

Acc. to DIN EN 10242 (formerly DIN 2950).

The classic - and the most popular - screw fitting series for pipe construction.

These fittings are characterized by their high mechanical strength and surface quality to DIN 2444. They are completely coated with a layer of pure zinc and are therefore suitable for drinking water; they are also protected against rust.

The fittings are used in pipe construction, plumbing and gas installations as well as a wide range of industrial applications.

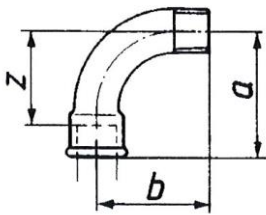
Working minimal temperature = -20 °C; 25 bar.

Working pressure for temperature range from -20 °C to 120 °C = 25 bar.

Working pressure for temperature range from 120 °C to 300 °C = 20-25 bar

Products with flat seal have a recommended temperature of -20 °C to 200 °C with working pressure of max. 25 bar.

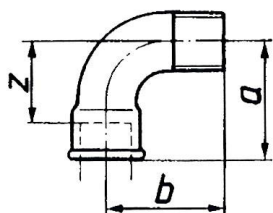
Material: Black malleable iron B350-10, design symbol A  
 Temperature range: -20 °C to +300 °C  
 Surface: Hot dip galvanised  
 Standard thread: acc. ISO 7-1



TFB 1-12

**Long sweep bend 1, 90°, female/male**

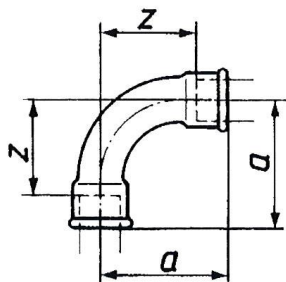
Art. No.	Type No.	Thread female	Thread male	a mm	b mm	z mm
112826	TFB 1-14	Rp 1/4	R 1/4	40.0	36.0	30.0
112827	TFB 1-38	Rp 3/8	R 3/8	48.0	42.0	38.0
112828	TFB 1-12	Rp 1/2	R 1/2	55.0	48.0	42.0
112829	TFB 1-34	Rp 3/4	R 3/4	69.0	60.0	54.0
112830	TFB 1-10	Rp 1	R 1	85.0	75.0	68.0
112831	TFB 1-114	Rp 1 1/4	R 1 1/4	105.0	95.0	86.0
112832	TFB 1-112	Rp 1 1/2	R 1 1/2	116.0	105.0	97.0
112833	TFB 1-20	Rp 2	R 2	140.0	130.0	116.0
112834	TFB 1-212	Rp 2 1/2	R 2 1/2	176.0	165.0	149.0
112835	TFB 1-30	Rp 3	R 3	205.0	190.0	175.0



TFB 1A-12

Short bend 1a, 90°, female/male

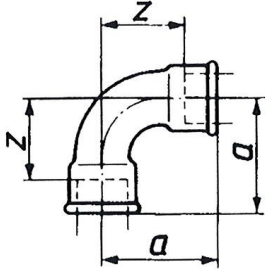
Art. No.	Type No.	Thread female	Thread male	a mm	b mm	z mm
112836	TFB 1A-14	Rp 1/4	R 1/4	30.0	30.0	20.0
112837	TFB 1A-38	Rp 3/8	R 3/8	36.0	36.0	26.0
112838	TFB 1A-12	Rp 1/2	R 1/2	45.0	45.0	32.0
112839	TFB 1A-34	Rp 3/4	R 3/4	50.0	50.0	35.0
112840	TFB 1A-10	Rp 1	R 1	63.0	63.0	46.0
112841	TFB 1A-114	Rp 1 1/4	R 1 1/4	76.0	76.0	57.0
112842	TFB 1A-112	Rp 1 1/2	R 1 1/2	85.0	85.0	66.0
112843	TFB 1A-20	Rp 2	R 2	102.0	102.0	78.0
112844	TFB 1A-212	Rp 2 1/2	R 2 1/2	-	-	-



TFB 2-12

Long sweep bend 2, 90°, female/female

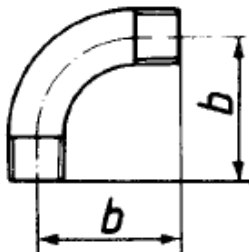
Art. No.	Type No.	Thread female	a mm	z mm
112845	TFB 2-14	Rp/Rp 1/4	40.0	30.0
112846	TFB 2-38	Rp/Rp 3/8	48.0	38.0
112847	TFB 2-12	Rp/Rp 1/2	55.0	42.0
112848	TFB 2-34	Rp/Rp 3/4	69.0	54.0
112849	TFB 2-10	Rp/Rp 1	85.0	68.0
112850	TFB 2-114	Rp/Rp 1 1/4	105.0	86.0
112851	TFB 2-112	Rp/Rp 1 1/2	116.0	97.0
112852	TFB 2-20	Rp/Rp 2	140.0	116.0
112853	TFB 2-212	Rp 2 1/2	176.0	149.0
112854	TFB 2-30	Rp 3	205.0	175.0



TFB 2A-10

**Short bend 2a, 90°, female/female**

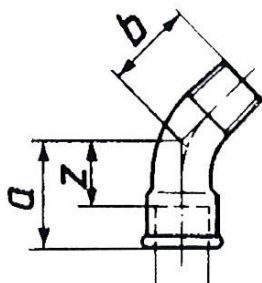
Art. No.	Type No.	Thread female	a mm	z mm
112855	TFB 2A-14	Rp/Rp 1/4	30.0	20.0
112856	TFB 2A-38	Rp/Rp 3/8	36.0	26.0
112857	TFB 2A-12	Rp/Rp 1/2	45.0	32.0
112858	TFB 2A-34	Rp/Rp 3/4	50.0	35.0
112859	TFB 2A-10	Rp/Rp 1	63.0	46.0
112860	TFB 2A-114	Rp/Rp 1 1/4	76.0	57.0
112861	TFB 2A-112	Rp/Rp 1 1/2	85.0	66.0
112862	TFB 2A-20	Rp/Rp 2	102.0	78.0



