

According to DIN EN 10242 (previously 2950).

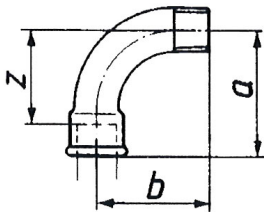
Malleable iron cast fittings in black steel, non-galvanized, is the classic fitting series in connection series in piping construction. Our malleable iron cast fittings are characterized by high mechanical strength and standardized fitting technology.

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

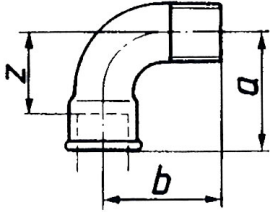
Material: Black malleable iron B350-10, design symbol A  
 Temperature range: -20 °C to +300 °C  
 Surface: Black  
 Standard thread: Acc. ISO 7-1



TFB 1-12-S

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

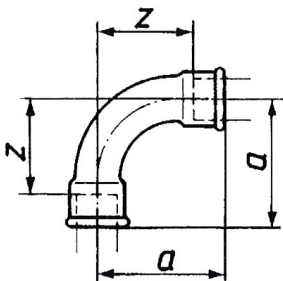
Art. No.	Ident No.	Thread female	Thread male	a mm	b mm	z mm
TFB 1-14-S	133572	Rp 1/4	R 1/4	40.0	36.0	30.0
TFB 1-38-S	133573	Rp 3/8	R 3/8	48.0	42.0	38.0
TFB 1-12-S	133574	Rp 1/2	R 1/2	55.0	48.0	42.0
TFB 1-34-S	133575	Rp 3/4	R 3/4	69.0	60.0	54.0
TFB 1-114-S	133576	Rp 1 1/4	R 1 1/4	105.0	95.0	86.0
TFB 1-112-S	133577	Rp 1 1/2	R 1 1/2	116.0	105.0	97.0
TFB 1-20-S	133578	Rp 2	R 2	140.0	130.0	116.0



TFB 1-12-S

Short bend 1a, 90°, female/male, black

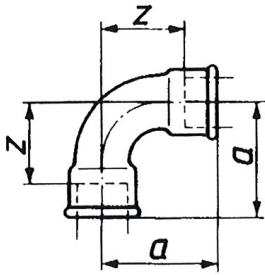
Art. No.	Ident No.	Thread female	Thread male	a mm	b mm	z mm
TFB 1A-38-S	133579	Rp 3/8	R 3/8	36.0	36.0	26.0
Art. No. 133579 = discontinued product						
TFB 1A-12-S	133580	Rp 1/2	R 1/2	45.0	45.0	32.0
TFB 1A-34-S	133581	Rp 3/4	R 3/4	50.0	50.0	35.0
TFB 1A-10-S	133582	Rp 1	R 1	63.0	63.0	46.0
TFB 1A-114-S	133583	Rp 1 1/4	R 1 1/4	76.0	76.0	57.0
TFB 1A-112-S	133584	Rp 1 1/2	R 1 1/2	85.0	85.0	66.0
TFB 1A-20-S	133585	Rp 2	R 2	102.0	102.0	78.0
TFB 1A-212-S	133586	Rp 2 1/2	R 2 1/2	-	-	-



TFB 2-12-S

Long sweep bend 2, 90°, female/female, black

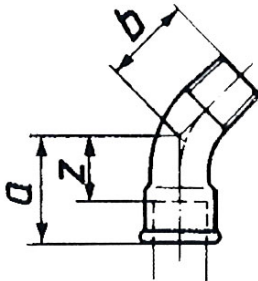
Art. No.	Ident No.	Thread female	a mm	z mm
TFB 2-14-S	133587	Rp/Rp 1/4	40.0	30.0
TFB 2-38-S	133588	Rp/Rp 3/8	48.0	38.0
TFB 2-12-S	133589	Rp/Rp 1/2	55.0	42.0
TFB 2-34-S	133590	Rp/Rp 3/4	69.0	54.0
TFB 2-10-S	133591	Rp/Rp 1	85.0	68.0
TFB 2-114-S	133592	Rp/Rp 1 1/4	105.0	86.0
TFB 2-112-S	133593	Rp/Rp 1 1/2	116.0	97.0
TFB 2-20-S	133594	Rp/Rp 2	140.0	116.0
TFB 2-212-S	133595	Rp 2 1/2	176.0	149.0
TFB 2-30-S	133596	Rp 3	205.0	175.0



