

ATUSA

MALLEABLE CAST IRON PIPE FITTINGS

CATALOGUE 2024

GENERAL INDICATIONS

1. STANDARD AND IDENTIFICATION

– Standard for production and use EN 10242: 1994.
– Identification: In accordance with the material selected for the production and the type of thread the EO fittings are identified as class "A", that is:

- They are generally made of white heart malleable cast iron of high quality EN-GJMW 400 - 05.
- The threads are cut according to ISO 7/1, i.e. parallel internal thread (Rp) and tapered external thread (R).

2. QUALITY ASSURANCE

The new UNE-EN 10242 standard requires that manufacturers establish and maintain a documented System of Quality Assurance in accordance with ISO 9001. This system has to be certified by an independent Organisation for Certification which observes the strict regulations of the EN ISO/IEC 17021, in order to guarantee that the fittings are in accordance with the requirements of the product standard EN 10242:1994. **ATUSA** fulfils these requirements and has established a System of Quality Assurance according to ISO 9001 as shown by the Certificate of Registration of the Firm AENOR/ER 076/2/95 and the certificate of the prestigious **IQNet** (The International Network for Quality System Assessment and Certification) in accordance to the criteria of the EN ISO/IEC.

3. GALVANIZATION

The EO fittings can be delivered as requested by the purcharser with black or galvanized finish.
As prescribed by the standard EN 10242:1994, the mass of zinc coating shall be not less than 500 gr/m2, which corresponds to a medium layer thickness of 70 µm.
Both types of finish are covered with an anti rust varnish.
The surfaces of the EO fittings are free from polycyclic aromatic hydrocarbons.

4. LEAK TEST

Applying the standard EN 10242:1994 each individual EO fitting is subjected to a pressure test with a min. hydrostatic pressure of 20 bar, which is equivalent to a pneumatic pressure of min. 5 bar.

5. TERMS OF DELIVERY

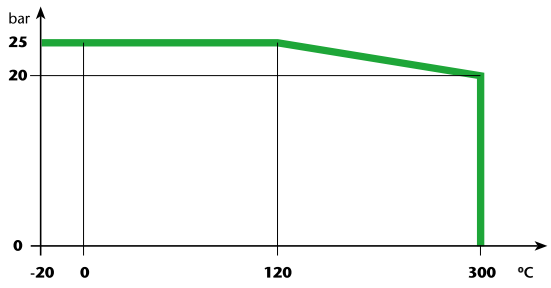
Technical aspects, design and other characteristics of the fittings are subject to possible modifications due to technical improvements or changes of standardization.

NOMINAL DIAMETER AND CONNECTING MEASURES

DN	6	8	10	15	20	25	32	40	50	65	80	100	125	150
"	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6

PRESSURE / TEMPERATURE RATINGS

Service temperature (ºC)	Maximum permissible working pressure (*) (bar)
-20 to 120	25
between 120 and 300	interpolated values
300	20



(*) For higher uses, please consult our Technical Department.


1


1A


2


2A


3


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85


90



90R


92



92R


94



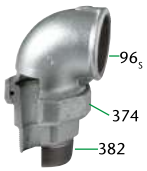
95



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120


121


130



130R


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220


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223



240



241



245



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596



1 LONG SWEEP BEND M/F

ISO/EN **G4**

Ø			BLACK CODE	GALVANIZED CODE
1/8″	200	10	01001000	01005000
1/4″	250	10	01001001	01005001
3/8″	170	10	01001002	01005002
1/2″	110	10	01001003	01005003
3/4″	60	10	01001004	01005004
1″	35	1	01001005	01005005
1 1/4″	17	1	01001006	01005006
1 1/2″	12	1	01001007	01005007
2″	6	1	01001008	01005008
2 1/2″	3	1	01001009	01005009
3″	4	1	0100100A	0100500A
4″	2	1	0100100C	0100500C



1A SHORT BEND M/F

ISO/EN **D4**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	250	10	01A01001	01A05001
3/8″	130	10	01A01002	01A05002
1/2″	100	10	01A01003	01A05003
3/4″	60	10	01A01004	01A05004
1″	40	1	01A01005	01A05005
1 1/4″	20	1	01A01006	01A05006
1 1/2″	15	1	01A01007	01A05007
2″	8	1	01A01008	01A05008
2 1/2″	3	1	01A01009	01A05009
3″	4	1	01A0100A	01A0500A
4″	2	1	01A0100C	01A0500C



2 LONG SWEEP BEND F/F

ISO/EN **G1**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	200	10	02001001	02005001
3/8″	140	10	02001002	02005002
1/2″	90	10	02001003	02005003
3/4″	50	10	02001004	02005004
1″	28	1	02001005	02005005
1 1/4″	14	1	02001006	02005006
1 1/2″	10	1	02001007	02005007
2″	5	1	02001008	02005008
2 1/2″	2	1	02001009	02005009
3″	4	1	0200100A	0200500A
4″	2	1	0200100C	0200500C



2A SHORT BEND F/F

ISO/EN **D1**

Ø			BLACK CODE	GALVANIZED CODE
3/8″	50	10	02A01002	02A05002
1/2″	90	10	02A01003	02A05003
3/4″	50	10	02A01004	02A05004
1″	35	1	02A01005	02A05005
1 1/4″	20	1	02A01006	02A05006
1 1/2″	14	1	02A01007	02A05007
2″	8	1	02A01008	02A05008
2 1/2″	4	1	02A01009	02A05009
3″	4	1	02A0100A	02A0500A
4″	2	1	02A0100C	02A0500C



3 LONG SWEEP BEND M/M

ISO/EN **G8**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	300	10	03001001	03005001
3/8″	200	10	03001002	03005002
1/2″	120	10	03001003	03005003
3/4″	70	10	03001004	03005004
1″	40	1	03001005	03005005
1 1/4″	20	1	03001006	03005006
1 1/2″	14	1	03001007	03005007
2″	7	1	03001008	03005008
2 1/2″	3	1	03001009	03005009
3″	5	1	0300100A	0300500A



40 45° LONG SWEEP BEND M/F

ISO/EN **G4/45°**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	300	10	04001001	04005001
3/8″	200	10	04001002	04005002
1/2″	120	10	04001003	04005003
3/4″	80	10	04001004	04005004
1″	50	1	04001005	04005005
1 1/4″	25	1	04001006	04005006
1 1/2″	18	1	04001007	04005007
2″	10	1	04001008	04005008
2 1/2″	6	1	04001009	04005009
3″	3	1	0400100A	0400500A
4″	4	1	0400100C	0400500C



41 45° LONG SWEEP BEND F/F

ISO/EN **G1/45°**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	220	10	04101001	04105001
3/8″	150	10	04101002	04105002
1/2″	100	10	04101003	04105003
3/4″	60	10	04101004	04105004
1″	40	1	04101005	04105005
1 1/4″	22	1	04101006	04105006
1 1/2″	15	1	04101007	04105007
2″	9	1	04101008	04105008
2 1/2″	4	1	04101009	04105009
3″	2	1	0410100A	0410500A
4″	2	1	0410100C	0410500C