TFB 3-34

**Long sweep bend 3, 90°, male/male**

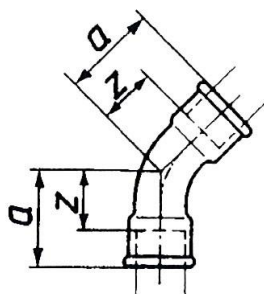
Art. No.	Type No.	Thread female	b mm
112863	TFB 3-38	R 3/8	42.0
112864	TFB 3-12	R 1/2	48.0
112865	TFB 3-34	R 3/4	60.0
112866	TFB 3-10	R 1	75.0
112867	TFB 3-114	R 1 1/4	95.0
112868	TFB 3-112	R 1 1/2	105.0
112869	TFB 3-20	R 2	130.0



TFB 40-10

**Bend 40, 45°, female/male**

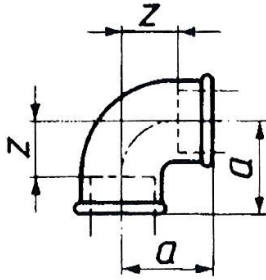
Art. No.	Type No.	Thread female	Thread male	a mm	b mm	z mm
112870	TFB 40-14	Rp 1/4	R 1/4	26.0	21.0	16.0
112871	TFB 40-38	Rp 3/8	R 3/8	30.0	24.0	20.0
112872	TFB 40-12	Rp 1/2	R 1/2	36.0	30.0	23.0
112873	TFB 40-34	Rp 3/4	R 3/4	43.0	36.0	28.0
112874	TFB 40-10	Rp 1	R 1	51.0	42.0	34.0
112875	TFB 40-114	Rp 1 1/4	R 1 1/4	64.0	54.0	45.0
112876	TFB 40-112	Rp 1 1/2	R 1 1/2	68.0	58.0	49.0
112877	TFB 40-20	Rp 2	R 2	81.0	70.0	57.0
112878	TFB 40-212	Rp 2 1/2	R 2 1/2	99.0	86.0	72.0
112879	TFB 40-30	Rp 3	R 3	113.0	100.0	83.0



TFB 41-10

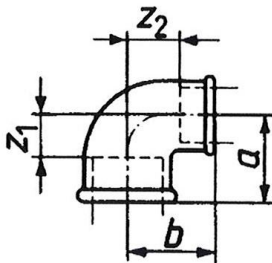
**Bend 41, 45°, female/female**

Art. No.	Type No.	Thread female	a mm	z mm
112880	TFB 41-38	Rp/Rp 3/8	30.0	20.0
112881	TFB 41-12	Rp/Rp 1/2	36.0	23.0
112882	TFB 41-34	Rp/Rp 3/4	43.0	28.0
112883	TFB 41-10	Rp/Rp 1	51.0	34.0
112884	TFB 41-114	Rp/Rp 1 1/4	64.0	45.0
112885	TFB 41-112	Rp/Rp 1 1/2	68.0	49.0
112886	TFB 41-20	Rp/Rp 2	81.0	57.0
112887	TFB 41-212	Rp/Rp 2 1/2	99.0	72.0
112888	TFB 41-30	Rp/Rp 3	113.0	83.0


**Elbow 90, 90°, female/female**

TFW 90-12

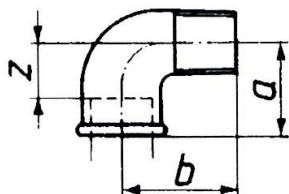
Art. No.	Type. No.	Thread female	a mm	z mm
112889	TFW 90-14	Rp/Rp 1/4	21.0	11.0
112890	TFW 90-38	Rp/Rp 3/8	25.0	15.0
112891	TFW 90-12	Rp/Rp 1/2	28.0	15.0
112892	TFW 90-34	Rp/Rp 3/4	33.0	18.0
112893	TFW 90-10	Rp/Rp 1	38.0	21.0
112894	TFW 90-114	Rp/Rp 1 1/4	45.0	26.0
112895	TFW 90-112	Rp/Rp 1 1/2	50.0	31.0
112896	TFW 90-20	Rp/Rp 2	58.0	34.0
112897	TFW 90-212	Rp/Rp 2 1/2	69.0	42.0
112898	TFW 90-30	Rp/Rp 3	78.0	48.0



TFW 90-1012

**Elbow 90, 90°, reduced, female/female**

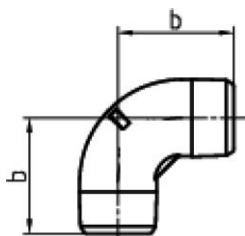
Art. No.	Type No.	Thread female	Thread female	a mm	b mm	c mm	z <sub>1</sub> mm	z <sub>2</sub> mm
133560	TFW 90-1238	Rp 1/2	Rp 3/8	26.0	26.0	33.0	13.0	16.0
133561	TFW 90-3412	Rp 3/4	Rp 1/2	30.0	31.0	40.0	15.0	18.0
133562	TFW 90-1012	Rp 1	Rp 1/2	32.0	34.0	-	15.0	21.0
133563	TFW 90-1034	Rp 1	Rp 3/4	35.0	36.0	46.0	18.0	21.0
133564	TFW 90-11410	Rp 1 1/4	Rp 1	40.0	42.0	56.0	21.0	25.0
133565	TFW 90-11212	Rp 1 1/2	Rp 1/2	-	-	-	-	-
133566	TFW 90-112114	Rp 1 1/2	Rp 1 1/4	46.0	48.0	-	27.0	29.0
133567	TFW 90-21	Rp 2	Rp 1	-	-	-	-	-
133568	TFW 90-212112	Rp 2 1/2	Rp 1 1/2	-	-	-	-	-