TFB 2A-12-S

**Short bend 2a, 90°, female/female, black**

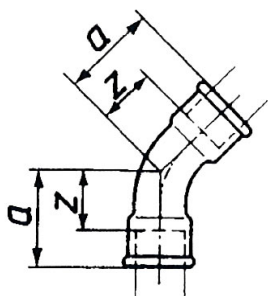
Art. No.	Ident No.	Thread female	a mm	z mm
TFB 2A-12-S	133597	Rp/Rp 1/2	45.0	32.0
TFB 2A-34-S	133598	Rp/Rp 3/4	50.0	35.0
TFB 2A-10-S	133599	Rp/Rp 1	63.0	46.0
TFB 2A-114-S	133600	Rp/Rp 1 1/4	76.0	57.0
TFB 2A-112-S	133601	Rp/Rp 1 1/2	85.0	66.0
TFB 2A-20-S	133602	Rp/Rp 2	102.0	78.0



TFB 40-12-S

**Bend 40, 45°, female/male, black**

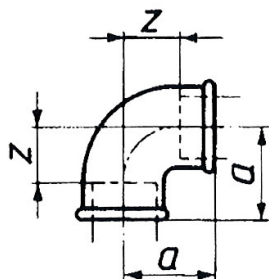
Art. No.	Ident No.	Thread female	Thread male	a mm	b mm	z mm
TFB 40-14-S	133603	Rp 1/4	R 1/4	26.0	21.0	16.0
TFB 40-38-S	133604	Rp 3/8	R 3/8	30.0	24.0	20.0
TFB 40-12-S	133605	Rp 1/2	R 1/2	36.0	30.0	23.0
TFB 40-34-S	133606	Rp 3/4	R 3/4	43.0	36.0	28.0
TFB 40-10-S	133607	Rp 1	R 1	51.0	42.0	34.0
TFB 40-112-S	133608	Rp 1 1/2	R 1 1/2	68.0	58.0	49.0
TFB 40-20-S	133609	Rp 2	R 2	81.0	70.0	57.0
TFB 40-212-S	133610	Rp 2 1/2	R 2 1/2	99.0	86.0	72.0



TFB 41-12-S

**Bend 41, 45°, female/female, black**

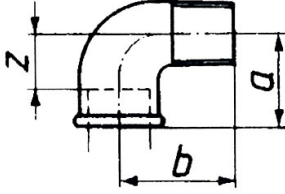
Art. No.	Ident No.	Thread female	a mm	z mm
TFB 41-38-S	133611	Rp/Rp 3/8	30.0	20.0
TFB 41-12-S	133612	Rp/Rp 1/2	36.0	23.0
TFB 41-34-S	133613	Rp/Rp 3/4	43.0	28.0
TFB 41-10-S	133614	Rp/Rp 1	51.0	34.0
TFB 41-114-S	133615	Rp/Rp 1 1/4	64.0	45.0
TFB 41-112-S	133616	Rp/Rp 1 1/2	68.0	49.0
TFB 41-20-S	133617	Rp/Rp 2	81.0	57.0
TFB 41-212-S	133618	Rp/Rp 2 1/2	99.0	72.0



TFW 90-12-S

**Elbow 90, 90°, female/female, black**

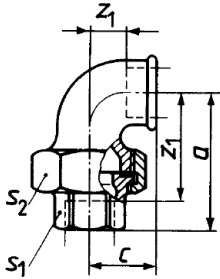
Art. No.	Ident No.	Thread female	a mm	z mm
TFW 90-14-S	133619	Rp/Rp 1/4	21.0	11.0
TFW 90-38-S	133620	Rp/Rp 3/8	25.0	15.0
TFW 90-12-S	133621	Rp/Rp 1/2	28.0	15.0
TFW 90-34-S	133622	Rp/Rp 3/4	33.0	18.0
TFW 90-10-S	133623	Rp/Rp 1	38.0	21.0
TFW 90-114-S	133624	Rp/Rp 1 1/4	45.0	26.0
TFW 90-112-S	133625	Rp/Rp 1 1/2	50.0	31.0
TFW 90-20-S	133626	Rp/Rp 2	58.0	34.0
TFW 90-212-S	133627	Rp/Rp 2 1/2	69.0	42.0
TFW 90-30-S	133628	Rp/Rp 3	78.0	48.0



