EE mit einem Prüfdruck von Minimum 0,5 MPa/5 bar auf Dichtheit geprüft. Was entspricht dem hydrostatischen Druck von Minimum 2.0 MPa/20 bar/.

TECHNISCHE AUSFÜHRUNG

Die Gestaltung und Ausführung der Tempergussfittings kann entsprechend der technischen Entwicklung und gemäß den Normänderungen angepasst werden.

INFORMATIONS GÉNÉRALES

UTILISATION

Les raccords en fonte de marque EE sont utilisés sur les assemblages des tuyaux filetés, et en particulier dans les réseaux de distribution d'eau, de gaz, de vapeur, de chauffage central, de systèmes d'arrosage, etc. pour le transfert de liquides et de gaz non corrosifs.

PLAGE DE DIMENSIONS

De 1/4 à 4

DN (MM)	8	10	15	20	25	32	40	50	65	80	100
THREAD	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4

RÉALISATION

Selon la norme EN 10242 et ISO 49 - symbole de construction «A».

MATÉRIAU

Tempergussfittings aus weißen Temperguss EN-GJM W-400-5 nach EN 1562 bzw. W 40-05 nach ISO 5922.

Résistance à la traction [MPa]	Allongement [%]	Dureté HB
min 400	min 5,0	max. 220

FILETAGES

Filetages: selon EN 10226-1 - filetages externes coniques R, filetages internes cylindrique Rp et EN ISO 228-1 - filetages de fixation G.

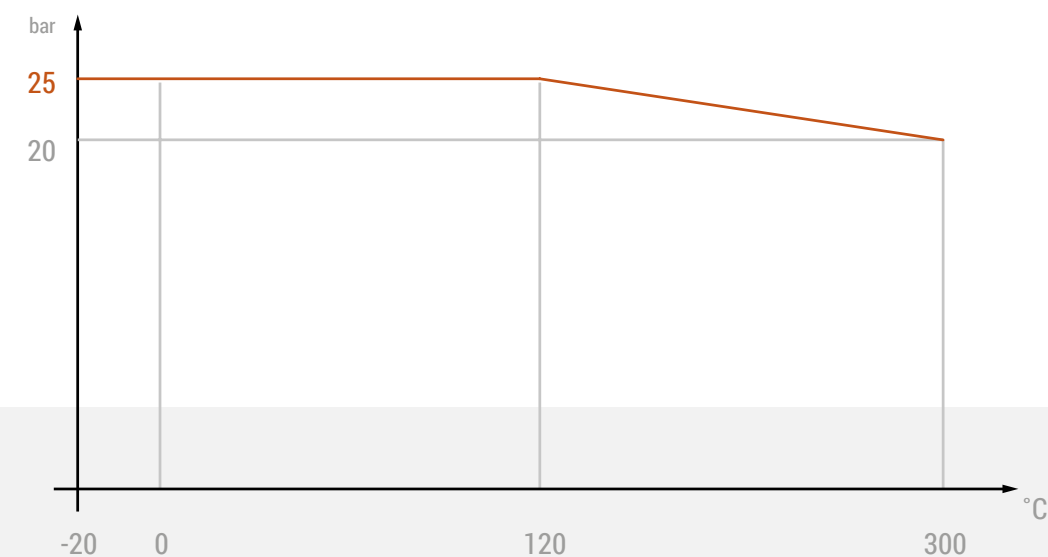
SURFACE / GALVANISATION

Les raccords de marque EE peuvent être fournis conformément à la commande avec une surface noire ou galvanisée. Selon la norme EN 10242, le poids du revêtement en zinc par rapport à la surface est supérieur à 500 g./m², ce qui correspond à une épaisseur de couche moyenne de 70 µm. La surface noire, et la surface galvanisée, sont protégées contre la corrosion. La protection anticorrosive ne contient pas d'hydrocarbure aromatique polycyclique.

PRESSION DE TRAVAIL

2,5 MPa / 25 bar / à une temp. de -20°C à 120°C

2,0 MPa / 20 bar / à une temp. de 300°C



TEST D'ÉTANCHÉITÉ

Selon la norme EN 10242 chaque raccord de marque EE est soumis à un test d'étanchéité sous la pression d'air comprimé d'au moins 0,5 MPa / 5 bar /, ce qui équivaut à une pression hydrostatique minimale de 2,0 MPa / 20 bar /.

CONSTRUCTION

Les aspects techniques, l'apparence et les autres caractéristiques des raccords peuvent être modifiés avec le progrès technique et en conformité avec l'évolution des normes applicables.

GENERALITA'

CAMPO D'IMPIEGO

I raccordi in ghisa col marchio EE sono utilizzati nell'accoppiamento di tubi filettati ed in particolare, negli impianti di fornitura d'acqua impianti gas, e vapore, di impianti di riscaldamento centralizzato, e di irrigazione, ecc. per il trasporto dei liquidi e dei gas non aggressivi.

AMBITO DIMENSIONALE

Da 1/4 a 4

DN (MM)	8	10	15	20	25	32	40	50	65	80	100
THREAD	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4

ESECUZIONE

Conformemente alla norma EN 10242 e ISO 49 - simbolo di costruzione ,A''.

MATERIALE

Raccordi: ghisa a cuore bianco EN-GJMW-400-5 secondo la norma EN 1562 rif.W 40-05 sec. ISO 5922.

Resistenza alla trazione [MPa]	Allungamento [%]	Durezza HB
min 400	min 5,0	max. 220

FILETIATURE

Secondo la norma EN 10226-1 - filettature esterne coniche R, filettature interne cilindriche Rp e EN ISO 228-1 - filettature di collegamento.

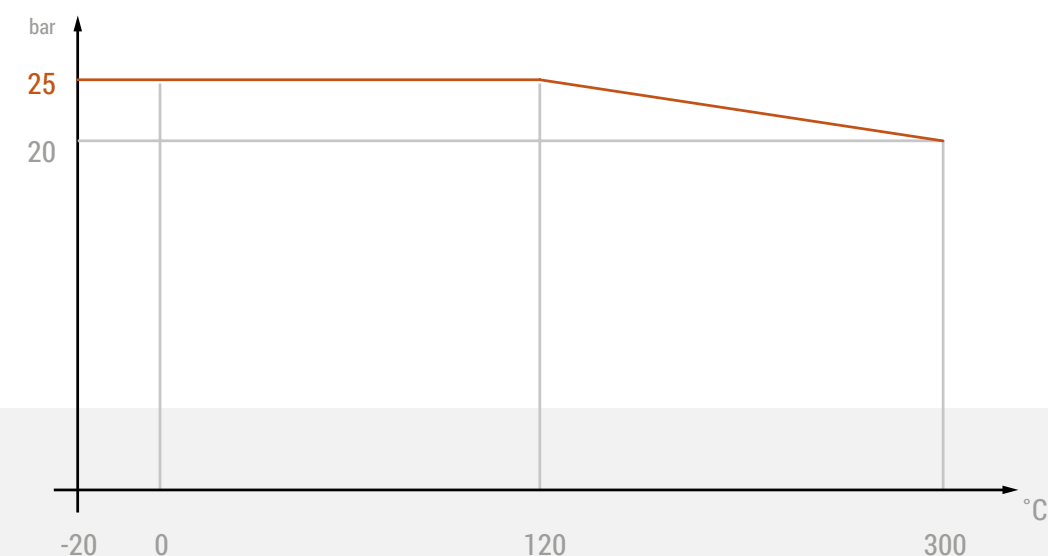
SUPERFICIE / ZINCATURA

I raccordi col marchio EE possono essere forniti, in funzione dell'ordine, con la superficie nera o zincata. Conformemente alla norma EN 10242 il peso del rivestimento in zinco riferito alla superficie è superiore a 500 g./m², il che corrisponde allo spessore medio dello strato di 70 µm. La superficie (sia nera che zincata) è protetta contro la corrosione. La protezione anticorrosiva non contiene idrocarburi policiclici aromatici.

PRESSIONE D'ESERCIZIO

2,5 MPa/ 25 bar/ a temp. da -20°C a 120°C

2,0 MPa/ 20 bar/ a temp. 300°C



PROVA DI TENUTA

Conformemente alla norma EN 10242 ogni raccordo EE è sottoposto alla prova di tenuta sotto pressione dell'aria compressa al minimo di 0,5 MPa / 5 bar /, il che equivale alla pressione idrostatica minima di 2,0 MPa / 20 bar /.

COSTRUZIONE

I concetti tecnici, aspetto esterno e altre caratteristiche dei raccordi sono soggette a modifiche dovute al progresso tecnico e a quelle inerenti le norme in vigore.

ОБЩИЕ ВВЕДЕНИЯ

ПРИМЕНЕНИЕ

Чугунные фитинги марки ЕЕ применяются в соединениях труб на резьбе, в частности в сетях водоснабжения, газоснабжения, подачи пара, центрального отопления, спринклерных установках и т. п. – для транспортировки неагрессивных жидкостей и газов.