TFW 92-12

**Elbow 92, 90°, female/male**

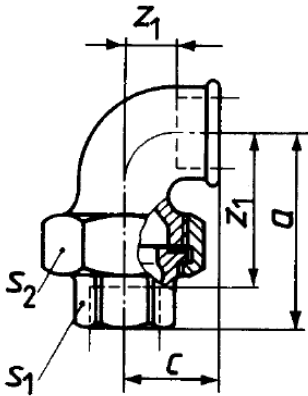
Art. No.	Type No.	Thread female	Thread male	a mm	b mm	z mm
112899	TFW 92-14	Rp 1/4	R 1/4	21.0	28.0	11.0
112900	TFW 92-38	Rp 3/8	R 3/8	25.0	32.0	15.0
112901	TFW 92-12	Rp 1/2	R 1/2	28.0	37.0	15.0
112902	TFW 92-34	Rp 3/4	R 3/4	33.0	43.0	18.0
112903	TFW 92-10	Rp 1	R 1	38.0	52.0	21.0
112904	TFW 92-114	Rp 1 1/4	R 1 1/4	45.0	60.0	26.0
112905	TFW 92-112	Rp 1 1/2	R 1 1/2	50.0	65.0	31.0
112906	TFW 92-20	Rp 2	R 2	58.0	74.0	34.0
112907	TFW 92-212	Rp 2 1/2	R 2 1/2	69.0	88.0	42.0
112908	TFW 92-30	Rp 3	R 3	78.0	98.0	48.0



TFW 94-38

**Elbow 94, 90°, male/male**

Art. No.	Type No.	Thread male	b mm
112909	TFW 94-38	R/R 3/8	30.0
112910	TFW 94-12	R/R 1/2	37.0
112911	TFW 94-34	R/R 3/4	40.0
112912	TFW 94-10	R/R 1	47.0
112913	TFW 94-114	R/R 1 1/4	57.0
112914	TFW 94-112	R/R 1 1/2	60.0
112915	TFW 94-20	R/R 2	70.0

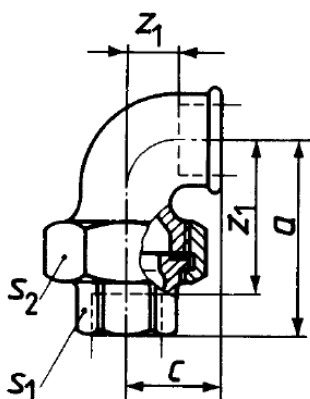


TFV 95-10

**Union elbow 95**, flat seat, female/female, without seal  
 Temperature range -20 °C to 200 °C

Art. No.	Type No.	Thread female	a mm	b mm	c mm	z <sub>1</sub> mm
112916	TFV 95-12	Rp 1/2	58.0	76.0	28.0	15.0
112917	TFV 95-34	Rp 3/4	62.0	82.0	33.0	18.0
112918	TFV 95-10	Rp 1	72.0	94.0	38.0	21.0
112919	TFV 95-114	Rp 1 1/4	82.0	107.0	45.0	26.0
112920	TFV 95-112	Rp 1 1/2	90.0	115.0	50.0	31.0
112921	TFV 95-20	Rp 2	100.0	128.0	58.0	34.0

→ Maximum temperature and maximum operating pressure should not occur at the same time!

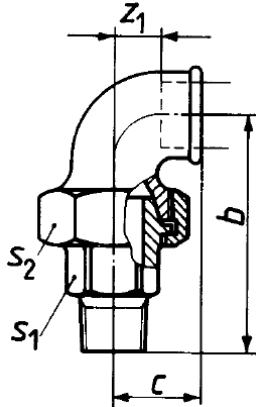


TFV 96-10

Union elbow 96, taper seat, female/female

Art. No.	Type No.	Thread female	a mm	b mm	z <sub>1</sub> mm
112922	TFV 96-12	Rp 1/2	58.0	76.0	15.0
112923	TFV 96-34	Rp 3/4	62.0	82.0	18.0
112924	TFV 96-10	Rp 1	72.0	94.0	21.0
112925	TFV 96-114	Rp 1 1/4	82.0	107.0	26.0
112926	TFV 96-112	Rp 1 1/2	90.0	115.0	31.0
112927	TFV 96-20	Rp 2	100.0	128.0	34.0
112928	TFV 96-212	Rp 2 1/2	-	-	-



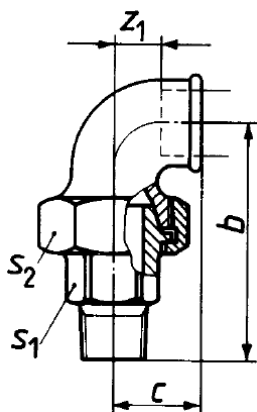


TFV 98-10

**Union elbow 97**, flat seat, female/male, without seal  
 Temperature range -20 °C to 200 °C

Art. No.	Type No.	Thread 1 male	Thread 2 male	b mm	c mm	Z <sub>1</sub> mm
112929	TFV 97-12	Rp 1/2	R 1/2	76.0	28.0	15.0
112930	TFV 97-34	Rp 3/4	R 3/4	82.0	33.0	18.0
112931	TFV 97-10	Rp 1	R 1	94.0	38.0	21.0
112932	TFV 97-114	Rp 1 1/4	R 1 1/4	45.0	45.0	26.06
112933	TFV 97-112	Rp 1 1/2	R 1 1/2	115.0	50.0	31.0
112934	TFV 97-20	Rp 2	R 2	128.0	58.0	34.0

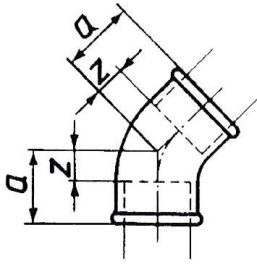
→ Maximum temperature and maximum operating pressure should not occur at the same time!