TFW 92-12-S

Elbow 92, 90°, female/male, black

Art. No.	Ident No.	Thread female	Thread male	a mm	b mm	z mm
TFW 92-14-S	133629	Rp 1/4	R 1/4	21.0	28.0	11.0
TFW 92-38-S	133630	Rp 3/8	R 3/8	25.0	32.0	15.0
TFW 92-12-S	133631	Rp 1/2	R 1/2	28.0	37.0	15.0
TFW 92-34-S	133632	Rp 3/4	R 3/4	33.0	43.0	18.0
TFW 92-10-S	133633	Rp 1	R 1	38.0	52.0	21.0
TFW 92-114-S	133634	Rp 1 1/4	R 1 1/4	45.0	60.0	26.0
TFW 92-112-S	133635	Rp 1 1/2	R 1 1/2	50.0	65.0	31.0
TFW 92-20-S	133636	Rp 2	R 2	58.0	74.0	34.0
TFW 92-212-S	133637	Rp 2 1/2	R 2 1/2	69.0	88.0	42.0

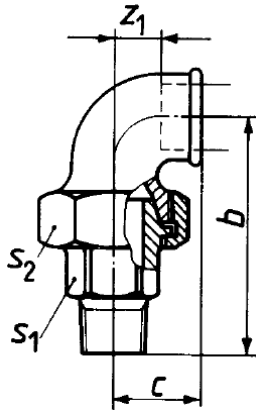


TFV 95-12-S

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

Art. No.	Ident No.	Thread female	a mm	b mm	c mm	z1 mm
TFV 95-12-S	133638	Rp 1/2	58.0	76.0	28.0	15.0
TFV 95-34-S	133639	Rp 3/4	62.0	82.0	33.0	18.0
TFV 95-10-S	133640	Rp 1	72.0	94.0	38.0	21.0
TFV 95-114-S	133641	Rp 1 1/4	82.0	107.0	45.0	26.0
TFV 95-112-S	133642	Rp 1 1/2	90.0	115.0	50.0	31.0
TFV 95-20-S	133643	Rp 2	100.0	128.0	58.0	34.0

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

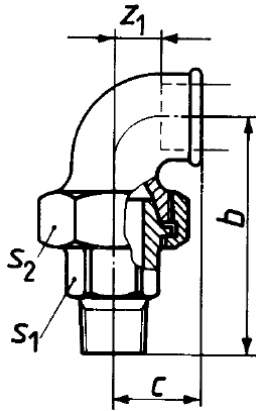


TFV 97-12-S

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

Art. No.	Ident No.	Thread 1 male	Thread 2 male	b mm	c mm	z <sub>1</sub> mm
TFV 97-12-S	133644	Rp 1/2	R 1/2	76.0	28.0	15.0
TFV 97-34-S	133645	Rp 3/4	R 3/4	82.0	33.0	18.0
TFV 97-10-S	133646	Rp 1	R 1	94.0	38.0	21.0
TFV 97-114-S	133647	Rp 1 1/4	R 1 1/4	45.0	45.0	26.06
TFV 97-112-S	133648	Rp 1 1/2	R 1 1/2	115.0	50.0	31.0
TFV 97-20-S	133649	Rp 2	R 2	128.0	58.0	34.0

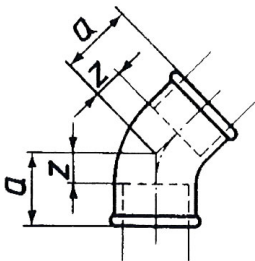
→ Maximum temperature and maximum operating pressure should not occur at the same time!



TFV 98-12-S

Union elbow 98, taper seat, female/male, black

Art. No.	Ident No.	Thread 1 male	Thread 2 male	b mm	c mm	Z1 mm
TFV 98-12-S	133650	Rp 1/2	R 1/2	76.0	28.0	15.0
TFV 98-34-S	133651	Rp 3/4	R 3/4	82.0	33.0	18.0
TFV 98-10-S	133652	Rp 1	R 1	94.0	38.0	21.0
TFV 98-114-S	133653	Rp 1 1/4	R 1 1/4	107.0	45.0	26.0
TFV 98-20-S	133654	Rp 2	R 2	128.0	58.0	34.0