90 90° ELBOW F/F

ISO/EN **A1**

Ø			BLACK CODE	GALVANIZED CODE
1/8″	400	10	09001000	09005000
1/4″	350	10	09001001	09005001
3/8″	250	10	09001002	09005002
1/2″	120	10	09001003	09005003
3/4″	90	10	09001004	09005004
1″	50	10	09001005	09005005
1 1/4″	30	1	09001006	09005006
1 1/2″	22	1	09001007	09005007
2″	12	1	09001008	09005008
2 1/2″	7	1	09001009	09005009
3″	4	1	0900100A	0900500A
4″	2	1	0900100C	0900500C
5″	2	1		0900500D
6″	1			0900500E



92 90° ELBOW M/F

ISO/EN **A4**

Ø			BLACK CODE	GALVANIZED CODE
1/8″	500	10	09201000	09205000
1/4″	350	10	09201001	09205001
3/8″	250	10	09201002	09205002
1/2″	150	10	09201003	09205003
3/4″	90	10	09201004	09205004
1″	50	10	09201005	09205005
1 1/4″	30	1	09201006	09205006
1 1/2″	22	1	09201007	09205007
2″	12	1	09201008	09205008
2 1/2″	7	1	09201009	09205009
3″	4	1	0920100A	0920500A
4″	2	1	0920100C	0920500C



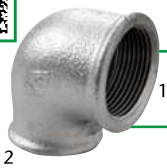
60 RETURN BEND

Ø			BLACK CODE	GALVANIZED CODE
1/2″	90	1	06001003	06005003
3/4″	90	1	06001004	06005004
1″	20	1	06001005	06005005
1 1/4″	15	1	06001006	06005006
1 1/2″	10	1	06001007	06005007
2″	6	1		06005008



85 CROSSOVER

Ø			BLACK CODE	GALVANIZED CODE
3/8″	100	10	08501002	08505002
1/2″	60	10	08501003	08505003
3/4″	30	10	08501004	08505004
1″	20	1	08501005	08505005
1 1/4″	10	1	08501006	08505006



90R 90° REDUCING ELBOW F/F

ISO/EN **A1**

Ø			BLACK CODE	GALVANIZED CODE
3/8″-1/4″	120	10	09001021	09005021
1/2″-1/4″	120	10	09001031	09005031
1/2″-3/8″	120	10	09001032	09005032
3/4″-3/8″	90	10	09001042	09005042
3/4″-1/2″	90	10	09001043	09005043
1″-1/2″	50	10	09001053	09005053
1″-3/4″	50	10	09001054	09005054
1 1/4″-1/2″	50	10	09001063	09005063
1 1/4″-3/4″	50	10	09001064	09005064
1 1/4″-1″	40	1	09001065	09005065
1 1/2″-3/4″	30	1	09001074	09005074
1 1/2″-1″	35	1	09001075	09005075
1 1/2″-1 1/4″	25	1	09001076	09005076
2″-1″	15	1	09001085	09005085
2″-1 1/4″	15	1	09001086	09005086
2″-1 1/2″	15	1	09001087	09005087
2 1/2″-2″	8	1		09005098



92R 90° REDUCING ELBOW M/F

ISO/EN **A4**

Ø			BLACK CODE	GALVANIZED CODE
1/2″ x 3/8″	150	10	09201032	09205032
3/4″ x 1/2	90	10	09201043	09205043
1″ x 3/4″	60	10	09201054	09205054
1 1/4″ x 1″	30	1	09201065	09205065
1 1/2″ x 1″	20	1	09201075	09205075
1 1/2″ x 1 1/4″	20	1	09201076	09205076
3/8″ x 1/2″	150	10	09201023	09205023
1/2″ x 3/4″	90	10	09201034	09205034
3/4″ x 1″	60	10	09201045	09205045
1″ x 1 1/4″	30	1	09201056	09205056



94 90° ELBOW M/M

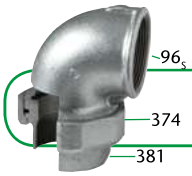
Ø			BLACK CODE	GALVANIZED CODE
3/8"	200	10	09401002	09405002
1/2"	150	10	09401003	09405003
3/4"	90	10	09401004	09405004
1"	60	10	09401005	09405005
1 1/4"	20	1	09401006	09405006
1 1/2"	25	1	09401007	09405007
2"	10	1	09401008	09405008



95 UNION ELBOW, FLAT SEAT

ISO/EN **UA1**

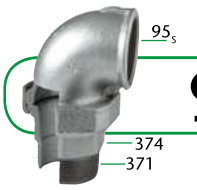
Ø			BLACK CODE	GALVANIZED CODE
3/8"	70	10	09501002	09505002
1/2"	50	10	09501003	09505003
3/4"	40	10	09501004	09505004
1"	28	1	09501005	09505005
1 1/4"	14	1	09501006	09505006
1 1/2"	10	1	09501007	09505007
2"	6	1	09501008	09505008



96 UNION ELBOW, TAPER SEAT

ISO/EN **UA11**

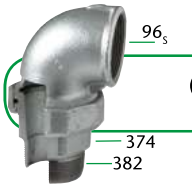
Ø			BLACK CODE	GALVANIZED CODE
1/4"	120	10	09601001	09605001
3/8"	80	10	09601002	09605002
1/2"	50	10	09601003	09605003
3/4"	40	10	09601004	09605004
1"	28	1	09601005	09605005
1 1/4"	14	1	09601006	09605006
1 1/2"	10	1	09601007	09605007
2"	6	1	09601008	09605008
2 1/2"	4	1	09601009	09605009
3"	2	1	0960100A	0960500A



97 UNION ELBOW, FLAT SEAT

ISO/EN **UA2**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	70	10	09701002	09705002
1/2"	50	10	09701003	09705003
3/4"	30	10	09701004	09705004
1"	23	1	09701005	09705005
1 1/4"	12	1	09701006	09705006
1 1/2"	10	1	09701007	09705007
2"	6	1	09701008	09705008



98 UNION ELBOW, TAPER SEAT

ISO/EN **UA12**

Ø			BLACK CODE	GALVANIZED CODE
1/4"	120	10	09801001	09805001
3/8"	80	10	09801002	09805002
1/2"	50	10	09801003	09805003
3/4"	30	10	09801004	09805004
1"	23	1	09801005	09805005
1 1/4"	12	1	09801006	09805006
1 1/2"	10	1	09801007	09805007
2"	6	1	09801008	09805008
2 1/2"	3	1	09801009	09805009
3"	2	1	0980100A	0980500A



120 45° ELBOW F/F

ISO/EN **A1/45°**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	150	10	12001002	12005002
1/2"	150	10	12001003	12005003
3/4"	90	10	12001004	12005004
1"	60	10	12001005	12005005
1 1/4"	30	1	12001006	12005006
1 1/2"	25	1	12001007	12005007
2"	10	1	12001008	12005008
2 1/2"	8	1	12001009	12005009
3"	5	1	1200100A	1200500A



121 45° ELBOW M/F

ISO/EN **A4/45°**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	200	10	12101002	12105002
1/2"	150	10	12101003	12105003
3/4"	100	10	12101004	12105004
1"	50	10	12101005	12105005
1 1/4"	30	1	12101006	12105006
1 1/2"	25	1	12101007	12105007
2"	12	1	12101008	12105008
2 1/2"	8	1	12101009	12105009
3"	5	1	1210100A	1210500A