ПРЕДЕЛЫ РАЗМЕРОВ

От ¼ до 4

DN (MM)	8	10	15	20	25	32	40	50	65	80	100
THREAD	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4

ИСПОЛНЕНИЕ

В соответствии со стандартами EN 10242 и ISO 49 – конструкционный символ «А».

МАТЕРИАЛ

Фитинги: белый ковкий чугун EN-GJMW-400-5 согл. EN 1562, аналог W 40-05 согл. ISO 5922.

Предел прочности [МПа]	Удлинение [%]	Твердость НВ
min 400	min 5,0	max. 220

РЕЗЬБА

Резьба: согл. EN 10226-1 – коническая наружная резьба R, цилиндрическая внутренняя резьба Rp и EN ISO 228-1 – соединительная резьба G.

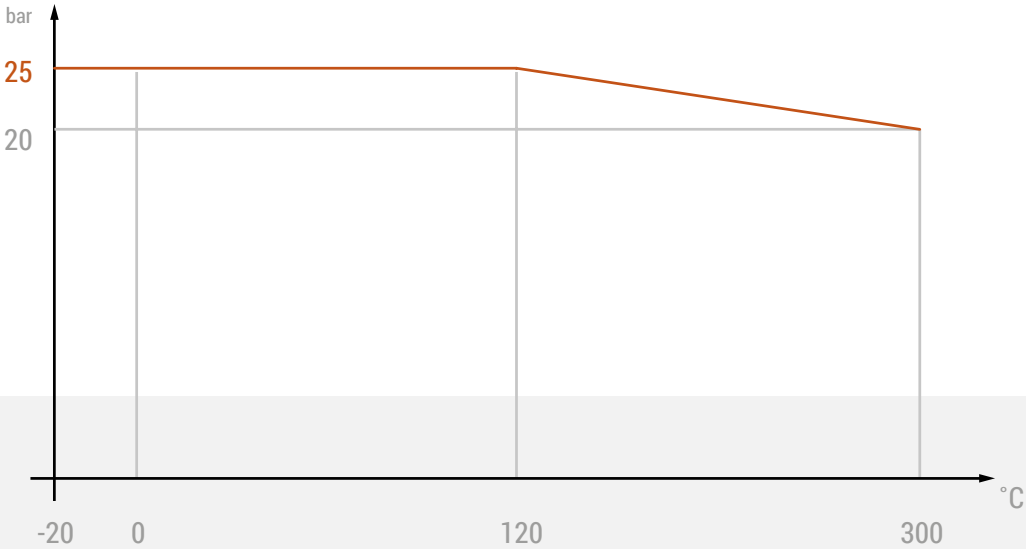
ПОВЕРХНОСТЬ / ЦИНКОВОЕ ПОКРЫТИЕ

Фитинги марки ЕЕ могут поставляться в соответствии с заказом – вариант исполнения с чёрной или оцинкованной поверхностью. В соответствии со стандартом EN 10242 масса цинкового покрытия относительно площади поверхности – не менее 500 г/м², что соответствует средней толщине слоя покрытия 70 мкм. Как чёрная, так и оцинкованная поверхность имеет антикоррозионную защиту. Антикоррозионная защита не содержит ароматических углеводородов.

ПРИМЕНЕНИЕ

2,5 МПа / 25 бар / при темп. от -20оС до 120оС

2,0 МПа / 20 бар / при темп. 300оС



ПРОВЕРКА ГЕРМЕТИЧНОСТИ

В соответствии со стандартом EN 10242 для каждого фитинга марки ЕЕ выполняется проверка герметичности при давлении сжатого воздуха не менее 0,5 МПа / 5 бар /, что эквивалентно минимальному гидростатическому давлению 2,0 МПа / 20 бар /.

ПРОВЕРКА ГЕРМЕТИЧНОСТИ

Технические аспекты, внешний вид и другие характерные свойства фитингов могут подвергаться изменению с учётом технического прогресса и в соответствии с изменениями в действующих стандартах.



1 | 13 1a | 1a 2 | 15 2a | 2a 3 | 14



40 | 22 41 | 20 85 | 85 90 | 6 92 | 7



94 | 94 95oru | 9oru 96 | 10 97oru | 11oru 98 | 12



120 | 5 130 | 25 131 | 31 135 | 135 165 | 30



180 | 34 220 | 220 221 | 33 240 | 3 241 | 45



245 | 40 246 | 246 270 | 2 271 | 1 280 | 38



281 | 39 290 | 46 291 | 47 300 | 43 301 | 301



310 | 44 321 | 63 321a | 63a 326 | 326 330oru | 48oru



331oru | 59oru 340 | 54 341 | 60 270 | 49 371or | 50or



372or | 51or 374 | 52 471 | 471 529a | 529a 600 | 600



601 | 601 623 | 623 624 | 624

Carton

S [small] - 192 x 285 x 110 mm

M [medium] - 385 x 285 x 110 mm

L [large] - 385 x 285 x 220 mm

bag packing: 10 pcs

Catalogue number of products consists of two numbers:

- First number- international number
- Second number- catalogue EE number



1	ISO/EN G4 Long sweep bend 90° Bogen 90°, lang Courbe à grand rayon 90° Curva lunga 90° Отвод 90°
13	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791600011	5907791600028	S	120	10
3/8	5907791600042	5907791600059	S	80	10
1/2	5907791600073	5907791600080	M	100	10
3/4	5907791600103	5907791600110	M	60	10
1	5907791600134	5907791600141	L	60	
1 1/4	5907791600165	5907791600172	L	35	
1 1/2	5907791600196	5907791600202	L	25	
2	5907791600226	5907791600233	L	15	
2 1/2	5907791600257	5907791600264	L	4	
3	5907791600288	5907791600295	L	3	



3	ISO/EN G8 Long sweep bend 90° Bogen 90°, lang Courbe à grand rayon 90° Curva lunga 90° Отвод 90°
14	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791600677	5907791600684	S	50	10
3/4	5907791621795	5907791621801	S	30	10
1	5907791621870	5907791621887	S	20	



1a	ISO/EN D4 Short bend 90° Bogen 90°, kurz Courbe courte 90° Curva corta 90° Отвод 90°
1a	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791619150	5907791619167	S	80	10
1/2	5907791619181	5907791619198	S	50	10
3/4	5907791619211	5907791619228	S	30	10
1	5907791619242	5907791619259	S	20	
1 1/4	5907791619273	5907791619280	S	10	
1 1/2	5907791619303	5907791619310	S	8	
2	5907791619334	5907791619341	S	4	



40	ISO/EN G4/45° Long sweep bend 45° Bogen 45°, lang Courbe à grand rayon 45° Curva lunga 45° Отвод 45°
22	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791600790	5907791600806	S	100	10
3/8	5907791600820	5907791600837	S	80	10
1/2	5907791600851	5907791600868	M	100	10
3/4	5907791600882	5907791600899	M	70	10
1	5907791600912	5907791600929	M	40	
1 1/4	5907791600943	5907791600950	M	25	
1 1/2	5907791600974	5907791600981	M	15	
2	5907791601001	5907791601018	M	8	
2 1/2	5907791601032	5907791601049	M	4	
3	5907791601063	5907791601070	L	6	
4	5907791601094	5907791601100	L	2	



2	ISO/EN G1 Long sweep bend 90° Bogen 90°, lang Courbe à grand rayon 90° Curva lunga 90° Отвод 90°
15	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791600349	5907791600356	S	100	10
3/8	5907791600370	5907791600387	S	60	10
1/2	5907791600400	5907791600417	M	80	10
3/4	5907791600431	5907791600448	M	60	10
1	5907791600462	5907791600479	L	50	
1 1/4	5907791600493	5907791600509	L	30	
1 1/2	5907791600523	5907791600530	L	23	
2	5907791600554	5907791600561	L	12	
2 1/2	5907791600585	5907791600592	L	4	
3	5907791600615	5907791600622	L	3	
4	5907791600646	5907791600653	L	1	



41	ISO/EN G1/45° Long sweep bend 45° Bogen 45°, lang Courbe à grand rayon 45° Curva lunga 45° Отвод 45°
20	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791601124	5907791601131	S	100	10
3/8	5907791601155	5907791601162	S	60	10
1/2	5907791601186	5907791601193	M	100	10
3/4	5907791601216	5907791601223	M	60	10
1	5907791601247	5907791601254	M	30	
1 1/4	5907791601278	5907791601285	M	20	
1 1/2	5907791601308	5907791601315	M	12	
2	5907791601339	5907791601346	M	6	
2 1/2	5907791601360	5907791601377	M	4	
3	5907791601391	5907791601407	L	6	



2a	ISO/EN D1 Short bend 90° Bogen 90°, kurz Courbe courte 90° Curva corta 90° Отвод 90°
2a	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791619365	5907791619372	S	60	10
1/2	5907791619396	5907791619402	S	50	10
3/4	5907791619426	5907791619433	S	30	10
1	5907791619457	5907791619464	S	15	
1 1/4	5907791619488	5907791619495	S	10	
1 1/2	5907791619518	5907791619525	S	5	
2	5907791619549	5907791619556	S	3	