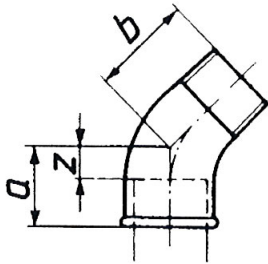


TFW 120-12-S

Elbow 120, 45°, female/female, black

Art. No.	Ident No.	Thread female	a mm	z mm
TFW 120-38-S	133655	Rp/Rp 3/8	20.0	10.0
TFW 120-12-S	133656	Rp/Rp 1/2	22.0	9.0
TFW 120-34-S	133657	Rp/Rp 3/4	25.0	10.0
TFW 120-10-S	133658	Rp/Rp 1	28.0	11.0
TFW 120-114-S	133659	Rp/Rp 1 1/4	33.0	14.0
TFW 120-112-S	133660	Rp/Rp 1 1/2	36.0	17.0
TFW 120-20-S	133661	Rp/Rp 2	43.0	19.0
TFW 120-212-S	133662	Rp 2 1/2	-	-

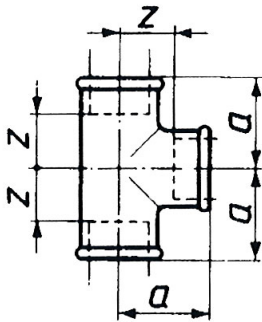




TFW 121-12-S

**Elbow 121, 45°, female/male, black**

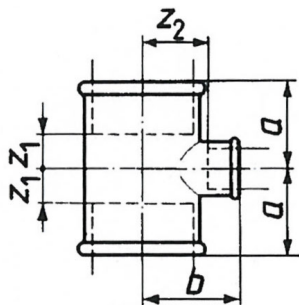
Art. No.	Ident No.	Thread female	Thread male	a mm	b mm	z mm
TFW 121-38-S	133663	Rp 3/8	R 3/8	20.0	25.0	10.0
TFW 121-12-S	133664	Rp 1/2	R 1/2	22.0	28.0	9.0
TFW 121-34-S	133665	Rp 3/4	R 3/4	25.0	32.0	10.0
TFW 121-10-S	133666	Rp 1	R 1	28.0	37.0	11.0
TFW 121-114-S	133667	Rp 1 1/4	R 1 1/4	33.0	43.0	14.0
TFW 121-112-S	133668	Rp 1 1/2	R 1 1/2	36.0	46.0	17.0
TFW 121-20-S	133669	Rp 2	R 2	43.0	55.0	19.0



TFT 130-12-S

**Tee 130, female/female/female, black**

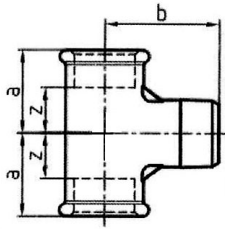
Art. No.	Ident No.	Thread female	a mm	z mm
TFT 130-14-S	133670	Rp 1/4	21.0	11.0
TFT 130-38-S	133671	Rp 3/8	25.0	15.0
TFT 130-12-S	133672	Rp 1/2	28.0	15.0
TFT 130-34-S	133673	Rp 3/4	33.0	18.0
TFT 130-10-S	133674	Rp 1	38.0	21.0
TFT 130-114-S	133675	Rp 1 1/4	45.0	26.0
TFT 130-112-S	133676	Rp 1 1/2	50.0	31.0
TFT 130-20-S	133677	Rp 2	58.0	34.0



TFT 130-1238-S

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

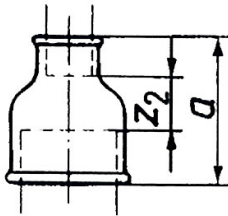
Art. No.	Ident No.	Thread 1	Thread 2 Reduced branch tee	a mm	b mm	$Z_1$ mm	$Z_2$ mm
TFT 130-1238-S	133678	Rp/Rp 1/2	Rp 3/8	26.0	26.0	13.0	16.0
TFT 130-3412-S	133679	Rp/Rp 3/4	Rp 1/2	30.0	31.0	15.0	18.0
TFT 130-1012-S	133680	Rp/Rp 1	Rp 1/2	32.0	34.0	15.0	21.0
TFT 130-1034-S	133681	Rp/Rp 1	Rp 3/4	35.0	36.0	18.0	21.0
TFT 130-11412-S	133682	Rp/Rp 1 1/4	Rp 1/2	34.0	38.0	15.0	25.0
TFT 130-11434-S	133683	Rp/Rp 1 1/4	Rp 3/4	36.0	41.0	17.0	26.0
TFT 130-11410-S	133684	Rp/Rp 1 1/4	Rp 1	40.0	42.0	21.0	25.0
TFT 130-11212-S	133685	Rp/Rp 1 1/2	Rp 1/2	36.0	42.0	17.0	29.0
TFT 130-11234-S	133686	Rp/Rp 1 1/2	Rp 3/4	38.0	44.0	19.0	29.0
TFT 130-11210-S	133687	Rp/Rp 1 1/2	Rp 1	42.0	46.0	23.0	29.0
TFT 130-2012-S	133689	Rp/Rp 2	Rp 1/2	38.0	48.0	14.0	35.0
TFT 130-2034-S	133690	Rp/Rp 2	Rp 3/4	40.0	50.0	16.0	35.0
TFT 130-2010-S	133691	Rp/Rp 2	Rp 1	44.0	52.0	20.0	35.0
TFT 130-20112-S	133692	Rp/Rp 2	Rp 1 1/2	52.0	55.0	28.0	36.0