TFV 98-10

Union elbow 98, taper seat, female/male

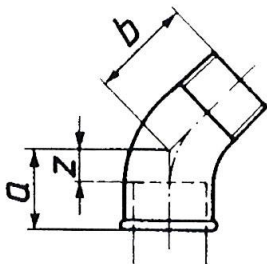
Art. No.	Type No.	Thread 1 male	Thread 2 male	b mm	c mm	z <sub>1</sub> mm
112935	TFV 98-14	Rp 1/4	R 1/4	61.0	21.0	11.0
112936	TFV 98-12	Rp 1/2	R 1/2	76.0	28.0	15.0
112937	TFV 98-34	Rp 3/4	R 3/4	82.0	33.0	18.0
112938	TFV 98-10	Rp 1	R 1	94.0	38.0	21.0
112939	TFV 98-114	Rp 1 1/4	R 1 1/4	107.0	45.0	26.0
112940	TFV 98-112	Rp 1 1/2	R 1 1/2	115.0	50.0	31.0
112941	TFV 98-20	Rp 2	R 2	128.0	58.0	34.0
112942	TFV 98-212	Rp 2 1/2	R 2 1/2	-	-	-



TFW 120-12

**Elbow 120, 45°, female/female**

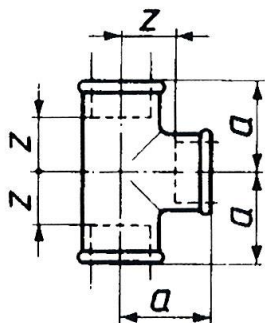
Art. No.	Type No.	Thread female	a mm	z mm
112943	TFW 120-38	Rp/Rp 3/8	20.0	10.0
112944	TFW 120-12	Rp/Rp 1/2	22.0	9.0
112945	TFW 120-34	Rp/Rp 3/4	25.0	10.0
112946	TFW 120-10	Rp/Rp 1	28.0	11.0
112947	TFW 120-114	Rp/Rp 1 1/4	33.0	14.0
112948	TFW 120-112	Rp/Rp 1 1/2	36.0	17.0
112949	TFW 120-20	Rp/Rp 2	43.0	19.0
112950	TFW 120-212	Rp 2 1/2	-	-
112951	TFW 120-30	Rp 3	-	-



TFW 121-12

**Elbow 121, 45°, female/male**

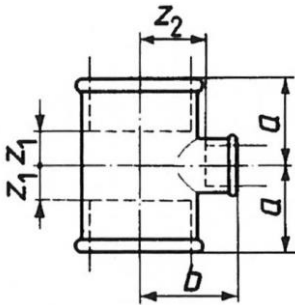
Art. No.	Type No.	Thread female	Thread male	a mm	b mm	z mm
112952	TFW 121-38	Rp 3/8	R 3/8	20.0	25.0	10.0
112953	TFW 121-12	Rp 1/2	R 1/2	22.0	28.0	9.0
112954	TFW 121-34	Rp 3/4	R 3/4	25.0	32.0	10.0
112955	TFW 121-10	Rp 1	R 1	28.0	37.0	11.0
112956	TFW 121-114	Rp 1 1/4	R 1 1/4	33.0	43.0	14.0
112957	TFW 121-112	Rp 1 1/2	R 1 1/2	36.0	46.0	17.0
112958	TFW 121-20	Rp 2	R 2	43.0	55.0	19.0



TFT 130-12

Tee 130, female/female/female

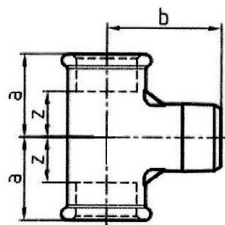
Art. No.	Type No.	Thread female	a mm	z mm
112959	TFT 130-14	Rp 1/4	21.0	11.0
112960	TFT 130-38	Rp 3/8	25.0	15.0
112961	TFT 130-12	Rp 1/2	28.0	15.0
112962	TFT 130-34	Rp 3/4	33.0	18.0
112963	TFT 130-10	Rp 1	38.0	21.0
112964	TFT 130-114	Rp 1 1/4	45.0	26.0
112965	TFT 130-112	Rp 1 1/2	50.0	31.0
112966	TFT 130-20	Rp 2	58.0	34.0
112967	TFT 130-212	Rp 2 1/2	69.0	42.0
112968	TFT 130-30	Rp 3	78.0	48.0



TFT 130-3438

**Tee 130, reducing, female/female/female**

Art. No.	Type No.	Thread 1	Thread 2 Reduced branch tee	a mm	b mm	z <sub>1</sub> mm	z <sub>2</sub> mm
112969	TFT 130-3814	Rp/Rp 3/8	Rp1/4	23.0	23.0	13.0	13.0
112970	TFT 130-1214	Rp/Rp 1/2	Rp 1/4	24.0	24.0	11.0	14.0
112971	TFT 130-1238	Rp/Rp 1/2	Rp 3/8	26.0	26.0	13.0	16.0
125298	TFT 130-3414	Rp/Rp 3/4	Rp 1/4	26.0	27.0	11.0	17.0
112973	TFT 130-3438	Rp/Rp 3/4	Rp 3/8	28.0	28.0	13.0	18.0
112974	TFT 130-3412	Rp/Rp 3/4	Rp 1/2	30.0	31.0	15.0	18.0
112975	TFT 130-1038	Rp/Rp 1	Rp 3/8	30.0	32.0	13.0	22.0
112976	TFT 130-1012	Rp/Rp 1	Rp 1/2	32.0	34.0	15.0	21.0
112977	TFT 130-1034	Rp/Rp 1	Rp 3/4	35.0	36.0	18.0	21.0
125297	TFT 130-11438	Rp/Rp 1 1/4	Rp 3/8	32.0	36.0	13.0	26.0
112979	TFT 130-11412	Rp/Rp 1 1/4	Rp 1/2	34.0	38.0	15.0	25.0
112980	TFT 130-11434	Rp/Rp 1 1/4	Rp 3/4	36.0	41.0	17.0	26.0
112981	TFT 130-11410	Rp/Rp 1 1/4	Rp 1	40.0	42.0	21.0	25.0
125296	TFT 130-11238	Rp/Rp 1 1/2	Rp 3/8	33.0	38.0	14.0	28.0
112983	TFT 130-11212	Rp/Rp 1 1/2	Rp 1/2	36.0	42.0	17.0	29.0
112984	TFT 130-11234	Rp/Rp 1 1/2	Rp 3/4	38.0	44.0	19.0	29.0
112985	TFT 130-11210	Rp/Rp 1 1/2	Rp 1	42.0	46.0	23.0	29.0
112986	TFT130-112114	Rp/Rp 1 1/2	Rp 1 1/4	46.0	48.0	27.0	29.0
112987	TFT 130-2012	Rp/Rp 2	Rp 1/2	38.0	48.0	14.0	35.0
112988	TFT 130-2034	Rp/Rp 2	Rp 3/4	40.0	50.0	16.0	35.0
112989	TFT 130-2010	Rp/Rp 2	Rp 1	44.0	52.0	20.0	35.0
112990	TFT 130-20114	Rp/Rp 2	Rp 1 1/4	48.0	54.0	24.0	35.0
112991	TFT 130-20112	Rp/Rp 2	Rp 1 1/2	52.0	55.0	28.0	36.0
112992	TFT 130-21210	Rp/Rp 2 1/2	Rp 1	47.0	60.0	20.0	43.0
112993	TFT130-212114	Rp/Rp 2 1/2	Rp 1 1/4	52.0	62.0	25.0	43.0
112994	TFT130-212112	Rp/Rp 2 1/2	Rp 1 1/2	55.0	63.0	28.0	44.0
112995	TFT 130-21220	Rp/Rp 2 1/2	Rp 2	61.0	66.0	34.0	42.0
112996	TFT 130-3020	Rp/Rp 3	Rp 2	64.0	73.0	34.0	49.0
112997	TFT 130-30212	Rp/Rp 3	Rp 1 1/2	58.0	71.0	28.0	52.0