130 TEE

ISO/EN **B1**

Ø			BLACK CODE	GALVANIZED CODE
1/8"	200	10	13001000	13005000
1/4"	220	10	13001001	13005001
3/8"	120	10	13001002	13005002
1/2"	70	10	13001003	13005003
3/4"	60	10	13001004	13005004
1"	30	10	13001005	13005005
1 1/4"	20	1	13001006	13005006
1 1/2"	14	1	13001007	13005007
2"	10	1	13001008	13005008
2 1/2"	5	1	13001009	13005009
3"	4	1	1300100A	1300500A
4"	2	1	1300100C	1300500C
5"	2	1		1300500D
6"	1			1300500E



130R 90° REDUCING TEE

ISO/EN **B1**

Ø			BLACK CODE	GALVANIZED CODE
3/8"-1/4"-3/8"	150	10	13001212	13005212
3/8"-1/2"-3/8"	120	10	13001232	13005232
3/8"-3/4"-3/8"	90	10	13001242	13005242
1/2"-1/4"-1/2"	110	10	13001313	13005313
1/2"-3/8"-3/8"	110	10	13001322	13005322
1/2"-3/8"-1/2"	110	10	13001323	13005323
1/2"-1/2"-3/8"	110	10	13001332	13005332
1/2"-3/4"-3/8"	70	10	13001342	13005342
1/2"-3/4"-1/2"	70	10	13001343	13005343
1/2"-1"-1/2"	60	10	13001353	13005353
3/4"-1/4"-3/4"	70	10	13001414	13005414
3/4"-3/8"-1/2"	70	10	13001423	13005423
3/4"-3/8"-3/4"	70	10	13001424	13005424
3/4"-1/2"-3/8"	70	10	13001432	13005432
3/4"-1/2"-1/2"	70	10	13001433	13005433
3/4"-1/2"-3/4"	60	10	13001434	13005434
3/4"-3/4"-3/8"	60	10	13001442	13005442
3/4"-3/4"-1/2"	60	10	13001443	13005443
3/4"-1"-1/2"	50	10	13001453	13005453
3/4"-1"-3/4"	40	10	13001454	13005454
3/4"-1 1/4"-3/4"	35	1	13001464	13005464
1"-1/4"-1"	40	10	13001515	13005515
1"-3/8"-3/4"	50	10	13001524	13005524
1"-3/8"-1"	50	10	13001525	13005525
1"-1/2"-1/2"	50	10	13001533	13005533
1"-1/2"-3/4"	50	10	13001534	13005534
1"-1/2"-1"	40	10	13001535	13005535
1"-3/4"-1/2"	40	10	13001543	13005543
1"-3/4"-3/4"	40	10	13001544	13005544
1"-3/4"-1"	40	10	13001545	13005545
1"-1"-3/8"	40	10	13001552	13005552
1"-1"-1/2"	40	10	13001553	13005553
1"-1"-3/4"	30	10	13001554	13005554
1"-1 1/4"-3/4"	30	1	13001564	13005564
1"-1 1/4"-1"	30	1	13001565	13005565
1"-1 1/2"-1"	22	1	13001575	13005575
1 1/4"-3/8"-1 1/4"	30	1	13001626	13005626
1 1/4"-1/2"-1"	35	1	13001635	13005635
1 1/4"-1/2"-1 1/4"	30	1	13001636	13005636
1 1/4"-3/4"-3/4"	35	1	13001644	13005644
1 1/4"-3/4"-1"	32	1	13001645	13005645
1 1/4"-3/4"-1 1/4"	30	1	13001646	13005646
1 1/4"-1"-3/8"	30	1	13001652	13005652
1 1/4"-1"-1/2"	32	1	13001653	13005653
1 1/4"-1"-3/4"	30	1	13001654	13005654
1 1/4"-1"-1"	28	1	13001655	13005655
1 1/4"-1"-1 1/4"	25	1	13001656	13005656
1 1/4"-1 1/4"-1/2"	30	1	13001663	13005663
1 1/4"-1 1/4"-3/4"	25	1	13001664	13005664
1 1/4"-1 1/4"-1"	25	1	13001665	13005665
1 1/4"-1 1/2"-1"	20	1	13001675	13005675
1 1/4"-1 1/2"-1 1/4"	18	1	13001676	13005676
1 1/4"-2"-1 1/4"	10	1	13001686	13005686
1 1/2"-3/8"-1 1/2"	28	1	13001727	13005727
1 1/2"-1/2"-1 1/4"	28	1	13001736	13005736
1 1/2"-1/2"-1 1/2"	25	1	13001737	13005737
1 1/2"-3/4"-1 1/4"	25	1	13001746	13005746
1 1/2"-3/4"-1 1/2"	22	1	13001747	13005747

Ø			BLACK CODE	GALVANIZED CODE
1 1/2"-1"-1"	25	1	13001755	13005755
1 1/2"-1"-1 1/4"	22	1	13001756	13005756
1 1/2"-1"-1 1/2"	20	1	13001757	13005757
1 1/2"-1 1/4"-1"	15	1	13001765	13005765
1 1/2"-1 1/4"-1 1/4"	18	1	13001766	13005766
1 1/2"-1 1/4"-1 1/2"	17	1	13001767	13005767
1 1/2"-1 1/2"-1/2"	17	1	13001773	13005773
1 1/2"-1 1/2"-3/4"	17	1	13001774	13005774
1 1/2"-1 1/2"-1"	17	1	13001775	13005775
1 1/2"-1 1/2"-1 1/4"	15	1	13001776	13005776
1 1/2"-2"-1 1/4"	10	1	13001786	13005786
1 1/2"-2"-1 1/2"	10	1	13001787	13005787
2"-1/2"-1 1/2"	18	1	13001837	13005837
2"-1/2"-2"	15	1	13001838	13005838
2"-3/4"-1 1/2"	16	1	13001847	13005847
2"-3/4"-2"	15	1	13001848	13005848
2"-1"-1 1/2"	15	1	13001857	13005857
2"-1"-2"	12	1	13001858	13005858
2"-1 1/4"-1"	12	1	13001865	13005865
2"-1 1/4"-1 1/4"	12	1	13001866	13005866
2"-1 1/4"-1 1/2"	12	1	13001867	13005867
2"-1 1/4"-2"	12	1	13001868	13005868
2"-1 1/2"-1"	12	1	13001875	13005875
2"-1 1/2"-1 1/2"	10	1	13001877	13005877
2"-1 1/2"-2"	10	1	13001878	13005878
2"-2"-1/2"	10	1	13001883	13005883
2"-2"-3/4"	10	1	13001884	13005884
2"-2"-1"	10	1	13001885	13005885
2"-2"-1 1/4"	10	1	13001886	13005886
2"-2"-1 1/2"	10	1	13001887	13005887
2"-2 1/2"-2"	6	1	13001898	13005898
2 1/2"-1/2"-2 1/2"	8	1	13001939	13005939
2 1/2"-3/4"-2 1/2"	8	1	13001949	13005949
2 1/2"-1"-2 1/2"	8	1	13001959	13005959
2 1/2"-1 1/4"-2 1/2"	8	1	13001969	13005969
2 1/2"-1 1/2"-2 1/2"	8	1	13001979	13005979
2 1/2"-2"-2"	6	1	13001988	13005988
2 1/2"-2"-2 1/2"	6	1	13001989	13005989
2 1/2"-2 1/2"-1 1/2"	6	1		13005997
2 1/2"-2 1/2"-2	6	1		13005998
3"-1/2"-3"	5	1		13005A3A
3"-3/4"-3"	6	1		13005A4A
3"-1"-3"	5	1	13001A5A	13005A5A
3"-1 1/4"-3"	4	1	13001A6A	13005A6A
3"-1 1/2"-3"	4	1	13001A7A	13005A7A
3"-2"-2"	4	1		13005A88
3"-2"-3"	4	1	13001A8A	13005A8A
3"-2 1/2"-3"	3	1	13001A9A	13005A9A
3"-3"-2"	2	1		13005AA8
4"-1/2"-4"	2	1	13001C3C	
4"-3/4"-4"	2	1	13001C4C	13005C4C
4"-1"-4"	2	1	13001C5C	13005C5C
4"-1 1/2"-4"	2	1	13001C7C	13005C7C
4"-2"-4"	2	1	13001C8C	13005C8C
4"-2 1/2"-4"	2	1	13001C9C	13005C9C
4"-3"-4"	2	1	13001CAC	13005CAC
5"- 4"-5"	2	1		13005DCD