85	Crossover Überspringbogen Dos d'âne Scavalcatubo a curva Обход
85	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791601452	5907791601469	M	80	
3/4	5907791601483	5907791601490	M	40	



90	ISO/EN A1
6	Elbow 90°, equal Winkel 90°, egal Coude 90°, égal Gomito 90°, uguale Угольник 90°

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791601513	5907791601520	M	250	10
3/8	5907791601544	5907791601551	M	200	10
1/2	5907791601605	5907791601612	M	150	10
3/4	5907791601698	5907791601704	M	80	10
1	5907791601810	5907791601827	L	100	
1 1/4	5907791601933	5907791601940	L	60	
1 1/2	5907791602053	5907791602060	L	50	
2	5907791602206	5907791602213	L	25	
2 1/2	5907791602381	5907791602398	L	15	
3	5907791602534	5907791602541	L	10	
4	5907791602657	5907791602664	L	4	



90	ISO/EN A1
6	Elbow 90°, reducing Winkel 90°, reduziert Coude 90°, réduit Gomito 90°, ridotto Угольник 90°

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8 x 1/4	5907791601575	5907791601582	S	100	10
1/2 x 1/4	5907791601636	5907791601643	S	80	10
1/2 x 3/8	5907791601667	5907791601674	S	80	10
3/4 x 1/4	5907791601728	5907791601735	S	50	10
3/4 x 3/8	5907791601759	5907791601766	S	50	10
3/4 x 1/2	5907791601780	5907791601797	M	100	10
1 x 3/8	5907791601841	5907791601858	S	40	10
1 x 1/2	5907791601872	5907791601889	M	70	10
1 x 3/4	5907791601902	5907791601919	L	100	10
1 1/4 x 1/2	5907791601964	5907791601971	M	45	
1 1/4 x 3/4	5907791601995	5907791602008	M	40	
1 1/4 x 1	5907791602022	5907791602039	M	35	
1 1/2 x 1/2	5907791602084	5907791602091	M	40	
1 1/2 x 3/4	5907791602114	5907791602121	M	30	
1 1/2 x 1	5907791602145	5907791602152	M	30	
1 1/2 x	5907791602176	5907791602183	M	20	
2 x 1/2	5907791602237	5907791602244	M	27	
2 x 3/4	5907791602268	5907791602275	M	25	
2 x 1	5907791602299	5907791602305	M	15	
2 x 1 1/4	5907791602329	5907791602336	M	14	
2 x 1 1/2	5907791602350	5907791602367	M	14	
"2 1/2 x	5907791602473	5907791602480	M	10	
2 1/2 x 2	5907791602503	5907791602510	M	8	
3 x 1 1/2	5907791602565	5907791602572	M	9	
3 x 2	5907791602596	5907791602602	M	5	
3 x 2 1/2	5907791602626	5907791602633	M	5	



92	ISO/EN A4
7	Elbow 90°, equal Winkel 90°, egal Coude 90°, égal Gomito 90°, uguale Угольник 90°

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791602688	5907791602695	M	300	10
3/8	5907791602718	5907791602725	M	250	10
1/2	5907791602749	5907791602756	M	150	10
3/4	5907791602800	5907791602817	M	80	10
1	5907791602862	5907791602879	L	100	10
1 1/4	5907791602923	5907791602930	L	55	
1 1/2	5907791602985	5907791602992	L	45	
2	5907791603012	5907791603029	L	25	
2 1/2	5907791603043	5907791603050	L	15	
3	5907791603074	5907791603081	L	10	
4	5907791603104	5907791603111	L	4	



92	ISO/EN A4
7	Elbow 90°, reducing Winkel 90°, reduziert Coude 90°, réduit Gomito 90°, ridotto Угольник 90°

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2 x 3/8	5907791602770	5907791602787	S	80	10
3/4 x 1/2	5907791602831	5907791602848	S	50	10
1 x 3/4	5907791602893	5907791602909	M	50	10

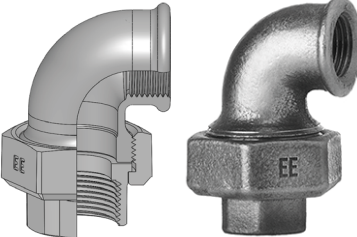


94	Elbow 90° Winkel 90° Coude 90° Gomito 90° Угольник 90°
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DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791621900	5907791621917	S	60	10
3/4	5907791603135	5907791603142	S	40	10
1	5907791621931	5907791621948	M	30	10

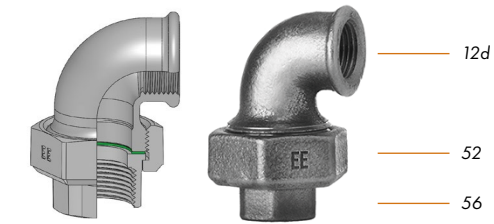


90	ISO/EN A1
6	Elbow 90°, reducing Winkel 90°, reduziert Coude 90°, réduit Gomito 90°, ridotto Угольник 90°



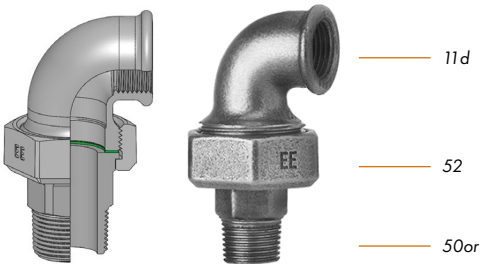
95oru	ISO/EN UA1
9oru	Union elbow, flat seat Winkelverschraubung, flach dichtend Coude union, à joint plat Gomito con bocchettone, a sede piana Разъем. соединение угловое

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791619723	5907791619730	S	40	
1/2	5907791619754	5907791619761	S	30	
3/4	5907791619785	5907791619792	S	20	
1	5907791619815	5907791619822	M	20	
1 1/4	5907791619846	5907791619853	M	10	
1 1/2	5907791619877	5907791619884	M	8	
2	5907791619907	5907791619914	M	6	



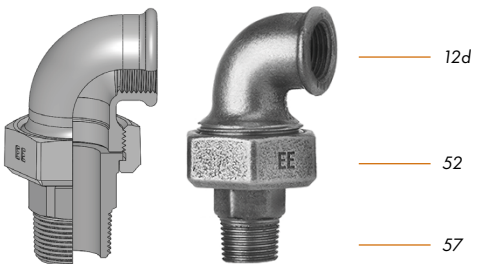
96	ISO/EN UA11 Union elbow, taper seat Winkelverschraubung, kegelig dichtend Coude union, à joint conique Gomito con bocchettone, a sede conica Конусное соединение угловое
10	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791603371	5907791603388	S	40	
1/2	5907791603401	5907791603418	M	60	
3/4	5907791603432	5907791603449	M	45	
1	5907791603463	5907791603470	M	20	
1 1/4	5907791603494	5907791603500	M	10	
1 1/2	5907791603524	5907791603531	M	8	
2	5907791603555	5907791603562	M	6	



97oru	ISO/EN UA2 Union elbow, flat seat Winkelverschraubung, flach dichtend Coude union, à joint plat Gomito con bocchettone, a sede piana Разъем. соединение угловое
11oru	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791619938	5907791619945	S	30	
1/2	5907791619969	5907791619976	S	20	
3/4	5907791619990	5907791620002	S	17	
1	5907791620026	5907791620033	M	15	
1 1/4	5907791620057	5907791620064	M	10	
1 1/2	5907791620088	5907791620095	M	7	
2	5907791620118	5907791620125	M	5	



98	ISO/EN UA2 UA12 Union elbow, taper seat Winkelverschraubung, kegelig dichtend Coude union, à joint conique Gomito con bocchettone, a sede conica Конусное соединение угловое
12	

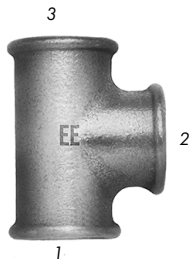
DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791603791	5907791603807	S	30	
1/2	5907791603821	5907791603838	M	50	
3/4	5907791603852	5907791603869	M	35	
1	5907791603883	5907791603890	M	15	
1 1/4	5907791603913	5907791603920	M	10	
1 1/2	5907791603944	5907791603951	M	7	
2	5907791603975	5907791603982	M	5	



120	ISO/EN A1/45° Elbow 45° Winkel 45° Coude 45° Gomito 45° Угльник 45°
5	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791604002	5907791604019	S	70	10
3/4	5907791604033	5907791604040	S	40	10
1	5907791604064	5907791604071	M	50	10