TFT 133-12-S

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

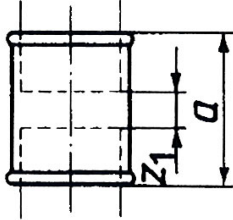
Art. No.	Ident No.	Thread	a mm	b mm	z mm
TFT 133-38-S	133693	Rp 3/8	22.0	31.0	12.0
TFT 133-12-S	133694	Rp 1/2	25.0	38.0	12.0
TFT 133-10-S	133695	Rp 1	39.0	53.0	22.0



TFM 240-1012-S

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

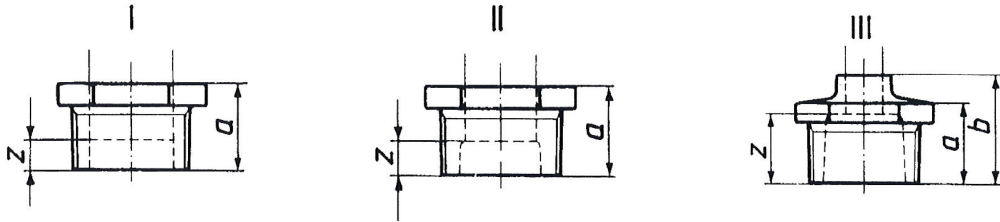
Art. No.	Ident No.	Thread 1 female	Thread 2 female	a mm	z <sub>2</sub> mm
TFM 240-3814-S	133696	Rp 3/8	Rp 1/4	30.0	10.0
TFM 240-1214-S	133697	Rp 1/2	Rp 1/4	36.0	13.0
TFM 240-1238-S	133698	Rp 1/2	Rp 3/8	36.0	13.0
TFM 240-3438-S	133699	Rp 3/4	Rp 3/8	39.0	14.0
TFM 240-3412-S	133700	Rp 3/4	Rp 1/2	38.0	11.0
TFM 240-1038-S	133701	Rp 1	Rp 3/8	45.0	18.0
TFM 240-1012-S	133702	Rp 1	Rp 1/2	45.0	15.0
TFM 240-1034-S	133703	Rp 1	Rp 3/4	45.0	13.0
TFM 240-11412-S	133704	Rp 1 1/4	Rp 1/2	50.0	18.0
TFM 240-11434-S	133705	Rp 1 1/4	Rp 3/4	50.0	16.0
TFM 240-11410-S	133706	Rp 1 1/4	Rp 1	50.0	14.0
TFM 240-11212-S	133707	Rp 1 1/2	Rp 1/2	55.0	23.0
TFM 240-11234-S	133708	Rp 1 1/2	Rp 3/4	55.0	21.0
TFM 240-11210-S	133709	Rp 1 1/2	Rp 1	55.0	19.0
TFM 240-2012-S	133710	Rp 2	Rp 1/2	65.0	28.0
TFM 240-2034-S	133711	Rp 2	Rp 3/4	65.0	26.0
TFM 240-2010-S	133712	Rp 2	Rp 1	65.0	24.0
TFM 240-20114-S	133713	Rp 2	Rp 1 1/4	65.0	22.0
TFM 240-20112-S	133714	Rp 2	Rp 1 1/2	65.0	22.0
TFM 240-21220-S	133715	Rp 2 1/2	Rp 2	74.0	23.0
TFM 240-3020-S	133716	Rp 3	Rp 2	80.0	26.0