131 90° PITCHER TEE

ISO/EN **E1**

Ø			BLACK CODE	GALVANIZED CODE
1/2″	50	10	13101003	13105003
3/4″	40	10	13101004	13105004
1″	20	10	13101005	13105005
1 1/4″	14	1	13101006	13105006
1 1/2″	8	1	13101007	13105007
2″	4	1	13101008	13105008
2 1/2″	2	1	13101009	13105009
3″	2	1	1310100A	1310500A
4″	2	1	1310100C	1310500C



132 TWIN ELBOW

ISO/EN **E2**

Ø			BLACK CODE	GALVANIZED CODE
1/2″	40	1	13201003	13205003
3/4″	25	1	13201004	13205004
1″	15	1	13201005	13205005
1 1/4″	10	1	13201006	13205006
1 1/2″	8	1	13201007	13205007
2″	3	1	13201008	13205008



133 TEE

Ø			BLACK CODE	GALVANIZED CODE
3/8″	150	10	13301002	13305002
1/2″	80	10	13301003	13305003
3/4″	50	10	13301004	13305004
1″	15	1	13301005	13305005



134 TEE

Ø			BLACK CODE	GALVANIZED CODE
1/2″	80	10	13401003	13405003
3/4″	50	10	13401004	13405004
1″	30	1	13401005	13405005
1 1/4″	20	1	13401006	13405006
1 1/2″	15	1	13401007	13405007
2″	8	1	13401008	13405008



135 TEE

Ø			BLACK CODE	GALVANIZED CODE
1/2″	100	10	13501003	13505003
3/4″	60	1	13501004	13505004
1″	40	1	13501005	13505005



165 45° TEE

Ø			BLACK CODE	GALVANIZED CODE
1/2″	50	10	16501003	16505003
3/4″	30	10	16501004	16505004
1″	20	1	16501005	16505005
1 1/4″	10	1	16501006	16505006
1 1/2″	6	1	16501007	16505007
2″	4	1	16501008	16505008



180 CROSS

ISO/EN **C1**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	120	10	18001001	18005001
3/8″	100	10	18001002	18005002
1/2″	70	10	18001003	18005003
3/4″	40	10	18001004	18005004
1″	28	1	18001005	18005005
1 1/4″	16	1	18001006	18005006
1 1/2″	10	1	18001007	18005007
2″	7	1	18001008	18005008
2 1/2″	3	1	18001009	18005009
3″	2	1	1800100A	1800500A
4″	1		1800100C	1800500C



220 "Y" PIECE

Ø			BLACK CODE	GALVANIZED CODE
3/8″	100	10	22001002	22005002
1/2″	60	10	22001003	22005003
3/4″	40	10	22001004	22005004
1″	20	1	22001005	22005005



221 SIDE OUTLET ELBOW

ISO/EN **Za1**

Ø			BLACK CODE	GALVANIZED CODE
3/8″	120	10	22101002	22105002
1/2″	80	10	22101003	22105003
3/4″	50	10	22101004	22105004
1″	40	10	22101005	22105005
1 1/4″	20	1	22101006	22105006
1 1/2″	13	1	22101007	22105007
2″	8	1	22101008	22105008



223 SIDE OUTLET TEE

ISO/EN **Za2**

Ø			BLACK CODE	GALVANIZED CODE
1/2″	60	1	22301003	22305003
3/4″	40	1	22301004	22305004
1″	25	1	22301005	22305005

2

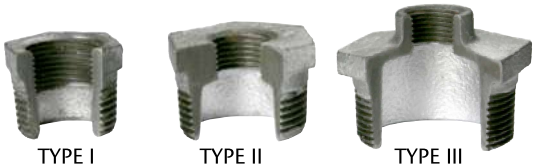


1

240 REDUCING SOCKET

ISO/EN **M2**

Ø			BLACK CODE	GALVANIZED CODE
1/4″- 1/8″	400	10	24011010	24015010
3/8″-1/8″	400	10	24011020	24015020
3/8″-1/4″	400	10	24011021	24015021
1/2″-1/4″	150	10	24001031	24005031
1/2″-3/8″	200	10	24001032	24005032
3/4″-1/4″	140	10	24001041	24005041
3/4″-3/8″	140	10	24001042	24005042
3/4″-1/2″	140	10	24001043	24005043
1″-3/8″	100	10	24001052	24005052
1″-1/2″	90	10	24001053	24005053
1″-3/4″	80	10	24001054	24005054
1 1/4″-3/8″	60	10	24001062	24005062
1 1/4″-1/2″	60	10	24001063	24005063
1 1/4″-3/4″	60	10	24001064	24005064
1 1/4″-1″	50	10	24001065	24005065
1 1/2″-1/2″	50	1	24001073	24005073
1 1/2″-3/4″	50	1	24001074	24005074
1 1/2″-1″	45	1	24001075	24005075
1 1/2″-1 1/4″	40	1	24001076	24005076
2″-1/2″	30	1	24001083	24005083
2″-3/4″	30	1	24001084	24005084
2″-1″	25	1	24001085	24005085
2″-1 1/4″	22	1	24001086	24005086
2″-1 1/2″	22	1	24001087	24005087
2 1/2″-1″	16	1	24001095	24005095
2 1/2″-1 1/4″	14	1	24001096	24005096
2 1/2″-1 1/2″	14	1	24001097	24005097
2 1/2″-2″	10	1	24001098	24005098
3″-1 1/4″	10	1	240010A6	240050A6
3″-1 1/2″	10	1	240010A7	240050A7
3″-2″	10	1	240010A8	240050A8
3″-2 1/2″	8	1	240010A9	240050A9
4″-2″	6	1	240010C8	240050C8
4″-2 1/2″	6	1	240010C9	240050C9
4″-3″	6	1	240010CA	240050CA