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791604095	5907791604101	M	150	10
3/8	5907791604125	5907791604132	M	120	10
1/2	5907791604217	5907791604224	M	100	10
3/4	5907791604422	5907791604439	L	100	10
1	5907791604699	5907791604705	L	70	
1 1/4	5907791605115	5907791605122	L	40	
1 1/2	5907791605504	5907791605511	L	30	
2	5907791605863	5907791605870	L	20	
2 1/2	5907791606136	5907791606143	L	10	
3	5907791606341	5907791606358	L	8	
4	5907791606525	5907791606532	L	4	
3/8 x 1/4 x 3/8	5907791604156	5907791604163	S	80	10
3/8 x 1/2 x 3/8	5907791604187	5907791604194	S	50	10
1/2 x 1/4 x 1/2	5907791604248	5907791604255	S	50	10
1/2 x 3/8 x 3/8	5907791604279	5907791604286	S	50	10
1/2 x 3/8 x 1/2	5907791604309	5907791604316	S	50	10
1/2 x 1/2 x 3/8	5907791604330	5907791604347	S	50	10
1/2 x 3/4 x 1/2	5907791604361	5907791604378	S	40	10
1/2 x 1 x 1/2	5907791604392	5907791604408	S	30	
3/4 x 1/4 x 3/4	5907791604453	5907791604460	S	30	10
3/4 x 3/8 x 1/2	5907791604514	5907791604521	S	30	10
3/4 x 3/8 x 3/4	5907791604545	5907791604552	S	30	10
3/4 x 1/2 x 1/2	5907791604576	5907791604583	S	30	10
3/4 x 1/2 x 3/4	5907791604606	5907791604613	L	120	10
3/4 x 3/4 x 1/2	5907791604637	5907791604644	M	50	10



130	ISO/EN B1 Tee, equal T-Stück, egal Té, égal Ti, uguale Тройник прямой
25	



130	ISO/EN B1 Tee, reducing on the branch T-Stück, Abzweig reduziert oder vergr sert Té, réduit aux embranchements Ti, ridotta nella diramazione Тройник прямой
25	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1 1/2 x 1 x 1	5907791605658	5907791605665	M	20	
1 1/2 x 1 x 1 1/4	5907791605689	5907791605696	M	20	
1 1/2 x 1 x 1 1/2	5907791605719	5907791605726	L	30	
1 1/2 x 1 1/4 x 1 1/4	5907791605740	5907791605757	M	15	
1 1/2 x 1 1/4 x 1 1/2	5907791605771	5907791605788	L	30	
1 1/2 x 1 1/2 x 1 1/4	5907791605801	5907791605818	S	6	
1 1/2 x 2 x 1 1/2	5907791605832	5907791605849	S	5	
2 x 1/2 x 2	5907791605894	5907791605900	L	30	
2 x 3/4 x 2	5907791605924	5907791605931	L	30	
2 x 1 x 2	5907791605955	5907791605962	L	20	
2 x 1 1/4 x 2	5907791605986	5907791605993	L	20	
2 x 1 1/2 x 1 1/2	5907791606013	5907791606020	M	10	
2 x 1 1/2 x 2	5907791606044	5907791606051	L	20	
2 x 2 1/2 x 2	5907791606075	5907791606082	S	3	
2 x 3 x 2	5907791606105	5907791606112	S	2	



130	ISO/EN B1 Tee, reducing on the branch, reducing on the run T-Stück, Abzweig reduziert oder vergr sert, Durchgang reduziert Té, réduit aux embranchements, ou réduit au niveau du passage Ti, ridotta nella diramazione, ridotta nel passaggio Тройник прямой
25	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
2 1/2 x 3/4 x 2 1/2	5907791606167	5907791606174	M	9	
2 1/2 x 1 x 2 1/2	5907791606198	5907791606204	M	9	
2 1/2 x 1 1/4 x 2 1/2	5907791606228	5907791606235	M	6	
2 1/2 x 1 1/2 x 2 1/2	5907791606259	5907791606266	M	6	
2 1/2 x 2 x 2 1/2	5907791606310	5907791606327	L	15	
3 x 1 x 3	5907791606372	5907791606389	M	6	
3 x 1 1/4 x 3	5907791606402	5907791606419	M	6	
3 x 1 1/2 x 3	5907791606433	5907791606440	M	4	
3 x 2 x 3	5907791606464	5907791606471	L	8	
3 x 2 1/2 x 3	5907791606495	5907791606501	L	8	
4 x 1 1/2 x 4	5907791606587	5907791606594	L	4	
4 x 2 x 4	5907791606617	5907791606624	L	4	
4 x 2 1/2 x 4	5907791606648	5907791606655	L	4	
4 x 3 x 4	5907791606679	5907791606686	L	4	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/4 x 1 x 3/4	5907791604668	5907791604675	S	25	
1 x 3/8 x 1	5907791604750	5907791604767	M	50	
1 x 1/2 x 1/2	5907791604781	5907791604798	S	30	
1 x 1/2 x 3/4	5907791604811	5907791604828	S	30	
1 x 1/2 x 1	5907791604842	5907791604859	L	100	
1 x 3/4 x 1/2	5907791604873	5907791604880	S	25	
1 x 3/4 x 3/4	5907791604903	5907791604910	M	40	
1 x 3/4 x 1	5907791604934	5907791604941	L	80	
1 x 1 x 1/2	5907791604965	5907791604972	M	40	
1 x 1 x 3/4	5907791604996	5907791605009	M	35	
1 x 1 1/4 x 1	5907791605023	5907791605030	S	12	
1 x 1 1/2 x 1	5907791605054	5907791605061	S	12	
1 1/4 x 3/8 x 1 1/4	5907791605146	5907791605153	M	20	
1 1/4 x 1/2 x 1	5907791605177	5907791605184	M	30	
1 1/4 x 1/2 x 1 1/4	5907791605207	5907791605214	L	60	
1 1/4 x 3/4 x 3/4	5907791605238	5907791605245	M	30	
1 1/4 x 3/4 x 1	5907791605269	5907791605276	M	30	
1 1/4 x 3/4 x 1 1/4	5907791605290	5907791605306	L	50	
1 1/4 x 1 x 1	5907791605320	5907791605337	M	25	
1 1/4 x 1 x 1 1/4	5907791605351	5907791605368	L	50	
1 1/4 x 1 1/4 x 3/4	5907791605382	5907791605399	S	10	
1 1/4 x 1 1/4 x 1	5907791605412	5907791605429	S	10	
1 1/4 x 1 1/2 x 1 1/4	5907791605443	5907791605450	S	9	
1 1/4 x 2 x 1 1/4	5907791605474	5907791605481	S	6	
1 1/2 x 1/2 x 3/4	5907791605535	5907791605542	M	17	
1 1/2 x 1/2 x 1 1/2	5907791605566	5907791605573	L	40	
1 1/2 x 3/4 x 1 1/2	5907791605597	5907791605603	L	40	
1 1/2 x 1 x 3/4	5907791605627	5907791605634	M	15	



131	ISO/EN E1 Pitcher tee, equal Bogen-T-Stück, egal Té cintré, égal Ti a una curva, uguale Тройник с отводом
31	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791606709	5907791606716	S	30	
3/4	5907791606730	5907791606747	S	20	
1	5907791606761	5907791606778	S	10	
1 1/4	5907791606792	5907791606808	S	8	
1 1/2	5907791606822	5907791606839	S	3	
2	5907791606853	5907791606860	S	2	



130	ISO/EN B1 Tee, reducing on the run T-Stück, Durchgang reduziert Té, ou réduit au niveau du passage Ti, ou réduit au niveau du passage Тройник прямой
25	



135	Tee, equal T-Stück, egal Té, égal Ti, uguale Тройник прямой
135	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1	5907791621962	5907791621979	S	20	

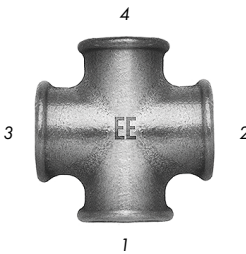


165

30

Tee 45°, equal
T-Stück 45°, egal
Té 45° égal
Ti 45°, uguale
Тройник 45° о прямой

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791606884	5907791606891	S	30	
3/4	5907791606914	5907791606921	S	15	
1	5907791606945	5907791606952	S	10	
1 1/4	5907791606976	5907791606983	S	6	
1 1/2	5907791607003	5907791607010	S	3	
2	5907791607034	5907791607041	S	2	



180

34

ISO/EN C1
Cross, reducing
Kreuz, reduziert
Croix, réduit
Croce, ridotto
Крестовина

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2 x 3/8 x 1/2 x 3/8	5907791607157	5907791607164	S	30	10
3/4 x 3/8 x 3/4 x 3/8	5907791607218	5907791607225	S	20	10
3/4 x 1/2 x 3/4 x 1/2	5907791607270	5907791607287	S	20	10
1 x 1/2 x 1 x 1/2	5907791607362	5907791607379	S	15	
1 x 3/4 x 1 x 3/4	5907791607393	5907791607409	S	15	
1 1/4 x 1/2 x 1 1/4 x 1/2	5907791607454	5907791607461	L	30	
2 x 3/4 x 2 x 3/4	5907791607751	5907791607768	L	15	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791607096	5907791607102	S	40	10
1/2	5907791607126	5907791607133	M	60	10
3/4	5907791607188	5907791607195	M	40	10
1	5907791607300	5907791607317	M	25	
1 1/4	5907791607423	5907791607430	M	12	
1 1/2	5907791607546	5907791607553	M	12	
2	5907791607690	5907791607706	M	6	
2 1/2	5907791607812	5907791607829	M	3	
3	5907791607843	5907791607850	L	4	
4	5907791607874	5907791607881	L	3	