TFT 133-38

**Tee 133, female/male/female**

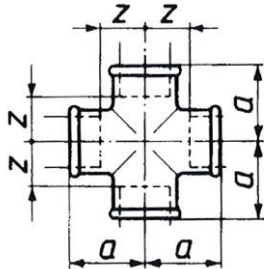
Art. No.	Type No.	Thread	a mm	b mm	z mm
112998	TFT 133-38	Rp 3/8	22.0	31.0	12.0
112999	TFT 133-12	Rp 1/2	25.0	38.0	12.0
113000	TFT 133-10	Rp 1	39.0	53.0	22.0



TFT 134-10

**Tee 134, female/female/male**

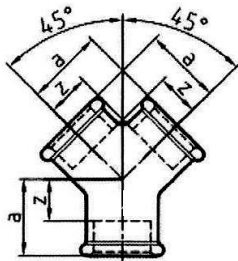
Art. No.	Type No.	Thread 1	Thread 2	Thread 3
113001	TFT 134-12	Rp 1/2	R 1/2	Rp 1/2
113002	TFT 134-34	Rp 3/4	R 3/4	Rp 3/4
113003	TFT 134-10	Rp 1	R 1	Rp 1
113004	TFT 134-114	Rp 1 1/4	R 1 1/4	Rp 1 1/4
113005	TFT 134-112	Rp 1 1/2	R 1 1/2	Rp 1 1/2
113006	TFT 134-20	Rp 2	R 2	Rp 2



TFK 180-12

**Cross 180, 4 x female**

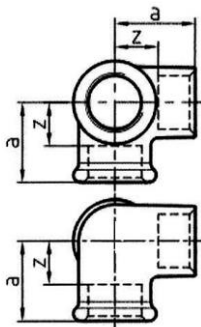
Art. No.	Type No.	Thread female	a mm	z mm
113007	TFK 180-14	Rp 1/4	21.0	11.0
113008	TFK 180-38	Rp 3/8	25.0	15.0
113009	TFK 180-12	Rp 1/2	28.0	15.0
113010	TFK 180-34	Rp 3/4	33.0	18.0
113011	TFK 180-10	Rp 1	38.0	21.0
113012	TFK 180-114	Rp 1 1/4	45.0	26.0
113013	TFK 180-112	Rp 1 1/2	50.0	31.0
113014	TFK 180-20	Rp 2	58.0	34.0
113015	TFK 180-30	Rp 3	78.0	48.0



TFY 22-10

**Y-piece 220, female/female/female**

Art. No.	Type No.	Thread female	a mm	z mm
113016	TFY 220-12	Rp 1/2	27.0	14.0
113017	TFY 220-34	Rp 3/4	33.0	18.0
113018	TFY 220-10	Rp 1	40.0	23.0

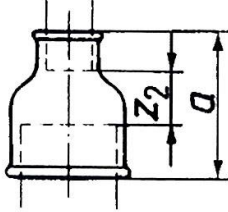


TFE 221-10

**Elbow connector 221, female/female/female**

Art. No.	Type No.	Thread female	a mm	z mm
113019	TFE 221-12	Rp 1/2	28.0	15.0
113020	TFE 221-34	Rp 3/4	33.0	18.0
113021	TFE 221-10	Rp 1	38.0	21.0
113022	TFE 221-112	Rp 1 1/2	50.0	31.0
113023	TFE 221-20	Rp 2	58.0	34.0