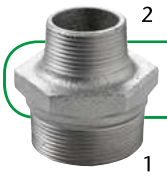


TYPE I TYPE II TYPE III

241 REDUCING BUSH

ISO/EN **N4**

Ø	TYPE			BLACK CODE	GALVANIZED CODE
1/4″-1/8″	I	400	10	24111010	24115010
3/8″-1/8″	II	400	10	24111020	24115020
3/8″-1/4″	I	400	10	24111021	24115021
1/2″-1/8″	II	400	10	24111030	24115030
1/2″-1/4″	II	350	10	24101031	24105031
1/2″-3/8″	I	350	10	24101032	24105032
3/4″-1/4″	II	200	10	24101041	24105041
3/4″-3/8″	II	200	10	24101042	24105042
3/4″-1/2″	I	200	10	24101043	24105043
1″-1/4″	II	140	10	24101051	24105051
1″-3/8″	II	140	10	24101052	24105052
1″-1/2″	II	140	10	24101053	24105053
1″-3/4″	I	140	10	24101054	24105054
1 1/4″-3/8″	II	80	10	24101062	24105062
1 1/4″-1/2″	II	80	10	24101063	24105063
1 1/4″-3/4″	II	80	10	24101064	24105064
1 1/4″-1″	I	80	10	24101065	24105065
1 1/2″-3/8″	II	80	10	24101072	24105072
1 1/2″-1/2″	II	70	10	24101073	24105073
1 1/2″-3/4″	II	70	10	24101074	24105074
1 1/2″-1″	II	70	10	24101075	24105075
1 1/2″-1 1/4″	I	70	10	24101076	24105076
2″-1/2″	III	30	1	24101083	24105083
2″-3/4″	III	30	1	24101084	24105084
2″-1″	II	30	1	24101085	24105085
2″-1 1/4″	II	30	1	24101086	24105086
2″-1 1/2″	II	30	1	24101087	24105087
2 1/2″-1″	III	20	1	24101095	24105095
2 1/2″-1 1/4″	III	20	1	24101096	24105096
2 1/2″-1 1/2″	II	20	1	24101097	24105097
2 1/2″-2″	II	20	1	24101098	24105098
3″-1″	III	10	1	241010A5	241050A5
3″-1 1/4″	III	10	1	241010A6	241050A6
3″-1 1/2″	III	10	1	241010A7	241050A7
3″-2″	II	15	1	241010A8	241050A8
3″-2 1/2″	II	15	1	241010A9	241050A9
4″-2″	III	8	1	241010C8	241050C8
4″- 2 1/2″	III	8	1	241010C9	241050C9
4″-3″	II	8	1	241010CA	241050CA
5″-4″	II	11	1		241050DC
6″-4″	III	6	1		241050EC
6″-5″	II	6	1		241050ED



245 REDUCING HEXAGONAL NIPPLE

ISO/EN **N8**

Ø			BLACK CODE	GALVANIZED CODE
1/4"-1/8"	400	10	24511010	24515010
3/8"-1/8"	400	10	24511020	24515020
3/8"-1/4"	400	10	24511021	24515021
1/2"-1/4"	250	10	24511031	24515031
1/2"-3/8"	230	10	24501032	24505032
3/4"-1/4"	150	10	24501041	24505041
3/4"-3/8"	140	10	24501042	24505042
3/4"-1/2"	150	10	24501043	24505043
1"-1/2"	100	10	24501053	24505053
1"-3/4"	100	10	24501054	24505054
1 1/4"-1/2"	60	10	24501063	24505063
1 1/4"-3/4"	60	10	24501064	24505064
1 1/4"-1"	50	10	24501065	24505065
1 1/2"-3/4"	50	1	24501074	24505074
1 1/2"-1"	50	1	24501075	24505075
1 1/2"-1 1/4"	45	1	24501076	24505076
2"-1"	25	1	24501085	24505085
2"-1 1/4"	25	1	24501086	24505086
2"-1 1/2"	25	1	24501087	24505087
2 1/2"-1 1/2"	15	1	24501097	24505097
2 1/2"-2"	14	1	24501098	24505098
3"-2"	8	1	245010A8	245050A8
3"-2 1/2"	8	1	245010A9	245050A9
4"-3"	4	1	245010CA	245050CA



246 REDUCING SOCKET F/M

ISO/EN **M4**

Ø			BLACK CODE	GALVANIZED CODE
1/4"-1/8"	400	10	24611010	24615010
3/8"-1/4"	400	10	24611021	24615021
1/2"-1/4"	220	10	24601031	24605031
1/2"-3/8"	220	10	24601032	24605032
3/4"-3/8"	150	10	24601042	24605042
3/4"-1/2"	140	10	24601043	24605043
1"-1/2"	80	10	24601053	24605053
1"-3/4"	80	10	24601054	24605054
1 1/4"-1/2"	60	10	24601063	24605063
1 1/4"-3/4"	50	10	24601064	24605064
1 1/4"-1"	50	10	24601065	24605065
1 1/2"-3/4"	45	1	24601074	24605074
1 1/2"-1"	45	1	24601075	24605075
1 1/2"-1 1/4"	40	1	24601076	24605076
2"-1"	30	1	24601085	24605085
2"-1 1/4"	25	1	24601086	24605086
2"-1 1/2"	20	1	24601087	24605087
2 1/2"-1 1/2"	12	1	24601097	24605097
2 1/2"-2"	12	1	24601098	24605098
3"-2"	12	1	246010A8	246050A8
3"-2 1/2"	12	1	246010A9	246050A9



270 SOCKET

ISO/EN **M2**

Ø			BLACK CODE	GALVANIZED CODE
1/8"	400	10	27011000	27015000
1/4"	400	10	27011001	27015001
3/8"	250	10	27001002	27005002
1/2"	180	10	27001003	27005003
3/4"	110	10	27001004	27005004
1"	80	10	27001005	27005005
1 1/4"	45	1	27001006	27005006
1 1/2"	35	1	27001007	27005007
2"	20	1	27001008	27005008
2 1/2"	12	1	27001009	27005009
3"	9	1	2700100A	2700500A
4"	4	1	2700100C	2700500C
5"	3	1		2700500D
6"	3	1		2700500E



271 RIGHT AND LEFT SOCKET

ISO/EN **M2 R-L**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	250	10	27101002	27105002
1/2"	180	10	27101003	27105003
3/4"	110	10	27101004	27105004
1"	80	10	27101005	27105005
1 1/4"	45	1	27101006	27105006
1 1/2"	35	1	27101007	27105007
2"	20	1	27101008	27105008



280 HEXAGONAL NIPPLE

ISO/EN **N8**

Ø			BLACK CODE	GALVANIZED CODE
1/8"	400	10	28011000	28015000
1/4"	400	10	28011001	28015001
3/8"	300	10	28001002	28005002
1/2"	200	10	28001003	28005003
3/4"	130	10	28001004	28005004
1"	80	10	28001005	28005005
1 1/4"	40	10	28001006	28005006
1 1/2"	40	1	28001007	28005007
2"	20	1	28001008	28005008
2 1/2"	10	1	28001009	28005009
3"	8	1	2800100A	2800500A
4"	4	1	2800100C	2800500C
5"	3	1		2800500D
6"	3	1		2800500E



281 RIGHT AND LEFT HEXAGONAL NIPPLE

ISO/EN **N8 R-L**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	300	10	28101002	28105002
1/2"	200	10	28101003	28105003
3/4"	130	10	28101004	28105004
1"	80	10	28101005	28105005
1 1/4"	40	10	28101006	28105006
1 1/2"	40	1	28101007	28105007
2"	20	1	28101008	28105008