180

34

ISO/EN C1
Cross, equal
Kreuz, egal
Croix, égal
Croce, uguale
Крестовина



220

220

Y-piece
Y-Verteiler
Distributeur Y
Distribuzione a Y
Тройник вилкообразный

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791621993	5907791622006	S	30	10
3/4	5907791622020	5907791622037	S	20	
1	5907791622051	5907791622068	S	15	



221

33

ISO/EN Za1
Side outlet elbow
Winkelverteiler
Distributeur à coude
Distribuzione a gomito
Тройник трехосевой

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791607904	5907791607911	S	50	
1/2	5907791607935	5907791607942	M	80	
3/4	5907791607966	5907791607973	M	50	
1	5907791607997	5907791608000	M	30	
1 1/4	5907791608024	5907791608031	M	15	
1 1/2	5907791608055	5907791608062	M	10	
2	5907791608086	5907791608093	M	7	

240	ISO/EN M2
3	Socket, reducing Muffe, reduziert Manchon, réduit Manicotto, ridotto Муфта переходная



DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8 x 1/4	5907791608116	5907791608123	S	150	10
1/2 x 1/4	5907791608147	5907791608154	S	100	10
1/2 x 3/8	5907791608178	5907791608185	S	100	10
3/4 x 3/8	5907791608239	5907791608246	S	60	10
3/4 x 1/2	5907791608260	5907791608277	M	100	10
1 x 3/8	5907791608321	5907791608338	S	40	10
1 x 1/2	5907791608352	5907791608369	L	180	10
1 x 3/4	5907791608383	5907791608390	L	150	10
1 1/4 x 3/8	5907791608413	5907791608420	S	25	
1 1/4 x 1/2	5907791608444	5907791608451	M	50	
1 1/4 x 3/4	5907791608475	5907791608482	L	100	
1 1/4 x 1	5907791608505	5907791608512	L	100	
1 1/2 x 1/2	5907791608536	5907791608543	M	40	
1 1/2 x 3/4	5907791608567	5907791608574	M	40	
1 1/2 x 1	5907791608598	5907791608604	L	80	
1 1/2 x 1 1/4	5907791608628	5907791608635	L	75	
2 x 1/2	5907791608659	5907791608666	M	20	
2 x 3/4	5907791608680	5907791608697	M	20	
2 x 1	5907791608710	5907791608727	L	50	
2 x 1 1/4	5907791608741	5907791608758	L	50	
2 x 1 1/2	5907791608772	5907791608789	L	40	
2 1/2 x 1	5907791608802	5907791608819	M	15	
2 1/2 x 1 1/4	5907791608833	5907791608840	M	15	
2 1/2 x 1 1/2	5907791608864	5907791608871	M	15	
2 1/2 x 2	5907791608895	5907791608901	M	12	
3 x 1	5907791608925	5907791608932	M	12	
3 x 1 1/4	5907791608956	5907791608963	M	12	
3 x 1 1/2	5907791608987	5907791608994	M	12	
3 x 2	5907791609014	5907791609021	M	12	
3 x 2 1/2	5907791609045	5907791609052	M	8	
4 x 1 1/2	5907791609076	5907791609083	M	5	
4 x 2	5907791609106	5907791609113	M	6	
4 x 2 1/2	5907791609137	5907791609144	M	6	
4 x 3	5907791609168	5907791609175	M	6	

241	ISO/EN N4
45	Reducing bush Reduziernippel Mamelon, réduit Nipplo di riduzione Футорка



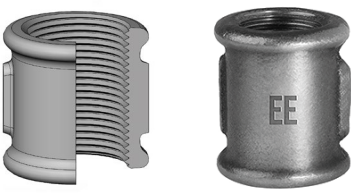
DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8 x 1/4	5907791609199	5907791609205	S	200	10
1/2 x 1/4	5907791609229	5907791609236	S	150	10
1/2 x 3/8	5907791609250	5907791609267	M	300	10
3/4 x 1/4	5907791609281	5907791609298	S	100	10
3/4 x 3/8	5907791609311	5907791609328	S	100	10
3/4 x 1/2	5907791609342	5907791609359	M	200	10
1 x 3/8	5907791609403	5907791609410	S	60	10
1 x 1/2	5907791609434	5907791609441	L	220	10
1 x 3/4	5907791609465	5907791609472	L	250	10
1 1/4 x 3/8	5907791609496	5907791609502	S	40	10
1 1/4 x 1/2	5907791609526	5907791609533	L	100	10
1 1/4 x 3/4	5907791609557	5907791609564	L	120	10
1 1/4 x 1	5907791609588	5907791609595	L	150	10
1 1/2 x 1/2	5907791609618	5907791609625	L	90	
1 1/2 x 3/4	5907791609649	5907791609656	L	90	
1 1/2 x 1	5907791609670	5907791609687	L	100	
1 1/2 x 1 1/4	5907791609700	5907791609717	L	150	
2 x 1/2	5907791609731	5907791609748	L	60	
2 x 3/4	5907791609762	5907791609779	L	55	
2 x 1	5907791609793	5907791609809	L	55	
2 x 1 1/4	5907791609823	5907791609830	L	60	
2 x 1 1/2	5907791609854	5907791609861	L	80	
2 1/2 x 1	5907791609946	5907791609953	M	20	
2 1/2 x 1 1/4	5907791609977	5907791609984	M	20	
2 1/2 x 1 1/2	5907791610003	5907791610010	L	36	
2 1/2 x 2	5907791610034	5907791610041	L	45	
3 x 1	5907791610065	5907791610072	M	12	
3 x 1 1/4	5907791610096	5907791610102	M	12	
3 x 1 1/2	5907791610126	5907791610133	M	12	
3 x 2	5907791610157	5907791610164	L	26	
3 x 2 1/2	5907791610188	5907791610195	L	30	
4 x 1	5907791610218	5907791610225	L	15	
4 x 1 1/4	5907791610249	5907791610256	L	15	
4 x 1 1/2	5907791610270	5907791610287	L	15	
4 x 2	5907791610300	5907791610317	M	10	
4 x 2 1/2	5907791610331	5907791610348	M	10	
4 x 3	5907791610362	5907791610379	L	15	



245	ISO/EN N8 Hexagon nipple, reducing Doppelnippel, reduziert Mamelon, réduit Nipplo doppio, ridotto Ниппель редукционный
40	



246	ISO/EN M4 Socket, reducing Muffe, reduziert Manchon, réduit Manicotto, ridotto Муфта редукционная
246	



270	ISO/EN M2 Socket, equal Muffe, egal Manchon, égal Manicotto, uguale Муфта
2	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8 x 1/4	5907791610393	5907791610409	S	150	10
1/2 x 1/4	5907791610423	5907791610430	S	100	10
1/2 x 3/8	5907791610454	5907791610461	S	100	10
3/4 x 3/8	5907791610485	5907791610492	S	70	10
3/4 x 1/2	5907791610515	5907791610522	M	150	10
1 x 3/8	5907791610546	5907791610553	M	90	10
1 x 1/2	5907791610577	5907791610584	L	150	10
1 x 3/4	5907791610607	5907791610614	L	180	10
1 1/4 x 1/2	5907791610638	5907791610645	M	50	10
1 1/4 x 3/4	5907791610669	5907791610676	L	100	10
1 1/4 x 1	5907791610690	5907791610706	L	100	10
1 1/2 x 3/4	5907791610751	5907791610768	M	40	
1 1/2 x 1	5907791610782	5907791610799	L	80	
1 1/2 x 1 1/4	5907791610812	5907791610829	L	60	
2 x 1/2	5907791610843	5907791610850	M	25	
2 x 1	5907791610904	5907791610911	M	25	
2 x 1 1/4	5907791610935	5907791610942	L	45	
2 x 1 1/2	5907791610966	5907791610973	L	45	
2 1/2 x 1	5907791610997	5907791611000	M	17	
2 1/2 x 1 1/4	5907791611024	5907791611031	M	11	
2 1/2 x 1 1/2	5907791611055	5907791611062	M	16	
2 1/2 x 2	5907791611086	5907791611093	M	16	
3 x 2	5907791611116	5907791611123	M	9	
3 x 2 1/2	5907791611147	5907791611154	M	9	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8 x 1/4	5907791611178	5907791611185	S	150	10
1/2 x 1/4	5907791611208	5907791611215	S	100	10
1/2 x 3/8	5907791611239	5907791611246	S	100	10
3/4 x 3/8	5907791611260	5907791611277	S	50	10
3/4 x 1/2	5907791611291	5907791611307	M	100	10
1 x 1/2	5907791611321	5907791611338	M	80	10
1 x 3/4	5907791611352	5907791611369	L	150	10
1 1/4 x 3/4	5907791611383	5907791611390	M	50	
1 1/4 x 1	5907791611413	5907791611420	L	95	
1 1/2 x 1	5907791611444	5907791611451	M	40	
1 1/2 x 1 1/4	5907791611475	5907791611482	M	35	
2 x 1 1/4	5907791611505	5907791611512	M	20	
2 x 1 1/2	5907791611536	5907791611543	M	20	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791611567	5907791611574	S	150	10
3/8	5907791611598	5907791611604	S	100	10
1/2	5907791611628	5907791611635	M	180	10
3/4	5907791611659	5907791611666	L	200	10
1	5907791611680	5907791611697	L	150	10
1 1/4	5907791611710	5907791611727	L	80	
1 1/2	5907791611741	5907791611758	L	70	
2	5907791611772	5907791611789	L	30	
2 1/2	5907791611802	5907791611819	L	20	
3	5907791611833	5907791611840	L	10	
4	5907791611864	5907791611871	L	10	