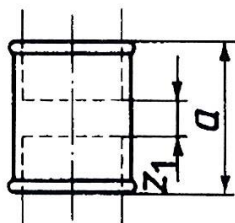




TFM 240-1012

**Socket 240, reducing, female/female**

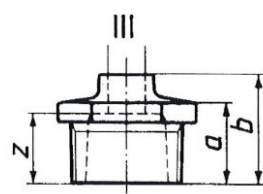
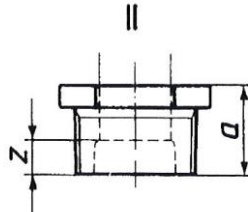
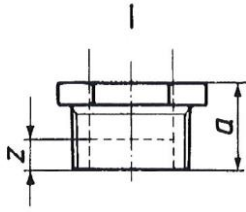
Art. No.	Type No.	Thread 1 female	Thread 2 female	a mm	z <sub>2</sub> mm
113024	TFM 240-3814	Rp 3/8	Rp 1/4	30.0	10.0
113025	TFM 240-1214	Rp 1/2	Rp 1/4	36.0	13.0
113026	TFM 240-1238	Rp 1/2	Rp 3/8	36.0	13.0
113027	TFM 240-3414	Rp 3/4	Rp 1/4	39.0	14.0
113028	TFM 240-3438	Rp 3/4	Rp 3/8	39.0	14.0
113029	TFM 240-3412	Rp 3/4	Rp 1/2	38.0	11.0
113030	TFM 240-1038	Rp 1	Rp 3/8	45.0	18.0
113031	TFM 240-1012	Rp 1	Rp 1/2	45.0	15.0
113032	TFM 240-1034	Rp 1	Rp 3/4	45.0	13.0
125295	TFM 240-11438	Rp 1 1/4	Rp 3/8	50.0	21.0
113034	TFM 240-11412	Rp 1 1/4	Rp 1/2	50.0	18.0
113035	TFM 240-11434	Rp 1 1/4	Rp 3/4	50.0	16.0
113036	TFM 240-11410	Rp 1 1/4	Rp 1	50.0	14.0
113037	TFM 240-11212	Rp 1 1/2	Rp 1/2	55.0	23.0
113038	TFM 240-11234	Rp 1 1/2	Rp 3/4	55.0	21.0
113039	TFM 240-11210	Rp 1 1/2	Rp 1	55.0	19.0
113040	TFM240-112114	Rp 1 1/2	Rp 1 1/4	55.0	17.0
113041	TFM 240-2012	Rp 2	Rp 1/2	65.0	28.0
113042	TFM 240-2034	Rp 2	Rp 3/4	65.0	26.0
113043	TFM 240-2010	Rp 2	Rp 1	65.0	24.0
113044	TFM 240-20114	Rp 2	Rp 1 1/4	65.0	22.0
113045	TFM 240-20112	Rp 2	Rp 1 1/2	65.0	22.0
113046	TFM 240-21220	Rp 2 1/2	Rp 2	74.0	23.0
113047	TFM 240-30112	Rp 3	Rp 1 1/2	80.0	31.0
113048	TFM 240-3020	Rp 3	Rp 2	80.0	26.0
113049	TFM 240-30212	Rp 3	Rp 2 1/2	80.0	23.0



TFM 270-12

Socket 270, female/female

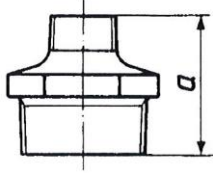
Art. No.	Type No.	Thread female	a mm	z <sub>1</sub> mm
113050	TFM 270-14	Rp/Rp 1/4	27.0	7.0
113051	TFM 270-38	Rp/Rp 3/8	30.0	10.0
113052	TFM 270-12	Rp/Rp 1/2	36.0	10.0
113053	TFM 270-34	Rp/Rp 3/4	39.0	9.0
113054	TFM 270-10	Rp/Rp 1	45.0	11.0
113055	TFM 270-114	Rp/Rp 1 1/4	50.0	12.0
113056	TFM 270-112	Rp/Rp 1 1/2	50.0	17.0
113057	TFM 270-20	Rp/Rp 2	65.0	17.0
113058	TFM 270-212	Rp 2 1/2	74.0	20.0
113059	TFM 270-30	Rp 3	80.0	20.0



TFR 241-1214

**Reducing bush 241, male/female**

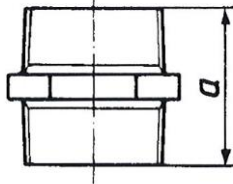
Art. No.	Type No.	Thread 1 male	Thread 2 female	a mm	b mm	z mm	Type
113060	TFR 241-3814	R 3/8	Rp 1/4	20.0	-	10.0	I
113061	TFR 241-1214	R 1/2	Rp 1/4	24.0	-	14.0	II
113062	TFR 241-1238	R 1/2	Rp 3/8	24.0	-	14.0	I
113063	TFR 241-3414	R 3/4	Rp 1/4	26.0	-	16.0	II
113064	TFR 241-3438	R 3/4	Rp 3/8	26.0	-	16.0	II
113065	TFR 241-3412	R 3/4	Rp 1/2	26.0	-	13.0	I
113066	TFR 241-1038	R 1	Rp 3/8	29.0	-	19.0	II
113067	TFR 241-1012	R 1	Rp 1/2	29.0	-	16.0	II
113068	TFR 241-1034	R 1	Rp 3/4	29.0	-	14.0	I
113069	TFR 241-11438	R 1 1/4	Rp 3/8	31.0	-	21.0	II
113070	TFR 241-11412	R 1 1/4	Rp 1/2	31.0	-	18.0	II
113071	TFR 241-11434	R 1 1/4	Rp 3/4	31.0	-	16.0	II
113072	TFR 241-11410	R 1 1/4	Rp 1	31.0	-	14.0	I
113073	TFR 241-11238	R 1 1/2	Rp 3/8	31.0	-	21.0	II
113074	TFR 241-11212	R 1 1/2	Rp 1/2	31.0	-	18.0	II
113075	TFR 241-11234	R 1 1/2	Rp 3/4	31.0	-	16.0	II
113076	TFR 241-11210	R 1 1/2	Rp 1	31.0	-	14.0	II
113077	TFR241-112114	R 1 1/2	Rp 1 1/4	31.0	-	12.0	I
113078	TFR 241-2012	R 2	Rp 1/2	35.0	48.0	35.0	III
113079	TFR 241-2034	R 2	Rp 3/4	35.0	48.0	33.0	III
113080	TFR 241-2010	R 2	Rp 1	35.0	-	18.0	II
113081	TFR 241-20114	R 2	Rp 1 1/4	35.0	-	16.0	II
113082	TFR 241-20112	R 2	Rp 1 1/2	35.0	-	16.0	II
113083	TFR241-212112	R 2 1/2	Rp 1 1/2	40.0	-	21.0	II
113084	TFR 241-21220	R 2 1/2	Rp 2	40.0	-	16.0	II
113085	TFR 241-30112	R 3	Rp 1 1/2	44.0	59.0	40.0	III
113086	TFR 241-3020	R 3	Rp 2	44.0	-	20.0	II
113087	TFR 241-30212	R 3	Rp 2 1/2	44.0	-	17.0	II