290 PLUG

ISO/EN **T9**

Ø			BLACK CODE	GALVANIZED CODE
1/8"	400	10	29011000	29015000
1/4"	400	10	29011001	29015001
3/8"	400	10	29001002	29005002
1/2"	300	10	29001003	29005003
3/4"	200	10	29001004	29005004
1"	120	10	29001005	29005005
1 1/4"	80	10	29001006	29005006
1 1/2"	60	10	29001007	29005007
2"	40	1	29001008	29005008
2 1/2"	20	1	29001009	29005009
3"	15	1	2900100A	2900500A
4"	8	1	2900100C	2900500C



291 PLAIN PLUG

ISO/EN **T8**

Ø			BLACK CODE	GALVANIZED CODE
1/8"	400	10	29111000	29115000
1/4"	400	10	29111001	29115001
3/8"	400	10	29101002	29105002
1/2"	300	10	29101003	29105003
3/4"	200	10	29101004	29105004
1"	120	10	29101005	29105005
1 1/4"	80	10	29101006	29105006
1 1/2"	60	10	29101007	29105007
2"	40	1	29101008	29105008
2 1/2"	20	1	29101009	29105009
3"	15	1	2910100A	2910500A
4"	8	1	2910100C	2910500C



294 PLUG WITH HOLE IN SQUARE HEAD

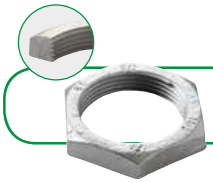
Ø			BLACK CODE	GALVANIZED CODE
1/2"	300	10	29401003	29405003
3/4"	200	10	29401004	29405004
1"	120	10	29401005	29405005
1 1/4"	80	10	29401006	29405006
1 1/2"	60	10	29401007	29405007
2"	40	1	29401008	29405008



300 CAP

ISO/EN **T1**

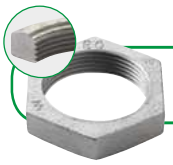
Ø			BLACK CODE	GALVANIZED CODE
1/8"	400	10	30011000	30015000
1/4"	400	10	30011001	30015001
3/8"	400	10	30011002	30015002
1/2"	280	10	30001003	30005003
3/4"	180	10	30001004	30005004
1"	130	10	30001005	30005005
1 1/4"	80	10	30001006	30005006
1 1/2"	60	10	30001007	30005007
2"	40	1	30001008	30005008
2 1/2"	25	1	30001009	30005009
3"	15	1	3000100A	3000500A
4"	8	1	3000100C	3000500C



310 BACKNUT

ISO/EN **P4**

Ø			BLACK CODE	GALVANIZED CODE
1/4"	400	10	31011001	31015001
3/8"	400	10	31011002	31015002
1/2"	400	10	31001003	31005003
3/4"	300	10	31001004	31005004
1"	200	10	31001005	31005005
1 1/4"	80	1	31001006	31005006
1 1/2"	70	1	31001007	31005007
2"	50	1	31001008	31005008
2 1/2"	25	1	31001009	31005009
3"	25	1	3100100A	3100500A



312 BACKNUT, RECESSED

ISO/EN **P4**

Ø			BLACK CODE	GALVANIZED CODE
1/4"	400	10	31211001	31215001
3/8"	400	10	31211002	31215002
1/2"	400	10	31201003	31205003
3/4"	300	10	31201004	31205004
1"	200	10	31201005	31205005
1 1/4"	120	10	31201006	31205006
1 1/2"	90	10	31201007	31205007
2"	60	10	31201008	31205008
2 1/2"	35	1	31201009	31205009
3"	25	1	3120100A	3120500A
4"	12	1	3120100C	3120500C



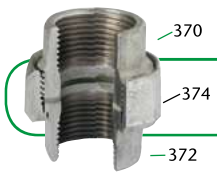
320 OVAL FLANGE

Ø			BLACK CODE	GALVANIZED CODE
1/2"	140	1	32001003	32005003
3/4"	110	1	32001004	32005004
1"	70	1	32001005	32005005
1 1/4"	50	1	32001006	32005006
1 1/2"	35	1	32001007	32005007
2"	30	1	32001008	32005008
2 1/2"	15	1	32001009	32005009
3"	10	1	3200100A	3200500A
4"	6	1	3200100C	3200500C



321 CIRCULAR FLANGE

Ø			BLACK CODE	GALVANIZED CODE
3/8"	110	1		32105002
1/2"	90	1	32101003	32105003
3/4"	70	1	32101004	32105004
1"	50	1	32101005	32105005
1 1/4"	30	1	32101006	32105006
1 1/2"	20	1	32101007	32105007
2"	15	1	32101008	32105008
2 1/2"	12	1	32101009	32105009
3"	9	1	3210100A	3210500A
4"	5	1	3210100C	3210500C

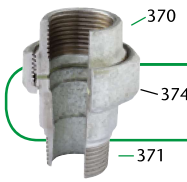


330 FLAT SEAT UNION F/F

ISO/EN **U1**

Ø			BLACK CODE	GALVANIZED CODE
1/2"	80	10	33001003	33005003
3/4"	50	10	33001004	33005004
1"	30	10	33001005	33005005
1 1/4"	20	1	33001006	33005006
1 1/2"	18	1	33001007	33005007
2"	10	1	33001008	33005008
2 1/2"	7	1	33001009	33005009
3"	4	1	3300100A	3300500A
4"	2	1	3300100C	3300500C

Supplied without gasket. See Page 20

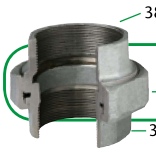


331 FLAT SEAT UNION M/F

ISO/EN **U2**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	100	10	33101002	33105002
1/2"	60	10	33101003	33105003
3/4"	40	10	33101004	33105004
1"	35	1	33101005	33105005
1 1/4"	18	1	33101006	33105006
1 1/2"	15	1	33101007	33105007
2"	10	1	33101008	33105008
2 1/2"	4	1	33101009	33105009
3"	2	1	3310100A	3310500A

Supplied without gasket. See Page 20



340 TAPER SEAT UNION F/F

ISO/EN **U11**

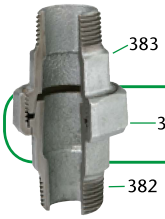
Ø			BLACK CODE	GALVANIZED CODE
1/8″	160	10	34001000	34005000
1/4″	140	10	34001001	34005001
3/8″	100	10	34001002	34005002
1/2″	80	10	34001003	34005003
3/4″	50	10	34001004	34005004
1″	30	10	34001005	34005005
1 1/4″	20	1	34001006	34005006
1 1/2″	18	1	34001007	34005007
2″	10	1	34001008	34005008
2 1/2″	7	1	34001009	34005009
3″	4	1	3400100A	3400500A
4″	2	1	3400100C	3400500C



341 TAPER SEAT UNION M/F

ISO/EN **U12**

Ø			BLACK CODE	GALVANIZED CODE
1/4″	120	10	34101001	34105001
3/8″	100	10	34101002	34105002
1/2″	60	10	34101003	34105003
3/4″	40	10	34101004	34105004
1″	35	1	34101005	34105005
1 1/4″	18	1	34101006	34105006
1 1/2″	15	1	34101007	34105007
2″	10	1	34101008	34105008
2 1/2″	4	1	34101009	34105009
3″	2	1	3410100A	3410500A
4″	1		3410100C	3410500C