271	ISO/EN M2 R-L Socket, right and left hand thread Muffe, m. Rechts- u. Linksgewinde Manchon, filetage droite/gauche Manicotto, con filettatura destra/sinistra Муфта
1	



280	ISO/EN N8 Hexagon nipple, reducing Doppelnippel Mamelon Nipplo doppio Ниппель шестигранный
38	



281	ISO/EN N8 R-L Hexagon nipple, right and left hand thread Doppelnippel, m. Rechts- u. Linksgewinde Mamelon, filetage droite/gauche Nipplo doppio, con filettatura destra/sinistra Ниппель шестигранный
39	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791611925	5907791611932	S	100	10
1/2	5907791611956	5907791611963	S	80	10
3/4	5907791611987	5907791611994	S	50	10
1	5907791612014	5907791612021	S	40	10
1 1/4	5907791612045	5907791612052	S	20	
1 1/2	5907791612076	5907791612083	S	12	
2	5907791612106	5907791612113	S	8	
2 1/2	5907791612137	5907791612144	S	5	
3	5907791612168	5907791612175	S	3	
4	5907791612199	5907791612205	S	2	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791612229	5907791612236	S	200	10
3/8	5907791612250	5907791612267	S	150	10
1/2	5907791612281	5907791612298	M	160	10
3/4	5907791612311	5907791612328	M	140	10
1	5907791612342	5907791612359	L	130	10
1 1/4	5907791612373	5907791612380	L	80	
1 1/2	5907791612403	5907791612410	L	75	
2	5907791612434	5907791612441	L	40	
2 1/2	5907791612465	5907791612472	L	25	
3	5907791612496	5907791612502	L	20	
4	5907791612526	5907791612533	L	8	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791612557	5907791612564	S	170	10
3/8	5907791612588	5907791612595	S	150	10
1/2	5907791612618	5907791612625	S	100	10
3/4	5907791612649	5907791612656	S	70	10
1	5907791612670	5907791612687	S	40	10
1 1/4	5907791612700	5907791612717	S	20	
1 1/2	5907791612731	5907791612748	S	20	
2	5907791612762	5907791612779	S	8	



290	ISO/EN T9
46	Plug, beaded Stopfen, mit Rand Bouillon, avec collet Tappo, con bordo Пробка

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791612885	5907791612892	S	300	10
3/8	5907791612915	5907791612922	S	250	10
1/2	5907791612946	5907791612953	M	350	10
3/4	5907791612977	5907791612984	M	200	10
1	5907791613004	5907791613011	L	150	10
1 1/4	5907791613035	5907791613042	L	100	
1 1/2	5907791613066	5907791613073	L	80	
2	5907791613097	5907791613103	L	55	
2 1/2	5907791613127	5907791613134	L	30	
3	5907791613158	5907791613165	L	20	
4	5907791613189	5907791613196	L	10	



291	ISO/EN T8
47	Plug, plain Stopfen, ohne Rand Bouillon, sans collet Tappo, senza bordo Пробка

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791613219	5907791613226	S	300	10
3/8	5907791613240	5907791613257	S	250	10
1/2	5907791613271	5907791613288	S	200	10
3/4	5907791613301	5907791613318	S	150	10
1	5907791613332	5907791613349	S	100	10
1 1/4	5907791613363	5907791613370	S	80	
1 1/2	5907791613394	5907791613400	S	50	
2	5907791613424	5907791613431	S	30	
2 1/2	5907791613455	5907791613462	S	15	
3	5907791613486	5907791613493	S	10	
4	5907791613516	5907791613523	S	4	



300	ISO/EN T1
43	Cap Kappe Bouillon Calotta Заглушка

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791613547	5907791613554	S	200	10
3/8	5907791613578	5907791613585	S	200	10
1/2	5907791613608	5907791613615	M	250	10
3/4	5907791613639	5907791613646	M	200	10
1	5907791613660	5907791613677	L	150	10
1 1/4	5907791613691	5907791613707	L	100	
1 1/2	5907791613721	5907791613738	L	70	
2	5907791613752	5907791613769	L	45	
2 1/2	5907791613783	5907791613790	L	30	
3	5907791613813	5907791613820	L	24	
4	5907791613844	5907791613851	L	10	



301	Cap
301	Kappe Bouillon Calotta Заглушка

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791613875	5907791613882	S	200	10
1/2	5907791613905	5907791613912	M	250	10
3/4	5907791613936	5907791613943	M	150	10
1	5907791613967	5907791613974	L	150	10
1 1/4	5907791613998	5907791614001	L	100	
1 1/2	5907791614025	5907791614032	L	70	
2	5907791614056	5907791614063	L	45	



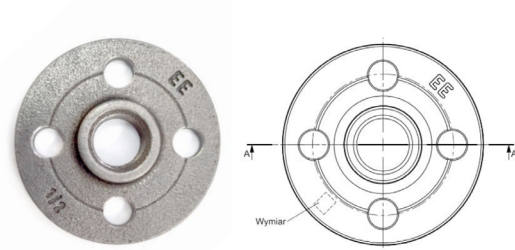
310	ISO/EN P4
44	Backnut Gegenmutter Contre-écrou Contrrodado Контргайка

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/4	5907791614087	5907791614094	S	300	10
3/8	5907791614117	5907791614124	S	250	10
1/2	5907791614148	5907791614155	S	200	10
3/4	5907791614179	5907791614186	S	150	10
1	5907791614209	5907791614216	M	150	10
1 1/4	5907791614230	5907791614247	M	100	10
1 1/2	5907791614261	5907791614278	M	100	
2	5907791614292	5907791614308	M	50	
2 1/2	5907791614322	5907791614339	S	15	
3	5907791614353	5907791614360	S	10	
4	5907791614384	5907791614391	S	6	



321	Flange without bolt holes Gewindeflansch, ungebohrt Bride sans trou de boulons Flangia senza fori per viti Фланец
63	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791614414	5907791614421	S	50	
1/2	5907791614445	5907791614452	S	40	
3/4	5907791614476	5907791614483	S	30	
1	5907791614506	5907791614513	S	20	
1 1/4	5907791614537	5907791614544	S	15	
1 1/2	5907791614568	5907791614575	S	10	
2	5907791614599	5907791614605	S	10	
2 1/2	5907791614629	5907791614636	M	7	
3	5907791614650	5907791614667	M	5	
4	5907791614681	5907791614698	M	4	



321a	Flange without bolt holes Gewindeflansch, ungebohrt Bride sans trou de boulons Flangia senza fori per viti Фланец
63a	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791644633	5907791644640	S	40	
3/4	5907791644657	5907791644664	S	30	
1	5907791644671	5907791644688	S	20	

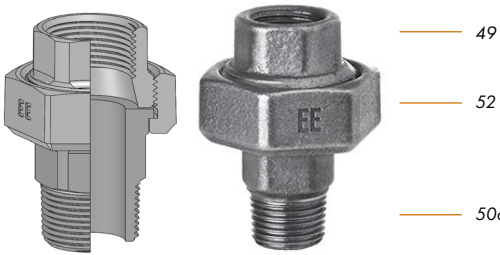


326	Screwed flange, with 2 bolt holes Gewindeflansch, gebohrt, 2 Loch Bride avec 2 trous de boulons Flangia con 2 fori per viti Фланец с 2-мя отверстиями
326	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/4	5907791622143	5907791622150	S	30	
1	5907791622167	5907791622174	S	20	
1 1/4	5907791622235	5907791622242	S	15	
1 1/2	5907791622259	5907791622266	S	10	



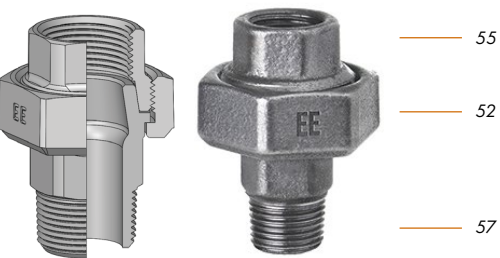
330oru	ISO/EN U1 Union, flat seat Verschraubung, flach dichtend Manchon, union à joint plat Bocchettone, a sede piana Разъемное соединение под плоское уплотнение
48oru	