TFM 270-12-S

**Socket 270, female/female, black**

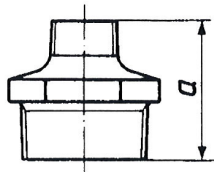
Art. No.	Ident No.	Thread female	a mm	z <sub>1</sub> mm
TFM 270-14-S	133717	Rp/Rp 1/4	27.0	7.0
TFM 270-38-S	133718	Rp/Rp 3/8	30.0	10.0
TFM 270-12-S	133719	Rp/Rp 1/2	36.0	10.0
TFM 270-34-S	133720	Rp/Rp 3/4	39.0	9.0
TFM 270-10-S	133721	Rp/Rp 1	45.0	11.0
TFM 270-114-S	133722	Rp/Rp 1 1/4	50.0	12.0
TFM 270-112-S	133723	Rp/Rp 1 1/2	50.0	17.0
TFM 270-20-S	133724	Rp/Rp 2	65.0	17.0
TFM 270-212-S	133725	Rp 2 1/2	74.0	20.0
TFM 270-30-S	133726	Rp 3	80.0	20.0



TFR 241-1012-S

## Reducing bush 241, male/female, black

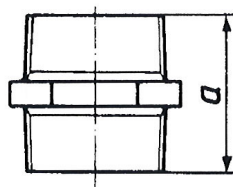
Art. No.	Ident No.	Thread 1 male	Thread 2 female	a mm	b mm	z mm	Type
TFR 241-3814-S	133727	R 3/8	Rp 1/4	20.0	-	10.0	I
TFR 241-1214-S	133728	R 1/2	Rp 1/4	24.0	-	14.0	II
TFR 241-1238-S	133729	R 1/2	Rp 3/8	24.0	-	14.0	I
TFR 241-3414-S	133730	R 3/4	Rp 1/4	26.0	-	16.0	II
TFR 241-3438-S	133731	R 3/4	Rp 3/8	26.0	-	16.0	II
TFR 241-3412-S	133732	R 3/4	Rp 1/2	26.0	-	13.0	I
TFR 241-1038-S	133733	R 1	Rp 3/8	29.0	-	19.0	II
TFR 241-1012-S	133734	R 1	Rp 1/2	29.0	-	16.0	II
TFR 241-1034-S	133735	R 1	Rp 3/4	29.0	-	14.0	I
TFR 241-11412-S	133736	R 1 1/4	Rp 1/2	31.0	-	18.0	II
TFR 241-11434-S	133737	R 1 1/4	Rp 3/4	31.0	-	16.0	II
TFR 241-11410-S	133738	R 1 1/4	Rp 1	31.0	-	14.0	I
TFR 241-11212-S	133739	R 1 1/2	Rp 1/2	31.0	-	18.0	II
TFR 241-11234-S	133740	R 1 1/2	Rp 3/4	31.0	-	16.0	II
TFR 241-11210-S	133741	R 1 1/2	Rp 1	31.0	-	14.0	II
TFR 241-2012-S	133742	R 2	Rp 1/2	35.0	48.0	35.0	III
TFR 241-2034-S	133743	R 2	Rp 3/4	35.0	48.0	33.0	III
TFR 241-2010-S	133744	R 2	Rp 1	35.0	-	18.0	II
TFR 241-20114-S	133745	R 2	Rp 1 1/4	35.0	-	16.0	II
TFR 241-20112-S	133746	R 2	Rp 1 1/2	35.0	-	16.0	II
TFR 241-21220-S	133747	R 2 1/2	Rp 2	40.0	-	16.0	II
TFR 241-30112-S	133748	R 3	Rp 1 1/2	44.0	59.0	40.0	III



TFD 245-1214-S

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

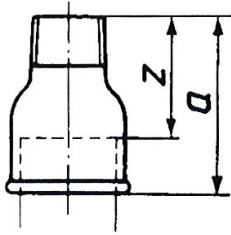
Art. No.	Ident No.	Thread 1 male	Thread 2 male	a mm
TFD 245-3814-S	133749	R 3/8	R 1/4	38.0
TFD 245-1214-S	133750	R 1/2	R 1/4	44.0
TFD 245-1238-S	133751	R 1/2	R 3/8	44.0
TFD 245-3438-S	133752	R 3/4	R 3/8	47.0
TFD 245-3412-S	133753	R 3/4	R 1/2	47.0
TFD 245-1012-S	133754	R 1	R 1/2	53.0
TFD 245-1034-S	133755	R 1	R 3/4	53.0
TFD 245-11434-S	133756	R 1 1/4	R 3/4	57.0
TFD 245-11410-S	133757	R 1 1/4	R 1	57.0
TFD 245-11210-S	133758	R 1 1/2	R 1	59.0
TFD245-112114-S	133759	R 1 1/2	R 1 1/4	59.0
TFD 245-20114-S	133760	R 2	R 1 1/4	68.0
TFD 245-20112-S	133761	R 2	R 1 1/2	68.0
TFD245-212112-S	133762	R 2 1/2	R 1 1/2	75.0
TFD 245-21220-S	133763	R 2 1/2	R 2	75.0