344 TAPER SEAT UNION M/M

Ø			BLACK CODE	GALVANIZED CODE
1/4″	120	10	34401001	34405001
3/8″	100	10	34401002	34405002
1/2″	50	10	34401003	34405003
3/4″	40	10	34401004	34405004
1″	30	1	34401005	34405005
1 1/4″	15	1	34401006	34405006
1 1/2″	10	1	34401007	34405007
2″	6	1	34401008	34405008



370 FLAT SEAT UNION BUSH F/M

Ø			BLACK CODE	GALVANIZED CODE
1/2″	250	1	37001003	37005003
3/4″	200	1	37001004	37005004
1″	120	1	37001005	37005005
1 1/4″	70	1	37001006	37005006
1 1/2″	50	1	37001007	37005007
2″	25	1	37001008	37005008
2 1/2″	15	1	37001009	37005009
3″	10	1	3700100A	3700500A
4″	6	1	3700100C	3700500C



371 FLAT SEAT UNION MALE

Ø			BLACK CODE	GALVANIZED CODE
1/2″	225	1	37101003	37105003
3/4″	125	1	37101004	37105004
1″	80	1	37101005	37105005
1 1/4″	45	1	37101006	37105006
1 1/2″	35	1	37101007	37105007
2″	20	1	37101008	37105008
2 1/2″	10	1	37101009	37105009
3″	6	1	3710100A	3710500A



372 FLAT SEAT UNION FEMALE

Ø			BLACK CODE	GALVANIZED CODE
1/2″	325	1	37201003	37205003
3/4″	210	1	37201004	37205004
1″	150	1	37201005	37205005
1 1/4″	80	1	37201006	37205006
1 1/2″	55	1	37201007	37205007
2″	30	1	37201008	37205008
2 1/2″	16	1	37201009	37205009
3″	10	1	3720100A	3720500A



374 UNION NUT

Ø			BLACK CODE	GALVANIZED CODE
3/8"	300	1	37401002	37405002
1/2"	175	1	37401003	37405003
3/4"	140	1	37401004	37405004
1"	100	1	37401005	37405005
1 1/4"	55	1	37401006	37405006
1 1/2"	45	1	37401007	37405007
2"	30	1	37401008	37405008
2 1/2"	15	1	37401009	37405009
3"	12	1	3740100A	3740500A
4"	8	1	3740100C	3740500C



526 EXTENSION TUBE

Ø			BLACK CODE	GALVANIZED CODE
30 x 3/8"	350	10	52601302	52605302
30 x 1/2"	220	10	52601303	52605303
40 x 3/8"	250	10	52601402	52605402
40 x 1/2"	200	10	52601403	2605403
40 x 3/4"	120	10	52601404	52605404
50 x 1/2"	120	10	52601503	52605503



531 INTERNAL NIPPLE

Ø			BLACK CODE	GALVANIZED CODE
1/8"	100	10		53115000
1/4"	500	10	53111001	53115001
3/8"	400	10	53101002	53105002
1/2"	380	10	53101003	53105003
3/4"	240	10	53101004	53105004
1"	140	10	53101005	53105005
1 1/4"	80	10	53101006	53105006
1 1/2"	60	10	53101007	53105007
2"	35	1	53101008	53105008
2 1/2"	18	1	53101009	53105009
3"	12	1	5310100A	5310500A
4"	8	1	5310100C	5310500C

GASKET FOR FLAT SEAT UNION



Gasket suitable for gas, water, oil and hydrocarbons.
Optimal quality in ratio (0-50Bar) - Tª (0 - 220° C).
Drinkable water (TZW) and gas (DVGW - VP 401 and DVGW DIN 3535-6) certified.

Ø	Ø Int. mm.	Ø Ext. mm.	THICKNESS	CODE
1/2"	24	34	2	90000003
3/4"	27	38	2	90000004
1"	32	44	2	90000005
1 1/4"	42	55	2	90000006
1 1/2"	46	62	2	90000007
2"	60	78	2	90000008
2 1/2"	75	96	3	90000009
3"	88	109	3	9000000A
4"	113	134	3	9000000C



334 COMPENSATION UNION

Ø			BLACK CODE	GALVANIZED CODE
1/2" x 88	50	1		33405003
3/4" x 96	30	1		33405004
1" x 106	20	1		33405005
1 1/4" x 118	15	1		33405006
1 1/2" x 122	10	1		33405007
2" x 134	8	1		33405008



471 BRACKET ELBOW

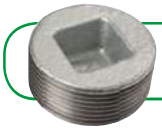
Ø			BLACK CODE	GALVANIZED CODE
1/2"	40	10		47105003
3/4"	30	10		47105004
1"	20	10		47105005



529 EXTENSION TUBE

ISO/EN **M4**

Ø			BLACK CODE	GALVANIZED CODE
3/8"	300	10	52901002	52905002
1/2"	200	10	52901003	52905003
3/4"	120	10	52901004	52905004
1"	60	10	52901005	52905005
1 1/4"	40	1	52901006	52905006
1 1/2"	35	1	52901007	52905007
2"	20	1	52901008	52905008

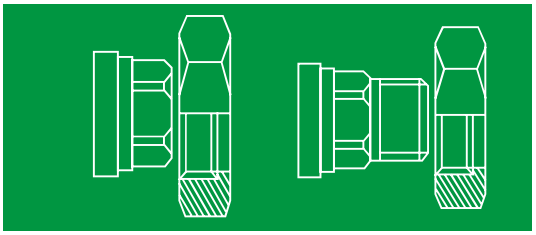


596 PLUG SQUARE INSIDE

ISO/EN **T11**

Ø			BLACK CODE	GALVANIZED CODE
1/2"	200	10		59605003
3/4"	150	10	59601004	
1"	150	10	59601005	
1 1/4"	140	1	59601006	
1 1/2"	125	1	59601007	59605007
2"	60	1	59601008	

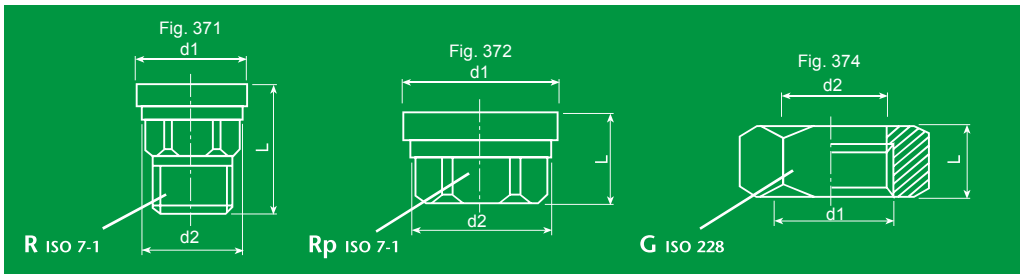
STEEL FITTINGS



PUMPS CONNECTION KITS

- **1 Kit is composed by:**
  - 2 Backnuts Ref. 374 (P1)
    Fastening threads DIN EN-ISO 228-1.
  - 2 Union ends Ref. 372 or 371
    Jointing threads DIN 2999 / ISO 7-1 / EN 10226-1
  - 2 Gaskets, free of asbestos:
    - Max. Temperature 300° C.
    - Max. Temperature with steam 200° C.
    - DVGW Certificate for industrial gases.
    - KTW Ceritificate for food and drinking water.