331oru	ISO/EN U2 Union, flat seat Verschraubung, flach dichtend Manchon, union à joint plat Bocchettone, a sede piana Разъемное соединение под плоское уплотнение
59oru	



340	ISO/EN U11 Union, taper seat Verschraubung, kegelig dichtend Manchon, union à joint conique Bocchettone, a sede conica Конусное соединение
54	



341	ISO/EN U12 Union, taper seat Verschraubung, kegelig dichtend Manchon, union à joint conique Bocchettone, a sede conica Конусное соединение
60	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791622945	5907791622952	S	60	
1/2	5907791622761	5907791622778	M	80	
3/4	5907791622792	5907791622808	M	60	
1	5907791622822	5907791622839	M	35	
1 1/4	5907791622853	5907791622860	L	35	
1 1/2	5907791622884	5907791622891	L	25	
2	5907791622914	5907791622921	L	20	
2 1/2	5907791622976	5907791622983	L	10	
3	5907791623003	5907791623010	L	8	
4	5907791623034	5907791623041	L	4	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791626141	5907791626158	S	50	
1/2	5907791625939	5907791625946	M	40	
3/4	5907791626127	5907791626134	M	30	
1	5907791625908	5907791625922	L	55	
1 1/4	5907791625991	5907791626004	L	30	
1 1/2	5907791625960	5907791625977	L	25	
2	5907791626028	5907791626035	L	15	
2 1/2	5907791626059	5907791626066	L	10	
3	5907791626080	5907791626097	L	6	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791615190	5907791615206	S	60	
1/2	5907791615220	5907791615237	M	80	
3/4	5907791615251	5907791615268	M	60	
1	5907791615282	5907791615299	L	60	
1 1/4	5907791615312	5907791615329	L	35	
1 1/2	5907791615343	5907791615350	L	25	
2	5907791615374	5907791615381	L	20	
2 1/2	5907791615404	5907791615411	L	10	
3	5907791615435	5907791615442	L	8	
4	5907791615466	5907791615473	L	4	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791615497	5907791615503	S	50	
1/2	5907791615527	5907791615534	M	40	
3/4	5907791615558	5907791615565	M	30	
1	5907791615589	5907791615596	L	50	
1 1/4	5907791615619	5907791615626	L	30	
1 1/2	5907791615640	5907791615657	L	25	
2	5907791615671	5907791615688	L	15	
2 1/2	5907791615701	5907791615718	L	10	
3	5907791615732	5907791615749	L	6	
4	5907791615763	5907791615770	L	2	



370	Union bush, flat seat Einschraubteil, flach dichtend Pièce filetée, à joint plat Pezzo filettato, a sede piana Плоское соединение
49	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791615824	5907791615831	S	100	
3/4	5907791615855	5907791615862	S	100	
1	5907791615886	5907791615893	M	100	
1 1/4	5907791615916	5907791615923	M	50	
1 1/2	5907791615947	5907791615954	M	40	
2	5907791615978	5907791615985	M	20	
2 1/2	5907791616005	5907791616012	M	15	
3	5907791616036	5907791616043	M	10	



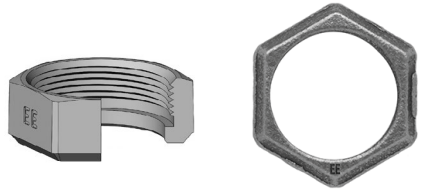
371or	Union end, flat seat Einlegteil, flach dichtend Pièce folle, à joint plat Pezzo folle, a sede piana Плоское соединение
50or	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791620835	5907791620842	S	100	
3/4	5907791620866	5907791620873	S	80	
1	5907791620897	5907791620903	M	60	
1 1/4	5907791620927	5907791620934	M	40	
1 1/2	5907791620958	5907791620965	M	25	
2	5907791620989	5907791620996	M	15	
2 1/2	5907791621016	5907791621023	M	8	



372or	Union end, flat seat, equal Einlegteil, flach dichtend, egal Pièce folle, à joint plat, égal Pezzo folle, a sede piana, uguale Плоское соединение д/ насоса
51or	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791621108	5907791621115	M	250	
3/4	5907791621139	5907791621146	M	250	
1	5907791621160	5907791621177	L	200	
1 1/4	5907791621191	5907791621207	L	100	
1 1/2	5907791621221	5907791621238	M	40	
2	5907791621252	5907791621269	M	20	
2 1/2	5907791621283	5907791621290	M	15	
3	5907791621313	5907791621320	M	10	



374	Union nut überwurfmutter Ecrou Dado Гайка д/насоса
52	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791616579	5907791616586	S	150	
1/2 x 1 1/8	5907791616609	5907791616616	M	200	
3/4	5907791616661	5907791616678	M	150	
1	5907791616692	5907791616708	L	200	
1 1/4	5907791616722	5907791616739	L	100	
1 1/2	5907791616753	5907791616760	M	40	
2	5907791616784	5907791616791	M	24	
2 1/2	5907791616814	5907791616821	M	18	
3	5907791616845	5907791616852	M	8	



600	Nut for gas A/G 1 1/4
600	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON
1 1/4	5907791617866		L	200



601	Fitting for gas A/R
601	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON
1	5907791626172		L	200



471	Bracket elbow Deckenwinke Applique à coude Gomito per soffitto Угольник установочный
471	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
1/2	5907791617804	5907791617811	S	30	
3/4	5907791617835	5907791617842	S	20	



623	Pump connection sets of fittings
623	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON
"3/4 x 1 1/4"	5907791629531		M	35
1 x 1 1/2	5907791618252		M	20
1 1/4 x 2	5907791618283		M	15



529a	ISO/EN M4 Socket, with, internal and external thread Muffe, mit, Innen- und Aussengewinde Manchon, avec filetage femelle et male Manicotto, con filettatura interno e esterno Муфта
529a	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON	BAGS 10 PCS IN CARTON
3/8	5907791619570	5907791619587	S	150	10
1/2	5907791619600	5907791619617	M	120	10
3/4	5907791619631	5907791619648	M	100	10
1	5907791619662	5907791619679	M	70	10
1 1/4	5907791619693	5907791619709	M	40	



624	Pump connection sets of fittings with external thread
624	

DIMENSION [INCH]	BLACK BAR CODE	GALV BAR CODE	CARTON S/M/L	QUANTITY [PC] IN CARTON
1 x 1 1/2	5907791644565		M	20

FITTINGS FOR GAS

No. 600 | 601

Odlewnia Zawiercie SA offers also special fittings for gas installation: fittings A/R 1 (no 601) and nuts A/G 1 1/4 (no 600). They are used as couplings for bellows gas meters with connector pipe with external thread G1 1/4-according to EN ISO 228-1.



600

Nut A/G 1 1/4 with internal thread G1 1/4



601

Fitting A/R 1 with external thread R1



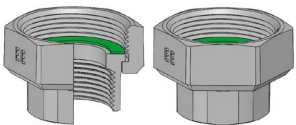
601 | 600

Fitting A/R 1 (no 601) and Nut A/G 1 1/4 (no 600) as set for gas

PUMP SET OF FITTINGS

No 623

- 2 nuts, ref. 374/52, threaded in accordance with EN ISO 228-1
- 2 union ends, ref. 372or/51 or, threaded in accordance with EN 10266 (ISO 7/1)
- 2 synthetic fibre gaskets, no asbestos content, GAMBIT AF-153. thickness 2mm
- max. working temperature, standard 155° – higher to be negotiated
- max. steam working temperature, standard 130° – higher to be negotiated
- sets are made in black (not galvanized), unless otherwise specified
- each set is packed in shrink foil plus cardboard box and is labelled

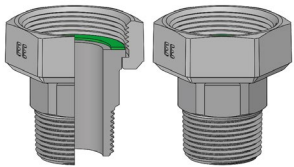


MANUFACTURED DIMENSIONS:

Thread		Dimensions [inch]	weight of carton[kg] black	quantity in carton [pc]
372or/51 or	374/52			
Rp 3/4	G 1 1/4	3/4 x 1 1/4	13	35
Rp 1	G 1 1/2	1 x 1 1/2	9	20
Rp 1 1/4	G 2	1 1/4 x 2	13	15

PUMP SET OF FITTINGS No 624

- 2 nuts, ref 52/374, threaded in accordance with EN ISO 228/1
- 2 union ends, ref 50or/371or, threaded in accordance with EN 10266 (ISO 7/1)
- 2 synthetic fibre gaskets, no asbestos content, GAMBIT AF-153. thickness 2mm
- max. working temperature, standard 155° – higher to be negotiated
- max. steam working temperature, standard 130° – higher to be negotiated
- sets are made in black (not galvanized), unless otherwise specified
- each set with gaskets is packed in a shrink foil plus a cardboard box and is labelled



MANUFACTURED DIMENSIONS:

Thread		Dimensions [inch]	weight of carton[kg] black	quantity in carton [pc]
371or/50or	374/52			
Rp 1	G 1 1/2	1 x 1 1/2	13	20

- new thread for the installer: pump mounting kit no. 616-1" with external thread
- this is a new solution for pump installation
- external thread allows for new installation design possibilities
- half-fittings for cast iron pumps are characterized by high durability and good quality compared to other materials (e.g. brass and others)

USAGE INSTRUCTION OF WHITEHEART MALLEABLE CAST IRON UNIONS EE BRAND

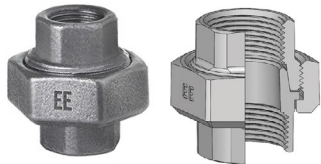
CONICAL UNION

1. 340/54"

Leak tightness of these connections is obtained by conical clip (metallic) that is attained by extra tightening moment. Assembling of the unions by using torque wrench.