TFD 245-1238

**Hexagon nipple 245, reducing, male/male**

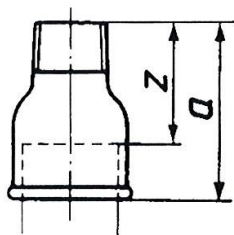
Art. No.	Type No.	Thread 1 male	Thread 2 male	a mm
113088	TFD 245-3814	R 3/8	R 1/4	38.0
113089	TFD 245-1214	R 1/2	R 1/4	44.0
113090	TFD 245-1238	R 1/2	R 3/8	44.0
113091	TFD 245-3438	R 3/4	R 3/8	47.0
113092	TFD 245-3412	R 3/4	R 1/2	47.0
113093	TFD 245-1012	R 1	R 1/2	53.0
113094	TFD 245-1034	R 1	R 3/4	53.0
113095	TFD 245-11434	R 1 1/4	R 3/4	57.0
113096	TFD 245-11410	R 1 1/4	R 1	57.0
133569	TFD 245-11212	R 1 1/2	R 1/2	-
133570	TFD 245-11234	R 1 1/2	R 3/4	59.0
113097	TFD 245-11210	R 1 1/2	R 1	59.0
113098	TFD245-112114	R 1 1/2	R 1 1/4	59.0
133571	TFD 245-234	R 2	R 3/4	-
113099	TFD 245-20114	R 2	R 1 1/4	68.0
113100	TFD 245-20112	R 2	R 1 1/2	68.0
113101	TFD245-212112	R 2 1/2	R 1 1/2	75.0
113102	TFD 245-21220	R 2 1/2	R 2	75.0
113103	TFD 245-3020	R 3	R 2	83.0
113104	TFD 245-30212	R 3	R 2 1/2	83.0



TFD 280-12

**Hexagon nipple 280, male/male**

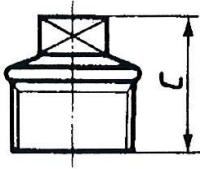
Art. No.	Type No.	Thread male	a mm
113105	TFD 280-14	R 1/4	36.0
113106	TFD 280-38	R 3/8	38.0
113107	TFD 280-12	R 1/2	44.0
113108	TFD 280-34	R 3/4	47.0
113109	TFD 280-10	R 1	53.0
113110	TFD 280-114	R 1 1/4	57.0
113111	TFD 280-112	R 1 1/2	59.0
113112	TFD 280-20	R 2	68.0
113113	TFD 280-212	R 2 1/2	-
113114	TFD 280-30	R 3	-



TFM 246-1012

Socket 246, reducing, female/male

Art. No.	Type No.	Thread 1 female	Thread 2 male	a mm	z mm
113115	TFM 246-3814	Rp 3/8	R 1/4	35.0	25.0
113116	TFM 246-1214	Rp 1/2	R 1/4	43.0	30.0
113117	TFM 246-1238	Rp 1/2	R 3/8	43.0	30.0
113118	TFM 246-3412	Rp 3/4	R 1/2	48.0	33.0
113119	TFM 246-1012	Rp 1	R 1/2	55.0	38.0
113120	TFM 246-1034	Rp 1	R 3/4	55.0	38.0
113121	TFM 246-11434	Rp 1 1/4	R 3/4	60.0	41.0
113122	TFM 246-11410	Rp 1 1/4	R 1	60.0	41.0
113123	TFM 246-11210	Rp 1 1/2	R 1	63.0	44.0
113124	TFM246-112114	Rp 1 1/2	R 1 1/4	63.0	44.0
113125	TFM 246-2010	Rp 2	R 1	65.0	43.0
113126	TFM 246-20114	Rp 2	R 1 1/4	70.0	46.0
113127	TFM 246-20112	Rp 2	R 1 1/2	70.0	46.0
113128	TFM 246-21220	Rp 2 1/2	R 2	-	-
113129	TFM 246-3020	Rp 3	R 2	-	-
113130	TFM 246-30212	Rp 3	R 2 1/2	-	-



TFS 290-10

**Plugs 290, male**

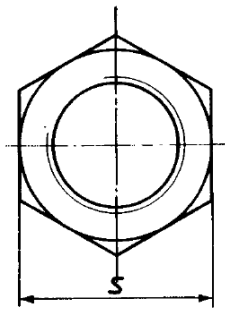
Art. No.	Type No.	Thread male	Min. c mm
113131	TFS 290-14	R 1/4	22.0
113132	TFS 290-38	R 3/8	24.0
113133	TFS 290-12	R 1/2	26.0
113134	TFS 290-34	R 3/4	32.0
113135	TFS 290-10	R 1	36.0
113136	TFS 290-114	R 1 1/4	39.0
113137	TFS 290-112	R 1 1/2	41.0
113138	TFS 290-20	R 2	48.0
113139	TFS 290-212	R 2 1/2	54.0
113140	TFS 290-30	R 3	60.0



TFK 300-12

**Cap 300, female**

Art. No.	Type No.	Thread female	Min. a mm
113141	TFK 300-14	Rp 1/4	15.0
113142	TFK 300-38	Rp 3/8	17.0
113143	TFK 300-12	Rp 1/2	19.0
113144	TFK 300-34	Rp 3/4	22.0
113145	TFK 300-10	Rp 1	24.0
113146	TFK 300-114	Rp 1 1/4	27.0
113147	TFK 300-112	Rp 1 1/2	27.0
113148	TFK 300-20	Rp 2	32.0
113149	TFK 300-212	Rp 2 1/2	35.0
113150	TFK 300-30	Rp 3	38.0



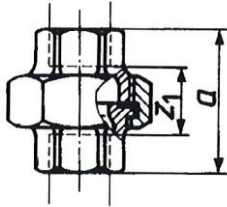
TFG 310-10

**Lock nut 310, female**

Art. No.	Type No.	Thread male	Min. a mm
113151	TFG 310-14	Rp 1/4	6.0
113152	TFG 310-38	Rp 3/8	7.0
113153	TFG 310-12	Rp 1/2	8.0
113154	TFG 310-34	Rp 3/4	9.0
113155	TFG 310-10	Rp 1	10.0
113156	TFG 310-112	Rp 1 1/2	12.0
113157	TFG 310-20	Rp 2	13.0
113158	TFG 310-212	Rp 2 1/2	16.0
113159	TFG 310-30	Rp 3	19.0

\*The measure of a/f (s) depends on the construction of the fittings and is up to the manufacturer.