TFD 280-12-S

**Hexagon nipple 280, male/male, black**

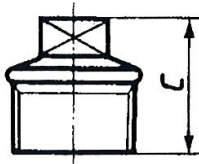
Art. No.	Ident No.	Thread male	a mm
TFD 280-14-S	133764	R 1/4	36.0
TFD 280-38-S	133765	R 3/8	38.0
TFD 280-12-S	133766	R 1/2	44.0
TFD 280-34-S	133767	R 3/4	47.0
TFD 280-10-S	133768	R 1	53.0
TFD 280-114-S	133769	R 1 1/4	57.0
TFD 280-112-S	133770	R 1 1/2	59.0
TFD 280-20-S	133771	R 2	68.0
TFD 280-212-S	133772	R 2 1/2	-



TFM 246-1012-S

**Socket 246, reducing, female/male, black**

Art. No.	Ident No.	Thread 1 female	Thread 2 male	a mm	z mm
TFM 246-3814-S	133773	Rp 3/8	R 1/4	35.0	25.0
TFM 246-1214-S	133774	Rp 1/2	R 1/4	43.0	30.0
TFM 246-1238-S	133775	Rp 1/2	R 3/8	43.0	30.0
TFM 246-3412-S	133776	Rp 3/4	R 1/2	48.0	33.0
TFM 246-1012-S	133777	Rp 1	R 1/2	55.0	38.0
TFM 246-1034-S	133778	Rp 1	R 3/4	55.0	38.0
TFM 246-11434-S	133779	Rp 1 1/4	R 3/4	60.0	41.0
TFM 246-11410-S	133780	Rp 1 1/4	R 1	60.0	41.0
TFM 246-11234-S	133786	Rp 1 1/2	R 3/4	-	-
TFM 246-11210-S	133781	Rp 1 1/2	R 1	63.0	44.0
TFM 246-2010-S	133782	Rp 2	R 1	65.0	43.0
TFM 246-20114-S	133783	Rp 2	R 1 1/4	70.0	46.0
TFM 246-20112-S	133784	Rp 2	R 1 1/2	70.0	46.0
TFM 246-21220-S	133785	Rp 2 1/2	R 2	-	-



TFS 290-12-S

**Plugs 290, male, black**

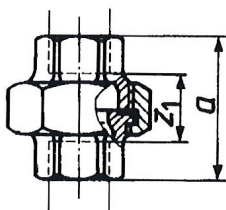
Art. No.	Ident No.	Thread male	Min. c mm
TFS 290-14-S	133787	R 1/4	22.0
TFS 290-38-S	133788	R 3/8	24.0
TFS 290-12-S	133789	R 1/2	26.0
TFS 290-34-S	133790	R 3/4	32.0
TFS 290-10-S	133791	R 1	36.0
TFS 290-114-S	133792	R 1 1/4	39.0
TFS 290-112-S	133793	R 1 1/2	41.0
TFS 290-20-S	133794	R 2	48.0
TFS 290-212-S	133795	R 2 1/2	54.0
TFS 290-30-S	133796	R 3	60.0



TFK 300-12-S

**Cap 300, female, black**

Art. No.	Ident No.	Thread female	Min. a mm
TFK 300-14-S	133797	Rp 1/4	15.0
TFK 300-38-S	133798	Rp 3/8	17.0
TFK 300-12-S	133799	Rp 1/2	19.0
TFK 300-34-S	133800	Rp 3/4	22.0
TFK 300-10-S	133801	Rp 1	24.0
TFK 300-114-S	133802	Rp 1 1/4	27.0
TFK 300-112-S	133803	Rp 1 1/2	27.0
TFK 300-20-S	133804	Rp 2	32.0
TFK 300-212-S	133805	Rp 2 1/2	35.0