Dimensions in inches	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
MIN. TIGHTENING MOMENT Nm	60	90	120	170	210	250	340	420	500	600

newton-meter-unit of the moment of a force 1Nm=0,1kGm



note

Conical unions and conical union details cannot be used again after disassembly because of surface deformation of the cone, It is recommended to use unions as a complete set due to the fact that union details manufactured by different producers or component parts of a different unions manufactured by the same producer does not have to be mutually interchangeable. The constructions of the cone are not normalized.

FLAT UNION

2.330 oru/ 48 oru

leak tightness of these details is obtained by using the special gaskets

Dimensions of unions in inches	Gasket size [mm]		Thread dimension of union nuts
	inner diameter[mm]	outer diameter [mm]	
3/8	19	27	G 7/8
1/2	24	34	G 1 1/8
3/4	27	38	G 1 1/4
1	32	44	G 1 1/2
1 1/4	42	55	G2
1 1/2	46	62	G 2 1/4
2	60	78	G 2 3/4
2 1/2	75	97	G 3 1/2
3	88	110	G4
4	120	148	G 5 1/2

Material used for gaskets depends on the usage (the transmitted factor temperature). Gaskets of the unions are made from synthetic fibers which does not contain asbestos.

- Max continuous working temperature 140 °C
- Max temporary working temperature 210 °C
- Max steam temperature 120 °C



Higher parameters to be agreed upon orders
The gaskets and other seals measures for the threads used by the customers shall comply with the requirements and standards appropriate to the type of installation.

USAGE INSTRUCTION OF WHITEHEART MALLEABLE CAST IRON UNIONS EE BRAND

WHITEHEART MALLEABLE CAST IRON FITTINGS APPLICATION

The offered range

- **Dimension:** 1/4" - 4"
- **Assortment in accordance with PN-EN 10242 and ISO 49 catalogues of Odlewnia Zawiercie SA**

Grade of material

Whiteheart malleable cast iron EN-GJMW 400-05 according to EN 1562 equivalent of W 40-05 according to ISO 5922

Definition

For drinking water, elements made of different materials should not be used alternately electrochemical potential. This is permissible but only if applicable rules for the direction of medium flow from the material with lower potential to the material with higher potential with the use of a dielectric spacer. It means that if we're going to use a black or galvanized cast iron connector and a brass or brown pipe in the installation or copper, the installation should be made in such a way that the cast iron connector is in front of copper elements looking in the direction of water flow. Otherwise, corrosion of such a connector will be accelerated many times over.

Appropriation

For water, central heating, gaseous, steam-driven, fire-proof and other installations, for transmitting liquids and non-aggressive gases - to perform at the highest admissible working pressure and temperature ranges quoted in the table.

Temperature	-20 do 120	140	160	180	200	220	240	260	280	300
Max pressure	25	24,45	23,9	23,3	22,8	22,2	21,7	21,1	20,5	20

1 bar = 0,1 Mpa

Cast iron fittings EE brand are characterized by high quality standard it means proper surface finish, dimensional stability, stability of the cast iron structure by keeping hardness, plasticity and strength.

They fulfill the requirements of A constructional symbol it means:

- threads are according to EN 10226-1: external - taper R and internal - cylindrical (Rp).

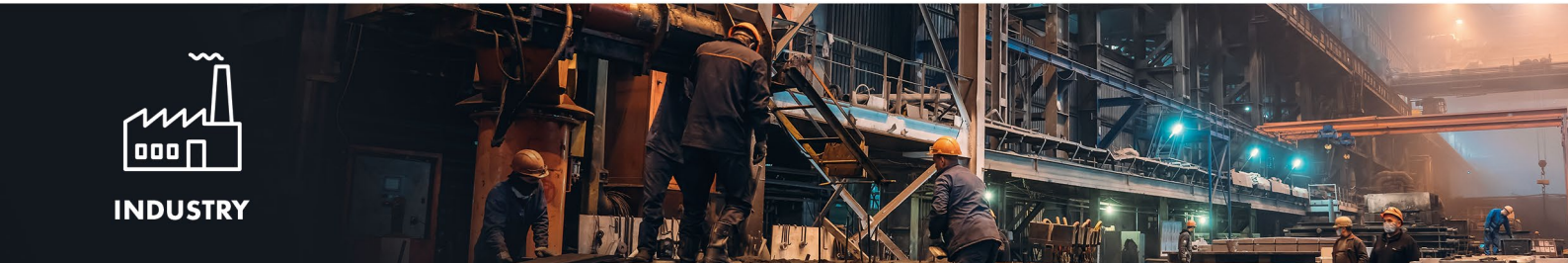
Threads of backnuts, union nuts and threads working with them - according to EN ISO 228-1

- range from 1/4-5 1/2 - of the symbol G.

Combinations of the threads connections:

To obtain tight connection it is needed to use the following combination: internal thread Rp-external thread R. Connection of the external cylindrical thread G with internal cylindrical thread Rp is risky as it may finish with leaky installation.

- connection of the external thread G with internal thread G
- connection of the external thread R with internal thread G

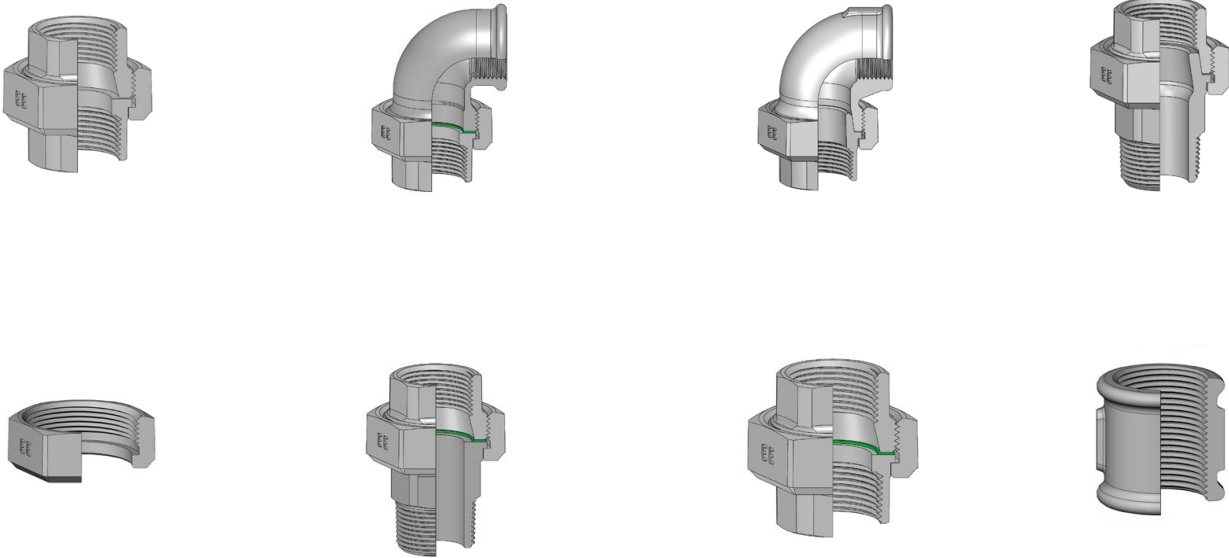


LIBRARY CAD WITH WHITEHEART MALLEABLE CAST IRON FITTINGS EE BRAND

SAVE INSTALLATION
WITH EE FITTINGS



AUTOCAD



DOWNLOAD FROM OUR WEBSITE:

www.eeodlewnia.pl/biblioteka-cad

 330or - 3/4 "	+	 280 - 3/4 "	+	 90 - 3/4 "	=	 95or - 3/4 "
 331or - 3/4 "	+	 92 - 3/4 "	+		=	 97or - 3/4 "
 241 - 3/4 x 1/2 "	+	 280 - 1/2 "	+		=	 245 - 3/4 x 1/2 "
 240 - 3/4 x 1/2 "	+	 280 - 1/2 "	+		=	 246 - 3/4 x 1/2 "
 130 - 1 "	+	 3x 280 - 1 "	+		=	 135 - 1 "
 623 - 1 x 1 1/2 "	+	 280 - 1 "	+		=	 624 - 1 x 1 1/2 "



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