- Kits are produced in black finish, (without galvanisation), if opposite is not specified.
- Each kit is supplied in plastic bag and carton box, duly marked with a label.



3/4" (372 Reduced) KIT
C4201047

FIG	mm.				(grs.)
	d1	d2	L		
372 Rp 3/4"	44,2	40,9	26,0	20	464
374 G 1 1/2"	45,15	41,8	22,0		

1" KIT
C4201057

FIG	mm.				(grs.)
	d1	d2	L		
372 Rp 1"	44,2	40,9	26,5	20	474
374 G 1 1/2"	45,15	41,8	22,0		

1" (372 Reduced) KIT
C4201058

FIG	mm.				(grs.)
	d1	d2	L		
372 Rp 1"	56,0	52,2	31,0	15	854
374 G 2"	56,9	52,9	24,0		

1" KIT
C4101057

FIG	mm.				(grs.)
	d1	d2	L		
371 R 1"	44,2	40,9	49,0	18	620
374 G 1 1/2"	45,15	41,8	22,0		

1 1/4" (371 Increased)
C4101067

FIG	mm.				(grs.)
	d1	d2	L		
371 R 1 1/4"	44,2	40,9	48,0	15	624
374 G 1 1/2"	45,15	41,8	22,0		

1 1/4" KIT
C4201068

FIG	mm.				(grs.)
	d1	d2	L		
372 Rp 1 1/4"	56,0	52,2	31,0	15	878
374 G 2"	56,9	52,9	24,0		

R = Male thread (taper external thread) - Rp = Female thread (parallel internal thread)
G_{374} = Female thread (parallel internal thread)

PACKING

FIG.	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
1	200	250	170	110	60	35	17	12	6	3	4	2		
1A		250	130	100	60	40	20	15	8	3	4	2		
2		200	140	90	50	28	14	10	5	2	4	2		
2A			50	90	50	35	20	14	8	2	4	2		
3		300	200	120	70	40	20	14	7	3	5	2		
40		300	200	120	80	50	25	18	10	6	3	4		
41		220	150	100	60	40	22	15	9	4	2	2		
60				90	90	20	15	10	6					
85			100	60	30	20	10							
90	400	350	250	120	90	50	30	22	12	7	4	2	2	1
92	500	350	250	150	90	50	30	22	12	7	4	2		
94			200	150	90	60	20	25	10					
95			70	50	40	28	14	10	6					
96		120	80	50	40	28	14	10	6	4	2			
97			70	50	30	23	12	10	6					
98		120	80	50	30	23	12	10	6	3	2			
120			150	150	90	60	30	20	10	8	5			
121			200	150	100	50	30	25	12	8	5			
130	200	220	120	70	60	30	20	14	10	5	4	2	2	1
131				50	40	20	14	8	4	2	2	2		
132				40	25	15	10	8	3					
133			150	80	50	15								
134				80	50	30	20	15	8					
135				100	60	40								
165				50	30	20	10	6	4					
180		120	100	70	40	28	16	10	7	3	2	1		
220			100	60	40	20								
221			120	80	50	40	20	13	8					
223				60	40	25								
270	400	400	250	180	110	80	45	35	20	12	9	4	3	3
271			250	180	110	80	45	35	20					
280	400	400	300	200	130	80	40	40	20	10	8	4	3	3
281			300	200	130	80	40	40	20					
290	400	400	400	300	200	120	80	60	40	20	15	8		
291	400	400	400	300	200	120	80	60	40	20	15	8		
294				300	200	120	80	60	40					
300	400	400	400	280	180	130	80	60	40	25	15	8		
310		400	400	400	300	200	80	70	50	25	25			
312		400	400	400	300	200	120	90	60	35	25	12		
320				140	110	70	50	35	30	15	10	6		
321				90	70	50	30	20	15	12	9	5		
330				80	50	30	20	18	10	7	4	2		
331			100	60	40	35	18	15	10	4	2			
334				50	30	20	15	10	8					
340	160	140	100	80	50	30	20	18	10	7	4	2		
341		120	100	60	40	35	18	15	10	4	2	1		
344		120	100	50	40	30	15	10	6					
370				250	200	120	70	50	25	15	10	6		
371				225	125	80	45	35	20	10	6			
372				325	210	150	80	55	30	16	10			
374				175	140	100	55	45	30	15	12	8		
471				40	30	20								
529			300	200	120	60	40	35	20					
531	500	500	400	380	240	140	80	60	35	18	12	8		
596				200	150	150	140	125	60					



130R
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130R
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FIG.	90R	240	241	245	246
1/4 x 1/8		400	400	400	400
3/8 x 1/8		400	400	400	
3/8 x 1/4	120	400	400	400	400
1/2 x 1/8			400		
1/2 x 1/4	120	150	350	250	220
1/2 x 3/8	120	200	350	230	220
3/4 x 1/4		140	200	150	
3/4 x 3/8	90	140	200	140	150
3/4 x 1/2	90	140	200	150	140
1 x 1/4			140		
1 x 3/8		100	140		
1 x 1/2	50	90	140	100	80
1 x 3/4	50	80	140	100	80
1 1/4 x 3/8		60	80		
1 1/4 x 1/2	50	60	80	60	60
1 1/4 x 3/4	50	60	80	60	50
1 1/4 x 1	40	50	80	50	50
1 1/2 x 3/8			80		
1 1/2 x 1/2		50	70		
1 1/2 x 3/4	30	50	70	50	45
1 1/2 x 1	35	45	70	50	45
1 1/2 x 1 1/4	25	40	70	45	40
2 x 1/2		30	30		
2 x 3/4		30	30		
2 x 1	15	25	30	25	30
2 x 1 1/4	15	22	30	25	25
2 x 1 1/2	15	22	30	25	20
2 1/2 x 1		16	20		
2 1/2 x 1 1/4		14	20		
2 1/2 x 1 1/2		14	20	15	12
2 1/2 x 2	8	10	20	14	12
3 x 1			10		
3 x 1 1/4		10	10		
3 x 1 1/2		10	10		
3 x 2		10	15	8	12
3 x 2 1/2		8	15	8	12
4 x 2		6	8		
4 x 2 1/2		6	8		
4 x 3		6	8	4	
5 x 4			11		
6 x 4			6		
6 x 5			6		



FIG.	526
30 x 3/8	350
30 x 1/2	220
40 x 3/8	250
40 x 1/2	200
40 x 3/4	120
50 x 1/2	120
50 x 3/4	100



FIG.	92R
1/2" x 3/8"	150
3/4" x 1/2"	90
1" x 3/4"	60
1 1/4" x 1"	30
1 1/2" x 1"	20
1 1/2" x 1 1/4"	20
3/8" x 1/2"	150
1/2" x 3/4"	90
3/4" x 1"	60
1" x 1 1/4"	30

BOXES SIZES		
25 x 19 x 20 cm.	37.5 x 27 x 21 cm.	
STANDARD	Fig. 1, 1a, 2, 2a	3", 4"
	Fig. 40 , 41	4"
	Fig. 90, 130, 270, 280	5", 6"
	Fig. 130R	5" x 4" x 5"
	Fig. 241	5" x 4"
		6" x 4"
		6" x 5"

PACKING

In plastic bags with 10 pieces.

Steel fittings.

The normal boxes´size is 25 x 19 x 20 cm.

www.atusagroup.com

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