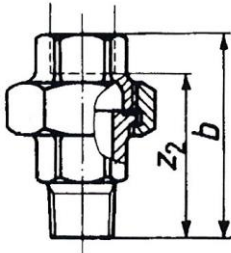


TFV 330-12

**Union 330**, flat seat, female/female, with NBR-seal (NBR with aramide fiber)  
 Temperature -20 °C to 200 °C

Art. No.	Type No.	Thread female	a mm	z <sub>1</sub> mm
113160	TFV 330-14-D	Rp/Rp 1/4	42.0	22.0
113161	TFV 330-38-D	Rp/Rp 3/8	45.0	25.0
113162	TFV 330-12-D	Rp/Rp 1/2	48.0	22.0
113163	TFV 330-34-D	Rp/Rp 3/4	52.0	22.0
113164	TFV 330-10-D	Rp/Rp 1	58.0	24.0
113165	TFV 330-114-D	Rp/Rp 1 1/4	65.0	27.0
113166	TFV 330-112-D	Rp/Rp 1 1/2	70.0	32.0
113167	TFV 330-20-D	Rp/Rp 2	78.0	30.0
113168	TFV 330-212-D	Rp/Rp 2 1/2	85.0	31.0
113169	TFV 330-30-D	Rp/Rp 3	95.0	35.0

→ Maximum temperature and maximum operating pressure should not occur at the same time!

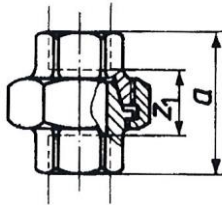


TFV 331-12

**Union 331**, flat seat, female/male, with NBR-seal (NBR with aramide fiber)  
 Temperature -20 °C to 200 °C

Art. No.	Type No.	Thread female	Thread male	b mm	z <sub>2</sub> mm
113170	TFV 331-14-D	Rp 1/4	R 1/4	55.0	45.0
113171	TFV 331-38-D	Rp 3/8	R 3/8	58.0	48.0
113172	TFV 331-12-D	Rp 1/2	R 1/2	66.0	53.0
113173	TFV 331-34-D	Rp 3/4	R 3/4	72.0	57.0
113174	TFV 331-10-D	Rp 1	R 1	80.0	63.0
113175	TFV 331-114-D	Rp 1 1/4	R 1 1/4	90.0	71.0
113176	TFV 331-112-D	Rp 1 1/2	R 1 1/2	95.0	76.0
113177	TFV 331-20-D	Rp 2	R 2	106.0	82.0
113178	TFV 331-212-D	Rp 2 1/2	R 2 1/2	118.0	91.0

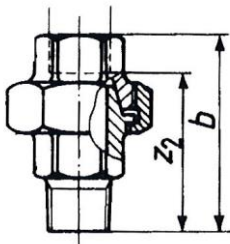
→ Maximum temperature and maximum operating pressure should not occur at the same time!



TFV 340-12

**Union 340, taper seat, female/female**

Art. No.	Type No.	Thread female	a mm	z <sub>1</sub> mm
113179	TFV 340-14	Rp/Rp 1/4	42.0	22.0
113180	TFV 340-38	Rp/Rp 3/8	45.0	25.0
113181	TFV 340-12	Rp/Rp 1/2	48.0	22.0
113182	TFV 340-34	Rp/Rp 3/4	52.0	22.0
113183	TFV 340-10	Rp/Rp 1	58.0	24.0
113184	TFV 340-114	Rp/Rp 1 1/4	65.0	27.0
113185	TFV 340-112	Rp/Rp 1 1/2	70.0	32.0
113186	TFV 340-20	Rp/Rp 2	78.0	30.0
113187	TFV 340-212	Rp/Rp 2 1/2	85.0	31.0
113188	TFV 340-30	Rp/Rp 3	95.0	35.0



TFV 341-10

**Union 341, taper seat, female/male**

Art. No.	Type No.	Thread female	Thread male	b mm	Z <sub>2</sub> mm
113189	TFV 341-14	Rp 1/4	R 1/4	55.0	45.0
113190	TFV 341-38	Rp 3/8	R 3/8	58.0	48.0
113191	TFV 341-12	Rp 1/2	R 1/2	66.0	53.0
113192	TFV 341-34	Rp 3/4	R 3/4	72.0	57.0
113193	TFV 341-10	Rp 1	R 1	80.0	63.0
113194	TFV 341-114	Rp 1 1/4	R 1 1/4	90.0	71.0
113195	TFV 341-112	Rp 1 1/2	R 1 1/2	95.0	76.0
113196	TFV 341-20	Rp 2	R 2	106.0	82.0
113197	TFV 341-212	Rp 2 1/2	Rp 2 1/2	118.0	91.0
113198	TFV 341-30	Rp 3	Rp 3	130.0	100.0

**Flat seal for malleable iron fittings (NBR with aramide fiber)**

Temperature -20 °C to 200 °C

Art. No.	Type No.	For connection size (inch)	O.D. mm	I.D. mm	Thickness mm
162262	TFD 14-1	1/4	24.0	17.0	2.0
113200	TFD 38	3/8	27.0	19.0	2.0
113201	TFD 12	1/2	30.0	21.0	2.0
113202	TFD 34	3/4	38.0	27.0	2.0
113203	TFD 10	1	44.0	32.0	2.0
113204	TFD 114	1 1/4	55.0	42.0	2.0
113205	TFD 112	1 1/2	62.0	46.0	2.0
113206	TFD 20	2	78.0	60.0	2.0
113207	TFD 212	2 1/2	97.0	75.0	2.0
113208	TFD 30	3	110.0	88.0	2.0



TFD 12

→ Maximum temperature and maximum operating pressure should not occur at the same time!

The specified dimensions are approximate dimensions in mm.

According DIN EN 10242 the measure of a/f depends on the construction of the fittings and is up to the manufacturer.