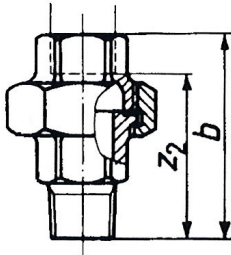
TFV 330-12-DS

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

Art. No.	Ident No.	Thread female	a mm	Z1 mm
TFV 330-38-DS	133806	Rp/Rp 3/8	45.0	25.0
TFV 330-12-DS	133807	Rp/Rp 1/2	48.0	22.0
TFV 330-34-DS	133808	Rp/Rp 3/4	52.0	22.0
TFV 330-10-DS	133809	Rp/Rp 1	58.0	24.0
TFV 330-114-DS	133810	Rp/Rp 1 1/4	65.0	27.0
TFV 330-112-DS	133811	Rp/Rp 1 1/2	70.0	32.0
TFV 330-20-DS	133812	Rp/Rp 2	78.0	30.0
TFV 330-212-DS	133813	Rp/Rp 2 1/2	85.0	31.0
TFV 330-30-DS	133814	Rp/Rp 3	95.0	35.0

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



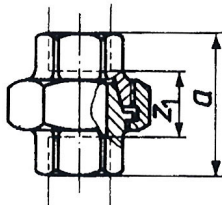


TFV 331-12-DS

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

Art. No.	Ident No.	Thread female	Thread male	b mm	Z <sub>2</sub> mm
TFV 331-12-DS	133815	Rp 1/2	R 1/2	66.0	53.0
TFV 331-34-DS	133816	Rp 3/4	R 3/4	72.0	57.0
TFV 331-10-DS	133817	Rp 1	R 1	80.0	63.0
TFV 331-114-DS	133818	Rp 1 1/4	R 1 1/4	90.0	71.0
TFV 331-112-DS	133819	Rp 1 1/2	R 1 1/2	95.0	76.0
TFV 331-20-DS	133820	Rp 2	R 2	106.0	82.0
TFV 331-212-DS	133821	Rp 2 1/2	R 2 1/2	118.0	91.0

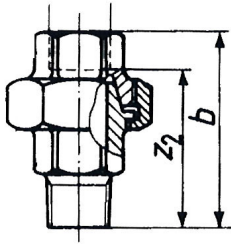
→ Maximum temperature and maximum operating pressure should not occur at the same time!



TFV 340-12-S

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

Art. No.	Ident No.	Thread female	a mm	Z <sub>1</sub> mm
TFV 340-38-S	133822	Rp/Rp 3/8	45.0	25.0
TFV 340-12-S	133823	Rp/Rp 1/2	48.0	22.0
TFV 340-34-S	133824	Rp/Rp 3/4	52.0	22.0
TFV 340-10-S	133825	Rp/Rp 1	58.0	24.0
TFV 340-114-S	133826	Rp/Rp 1 1/4	65.0	27.0
TFV 340-112-S	133827	Rp/Rp 1 1/2	70.0	32.0
TFV 340-212-S	133828	Rp/Rp 2 1/2	85.0	31.0



TFV 341-12-S

Union 341, taper seat, female/male, black

Art. No.	Ident No.	Thread female	Thread male	b mm	z <sub>2</sub> mm
TFV 341-38-S	133829	Rp 3/8	R 3/8	58.0	48.0
TFV 341-12-S	133830	Rp 1/2	R 1/2	66.0	53.0
TFV 341-34-S	133831	Rp 3/4	R 3/4	72.0	57.0
TFV 341-10-S	133832	Rp 1	R 1	80.0	63.0
TFV 341-114-S	133833	Rp 1 1/4	R 1 1/4	90.0	71.0
TFV 341-112-S	133834	Rp 1 1/2	R 1 1/2	95.0	76.0
TFV 341-20-S	133835	Rp 2	R 2	106.0	82.0
TFV 341-212-S	133836	Rp 2 1/2	Rp 2 1/2	118.0	91.0
TFV 341-30-S	133837	Rp 3	Rp 3	130.0	100.0

Flat seal for malleable iron fittings (NBR with aramide fiber)  
 Temperature -20 °C to 200 °C

Type No.	Art. No.	For connection size (inch)	O.D. mm	I.D. mm	Thickness mm
TFD 14	113199	1/4	24.0	17.0	2.0
TFD 38	113200	3/8	27.0	19.0	2.0
TFD 12	113201	1/2	30.0	21.0	2.0
TFD 34	113202	3/4	38.0	27.0	2.0
TFD 10	113203	1	44.0	32.0	2.0
TFD 114	113204	1 1/4	55.0	42.0	2.0
TFD 112	113205	1 1/2	62.0	46.0	2.0
TFD 20	113206	2	78.0	60.0	2.0
TFD 212	113207	2 1/2	97.0	75.0	2.0
TFD 30	113208	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.